



ANDREW M. CUOMO Governor

RICHARD L. KAUFFMAN Chair

ALICIA BARTON President and CEO

December 1, 2019

Hon. Andrew M. Cuomo Governor **Executive Chamber** NYS Capitol Albany, NY 12224

Dear Governor Cuomo,

Pursuant to the Public Authority Law Section 1867(7), as amended in 2015, attached is NYSERDA's semi-annual report regarding specified contracting actions for the period from April 1, 2019 through September 30, 2019.

- The report is broken into sections to meet the statute's reporting requirements, summaries of which are provided below.
- **Requirement 1** is for the revenues collected by the Authority in the reporting period. A report that details the revenues collected during the period is attached.
- Requirement 2 is a list of requests for proposals, program opportunity notices, or similar solicitations that have been issued in the reporting period. A report that details the solicitations issued is attached.
- **Requirement 3** is a description of the criteria and standards utilized for assessing proposals made in response requests ۲ for proposals, program opportunity notices, or similar solicitations. The criteria and standards utilized for award selection and project eligibility are included in each solicitation. Please note that requirements 2 and 3 are contained in one section of the report.
- Requirement 4 is a report on all projects selected for funding by the Authority during the reporting period broken down by region, including the county and utility service territory in which the project is located and the total value of these projects statewide and by region. Both a summary by regional economic development council (REDC) and details for each REDC are provided. The region "Statewide" includes projects that do not have a distinct project location and provide benefits across New York State.
- Requirement 5 is a report of all disbursements or expenditures of revenues pursuant to requests for proposals, program opportunity notices, or similar solicitations. A report that details these disbursements is included.
- **Requirement 6** is a list of all contracts executed and completed during the reporting period including a description of . each project. A report that details the executed contracts is attached.

This semi-annual report for the reporting period is also currently available on NYSERDA's website at

https://www.nyserda.ny.gov/-/media/Files/Publications/Annual-Reports-and-Financial-Statements/2019-decembernyserda-semi-annual-report.pdf

If you have any questions on this information, please contact me. Sincerely,

Alicia Barton

President and CEO

New York State Energy Research and Development Authority

Albany

17 Columbia Circle, Albany, NY 12203-6399 (P) 1-866-NYSERDA | (F) 518-862-1091

nyserda.ny.gov | info@nyserda.ny.gov

Buffalo 726 Exchange Street Suite 821 Buffalo, NY 14210-1484 (P) 716-842-1522 (F) 716-842-0156

New York City 1359 Broadway 19th Floor New York, NY 10018-7842 (P) 212-971-5342 (F) 518-862-1091 West Valley Site Management Program 9030-B Route 219 West Valley, NY 14171-9500 (P) 716-942-9960 (F) 716-942-9961

NYSERDA Revenues Collected - April 1, 2019 through September 30, 2019

Revenue Source	Amount (\$000's)
State Appropriation	15,377
Utility Surcharge Assessments	321,666
Clean Energy Standard Proceeds	274,866
Allowance Proceeds	55,436
Third-party reimbursements	18,343
Federal grants	1,641
Interest subsidy	204
Project repayments	-
Rentals from leases	485
Fees and other income	1,365
Loans and financing receivables interest	12,483
Investment income	10,239
Total revenues	712,105

NYSERDA

Public Authority Law Report

April 1, 2019 to September 30, 2019

Section Break

Solicitation Summary April 1, 2019 to September 30, 2019

Solicitation No.	Title of Solicitation	Solicitation Description	Issue Date	Due Date/Round	Dollar Award
PON 2439	Small Wind Turbine Incentive Program	This Program provides support for installing small wind turbines in size up to 5 MW per site. The program offers assistance with qualified equipment with a proven track record installed by eligible installers. Support is based on the nameplate rating of the wind turbine.	4/1/2019	12/31/2019	\$6,000,000.00
PON 4072	Commercial Tenant Program	The goal of NYSERDA's Commercial Tenant Program is to integrate energy efficiency in leased office spaces. This program is open to commercial office tenants and their landlords who wish to improve the efficiency of their leased office space. The Program can fund eligible technical assistance services during all phases of a tenant's leasing cycle, including during the space selection or pre-lease phase, during project development, during project implementation, and throughout occupancy.	4/3/2019	12/31/2020	No value was stated in solicitation
PON 4074	Electric Power Transmission and Distribution (EPTD) High Performing Grid Program	The Electric Power Transmission and Distribution High Performing Grid Program, funded through the Clean Energy Fund and authorized by the Public Service Commission, will make investments in research and development that accelerate the realization of an advanced, digitally enhanced and dynamically managed electric grid. Such a system will result in more efficient asset utilization (e.g., reduced operating margins, reduced power demands, reduced energy losses) and improved reliability, and resiliency.	4/9/2019	10/7/2020	\$30,000,000.00
PON 3908	P-12 Schools Initiative - Benchmarking Program	NYSERDA is accepting applications from schools serving Pre- kindergarten through Grade 12 (P-12) in New York State to participate in a free Benchmarking Program. The goal of the program is to help schools better understand their energy usage and identify opportunities that will lower operating costs and greenhouse gas emissions while creating healthier and more productive learning environments in schools across New York State.	4/11/2019	3/31/2022	No value was stated in solicitation

PON 3833	Improving the Efficiency of New York's Transportation System	This program advances an integrated, multi-faceted, energy- efficient, and sustainable transportation system through the identification and demonstration of innovative strategies, policies, underutilized commercial technologies, and partnerships in New York State. This program supports projects that have the potential to reduce greenhouse emissions and associated energy consumption of the existing multi-modal transportation system in New York State, especially those that center on: (1) Efficient Mobility Solutions; or (2) Efficient Infrastructure, Operations, and Systems Planning.	4/17/2019	10/30/2019	\$3,000,000.00
RESRFP 19- 1	RESRFP19-1 - Renewable Energy Standard Purchase of New York Tier 1 Eligible Renewable Energy Certificates	NYSERDA seeks to purchase Tier 1 Renewable Energy Certificates associated with electricity generated from eligible facilities that enter commercial operation on or after January 1, 2015 and on or before November 30, 2021, unless extended to November 30, 2024. (refer to the RESRFP19-1 Summary for full details).	4/24/2019	6/13/2019	No value was stated in solicitation
RFP 4091	Peoplesoft Support Services	NYSERDA is seeking to identify professional PeopleSoft support services to lead and assist with upgrades and patching to ensure all NYSERDA PeopleSoft servers and environments meet New York State cyber security standards and policies.	4/24/2019	5/21/2019	No value was stated in solicitation
PON 4139	Bulk Energy Storage Incentive Program	NYSERDA's Bulk Storage Incentive program provides financial support for new energy storage systems over 5 megawatts (MW) of power measured in alternating current (AC) that provide wholesale market energy, ancillary services, and/or capacity services.	4/25/2019	12/31/2025	\$150,000,000.00
PON 4112	Retail Energy Storage Incentive Program	NYSERDA's Retail Energy Storage Incentive Program provides financial incentives for new grid-connected energy storage systems up to five megawatts of alternating current (AC) connection located either with load or connected directly into the distribution system. Energy storage systems under this program must be operated primarily for electric load management or shifting electric generation to more beneficial time periods while operating in parallel with the utility grid.	4/25/2019	12/31/2025	No value was stated in solicitation

RFP 4063	Developing and Disseminating Energy-Related Agriculture Best Practices	NYSERDA is seeking one or more teams to develop and disseminate accessible, up-to-date energy-related best practices guidance materials for New York State farmers that: identify efficient technologies, processes, and practices most pertinent to the operations of multiple agriculture sub-sectors; and describe potential financial, labor, and other impacts of technologies, processes, and practices.	5/2/2019	7/17/2019	No value was stated in solicitation
PON 3715 - Reissued as Open Enrollment	Workforce Training - Building Operations and Maintenance	NYSERDA's Building Operations and Maintenance Workforce Development and Training Program seeks to reduce energy use, associated carbon emissions, and building operations costs by enhancing the skills of operations and maintenance staff and managers across the State. The Program provides employers and building owners with support to implement workforce development and training projects that create the talent development strategy, corporate culture, on-site training framework, and training tools needed to support building operations and maintenance workers beyond classroom training.	5/8/2019	5/26/2021	\$10,000,000.00
PON 4094	EPTD DER Low-Cost Monitoring, Control, Backfeed Protection & Smart Inverters	This solicitation invests in focus areas that accelerate the safe and reliable integration of high penetrations for clean distributed energy resources with the New York State electric grid. Up to \$5 million is available to support technology feasibility, product development, demonstration and commercialization of innovative technologies that advance the distributed system platform in New York State.	5/30/2019	8/15/2019	\$5,000,000.00
RFQL 4150	Co-Investment Fund - Investor Qualification	This solicitation qualifies co-investors for companies seeking funds through Program Opportunity Notice (PON) 4150 Co- Investment Fund. NYSERDA's goal is to mobilize more early- stage capital in the clean energy space by providing matching investments in promising clean energy companies alongside experienced and successful investors.	6/19/2019	6/30/2021	No value was stated in solicitation
RFP 11	Technical & Engineering Support & Market Fundamentals & Analysis Services - Summary	The objective of RFP 11 is to solicit proposals from technical, engineering and service firms experienced in a broad variety of renewable energy technologies and other sectors of sustainable infrastructure.	6/28/2019	7/23/2019	No value was stated in solicitation

RFP 4152	Investment Banking and Underwriting Services	NYSERDA is requesting proposals from firms interested in providing investment banking and underwriting services. These services would be related to the competitive or negotiated sale or private placement of bonds by NYSERDA, or the sale or financing of loans issued in connection with NYSERDA's Green Jobs – Green New York ("GJGNY") Loan Program, or for other clean energy financing program activities through the Clean Energy Fund.	7/2/2019	9/4/2019	No value was stated in solicitation
RFQL 4145	Clean Energy Training Services	NYSERDA is issuing this Clean Energy Training Services RFQL to establish a pool of contractors qualified to deliver training, develop curriculum and/or training tools, and provide market expertise and/or other services related to clean energy workforce development and training.	7/10/2019	9/11/2019	No value was stated in solicitation
PON 4128	Electric Power Transmission and Distribution (EPTD) Future Grid Challenge	NYSERDA is seeking to invest in innovative grid solutions that directly address the Joint Utilities of New York operational goals stated in their Distributed System Implementation Plan (DSIP), to promote product development and demonstration projects that advance renewable energy integration, resiliency, and reliability of New York's grid.	7/11/2019	10/0/2019	\$15,000,000.00
RFP 4153	New York State Offshore Wind Fisheries Liaison	NYSERDA is seeking an individual to undertake the role of a New York State offshore wind fisheries liaison. The fisheries liaison will also report to the State on fishing practices, equipment and other factors to be taken into consideration in the siting, planning and development of offshore wind farms.	7/18/2019	8/19/2019	\$9,000,000.00
PON 4114	Clean Heating and Cooling Community Campaigns	This program is aimed at getting groups of homes and businesses in New York State to install clean heating and cooling (CH&C) technologies, including ground source and air source heat pumps, solar heating and cooling, and high- efficiency low-emissions biomass. These technologies can help lower energy bills and reduce emissions of harmful greenhouse gases, while making homes and businesses more comfortable.	7/31/2019	9/18/2019	\$2,500,000.00
RFP 4189	Bond Counsel Services	NYSERDA invites proposals from law firms interested in providing bond counsel and other trust and financial related services to NYSERDA in connection with its past and future issuance of bonds, notes, and other obligations ("bonds").	8/1/2019	8/26/2019	No value was stated in solicitation

PON 4038	Home Energy Rating Provider - Round 2	NYSERDA is seeking applications to competitively select licensed home inspectors to participate in a pilot program to use home energy ratings to encourage homeowners to invest in energy efficiency upgrades.	8/21/2019	10/3/2019	\$1,000,000.00
RFP 12	Outside Legal Counsel Services	The objective of RFP 12 is to solicit proposals from law firms interested in serving as outside legal counsel in connection with the operations and investment activity of NY Green Bank relative to its financing of clean energy projects and businesses and sustainable infrastructure, as well as potentially other NYSERDA-wide financing-related legal work.	8/30/2019	9/30/2019	No value was stated in solicitation
PON 4150	Co-Investment Fund	The Co-Investment Fund makes \$6 million available initially to invest in companies that have successfully closed investments from investors which have been previously "qualified" through NYSERDA Request for Qualifications (RFQL) 4150 Co- Investment Fund Investor Qualification. NYSERDA's goal is to mobilize more early-stage capital in the clean energy space by providing matching investments in promising clean energy companies alongside experienced and successful investors.	9/11/2019	9/30/2021	\$6,000,000.00
PON 4209	Commercial Broker Referral Program	NYSERDA's Commercial Broker Referral Program provides financial incentives to commercial brokers who refer customers to the NYSERDA Commercial Tenant Program. All commercial brokers are eligible, including tenant and landlord brokers. The Commercial Tenant Program supports commercial landlords and tenants in designing and building sustainable, energy efficiency workspaces, with the goal of reducing the energy consumption of tenant spaces and improving the overall energy performance of whole buildings.	9/24/2019	12/31/2020	No value was stated in solicitation
PON 4089	New York Truck Voucher Incentive Program	The New York Truck Voucher Incentive Program offers rebates to reduce the cost of purchases of all-electric and alternative fuel trucks and buses for public, private, and non-profit fleets throughout New York State. Rebates are provided directly by truck and bus dealers and are taken off the purchase or lease price of the vehicles.	9/24/2019	9/23/2026	

RFQL 4162	Market Research and Evaluation Support Services	NYSERDA is seeking to establish a pool of qualified consultants in the areas of Market Research, Impact Evaluation/Field Verification, and Survey Data Collection to support the NYSERDA Performance Management and Market Insights teams with a variety of objective market and evaluative research. This research will be used to inform existing and new program strategies and assess the effectiveness of program efforts.	9/17/2019	10/23/2019	\$52,000,000.00
PON 4242	Accelerate Southern Tier	NYSERDA's goal is to develop programs that help early stage clean energy companies in the Southern Tier form, grow, and scale to help New York State achieve its energy and climate goals.	9/25/2019	11/19/2019 Round 1	\$3,500,000.00

Revised Solicitations April 1, 2019 to September 30, 2019

Solicitation No.	Title of Solicitation	Solicitation Description	Revised Issue Date	Due Date/Round	Dollar Award
PON 3716 Revised	Multifamily New Construction Program	The Multifamily New Construction Program offers technical support and incentives to developers of multifamily high rise new construction and gut rehabilitation projects. The multi- tiered incentive structure is intended to promote increased levels of performance, up to and inclusive of net zero energy performance, identifying replicable and integrated design solutions by focusing on cost optimization analysis and financing of strategies that recognize operation costs and management of perceived risk.	4/1/2019	12/31/2020	\$26,850,000.00
PON 3717 Revised	Low-rise Residential New Construction Program	The Low-rise Residential New Construction Program (LR NCP) offers technical support and incentives to developers of single family, low-rise multi-unit, and low-rise multifamily new construction, as well as gut rehabilitation projects. The goal is to increase awareness of, and demand for, advanced clean energy solutions while strengthening the capacity of clean energy professionals to deliver design and construction services. The multi-tiered incentive structure is intended to promote increased levels of performance, up to and including net zero energy performance.	4/1/2019	12/31/2020	\$18,200,000.00

PON 3609 Revised	Commercial new Construction	The Commercial New Construction Program Opportunity Notice PON 3609 offers objective technical and financial support to building owners to effect a permanent transformation in the way buildings are designed and constructed in New York State. Technical support is offered on a first-come, first-served basis, subject to funding availability.	4/1/2019	12/31/2020	\$38,678,748.00
PON 3689 Revised	Real Time Energy Management (RTEM)	This Program is seeking to achieve deep energy savings through the collection and analysis of energy usage data from buildings at a system level. To accelerate adoption of RTEM practices, the Program offers cost-share support for RTEM projects in the commercial, industrial and multifamily sectors. Applicants must be qualified as a NYSERDA RTEM Qualified Vendor to apply to this Program.	4/4/2019	6/30/2021	\$42,100,000.00 - Commercial, \$5,700,000.00 - Industrial, \$6,270,000,00 - Multifamily
PON 3620 Revised	Ground Source Heat Pump Rebate Program	This Program supports the installation of ground source heat pump systems at residential, commercial, institutional, and industrial buildings. Funding is available only to eligible designers and installers of ground source heat pump systems that have been approved by NYSERDA.	4/5/2019	12/31/2019	\$26,500,000.00
RFQL 3902 Revised	Charge Ready NY Equipment and Network Qualification Process	NYSERDA is issuing this RFQL to establish a list of qualified Level 2 electric vehicle (EV) charging equipment and networks that will be eligible for incentives under the upcoming Charge Ready NY Program (Program). Under the Program, interested site owners will be able to receive incentives for the installation of qualified charging equipment. Charging station vendors will submit applications to qualify one or more models of charging equipment. Charging network operators will submit applications to have information about their network, and which charging equipment it is compatible with, listed as part of program materials.	4/9/2019	12/31/2021	No value was stated in solicitation

PON 3981 Revised - 1	Energy Efficiency and Clean Technology Training	Through this program, NYSERDA will provide funding to training providers across the State to ensure that New York energy efficiency and clean technology businesses have an adequate supply of new and existing workers with the necessary occupational skills, credentials and experience to participate in the clean energy economy. Projects funded through this PON are intended to develop and/or deliver training, hands-on experience and job placement assistance to ensure that new and existing workers have the skills that businesses need and to reduce the risk and expense associated with recruiting, onboarding, training, and retaining workers.	4/9/2019	1/23/2020	\$7,000,000.00
PON 3653 Revised	Air-Source Heat Pump Program	NYSERDA has made up to \$10.95 million available to support the installation of air source heat pump (ASHP) systems in residential sites to include single-family and multifamily buildings. Funding is available only to ASHP installers that have been approved by NYSERDA and have installed program- qualified ASHP systems.	4/10/2019	12/31/2019	\$10,950,000.00
PON 3298 Revised	Clean Energy Communities Program	The Clean Energy Communities Program provides grants, direct technical support to communities, and recognition to local governments that demonstrate leadership in the area of clean energy. NYSERDA has identified ten high-impact actions that local governments can take to save money, foster a vibrant economy, and improve the environment	4/12/2019	9/30/2019	No value was stated in solicitation
RFQL 3685 Revised	Flexible Energy Technical Analysis	NYSERDA is issuing this solicitation to establish a pool of consulting firms qualified to provide the NYSERDA Energy and Environmental Analysis Department (EEA) with diverse technical, energy, economic, and environmental analytical capacity that can also provide support services on short notice. The pool of consultants will also be available for all Programs throughout NYSERDA, providing technical expertise when such services are needed.	5/14/2019	12/30/2022	No value was stated in solicitation
RFP 4091 Revised	Peoplesoft Support Services	NYSERDA is seeking consultants who can provide professional PeopleSoft support services to lead and assist with upgrades and patching to ensure all NYSERDA PeopleSoft servers and environments meet New York State cyber security standards and policies.	5/16/2019	6/7/2019	No value was stated in solicitation

PON 4124 Revised	National Offshore Wind Research and Development Consortium	NYSERDA is seeking professionals who can develop and demonstrate technology innovations that will reduce the levelized cost of electricity (LCOE) for offshore wind in the United States. These technology innovations must have the potential to reduce costs and remove barriers to offshore wind in the United States, while supporting the growth of U.Sbased offshore wind manufacturing and the supply chain. This Program Opportunity Notice (PON) is being executed on behalf of the National Offshore Wind Research and Development Consortium.	5/16/2019	12/31/2019	\$7,000,000.00
PON 3010 Revised	Renewable Heat NY Program	NYSERDA requests applications from eligible contractors to participate in a financial incentive program to install approved high-efficiency, low-emission biomass heating systems for eligible residential and commercial customers.	5/30/2019	12/31/2021	\$9,627,000.00
PON 3620 Revised -2	Ground Source Heat Pumps Rebate Program	The Ground Source Heat Pumps Rebate Program supports the installation of ground source heat pump systems at residential, commercial, institutional, and industrial buildings. Funding is available only to eligible designers and installers of ground source heat pump systems that have been approved by NYSERDA.	6/20/2019	12/31/2019	\$26,500,000.00
PON 2112 Revised - 1	NY-SUN Residential/Nonresidential Incentive Program	NYSERDA provides cash incentives and/or financing for the installation by Contractors and Builders of new grid-connected electric photovoltaic (PV) systems for residential sites in any region that are 25kW or less, for nonresidential sites in Upstate and PSEG Long Island regions that are up to 750kW, and for nonresidential sites in Con Ed region that are up to 7.5MW.	7/3/2019	12/29/2023	No value was stated in solicitation
PON 3082 Revised - 1	NY-Sun Commercial/Industrial Incentive Program	NYSERDA provides performance-based incentives for the installation by Contractors of new grid-connected electric photovoltaic (PV) systems that are ranging from 750kW to 7.5MW in Upstate region.	7/3/2019	12/29/2023	No value was stated in solicitation
PON 2112 Revised -2	NY-SUN Residential/Nonresidential Incentive Program	NYSERDA provides cash incentives and/or financing for the installation by Contractors and Builders of new grid-connected electric photovoltaic (PV) systems for residential sites in any region that are 25kW or less, for nonresidential sites in Upstate and PSEG Long Island regions that are up to 750kW, and for nonresidential sites in Con Ed region that are up to 7.5MW.	8/14/2019	12/29/2023	No value was stated in solicitation

PON 3082 Revised -2	NY-Sun Commercial / Industrial Incentive Program	NYSERDA provides performance-based incentives for the installation by Contractors of new grid-connected electric photovoltaic (PV) systems that are ranging from 750kW to 7.5MW in Upstate region.	8/14/2019	12/29/2023	No value was stated in solicitation
PON 3701 Revised	On-site Energy Manager Pilot	NYSERDA is seeking applications from facilities interested in participating in the On-site Energy Manager Pilot to demonstrate how a dedicated On-site Energy Manager can improve a company's profitability by delivering energy, process, and operational improvements. The Pilot targets commercial and industrial facilities or campuses that do not have an existing, dedicated, full-time energy manager on-site.	8/22/2019	12/30/2022	No value was stated in solicitation
PON 4128 Round 1 Revised	Electric Power Transmission and Distribution (EPTD) Future Grid Challenge	This program is investing in innovative grid solutions that directly address the Joint Utilities of New York operational goals stated in their Distributed System Implementation Plan (DSIP). Up to \$3 million is available for each challenge through 2019 to promote product development and demonstration projects that advance renewable energy integration, resiliency, and reliability of New York's grid.	9/27/2019	12/11/2019	\$15,000,000.00
PON 3981 Revised -2	Energy Efficiency and Clean Technology Training	Through this program, NYSERDA will provide funding to training providers across the State to ensure that New York energy efficiency and clean technology businesses have an adequate supply of new and existing workers with the necessary occupational skills, credentials and experience to participate in the clean energy economy.	9/27/2019	10/22/2019 - Round 5	\$4,000,000.00

There were 28 new solicitations published during the period of April 1, 2019 to September 30, 2019.

There were 21 revised solicitations with major revision changes during the period of April 1, 2019 to September 30, 2019.



Small Wind Turbine Incentive Program Program Opportunity Notice (PON) 2439

\$6,000,000 Available*

Applications accepted from May 2016 through December 31, 2019 by 3:00 PM Eastern Time

NYSERDA announces the availability of incentive funds to encourage the installation of end-use wind energy systems for residential, commercial, institutional or government use, and in Community Distributed Generation (CDG) format. Visibility regarding the approximate remaining program balance is available and updated periodically at https://www.nyserda.ny.gov/-/media/Files/Programs/Remaining-Small-Wind-Program-Budget.xlsx. The incentives, of up to \$1,000,000 per site/customer/cluster of CDG turbines, will be paid to Eligible Installers who install new approved grid-connected wind energy systems using qualified equipment, in accordance with the eligibility requirements described below. The maximum equipment size shall be 5 MW (5,000 kW) per site/customer/cluster of CDG turbines. NYSERDA's incentive shall not exceed 50% of the total installed cost of the system. The program will continue through December 31, 2019 or until funds are fully committed, whichever comes first. (NYSERDA reserves the right to add additional funds to this solicitation and/or extend the timeframe of this solicitation. Depending on market conditions at the time, NYSERDA reserves the right to create a "Wait List" regarding applications received for which funds were not available at the time).

Incentives are intended to benefit both the installer for business development, and the wind energy system customer, where generated power offsets the customer's utility power purchases or in a CDG arrangement. Eligible Installers must pass incentives, in their entirety, through to their customers. Incentives will be based on the nameplate rating of the installed wind turbine energy system. Incentives will not be approved for wind energy systems that are already completely or partially installed prior to application approval.

Applications must be submitted by Eligible Installers; installers must be approved as eligible by NYSERDA before they may submit an application. Installer eligibility will be determined for specific equipment and based on professional experience, company history, and installer credentialing. A list of Eligible Installers is posted on <u>http://nyserda.ny.gov/Contractors/Find-a-Contractor/Wind-Installers.aspx</u>. All Eligible Installers receive a letter from NYSERDA that attests to their eligibility to participate in this program.

*NYSERDA may increase or decrease the funds available under this PON at any time.

The application forms for this program are available directly from NYSERDA at <u>http://nyserda.ny.gov/Funding-Opportunities/PON-2439-On-Site-Wind-Turbine-Incentive-Program.aspx</u>, by contacting NYSERDA at 1-866-NYSERDA, or at info@nyserda.ny.gov. Completed application forms for incentives for specific installations by Eligible Installers will be processed and approved, until funds are fully committed, under the conditions outlined below. Completed application forms for eligibility as an installer will not be accepted after September 30, 2019. Applications for the qualification of wind turbines will be accepted at any time throughout the duration of this program.

Application Submission: Completed application forms must be clearly labeled, contain all required information, have original signatures, and be mailed to:

New York State Energy Research and Development Authority PON 2439 Small Wind 17 Columbia Circle Albany, NY 12203-6399

Envelopes must be addressed as indicated above or processing may be delayed.

Installers may direct any questions to Mark Mayhew at 1-866-NYSERDA, 518-862-1090, extension 3319 or wind@nyserda.ny.gov. Please indicate that you are calling in reference to PON 2439.

*Late, incomplete, or unsigned applications for incentives will be returned. Faxed applications for incentives will not be accepted. Applications to become an Eligible Installer or to have a wind turbine listed for eligibility may be e-mailed. Applications will not be accepted at any other NYSERDA location other than the address above. If changes are made to this solicitation, notification will be posted on NYSERDA's website at http://www.nyserda.ny.gov/.

I. INTRODUCTION

Wind energy benefits the public by enhancing the reliability of the electricity grid, reducing peak electric demand, increasing in-state electricity generation, increasing the diversity of the state's energy supply portfolio including carbon-free electricity that improves the environment, and making the electric supply market more competitive by promoting consumer choice. To qualify, the small wind energy system must be either (i) connected on the customer's side of the electric meter and electricity generated by the system must offset the customer's utility electricity purchases, or (ii) serve in the form of CDG where the installation is consistent with the current utility tariff of the interconnecting utility.

This program provides incentives to Eligible Installers who install approved, grid-connected, small wind energy systems. Incentives must be passed on in their entirety to the customer. The program will accept applications for eligibility from installers who would like to participate in the program until September 30, 2019 and will accept applications continuously from wind turbine manufacturers who would like to have their wind turbines listed as eligible to receive funding. Once eligible, installers may apply for incentives for approved wind energy systems, for specific projects, until December 31, 2019 or until funds are fully committed, whichever comes first.

To be eligible to install wind energy systems under this program, installers must demonstrate that they have adequate training **and** experience installing wind energy systems, including wind turbines and towers, and must be authorized by the wind turbine manufacturer or distributor to be an installer of the Eligible Wind Turbine.

NYSERDA provides complementary programs that encourage companies, organizations, and individuals to enter or improve their position in the sustainable marketplace. Visit the Funding Opportunities page on NYSERDA's web-site (<u>http://www.nyserda.ny.gov</u>) or call 866-NYSERDA for more information. NYSERDA has developed installer training programs to educate and expand New York's wind installer community. Training opportunities will be posted at: <u>http://www.nyserda.ny.gov/Business-and-Industry/Training-Opportunities</u>.

II. FUNDING, ELIGIBLE CUSTOMERS, INCENTIVES, LIMITATIONS

A. Program Funding

This Program is funded through the Clean Energy Fund (CEF). The CEF is the next evolution of clean energy programs and is part of a strategy to build a clean, more resilient, and affordable energy infrastructure in New York State. This fund will operate four major portfolios and Market Development is one of these. The Market Development portfolio will focus on facilitating the market for on-site, behind-the-meter clean energy solutions including energy efficiency, distributed generation, renewable thermal, and energy storage. A core premise of this portfolio is the recognition that, in the absence of a fully functioning market, initiatives are needed to spur solutions and innovations that accelerate the transition to market mechanisms. The Market Development portfolio will address the diverse barriers to clean energy deployment. Bridge incentives will be deployed alongside new techniques that spur self-sustaining clean energy markets and seek to mobilize capital to create the greatest opportunity for market penetration. The CEF Resource Acquisition Transition plan details the process to transition away from legacy programs. For the Small Wind Incentive program, this will be carried out by an extension through 12/31/2019 of the existing program with its original budget.

At the launch of this program \$6 million was made available for incentives to install approved wind energy turbines for Eligible Customers as defined below (visibility to the approximate remaining program balance is available and updated periodically at https://www.nyserda.ny.gov/-/media/Files/Programs/Remaining-Small-

<u>Wind-Program-Budget.xlsx</u>). The program is expected to be available through December 31, 2019 or until funds are fully committed, whichever comes first.

In general, this program will be first-come, first-served with queue position determined based on the date that a **full-and-complete application is received by NYSERDA** (applications will be considered full and complete only after Attachments A and B and all supporting documents are reviewed and approved by NYSERDA). If and when funds remaining in the program are less than what is requested by the next applicant, that applicant will be given the right to first refusal of the funds remaining. If that applicant declines, the remaining funds will be offered in the same manner to the next applicant until such time as all funding is exhausted or the close of the program, whichever occurs first. Depending on market conditions at the time, NYSERDA reserves the right to create a "Wait List Queue" regarding applications received for which funds were not available at the time.

Projects eligible under this CEF Program may also be eligible under a Large-Scale Renewables (LSR) solicitation. However, once a project application or proposal has been approved by NYSERDA or becomes the subject of an award under this CEF Program, for which funds are available, that project will become ineligible for funding under the LSR Program. Applicants will not be permitted to withdraw or cancel a project application, proposal, or contract in order to apply or pursue an application or proposal in the LSR for the same project (or for any portion of the project).

B. Eligible Customers

Financial incentives for the installation of wind energy systems are available for all sectors, including but not limited to residential, commercial, industrial, agricultural, institutional, educational, not-for-profit, and government-owned facilities. Projects that have been funded or partially funded by other NYSERDA programs are not eligible for funding under this PON. To be eligible, for projects that are not CDG, the customer must be an electricity distribution customer of: Central Hudson Gas & Electric Corporation, Consolidated Edison Company of New York, Inc., New York State Electric & Gas Corporation, National Grid, Orange and Rockland Utilities, Inc. or Rochester Gas and Electric Corporation, who pays the Systems Benefit Charge surcharge. For projects that are CDG, the CDG Host and CDG Satellites must meet the definition in their current utility tariff and pay the SBC. This charge typically appears as an itemized charge on the electric utility bill, with a reference to SBC.

Wind energy systems owned by third-parties may be eligible for funding under this program, provided that the electric customer(s) who benefit pay the SBC surcharge, and that any contractual relationship involving the customer, system owner, or the installer provides that the entire incentive payment is being passed on to the customer, and that the program requirements required of Eligible Installers are provided to the customer by an Eligible Installation company.

C. Incentive Levels

The NYSERDA incentive will be based on the Nameplate Rating (kW) of the wind turbine energy system. An incentive of \$1,500 per kW will be applied to the first 100 kW of a wind turbine energy system, and an incentive of \$500 per kW will be applied for each kW over the initial 100. If multiple wind turbines are installed at a site/CDG cluster, the NYSERDA incentive is based on the sum of the nameplate ratings of all wind turbines combined as a wind turbine energy system.

Changes in Incentive Level - Although incentives are expected to stay at the above levels, incentives may be changed at any given time during the program, for any reason. Eligible Installers will be notified of any program changes via e-mail and the changes will also be posted on NYSERDA's web site. Applications that are complete when received by NYSERDA will not be subject to subsequent changes in incentive levels.

D. Limitations.

The maximum incentive available is \$1,000,000 per site/customer/cluster of CDG turbines. The maximum total equipment size is 5 MW (5,000 kW) per site/customer/cluster of CDG turbines. The NYSERDA incentive will not exceed 50% of the total installed cost of the wind turbine energy system.

The purpose of NYSERDA's Small Wind Turbine Incentive Program is to support the installation of customer generation that will produce electricity primarily for use by that customer or via a CDG mechanism. Consistent with this purpose, this program limits the size (kW) of the electric generation system that can be installed behind a customer's meter; in such cases systems shall be sized such that the expected annual energy produced (kWh/year) by the system will not exceed 110% of the customer's grid-supplied electric energy usage per annum, including eligible remote meters. To be eligible each remote net meter(s) must be subject to the payment of the SBC surcharge on the account served by each remote meter, also known as a satellite account. For sites that do not have 12 months of electric consumption or that are increasing their electric use, an estimated energy use analysis may be used to predict that usage. For CDG applications, the system shall be sized such that the expected annual energy produced (kWh/year) by the system will not materially exceed that of the CDG Host and the CDG Satellites proposed with their utility CDG application.

Applications will be accepted for review in accordance with the following limitations:

- The first application submitted by a new Installer must be approved by NYSERDA before any additional applications may be submitted.
- If more than five (5) of an Eligible Installation Company's open projects (i.e., application for which NYSERDA has issued a Purchase Order but NYSERDA has not yet paid the final invoice) are not proceeding in a timely manner, as defined in Section II.F of this PON, NYSERDA will not process or approve any additional applications involving that company, until the non-timely projects are reduced to no more than five (5).

Incentives are only available for the installation of new equipment and wind energy systems that have not been installed (partially or completely) prior to NYSERDA approval of an incentive application submitted in accordance with the terms and conditions of this PON. Incentives are only available to Eligible Installers and incentives must be passed on in their entirety to customers. Incentives will not be provided directly to customers who purchase and install their own wind energy systems.

E. Incentive Payment Schedule

Incentives will be paid to Eligible Installers in one lump sum payment upon demonstration that the wind energy system has been connected to the utility grid, inspected by all Authorities Having Jurisdiction, and/or inspected by NYSERDA or its representatives and Attachment E has been completed, submitted and approved by NYSERDA. Documentation for all applicable utility, state, city, town, and other inspections and approvals must be attached to Attachment E.

F. Application and Payment Approval Timing

Complete, accurate, and legible incentive applications will help facilitate a quick review. NYSERDA will not consider or process applications that are not complete. Applications for projects to be installed behind a customer's meter that are not complete and signed by both the Eligible Installer and Customer when submitted will not be processed. Applications for CDG projects, that are not complete and signed by both the Eligible Installer and CDG Host when submitted will not be processed. In general, this program will be first-come, first-

served with queue position determined based on the date that a full-and-complete application is received by NYSERDA.

Incentive Application Form Part 1 (Attachment A) will be reviewed and installers will be notified within 30 days of NYSERDA's receipt of the completed application. Applications for proposed installations that (1) do not meet the requirements of PON 2439, (2) have installation and interconnection schedules in the customer purchase agreement that are not reasonable, and/or (3) indicate that the proposed wind energy system has been installed (partially or completely) before NYSERDA approval will be rejected and returned.

Incentive Application Form Part 2 (Attachment B) will be reviewed and, for situations where the Town or other permit-granting body has completed the requirements of the State Environmental Quality Review Act (SEQR) (<u>http://www.dec.ny.gov/permits/357.html</u>), installers will be notified within 30 days of receipt of the application. If no zoning, land-use or other approval-granting body has jurisdiction, at least an additional 30 days will be necessary.

Upon NYSERDA's approval of a full and complete application, the installer will receive an approval letter with a Purchase Order attached; this is the point at which funds will be allocated for the project. The date on the Purchase Order shall serve as the starting date of the project. For projects to be installed behind a customer's meter, all the wind energy system components should be delivered to the customer's site within 120 days of this starting date. For CDG projects, all the wind energy system components should be delivered to the delivered to the installation site within 240 days of this starting date. Otherwise, the project will be deemed to be delinquent and may be subject to corrective action at NYSERDA's sole discretion including but not limited to termination of the incentive award and/or withholding the award of further contracts to the involved Eligible Installation Company based on the company's overall portfolio of then delinquent projects.

The entire NYSERDA incentive shall be paid in a single lump sum once the wind energy system is operating, has been connected to the utility grid, inspected by all Authorities Having Jurisdiction, and/or after a NYSERDA system inspection to verify that the system installation was consistent with the NYSERDA application. Documentation for all applicable utility, state, city, town, and other inspections and approvals must be attached to Attachment E. Incentive payments may be contingent on NYSERDA inspecting an installed system. Inspections will be made within a reasonable time after a system is installed and are not intended to significantly delay a final incentive payment if all program requirements have been met. The wind energy system must be shown to be operational within 120 days of the equipment being delivered to the site. Otherwise, the project will be deemed to be delinquent and may be subject to corrective action at NYSERDA's sole discretion including but not limited to termination of the Contract and/or withholding the awarding of further contracts to the involved Eligible Installation Company based on the company's overall portfolio of then delinquent projects.

Once all deliverables have been met, NYSERDA's payment for an approved wind energy system will be paid under the terms of NYSERDA's prompt payment policy. (http://nyserda.ny.gov/~/media/Files/FO/Standard%20Forms%20and%20Agreements/exhibitd.ashx?sc_database= web)

III. WIND ENERGY SYSTEM AND SITE REQUIREMENTS

A. Wind Energy Systems and Components

Systems must be for grid-connected, on-site applications or CDG format to be eligible for an incentive. All components of wind energy systems installed under this program must be new equipment. **Incentives are only available for wind energy systems that have not been installed (partially or completely) prior to NYSERDA approval of an incentive application submitted in accordance with the terms and conditions of this PON.** Construction or partial construction of the foundation is considered partial installation of the wind energy system and should not occur prior to NYSERDA's approval of an incentive application.

Wind Turbines - Only wind turbines that have been pre-approved by NYSERDA are eligible for funding under this program. A list of Eligible Wind Turbines is available at <u>http://www.nyserda.ny.gov/All-Programs/Programs/Small-Wind-Program/Eligible-Wind-Turbines</u>. See Section VI.

Towers - Wind turbines must be mounted on an appropriate tower and the towers must be designed to accommodate the proposed wind turbine. It is recommended that towers be at least 60 feet in height; however, the bottom of the rotor <u>must be</u> at least 30 feet above any obstacle, in any direction, within 500' of the turbine. NYSERDA reserves the right to consider installations on a case-by-case basis.

Building-Mounted Turbines – In situations where the local municipality has an ordinance that stipulates the criteria for building-mounted wind turbines, a wind turbine may be mounted on a pre-existing structure such as a building or a pre-existing tower. For turbines mounted on a pre-existing structure, a structural analysis must be provided demonstrating sufficient structural integrity. NYSERDA reserves the right to approve such applications on a case-by-case basis.

Inverters and Interconnection - Inverters and interconnection devices must be listed on the New York State Department of Public Service's list of Certified Interconnection Equipment (http://www3.dps.ny.gov/W/PSCWeb.nsf/All/DCF68EFCA391AD6085257687006F396B?OpenDocument) or the interconnection must be in agreement with the most current version of the Public Service Commission's Standardized Interconnection Requirements. All wind energy systems must have an appropriate interconnection agreement with the utility and the wind energy system must be installed in compliance with that agreement.

Other Electrical Components - All other electrical components of the wind energy systems such as charge controllers, batteries, wiring, and metering equipment must be certified as meeting the requirements of any relevant national and state codes and standards.

Monitoring Equipment - Each wind energy system must include, at a minimum, a cyclometer register kilowatthour meter (or a meter that can be read numerically by a customer or an "easy read meter") to read total energy output. The energy metering data must be automatically stored independently of the inverter display. In lieu of a meter, a data acquisition system (DAS) capable of transmitting and storing data off-site may be used. The meter must have an accuracy of within $\pm 5\%$ and include a certificate of compliance from the manufacturer. Energy production (including the date of first production and the date of each meter reading) must be collected by the installer or customer at least once per month and the installer must submit this data to NYSERDA twice per year for two years following interconnection of the wind energy system. A DAS does not alleviate the installer's responsibility to submit timely data to NYSERDA. At NYSERDA's cost, NYSERDA may require that additional monitoring equipment be installed.

B. Siting Considerations

Under the provisions of the State Environmental Quality Review Act (SEQR), NYSERDA must determine if the funding of any action may have a significant impact on the environment. All wind installations must meet the requirements of the local zoning ordinances.

In addition, the following general criteria will apply:

- The minimum work zone distance between the tower base, and a property line or power line is the height of the wind energy system, above ground level, including the blades, plus 10%. (i.e., 1.1 times the total height of the wind energy system)
 - Host sites may apply for an exemption with written permission from the neighbor and an indication from the neighbor that the use of land in the vicinity is consistent with the proposed wind energy system. There is no exemption for power lines.
- The minimum setback distance between the tower base and any human-occupied building is five times the rotor diameter.
 - Host sites may apply in writing for an exemption from this minimum distance requirement for buildings they own; however, the host site must demonstrate that the potential problems that may arise by locating the wind energy system less than the required distance from the building have been addressed.
- For building-mounted applications, if the local municipality has an ordinance that stipulates the criteria for building-mounted wind turbines, then building-mounted wind turbines may be eligible for funding under this program, provided all other program requirements are met. If the local municipality does not have an ordinance that stipulates the criteria for building-mounted wind turbines, then a building-mounted wind turbine is not eligible for funding under this program.
- If multiple turbines are proposed for a site/CDG cluster, there must be a distance of at least ten times the rotor diameter between the tower bases.
- The bottom of the rotor must be at least 30 feet above any obstacle, in any direction, within 500' of the turbine.

IV. REQUIRED DOCUMENTATION FOR INCENTIVE APPLICATIONS

There are two parts to the incentive application: Attachment A, "Installation Information," and Attachment B, "Permitting and SEQR Information." Installers may submit Attachment A prior to obtaining permits for the wind energy system as it is possible that the review of Attachment A could result in recommendations to make changes to the wind energy system location or tower height. Both Attachments A and B include lists of the supporting documentation that must be provided with each. **Only after Attachments A and B and all supporting documents are reviewed and approved by NYSERDA will an application be considered "full and complete" and a Purchase Order be issued.**

A. Attachment A – Installation Information

Attachment A describes the site and the wind energy system that will be erected. Installers must supply all of the information requested in Attachment A, "Installation Information." Applications that do not include all of the information requested will be returned.

Wind Site Assessment - A wind site assessment provides host sites with site-specific information. At a minimum, this assessment shall include the following; however, applications for turbines with a nameplate rating of greater than 100 kW will require a more detailed analysis:

a. An evaluation of the wind resource at the potential location of the wind turbine(s) at hub height.

- b. Eight photographs taken from the proposed wind energy system location looking in the following directions: N, NE, E, SE, S, SW, W, NW.
- Site contour map.
- Demonstrated historic annual site electric use (kWh). For sites that do not have 12 months of electric consumption or that are increasing their electric use, an energy-use analysis may be used to predict that usage. Copy of a utility bill(s) from the customer or CDG Host showing proof of payment of the System Benefits Charge surcharge (SBC) (or letter from utility if not indicated on electric bill) and annual kWh usage. In addition for CDG applications, a copy of the utility bill showing proof of SBC payment must be submitted for each CDG Satellite site proposed with their utility CDG application. Attachment I Electric Utility Information must also be completed.
- Details about the proposed turbine, including manufacturer and model, rotor diameter, tower height, and tower type.
- A description of potential obstructions that may affect the proposed turbine's Annual Energy Output (AEO). NYSERDA may apply additional turbulence losses to the analysis. When the obstacles are trees, their mature height must be used to determine minimum turbine height.
- Aerial photos or images of the potential wind site.
- Elevation of the site (feet about sea level).
- A plot plan, on 8-1/2" x 11" paper, (multiple plans may be submitted, if scaling is an issue.) which includes the following:
 - o Property lines and physical dimensions of the property
 - o Location, dimensions, and types of existing major structures on the property
 - o Location of the proposed wind system tower(s)
 - o The right-of-way of any public road that is contiguous with the property;
 - o Location of any overhead utility lines;
 - o Location of utility meter; and
 - o Electrical interconnection location.
- Estimated AEO of the proposed turbine.

Wind Site Assessment for wind turbines with a nameplate rating equal to or greater than 100 kW shall also include a review of the following:

- c. Accessibility of site and availability of work area
- d. Ease of interconnection to existing electrical infrastructural (on-site and utility)
- e. Economic analysis
- f. Shadow flicker and sound issues
- g. Any additional reviews required by any Authority Having Jurisdiction (AHJ).

One-Line Diagram - A legible diagram using unique line characteristics and standard symbols to clearly describe the wind energy system as it will be installed. The One-Line Diagram must show all major system components

from the wind turbine to the utility meter. Each conductor's size and type shall be shown, as well as the relevant conduit characteristics (i.e. size and type, and length, if greater than 20'). The make, model, and voltage and amperage ratings of all overcurrent devices, switches, inverters, batteries and other relevant equipment shall be shown, as applicable. The Diagram should also make clear whether the system will be connected via a line-side tap or if it will be back-fed through a circuit breaker in the main service panel.

System designs must be in accordance with applicable local, State, and national codes and regulations, including Article 694, Small Wind Electric Systems, of the National Electrical Code.

Installation Drawings – If required by the AHJ, provide copies of any tower foundation blueprints or drawings, tower blueprint or drawing, and any other required documentation.

B. Attachment B - State Environmental Quality Review

Attachment B, Permitting and SEQR Information, provides a list of the steps and supporting documents that are necessary for approval of NYSERDA funding. It is the Eligible Installer's responsibility to ensure that all necessary permits, approvals, certificates, etc. from any applicable AHJ are obtained for all installed systems.

The Eligible Installer is responsible for ensuring that each project complies with the requirements of the State Environmental Quality Review Act (SEQR). Under the provisions of SEQR, NYSERDA must determine if the funding of any action may have a significant impact on the environment, regardless of any other authority's determination. SEQR review should begin with an application to the Town board, zoning, land-use or other local approval-granting body. A SEQR negative declaration or other determination by a local authority will be considered by NYSERDA in its determination. NYSERDA does not consider the installation of a wind turbine to be a Type II Action.

For incentive applications where the combined total name plate rating of the wind turbines at a site/CDG cluster is equal to or greater than 100 kW, the application must include the Full Environmental Assessment Form with the Visual EAF. During NYSERDA's review, particular attention will be paid to questions A-11, A-14, A-18, B-9, B-10, C-11 and C-17.

Eligible Installers are encouraged to review the SEQR requirements early in the developmental stage, before entering a contract with a customer that reflects NYSERDA participation. Please contact NYSERDA if you have any questions regarding these requirements. For a more comprehensive description of the SEQR process visit http://www.dec.ny.gov/permits/357.html. NYSERDA will not commit to providing incentives on any project until it makes a determination under SEQR.

V. INSTALLER ELIGIBILITY

To apply for status as an Eligible Installer, an individual must complete and submit Attachment F - Installer Eligibility Application Form along with the required supporting documentation. An applicant's eligibility will be determined and maintained for specific wind turbines depending on the types of wind energy systems the applicant has experience installing. Attachment J - Manufacturer Authorization Letter must also be completed; this letter stipulates that the installer is authorized to install the specified wind turbine and that the manufacturer will honor the NYSERDA required warranty, as stated in Attachment C - Addendum to Customer Purchase Agreement, in the event of a default by the installer.

Determinations of eligibility will be based on factors such as acceptance of all program terms and conditions, training, extent and type of installation experience, customer references, and proof that at least one of NYSERDA's Eligible Wind Turbine manufacturers or dealers will sell product to the applicant. Site assessment skills, wind resource and energy estimation skills, and professionalism will also be evaluated. Past performance under NYSERDA programs is a critical criterion for determining eligibility and the conditions of eligibility under this solicitation.

Once determined otherwise eligible, applicants will be required to sign and comply with the Standard Terms and Conditions (Attachment G). If the Eligible Installer, Installation Company employees, or subcontractors do not meet all program terms and conditions or program requirements, the Eligible Installer will be subject to termination or suspension actions as described in Section 3(b) of Attachment G, Eligible Installer Agreement - Standard Terms and Conditions.

Installers will be required to meet all insurance requirements (both commercial general liability and commercial automobile liability insurance) as specified under Section 10 of Standard Terms and Conditions (Attachment G). Each insurance certificate must name NYSERDA and the State of New York as additional insureds. Proof of insurance must be provided to NYSERDA and submitted with the signed copy of the Standard Terms and Conditions.

Once the above requirements have been satisfied and the installer has been notified in writing by NYSERDA of Eligible Installer status, an Eligible Installer may then submit applications for incentives for specific customers, under the terms and conditions described in PON 2439, and the Eligible Installer will be placed on NYSERDA's list of Eligible Installers. Review of Eligible Installer Applications may take up to 30 days. Since the incentives offered under this program will close on December 31, 2019, until further notice installer eligibility applications will only be accepted until September 30, 2019.

A list of Eligible Installers is posted on <u>http://nyserda.ny.gov/Contractors/Find-a-Contractor/Wind-Installers.aspx</u>.

To maintain eligibility under this program, all installers must meet the following conditions every calendar year:

- h. Their insurance is current
- i. They can show proof that they have had a significant role in a wind turbine installation, attended at least one in-depth wind installation training course, or attended an in-depth wind site assessor course. (NABCEP Certified Small Wind Installers are exempt from this initiative.)
- j. There have been no other substantial changes that could affect their program eligibility.

NYSERDA's Rights and Limitations - NYSERDA may deny or revoke eligibility for any reason, including, but not limited to: inadequate training, inadequate experience, poor references, failure to act professionally, fairly, and in good faith with NYSERDA or customers, providing false information to NYSERDA or customers, poor performance in previous NYSERDA programs, and committing actions that would be subject to disciplinary actions under Section 3(b) of Attachment G, Compliance with program terms and conditions.

Neither NYSERDA nor the State of New York endorses any Eligible Installer, Installation Company, or Eligible Wind Turbine. In addition, NYSERDA and the State of New York does not guarantee, warrant, or in any way represent or assume liability for any work proposed or carried out by an Eligible Installer or Installation Company. NYSERDA is not responsible for assuring that the design, engineering, or construction of the project or installation of any wind energy system is proper or complies with any particular laws, regulations, codes, licensing, certification and permit requirements, or industry standards. NYSERDA does not make any

representations of any kind regarding the results to be achieved by the wind energy systems or the adequacy or safety of such measures.

VI. ELIGIBLE WIND TURBINES

Only commercially-available wind turbines with a proven record for power performance, reliability, safety, and acoustics will be considered for funding. NYSERDA is a member of the Interstate Turbine Advisory Council (ITAC), established under the Clean Energy States Alliance. One of ITAC's goals is to establish a collaborative group of public clean energy programs to evaluate and identify small and medium wind turbines that fit the performance and durability expectations of incentive providers. ITAC has published its Unified List of Turbines, which is available at http://www.cleanenergystates.org/projects/ITAC/itac-unified-list-of-wind-turbines/. NYSERDA has adopted this list for all wind turbine sizes included in the list, as they pertain to PON 2439. NYSERDA reserves the right to impose additional restrictions or modify ITAC's requirements dependent on program needs.

For wind turbines outside the ITAC purview to be considered for eligibility to receive funding under this program, a manufacturer or dealer must complete and submit Attachment H, Eligible Wind Turbine Application Form, with all of the information requested.

NYSERDA requires that manufacturers or dealers of wind turbine provide evidence that an international organization, accredited to ISO/IEC Guide 65 or EN45011, has certified that the wind turbine meets the appropriate sections of IEC 61400 for acoustics, durability, safety, and performance standards.

In addition, in order to participate in the program, the manufacturer or dealer must submit the technical specifications on the wind turbine, inverter, and tower, as well as the power curve in graphic and table form, from IEC 61400-12-1. NYSERDA reserves the right to deny eligibility of any wind turbine for any reason including but not limited to: poor performance, concerns about wind turbine's design, concerns about the quality of data presented, or lack of manufacturer support for maintenance and warranties. Review of Wind Turbine Applications may take up to 60 days.

Details on Eligible Wind Turbines may be found at: http://www.nyserda.ny.gov/All-Programs/Programs/Small-Wind-Program/Eligible-Wind-Turbines.

VII. GENERAL CONDITIONS

Proprietary Information - Careful consideration should be given before confidential information is submitted to NYSERDA as part of your proposal. Review should include whether it is critical for evaluating a proposal, and whether general, non-confidential information, may be adequate for review purposes.

The NYS Freedom of Information Law, Public Officers law, Article 6, provides for public access to information NYSERDA possesses. Public Officers Law, Section 87(2)(d) provides for exceptions to disclosure for records or portions thereof that "are trade secrets or are submitted to an agency by a commercial enterprise or derived from information obtained from a commercial enterprise and which if disclosed would cause <u>substantial injury to the competitive position</u> of the subject enterprise." Information submitted to NYSERDA that the proposer wishes to have treated as proprietary, and confidential trade secret information, should be identified and labeled "Confidential" or "Proprietary" on each page at the time of disclosure. This information should include a written request to except it from disclosure, including a written statement of the reasons why the information should be

excepted. See Public Officers Law, Section 89(5) and the procedures set forth in 21 NYCRR Part 501 <u>http://www.nyserda.ny.gov/About/-/media/Files/About/Contact/NYSERDA-Regulations.ashx</u>. However, NYSERDA cannot guarantee the confidentiality of any information submitted.

Omnibus Procurement Act of 1992 - It is the policy of New York State to maximize opportunities for the participation of New York State business enterprises, including minority- and women-owned business enterprises, as bidders, subcontractors, and suppliers on its procurement Agreements.

Information on the availability of New York subcontractors and suppliers is available from:

Empire State Development Division For Small Business 625 Broadway Albany, NY 12207

A directory of certified minority- and women-owned business enterprises is available from:

Empire State Development Minority and Women's Business Development Division 625 Broadway Albany, NY 12207

State Finance Law sections 139-j and 139-k - NYSERDA is required to comply with State Finance Law sections 139-j and 139-k. These provisions contain new procurement lobbying requirements which can be found at

http://www.ogs.ny.gov/aboutogs/regulations/advisoryCouncil/StatutoryReferences.html The attached Proposal Checklist calls for a signature certifying that the proposer will comply with State Finance Law sections 139-j and 139-k and the Disclosure of Prior Findings of Non-responsibility form includes a disclosure statement regarding whether the proposer has been found non-responsible under section 139-j of the State Finance Law within the previous four years.

Tax Law Section 5-a - NYSERDA is required to comply with the provisions of Tax Law Section 5-a, which requires a prospective contractor, prior to entering an agreement with NYSERDA having a value in excess of \$100,000, to certify to the Department of Taxation and Finance (the "Department") whether the contractor, its affiliates, its subcontractors and the affiliates of its subcontractors have registered with the Department to collect New York State and local sales and compensating use taxes. The Department has created a form to allow a prospective contractor to readily make such certification. *See*, ST-220-TD (available at http://www.tax.ny.gov/pdf/current_forms/st/st220td_fill_in.pdf). Prior to contracting with NYSERDA, the prospective contractor must also certify to NYSERDA whether it has filed such certification with the Department. The Department has created a second form that must be completed by a perspective contractor prior to contacting and filed with NYSERDA. *See*, ST-220-CA (available at

http://www.tax.ny.gov/pdf/2006/fillin/st/st220ca_606_fill_in.pdf). The Department has developed guidance for contractors which is available at http://www.tax.ny.gov/pdf/publications/sales/pub223.pdf.

Contract Award - NYSERDA anticipates making multiple awards under this solicitation. It may award a contract based on initial applications without discussion, or following limited discussion or negotiations. Each offer should be submitted using the most favorable cost and technical terms. NYSERDA may request additional data or material to support applications. NYSERDA will issue a Purchase Order and cover letter to contract

successful proposals. NYSERDA expects to notify applicants in approximately four weeks from the receipt of an application whether your application has been selected to receive an award.

Limitation - This solicitation does not commit NYSERDA to award a contract, pay any costs incurred in preparing a proposal, or to procure or contract for services or supplies. NYSERDA reserves the right to accept or reject any or all proposals received, to negotiate with all qualified sources, or to cancel in part or in its entirety the solicitation when it is in NYSERDA's best interest.

Disclosure Requirement - The proposer shall disclose any indictment for any alleged felony, or any conviction for a felony within the past five years, under the laws of the United States or any state or territory of the United States, and shall describe circumstances for each. When a proposer is an association, partnership, corporation, or other organization, this disclosure requirement includes the organization and its officers, partners, and directors or members of any similarly governing body. If an indictment or conviction should come to the attention of NYSERDA after the award of a contract, NYSERDA may exercise its stop-work right pending further investigation, or terminate the agreement; the contractor may be subject to penalties for violation of any law which may apply in the particular circumstances. Proposers must also disclose if they have ever been debarred or suspended by any agency of the U.S. Government or the New York State Department of Labor.

VIII. ATTACHMENTS

- Attachment A Incentive Application Form
- Attachment B Permitting and SEQR Information
- Attachment C Addendum to the Customer Purchase Agreement Standard Terms and Conditions
- Attachment D No Longer Used
- Attachment E Incentive Payment Form
- Attachment F Installer Eligibility Application Form
- Attachment G Eligible Installer Agreement Standard Terms and Conditions
- Attachment H Eligible Wind Turbine Application Form
- Attachment I Electric Utility Information
- Attachment J Manufacturer Authorization Letter



Workforce Training: Building Operations and Maintenance Program Opportunity Notice (PON) 3715 \$10,000,000 Available

NYSERDA reserves the right to extend and/or add funding to the Solicitation should other program funding sources become available.

Applications accepted on a first-come, first-served basis dependent on funding availability until May 26, 2021 by 3:00 PM Eastern Time.

As part of Governor Cuomo's transformative plan to improve the state's economic development model, a New York State Consolidated Funding Application (CFA) has been created that will streamline and expedite the grant application process. NYSERDA's Building Operations and Maintenance Workforce Development and Training Program is part of this CFA process. This program seeks to reduce energy use and associated carbon emissions while saving building operators and owners money by building the skills of operations and maintenance staff and managers across the state. The goal is to provide support to help employers and building owners with workforce development and training projects that create the talent development strategy, corporate culture, on-site training framework, and training tools needed to support building operations and maintenance workers beyond classroom training. NYSERDA will support eligible projects by providing funding for activities such as, but not limited to, on-site training laboratories, curriculum development, career pathways training, coaching/mentorships, apprenticeships, internships, training trainers within a company, and partnerships with manufacturers. Projects submitted to this PON should be designed to help employers build upon their employees' technical skills and reduce facility energy use, while realizing other corporate benefits such as reduced equipment downtimes, increased occupant comfort, reduced occupant complaints and tenant turnover, increased numbers of staff with national certifications, and opportunities for promotion and career advancement.

This program targets the operations and maintenance workforce employed in the following building types: multifamily housing, office buildings, retail, colleges and universities, hospitals and health care facilities, state and local governments, not-for-profit and private institutions, industrial facilities, and public and private K-12 schools. Other building types will be evaluated on a case-by-case basis. While a training organization may be the lead proposer, they must partner with a specified entity or entities employing building operations and maintenance workers. Such entities must be New York State electricity customers of a participating utility company and paying into the System Benefits Charge (SBC)/Clean Energy Fund (CEF). Proposals must be for buildings or groups of buildings, including partnerships of businesses with common training needs and skills gaps that have total annual energy expenditures of \$1 million or more. Building operations and maintenance occupations or job titles that are targeted for hands-on and on-site training under this program may include, but are not limited to, the following: facilities and property managers; operating and stationary engineers; technicians; building superintendents; maintenance workers; mechanics and supervisors; electricians; HVAC technicians; procurement staff; facility coordinators; and energy/sustainability managers.

Potential cost reduction and efficiency improvements achieved through training could target, but are not limited to HVAC systems and controls; building envelope; mechanical systems; building diagnostics; pneumatic systems and controls; building set points and temperature standards; and lighting and lighting controls, motors, etc.

NYSERDA will provide cost share of up to 50% with a cap of \$400,000 per application. **Applications will be received on a first-come, first-served basis through May 26, 2021.** If changes are made to this solicitation, notification will be posted on NYSERDA's web site at <u>https://www.nyserda.ny.gov</u>.

Application Submission: Applications will only be accepted through the New York State Consolidated Funding Application (CFA) online portal: <u>https://apps.cio.ny.gov/apps/cfa/</u>

No communication intended to influence this procurement is permitted except by contacting Angela Datri – primary contact (Designated Contact) at (518) 862-1090, ext. 3515 or by e-mail Wfinfo@nyserda.ny.gov or Adele Ferranti – secondary contact (Designated Contact) at (518) 862-1090, ext. 3206 or by e-mail Wfinfo@nyserda.ny.gov (for technical questions). If you have contractual questions concerning this solicitation, contact Nancy Marucci (Designated Contact) at (518) 862-1090, ext. 3335 or by email NancySolicitations@nyserda.ny.gov. Contacting anyone other than the Designated Contacts (either directly by the proposer or indirectly through a lobbyist or other person acting on the proposer's behalf) in an attempt to influence the procurement: (1) may result in a proposer being deemed a non-responsible offerer, and (2) may result in the proposer not being awarded a contract.

If changes are made to this solicitation, notification will be posted on NYSERDA's web site at <u>https://www.nyserda.ny.gov/</u>.

I. INTRODUCTION

NYSERDA's Building Operations and Maintenance Workforce Development and Training Program seeks to reduce energy use and associated carbon emissions while saving building operators and owners money by building the skills of operations and maintenance staff and managers across the state. The goal is to provide support to help employers and building owners with workforce development and training projects that create the talent development strategy, corporate culture, on-site training framework, and training tools needed to support building operations and maintenance workers beyond classroom training. NYSERDA will support eligible projects by providing funding for activities such as, but not limited to, on-site training laboratories, curriculum development, career pathways training, coaching/mentorships, apprenticeships, internships, training trainers within a company, and partnerships with manufacturers. Projects submitted to this PON should be designed to help employers build upon their employees' technical skills and reduce facility energy use, while realizing other corporate benefits such as reduced equipment downtimes, increased occupant comfort, reduced occupant complaints and tenant turnover, increased numbers of staff with national certifications, and opportunities for promotion and career advancement.

This program targets the operations and maintenance workforce employed in the following building types: multifamily housing, office buildings, retail, colleges and universities, hospitals and health care facilities, state and local governments, not-for-profit and private institutions, industrial facilities, and public and private K-12 schools. Other building types will be evaluated on a case-by-case basis. While a training organization may be the lead proposer, they must partner with a specified entity or entities employing building operations and maintenance workers. Such entities must be New York State electricity customers of a participating utility company and paying into the System Benefits Charge (SBC)/Clean Energy Fund (CEF). Proposals must be for buildings or groups of buildings, including partnerships of businesses with common training needs and skills gaps that have total annual energy expenditures of \$1 million or more. Building operations and maintenance occupations or job titles that are targeted for hands-on and on-site training under this program may include, but are not limited to, the following: facilities and property managers; operating and stationary engineers; technicians; building superintendents; maintenance workers; mechanics and supervisors; electricians; HVAC technicians; procurement staff; facility coordinators; and energy/sustainability managers.

It is anticipated that proposals will be aimed at developing comprehensive workforce development and training initiatives to train new workers and advance the skills of existing workers. It is anticipated that **eligible training initiatives** funded under this PON will be equipment- or operations and maintenance-based. Equipment-based skills training can target categories such as, but not limited to, the following:

- Lighting and controls
- HVAC equipment (packaged or split systems)
- Domestic hot water
- Boilers, hot water, and steam distribution systems
- Ventilation, economizers, demand management, and other ventilation controls
- Motors and drives
- Fans and air distribution systems
- Chiller/chilled water systems

- Cooling towers
- Water pumps
- Pneumatic system and controls
- Building diagnostics
- Building envelope
- Thermal storage systems
- Solar water heating
- Photovoltaics
- Energy and building management systems
- Whole building/building science
- Digital controls

Operations and maintenance training can target general or very specific areas such as:

- Cleaning heat exchangers and coils
- Optimizing supply air temperatures
- Equipment scheduling (boilers, pumps, fans, etc.)
- Tuning up boilers
- System commissioning
- Chiller optimization
- Matching boiler capacity to loads
- Utilizing natural ventilation where possible
- Measuring and optimizing system performance
- Setback temperatures
- Monitoring pump operating temperatures
- Heat recovery
- Indoor air quality
- Water efficiency
- Environmental health and safety
- Energy accounting

Successful Proposals

It is anticipated that a successful proposal will result in training initiatives and outcomes that can be replicated and shared with others within the same industry or across industries. A successful proposal will:

- Result in the implementation of training elements that address <u>specific skills gaps</u> and that are <u>integrated</u> into standard business procedures;
- <u>Demonstrate how a project can be replicated</u> throughout an organization, either as part of the proposed project scope, efforts funded through this PON, or through future efforts addressed as part of the proposer's plan to sustain training activities beyond the project scope proposed;
- <u>Reach the number</u> of building operations and maintenance workers necessary to have measurable energy and non-energy benefits, either as part of the proposed scope or through sustainability planning;

- Result in <u>operational cost savings</u> and;
- Promote measurable reductions in energy use and carbon emissions.

A proposal should be aimed at continuously advancing the skills of new or existing building operations and maintenance workers beyond typical training or beyond training that is currently available in the market. Following are a few examples of areas eligible for funding:

- Developing and implementing a new, New York State-registered apprenticeship program or modifying an existing registered apprenticeship program, including developing or modifying curriculum and training trainers.
- Developing a training lab at a building site, supported by other training elements like those mentioned below.
- Developing a job mentoring program that includes training mentors, classroom training, on-the-job training with a defined training plan, and/or developing operations and maintenance manuals as training tools.
- Partnerships between employers with job openings and technical high schools and/or colleges to introduce students with basic skills training to career opportunities through a plan that may include internships, pre-apprenticeships, mentoring, advanced training, and/or job shadowing.
- Initiatives to support advanced training that leads to national certifications, including activities to recognize employees that achieve training milestones.

The following are some examples that are not eligible for training funds under this solicitation:

- Training contractors outside of those employed by the proposer or sub-contractors
- Work focused on the new construction of buildings.
- Projects that train on system installation techniques.

Proposers may be able to complete proposed tasks on their own, or proposals can include partnerships with other organizations to carry out the Scope of Work (i.e., to develop curriculum, develop and implement a plan to measure the energy and non-energy benefits associated with the project, train trainers, etc.). NYSERDA will also support measurement and verification of project impacts; foster employer partnerships with training organizations; share project results and outcomes with similar organizations through the NYSERDA website and case studies; and facilitate industry partnerships to help in addressing common barriers.

II. PROGRAM BUDGET

Total funding currently available for this solicitation is \$10,000,000. Additional funds may be added to the PON if funds become available, and it is anticipated that the PON could be reissued with or without modifications. If changes are made to this solicitation, notification will be posted on NYSERDA's web site at <u>https://www.nyserda.ny.gov</u>.

NYSERDA anticipates awarding multiple contracts under this solicitation, with a maximum initial award of \$400,000 per contract. Contracts may be modified/extended, and additional funds may be added, if justified and if additional funds are available. NYSERDA may partially fund proposals.

Proposers will be required to provide 50% cost share, which can include cash or in-kind services. Some examples of eligible cost share, for example, could include employees' wages during training, equipment from manufacturers that will be used exclusively for training purposes, training fees offset by a third party, etc. Should the project require the purchase of laptops, tablets, or cell phones, these should be designated as proposer cost share. Examples of approved uses of NYSERDA funds include, but are not limited to, classroom training and certification costs; hands-on training equipment; development and implementation of internship programs (including costs associated with administering internships and intern wages); on-the-job training wage support for new hires (consistent with the duration of typical on-the-job training programs and when supported by other activities in a training plan) and; curriculum development.

III. PROGRAM REQUIREMENTS

Eligibility Requirements:

- Eligible participants include facilities that are New York State electricity customers of a participating utility company and are paying into the System Benefits Charge (SBC)/Clean Energy Fund (CEF). Such entities may include, but are not limited to multifamily housing, office buildings, retail, colleges and universities, hospitals and health care facilities, state and local governments, not-for-profit and private institutions, industrial, and public and private K-12 schools. Other building types will be evaluated on a case-by-case basis.
- While a training organization may be the lead proposer, they must partner with a specified entity or entities employing building operations and maintenance workers. Such entities may include, but are not limited to, building owners, facility managers, property management companies, or business associations/trade groups that represent or are comprised of employers. The majority of the cost share must be provided by the entity employing building operations and maintenance workers.
- Participating employers of building operations and maintenance workers must have buildings, campuses, or groups of participating buildings in a proposal with total energy expenditures of \$1 million or more annually (all fuels and all uses).
- Preference will be given to proposals that exceed the minimum requirements outlined below and funding requests should be commensurate with the project's impact.

IV. PROJECT REQUIREMENTS

Projects must:

- Have a Scope of Work that details project goals, objectives, tasks, deliverables, and outcomes.
- Identify the skills gaps being addressed, the training initiatives to address those gaps, and the job titles or occupations being impacted.
- Include a plan and specific tasks to ensure the efforts are self-sustaining (within the facilities of the participating employers) after NYSERDA support has ended, and impact building operations and maintenance staff within an organization or across partnering organizations during the project and after it has been completed.

- Have a measurable impact on the workers trained, both advancing the skills of existing workers and providing applicable skills to new workers.
- Include energy savings targets and tasks to measure and verify savings. Projects must identify energy savings goals (basic estimates are acceptable in applications, but more detailed estimates will be viewed more favorably) and outline plans to monitor and verify energy savings over a reasonable time (such as over 6-12 months or a time period that addresses seasonal energy consideration, i.e., through two heating or cooling cycles). For example, depending on the scope and scale of the project, energy savings may be verified through bill analyses or data monitoring equipment. While some estimate that building owners can save five to 20 percent on their energy bills annually by implementing operations and maintenance best practices, proposers should determine realistic savings targets on a case-by-case basis.
- Demonstrate replicability, and result in deliverables that can be shared, as appropriate, with similar organizations or building types.

Projects should also:

- Include a plan to identify non-energy goals and benefits and a strategy for measuring or monitoring such impacts (i.e., reduced staff turnover, increased occupant satisfaction and reduced tenant turnover, reduced equipment downtime, and increased number of worker certifications); and/or
- Demonstrate how they will leverage existing training, if applicable. If it can be demonstrated that necessary training is not available in the market, new curriculum can be developed--ideally combined with one or more of the other hands-on, on-site training components mentioned above; and/or
- Include partnerships to leverage existing or other resources, and share results, where appropriate, either between employers, across multiple properties, or with training providers. For example, a business could partner with a training provider to develop curriculum or develop training protocols for job shadowing; or a business could partner with a manufacturer to develop customized training modules or develop operations and maintenance manuals; and/or
- Identify and explore opportunities to hire and advance the skills of workers that need special assistance entering the clean energy labor market such as, but not limited to, unemployed, under-employed, transitioning, or displaced workers. Partnerships could include working with a community-based organization to develop job placement and career pathway steps for workers needing special assistance to enter the job market.

Preference will be given to proposals that include strategies that address one or more of the four bullets above.

V. SCOPE OF WORK REQUIREMENTS

Proposers must include a detailed Scope of Work in their Application. The Scope of Work must include project goals, objectives, tasks, deliverables, and outcomes. See Attachment A for a Sample Scope of Work.

The Scope of Work must include:

- Specific tasks and deliverables to develop an in-house energy training culture, infrastructure, and activities that result in continuous, organization-wide training to provide skills to new workers and/or advance the skills of existing workers.
- A task that outlines steps that will be taken to ensure the project results in a sustainable effort that is incorporated into the corporate culture and, as appropriate, shared with others with similar skills gaps and workforce training needs.
- Clearly identified skills gaps being addressed and the training initiatives to address those gaps.
- The type and number of workers being trained in each training task and overall.
- A task for measuring energy and non-energy benefits associated with training.

Additional Scope of Work tasks related to specific training initiatives, for example, COULD include one or more of the following:

- **Curriculum Development:** If new curriculum is proposed, the Scope of Work should identify the market gap that the curriculum will address; describe the proposed curriculum; and identify who will develop the curriculum (e.g., it could be a training organization identified in the proposal). How will the curriculum meet a current gap in the market?
- **Train-the-Trainer:** The Scope of Work should address how the program will develop internal capacity and the roles of trainers for training new or existing staff. What training will they need and how will it be provided/accessed? What skills gaps are being addressed?
- **Employee Training:** Provide details on who will be trained, how, and on what skills. Will training lead to or prepare workers for national certifications? What happens after staff are trained?
- **Career Pathways Training:** If your proposal includes activities to develop career paths for new or existing employees, the Scope of Work should identify the training needs, skills, and job titles along each career path. Will efforts include activities to hire workers that need special assistance entering the clean energy labor market?
- Internships/Pre-Apprenticeships/Apprenticeships/On-the-Job Training: Provide training and task details and indicate the number of hours for the initiative once implemented. For example, how many training hours, including classroom hours, would an on-the-job training plan or internship include?
- **Partnerships with Manufacturers:** Describe the roles and expectations of manufacturers in any training activities. How will you work with manufacturers to leverage existing training or training equipment, support the development of training and maintenance manuals, etc.?

• **Build a Hands-On Training Laboratory On-Site:** Tasks should detail what a training laboratory will include (equipment), where it will be located, who will have access to it, who the trainers will be at the laboratory, how it fits into a training plan, and why it is needed on-site. How will the lab be staffed and maintained after the project is complete?

Proposals that include and integrate several of the activities mentioned above, as examples, are more likely to have an impact on addressing skills gaps and be sustainable. As a result, such proposals are more likely to be funded than projects that only include one discrete element.

VI. SCHEDULE REQUIREMENTS

Include a schedule for all tasks and deliverables, completion dates, or other detail, as applicable. Projects should be completed within 24 months or less from contract execution. Contracts could be executed within weeks of submitting a complete, successful proposal. See schedule format below:

Task No.	Title or Description	January 2018	February 2018	March 2018	April 2018	May 2018	June 2018	July 2018	August 2018	September 2018	October 2018	November 2018	December 2018
1.	Train Trainers												
2.	Develop Internship Program												
3.													
4.													
5.													
<u>6</u> .													

Schedule Example

VII. BUDGET REQUIREMENTS

Include a detailed budget for the proposal that shows hours and dollars allocated to each task of the Scope of Work. If a proposal is selected for funding, proposers will be required to use the budget template provided in Attachment C. The budget must be reasonable and must show the portion being requested from NYSERDA and the portion that is the proposer's or proposing team's responsibility. The majority of the cost share must be provided by the entity employing building operations and maintenance workers. Work completed or costs incurred prior to NYSERDA's receipt of the Application are ineligible for funding or for consideration as cost share.

VIII. EVALUATION CRITERIA (72 points is the minimum threshold of 100 possible points. No proposal with a score of less than 72 will be considered for contract negotiations.)

- Cost Effectiveness of the Proposal 20 points
 - Are the costs reasonable?
 - Is the funding requested commensurate with the impact a project will have (number trained, energy savings, non-energy benefits)?

- Energy Savings Goals and Verified Energy Savings 17 points
 - Will the project have a measurable impact on energy use?
 - Does the project identify energy savings goals? (Basic estimates are acceptable in applications, but detailed goals will be viewed more favorably.)
 - Does the project include a plan (and a Scope of Work task) to monitor and verify energy savings over a reasonable time?
- Self-sustaining After NYSERDA Support Has Ended; Training Integrated into Corporate Culture 15 points
 - Is the impact on building operations and maintenance staff within an organization or across partnering organizations clearly identified during the project and after it has been completed?
 - Does the project address sustainability after the project is completed and integrate or leverage complementary training elements into a comprehensive plan to continuously advance the skills of existing workers or provide a career path for new workers?
- Scope of Work 12 points
 - Does the Scope of Work have well-defined tasks and deliverables to develop an in-house energy training culture, infrastructure, and activities that result in continuous, organization-wide training to provide targeted skills to new workers and/or advance the skills of existing workers?
 - Does the Scope of Work clearly identify skills gaps being addressed and the training initiatives to address those gaps?
 - Are the type and number of workers being trained specified in each training task and overall?
 - Is there a task that outlines steps that will be taken to ensure the project results in a sustainable effort that is incorporated into the corporate culture?
- Replicable 10 points
 - Can the project be replicated throughout an organization that employs building operation and maintenance workers or throughout a proposing team?
 - Will the project result in deliverables that can be used to share project results and lessons learned with other similar organizations or building types?
- Efforts to Hire Workers that Need Assistance Entering the Clean Energy Labor Market 10 points
 - Is there a component to identify and explore opportunities to hire and advance the skills of unemployed, under-employed, transitioning, or displaced workers?
- Plan to Identify and Measure Non-Energy Benefits 8 points
 - Is there a reasonable strategy for measuring or monitoring non-energy benefits and impacts (i.e., cost savings, reduced staff turnover, increased occupant satisfaction, reduced tenant turnover, reduced equipment downtime, and/or increased number of worker certifications)?

- Maximize Impact and Leverage Existing Resources 8 points
 - Is there leveraging of resources, such as subject matter experts, curriculum, equipment, training facilities, etc.)?
 - Are there teaming arrangements between employers, across multiple properties, or with training providers?

Programmatic Considerations:

NYSERDA reserves the right to ensure the distribution of participants across multiple sectors and geographically across New York State and to ensure that projects selected for funding optimize the use of available funding to achieve programmatic objectives. NYSERDA also reserves the right to limit the number of awards per applicant and interview applicants.

IX. Evaluation Process

Evaluation Process:

Proposals that meet the eligibility and project requirements detailed in Sections II, III, and IV will be reviewed at least biweekly by a Scoring Committee using the Evaluation Criteria identified above. After the proposals are reviewed, NYSERDA will inform each proposer of their selection status. Applicants receiving favorable evaluations may also be asked to address specific questions or recommendations of the Scoring Committee or make modifications to the Scope of Work before being awarded funding. NYSERDA reserves the right to accept or reject any or all proposals received, to negotiate with all qualified sources, or to cancel the PON in part or in its entirety when it is in NYSERDA's best interest. NYSERDA may request additional data or material to support proposals.

Successful Proposals:

After review by the Scoring Committee, recommendations and comments on proposal documents must be resolved. Then, NYSERDA will make a final decision and will notify applicants whether the proposal has been selected to receive an award. An award under this PON will result in a contract. NYSERDA may award a contract based on applications without discussion or following limited discussion.

Denied Applications:

Proposers whose applications are denied may request a debriefing and may reapply under the Program Opportunity Notice as long as funding is available.

X. GENERAL CONDITIONS

Proprietary Information - Careful consideration should be given before confidential information is submitted to NYSERDA as part of your proposal. Review should include whether it is critical for evaluating a proposal, and whether general, non-confidential information, may be adequate for review purposes.

The NYS Freedom of Information Law, Public Officers law, Article 6, provides for public access to information NYSERDA possesses. Public Officers Law, Section 87(2)(d) provides for exceptions to disclosure for records or portions thereof that "are trade secrets or are submitted to an agency by a commercial enterprise or derived from information obtained from a commercial

enterprise and which if disclosed would cause substantial injury to the competitive position of the subject enterprise." Information submitted to NYSERDA that the proposer wishes to have treated as proprietary, and confidential trade secret information, should be identified and labeled "Confidential" or "Proprietary" on each page at the time of disclosure. This information should include a written request to except it from disclosure, including a written statement of the reasons why the information should be excepted. See Public Officers Law, Section 89(5) and the procedures set forth in 21 NYCRR Part 501 <u>https://www.nyserda.ny.gov/About/-/media/Files/About/Contact/NYSERDA-Regulations.ashx</u>. However, NYSERDA cannot guarantee the confidentiality of any information submitted.

Omnibus Procurement Act of 1992 - It is the policy of New York State to maximize opportunities for the participation of New York State business enterprises, including minorityand women-owned business enterprises, as bidders, subcontractors, and suppliers on its procurement Agreements.

Information on the availability of New York subcontractors and suppliers is available from:

Empire State Development Division for Small Business 625 Broadway Albany, NY 12207

A directory of certified minority- and women-owned business enterprises is available from:

Empire State Development Minority and Women's Business Development Division 625 Broadway Albany, NY 12207

State Finance Law sections 139-j and 139-k - NYSERDA is required to comply with State Finance Law sections 139-j and 139-k. These provisions contain procurement lobbying requirements which can be found at https://online.ogs.ny.gov/legal/lobbyinglawfaq/default.aspx . Proposers are required to answer questions during proposal submission, which will include making required certification under the State Finance Law and to disclose any Prior Findings of Non-Responsibility (this includes a disclosure statement regarding whether the proposer has been found non-responsible under section 139-j of the State Finance Law within the previous four years).

Tax Law Section 5-a - NYSERDA is required to comply with the provisions of Tax Law Section 5-a, which requires a prospective contractor, prior to entering an agreement with NYSERDA having a value in excess of \$100,000, to certify to the Department of Taxation and Finance (the "Department") whether the contractor, its affiliates, its subcontractors and the affiliates of its subcontractors have registered with the Department to collect New York State and local sales and compensating use taxes. The Department has created a form to allow a prospective contractor to readily make such certification. See, ST-220-TD (available at http://www.tax.ny.gov/pdf/current_forms/st/st220td_fill_in.pdf). Prior to contracting with NYSERDA, the prospective contractor must also certify to NYSERDA whether it has filed such certification with the Department.

The Department has created a second form that must be completed by a prospective contractor prior to contacting and filed with NYSERDA. See, ST-220-CA (available at http://www.tax.ny.gov/pdf/current_forms/st/st220ca_fill_in.pdf). The Department has developed guidance for contractors which is available at http://www.tax.ny.gov/pdf/current_forms/st/st220ca_fill_in.pdf). The Department has developed guidance for contractors which is available at http://www.tax.ny.gov/pdf/publications/sales/pub223.pdf .

Contract Award - NYSERDA anticipates making multiple awards under this solicitation. A contract may be awarded based on initial applications without discussion, or following limited discussion or negotiations pertaining to the Statement of Work. Each offer should be submitted using the most favorable cost and technical terms. NYSERDA may request additional data or material to support applications. NYSERDA will use the Sample Agreement to contract successful proposals. NYSERDA may at its discretion elect to extend and/or add funds to any project funded through this solicitation. NYSERDA reserves the right to limit any negotiations to exceptions to standard terms and conditions in the Sample Agreement to those specifically identified in the checklist questions. Proposers should keep in mind that acceptance of all standard terms and conditions will generally result in a more expedited contracting process. NYSERDA expects to notify applicants in approximately four (4) weeks from the receipt of an application whether your application has been selected to receive an award. NYSERDA may decline to contract with awardees that are delinquent with respect to any obligation under any previous or active NYSERDA agreement.

Accessibility Requirements - If awardees from this solicitation will be posting anything on the web, or if the awardee will produce a final report that NYSERDA will post to the web, the following language must be included. NYSERDA requires contractors producing content intended to be posted to the Web to adhere to New York State's Accessibility Policy. This includes, but is not limited to, deliverables such as: documents (PDF, Microsoft Word, Microsoft Excel, etc.), audio (.mp3, .wav, etc.), video (.mp4, .mpg, .avi, etc.), graphics (.jpg, .png, etc.), web pages (.html, .aspx, etc.), and other multimedia and streaming media content. For more information, see <u>NYSERDA's Accessibility Requirements</u>.

Limitation - This solicitation does not commit NYSERDA to award a contract, pay any costs incurred in preparing a proposal, or to procure or contract for services or supplies. NYSERDA reserves the right to accept or reject any or all proposals received, to negotiate with all qualified sources, or to cancel in part or in its entirety the solicitation when it is in NYSERDA's best interest. NYSERDA reserves the right to reject proposals based on the nature and number of any exceptions taken to the standard terms and conditions of the Sample Agreement. NYSERDA reserves the right to disqualify proposers based upon the results of a background check into publicly available information and the presence of a material possibility of any reputational or legal risk in making of the award.

Disclosure Requirement - The proposer shall disclose any indictment for any alleged felony, or any conviction for a felony within the past five years, under the laws of the United States or any state or territory of the United States and shall describe circumstances for each. When a proposer is an association, partnership, corporation, or other organization, this disclosure requirement includes the organization and its officers, partners, and directors or members of any similarly governing body. If an indictment or conviction should come to the attention of NYSERDA after the award of a contract, NYSERDA may exercise its stop-work right pending further investigation or terminate the agreement; the contractor may be subject to penalties for violation of any law which may apply in the particular circumstances. Proposers must also disclose if they have ever been debarred or suspended by any agency of the U.S. Government or the New York State Department of Labor.

Vendor Assurance of No Conflict of Interest or Detrimental Effect - The proposer shall disclose any existing or contemplated relationship with any other person or entity, including any known relationships with any member, shareholders of 5% or more, parent, subsidiary, or affiliated firm, which would constitute an actual or potential conflict of interest or appearance of impropriety, relating to other clients/customers of the proposer or former officers and employees of NYSERDA, in connection with proposer's rendering services as proposed. If a conflict does or might exist, please describe how your company would eliminate or prevent it. Indicate what procedures will be followed to detect, notify NYSERDA of, and resolve any such conflicts.

The proposer must disclose whether it, or any of its members, or, to the best of its knowledge, shareholders of 5% or more, parents, affiliates, or subsidiaries, have been the subject of any investigation or disciplinary action by the New York State Commission on Public Integrity or its predecessor State entities (collectively, "Commission"), and if so, a brief description must be included indicating how any matter before the Commission was resolved or whether it remains unresolved.

Public Officers Law – For any resulting awards, the Contractor and its subcontractors shall not engage any person who is, or has been at any time, in the employ of the State to perform services in violation of the provisions of the New York Public Officers Law, other laws applicable to the service of State employees, and the rules, regulations, opinions, guidelines or policies promulgated or issued by the New York State Joint Commission on Public Ethics, or its predecessors (collectively, the "Ethics Requirements"). Proposers are reminded of the following Public Officers Law provision: contractors, consultants, vendors, and subcontractors may hire former NYSERDA employees. However, as a general rule and in accordance with New York Public Officers Law, former employees of NYSERDA may neither appear nor practice before NYSERDA, nor receive compensation for services rendered on a matter before NYSERDA, for a period of two years following their separation from NYSERDA service. In addition, former NYSERDA employees are subject to a "lifetime bar" from appearing before any state agency or authority or receiving compensation for services regarding any transaction in which they personally participated, or which was under their active consideration during their tenure with NYSERDA.

Any awardee will be required to certify that all of its employees, as well as employees of any subcontractor, whose subcontract is valued at \$100,000 or more who are former employees of the State and who are assigned to perform services under the resulting contract, shall be assigned in accordance with all Ethics Requirements. During the term of any agreement, no person who is employed by the contractor or its subcontractors and who is disqualified from providing services under the contract pursuant to any Ethics Requirements may share in any net revenues of the contractors provide it with whatever information the State deems appropriate about each such person's engagement, work cooperatively with the State to solicit advice from the New York State Joint Commission on Public Ethics, and, if deemed appropriate by the State, instruct any such person to seek the opinion of the New York State Joint Commission on Public Ethics. NYSERDA shall have the right to withdraw or withhold approval of any subcontractor if utilizing such subcontractor for any work performed would be in conflict with any of the Ethics

Requirements. NYSERDA shall have the right to terminate any contract at any time if any work performed is in conflict with any of the Ethics Requirements.

XI. ATTACHMENTS:

Attachment A – Sample Scope of Work Attachment B – Sample Agreement Attachment C – Budget Template



NYSERDA reserves the right to extend and/or add funding to the Solicitation should other program funding sources become available. All, some, or none of the available funds may be awarded.

Concept Papers will be accepted through October 30, 2019 by 3:00 PM Eastern Time or until all funds are committed.

Contents

I.	IN	ITRODUCTION	2
II.	PF	ROGRAM INFORMATION	3
Α	•	Focus Areas	3
В	•	Funding Categories	5
III.		CONCEPT PAPER REQUIREMENTS	6
Α	•	Content and Form of Concept Papers	6
В	•	Concept Paper Submission Process and Requirements	7
С	•	Contacting NYSERDA about a Concept Paper	8
D		Contacting NYSDOT about a Concept Paper	8
Ε	•	Compliance with State Finance Law	8
IV.		CONCEPT PAPER EVALUATION	8
V.	Fl	JLL PROPOSAL REQUIREMENTS (by invitation only)	10
Α	•	Content and Format Guidelines of Full Proposals	10
В	•	Full Proposal Submission Process and Requirements	12
С	•	Contacting NYSERDA about a Full Proposal	12
D		Contacting NYSDOT about a Full Proposal	13
Ε	•	Compliance with State Finance Law	13
VI.		FULL PROPOSAL EVALUATION	13
VII.		AWARDEE CONDITIONS	15
Α	•	Contract Award	15
В	•	Deliverables	16
VIII		GENERAL CONDITIONS	17
Α	•	Confidential and Proprietary Information	17



в.	Freedom of Information Law	17
C.	Omnibus Procurement Act of 1992	18
D.	State Finance Law, Sections 139-j and 139-k	18
Ε.	Tax Law Section 5-a	18
F.	Limitation	19
G.	Disclosure Requirement	19
IX.	ATTACHMENTS	21

I. INTRODUCTION

Innovation and technology are changing the nature of transportation. The emerging and rapidly developing shared mobility sector, along with broader innovations in information and communications technology, are transforming how people and goods move across the transportation network. Automated vehicle travel is on the horizon with elements of the technology already in place, promising to dramatically reshape the transportation sector. While concerns about safety, accessibility, and quality of life may be driving many of these new solutions, the need to reduce energy consumption and greenhouse gas (GHG) emissions remains a priority. New York State (NYS) is committed to meeting multiple clean energy goals including a 40% reduction in emissions by 2030.

The New York State Energy Plan defines *efficient* as "capable of producing desired results without wasting materials, time or energy." New York is the most fuel-efficient state in the country in terms of fuel consumed per capita, and NYS has continued to invest in improving the energy efficiency of the sector. This PON seeks projects that will support efficient travel, systems operations, and the development of innovative energy-efficient mobility options that can reduce vehicle miles traveled and encourage more fuel-efficient choices. Efficient travel, as demonstrated by New York's unparalleled transit system, can support robust economic activity and competitiveness while enhancing quality of life, safety and environmental sustainability.

In partnership with the New York State Department of Transportation (NYSDOT), the New York State Energy Research and Development Authority (NYSERDA) seeks research proposals that have the potential to reduce the GHG emissions and the associated energy consumption of the existing multi-modal transportation system in New York State. For this Program Opportunity Notice (PON), proposals must center on NYS transportation issues and innovative strategies and solutions in one of two Project Focus Areas: (1) Efficient Mobility Solutions; or (2) Efficient Infrastructure, Operations, and Systems Planning.

This is an ongoing transportation research funding opportunity subject to periodic changes in the Project Focus Areas. Total available NYS funding is \$3,000,000. All, some, or none of the available funding may be awarded. In funding this solicitation, the sponsors seek to advance an integrated, multi-faceted, energy-efficient, and sustainable transportation system through the identification of innovative strategies, policies, emerging technologies and partnerships and through useful demonstrations that validate underutilized commercial products in New York State.



This PON employs a two-step proposal process. Proposers must initially submit a four-page concept paper using the Concept Paper Framework (Appendix A). Concept Papers must meet the specified content and form requirements or may be deemed unresponsive and rejected (see Section III). Following an evaluation, NYSERDA and NYSDOT may invite a proposer whose project concept has been selected for further consideration to submit a more extensive Full Proposal. Proposers may only submit a Full Proposal if they have received an invitation to submit from NYSERDA and NYSDOT. Full Proposal requirements and evaluation criteria are described in Section V and VI, respectively, below.

II. PROGRAM INFORMATION

NYSDOT and NYSERDA are seeking innovative proposals that can address several of the following objectives: have the potential to reduce energy use and greenhouse gas emissions from the transportation sector; have broad application or impact across New York State; make use of new or emerging technologies; and improve intermodal connections or energy efficient services for the traveling public and commercial transportation providers. Proposals must clearly describe how objectives will be addressed.

This PON consists of two Focus Areas: (1) Efficient Mobility Solutions and (2) Efficient Infrastructure, Operations, and Systems Planning. Within each Focus Area, there are four Funding Categories with maximum award amounts varying with the type of project proposed (e.g. paper study, field demonstration). Each Concept Paper and subsequent Full Proposal MUST indicate the single Focus Area and single Funding Category for consideration. Proposers may submit more than one Concept Paper, subject to the limitations described in Section III.

A. Focus Areas

Focus Area 1: Efficient Mobility Solutions

The intent of this focus area is to explore solutions to improve the mobility of people and goods, reduce congestion, improve access to economic and educational opportunities, and improve the efficiency of transportation services and traveler mobility choices. Projects should aim to shift travel demand to more energy-efficient and lower greenhouse gas emission modes, routes, and times of travel, and/or to improve personal and commercial mobility across all transportation modes. Proposed strategies, services, and technologies should better equip the traveling public and commercial transportation providers, as applicable, with useful information; optimize transportation services to meet the needs of travelers; and/or support more energy-efficient transportation mobility choices.

Activities in this area may include, but are not limited to:

- Mobility services, products, designs, and solutions that enhance efficient travel, provide access to affordable, reliable, and convenient transportation options, or improve the mobility of people and goods.
- Transportation innovations and/or technologies that build or enhance efficiency, convenience, and attractiveness of alternative modes of transportation.
- Innovative information and communication platforms and decision-support systems to facilitate energyefficient trip planning and parking and/or optimized multi-modal travel.



- Methods to utilize information and communications technologies (ICT) to incentivize or leverage energyefficient travel practices (e.g., preferential parking, pricing incentives, freight applications).
- Creative approaches that maximize convenience and efficiency of multiple-passenger ride-hailing, car sharing and/or bike sharing connections to transit networks.

Focus Area 2: Efficient Infrastructure, Operations and Systems Planning

The intent of this focus area is to explore innovative strategies and technologies to improve the *efficient operation of the State's transportation networks*. Projects should aim to increase transportation efficiency by optimizing operations, expanding integrated modal options, and/or employing intelligent transportation infrastructure systems, while integrating these systems into larger infrastructure improvement initiatives. In addition, projects may explore innovative strategies and technology-driven approaches to create or improve energy-efficient practices associated with building and maintaining the NYS transportation infrastructure.

Proposed strategies and solutions should demonstrate improvement in the energy efficiency and greenhouse gas emissions of day-to-day operation, maintenance, and use of the transportation network.

Activities in this area may include, but are not limited to:

- Transportation operating technologies and innovative practices that support the integration and improvement of multi-agency operation of the transportation system. This includes concepts being deployed in NYS such as Active Transportation Demand Management (ATDM), Transportation System Management and Operations (TSMO), and Integrated Corridor Management (ICM).
- Strategies and practices that enhance the capability of transportation asset owners and service providers to efficiently gather, manage, integrate, and share information to support multi-agency operational objectives that improve system efficiency and reliability.
- Technologies and strategies that specifically improve and streamline bus operations and reduce travel times for transit including, but not limited to, signal priority, fare collection, and routing.
- Strategies, methods, and innovations that have the potential to reduce energy and greenhouse gas and criteria pollutant emissions from construction and maintenance of the transportation system, including, but not limited to, fleet charging innovations, light tower improvements, and attenuator truck technologies.
- Market feasibility assessment of freight infrastructure investments that may support a shift in goods movement to more efficient transportation modes or technologies (such as cleaner vehicles).
- Development of predictive analytics relative to highway, public transportation, parking, freight systems and infrastructure that improve operations, management, efficiencies, functionalities, decision support, and collaboration.
- Connected and/or automated systems, infrastructure, vehicles, and technologies that leverage the capabilities of government, non-governmental organizations (NGOs), and the private sector to create integrated, multi-modal system environments.



B. Funding Categories

Projects will be considered for funding in one of four categories at no more than the maximum funding levels shown below. Proposers must select only one (1) funding category per proposal, which **MUST** be indicated in both the Concept Paper and, if invited, subsequent Full Proposal. Concept Papers or Full Proposals that do not identify a funding category or include multiple funding categories may not be reviewed by NYSERDA. Proposers may submit more than one Concept Paper, subject to the limitations described in **Section III**.

NYSERDA may change a proposal to a more appropriate funding category if the category the proposer selects does not match the scope of the project; if this is the case and the proposal receives an award, it will be subject to the requirements of the funding category to which NYSERDA has assigned it.

- Education and Technology Transfer (\$50,000 max) Outreach activities to advance the education and awareness of the public, policymakers, industry participants, stakeholders, students, metropolitan planning organizations (MPOs), and others on opportunities to reduce transportation greenhouse gases (GHG)/energy consumption pertaining to the two focus areas specified above. Eligible activities in this category include: workshops, webinars, publications, guidebooks, and brochures. The funded activity should produce a projectspecific deliverable to promote impact and replication beyond the timeframe of the project (e.g. webcast, curriculum materials).
- <u>Research, Policy, and Feasibility Studies (\$200,000 max)</u> Applied research¹ to develop and evaluate new strategies and policies for New York State that have the potential to achieve reductions in transportation GHGs/energy consumption and to improve transportation energy efficiency. Eligible activities in this category include feasibility assessments, engineering studies, policy research and related analysis necessary to establish the energy, environmental and additional benefits (e.g. safety, mobility, security, financial) of a relevant policy, strategy, product or technology.</u>
- 3. Demonstrations of Underutilized Strategies and Policies (\$250,000 max) Demonstrations of strategies and policies that have not been previously deployed in New York State to any significant extent that have the potential to reduce transportation GHGs/energy consumption and that require minimal equipment and/or materials to be purchased for implementation (less than 30% of the total project budget). Examples of qualifying Category 3 demonstration proposals might include: a) demonstration, and communication of Management system approaches that facilitate the organization, integration, and communication of innovative, multimodal system concepts, products, and services that achieve full integration of system synergies to meet traveler needs; b) expanded access to and repurposing of underutilized facilities for consolidated freight services; or c) emerging innovations in transportation research, standards, and practices related to pedestrian and bike-related improvements.

¹ Applied research is defined as the systematic inquiry to solve practical problems resulting in practical applications, whereas, basic research is defined as the systematic study toward gaining greater knowledge or understanding, but without focus on specific practical applications, end results or projects.



4. <u>Demonstrations of Underutilized Commercial Technologies² (\$500,000 max)</u> – Demonstrations of technologies that have not been previously deployed in New York State to any significant extent that have the potential to reduce transportation GHGs/energy consumption and that require significant equipment and/or materials to be purchased for implementation (greater than 30% of the total project budget). Category 4 is designed to fund the limited demonstration of existing underutilized commercial technologies that have been successfully deployed in other states or countries (e.g., adaptive traffic signal control systems, open source travel demand technologies), but have not been previously deployed in New York State to any significant extent. The intent is not to research the existing technology per se, but to quantify and validate potential benefits and identify specific barriers to adoption for New York. In contrast to Category 3, it is recognized that significant procurement of material and equipment may be necessary for demonstration. Proposers will also be required to establish that the transportation technology is fully commercial and warrantied, and that no significant product development is required. Transportation technologies requiring additional product development are not eligible for this funding opportunity and should instead be proposed to other relevant solicitations.

Category 3 and **Category 4** proposers will be required to establish that their proposed strategy or technology is truly underutilized in NYS. Proposers should conduct a review of available literature, including news articles, published studies, and online resources to present a convincing case for the value in a NYS demonstration. A summary of this review should be included in the Full Proposal.

All proposals must provide additional funding as cost share, which shall be described in the Full Proposal. Refer to **Section V** for additional information and requirements.

III. CONCEPT PAPER REQUIREMENTS

This PON employs a two-step proposal process. Proposers must **initially submit a four-page Concept Paper**. Following an evaluation based on the PON solicitation criteria, NYSERDA and NYSDOT may invite a proposer whose project concept has been selected for further consideration to submit a **Full Proposal**.

A. Content and Form of Concept Papers

Concept Papers must conform to the following requirements:

• Concept Paper proposers are required to use the format prescribed in the **Concept Paper Framework** (Attachment A). The intent of the Framework is to lead the proposer through the requirements in an orderly, organized manner, without repeating or restating information. The Concept Paper requires initial information about the proposed project, as well as details related to the potential project impacts, work plan, and team. Concept Papers using a different format will be deemed unresponsive.

² A commercial technology is defined as a product, such as an item, material, component, subsystem, or system, applicable to transportation and sold or traded in reasonable quantities on the open market within the course of normal business operations at prices based on established catalog or market prices with industry-standard deliveries, terms, and warranties.



- Proposers are to provide answers to the questions contained in the Framework within their Concept Paper narrative. The Concept Paper narrative must be complete. If a required question contained in the Concept Paper Framework is not answered, the proposal will be deemed unresponsive.
- Concept Papers must be submitted in Adobe PDF format, be written in English, use black 11-point Times New Roman font, use 8.5 inch by 11 inch pages, be single-spaced, and have margins no less than 1 inch on all sides.
- Concept Papers shall not exceed four pages in length including graphics, figures, and/or tables.
- Concept Papers must prominently display the Principal Investigator's Last Name on each page.

B. Concept Paper Submission Process and Requirements

NYSERDA strongly prefers online submission for all solicitations. NYSERDA does not accept faxed or emailed submissions. NYSERDA will also accept proposals by mail or hand-delivery if online submission is not possible.

Complete and submit your proposal online at:

https://portal.nyserda.ny.gov/CORE_Solicitation_Login_Page?SolicitationId=a0rt000000YIsCvAAJ. Concept Papers must be **received by NYSERDA** on or before 3:00 PM on October 30, 2019. When submitting online, you will have to answer questions as part of this process, in addition to uploading documents. Therefore, you should allow at least 60 minutes to complete and submit your proposal. **Files in process, attempted edits, or submissions after the due date will not be accepted**. It is the proposer's responsibility to ensure that all pages have been included in the proposal. If changes are made to this solicitation, notification will be posted on https://portal.nyserda.ny.gov/CORE_Solicitation_Detail_Page?SolicitationId=a0rt000000YIsCv.

Proposers may submit Concept Papers at any time during the open period of this solicitation. Proposers are limited to having **one pending Concept Paper** before NYSERDA at any one time and will be allowed to submit a **maximum of two (2) unique Concept Papers in any 12-month period.** The 12-month period for each proposer will begin on the date of the proposer's first Concept Paper submission. Proposers will have **one** opportunity to resubmit **one of those two Concept Papers** if an initial Concept Paper is not selected, for a total of three (3) possible submissions within 12 months. Universities and similar research institutions may consider individual research teams to be unique proposers; each research team will be subject to the Concept Paper submission limitations outlined above, but there is no organization-wide cap on Concept Paper submissions for these proposers.

Proposers can expect a preliminary response within 30 business days from NYSERDA indicating whether a Concept Paper has been selected to submit a Full Proposal. Proposers submitting Concept Papers not selected for Full Proposal submission will receive a short, written summary of the results of the review, and, subject to the limitations stated above, may be permitted to resubmit one Concept Paper. Additional submittals will be deemed ineligible. Proposers may only submit a Full Proposal if the Concept Paper has been favorably reviewed and the Full Proposal has been requested.



C. Contacting NYSERDA about a Concept Paper

No communication intended to influence this procurement is permitted. *See* State Finance Law Section 139-7(3) for more information on permissible contacts.

If you have technical questions or other questions about this solicitation, the **Designated Contact is Robyn Marquis, Project Manager,** at (518) 862-1090, ext. 3112 or by email at MobilityManagement@nyserda.ny.gov or Adam Ruder (Designated Contact), Program Manager, at (518) 862-1090, ext. 3411 or by email transportation@nyserda.ny.gov.

If you have contractual questions or questions about NYSERDA's processes and policies regarding this solicitation, contact **Nancy Marucci (Designated Contact)** at (518) 862-1090, ext. 3335 or by email at NancySolicitations@nyserda.ny.gov.

Contacting anyone other than the designated contacts (either directly by the proposer or indirectly through a lobbyist or other person acting on the proposer's behalf) in an attempt to influence the procurement may result in a proposer being deemed a non-responsible offerer and may result in the proposer not being awarded a contract.

D. Contacting NYSDOT about a Concept Paper

No communication intended to influence this procurement is permitted. *See* State Finance Law Section 139-7(3) for more information on permissible contacts.

If your solution requires integration into existing transportation programs or networks that are managed by NYSDOT, you must provide the full name, title, and main office or region of your point of contact with whom you have already discussed the feasibility of your solution. NYSERDA reserves the right to verify this claim with the listed contact.

E. Compliance with State Finance Law

In compliance with <u>Sections 139-j and 139-k of the State Finance Law</u> (see **GENERAL CONDITIONS** below for additional information), proposers will be required to answer questions during proposal submission, which will include making required certification under the State Finance Law and to disclose any Prior Findings of Non-Responsibility.

IV. CONCEPT PAPER EVALUATION

Eligible Concept Papers will be reviewed and scored by a Scoring Committee according to the Evaluation Criteria below. A score of 60% (of final evaluation results) or higher must be obtained to receive an invitation to submit a Full Proposal. Proposers will be notified within 30 business days.

1. Impact

• How significant of a problem does the proposed solution address?



- How likely is it that the proposed solution will be implemented and result in positive NYS benefits?
- How significant is the statewide potential for NYS transportation energy and GHG emission reduction, and mobility and economic improvements? For Funding Category 1, Education and Technology Transfer, how substantial is the potential audience?
- Are other benefits identified? Is the overall project cost justified based on the expected benefits?

2. Innovation

- To what extent does the Concept Paper describe how the solution is unique and innovative/underutilized? Has the proposer identified past barriers and how they can be overcome? For Funding Category 1, Education and Technology Transfer, has the proposer justified the need for this outreach and identified why there is a gap in this knowledge base?
- Is the proposed concept technically feasible?
- Has the proposer demonstrated that the project is not duplicative of other research, technology, solutions, or outreach?
- Will the concept create additional value beyond current solutions? What is the potential for the project to be replicated beyond a single demonstration and/or scaled down to smaller deployments?

3. Project Plan

- Has the proposer identified the specific accomplishments that will be achieved by the end of the project? Is the project cost justified based on the outcome(s)?
- Are the project tasks, deliverables, schedule and performance measures clearly identified in the Concept Paper and appropriate for the outcome(s)? Is the proposed timeline reasonable? If applicable, has the proposer provided details on integrating into existing programs or networks?
- Does the proposed solution require collaboration with other stakeholders? If so, does the Concept Paper provide detail on collaboration? If not, is there information on how the project will be completed without additional stakeholders?

<u>4. Team</u>

- Are all necessary contributors identified in the Concept Paper and are there specifics on what each entity will contribute to the effort?
- Have the key team members and their roles been identified? Does the project team have the necessary technical and business background and experience to complete the proposed project?



V. FULL PROPOSAL REQUIREMENTS (by invitation only)

Selected Concept Paper applicants may be invited to submit Full Proposals. Proposers will be allotted 45 calendar days from the date of notification of their invitation to submit a Full Proposal. Full Proposals are subject to the requirements and evaluation criteria below.

To be selected for funding, Full Proposals must:

- Offer readily quantifiable reductions in GHG emissions and transportation energy use in New York State with a clearly identified process for verifying these benefits (not required for Funding Category 1, Education and Technology Transfer, projects).
- Demonstrate a viable path to market acceptance resulting in additional technology adoption and replication beyond a single demonstration.
- Emphasize the ultimate deployment of technical solutions rather than performance of basic research.
- Document accessibility, sustainability, mobility, reliability, environmental, economic, safety and/or security benefits in New York State.
- Be consistent with the goals of metropolitan transportation plans in New York State and with transportation-related regulations at the federal or state level.
- Provide the minimum required amount of cost-sharing by the proposer or third parties in the form of cash (preferred) or in-kind labor, materials, equipment, facilities, and other resources, subject to reasonable and verifiable valuation. Co-funding may be from the proposer or other private or government sources. New York State funds cannot be used to reimburse or replace normal expenses of other government organizations.

Due to the objectives of PON 3833, teaming arrangements are encouraged and may be necessary to achieve project success. Proposal teams may include commercial firms, industry associations, research organizations, universities, government agencies, end-users, and other stakeholders.

Proposals are to be submitted in compliance with the specified Content and Format guidelines and responsive to the Full Proposal evaluation criteria (see Section VI). Proposals that fail to follow the content and format guidelines will be rejected as non-responsive. Each page of the proposal should state the name of the proposer, the PON number, and the page number.

A. Content and Format Guidelines of Full Proposals

Proposals that exceed the page limits or fail to follow format guidelines may be rejected as non-responsive. If you believe proprietary information must be submitted to provide an adequate proposal, you must comply with the **Section VIII** instructions for submitting proprietary material. Unnecessary attachments beyond those sufficient to present a complete, comprehensive, effective, and concise proposal may reduce, rather than increase, a proposal's standing per the evaluation criteria.

The Full Proposal must contain the documents and sections indicated below. For full guidelines, see Attachment **B.** Also refer to the submission requirements for additional information on file naming and formatting.



- Document 1 Main Narrative (12 pages maximum)
 - o Executive Summary
 - Background and Proposed Approach
 - Proposer Qualifications
 - Project Benefits
 - Path to Market Acceptance
 - Budget Description and Cost Sharing
- Document 2 Proposed Statement of Work (see Attachment C) and Schedule
- Document 3 Budget Form (see Attachment D)
- Document 4 Appendix
 - Proposer Qualifications Supporting Materials
 - o Letters of Commitment
 - o Letters of Support

Prior to an award being made, potential awardees may be required to demonstrate:

- access to financial and staffing resources sufficient to perform the proposed work;
- technical experience and adequate facilities (or the ability to access them);
- a good performance record; and
- the ability to qualify for an award under applicable laws and regulations.

B. Cost Sharing

All proposals must provide additional funding as cost share, and this shall be an important evaluation criterion. NYSERDA will not pay for efforts which have already been undertaken. The proposer or proposing team cannot claim as cost share any expenses that have already been incurred.

Funding Category 2 proposals, Research, Policy, and Feasibility Studies, seeking more than \$100,000 of NYS funds and **Funding Category 4** proposals, Demonstrations of Underutilized Commercial Technologies, seeking more than \$350,000 of NYS funds are required to provide a minimum of 35% of the total project cost as cost share. For example, proposals seeking \$357,500 of NYS funds are required to provide a minimum of \$192,500 in cost share, which is 35% of the total project cost of \$550,000. All other proposals must provide a minimum of 25% of the total project cost as cost share. For example, proposals seeking \$75,000 of NYS funds are required to provide a minimum of \$25% of the total project cost as cost share. For example, proposals seeking \$75,000 of NYS funds are required to provide a minimum of \$25% of the total project cost of \$550,000.

Cost sharing can be from the proposer, other team members, and/or other government or private sources. Contributions of direct labor (for which the laborer is paid as an employee) and purchased materials may be considered "cash" contributions. Unpaid labor, indirect labor, or other general overhead may be considered "in-kind" contributions.



Proposers must include the cost-sharing plan using the following table (expand table as needed):

PROPOSAL COST SHARING TABLE (expand as needed)						
Proposed Funding By Task (Project Total					
Funding Source	Task 0 (\$)	Task 1 (\$)	Task 2 (\$)		Cash (\$)	In-Kind (\$)
NY State						
Proposer						
Co-Funder (identify)						
Co-Funder (identify)						
Task Total (\$)						

C. Full Proposal Submission Process and Requirements

NYSERDA strongly prefers online submission for all solicitations. NYSERDA does not accept faxed or emailed submissions. NYSERDA will also accept proposals by mail or hand-delivery if online submission is not possible.

Full Proposals must be **received by NYSERDA** on or before 3:00 PM on the deadline specified in your Concept Paper response letter. Complete and submit your Full Proposal online at the link that will be provided in your Concept Paper response letter. When submitting online, you will have to answer questions as part of this process, in addition to uploading documents. Therefore, you should allot at least 60 minutes to complete and submit your proposal. Files in process, attempted edits, or submissions after the due date will not be accepted. It is the proposer's responsibility to ensure that all pages have been included in the proposal. If changes are made to this solicitation, notification will be posted on:

https://portal.nyserda.ny.gov/CORE_Solicitation_Detail_Page?SolicitationId=a0rt000000YlsCv.

File names must include the proposer's entity name, or for Colleges/Universities, the name of the College/University and the surname of the Principal Investigator.

Proposal files should be searchable. Do not convert hardcopies into PDFs or any other type of file using a scanner or by taking a photo of the hardcopy. Individual files should be 100MB or less in file size. Unnecessary attachments beyond those sufficient to present a complete, comprehensive, and effective response will not be considered in the evaluation of the proposal.

For detailed instructions on how to submit a proposal, read the "<u>Application Instructions and Portal Training</u> <u>Guide</u> [PDF] " located in the "Current Opportunities" section of NYSERDA's website (<u>https://www.nyserda.ny.gov/Funding-Opportunities/Current-Funding-Opportunities.aspx</u>).

D. Contacting NYSERDA about a Full Proposal

No communication intended to influence this procurement is permitted. *See* State Finance Law Section 139-7(3) for more information on permissible contacts.



If you have technical questions or other questions about this solicitation, the **Designated Contact is Robyn Marquis, Project Manager,** at (518) 862-1090, ext. 3112 or by email at MobilityManagement@nyserda.ny.gov or Adam Ruder (Designated Contact), Program Manager, at (518) 862-1090, ext. 3411 or by email at transportation@nyserda.ny.gov.

If you have contractual questions or questions about NYSERDA's processes and policies regarding this solicitation, contact **Nancy Marucci (Designated Contact)** at (518) 862-1090, ext. 3335 or by email at NancySolicitations@nyserda.ny.gov.

Contacting anyone other than the designated contacts (either directly by the proposer or indirectly through a lobbyist or other person acting on the proposer's behalf) in an attempt to influence the procurement may result in a proposer being deemed a non-responsible offerer and may result in the proposer not being awarded a contract. **Proposers may not solicit Letters of Commitment or Support from any NYSERDA personnel due to their active sponsorship of this collaborative solicitation. Failure to comply with this requirement may result in disqualification.**

E. Contacting NYSDOT about a Full Proposal

If your solution requires integration into existing transportation programs or networks that are managed by NYSDOT, you must provide the full name, title, and main office or region of your point of contact with whom you have already discussed the feasibility of your solution. NYSERDA reserves the right to verify this claim with the listed contact. Proposers may not solicit Letters of Commitment or Support from any NYSDOT personnel due to their active sponsorship of this collaborative solicitation. Failure to comply with this requirement may result in disqualification.

F. Compliance with State Finance Law

In compliance with <u>Sections 139-j and 139-k of the State Finance Law</u> (see **GENERAL CONDITIONS** below for additional information), proposers will be required to answer questions during proposal submission, which will include making required certification under the State Finance Law and to disclose any Prior Findings of Non-Responsibility.

VI. FULL PROPOSAL EVALUATION

Proposals that meet solicitation requirements will be reviewed by a Scoring Committee using the following evaluation criteria:

1. Proposed Solution and Benefits

- Does the proposed project specifically address a problem or opportunity identified in a Focus Area, and does it show potential to make significant progress in support of the Focus Area?
- How significant is the issue or opportunity for NYS?



- Is the proposed solution innovative and superior to potential alternatives? Has the proposer provided sufficient evidence through a literature review?
- If a demonstration, is the technology and/or strategy truly commercial and/or underutilized in NYS?
- If an outreach activity, has the proposer identified the need for this effort and estimated the audience size?
- Is it likely to be adopted and result in NYS benefits? Are the expected benefits likely to be realized, given other constraints or barriers?
- How significant is the statewide potential for NYS transportation energy and GHG reductions, and mobility and economic improvements?
- If adopted, will there be economic benefits in NYS in the form of subsequent manufacturing or technical service activity (e.g., jobs created)?
- Are there additional significant reliability, environmental, safety, and security benefits?

2. Project Scope and Work Plan

- Is the proposed work plan technically feasible? Are the work strategy and schedule sound, and can they be tested, measured, and adjusted with ease?
- Does the project result in a work product that will advance the use and acceptance of a technology or strategy of importance to NYS?
- For outreach activities, does the proposer identify the dissemination and/or publicity plan?
- Are the processes for estimation of benefits clearly explained and reference defensible sources or reliable measurement methods?

3. Project Team and Support

- Does the team have the relevant and necessary technical and business background and experience to successfully complete the proposed project?
- Does the team include NYS businesses or organizations that are performing significant work on the project?
- Does the proposal contain Letters of Commitment and/or Support from all essential participants, co-funders, and related businesses and other organizations? (**Do not solicit letters from NYSERDA or NYSDOT**.)
- If NYSDOT resources are required, has the proposer identified a point of contact?

4. Project Outcome and Cost

- Is the overall project cost justified based on the expected benefits? Relative to project cost, how significant are the potential benefits?
- Has the minimum cost share requirement (25% or 35%) been met and/or exceeded?
- How appropriate are the proposer's cost share contributions (sources and amounts) with respect to their potential to benefit from the work and the financial status of the proposing organization and project team?

5. Future Implementation

• Has the proposer demonstrated that the technology or policy being studied is something that stakeholders are interested in and capable of implementing?



- Does the proposer identify a path to market acceptance and economic viability for the technology or policy being studied?
- Is there a path for the project to be replicated beyond a single demonstration? Does the proposer have a reasonable plan for pursuing additional funding necessary for a next phase or for expanding beyond a limited pilot?
- Is there a plan for technology and knowledge transfer?

NYSERDA may request additional data or material to support applications/proposals. NYSERDA may also request that proposers interview with all or part of the Scoring Committee to address any questions or provide clarification regarding information outlined in the proposals. Proposers will be notified if they are requested to attend an interview.

NYSERDA reserves the right to accept or reject proposals based on the following factors:

- 1) The degree to which pricing and hourly rates are in line with the rest of the market.
- 2) The degree to which the proposed project contributes to a diversity of technical approaches and methods that best achieve the overall goals and objectives of NYSERDA and NYSDOT.
- 3) The degree to which the proposed project contributes to the geographic diversity of mobility projects funded by NYSERDA and/or NYSDOT.
- 4) The degree to which there is industry involvement and demonstrated ability to accelerate the adoption of energy or related technologies.
- 5) Whether the proposed project will accelerate transformational technology advances in areas that industry by itself is not likely to undertake because of technical and financial uncertainty.
- 6) The degree to which the amount and type of proposed cost share is appropriate to the size and risk profile of the proposed project.
- 7) The degree to which the expected benefits are commensurate with the size and risk profile of the proposed project and are aligned with the program objectives.
- 8) Past performance of the proposer on other NYSERDA contracts and/or NYSDOT-funded projects.
- 9) The degree to which the applicant has the staff and financial or other resources to be able to complete the project.

NYSERDA expects to notify awardees approximately 6-10 weeks from the full proposal due date whether or not the full proposal has been selected to receive an award.

VII. AWARDEE CONDITIONS

Please read this section carefully as it contains the requirements and conditions for awardees.

A. Contract Award

NYSERDA anticipates making multiple awards under this solicitation. Upon execution of a contract, any awardee of this solicitation will be considered a NYSERDA contactor. A contract may be awarded based on initial applications without discussion, or following limited discussion or negotiations pertaining to the statement of work. Each



proposal should be submitted using the most favorable cost and technical terms. NYSERDA will use the Sample Agreement (Attachment E) to contract successful proposals.

NYSERDA may, at its discretion, elect to extend and/or add funds to any project funded through this solicitation. NYSERDA reserves the right to limit any negotiations to exceptions to standard terms and conditions in the Sample Agreement to those specifically identified in the checklist questions.

Selected proposers should keep in mind that acceptance of all standard terms and conditions will generally result in a more expedited contracting process. NYSERDA may decline to contract with awardees that are delinquent with respect to any obligation under any previous or active NYSERDA agreement.

B. Deliverables

Final Report

Upon completion of the contract period, the Contractor shall prepare a non-proprietary/non-confidential Final Report covering all aspects of the work performed under this Agreement; the report shall include information on the following subjects: 1) Discussion of the observations and findings and recommendations, if any, from all tasks, and avenues for further improvements, as appropriate; 2) Discussions of the project results and lessons learned regarding configuration, capabilities, and benefits of the project; and 3) Environmental, and economic benefits, and implementation scenarios associated with such.

A payment based on the final deliverable will be reserved until project completion. NYSERDA may choose to negotiate the amount reserved for this payment.

Annual Metrics Reports

NYSERDA requires awardees to annually submit a prepared analysis and summary of metrics addressing the anticipated energy, environmental and economic benefits that are realized by the project. All estimates must reference credible sources and estimating procedures, and all assumptions must be documented. Reporting must commence the first calendar year after the contract is executed. Reports must be submitted by January 31 for the previous calendar years' activities (i.e. reporting period). Reporting will continue for 2-10 calendar years post contract close, depending on the funding category. Reporting metrics must be provided in accordance with a web-based form, which will be distributed by NYSERDA.

NYSERDA may decline to contract with awardees that are delinquent with respect to metrics reporting for any previous or active NYSERDA agreement.



Accessibility Requirements

NYSERDA requires contractors producing content intended to be posted online to adhere to New York State's Accessibility Policy. This includes, but is not limited to, deliverables such as: documents (PDF, Microsoft Word, Microsoft Excel, etc.), audio (.mp3, .wav, etc.), video (.mp4, .mpg, .avi, etc.), graphics (.jpg, .png, etc.), web pages (.html, .aspx, etc.), and other multimedia and streaming media content. For more information, see <u>NYSERDA's</u> Accessibility Requirements.³

VIII. GENERAL CONDITIONS

If changes are made to this solicitation, notification will be posted on: https://portal.nyserda.ny.gov/CORE_solicitation_Detail_Page?SolicitationId=a0rt000000YlsCv.

A. Confidential and Proprietary Information

Give careful consideration before submitting confidential information to NYSERDA as part of your proposal. Consider and review whether confidential information is critical for evaluating a proposal, and whether general, non-confidential information, may be adequate for review purposes. Information submitted to NYSERDA that the proposer wishes to have treated as proprietary and confidential trade secret information, should be identified and labeled "Confidential" or "Proprietary" on each page at the time of disclosure. This information should include a written request to except it from disclosure, including a written statement of the reasons why the information should be excepted. See <u>Public Officers Law, Section 89(5)</u> and the procedures set forth in 21 NYCRR Part 501.⁴ However, NYSERDA is bound by State Freedom of Information Law and cannot guarantee the confidentiality of any information submitted.

B. Freedom of Information Law

<u>The New York State Freedom of Information Law, Public Officers law, Article 6</u>,⁵ provides for public access to information NYSERDA possesses. Public Officers Law, Section 87(2)(d) provides for exceptions to disclosure for records or portions thereof that "are trade secrets or are submitted to an agency by a commercial enterprise or derived from information obtained from a commercial enterprise and which if disclosed would cause substantial injury to the competitive position of the subject enterprise."

http://law.justia.com/codes/new-york/2015/pbo/article-6

³ <u>https://www.nyserda.ny.gov/-/media/Files/About/Style-Guide/ADA-Accessibility-Requirements.pdf</u>

⁴ <u>https://www.nyserda.ny.gov/About/-/media/Files/About/Contact/NYSERDA-Regulations.ashx</u>

⁵ <u>https://www.dos.ny.gov/coog/foil2.html</u>



C. Omnibus Procurement Act of 1992

It is the policy of New York State to maximize opportunities for the participation of New York State business enterprises, including minority- and women-owned business enterprises, as bidders, subcontractors, and suppliers on its procurement Agreements.

Information on the availability of New York subcontractors and suppliers is available from:

Empire State Development Division for Small Business 625 Broadway Albany, NY 12207 https://esd.ny.gov/

A directory of certified minority- and women-owned business enterprises is available from:

Empire State Development Minority and Women's Business Development Division 625 Broadway Albany, NY 12207 https://ny.newnycontracts.com/

D. State Finance Law, Sections 139-j and 139-k

NYSERDA is required to comply with <u>State Finance Law sections 139-j and 139-k</u>.⁶ These provisions contain procurement lobbying requirements. Proposers are required to answer questions during proposal submission, which will include making required certification under the State Finance Law and to disclose any Prior Findings of Non-Responsibility (this includes a disclosure statement regarding whether the proposer has been found non-responsible under section 139-j of the State Finance Law within the previous four years).

E. Tax Law Section 5-a

NYSERDA is required to comply with the provisions of Tax Law Section 5-a, which requires a prospective contractor, prior to entering an agreement with NYSERDA having a value in excess of \$100,000, to certify to the Department of Taxation and Finance (the Department) whether the contractor, its affiliates, its subcontractors and the affiliates of its subcontractors have registered with the Department to collect New York State and local sales and compensating use taxes. The Department has created a form to allow a prospective contractor to readily make such certification: see <u>ST-220-TD</u>.⁷ Prior to contracting with NYSERDA, the prospective contractor must also certify to NYSERDA whether it has filed such certification with the Department.

⁶https://online.ogs.ny.gov/legal/lobbyinglawfaq/default.aspx

⁷ http://www.tax.ny.gov/pdf/current_forms/st/st220td_fill_in.pdf



The Department has created a second form that must be completed by a prospective contractor prior to contacting and filed with NYSERDA: see <u>ST-220-CA</u>.⁸ The Department has also developed <u>guidance</u>⁹ for contractors.

F. Limitation

This solicitation does not commit NYSERDA to award a contract, pay any costs incurred in preparing a proposal, or to procure or contract for services or supplies. NYSERDA reserves the right to accept or reject any or all proposals received, to negotiate with all qualified sources, or to cancel in part or in its entirety the solicitation when it is in NYSERDA's or NYSDOT's best interest. NYSERDA reserves the right to reject proposals based on the nature and number of any exceptions taken to the standard terms and conditions of the Sample Agreement. NYSERDA reserves the right to disqualify proposers based upon the results of a background check into publicly available information and the presence of a material possibility of any reputational or legal risk in making of the award.

G. Disclosure Requirement

The proposer must disclose any indictment for any alleged felony or any conviction for a felony within the past five years, under the laws of the United States or any state or territory of the United States and must describe circumstances for each. When a proposer is an association, partnership, corporation, or other organization, this disclosure requirement includes the organization and its officers, partners, and directors or members of any similarly governing body. If an indictment or conviction should come to the attention of NYSERDA after the award of a contract, NYSERDA may exercise its stop-work right pending further investigation or terminate the agreement; the contractor may be subject to penalties for violation of any law which may apply in the particular circumstances. Proposers must also disclose if they have ever been debarred or suspended by any agency of the U.S. Government or the New York State Department of Labor.

H. Vendor Assurance of No Conflict of Interest or Detrimental Effect

The proposer shall disclose any existing or contemplated relationship with any other person or entity, including any known relationships with any member, shareholders of 5% or more, parent, subsidiary, or affiliated firm, which would constitute an actual or potential conflict of interest or appearance of impropriety, relating to other clients/customers of the proposer or former officers and employees of NYSERDA, in connection with proposer's rendering services as proposed. If a conflict does or might exist, please describe how your company would eliminate or prevent it. Indicate what procedures will be followed to detect, notify NYSERDA of, and resolve any such conflicts.

The proposer must disclose whether it, or any of its members, or, to the best of its knowledge, shareholders of 5% or more, parents, affiliates, or subsidiaries, have been the subject of any investigation or disciplinary action by the New York State Commission on Public Integrity or its predecessor State entities (collectively, "Commission"), and if so, a brief description must be included indicating how any matter before the Commission was resolved or whether it remains unresolved.

⁸ <u>http://www.tax.ny.gov/pdf/current_forms/st/st220ca_fill_in.pdf</u>

⁹ http://www.tax.ny.gov/pdf/publications/sales/pub223.pdf



I. Public Officers Law

For any resulting awards, the Contractor and its subcontractors shall not engage any person who is, or has been at any time, in the employ of the State to perform services in violation of the provisions of the New York Public Officers Law, other laws applicable to the service of State employees, and the rules, regulations, opinions, guidelines or policies promulgated or issued by the New York State Joint Commission on Public Ethics, or its predecessors (collectively, the "Ethics Requirements"). Proposers are reminded of the following Public Officers Law provision: contractors, consultants, vendors, and subcontractors may hire former NYSERDA employees. However, as a general rule and in accordance with New York Public Officers Law, former employees of NYSERDA may neither appear nor practice before NYSERDA, nor receive compensation for services rendered on a matter before NYSERDA, for a period of two years following their separation from NYSERDA service. In addition, former NYSERDA employees are subject to a "lifetime bar" from appearing before any state agency or authority or receiving compensation for services regarding any transaction in which they personally participated or which was under their active consideration during their tenure with NYSERDA.

Any awardee will be required to certify that all of its employees, as well as employees of any subcontractor, whose subcontract is valued at \$100,000 or more who are former employees of the State and who are assigned to perform services under the resulting contract, shall be assigned in accordance with all Ethics Requirements. During the term of any agreement, no person who is employed by the contractor or its subcontractors and who is disqualified from providing services under the contract pursuant to any Ethics Requirements may share in any net revenues of the contractor or its subcontractors derived from the contract. NYSERDA may request that contractors provide it with whatever information the State deems appropriate about each such person's engagement, work cooperatively with the State to solicit advice from the New York State Joint Commission on Public Ethics, and, if deemed appropriate by the State, instruct any such person to seek the opinion of the New York State Joint Commission on Public Ethics. NYSERDA shall have the right to withdraw or withhold approval of any subcontractor if utilizing such subcontractor for any work performed would be in conflict with any of the Ethics Requirements. NYSERDA shall have the right to terminate any contract at any time if any work performed is in conflict with any of the Ethics Requirements.

J. Due Diligence

NYSERDA, at its discretion, may conduct broad due diligence to validate any or all elements of an application and to assess applicants' prospects of success, including gathering information to assess a proposal relative to any of the topics listed in evaluation criteria, whether or not such topic is explicitly addressed in a proposal. NYSERDA may conduct due diligence on some or all proposals based on NYSERDA's current guidelines at the time of a review. NYSERDA staff may follow up with proposers to request additional information or clarification regarding applicant's proposal, including questions regarding applicant's business prospects and resources, whether or not those questions are specifically related to the elements of the proposal. Additionally, customized due diligence may be conducted by internal or external staff or contractors based on questions on any proposal raised by NYSERDA staff and/or the Scoring Committee. Due diligence may include (but is not limited to): interviews of independent references and background checks of team members; assessment of prior business experience of any team member associated with a proposal; research on intellectual property claims; customer and partner reference



checks; market research on the applicants' target market and any other related or possibly competitive technology or market area; research to validate any assumptions on current or future revenues, costs, capital needs, and financing prospects for proposers' business, including similar (or unrelated) technologies, processes, or competitive solutions; or any other research that could reasonably inform the evaluation of a proposal, or the prospects for commercial success of the proposers' business (whether directly related to, or unrelated to the specific elements in a proposal). Due diligence may include discussions with proposers' former and current business partners, employees, investors, customers, and competitors. Due diligence may be conducted by NYSERDA personnel or contractors including members of the Scoring Committee, before, during, or after a scoring process, and prior to finalization of a contract award, any information gleaned in diligence may be used to score or re-score a proposal.

IX. ATTACHMENTS

- Attachment A Concept Paper Framework
- Attachment B Full Proposal Guidelines
- Attachment C Statement of Work Sample Format
- Attachment D Budget Form and Instructions
- Attachment E Sample Agreement



P-12 Schools Initiative - Benchmarking Program

Program Opportunity Notice (PON) 3908

Applications will be accepted on a first-come, first-served basis dependent on resource availability until March 31, 2022 3:00 PM Eastern Time.*

NYSERDA's Pre-kindergarten through Grade 12 (P-12) Schools Initiative - Benchmarking Program (the "Program") is available to provide up to three years of free benchmarking services to eligible schools. Benchmarking is a mechanism to measure, track and assess an individual building's utility, greenhouse gas, cost and energy metrics over time or comparatively to other similar buildings. The goal of the Program is to help schools better understand their energy usage and identify opportunities that will lower operating costs and reduce greenhouse gas emissions while creating healthier and more productive learning environments in schools across New York State.

Eligibility: Eligible participants include publicly or privately-owned buildings that provide P-12 education. School owned auxiliary buildings such as bus garages, maintenance buildings, and field houses are eligible when applying with at least one school education building. All space within the buildings must be solely occupied by P-12 students and staff. Buildings cannot be occupied by students younger than pre-kindergarten level. Buildings must be located in New York State, and pay into the Systems Benefit Charge (SBC) on their electric utility bill.

Application Submission: Online submission is preferable through e-mail. Complete and submit your application to <u>P12Schools@nyserda.ny.gov</u>. For ease of identification, all electronic files must be named using the applicant's entity name in the title of the document. NYSERDA will also accept proposals by mail or hand-delivery if online submission is not possible. For detailed instructions on how to submit a proposal (online or paper submission), click the link "<u>Application Instructions and Portal Training Guide</u> [PDF] " located in the "Current Opportunities" section of NYSERDA's website (<u>https://www.nyserda.ny.gov/Funding-Opportunities.aspx</u>).

Questions: No communication intended to influence this procurement is permitted except by contacting <u>P12Schools@nyserda.ny.gov</u> for program questions. If you have contractual questions regarding this solicitation, contact Nancy Marucci, (518) 862-1090, ext. 3335 or <u>Nancy.Marucci@nyserda.ny.gov</u>. Contacting anyone other than the Designated Contacts (either directly by the Applicant or indirectly through a lobbyist or other person acting on the Applicant's behalf) in an attempt to influence the procurement: (1) may result in an applicant being deemed a non-responsible offerer, and (2) may result in the applicant not being awarded a contract.

* All applications must be received by 3pm Eastern Time on the date noted above. Late or faxed applications will not be accepted. Incomplete or unsigned applications may be subject to disqualification. It is the Applicant's responsibility to ensure that all pages have been completed/included in the application. If changes are made to this solicitation, notification will be posted on the "Current Opportunities" section of NYSERDA's website at<u>https://www.nyserda.ny.gov/Funding-Opportunities/Current-Funding-Opportunities.aspx</u>.

I. DEFINITIONS

P-12 – Pre-kindergarten through grade 12 education.

Applicant – The school or school district representative authorized to represent the school which is applying for Program services. In the instance that an application is prepared by a Benchmarking Consultant, the school signatory on the application is still considered the Applicant. The Applicant may be referred to as "the school" or "the school district."

Participant – The school or school district representative authorized to represent the school which is receiving benchmarking services. The Participant may be referred to as "the school" or "the school district." An Applicant becomes a Participant after their application is approved.

Pre-kindergarten – Pre-kindergarten level education serves three to five-year-old students.

Benchmarking Consultant – NYSERDA has pre-selected Benchmarking Consultants to provide benchmarking services and operational assessments to schools participating in the Program. Each school will be assigned a Benchmarking Consultant. Schools may only receive Program services from a NYSERDA Benchmarking Consultant.

Benchmarking – Benchmarking is a mechanism to measure, monitor, and assess an individual building's utility, greenhouse gas, cost and energy metrics over time or comparatively to other similar buildings.

Benchmarking Tool – The Program's benchmarking software tool used to collect, analyze, and produce user-friendly reports on the Participant's utility data and trends. The tool's reporting and analysis capabilities will allow schools to better understand their energy usage over time and in comparison to other schools.

Energy Baseline Report – Participants will receive an Energy Baseline Report after a complete package of utility data has been submitted and the application is approved. The Energy Baseline Report provides a summary of a school building's energy use over the past year to help schools understand how they've been using energy. Establishing an energy baseline also allows schools to understand the impacts of improving their energy use.

Biannual Benchmarking Report – Participants will receive Biannual Benchmarking Reports every 6 months throughout their participation in the Program. These reports are specific to each school building and summarize energy usage, greenhouse gas emissions, and costs over time. The reports will illustrate overall trends across all utilities and greenhouse gas emissions to serve as a resource to make informed energy improvements.

Operational Assessment – An Operational Assessment is optional to eligible schools that have received at least one Biannual Benchmarking Report through the Program. An Operational Assessment report will describe the building's existing conditions, analyze overall energy performance, building operations, maintenance procedures, and energy consuming equipment to then identify areas of opportunity for improvement and recommended next steps.

II. INTRODUCTION

NYSERDA's P-12 Schools Initiative promotes clean energy efforts by educating, guiding, and assisting school staff with clean energy projects and encouraging sustainability principles at facilities and in classrooms. As part of the P-12 Schools Initiative, NYSERDA seeks to help schools better understand their energy use and clean energy investment opportunities by providing free benchmarking services to eligible schools through the P-12 Schools Initiative – Benchmarking Program.

Benchmarking serves as a mechanism to stimulate demand for investments in clean energy improvements and allows schools to gain positive public recognition for the impact of their clean energy projects. Providing schools with utility benchmarking information and energy saving recommendations will identify ways to maximize building operation efficiency while supporting financial planning and budgeting efforts.

Participating schools will have their utility data entered into the Program's Benchmarking Tool and analyzed every six months to determine trends specific to energy usage, water usage, greenhouse gas emissions, and utility costs. Schools will receive benchmarking reports outlining these trends through metrics, visuals, and graphics to help them understand how their building performs month over month. An optional Operational Assessment is available for eligible schools interested in receiving building-specific energy and cost saving recommendations.

Schools will have access to the Benchmarking Tool throughout their participation in the Program. The tool establishes energy benchmarking scores for each school which allows schools to compare their energy performance against other participating schools. Schools will have the option to share their energy benchmarking metrics on the tool's web-based public portal. NYSERDA does not intend to share any data without consent from authorized school representatives. Participants may opt out of publicly sharing their data at any time. All participants will be included in the tool's peer comparison, which compares a Participant's anonymized energy usage to other participating schools. In addition, the tool is integrated with ENERGY STAR® Portfolio Manager® and calculates an ENERGY STAR score for each participating school.

III. ELIGIBILITY

To be eligible for services through this Program, buildings must be publicly or privately-owned P-12 education buildings with all space solely occupied by P-12 students and staff. School owned auxiliary buildings such as bus garages, maintenance buildings, and field houses are eligible for services when applying with at least one school building. Buildings occupied by students younger than pre-kindergarten level are ineligible for services. Buildings must be located in New York State and pay into the Systems Benefit Charge (SBC) on their electric utility bill.

The Program is aiming to develop a portfolio of New York State school utility profiles that can be accessed and shared across participating schools in the P-12 sector. Participants must agree to grant NYSERDA and NYSERDA's Benchmarking Consultant access to all utility data. Participants that do not provide utility data required to complete energy benchmarking will be ineligible to participate in the Program and receive Program services.

School buildings that have participated in the Benchmarking Program for at least six months and received one Biannual Benchmarking Report are eligible for an Operational Assessment. Initially, one school building per school district may request to receive an Operational Assessment. Operational Assessments for additional school buildings may be requested and will be completed dependent on resource availability and lessons learned from the first assessment.

IV. PARTICIPATION OPTIONS & RESPONSIBILITIES

Benchmarking:

Applicants must select Option One or Option Two below for participation in the Program:

Option One: The school will enter their utility data into the Benchmarking Tool every six months with support from their Benchmarking Consultant.

Participant Responsibilities

School staff must complete training on how to use the Benchmarking Tool (e.g. utility data collection and data entry process) with their Benchmarking Consultant. School staff are responsible for entering utility data for each utility account into the Benchmarking Tool every six months for the duration of their program participation. The school <u>must</u> complete data entry into the tool within 30 days of each six-month billing period being complete. The Benchmarking Consultant will act as a resource for the school or school district and provide quality control of the initial data entry to ensure reliable and accurate assessment of the school's utility data. Failure to meet deadlines and non-responsiveness may result in termination from the Program.

Option Two: The school will provide utility data to the Benchmarking Consultant every six months. The Benchmarking Consultant will enter the school's utility data into the Benchmarking Tool every six months.

Participant Responsibilities

School staff must complete training on how to use the Benchmarking Tool with their Benchmarking Consultant. The school must provide the Benchmarking Consultant with utility data every six months for the duration of their program participation. The Benchmarking Consultant is then responsible for entering utility data into the Benchmarking Tool. The school <u>must</u> provide the Benchmarking Consultant with six months of utility data for all utility accounts within 30 days of each six-month billing period being complete. Failure to meet deadlines and nonresponsiveness may result in termination from the Program.

Benchmarking Consultant Responsibilities (Option One and Option Two)

The Benchmarking Consultant will maintain communication with the Participant to provide support and ensure they are meeting deadlines and adhering to Program rules. The Benchmarking Consultant will provide the Participant with an Energy Baseline Report, Biannual Benchmarking Reports, and schedule biannual check-in calls to review benchmarking results.

Operational Assessment:

Operational Assessments are <u>optional</u> to Participants that have received at least one Biannual Benchmarking Report through the Program.

Participant Responsibilities

The school shall provide information to the Benchmarking Consultant that is needed to complete the Operational Assessment, such as equipment lists, building operations and maintenance practices, and occupancy schedules. The Participant shall provide access to the building for an on-site walkthrough and provide an escort knowledgeable in building operations.

Benchmarking Consultant Responsibilities

The Benchmarking Consultant will schedule and perform an on-site Operational Assessment to gather information on building equipment, operations, and maintenance procedures. The Benchmarking Consultant will provide the school with a report that analyzes the information gathered on site and identifies specific energy efficiency opportunities.

V. PARTICIPATION PROCESS & TIMELINE

Applying to Program:

Complete and submit your application to <u>P12Schools@nyserda.ny.gov</u>. NYSERDA will also accept applications by mail or hand-delivery if online e-mail submission is not possible. Schools may request their assigned Benchmarking Consultant prepare an application on their behalf. Schools must work with the Benchmarking Consultant assigned to their region. The list of Benchmarking Consultants and the regions they serve is posted on the P-12 Schools Initiative website at <u>https://www.nyserda.ny.gov/All-Programs/Programs/P-12-Benchmarking-Program/Consultant-Map</u>.

NYSERDA will review the submitted applications and respond to the Applicant within 10 business days of receipt. Applications will be rejected when eligibility requirements are not met, or the application is incomplete. Participants are approved on a first-come, first-served basis.

In the event NYSERDA has questions on the submitted application, the Applicant is required to submit written responses and/or revisions to NYSERDA within 30 days of receiving NYSERDA's questions. The school will become a Participant after formal, written approval of the application by NYSERDA.

To Engage in Benchmarking:

Applicants may submit one application on behalf of multiple school buildings within a district. A complete application consists of the following:

- Program Application (Attachment A)
 - All applicable fields of the application must be complete.
 - The application must be signed by a representative authorized to represent the school(s) or school district named on the application.

Applications will be accepted based on completeness and eligibility. Schools must then work with their assigned Benchmarking Consultant to submit a complete package of utility data and supplemental building information for each school named on the application. Once this information is received, the school's application will be approved and the school can begin receiving benchmarking services through the Program.

To Engage in an Operational Assessment:

Participants interested in receiving an Operational Assessment can contact their Benchmarking Consultant at any time during participation to determine next steps. The Operational Assessment will occur after the Participant receives their first biannual benchmarking report(s), which will be used to aid in conducting the assessment or determine which building in a district might best benefit from this service. The Benchmarking Consultant will work with the Participant to identify the target building and schedule an on-site assessment of building operations.

Participation Process and Timeline:

Application	Understand	Benchmarking	Benchmarking	Operational	Maintain Focus
	Current	Data Entry	Results	Assessment	on Energy
	Energy Use	(on-going)	(on-going)	(optional)	Efficiency
Submit application to NYSERDA. NYSERDA accepts application based on completeness and eligibility. Participate in Scoping Call and work with Benchmarking Consultant to submit required building and utility data. NYSERDA approves application upon receipt of required data.	•Receive Energy Baseline Report analyzing your building's energy use over the past year.	 Learn how to use the free Benchmarking Tool. Option 1: Enter energy data into the tool every six months. Option 2: Provide utility bills to your Benchmarking Consultant who will then enter energy data into the tool for you every six months. 	 Receive Biannual Benchmarking Reports analyzing how your building uses energy every six months. Receive final Biannual Benchmarking Report analyzing your building's overall energy performance since applying to the Program. 	•Request to receive an operational assessment to identify energy efficiency opportunities.	•Take advantage of other NYSERDA opportunities to help you achieve your energy, sustainability, and financial planning goals.

VI. GENERAL CONDITIONS

Proprietary Information - Careful consideration should be given before confidential information is submitted to NYSERDA as part of your proposal. Review should include whether it is critical for evaluating a proposal, and whether general, non-confidential information, may be adequate for review purposes.

The NYS Freedom of Information Law, Public Officers law, Article 6, provides for public access to information NYSERDA possesses. Public Officers Law, Section 87(2)(d) provides for exceptions to disclosure for records or portions thereof that "are trade secrets or are submitted to an agency by a commercial enterprise or derived from information obtained from a commercial enterprise and which if disclosed would cause substantial injury to the competitive position of the subject enterprise." Information submitted to NYSERDA that the proposer wishes to have treated as proprietary, and confidential trade secret information, should be identified and labeled "Confidential" or "Proprietary" on each page at the time of disclosure. This information should include a written request to except it from disclosure, including a written statement of the reasons why the information should be excepted. See Public Officers Law, Section 89(5) and the procedures set forth in 21 NYCRR Part 501 https://www.nyserda.ny.gov/About/-//Media/Files/About/Contact/NYSERDA-Regulations.ashx. However, NYSERDA cannot guarantee the confidentiality of any information submitted.

Omnibus Procurement Act of 1992 - It is the policy of New York State to maximize opportunities for the participation of New York State business enterprises, including minority- and women-owned business enterprises, as bidders, sub-consultants, and suppliers on its procurement Agreements.

Information on the availability of New York subconsultants and suppliers is available from:

Empire State Development Division for Small Business 625 Broadway Albany, NY 12207

A directory of certified minority- and women-owned business enterprises is available from:

Empire State Development Minority and Women's Business Development Division 625 Broadway Albany, NY 12207

State Finance Law sections 139-j and 139-k - NYSERDA is required to comply with State Finance Law sections 139-j and 139-k. These provisions contain procurement lobbying requirements which can be found at https://online.ogs.ny.gov/legal/lobbyinglawfaq/default.aspx Proposers are required to answer questions during proposal submission, which will include making required certification under the State Finance Law and to disclose any Prior Findings of Non-Responsibility (this includes a disclosure statement regarding whether the proposer has been found non-responsible under section 139-j of the State Finance Law within the previous four years).

Tax Law Section 5-a - NYSERDA is required to comply with the provisions of Tax Law Section 5-a, which requires a prospective Consultant, prior to entering an agreement with NYSERDA having a value in excess of \$100,000, to certify to the Department of Taxation and Finance (the "Department") whether the Consultant, its affiliates, its subconsultants and the affiliates of its subconsultants have registered with the Department to collect New York State and local sales and compensating use taxes. The Department has created a form to allow a prospective Consultant to readily make such certification. See, ST-220-TD (available at http://www.tax.ny.gov/pdf/current_forms/st/st220td_fill_in.pdf). Prior to contracting with NYSERDA, the prospective Consultant must also certify to NYSERDA whether it has filed such certification with the Department.

The Department has created a second form that must be completed by a prospective Consultant prior to contacting and filed with NYSERDA. See, ST-220-CA (available at <u>http://www.tax.ny.gov/pdf/current_forms/st/st220ca_fill_in.pdf</u>). The Department has developed guidance for Consultants which is available at <u>http://www.tax.ny.gov/pdf/publications/sales/pub223.pdf</u>.

Contract Award - NYSERDA anticipates making multiple awards under this solicitation. NYSERDA anticipates a contract until December 31, 2026, unless NYSERDA management determines a different structure is more efficient based upon proposals received. A contract may be awarded based on initial applications without discussion, or following limited discussion or negotiations pertaining to the application. NYSERDA may request additional data or material to support applications. NYSERDA will use the Attachment A, Program Application, and Attachment B, Terms and Conditions, to contract successful proposals. NYSERDA may at its discretion elect to extend and/or add funds to any project funded through this solicitation. NYSERDA reserves the right to limit any negotiations to exceptions to Attachment B, Terms and Conditions. Proposers should keep in mind that acceptance of all standard terms and conditions will generally result in a more expedited contracting process. NYSERDA expects to notify applicants in approximately two weeks from the receipt of an application whether your application has been selected to receive an award. NYSERDA may decline to contract with awardees that are delinquent with respect to any obligation under any previous or active NYSERDA agreement.

Accessibility Requirements - If awardees from this solicitation will be posting anything on the web, or if the awardee will produce a final report that NYSERDA will post to the web, the following language must be included. NYSERDA requires Consultants producing content intended to be posted to the Web to adhere to New York State's Accessibility Policy. This includes, but is not limited to, deliverables such as: documents (PDF, Microsoft Word, Microsoft Excel, etc.), audio (.mp3, .wav, etc.), video (.mp4, .mpg, .avi, etc.), graphics (.jpg, .png, etc.), web pages (.html, .aspx, etc.), and other multimedia and streaming media content. For more information, see <u>NYSERDA's Accessibility Requirements</u>.

Limitation - This solicitation does not commit NYSERDA to award a contract, pay any costs incurred in preparing a proposal, or to procure or contract for services or supplies. NYSERDA reserves the right to accept or reject any or all proposals received, to negotiate with all qualified sources, or to cancel in part or in its entirety the solicitation when it is in NYSERDA's best interest. NYSERDA reserves the right to reject proposals based on the nature and number of any exceptions taken to the standard terms and conditions of the Sample Agreement. NYSERDA reserves the right to disqualify proposers based upon the results of a background check into publicly available information and the presence of a material possibility of any reputational or legal risk in making of the award.

Disclosure Requirement - The proposer shall disclose any indictment for any alleged felony, or any conviction for a felony within the past five years, under the laws of the United States or any state or territory of the United States, and shall describe circumstances for each. When a proposer is an association, partnership, corporation, or other organization, this disclosure requirement includes the organization and its officers, partners, and directors or members of any similarly governing body. If an indictment or conviction should come to the attention of NYSERDA after the award of a contract, NYSERDA may exercise its stop-work right pending further investigation, or terminate the agreement; the Consultant may be subject to penalties for violation of any law which may apply in the particular circumstances. Proposers must also disclose if they have ever been debarred or suspended by any agency of the U.S. Government or the New York State Department of Labor.

VII. List of Attachments:

- Attachment A Program Application
- Attachment B Terms and Conditions



Application Due Date All applications are due by 3:00pm Eastern Time ¹						
Round Participant Due Date						
2	Licensed home inspectors	October 3, 2019				
	ould check NYSERDA's website at (<u>https://www.nyserda.ny.gov/Funding-</u> Current-Funding-Opportunities.aspx) for the latest updates and revisions to PON					

The New York State Energy Research and Development Authority (NYSERDA) is seeking applications to competitively select licensed home inspectors and home energy contractors to be Home Energy Rating Providers and participate in a pilot program to use home energy ratings to encourage homebuyers and homeowners to invest in energy efficiency upgrades. The solicitation consists of four (4) rounds:

Open now:

Round 2: NYSERDA is seeking seek applications from licensed home inspectors to deliver ratings to homebuyers as part of a pre-purchase inspection.

Future rounds:

Round 3: NYSERDA will seek applications from home energy contractors to use home energy ratings as a sales tool by delivering ratings to eligible homeowners.

Round 4: NYSERDA will seek applications from additional licensed home inspectors to deliver ratings to homebuyers as part of a pre-purchase inspection.

Prior round:

Round 1: NYSERDA sought applications from participating contractors in NYSERDA's Home Performance with ENERGY STAR[®] Program to use home energy ratings as a sales tool by delivering ratings to eligible homeowners.

¹ All applications must be received by 3pm Eastern Time on the date noted above. Late, faxed, or emailed applications will not be accepted. Incomplete applications may be subject to disqualification. It is the Applicant's responsibility to ensure that all pages have been included in the application. Please note: for online submission, there are required questions that you will have to answer in addition to uploading attachments and you should allot at least 60 minutes to enter/submit applications. The online application system closes promptly at 3pm Eastern Time. Files in process or attempted edits or submission after 3pm Eastern Time on the date above, will not be accepted. If changes are made to this solicitation, notification will be posted on the "Current Opportunities" section of NYSERDA's website (<u>https://www.nyserda.ny.gov/Funding-Opportunities/Current-Funding-Opportunities.aspx</u>.

Informational Webinar: NYSERDA will conduct an informational webinar for Round 2 on September 9th during which NYSERDA will review the requirements of this solicitation and answer questions. Follow this link to register to attend the webinar: <u>https://nyserda-events.webex.com/nyserda-events/onstage/g.php?MTID=efc76a67d39cb0723ef5cf3bc6ad8c8e1</u>

Within this solicitation, the term "Applicant" refers to a company responding to this solicitation by submitting an application to NYSERDA for pilot participation. "Pilot Provider" refers to an Applicant that has been selected for pilot participation by NYSERDA and with whom a pilot participation agreement has been executed.

Questions may be submitted via email to <u>keith.bohling@nyserda.ny.gov</u> prior to the webinar. Applicants will have the opportunity to type-in and ask questions during the webinar as well. NYSERDA will post questions and responses on the "Current Opportunities" section of NYSERDA's website after the webinar. All questions will be posted anonymously, and NYSERDA's written responses will supersede verbal responses given during the webinar.

Applicants are encouraged to check the Current Funding Opportunities page throughout the solicitation period. Questions and answers may be added or revised during the solicitation period. Look for the **Home Energy Rating Provider (PON 4038)** link in the "Current Funding Opportunities" section of NYSERDA's website (https://www.nyserda.ny.gov/Funding-Opportunities/Current-Funding-Opportunities.aspx).

Application Submission: Online submission is preferable. Applicants may submit Word, Excel, or PDF files (file formats include: csv, doc, docx, gif, jpeg, jpg, pdf, png, ppt, pptx, pps, ppsx, tif, txt, xls, xlsx, and zip). Individual files should be 100MB or less in file size. Application PDFs should be searchable and should be created by direct conversion from MS Word, or other conversion utility. Files should not be scanned. For ease of identification, all electronic files must be named using the Applicant's entity name in the title of the document. NYSERDA will also accept applications by mail or hand-delivery if online submission is not possible. For detailed instructions on how to submit an application (online or paper submission), click the <u>Application Instructions and Portal Training Guide</u> [PDF] " link located in the "Current Opportunities" section of NYSERDA's website.

No communication intended to influence this procurement is permitted except by contacting:

Keith Bohling (Designated Contact, Primary Contact) (518) 862-1090, ext. 3491 <u>keith.bohling@nyserda.ny.gov</u> or Laura Geel (Designated Contact, Secondary Contact) (518) 862-1090, ext.3446 <u>laura.geel@nyserda.ny.gov</u>

If you have contractual questions concerning this solicitation, contact: Tara Mae Tobler (Designated Contact) (518) 862-1090, ext. 3444 <u>taramae.tobler@nyserda.ny.gov</u>.

Contacting anyone other than the Designated Contacts (either directly by the Applicant or indirectly through a lobbyist or other person acting on the Applicant's behalf) in an attempt to influence the procurement: (1) may result in an Applicant being deemed a non-responsible Applicant, and (2) may result in the Applicant not being awarded a contract.

I. Introduction

With 73% of homeowners planning to improve their homes within a year² and only 35% satisfied with the efficiency of their home³, there is demand from homeowners to learn about energy efficiency opportunities in their home. Nearly 60% of home buyers are considering a home that needs renovating⁴. When delivered as part of a pre-purchase inspection, a home energy rating can provide a roadmap to energy efficiency opportunities. As the homebuyer becomes the homeowner, the home energy rating supports remodeling decisions that include improving the energy efficiency of the home.

Home Energy Ratings are similar to a Miles Per Gallon rating on a car, providing easy-to-understand visual reports that give the homebuyer insight into how a home performs in areas like insulation, air sealing, heating & cooling efficiency, and hot water heating. Each rating comes with a list of recommendations or improvement plan that helps the homebuyer plan upgrades to increase the efficiency, comfort, and value of their home.

The New York State Energy Research and Development Authority (NYSERDA) is administering the Home Energy Ratings Pilot (Pilot) to assist New York homeowners in improving the energy performance, durability, comfort and safety of existing one- to four-family homes.

The Pilot will last 2-3 years to establish home energy ratings in specific markets to increase consumer awareness and demand for energy efficiency services. The Pilot targets homebuyers who are ready to invest in their new homes and are looking for independent, trustworthy information. Home inspectors who apply and are accepted as Pilot Providers will provide homebuyers with third-party home energy performance ratings including opportunities for improving a home's energy efficiency and therefore the home's comfort, safety and cost performance.

NYSERDA will supply incentives, training, software, and coaching to help home inspectors expand their service to include this new opportunity.

The objectives of the Pilot are to:

- Encourage homebuyers and homeowners to make energy efficiency upgrades
- Establish the best practices for delivering home energy ratings to homebuyers

Two home energy rating systems will be used in the Pilot: The US Department of Energy's ("DOE") **Home Energy Score** and **Pearl Home Certification** (collectively "Rating System(s)"). Each Rating System will be tested in different geographic markets to help evaluate each Rating Systems' impact on the market independently.

Home Energy Score will be offered in:

- Queens
- Broome County
- Town of Tonawanda

Pearl Home Certification will be offered in:

- Staten Island
- Tompkins County
- Town of Irondequoit

² 2019 LightStream Home Improvement Survey, LightStream

³ 2013 Demand Institute Housing & Community Survey, Demand Institute

⁴ <u>https://news.move.com/2019-04-15-Spring-Home-Buyers-Eye-Homes-in-Need-of-Renovation</u>

Benefits of participating in the Pilot include:

- Capture new customers who learn about ratings via NYSERDA-sponsored marketing and promotional efforts
- Generate additional income with ability to offer free or reduced cost third-party ratings to customers, initially with incentives from NYSERDA
- Become a market leader and position yourself to earn referrals from customers, agents, and contractors
- Help make homebuyers eligible for additional mortgage and loan options
- Free training and mentoring
- Leverage third-party Pilot partner quality control to increase credibility with customers

Expectations for Pilot Providers:

- On-Boarding:
 - Each person providing ratings must attend training (online or in-person). NYSERDA provides an incentive for training time, detailed in the Program Manual (Attachment D).
 - Work with a Pilot-provided mentor while delivering initial scores. After each home visit, the mentor will review the rating, provide coaching, and answer any questions
- During Pilot:
 - Promote home energy ratings to customers seeking a home inspection
 - Record home energy features in applicable software
 - Capture digital images of the home's energy features in applicable software
 - Deliver an average of five (5) ratings per month (rolling 3 month average)
 - Support quality assurance reviews
 - o Actively provide feedback and make adjustments based on pilot learnings

Potential Applicants must read the Home Energy Rating Pilot Participation Agreement (Attachment C) and the Program Manual (Attachment D) which provide more information about the Pilot. NYSERDA expects to select up to four Pilot Providers per pilot market area in each round.

Funding has been allocated as part of the Clean Energy Fund's Engaging New Markets Initiative approved on December 1, 2017 (copy available at <u>https://www.nyserda.ny.gov/-/media/Files/About/Clean-Energy-Fund/CEF-Residential-Chapter.pdf</u>).

II. Qualifications

Each person within the Applicant's company that will be providing ratings must meet all the following minimum qualifications:

- 1. Possess and continuously maintain during the pilot a New York State Home Inspection License.
- 2. Possess one or more of the following certifications: InterNACHI[®] Home Energy Inspector

OR

One or more of these certifications:

- ASHI[®] Inspector
- ASHI Certified Inspector
- InterNACHI Certified Professional Inspector[®]

AND One or more of these certifications:

- BPI Energy Auditor
- BPI Building Analyst
- BPI Healthy Home Evaluator
- HERS Rater
- LEED Rater
- BPI Building Science Principles
 Certificate of Knowledge
- Or commit to obtaining BPI Building Science Principles Certificate of Knowledge within 30 days of acceptance into the pilot

Other equivalent certifications, or documented experience, may be considered with documentation

- Maintain general liability insurance and professional liability insurance (errors & omissions) per section 2.07 of the Participation Agreement. A certificate copy will be required if the Applicant is selected for pilot participation.
- 4. Maintain worker's compensation coverage per section 2.08 of the Participation Agreement. A certificate copy will be required if the Applicant is selected for pilot participation.

III. Participation Agreement Terms

The Participation Agreement will cover the period of time from execution date until December 31, 2021. Incentives will be granted on a first-come, first-served basis for ratings delivered through December 31, 2021 or until funds are fully committed, whichever comes first.

NYSERDA reserves the right to make changes to the Pilot and incentives (including but not limited to amount, timing, recipient, structure, incentive caps and total budget available) at any time.

IV. Application Process

To apply to this PON, an application must be completed in which the Applicant agrees to abide by the terms and conditions of the Home Energy Rating Pilot Participation Agreement (Attachment C) and Program Manual (Attachment D). If an Applicant wishes to participate in the Pilot in more than one geographic market, a separate application must be submitted for each geographic market. For separate applications, the Application Questionnaire should be customized for each specific region.

The online application includes:

1. An online form with information about the Applicant.

- 2. An Application Questionnaire that must be downloaded, filled out, then uploaded as part of the application. See Attachment B. This Questionnaire asks for details about the following:
 - Company experience
 - Training
 - Approach to participating in the pilot
 - General business practices
- 3. Uploaded copies of certifications

Specific application instructions can be found in Attachment A. Faxed or e-mailed applications will not be accepted.

The competitive selection process contains multiple steps including an initial eligibility review and ranking by a scoring committee. Applications received for more than one market area from the same Applicant will be reviewed separately.

Initial Eligibility Review

Verification that all required application elements are included and that the Applicant meets all minimum qualifications.

Evaluation Criteria

Applications that pass the Initial Eligibility Review will be reviewed by a scoring committee consisting of NYSERDA staff and selected outside reviewer(s) using the evaluation criteria listed below (listed in descending order of importance):

- Pilot partnership
 - o Commitment to delivering Ratings to homebuyers
 - o Committed staff for Pilot participation
 - Staffing plan supports Pilot participation
 - Marketing plan supports Pilot participation
 - Number of ratings expected to be completed per month
- Experience
 - Experience delivering home inspections
 - Experience inspecting energy efficiency home aspects of a home
- Training
 - Training and continuing education completed
 - Building science training, credentials and/or certifications
- Quality Control and Business Practices
 - Strength of Applicant's inspection process
 - Strength of quality control processes and commitment to improving and maintaining quality
 - o Strength of customer dispute resolution process
 - o Commitment to customer satisfaction
 - o Strength of online reviews and ratings
 - Strength of Better Business Bureau rating or accreditation (if applicable)
- Home energy rating experience
 - Level of experience delivering home energy ratings, scores, or certifications

Program Policy Factors

NYSERDA may consider the following program policy factors in making selection decisions:

- The degree to which the application supports NYSERDA's goal of market transformation to deliver Ratings to homebuyers.
- The degree to which there are technical, market, or organizational risks associated with the application.

At NYSERDA's discretion, Applicants may be requested to interview with all or part of the scoring committee to address any potential questions or clarifications outlined in the applications. Applicants will be notified if they are requested to participate in an interview. **Applications should be clear and complete and not rely on a possible interview to demonstrate the merits of the application.**

V. GENERAL CONDITIONS

In compliance with §139-j and §139-k of the State Finance Law, Applicants will be required to answer questions during application submission which will include making required certification under the State Finance Law and to disclose any Prior Findings of Non-Responsibility.

Proprietary Information - Careful consideration should be given before confidential information is submitted to NYSERDA as part of your application. Review should include whether it is critical for evaluating an application, and whether general, non-confidential information, may be adequate for review purposes. The NYS Freedom of Information Law, Public Officers law, Article 6, provides for public access to information NYSERDA possesses. Public Officers Law, Section 87(2)(d) provides for exceptions to disclosure for records or portions thereof that "are trade secrets or are submitted to an agency by a commercial enterprise or derived from information of the subject enterprise." Information submitted to NYSERDA that the Applicant wishes to have treated as proprietary, and confidential trade secret information, should be identified and labeled "Confidential" or "Proprietary" on each page at the time of disclosure. This information should include a written request to except it from disclosure, including a written statement of the reasons why the information should be excepted. See Public Officers Law, Section 89(5) and the procedures set forth in 21 NYCRR Part 501 https://www.nyserda.ny.gov/About/-/media/Files/About/Contact/NYSERDA-Regulations.ashx. However, NYSERDA cannot guarantee the confidentiality of any information submitted.

Omnibus Procurement Act of 1992 - It is the policy of New York State to maximize opportunities for the participation of New York State business enterprises, including minority- and women-owned business enterprises, as bidders, subcontractors, and suppliers on its procurement Agreements.

Information on the availability of New York subcontractors and suppliers is available from:

Empire State Development Division for Small Business 625 Broadway Albany, NY 12207

A directory of certified minority- and women-owned business enterprises is available from:

Empire State Development Minority and Women's Business Development Division 625 Broadway Albany, NY 12207 **State Finance Law sections 139-j and 139-k** - NYSERDA is required to comply with State Finance Law sections 139-j and 139-k. These provisions contain procurement lobbying requirements which can be found at https://online.ogs.ny.gov/legal/lobbyinglawfaq/default.aspx. Applicants are required to answer questions during application submission, which will include making required certification under the State Finance Law and to disclose any Prior Findings of Non-Responsibility (this includes a disclosure statement regarding whether the Applicant has been found non-responsible under section 139-j of the State Finance Law within the previous four years).

Tax Law Section 5-a – NYSERDA is required to comply with the provisions of Tax Law Section 5-a, which requires a prospective contractor, prior to entering an agreement with NYSERDA having a value in excess of \$100,000, to certify to the Department of Taxation and Finance (the "Department") whether the contractor, its affiliates, its subcontractors and the affiliates of its subcontractors have registered with the Department to collect New York State and local sales and compensating use taxes. The Department has created a form to allow a prospective contractor to readily make such certification. See, ST-220-TD (available at http://www.tax.ny.gov/pdf/current_forms/st/st220td_fill_in.pdf). Prior to contracting with NYSERDA, the prospective contractor must also certify to NYSERDA whether it has filed such certification with the Department. The Department has created a second form that must be completed by a prospective contractor prior to contracting and filed with NYSERDA. See, ST-220-CA (available at http://www.tax.ny.gov/pdf/current_forms/st/st220ca_fill_in.pdf). The Department has developed guidance for contractor swhich is available at http://www.tax.ny.gov/pdf/current_forms/st/st220td_fill_in.pdf). The Department has developed guidance for contractor swhich is available at http://www.tax.ny.gov/pdf/current_forms/st/st220ca_fill_in.pdf). The Department has developed guidance for contractors which is available at http://www.tax.ny.gov/pdf/current_forms/st/st220ca_fill_in.pdf).

Participation Award - NYSERDA anticipates executing several Participation Agreements under this solicitation. NYSERDA anticipates a Participation Agreement of duration of up to three (3) years. NYSERDA may request additional data or material to support applications. NYSERDA may at its discretion elect to extend and/or add funds to any project funded through this solicitation. NYSERDA reserves the right to limit any negotiations to exceptions to standard terms and conditions. NYSERDA expects to notify Applicants approximately (4) weeks from the application due date whether your application has been selected to receive an award. NYSERDA may decline to contract with awardees that are delinquent with respect to any obligation under any previous or active NYSERDA agreement.

Accessibility Requirements - NYSERDA requires contractors producing content intended to be posted to the Web to adhere to New York State's Accessibility Policy. This includes, but is not limited to, deliverables such as: documents (PDF, Microsoft Word, Microsoft Excel, etc.), audio (.mp3, .wav, etc.), video (.mp4, .mpg, .avi, etc.), graphics (.jpg, .png, etc.), web pages (.html, .aspx, etc.), and other multimedia and streaming media content. For more information, see <u>NYSERDA's Accessibility</u> <u>Requirements</u>.

Limitation - This solicitation does not commit NYSERDA to award a contract, pay any costs incurred in preparing an application, or to procure or contract for services or supplies. NYSERDA reserves the right to accept or reject any or all applications received, to negotiate with all qualified sources, or to cancel in part or in its entirety the solicitation when it is in NYSERDA's best interest. NYSERDA reserves the right to reject applications based on the nature and number of any exceptions taken to the standard terms and conditions of the Sample Agreement. NYSERDA reserves the right to disqualify Applicants based upon the results of a background check into publicly available information and the presence of a material possibility of any reputational or legal risk in making of the award.

Disclosure Requirement - The Applicant shall disclose any indictment for any alleged felony, or any conviction for a felony within the past five years, under the laws of the United States or any state or territory of the United States and shall describe circumstances for each. When an Applicant is an association, partnership, corporation, or other organization, this disclosure requirement includes the organization and its officers, partners, and directors or members of any similarly governing body. If an

indictment or conviction should come to the attention of NYSERDA after the award of a contract, NYSERDA may exercise its stop-work right pending further investigation, or terminate the agreement; the contractor may be subject to penalties for violation of any law which may apply in the particular circumstances. Applicants must also disclose if they have ever been debarred or suspended by any agency of the U.S. Government or the New York State Department of Labor.

VI. Attachments

- Attachment A Application Instructions
- Attachment B Application Questionnaire
- Attachment C Participation Agreement
- Attachment D Pilot Manual



Commercial Tenant Program

Program Opportunity Notice (PON) 4072 March 2019

Applications accepted through December 31, 2020 on a first-come, first-served basis dependent on funding availability*.

The Commercial Tenant Program (Program) enables commercial office tenants and building owners to create more energy efficient office spaces. By funding the technical assistance services associated with incorporating energy efficiency measures in leased commercial office spaces (Office Space), the Program supports commercial office tenants (Tenants) who wish to improve the performance of their current or future workplaces, and the commercial building owners and managers (Landlords) who lease Office Space in their buildings.

Tenants can use energy optimization to create comfortable, healthy, and more productive workplaces. Benefits include talent attraction and retention, recognition for leadership in energy efficiency and sustainability, and significant savings over the life of the lease. Landlords can increase the overall performance of their buildings and create a healthy, energy efficient asset that appeals to high quality, long-term tenants. Energy optimization and better tenant engagement can lead to recognition, lower vacancy rates, higher asset values and better whole-building benchmarking scores for Landlords.

Application Submission: Online submission is preferable. Complete and submit your application to https://nyserda-portal.force.com/login. For ease of identification, all electronic files must be named using the applicant's entity name in the title of the document. NYSERDA will also accept proposals by mail or hand-delivery if online submission is not possible. For detailed instructions on how to submit a proposal (online or paper submission), click the link "Application Instructions and Portal Training Guide [PDF] " located in the "Current Opportunities" section of NYSERDA's website (https://www.nyserda.ny.gov/Funding-Opportunities/Current-Funding-Opportunities.aspx).

Questions: No communication intended to influence this procurement is permitted except by contacting Sophie Cardona (866-NYSERDA ext. 3590) or <u>commercialprograms@nyserda.ny.gov</u> for program questions. If you have contractual questions regarding this solicitation, Venice Forbes, <u>Venicesolicitations@nyserda.ny.gov</u>. Contacting anyone other than the Designated Contacts (either directly by the Applicant or indirectly through a lobbyist or other person acting on the Applicant's behalf) in an attempt to influence the procurement: (1) may result in an applicant being deemed a nonresponsible offerer, and (2) may result in the applicant not being awarded a contract.

* All applications must be received by 3pm Eastern Time on the date noted above. Late or faxed applications will not be accepted. Incomplete or unsigned applications may be subject to disqualification. It is the Applicant's responsibility to ensure that all pages have been completed/included in the application. NYSERDA reserves the right to close or extend the Solicitation at any time and/or add funding to the Solicitation should other program funding sources become available. If changes are made to this solicitation, notification will be posted on NYSERDA's website at https://www.nyserda.ny.gov/Funding-Opportunities/Current-Funding-Opportunities.aspx.



Terminology

Term	Definition	
Applicant	The Applicant is the Consultant.	
Consultant	Eligible engineering firms, energy consultants, architecture firms, or other thin	
	party entities well-versed in energy efficiency-focused technical assistance,	
	including energy analysis, energy modeling, energy efficient project design and	
	implementation. See Section III for more information.	
Customer	The Customer is the Tenant or Landlord who engages the Consultant to provide	
	technical assistance on an energy efficiency project in leased commercial office	
	space.	
Landlord	Commercial building owners, building managers and/or property management	
	firms.	
Portfolio	Two or more buildings owned by the same Landlord or two or more office	
	spaces leased by the same Tenant.	
Program Specialist	A dedicated NYSERDA staff member who will work closely with Portfolio owners	
	to support their energy efficiency goals by leveraging the Commercial Tenant	
	Program.	
Technical	A series of activities that support a Customer's decision-making process with	
Assistance	respect to energy efficiency, at all stages during the leasing cycle.	
Tenant	Tenants occupying, or that will be occupying, commercial office space.	
Tenant Office	A Tenant Office Project (Project) is any energy efficiency project occurring	
Project (Project)	within the bounds of leased commercial office spaces where a Consultant is	
	providing technical assistance to support a Customer in making informed	
	energy management and investment decisions and/or ensuring the successful	
	completion of said Project.	

Overview

Tenants typically consume more than half of a commercial office building's energy. Tenant spaces, therefore, represent a substantial opportunity to reduce the energy consumption of commercial buildings throughout the State of New York. Tenants occupying leased office spaces in commercial buildings can take advantage of opportunities to improve their work environments and generate value through strategic energy efficiency upgrades and thoughtful design solutions. In turn, Landlords intent on optimizing the performance of their buildings can engage their Tenants in energy efficiency activities and deliver attractive spaces to high value Tenants.

Opportunities to save energy exist throughout the entire life of a commercial Tenant's leasing cycle. Fostering the adoption of energy efficiency measures in Tenant occupied office spaces should ideally begin at the earliest stages of the leasing cycle (including pre-lease activities). Engaging a Consultant in the pre-lease and early design process is key to maximizing results.



Figure 1. Tenant Leasing Cycle



What the Program Funds

The Program provides funding to cover the professional service fees of Consultants offering technical assistance to incorporate energy efficiency in Tenant Office Projects. For the Commercial Tenant Program, technical assistance is defined as a series of activities that support a Customer's decision-making process with respect to energy efficiency, at all stages during the leasing cycle (see Figure 1 above). These activities include, but are not limited to:

- Providing expert advice on issues, technologies, and equipment upgrades suitable for Tenant Office Projects.
- Providing un-biased, vendor-neutral information to help customers plan for energy efficient upgrades.
- Performing energy studies and opportunity assessments to uncover the potential for energy efficiency in various Tenant Office Projects, evaluating energy savings opportunities, and determining the economic and technical viability of installing recommended measures.
- Calculating projected energy and cost savings of energy efficiency measures, and presenting findings in a compelling, user-friendly format to facilitate a Customer's decision-making process.
- Demonstrating the value of energy efficiency in Tenant Office Projects beyond simple payback information, including showcasing the value of non-energy benefits (i.e. employee productivity, comfort, greenhouse gas emissions reductions, etc.).
- Providing technically sound and accurate information in a way that maximizes the benefits of deploying energy efficiency in Tenant-occupied spaces, including identifying financing options and providing technical support for financing applications.
- Advising on the overall process and technical components of implementing energy efficiency upgrades in tenant office spaces.
- Providing cost-effective project management services.



The Program can fund eligible technical assistance services during all phases of a Tenant's leasing cycle, as illustrated in Figure 1 above, including during the space selection or pre-lease phase, during project development, project implementation, and throughout occupancy. To be eligible, Projects must estimate quantifiable energy savings. Tenant Office Projects include, but are not limited to:

- Assessing and incorporating energy efficiency measures in the design of new tenant buildouts and renovations, pre-builds and test fit-outs
- Developing tenant design guidelines
- Reducing the energy consumption of existing office spaces, during occupancy or at lease renewal.

NOTE: The Program does not provide funding to offset the cost of implementing energy conservation measures (ECMs) in Tenant Office Projects. It solely covers the cost of technical assistance services rendered by the Consultant.

For implementation incentives to help offset the cost of energy efficient equipment, Customers should consult with their local utility, or other rebate programs as applicable.

The Consultant delivering the technical assistance is responsible for ensuring Customers receive energy savings recommendations that are actionable and can inform energy management and implementation decisions to optimize performance of leased office space. A Consultant may use a variety of tools to identify such energy savings opportunities, from comprehensive energy modeling to simple walk-through assessments, depending on the needs of the Customer. Funding ranges from fifty percent (50%) to one hundred percent (100%) of the Consultant's professional services fees associated with this work depending on the level of analysis and services provided, as approved by NYSERDA.

II. PROGRAM DETAILS

The Commercial Tenant Program aims to provide technical support to Landlords and Tenants interested in incorporating energy efficiency into the leased office spaces they respectively own/operate or occupy. The Program will support Projects that aim to incorporate energy efficiency in tenant office spaces in the four areas described below. To be eligible, a Project must focus on energy optimization, but other nonenergy benefits can also be quantified, using clearly documented methodologies. All Projects culminate in the delivery of a final report to the Customer and the NYSERDA Project Manager that outlines the energy impact of the recommendations pertinent to the Project's scope (for more information on deliverables, see section V).

1. Opportunity Assessment

The Program provides funding to support the assessment of energy efficiency opportunities throughout the leasing cycle, and generally supports activities that:

- Equip Tenants and Landlords with tailored information and resources needed to make sound energy efficient choices throughout the lifecycle of a tenancy.
- Build the business case for integrating energy efficiency in Tenant occupied office spaces, including the energy and financial analysis necessary to evaluate a project from an objective and sound technical and financial perspective.



• Ensure the parties involved in the development of Projects are on-boarded in a timely fashion, to increase the likelihood that energy efficiency will be considered early in the design process, maximizing its potential impact.

Examples of activities supported under this category include conducting energy audits and performing energy value analysis, setting energy performance targets and road-mapping, energy modeling, evaluating design options, developing design guidelines and standards for Tenants and Landlords, identifying energy conservation measures (ECMs), calculating projected financial returns, reviewing incremental energy costs and savings of ECMs, and peer review of plans and recommendations, among others. For more details and examples, please visit <u>www.nyserda.ny.gov/ctp</u>

2. Planning Assistance

Once a decision has been made to incorporate energy efficiency measures in a Project, technical support can increase the likelihood that the chosen measures are installed as intended and that they continue to deliver savings over time. During Planning Assistance, the Program can fund activities that:

- Support Tenants and Landlords as they enact their energy efficiency plans during a build-out or renovation Project, as well as throughout a Tenant's occupancy.
- Measure, track and verify the performance of energy efficiency measures.
- Educate occupants on the optimal operation of their space to minimize energy consumption.

Examples of activities supported under this category include providing detailed technical support for decisions regarding the purchase of energy-efficient equipment, preparing bid documents for the purchase and installation of equipment, leveling bids, preparing requests for proposals, providing independent verification that equipment and projects are installed as specified, integrating energy conservation measures (ECMs) into operations and maintenance (O&M) plans, identifying financing options and incentives, as well as providing technical support for financing and incentive applications, among others. For more details and examples, please visit <u>www.nyserda.ny.gov/ctp</u>.

3. Portfolios

Landlords or Tenants that wish to incorporate energy efficiency measures in a portfolio of properties or Office Spaces are highly encouraged to participate in the Program. Portfolios, as defined above, have the opportunity to be paired with a dedicated Program Specialist. This service is exclusively available for Landlords or Tenants that wish to incorporate energy efficiency measures in their Portfolio of properties or Office Spaces. NYSERDA will assign a dedicated Program Specialist who will work closely with the Customer and Consultant over the duration of the Project to develop a strategy that meets the Customer's energy efficiency goals for the leased office spaces, to capitalize on economies of scales, leverage industry best practices and other available resources. As needed, the Program Specialist will work with Landlords and Tenants to assist with the creation and implementation of effective tenant engagement strategies and other eligible tasks to ensure scaling of the identified energy efficiency measures across the portfolio. The Program can support all activities listed in the Opportunity Assessment and Planning Assistance sections above as well as activities that:

- Create turnkey solutions for the identification, evaluation, prioritization and implementation of energy efficiency measures in leased Office Spaces.
- Assist Landlords in the tenant engagement process.



• Educate relevant parties (i.e. owners, property managers, tenants) on the value of energy efficient tenant spaces and related co-benefits (including improved building-wide benchmarking scores, wellness, employee productivity, comfort, greenhouse gas emissions reductions, and/or opportunities for recognition, including Energy Star for Tenants, etc.)

Please contact <u>commercialprograms@nyserda.ny.gov</u>, or call 866-NYSERDA ext. 3638 if you would like to discuss your portfolio of Tenant Office Spaces with a Program Specialist.

4. Other Projects

NYSERDA is interested in engaging in alternate and/or innovative approaches to integrating energy efficiency in commercial tenant spaces. These efforts should drive deeper energy savings in leased commercial tenant spaces, and consider and aim to meet one or more of the following criteria:

- Demonstrate the value of tenant-focused ECMs or technologies.
- Support, enable and facilitate the tenant engagement process.
- Foster collaboration between Landlords and Tenants.
- Results in estimated energy savings.

To be considered for funding, these projects must be grounded in technical assistance, identify energy savings opportunities, and aim to quantify projected energy savings. NYSERDA will consider a wide range of projects, which may focus on a specific technology (i.e. plug load management systems, advanced controls, etc.), high performing office spaces, different approaches to customer acquisition, or tenant engagement and management strategies, for example. Please reach out to <u>commercialprograms@nyserda.ny.gov</u> with questions or to discuss project ideas.

III. ELIGIBILITY

Sites

- The site must be a tenant office space.
- Landlords wishing to develop a Project for vacant tenant office spaces in a building are eligible.
- The Tenant or the building where the site is located must pay into the New York State System Benefits Charge (SBC). NYSERDA reserves the right to ask for a utility bill to verify SBC contribution.
- A suggested minimum square footage of 10,000 square feet per tenant office space is recommended.
- Owner-occupied spaces are not eligible for the Commercial Tenant Program, but they could be eligible for other NYSERDA technical assistance offerings. Please contact NYSERDA for information.

Customers

Eligible program participants include commercial building owners and building managers, property managers and commercial office Tenants who own, manage or occupy an eligible site respectively, as defined above. Customers must select a Consultant to provide the technical assistance and apply to the Program on their behalf. This Consultant must meet minimum qualification requirements (see below).

Consultants

Consultants with the following qualifications are eligible to participate in the Program:

• FlexTech Consultants approved under RFP 3826 (see list here: <u>https://www.nyserda.ny.gov/Contractors/Find-a-Contractor/FlexTech-Consultants</u>)



- Primary Energy Consultants approved to provide technical support services under NYSERDA's Commercial New Construction Program (see list here: <u>https://www.nyserda.ny.gov/Contractors/Find-a-Contractor/NCP-Primary-Energy-Consultant</u>)
- All other Consultants must meet the qualifications criteria listed below. Proof of qualifications must be submitted for review and approval prior to a Consultant engaging in its first project under the Program:
 - Company experience: At least three (3) years of energy efficiency experience (i.e. executed energy audits or demand response projects).
 - Staff: Provide the resume(s) that highlight *recent* experience of the personnel who will be directly involved in providing the technical services.
 - Work Sample: Submit two (2) final reports for energy related work completed within the past two years, for an existing and occupied facility. The report must include 1) an executive summary that outlines the project background, results, and recommendations, 2) detailed engineering calculations and data to support the energy savings estimates, 3) a list of personnel who completed the work and 4) the customer's contact information for reference checks.

Proof of qualification should be sent to <u>commercialprograms@nyserda.ny.gov</u>. NYSERDA reserves the right to request additional information and data to confirm compliance with these qualifications criteria.

IV. FUNDING

NOTE: Eligible project costs are the professional services fees charged by the Consultant to provide technical assistance to support a Project.

The Consultant shall provide a proposed budget outlining expected project costs, per Attachment C. NYSERDA's cost-share covers between 50% to 100% of the Consultant's professional services fees, not to exceed the cap per project, whichever is lower, as approved by NYSERDA. Note the following limitations:

- NYSERDA will not fund any work that has been completed prior to the receipt of an Application.
- No single Consultant may receive more than 30% of total program funding.
- NYSERDA reserves the right to limit the number of projects conducted by any single Consultant, Tenant, or Landlord.
- NYSERDA reserves the right to reject a Project, or reduce the cost-share of any Project, if construction at the Project site is advanced or substantially completed, and/or the opportunity to incorporate energy efficiency in a Project is limited.



onsultant fees for echnical assistance	NYSERDA funding level (% of eligible fees)	NYSERDA funding cap per project	Incentive timing
---	---	---------------------------------------	------------------

NYSERDA provides 100% funding for all eligible Projects where the Consultant's technical assistance fees are equal to or less than \$5,000. For projects where the technical assistance fee is greater than \$5000 (i.e. \$5001 and above), see funding levels below. Progress payments are allowed at NYSERDA's sole discretion.

1. Opportunity Assessment				
≤ \$5,000	100%	\$5,000	Funding released at final report stage.	
> \$5,000	50%-100%	\$150,000	50% funding released at final report stage. 100% funding released if Customer installs ECMs (see below for more information) *	
2. Planning Assistance				
≤ \$5,000	100%	\$5,000	Funding released at final report stage.	
> \$5,000	50%	\$150,000	Funding released at final report stage.	
3. Portfolios				
Eligible for (Program Sp	Opportunity Assessments Other Projects funding (se ecialist support – free	•	e (see funding levels above).).	

• Portfolio-level cap: \$500,000

4. Other Projects

4. Other Projects				
≤ \$5,000	100%	\$5,000	Funding released at final	
			report stage	
> \$5,000	50%	No сар	Funding released at final	
			report stage.	

* Eligibility requirements for Projects seeking 100% funding

NYSERDA will disburse 50% of the eligible costs upon receipt and approval of the final report. Receiving 100% cost-share is contingent on the Customer taking action based on the recommendations presented to them by the Consultant in the Project's final report. To be eligible to receive 100% reimbursement of the eligible technical assistance costs, the following criteria must be met:

• If the Customer installs ALL recommended ECMs in the report with a payback of less than 3 years, NYSERDA will disburse the remaining 50% of the eligible technical assistance costs, for a total of 100% of the eligible technical assistance costs.



- If instead of installing all ECMs with a payback of less than 3 years, the Customer installs any other recommended ECM from the report, NYSERDA will issue payment to match the installation costs of these ECMs, not to exceed the remaining 50% of the technical assistance costs, whichever is lower, for a total of 100% of the eligible technical assistance costs.
- A Project can qualify to receive 100% funding only within two years of purchase order issuance date. <u>No exceptions will be made</u>. To receive 100% funding, the Customer must demonstrate that the ECMs have been installed. This can be done via a site inspection (performed by the NYSERDA Project Manager or the Technical Reviewer assigned to the Project), and/or by submitting receipted invoices and pictures of the installation.

NOTE: NYSERDA funding covers up to 100% of the professional services fees of Consultants providing technical assistance on a Project. It does not cover the costs to install ECMs.

NOTE: If the Customer does not act on any of the energy efficiency recommendations in the report-- and is therefore not eligible for 100% cost-share--the Customer is responsible for paying the Consultant the remaining 50% of the technical assistance costs not covered by NYSERDA.

V. PROCESS: APPLICATION, DELIVERABLES, PAYMENTS

Application

- Consultants must apply to the Program on behalf of the Customer. All Applications must be submitted online at https://nyserda-portal.force.com/login.
- In order to access the portal, Consultants must first register here: <u>http://nyserda-site.force.com/Core_Registration_Page?programName=Commercial_Tenant</u>.

As part of the Application, Consultants must provide the following documentation, to be uploaded to the online application portal:

- 1. Customer Approval Form (Attachment A)
- 2. Scope of work detailing the tasks associated with the project (See Attachment B for scope of work requirements and a scope of work template)
- **3. Proposed budget** showing resources allocated to each proposed task in the scope of work (Attachment C)

Deliverables

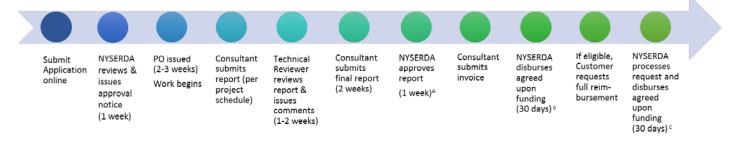
All Projects culminate in the delivery of a final report to the Customer and the NYSERDA Project Manager, that outlines the energy efficiency recommendations pertinent to the scope of work. All reports will be reviewed by a technical reviewer who will check the soundness of the energy savings projections and the technical viability of the recommended measures. The Consultant will be expected to address the comments and submit a revised report. For additional guidance on reporting, please consult the <u>Final Report Template</u> and <u>Project Summary Table</u>, as well as other resources, located on NYSERDA's Commercial Tenant Program webpage.

The project deliverables as outlined in the Project scope of work must be submitted per the Project's approved schedule and must in all cases be completed within two years of Purchase Order (PO)



issuance. Failure to complete work within the two-year timeframe will result in project cancellation. Cancelled projects may reapply if funds remain available. Figure 2 below illustrates the typical project work flow for a Tenant Office Project.

Figure 2. Project Work Flow



Notes:

- ^A Project timelines will vary based on the responsiveness of responsible parties
- ^B NYSERDA has a 30-day prompt pay policy and payment is made in accordance with the provisions below
- ^c All projects must be completed within 2 years of PO issuance.

Payments

- Upon receipt and approval of all required deliverables by the NYSERDA Project Manager, NYSERDA will contribute up to 100% of the project cost directly to the Consultant, subject to the maximum dollar amount listed in the issued Purchase Order, and not to exceed the cap.
- As needed, payment may be sent to the Customer listed on the Application.
- In cases where the Customer is not eligible for 100% funding under Program rules, the Customer
 under contract with the Consultant is responsible for paying the remaining balance of the
 project costs, under the terms and conditions negotiated between the Consultant and the
 Customer. As proof that the Customer has paid their portion of the cost-share, NYSERDA may
 require a copy of the Customer's canceled check.
- All invoices and other reimbursement documentation must be uploaded to the online Application portal (https://nyserda-portal.force.com/login)
- Progress payments may be approved at the NYSERDA Project Manager's sole discretion.
- Expenses are capped at 3% of the total eligible approved Consultant's fees.
- All payments are made to the Consultant.
- If eligible for 100% funding, the Customer must submit Attachment D to request the full 100% cost share.
- Once NYSERDA has verified that the criteria for 100% funding eligibility have been met, NYSERDA will issue the remaining 50% of the project costs to the Consultant (for a total of 100% of the Consultant's technical services fees), subject to the maximum dollar amount listed in the issued purchase order, and not to exceed the project cap.
- NYSERDA reserves the right to withhold payment in cases where Program deliverables are not met.



VI. NO-COST MEASUREMENT AND VERIFICATION

To enable Customers to fully identify, understand and capitalize on the benefits of the work undertaken as part of this Program, Customers who install at least one (1) of the ECMs recommended in their final reports may be selected to receive measurement and verification (M&V) services <u>at no cost</u>. The purpose of this M&V is to measure actual energy performance after the energy efficiency measures are in place and verify the energy savings predicted in the energy analysis. To comply with the M&V requirements, Customers selected to receive no cost M&V services shall allow NYSERDA and its Technical Reviewer to collect data and access the Project site. The analysis shall not be distributed or used by NYSERDA for any purpose other than the obligations under this Program without prior written approval of the Customer. Specifically:

- 1. The Customer shall allow NYSERDA and its Technical Reviewer to conduct up to one (1) year of reasonable tenant system-level technical review. This includes energy metering of tenant-controlled systems and other sources of data gathering.
- 2. The Customer shall provide NYSERDA and its Technical Reviewer reasonable access to submetered utility bill data (if available) for up to three (3) years to determine persistence of energy savings and energy savings above code if warranted. If available, the Customer will provide NYSERDA and its Technical Reviewer direct access to the utility bills.
- **3.** NYSERDA will provide the Customer with a summary of the technical review and the results of the utility bill analysis and note any inconsistencies with the predicted savings from the energy analysis.

VII. GENERAL CONDITIONS

Proprietary Information - Careful consideration should be given before confidential information is submitted to NYSERDA as part of your proposal. Review should include whether it is critical for evaluating a proposal, and whether general, non-confidential information, may be adequate for review purposes.

The NYS Freedom of Information Law, Public Officers law, Article 6, provides for public access to information NYSERDA possesses. Public Officers Law, Section 87(2)(d) provides for exceptions to disclosure for records or portions thereof that "are trade secrets or are submitted to an agency by a commercial enterprise or derived from information obtained from a commercial enterprise and which if disclosed would cause substantial injury to the competitive position of the subject enterprise." Information submitted to NYSERDA that the proposer wishes to have treated as proprietary, and confidential trade secret information, should be identified and labeled "Confidential" or "Proprietary" on each page at the time of disclosure. This information should include a written request to except it from disclosure, including a written statement of the reasons why the information should be excepted. See Public Officers Law, Section 89(5) and the procedures set forth in 21 NYCRR Part 501 https://www.nyserda.ny.gov/About/-/media/Files/About/Contact/NYSERDA-Regulations.ashx. However, NYSERDA cannot guarantee the confidentiality of any information submitted.

Omnibus Procurement Act of 1992 - It is the policy of New York State to maximize opportunities for the participation of New York State business enterprises, including minority- and women-owned business enterprises, as bidders, subcontractors, and suppliers on its procurement Agreements.



Information on the availability of New York subcontractors and suppliers is available from:

Empire State Development Division for Small Business 625 Broadway Albany, NY 12207

A directory of certified minority- and women-owned business enterprises is available from:

Empire State Development Minority and Women's Business Development Division 625 Broadway Albany, NY 12207

State Finance Law sections 139-j and 139-k - NYSERDA is required to comply with State Finance Law sections 139-j and 139-k. These provisions contain procurement lobbying requirements which can be found at https://online.ogs.ny.gov/legal/lobbyinglawfaq/default.aspx. Proposers are required to answer questions during proposal submission, which will include making required certification under the State Finance Law and to disclose any Prior Findings of Non-Responsibility (this includes a disclosure statement regarding whether the proposer has been found non-responsible under section 139-j of the State Finance Law within the previous four years).

Tax Law Section 5-a - NYSERDA is required to comply with the provisions of Tax Law Section 5-a, which requires a prospective contractor, prior to entering an agreement with NYSERDA having a value in excess of \$100,000, to certify to the Department of Taxation and Finance (the "Department") whether the contractor, its affiliates, its subcontractors and the affiliates of its subcontractors have registered with the Department to collect New York State and local sales and compensating use taxes. The Department has created a form to allow a prospective contractor to readily make such certification. See, ST-220-TD (available at http://www.tax.ny.gov/pdf/current_forms/st/st220td_fill_in.pdf). Prior to contracting with NYSERDA, the prospective contractor must also certify to NYSERDA whether it has filed such certification with the Department.

The Department has created a second form that must be completed by a prospective contractor prior to contacting and filed with NYSERDA. See, ST-220-CA (available at

<u>http://www.tax.ny.gov/pdf/current_forms/st/st220ca_fill_in.pdf</u>). The Department has developed guidance for contractors which is available at

http://www.tax.ny.gov/pdf/publications/sales/pub223.pdf.

Contract Award - NYSERDA anticipates making one multiple awards under this solicitation. NYSERDA anticipates a contract duration of two (2) years, unless NYSERDA management determines a different structure is more efficient based upon proposals received. A contract may be awarded based on initial applications without discussion, or following limited discussion or negotiations pertaining to the Statement of Work. Each application should be submitted using the most favorable cost and technical terms. NYSERDA may request additional data or material to support applications. NYSERDA will use the Attachment E, Terms and Conditions to contract successful proposals. NYSERDA may at its discretion elect to extend and/or add funds to any project funded through this solicitation. NYSERDA reserves the right to limit any negotiations to exceptions to standard terms and conditions in Attachment E, Terms and Conditions, to those specifically identified in the checklist questions. Proposers should keep in mind



that acceptance of all standard terms and conditions will generally result in a more expedited contracting process. NYSERDA expects to notify customers in approximately three (3) weeks from the receipt of a complete project package whether the submission has been selected to receive an award. NYSERDA may decline to contract with awardees that are delinquent with respect to any obligation under any previous or active NYSERDA agreement.

Accessibility Requirements - If awardees from this solicitation will be posting anything on the web, or if the awardee will produce a final report that NYSERDA will post to the web, the following language must be included. NYSERDA requires contractors producing content intended to be posted to the Web to adhere to New York State's Accessibility Policy. This includes, but is not limited to, deliverables such as: documents (PDF, Microsoft Word, Microsoft Excel, etc.), audio (.mp3, .wav, etc.), video (.mp4, .mpg, .avi, etc.), graphics (.jpg, .png, etc.), web pages (.html, .aspx, etc.), and other multimedia and streaming media content. For more information, see <u>NYSERDA's Accessibility Requirements</u>.

Limitation - This solicitation does not commit NYSERDA to award a contract, pay any costs incurred in preparing a proposal, or to procure or contract for services or supplies. NYSERDA reserves the right to accept or reject any or all proposals received, to negotiate with all qualified sources, or to cancel in part or in its entirety the solicitation when it is in NYSERDA's best interest. NYSERDA reserves the right to reject proposals based on the nature and number of any exceptions taken to the standard terms and conditions of the Attachment E, Terms and Conditions. NYSERDA reserves the right to disqualify proposers based upon the results of a background check into publicly available information and the presence of a material possibility of any reputational or legal risk in making of the award.

Disclosure Requirement - The proposer shall disclose any indictment for any alleged felony, or any conviction for a felony within the past five years, under the laws of the United States or any state or territory of the United States, and shall describe circumstances for each. When a proposer is an association, partnership, corporation, or other organization, this disclosure requirement includes the organization and its officers, partners, and directors or members of any similarly governing body. If an indictment or conviction should come to the attention of NYSERDA after the award of a contract, NYSERDA may exercise its stop-work right pending further investigation, or terminate the agreement; the contractor may be subject to penalties for violation of any law which may apply in the particular circumstances. Proposers must also disclose if they have ever been debarred or suspended by any agency of the U.S. Government or the New York State Department of Labor

VIII. ATTACHMENTS

- Attachment A Customer Approval Form
- Attachment B Scope of Work Requirements, Deliverables and Template
- Attachment C Proposed Budget Template
- Attachment D Request for Disbursement of 100% Cost-Share
- Attachment E Terms and Conditions



Electric Power Transmission and Distribution (EPTD) High Performing Grid Program Program Opportunity Notice (PON) 4074 Up to \$30 Million Available All, some, or none, of the available funds may be awarded

Rolling submissions are being accepted until October 7th, 2020 3:00 PM Eastern Time for Concept Papers and until November 18th, 2020 3:00 PM Eastern Time for Full Proposals, or until all funds are committed. *

The New York State Energy Research and Development Authority (NYSERDA) announces the availability of up to \$30 million in funds to support technology feasibility, research and engineering studies, product development and demonstration projects that improves the resiliency, reliability, efficiency, quality, and overall performance of the electric power delivery system in New York State. Submissions must demonstrate significant statewide public benefits and quantify all energy, environmental and/or economic impacts. The primary objective of the program is to promote the development of a high performing smart grid that accommodates a diverse supply of clean energy generation resources, enhances overall electric grid performance, and enables customers to reduce their energy costs, energy consumption, and environmental impacts. Additional objectives include the development of smart grid technologies and their commercialization by New York State companies.

Examples of eligible technologies include, but are not limited to, the following:

Advanced Monitoring / Measurement / Controls Distributed Energy Resources Integration/ Interconnections Advanced Materials / Cabling / Conductors Advanced Planning / Operations / Design / Forecasting Tools Innovative Cybersecurity / Data Analytics Transmission and Distribution Automation / Management Advanced Power Electronics / Smart Inverter Integration Advanced System Modeling / Applications / Algorithms Advanced Sensors / Devices / Systems Advanced / Adaptive Protection Systems / Controls

NYSERDA is accepting Concept Papers and Full Proposals in the following categories:

Category	Maximum NYSERDA Funding Per Award	Total Project Cost Share
Category A: Technology Feasibility Studies	\$100,000	25%
Category B: Product Development	No limit	50%
Category C: Research Studies	\$ 400,000	25%
Category D: Engineering Studies	\$ 400,000	25%
Category E: Demonstration Projects	No limit	50%

Concept Paper and Full Proposal Submission: Electronic submission is preferable. NYSERDA will also accept Concept Papers and Full Proposals submissions by mail or hand-delivery up until 3 pm Eastern Time by October 7, 2020 (Concept Papers) and by November 18, 2020 (Full Proposals). If submitting electronically, proposers must submit in either PDF or MS Word format. PDFs should be searchable and should be created by direct conversion from MS Word, or other conversion utility, rather than scanning. For ease of identification, all electronic files must be named using the proposer's entity name in the title of the document. Concept Papers and Full Proposals may be submitted electronically by following the link for electronic submissions found on this PON's webpage, which is located in the "Current Opportunities" section of NYSERDA's website (http://www.nyserda.ny.gov/Funding-Opportunities/Current-Funding-Opportunities.aspx).

If mailing or hand-delivering, proposers must submit two (2) paper copies of their submission with required attachments, along with a CD or DVD containing both a PDF and a MS Word digital copy of the Concept Paper or Full Proposal, following the guidelines. Full Proposals (not Concept Papers) must be accompanied with a completed and signed Proposal Checklist. Mailed or hand-delivered Concept Papers and Full Proposals must be clearly labeled and submitted to:

Jillina Baxter, PON 4074 NYS Energy Research and Development Authority 17 Columbia Circle Albany, NY 12203-6399

No communication intended to influence this procurement is permitted except by contacting Michael Razanousky (Designated Contact), (518) 862-1090 ext: 3245, or Sumit Bose (Designated Contact) (518) 862-1090 ext 3130 or Christopher Cheng (Designated Contact) (518) 862-1090 ext: 3245, or Sumit Bose (Designated Contact) (518) 862-1090 ext 3130 or Christopher Cheng (Designated Contact) (518) 862-1090 ext: 3436 or by e-mail <u>smartgrid@nyserda.ny.gov</u>. If you have contractual questions concerning this solicitation, contact Nancy Marucci, (518) 862-1090 ext: 3335 or by email <u>nancysolicitations@nyserda.ny.gov</u>. Contacting anyone other than the Designated Contacts (either directly by the proposer or indirectly through a lobbyist or other person acting on the proposer's behalf) in an attempt to influence the procurement: (1) may result in a proposer being deemed a non-responsible offerer, and (2) may result in the proposer not being awarded a contract.

* Late Concept Papers or Full Proposals will not be accepted. Incomplete Concept Papers or Full Proposals may be subject to disqualification. It is the proposer's responsibility to ensure that all pages have been included in the submission. Faxed or e-mailed submissions will not be accepted. Submissions will not be accepted at any other NYSERDA location other than the address above. If changes are made to this solicitation, notification will be posted on NYSERDA's web site at https://www.nyserda.ny.gov. NYSERDA reserves the rights to extend and/or adjust funding to this solicitation.

NOTE: This solicitation has a multi-step application process. The first step is to submit a Concept Paper explaining what would be proposed per the instructions in Attachment G. Concept Papers may propose to any category in the solicitation and must meet the funding amounts and cost share requirements for the proposed category. The Concept Papers will be reviewed by a Scoring Committee and approved papers will be invited for a Full Proposal submission. Full Proposals will not be reviewed and are ineligible without having successfully received approval at the Concept Paper stage.

I. INTRODUCTION

The future transmission and distribution system will be dramatically different from that which is in place today. For example, much of the system currently uses older planning tools and algorithms that do not utilize real time data and computational capacities of advanced technologies. Furthermore, today's electrical grid is relatively passive and continues to rely on electro-mechanical devices that do not dynamically communicate and are only capable of managing one-way flow of power. Systematic improvements to grid investments and operations are possible at all levels of the grid and are an essential element of the transformation of the grid and enable market development envisioned by NY's Reforming the Energy Vision (REV) initiative.

This solicitation seeks to make investments that accelerate the realization of an advanced, digitally enhanced and dynamically managed high-performing electric grid for New York State. The focus of this solicitation will be to:

- Build the capacity to integrate and expand the use of clean distributed energy resources.
- Pursue efficient asset utilization and reduce system losses.
- Facilitate greater transfer of clean energy from generation to load centers.
- Improve grid reliability and resiliency.
- Accommodate increased customer engagement in energy markets.
- Support the innovation of smart grid technologies in New York State.

This Electric Power Transmission and Distribution High Performing Grid Program solicitation is issued for specific technology areas that advance the goals discussed above. These technology areas include, but are not limited to:

- (1) Advanced monitoring, measurement and control systems and subsystems.
- (2) Transmission and distribution automation and management systems and subsystems.
- (3) Distributed energy resources integration and interconnection systems and subsystems.
- (4) Advanced power electronics and smart inverter systems.
- (5) Advanced materials, conductor and cabling technologies to improve resiliency, reliability, congestion and reduce losses.
- (6) Advanced systems modeling, applications and algorithms, such as data processing, visualization, diagnostics and analytic technologies.
- (7) Advanced planning, operations, design and forecasting tools.
- (8) Advanced sensors, devices, control systems and other equipment innovations that improve transmission and distribution system performance and reliability.
- (9) Innovative cybersecurity solutions and data analytics.
- (10) Advanced and adaptive protective systems and controls.

Activities include product development and demonstration projects. Studies into ways of improving grid resiliency, reliability, efficiency, quality, and performance as the electric power delivery network accommodates clean energy technologies such as renewable power generation, electric vehicles, and efficient distributed energy resources will also be supported.

Projects that promote high performing smart grid technologies, components and/or systems both within (Consolidated Edison, Orange and Rockland, New York State Electric and Gas, Rochester Gas and Electric, Central Hudson Gas and Electric, and National Grid) and outside (New York State's Power Authorities, municipal electric companies, cooperative electric organizations) of the New York regulated electric service territories and meet the Program Requirements are eligible for funding under this solicitation. The program strives to coordinate its activities with the Reforming the Energy Vision (REV) initiative being pursued in New York State. All projects must demonstrate broad public benefits to New York State.

Concept Papers and Full Proposals will be evaluated in five distinct project categories listed below in Section II and scored on the evaluation criteria listed in Section VI of this solicitation. All of the submissions will be reviewed by a scoring committee comprising of both internal NYSERDA staff and outside experts. All Concept Papers and Full Proposals will be evaluated according to the quality and level of detail provided within page limits. Full Proposals must include substantive documentation addressing all scoring criteria items. NYSERDA at its discretion may ask for an in-person presentation of a Full Proposal before making a funding decision.

II. PROJECT CATEGORIES

This solicitation includes five project categories. **Proposers must indicate under which category they are proposing.** Proposers should give careful consideration under which category to propose, as Full

Proposal requirements differ, so inappropriate choices could negatively affect project selection results. Proposers are encouraged to contact NYSERDA (see cover page for instructions) with technical questions to promote complete understanding of the project categories as described below:

Category A: Technology Feasibility Studies (NYSERDA's share of funding for any project of this type will be limited to a maximum of \$100,000. Proposer total project cost share at or above 25%.)

• Projects under this category include studies aimed at determining and demonstrating the feasibility of new smart grid technologies and products. Projects that successfully demonstrate feasibility may provide the basis for a project proposal under Category B: New Product Development projects to further the advancement of the new product or technology.

Category B: Product Development (No NYSERDA limit for funding request. Proposer total project cost share at or above 50%.)

 Product development includes any work focused on bringing a new or improved product or service to market, including technical feasibility, business case feasibility, market analysis, proof of concept, product design, engineering, scale up, and field testing. Field testing is the stage in which a technology, not yet commercially available with a warranty, is operated in real world conditions with results used for product iteration, market validation, or customer engagement. Product Development: the method of bringing a new or improved product or service to market, including technical feasibility, business case feasibility, market analysis, proof of concept, product design, engineering, scale up, and field testing. Field testing is the stage in which a technology, not yet commercially available with a warranty, is operated in real world conditions with results used for product iteration, market validation, or customer engagement. Projects under this category include the development and commercialization of technologies and products for improving the resiliency, reliability, quality and efficiency of the electrical power delivery system. Note that bench-scale testing and field verification or testing may be included in Category B projects. Product Development projects may lead to a project proposal under Category E: Demonstration Projects to prove out the potential product or technology at a New York State site. Note: Product Development projects are subject to NYSERDA's recoupment terms described in Section VII.

Category C: Research Studies (NYSERDA's share of funding for any project of this type will be limited to a maximum of \$400,000. Proposer total project cost share at or above 25%.)

• Projects under this category include studies aimed at ways of improving the resiliency, reliability, quality and efficiency of the electric power delivery system. Studies may explore effects and feasibility of new technology deployment, public policies, business models, planning methods, cost recovery models or other areas of analysis. Projects in this category **should not** include technology or product development tasks. If technology or product development tasks are necessary, consider proposing in Category B.

Category D: Engineering Studies (NYSERDA's share of funding for any project of this type will be limited to a maximum of \$400,000. Proposer total project cost share at or above 25%.)

Projects under this category include engineering studies that assess the design and effectiveness
of demonstrating new or under-utilized technologies at a New York site. Engineering studies are
expected to ultimately lead to a project proposal under Category E: Demonstration Projects and
are intended to support project development activity such as detailed design, site assessment,

economic analysis, interconnection and permitting issues associated with potential demonstration projects that improve the resiliency, reliability, quality and efficiency of the electric power delivery system.

Category E: Demonstration Projects (No NYSERDA limit for funding request. Proposer total project cost share at or above 50%.)

• Demonstration projects are intended to increase sales or usage of a commercialized product already in the marketplace, with results used to generate objective performance information for customers or policymakers. At this stage, the product is available for commercial sale with a warranty. While incremental improvements may be incorporated based on the demonstration results, the final product design is essentially complete. <u>Demonstration</u>: a project intended to increase sales or usage of a commercialized product already in the marketplace, with results used to generate objective performance information for customers or policymakers. At this stage, the product is available for commercial sale and warranty. While incremental improvements may be incorporated based on the demonstration results, the final product is available for commercial sale and warranty. While incremental improvements may be incorporated based on the demonstration results, the final product design is essentially complete. Projects in this category **should not** include technology or product development tasks. If technology or product development tasks are necessary, consider proposing in Category B. Projects in Category E should demonstrate innovative new or under-utilized products or technologies in pioneering applications. Proposers must clearly identify whether the demonstration project will support either transmission or local distribution operations.

NOTE: NYSERDA reserves the right to negotiate the project category, scope of work, budget and funding levels on all awarded projects. Efforts requesting more than \$250,000 from NYSERDA shall be funded in phases separated by go/no-go milestones.

The proposer has the option of requesting multiple stage projects that include multiple project categories. For example, a proposer may request consideration of a project that involves a Category A study to determine the feasibility of a new technology, a Category B effort to develop the new technology, and a Category D study to address detailed design for technology installation.

a. Any proposer who requests multiple stage projects should briefly describe how it will complete the initial stage and any following stage along with significant milestones and provide an estimate of the total cost and schedule for each stage.

b. Any contract awarded to fund a multi-stage project does not in any way obligate NYSERDA to fund any more than the first stage. NYSERDA reserves the right to negotiate project Categories if it determines the project's efforts are a better fit for a different project Category.

i. NYSERDA anticipates awarding contracts for either a single stage of a multistage project, or for multiple stages. In the case of a multi-stage award, NYSERDA anticipates issuing a contract with a maximum, "not-to-exceed" amount with subsequent stages only being awarded on a contingent basis as described below.

ii. NYSERDA reserves the right not to move forward with subsequent stages of a multi-stage award, dependent on project success and availability of funding. Later stages may be funded if, in NYSERDA's sole discretion, milestones from the previous stage have been satisfied, there is still significant potential market impact, and sufficient program funds remain. iii. NYSERDA expects it may award more contingent funding, due to project attrition, than is available for this program.

iv. At the end of each stage, project outcomes will be evaluated to determine if the project will continue to be funded.

c. The proposal must meet the minimum proposer total cost share for each category that is funded.

III. ELIGIBLE TECHNOLOGIES

Technologies eligible under this solicitation include innovative and under-utilized high performing smart grid and other technologies that improves the resiliency, reliability, performance, efficiency and new services for the electric power grid. Potential technologies include, but are not limited to:

- (1) Advanced monitoring, measurement and control systems and subsystems.
- (2) Transmission and distribution automation and management systems and subsystems.
- (3) Distributed energy resources integration and interconnection systems and subsystems.
- (4) Advanced power electronics and smart inverter systems.
- (5) Advanced materials, conductor and cabling technologies to improve resiliency, reliability, congestion and reduce losses.
- (6) Advanced systems modeling, applications and algorithms, such as data processing, visualization, diagnostics and analytic technologies.
- (7) Advanced planning, operations, design and forecasting tools.
- (8) Advanced sensors, devices, control systems and other equipment innovations that improve transmission and distribution system performance and reliability.
- (9) Innovative cybersecurity solutions and data analytics.
- (10) Advanced and adaptive protective systems and controls.
- (11) Technologies that facilitate the interconnection of clean renewable resources to the electric grid.
- (12) Increasing electric grid flexibility and dynamic operation.

IV. PROGRAM REQUIREMENTS

Projects proposed for funding must:

- (1) Address an innovative technology that improves the resiliency, reliability, performance, efficiency and provide new services for the electric power grid.
- (2) Provide direct and quantifiable energy, environmental, and/or economic benefits to New York State such as emissions reductions (such as greenhouse gases and criteria air pollutants), job creation, product manufacturing and sales, increased resiliency and reliability, higher efficiency, and reduced electric costs.

- (3) Include a project budget using the Attachment D Contract Pricing Proposal Form (CPPF) budget showing total project cost and proposer cost-share. Include a cost-sharing breakdown by project task in the Statement of Work (Sample Statement of Work included as Attachment B).
- (4) Satisfy recoupment obligations to NYSERDA for any new technology or product development effort requesting cumulative NYSERDA funding over \$75,000 upon product commercialization (see terms and conditions in Attachment F, Sample Agreement).
- (5) Demonstrate that the proposer and/or team of proposers are qualified to carry out the submitted project proposal.
- (6) Provide a strong rationale as to how the project will overcome barriers impeding the implementation or adoption of any new or under-utilized technology.
- (7) For projects that develop technologies or products, emphasize development and/or applications of marketable products for near-term commercialization, rather than basic research, and provide an assessment of the addressable market, and discuss an appropriate commercialization path and potential for manufacturing in New York State. Note that even in early-stage projects, initial activities focusing on commercialization (or technology deployment) paths and challenges are essential to assessing benefits, risks, and future resource requirements.
- (8) For demonstration projects, clearly identify how this project will increase sales or usage of a commercialized product already in the marketplace, generate objective performance information for customers or policymakers, and how such demonstration will lead to increased use of the product in New York State. Demonstration projects must be installed within New York State. See additional requirements for Demonstration Projects below.
- (9) Provide a letter of support and commitment from all funding sources and partners / entities responsible for managing, operating and maintaining all electric delivery infrastructure impacted by project.
- (10) Demonstrate that the project and funding request addresses a current challenge to technology advancement that is not being addressed adequately by current industry practices and/or federal and/or other state research priorities and funding. Include a cost and New York statewide public benefit analysis to justify allocation of funds.

Other Considerations

- A proposal may be considered non-responsive if it fails to comply with the requirements of this solicitation.
- Prior to an award being made, potential contractors may be required to demonstrate access to financial resources sufficient to perform the proposed work, technical experience and adequate facilities (or the ability to access them), a good performance record, and the ability to qualify for an award under applicable laws and regulations.
- Preference will be given to proposers that provide higher cash contributions towards project costs.

- External funding partnerships are encouraged to leverage limited New York State resources. Proposers are encouraged to develop projects that leverage funding with external resources partners such as other research and development organizations.
- Proposers may be required to make an in-person presentation, at any time during the open solicitation period, to NYSERDA prior to a final decision being made.

ADDITIONAL PROGRAM REQUIREMENTS FOR CATEGORY E DEMONSTRATION PROJECTS ONLY

Category E projects selected for funding must:

- (1) Have a <u>New York State demonstration site</u>.
- (2) Be installed within 36 months of contract.
- (3) Address safety issues, including public safety, that are applicable to the demonstration project.
- (4) Comply with all applicable building, fire, electrical, and interconnection codes, standards, and requirements.
- (5) Provide equipment sensors, instrumentation, and a complete data acquisition system for remote monitoring and reporting as specified below.
- (6) Demonstrate the technology viability and monitor the performance, characteristics, and benefits for a period adequate to meet project goals. If the period is under 18 months, the proposer must discuss why the proposed time is adequate. Unless the proposer demonstrates a compelling reason otherwise, at least 365 operating days of data will be required after commissioning.
- (7) Present an economic analysis of the proposed technology demonstration including an estimated cost/benefit ratio, and a plan to measure the actual cost/benefit ratio during the demonstration. Commercially available proof of technology and its warranty is required.

Data Acquisition Requirements for Category E: Demonstration Projects Only

NYSERDA intends to provide system level operation and performance information, including economic performance information, to all interested stakeholders (ex. New York electric utilities) and the general public on each of the demonstration projects funded under this solicitation. In order to meet this objective, each demonstration project must provide sufficient instrumentation and data transmittal, and analytical capabilities to allow the collection and analysis of technical and economic performance data.

The demonstration project proposal should include system operating data to be used for evaluation and generation of reports on the overall performance of the technology being demonstrated. Data acquisition sampling rates must be adequate to characterize the benefits and the value proposition of the proposed application. For example, sampling rates for applications designed to enhance power quality or system stability would be much higher than sampling rates for peak shaving or arbitrage applications. In the event that the demonstration system performs multiple activities, the system must provide for the collection of data for all activities. All raw and summary data collected at the project sites must be archived and protected from loss on permanent media.

Benefits Data Tracking and Reporting for Category E: Demonstration Projects Only

Data sufficient to demonstrate the energy, environmental, and/or economic benefits defined in the proposal must be measured, collected, analyzed, and recorded. For applications that claim multiple benefits, the proposed data and analysis methods must adequately support the claimed benefit for each of the benefits specified in the proposal.

Reporting Requirements for Category E: Demonstration Projects Only

The proposal must identify the project team member who will be responsible for the preparation and delivery of periodic written project reports. System operational summary information must be generated regularly and be included in progress reports. At a minimum, the system operational summary information must include the following:

- Raw data.
- System performance summary.
- Summary of system reliability and failure rates.
- A written summary of the economic benefit derived for the time period.
- A written summary of all operations and maintenance activities for the time period.
- System dispatch information and use patterns associated with the project, as appropriate.
- Energy consumption breakdown of parasitic loads introduced by the demonstration system, as appropriate.
- System performance under typical utility fault conditions, e.g. lightning strikes, primary phase to ground faults, voltage sags/spikes, electric outages, etc., as appropriate.
- System performance under user fault conditions, e.g. fault in customer plant, as appropriate.

Reports must be generated that consolidate all the information from the reports and summarize demonstration system performance for the preceding year.

Historical Performance Data Reporting for Category E: Demonstration Projects Only

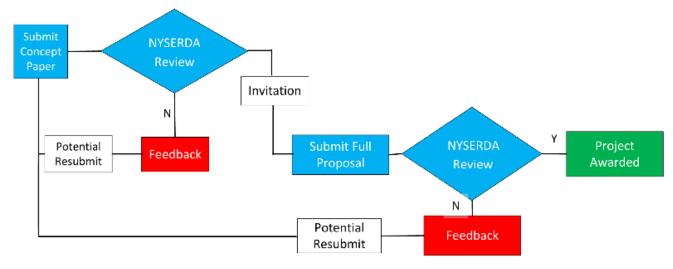
Where appropriate to document project benefits, historical utility system operational data prior to the installation of the demonstration system is required in order to provide credible baseline data on electrical system performance before and after the installation of the demonstration system. Information concerning load profiles, peaks, overloads, faults, power quality events, and any other information required to fully characterize the operation of the electrical utility at the demonstration site prior to installation of the demonstration system must be collected by the proposer for a reasonable period of time. Comparison information must be made part of the progress reports.

V. SUBMISSION REQUIREMENTS

Multi-step Application Process

A multi-step application process is used for this solicitation. All proposers must first submit a maximum 4-page Concept Paper per the instructions/template in Attachment G. Concept Papers must concisely describe the concept, why this is desirable and scalable in New York State, values to be sought and desired outcomes of the project. NYSERDA will evaluate/score Concept Papers as they are received based on the Scoring Criteria in Section VI. Concept Papers may be submitted to NYSERDA at any time this solicitation remains open for Concept Papers. Following a NYSERDA Review, Concept Paper proposers may be invited to submit a Full Proposal. Proposers invited to submit a Full Proposal will be provided feedback, questions and concerns related to their concept that should be addressed in the subsequent Full Proposal. Invited Concept Papers will have up to 45 calendar days from the Concept

Paper approval date to submit a Full Proposal or their Concept Paper will be rejected. Concept Papers for which full proposals are not invited may be resubmitted only one more time, with changes after a debriefing of the strengths and weaknesses. Full Proposals not meriting an award for contracting may be debriefed and resubmitted as a Concept Paper, ideally addressing NYSERDA's assessment of strengths and weaknesses. Only one such resubmittal will be considered during the term of this solicitation. This resubmittal may occur at any time that this solicitation remains open to Concept Papers. This process is depicted in the flow chart below.



Details on Submissions

Prior to Submission

Prior to submitting a Concept Paper to this solicitation, any proposers may communicate with NYSERDA's Designated Contact to discuss a concept and its potential responsiveness to this solicitation. Communication with NYSERDA staff prior to submission is entirely optional and is not required prior to Concept Paper submission.

Submission Process and Deadlines

Electronic submission is preferable. NYSERDA will also accept Concept Papers and Full Proposals submissions by mail or hand-delivery. Regardless of the mode of submittal, NYSERDA will only accept Concept Papers until 3 pm Eastern Time on October 7, 2020, and Full Proposals until 3 pm Eastern Time on November 18, 2020. If submitting electronically, proposers must submit in either PDF or MS Word format. PDFs should be searchable and should be created by direct conversion from MS Word, or other conversion utility, rather than scanning. For ease of identification, all electronic files must be named using the proposer's entity name in the title of the document. Concept Papers and Full Proposals may be submitted electronically by following the link for electronic submissions found on this PON's webpage, which is located in the "Current Opportunities" section of NYSERDA's website (http://www.nyserda.ny.gov/Funding-Opportunities/Current-Funding-Opportunities.aspx).

If mailing or hand-delivering, proposers must submit two (2) paper copies of their submission with required attachments, along with a CD or DVD containing both a PDF and a MS Word digital copy of the Concept Paper or Full Proposal, following the guidelines. Full Proposals (not Concept Papers) must be

accompanied with a completed and signed Proposal Checklist. Mailed or hand-delivered Concept Papers and Full Proposals must be clearly labeled and submitted to: Jillina Baxter, PON 4074, NYS Energy Research and Development Authority, 17 Columbia Circle, Albany, NY 12203-6399

Concept Papers: Submissions, Review and Re-submittals

Proposers of Concept Papers must use the format of the Concept Paper Template provided as Attachment G. The intent of the template is to present the concept in an orderly, organized manner, without repeating or restating information. Proposers are asked to submit only thoroughly considered Concept Papers. Proposers may submit Concept Papers to NYSERDA under this solicitation at any time during the open period of the Concept Paper submission. Concept Papers determined compliant with application procedures and responsive to the solicitation will be subject to NYSERDA Review by internal and/or external technical experts in accordance with Section VI Concept Paper and Full Proposal Scoring Criteria. Only the most technically meritorious Concept Papers will receive an invitation from NYSERDA to submit a Full Proposal. **Invited Concept Papers will have up to 45 calendar days from the Concept Paper approval date to submit a Full Proposal or their Concept Paper will be rejected.** Project ideas presented in any Concept Papers not meriting an invited Full Proposal may be resubmitted in a revised Concept Paper, ideally addressing NYSERDA's assessment of strengths and weaknesses. Only one such resubmittal will be considered during the term of this solicitation.

Full Proposals: Submissions, Review and Re-submittals

Proposers may submit a Full Proposal to NYSERDA for consideration under this solicitation only after a favorable review of a Concept Paper and an invitation to submit a Full Proposal. Full Proposals determined to be compliant with application procedures and responsive to the solicitation will be subject to review by a scoring committee comprising of NYSERDA and external technical experts in accordance with Section VI, Concept Paper and Full Proposal Scoring Criteria. Only the most technically meritorious Full Proposals will be awarded an invitation from NYSERDA to enter into a contract. Full Proposals not meriting an award for contracting may be debriefed and resubmitted as a Concept Paper, ideally addressing NYSERDA's assessment of strengths and weaknesses. Only one such resubmittal will be considered during the term of this solicitation.

To submit an invited Full Proposal, complete the Proposal Narrative form-fillable document as part of the PON (Attachment A). The Funding Category must be clearly indicated. The Proposal Narrative contains the following sections:

- Executive Summary
- Problem Statement and Proposed Solution
- State of Research and Technology Targets
 - Attachment C: Technology Readiness Level/Commercial Readiness Level Calculator (Categories B, and E)
- Commercialization Potential of Proposed Product
 - Attachment C1: Three-Year Financial Projections Worksheet (Category B)
- Demonstration Project Information (Category E)
- Study Information (Category A, C, and D)
- Statement of Work (Attachment B) and Schedule
- Project Benefits
- Budget (Attachment D1 Contract Pricing Proposal Form)

- Proposer Qualifications
- Letters of Support
- Attachments

Proposers must carefully review the Proposal Narrative to ensure that all required sections are completed. Failure to do so may result in the proposal being rejected as non-responsive.

Note: The proposer's goal should be to concisely present the information needed to fully address the scoring criteria (see Section VI). Proposals that grossly exceed the word limits or fail to follow the format guidelines may be rejected as non-responsive. Proposals deemed non-responsive will not be eligible for awards. If you believe proprietary information must be submitted to provide an adequate concept paper or proposal, you must comply with the Section VIII instructions for submitting proprietary material. Unnecessary attachments beyond those sufficient to present a complete, comprehensive, and effective proposal may reduce, rather than increase, a proposal's standing per the scoring criteria. Each page of the proposal should state the name of the proposer, the PON number (PON 4074), and the page number.

VI. CONCEPT PAPER and FULL PROPOSAL SCORING CRITERIA

Concept Papers and Full Proposals will be reviewed by a Scoring Committee and will be scored and ranked according to the following criteria. After the submissions are reviewed, NYSERDA will issue a letter to each proposer indicating its Concept Paper or Full Proposal evaluation results. Proposers receiving favorable evaluations will be invited to either submit a Full Proposal or enter into contract negotiations with NYSERDA. After initial review of the Full Proposal, the Proposer, at NYSERDA's sole discretion, may be asked to address specific questions or provide additional information, either in writing or through an interview, as part of the Full Proposal scoring process. The proposer will be required to submit a detailed Statement of Work, Budget, and Schedule, and may also be asked to address specific recommendations of the Scoring Committee before contract award.

CONCEPT PAPER SCORING CRITERIA:

Problem and Proposed Solution

- How significant is the problem or opportunity to New York State?
- How well does the proposed solution address the problem or opportunity?
- Is the proposed project technically and commercially viable and a clear advancement over existing or competitive industry solutions?
- Is the proposed project novel and/or leverage existing federal / state research priorities and funding?
- Does the proposed project address an eligible technology?
- Does the proposed project meet the category program requirements?
- Does the proposed solution have a high potential for commercialization, addressing demonstrated / validated customer needs and significant market and commercial potential?

New York State Impact and Project Benefits

• Does the project support the Reforming the Energy Vision (REV) goals, grid modernization in

general, the Clean Energy Standard, and the Clean Energy Fund goals in New York State?

- Does the proposed project have potential for favorable energy, efficiency, environmental and/or commercial economic growth impact benefits in New York State? How significant are these impacts?
- Does the proposed project address an innovative technology that improves the performance, quality or reliability / resiliency of the electric power system?
- How widely and rapidly deployed can the technology be, both in New York and globally?

Team Qualifications

- Has the proposer provided evidence of being qualified to perform the proposed work based on the qualifications of the organization(s) and the involved individual(s)?
- Is the proposed team appropriately organized and have the resources necessary to carry out the work plan?

Project Cost and Value

- Is the overall project cost justified and reasonable based on the level of effort proposed and the expected outcome and benefits?
- Is the value proposition and benefits sufficient that the concept or technology will likely be successful and adopted by the market?
- How appropriate are the proposer's co-funding contributions (sources and amounts) with respect to the degree of risk, potential benefits from the work?

<u>Other Considerations</u> – Concept Papers will be reviewed to determine if they reflect NYSERDA's overall objectives, including risk/reward relationships, similar ongoing or completed projects, and the general distribution of projects among categories, technologies, industries and other organizations, and geographically within New York State.

FULL PROPOSAL SCORING CRITERIA:

Problem and Proposed Solution (All Categories) -

- How significant is the problem or opportunity to New York State?
- Is the proposed work technically feasible, innovative, and superior to alternatives?
- Are the commercialization tasks likely to be effective in advancing the technology to market?
- Does the proposal address an eligible technology?
- How well does the proposed solution address the problem or opportunity?
- Are fundamental scientific principles well understood and clearly presented?
- How appropriate are the cost, technical, performance and commercialization goals for the proposed technology or product?
- Does the proposer exhibit an understanding of the state-of-the-art, competing products and alternative designs?
- If the proposed work is a follow-on project to a previously co-funded NYSERDA project, what was the outcome of the earlier phase?
- Is the proposed project addressing a current challenge or opportunity that is not being addressed adequately by current industry practices and/or federal and/or other state research priorities and funding?

• Does the proposed solution have a high potential for commercialization, addressing demonstrated customer needs and significant markets?

Proposed Work (Category E only) -

- How significant is the demonstration opportunity to New York State?
- How well does the proposed solution address the problem or opportunity?
- Is the proposed demonstration innovative and is it appropriate that the proposed demonstration be funded under this program as opposed to a NYSERDA program that provides incentives to install certified, commercially-ready technologies?
- Does the proposal address an eligible technology?
- Is the proposed demonstration well-conceived, technically feasible, and superior to alternatives?
- Does the proposer exhibit an understanding of the state-of-the-art, competing products and alternative designs?
- What is the level of commitment of a New York State site?
- Does the proposal include a New York State demonstration site?
- Is an appropriate performance monitoring and data analysis effort included in the proposal?
- If the proposed work is follow-on to a previously co-funded NYSERDA project, what was the outcome of the earlier phase?

New York State Impact and Project Benefits (All Categories) -

- To what extent does the project support the Reforming the Energy Vision (REV) goals, grid modernization in general, the Clean Energy Standard, and the Clean Energy Fund goals in New York State?
- To what extent will there be economic benefits in New York State in the form of subsequent commercial activity and economic growth?
- Are the appropriate letters of support and/or commitments included in the proposal?
- How well are the potential benefits to New York State quantified?
- How likely is it that the projected benefits will be realized?
- Does the proposed project have favorable energy, efficiency, environmental and/or economic impacts in New York State? How significant are these impacts?
- Are the technical risks identified, appropriately addressed, and balanced by project benefits?
- Does the proposal address an innovative technology that improves performance, quality or reliability / resiliency of the electric power system?

Statement of Work and Schedule (All Categories) -

- How appropriate are the technical, performance and commercialization goals for the proposed project?
- Do the proposed technical and performance goals adequately allow for measurement and verification of the success of the proposed project?
- Does the work strategy in the Statement of Work include technical and business development tasks and is likely to achieve the technical, performance and commercialization goals?
- Does the Statement of Work include an economic analysis of the technology based on performance measurements?
- Is the Statement of Work well organized, complete, and appropriate for the technical, performance and commercialization goals identified?
- How realistic is the schedule for achieving the goals of the proposed project?

- Is the proposed level of effort reasonable to complete the proposed project?
- Are the proposed milestones and tasks reasonable and complete in details?

The following criteria apply to Category E projects only:

- Are the data acquisition, monitoring, and reporting plans reasonable and do they meet the requirements in Section V, ADDITIONAL PROGRAM REQUIREMENTS FOR CATEGORY E DEMONSTRATION PROJECTS ONLY?
- Is the benefits tracking plan reasonable and does it meet the requirements in Section V, ADDITIONAL PROGRAM REQUIREMENTS FOR CATEGORY E DEMONSTRATION PROJECTS ONLY?
- If monitoring baseline utility system operation is necessary to document system benefits, does the Statement of Work include a provision to adequately gather baseline utility operational data?

Proposer / Team Qualifications (All Categories) -

- Has the proposer provided evidence of being qualified to perform the proposed work based on the qualifications of the organization(s) and the involved individual(s)?
- Were resumes of key individuals included in the proposal?
- To what degree does the proposer and team have the necessary technical and business background and experience?
- Has the proposer provided evidence of good past performance on other relevant projects?
- Is the proposing team appropriately organized?
- Are staff allocations and responsibilities reasonable?

Project Cost and Value (All Categories) -

- Is the overall project cost justified and reasonable based on the level of effort proposed and the expected outcome and benefits?
- How significant is the potential market opportunity relative to the project cost?
- How appropriate are the proposer's co-funding contributions (sources and amounts) with respect to the degree of risk, potential to benefit from the work, and financial status of the organization?
- How firm are the commitments and support from essential participants, co-funders, and related businesses and other organizations?
- Are the overhead rates reasonable and supported with appropriate documentation?
- Are equipment, facility, material, and travel costs based on reasonable estimates?
- Are the labor rates reflective of the industry?

Technology Transfer / Repeatability (All Categories) -

- Does the proposed technology have commercial applications at other New York State sites?
- Does the proposed project demonstrate an effective strategy and strong potential for the project to lead to future use of the technology in New York?
- Does the proposed technology address market needs?

Business/Commercialization Plan (Category B & E only) -

- Is the proposed product or concept likely to be successful?
- Are there sufficient markets or needs for the concept/technology?
- How significant is the commercial potential of this technology?

- How widely deployed can the technology be, both in New York and globally?
- Are the business and commercialization or replication plans appropriate for the type of project and stage of development?
- How significant are the barriers to market entry?
- Does the proposer demonstrate a clear understanding of the steps required to overcome these barriers?
- Have customers been identified and consulted regarding the value of the technology or solution?"
- Is the value proposition of the technology well matched to the expressed needs of the customer segments being targeted?
- Does the proposal identify competing and alternate solutions, and clearly show why this product or concept is superior to, price competitive with, or provides value compared to alternative products or solutions?
- If follow-on financial resources are necessary, are plans to raise necessary financial resources likely to be successful?
- How well are the project tasks directed at identifying and fulfilling customer requirements? How far will execution of the work plan take the product to full commercialization?
- Would achievement of technical and business goals position the company to raise capital or realize revenue from the product before NYSERDA funding is exhausted?

<u>Other Program Policy Factors</u> – In addition to considering how project Concept Papers and Full Proposals satisfy the Scoring Criteria listed above, NYSERDA reserves the right to make funding decisions on the basis of other Program Policy Factors, including but not limited to:

New York State Energy Mission Alignment

- The degree to which the proposed project will advance the goals of the State Energy Plan / Clean Energy Fund / REV.
 - The State Energy Plan / Clean Energy Fund / REV goals include improving resilience and reducing greenhouse gas emissions. <u>https://rev.ny.gov/</u>
 - Project continues to contribute to one or more of NYSERDA's key statutory goals. <u>https://www.nyserda.ny.gov/About</u>

Program Portfolio Value and Optimization

- The degree to which NYSERDA ongoing funding, (incl. cost shares), will make a difference in the technology impact, acceleration of transformational advances and project success.
- The degree of overlap with other state and federal programs.
- The degree to which there are technical, market, organizational and/or environmental risks associated with the projects that outweigh the potential benefits.
- The past performance of the proposer on other technical and business endeavors, including NYSERDA and DOE, ARPA-E, NSF, (if the performance history is available).
- The degree of NYSERDA portfolio balance/optimization. The project(s) balance(s) and enhances the NYSERDA portfolio in one or more of the following areas:
 - Technological diversity
 - Organizational diversity
 - Geographic diversity
 - Technical or commercialization risk
 - Stage of technology development

• Complimentary efforts to balance risk

Project Diversity, Leverage and Collaboration

- The consideration of the impact on, and benefits to, a diversity of communities/locations, including low-income and rural communities, partnerships with minority serving and/or owned businesses.
- The degree of ongoing leverage; attracting other funding sources: building on the NYS capabilities: linking technologies and/or companies.
- The degree to which the applicant has enabled the resources (human, financial and physical) to be able to complete the project.
- The degree to which the project enables collaboration with nongovernmental and industry entities for demonstration of technologies and research applications to successfully facilitate technology transfer, leading to robust technology development and subsequent scaling and market adoption.
- The degree to which a proposer could attract investor funding as the project progresses, including seed, Series A, high net worth individuals and beyond.

VII. RECOUPMENT AND METRICS

Recoupment. For any efforts **exceeding \$75,000** that involve product development and commercialization, including business development (see definition below), **NYSERDA will require a royalty based on sales and/or licensing of the new product developed** (Please see Attachment F, Sample Agreement for specific recoupment obligations).

<u>Product Development</u>: the method of bringing a new or improved product or service to market, including technical feasibility, business case feasibility, market analysis, proof of concept, product design, engineering, scale up, and field testing. Field testing is the stage in which a technology, not yet commercially available with a warranty, is operated in real world conditions with results used for product iteration, market validation, or customer engagement. Projects where NYSERDA's share of funding is \$75,000 or less will generally not require recoupment. However, should subsequent funds be awarded for further product development of the same or a substantially similar product, any funds previously received under the \$75,000 threshold will be added to the future recoupment obligation. Please note: NYSERDA may decline to contract with awardees that are delinquent with respect to recoupment payments or sales reporting for any previous NYSERDA agreement.

Annual Metrics Reports. If awarded, the proposer will be required to submit to NYSERDA's Project Manager on an annual basis, a prepared analysis and summary of metrics addressing the anticipated energy, environmental and/or economic benefits that are realized by the project. All estimates shall reference credible sources and estimating procedures, and all assumptions shall be documented. Reporting shall commence the first calendar year after the contract is executed. Reports shall be submitted by January 31st for the previous calendar years' activities (i.e. reporting period). Please see Attachment E: Sample Metrics Reporting Guide for the metrics that you will be expected to provide and the reporting duration. NYSERDA may decline to contract with awardees that are delinquent with respect to metrics reporting for any previous or active NYSERDA agreement.

VIII. GENERAL CONDITIONS

PROPRIETARY INFORMATION

Careful consideration should be given before confidential information is submitted to NYSERDA as part of your proposal. Review should include whether it is critical for evaluating a proposal, and whether general, non-confidential information, may be adequate for review purposes.

The NYS Freedom of Information Law, Public Officers law, Article 6, provides for public access to information NYSERDA possesses. Public Officers Law, Section 87(2)(d) provides for exceptions to disclosure for records or portions thereof that "are trade secrets or are submitted to an agency by a commercial enterprise or derived from information obtained from a commercial enterprise and which if disclosed would cause <u>substantial injury to the competitive position</u> of the subject enterprise." Information submitted to NYSERDA that the proposer wishes to have treated as proprietary, and confidential trade secret information, should be identified and labeled "<u>Confidential</u>" or "<u>Proprietary</u>" on each page at the time of disclosure. This information should include a written request to exempt it from disclosure, including a written statement of the reasons why the information should be exempted. See Public Officers Law, Section 89(5) and the procedures set forth in 21 NYCRR Part 501. <u>http://www.nyserda.ny.gov/About/-/media/Files/About/Contact/NYSERDA-Regulations.ashx</u>. However, NYSERDA cannot guarantee the confidentiality of any information submitted.

OMNIBUS PROCUREMENT ACT OF 1992

It is the policy of New York State to maximize opportunities for the participation of New York State business enterprises, including minority- and women-owned business enterprises, as bidders, subcontractors, and suppliers on its procurement Agreements.

Information on the availability of New York subcontractors and suppliers is available from:

Empire State Development Division for Small Business 30 South Pearl Street Albany, NY 12245

A directory of certified minority- and women-owned business enterprises is available from:

Empire State Development Minority and Women's Business Development Division 30 South Pearl Street Albany, NY 12245

State Finance Law sections 139-j and 139-k - - NYSERDA is required to comply with State Finance Law sections 139-j and 139-k. These provisions contain procurement lobbying requirements which can be found at https://online.ogs.ny.gov/legal/lobbyinglawfaq/default.aspx. Proposers are required to answer questions during proposal submission, which will include making required certification under the State Finance Law and to disclose any Prior Findings of Non-Responsibility (this includes a disclosure statement regarding whether the proposer has been found non-responsible under section 139-j of the State Finance Law within the previous four years).

Tax Law Section 5-a - NYSERDA is required to comply with the provisions of Tax Law Section 5-a, which requires a prospective contractor, prior to entering an agreement with NYSERDA having a value in excess of \$100,000, to certify to the Department of Taxation and Finance (the "Department") whether the contractor, its affiliates, its subcontractors and the affiliates of its subcontractors have registered with the Department to collect New York State and local sales and compensating use taxes. The Department has created a form to allow a prospective contractor to readily make such certification. *See*, ST-220-TD (available at http://www.tax.ny.gov/pdf/current forms/st/st220td fill in.pdf. Prior to contracting with NYSERDA, the prospective contractor must also certify to NYSERDA whether it has filed such certification with the Department. The Department has created a second form that must be completed by a prospective contractor prior to contacting and filed with NYSERDA. *See*, ST-220-CA (available at http://www.tax.ny.gov/pdf/current_forms/st/st220ca_fill_in.pdf. The Department has created a second form that must be completed by a prospective contractor prior to contacting and filed with NYSERDA. *See*, ST-220-CA (available at http://www.tax.ny.gov/pdf/current_forms/st/st220ca_fill_in.pdf. The Department has developed guidance for contractors which is available at http://www.tax.ny.gov/pdf/current_forms/st/st220ca_fill_in.pdf. The Department has developed guidance for contractors which is available at http://www.tax.ny.gov/pdf/publications/sales/pub223.pdf.

Contract Award - NYSERDA anticipates making multiple awards under this solicitation. It may award a contract based on initial applications without discussion, or following limited discussion or negotiations pertaining to the Statement of Work. Each offer should be submitted using the most favorable cost and technical terms. NYSERDA may request additional data or material to support applications. NYSERDA will use the Sample Agreement (Attachment F) to contract successful proposals. NYSERDA, at its sole discretion, will decide whether to contract successful projects using time and material or milestone payment terms. NYSERDA reserves the right to limit any negotiations to exceptions to standard terms and conditions in the Sample Agreement to those specifically identified in the submitted proposal. NYSERDA expects to notify proposers in approximately 4 weeks from the Concept Paper submission date and approximately 10 weeks from the Full Proposal submission date. <u>NYSERDA may decline to contract with awardees who are delinquent with respect to any obligation under any previous or active NYSERDA agreement</u>.

Limitation - This solicitation does not commit NYSERDA to award a contract, pay any costs incurred in preparing a proposal, or to procure or contract for services or supplies. NYSERDA reserves the right to accept or reject any or all submissions received, to negotiate with all qualified sources, or to cancel in part or in its entirety the solicitation when it is in NYSERDA's best interest. NYSERDA reserves the right to reject submissions based on the nature and number of any exceptions taken to the standard terms and conditions of the Sample Agreement. NYSERDA reserves the right to disqualify proposers based upon the results of a background check into publicly available information and the presence of a material possibility of any reputational or legal risk in making of the award.

DISCLOSURE REQUIREMENT

The proposer shall disclose any indictment for any alleged felony, or any conviction for a felony within the past five years, under the laws of the United States or any state or territory of the United States, and shall describe circumstances for each. When a proposer is an association, partnership, corporation, or other organization, this disclosure requirement includes the organization and its officers, partners, and directors or members of any similarly governing body. If an indictment or conviction should come to the attention of NYSERDA after the award of a contract, NYSERDA may exercise its stop-work right pending further investigation, or terminate the agreement; the contractor may be subject to penalties for violation of any law which may apply in the particular circumstances. Proposers must also disclose if they have ever been debarred or suspended by any agency of the U.S. Government or the New York State Department of Labor.

VENDOR ASSURANCE OF NO CONFLICT OF INTEREST OR DETRIMENTAL EFFECT

The proposer shall disclose any existing or contemplated relationship with any other person or entity, including any known relationships with any member, shareholders of 5% or more, parent, subsidiary, or affiliated firm, which would constitute an actual or potential conflict of interest or appearance of impropriety, relating to other clients/customers of the proposer or former officers and employees of NYSERDA, in connection with proposer's rendering services as proposed. If a conflict does or might exist, please describe how your company would eliminate or prevent it. Indicate what procedures will be followed to detect, notify NYSERDA of, and resolve any such conflicts.

The proposer must disclose whether it, or any of its members, or, to the best of its knowledge, shareholders of 5% or more, parents, affiliates, or subsidiaries, have been the subject of any investigation or disciplinary action by the New York State Commission on Public Integrity or its predecessor State entities (collectively, "Commission"), and if so, a brief description must be included indicating how any matter before the Commission was resolved or whether it remains unresolved.

PUBLIC OFFICERS LAW

For any resulting awards, the Contractor and its subcontractors shall not engage any person who is, or has been at any time, in the employ of the State to perform services in violation of the provisions of the New York Public Officers Law, other laws applicable to the service of State employees, and the rules, regulations, opinions, guidelines or policies promulgated or issued by the New York State Joint Commission on Public Ethics, or its predecessors (collectively, the "Ethics Requirements"). Proposers are reminded of the following Public Officers Law provision: contractors, consultants, vendors, and subcontractors may hire former NYSERDA employees. However, as a general rule and in accordance with New York Public Officers Law, former employees of NYSERDA may neither appear nor practice before NYSERDA, nor receive compensation for services rendered on a matter before NYSERDA, for a period of two years following their separation from NYSERDA service. In addition, former NYSERDA employees are subject to a "lifetime bar" from appearing before any state agency or authority or receiving compensation for services regarding any transaction in which they personally participated or which was under their active consideration during their tenure with NYSERDA.

Any awardee will be required to certify that all of its employees, as well as employees of any subcontractor, whose subcontract is valued at \$100,000 or more who are former employees of the State and who are assigned to perform services under the resulting contract, shall be assigned in accordance with all Ethics Requirements. During the term of any agreement, no person who is employed by the contractor or its subcontractors and who is disqualified from providing services under the contract pursuant to any Ethics Requirements may share in any net revenues of the contractor or its subcontractors derived from the contract. NYSERDA may request that contractors provide it with whatever information the State deems appropriate about each such person's engagement, work cooperatively with the State to solicit advice from the New York State Joint Commission on Public Ethics. NYSERDA shall have the right to withdraw or withhold approval of any subcontractor if utilizing such subcontractor for any work performed would be in conflict with any of the Ethics Requirements.

DUE DILIGENCE

NYSERDA, at its discretion, may conduct broad due diligence to validate any or all elements of an application and to assess applicants' prospects of success, including gathering information to assess a proposal relative to any of the topics listed in evaluation criteria, whether or not such topic is explicitly addressed in a proposal. NYSERDA may conduct due diligence on some or all proposals based on NYSERDA's current guidelines at the time of a review. NYSERDA staff may follow up with proposers to request additional information or clarification regarding applicant's proposal, including questions regarding applicant's business prospects and resources, whether or not those questions are specifically related to the elements of the proposal. Additionally, customized due diligence may be conducted by internal or external staff or contractors based on questions on any proposal raised by NYSERDA staff and/or the Scoring Committee. Due diligence may include (but is not limited to): interviews of independent references and background checks of team members; assessment of prior business experience of any team member associated with a proposal; research on intellectual property claims; customer and partner reference checks; market research on the applicants' target market and any other related or possibly competitive technology or market area; research to validate any assumptions on current or future revenues, costs, capital needs, and financing prospects for proposers' business, including similar (or unrelated) technologies, processes, or competitive solutions; or any other research that could reasonably inform the evaluation of a proposal, or the prospects for commercial success of the proposers' business (whether directly related to, or unrelated to the specific elements in a proposal). Due diligence may include discussions with proposers' former and current business partners, employees, investors, customers, and competitors. Due diligence may be conducted by NYSERDA personnel or contractors including members of the scoring committee, before, during, or after a scoring process, and prior to finalization of a contract award, any information gleaned in diligence may be used to score or re-score a proposal.

IX. Attachments

- Attachment A Proposal Narrative Format
- Attachment B Statement of Work Format
- Attachment C TRL-CRL Calculator Workbook
- Attachment C1 3 Year Financial Projection Worksheet
- Attachment D Contract Pricing Proposal Form Instructions
- Attachment D1 Contract Pricing Proposal Form (Excel)
- **Attachment E Sample Product Development Metrics**
- **Attachment E1 Sample Demonstration Metrics**
- Attachment E2 Sample Information Dissemination Metrics
- Attachment F Sample Agreement with Exhibits
- Attachment G Concept Paper Template

New York Truck Voucher Incentive Program

Implementation Manual

August 2019



Truck Voucher Incentive Program

Table of Contents

De	finitio	itions for NYTVIP2						
1	Prog	gram Overview	5					
2	l.1	Advancing Clean Vehicles through Voucher Incentives	5					
2	Prog	gram Eligibility	11					
ź	2.1	Vehicle Eligibility and Requirements	.11					
2	2.2	Contractor Eligibility and Requirements	.15					
2	2.3	Fleet Eligibility and Requirements	.16					
3	Vou	cher Application and Redemption	20					
3	3.1	Voucher Application Process	. 20					
3	3.2	Vehicle Scrappage Requirements	.21					
3	3.3	Voucher Redemption	.23					
3	3.4	Voucher Payment Process	.25					

Definitions for NYTVIP

All-Electric Vehicle (aka Battery Electric Vehicle or BEV) is an on-road, Class 3-8 gross vehicle weight rating (GVWR), zero-emission vehicle that operates solely by use of a battery pack, or that is powered primarily through the use of an electric battery pack that also stores energy produced by the electric motor or by regenerative braking to assist in vehicle operation. Primary recharge energy must be drawn from a source off the vehicle, such as a connection to grid electric service. Under the Program rules a BEV that has received Program incentives must travel a minimum of 5,000 miles per year or 1,000 hours of operation.

Alternative Fuel Vehicle (AFV) refers to plug-in hybrid electric vehicle (PHEV), non-plug-in hybrid electric vehicle (HEV) technology and vehicles powered by compressed natural gas (CNG) or propane (also known as liquefied petroleum gas or LPG).

Commercial Fleet is one or more vehicles used solely as part of a commercial enterprise (i.e., not used for individual or personal activities). Vehicles cannot be registered to an individual.

Compressed Natural Gas (CNG) Vehicle is an Alternative Fuel Vehicle that operates solely using compressed natural gas as its fuel.

Contractor is the vehicle dealership, Original Equipment Manufacturer (OEM), or Upfit/Retrofit Manufacturer (URM) that sells new medium- or heavy-duty vehicles directly to a Vehicle Purchaser or end-user. In the case of repowers the Contractor is the entity that sells the repower equipment to the Fleet and performs the repower on the vehicle.

Contractor Portal is an online system, utilizing Salesforce software, that entities that sell Eligible Vehicles use to apply to become a Contractor in the Program.

Domicile is the location where the vehicle will be registered, stored, maintained, and generally be located such as a fleet depot, when not performing duties.

Eligible Vehicle is an All-Electric Vehicle or Alternative Fuel Vehicle that meets all Program rules and requirements.

Factory Build Sheet contains assembly instructions according to detailed vehicle specifications for use at the manufacturing facility.

Fleet is the vehicle fleet of a commercial, nonprofit, or public sector entity (excluding federal governmental entities) that domiciles, registers, and operates class 3-8 vehicles in New York.

Gross Vehicle Weight Rating (GVWR) is the maximum operating weight/mass of a vehicle as specified by the manufacturer and described on the original manufacturer Line Setting Ticket provided to the vehicle dealer.

See below for table of weight classes.

Vehicle Class	Vehicle Weight Range
Class 3	10,001–14,000 pounds (4,536– 6,350 kg)
Class 4	14,001–16,000 pounds (6,351– 7,257 kg)
Class 5	16,001–19,500 pounds (7,258– 8,845 kg)
Class 6	19,501–26,000 pounds (8,846– 11,793 kg)
Class 7	26,001–33,000 pounds (11,794– 14,969 kg)
Class 8	33,001 pounds (14,969 kg)

Hybrid Electric Vehicle (HEV) is an Alternative Fuel Vehicle powered by an internal combustion engine and by an electric motor that uses energy stored in a battery. The battery is charged through regenerative braking and by the internal combustion engine and does not plug in to charge.

Incremental Cost is the difference in cost between the new Eligible Vehicle and the comparable new diesel-fueled vehicle that would be purchased to perform the same function. For the purposes of this Program, the entire cost to repower a vehicle is considered its Incremental Cost.

Line Setting Ticket is the factory build or construction sheet created when the vehicle order is sent to the vehicle manufacturer.

Original Equipment Manufacturer (OEM) is the company that builds or assembles, at a minimum, the completed drive train and chassis for an Eligible Vehicle.

Non-profit is an agency or corporation that is exempt from federal income taxes under Section 501 of the Internal Revenue Code (26 U.S.C. § 501).

NYSERDA Portal is a system utilizing Salesforce software that the Contractor, once approved by the Program, can log into to apply for vouchers, check status of their voucher progress, and upload Program required documents for voucher approval and voucher redemption approval.

Plug-In Hybrid Electric Vehicle (PHEV) is an Alternative Fuel Vehicle powered by an internal combustion engine and an electric motor that uses energy stored in a battery. The vehicle can be plugged in to an electric power source to charge the battery.

Program is the New York Truck Voucher Incentive Program.

Program Website is nyserda.ny.gov/All-Programs/Programs/NYTVIP

Propane (LPG) Vehicle is an Alternative Fuel Vehicle that operates solely using propane gas condensed in a liquid state as its fuel.

Replacement Vehicle is a new Eligible Vehicle that runs on alternative fuels and replaces an existing diesel vehicle of similar weight class and vocation that has been Scrapped to meet Program requirements.

Repowered Vehicle is an existing vehicle that had its existing diesel engine, which was dated 1992 through 2009, Scrapped and replaced with a new engine, motor, drivetrain, battery, and/or other Alternative Fuel Vehicle drive and fuel storage component.

Scrappage (Scrapped or Scrap) is verifiably rendering inoperable a vehicle with a diesel engine dated 1992 through 2009 by verifiably cutting a three-inch hole in the engine block and disabling the chassis by cutting the vehicle's frame rails completely in half. For Repowered Vehicles, the existing diesel engine block must have a three-inch hole cut into it and the engine must be at least six years old; the chassis need not be disabled.

Semi-Annual Usage Report is a required semi-annual report submitted by the Vehicle Operator that details the mileage, fuel use, maintenance, breakdown costs, and other information to NYSERDA.

Upfit/Retrofit Manufacturer (URM) is a company that installs equipment on a truck or bus rolling chassis purchased from an OEM. The Upfit/Retrofit Manufacturer must bear full responsibility under federal law for any vehicle defects and is responsible for certifying the vehicle meets all applicable federal safety standards.

Vehicle Operator is the entity that will operate an Eligible Vehicle under a lease agreement with a Vehicle Purchaser.

Vehicle Purchaser is the entity that will directly purchase, own and operate the vehicle or the leasing company that will lease an Eligible Vehicle to a Vehicle Operator. The Vehicle Purchaser may or may not be the same entity as the Vehicle Operator.

Voucher Application is the process of the Contractor supplying information through the NYSERDA Portal to have a voucher incentive set aside for an Eligible Vehicle or Repowered Vehicle.

Voucher Approval Date is the date on which NYSERDA has approved a project and set aside funding for a vehicle project. Contractors must submit all documentation for reimbursement within 12 months of the Voucher Approval Date, or within 18 months if an extension has been granted.

Voucher Redemption is the process of the Contractor supplying information through the NYSERDA Portal to complete the voucher process and satisfy all requirements for a payment to be made to the Contractor.

Voucher Help Center (VHC) is the entity that answers Program questions, takes in, reviews, and processes Voucher Applications and is the primary Program point of contact for OEMs, URMs, Contractors, and Fleets.

1 Program Overview

The New York Truck Voucher Incentive Program (NYTVIP or Program) is a rebate program aimed to accelerate the deployment of All-Electric and Alternative Fuel trucks and buses (also referred to as battery electric vehicles or BEVs and AFVs, respectively) in medium and heavy-duty vehicle classes throughout New York State. By increasing the use of cleaner vehicle technologies, the Program reduces harmful vehicle emissions, including greenhouse gases, and lessens New York's transportation sector's dependence on petroleum. In partnership with New York State Department of Transportation (DOT) and New York State Department of Environmental Conservation (DEC), the New York State Energy Research and Development Authority (NYSERDA) developed NYTVIP to reduce the cost of medium- and heavy-duty BEVs and AFVs to help fleets, leased vehicle operators, and vehicle owner-operators switch to vehicles that are better for the environment and often are more cost-effective than equivalent dieselfueled vehicles.

About the Implementation Manual

This Implementation Manual outlines the process, requirements, rules, and funding parameters of the Program to provide Program participants with information on how to participate in NYTVIP. NYSERDA may make changes to the Implementation Manual at any time. Changes will be applicable to all Voucher Applications not yet approved by NYSERDA. Program participants are bound by the version of Implementation Manual in effect at the time they obtain approval of a submitted Voucher Application. In other words, Voucher Applications, Voucher Redemption protocols, and all other Program elements associated with those vouchers must follow the directions outlined in the most recent version of the Implementation Manual posted on the Program Website at the time of Voucher Application. The most recent Implementation Manual, as well as all required forms and agreements, can be found on the Program Website (<u>nyserda.ny.gov/All-Programs/Programs/NYTVIP</u>) as well as in the NYSERDA Portal through which Voucher Applications are submitted. Notice of all changes will be provided to Program participants via their designated e-mail addresses, as identified in the Voucher Application.

1.1 Advancing Clean Vehicles through Voucher Incentives

Voucher incentives facilitate Fleet adoption of new BEV or AFV trucks and buses by reducing the upfront prices of these vehicles, which are more expensive than comparable diesel vehicles. Vouchers make it more affordable for Fleets to gain experience with cleaner technologies that may cost less to operate than diesel vehicles. In addition, voucher projects result in verifiable emissions reductions and air quality improvements by decommissioning old diesel vehicles through a Scrappage process. A Fleet agrees to purchase an Eligible Vehicle from a vendor/dealer (Contractor) qualified to sell that vehicle through the Program, and the Contractor deducts the value of the voucher from the total sale price. Once the Vehicle Purchaser has Scrapped a corresponding engine model year 1992 through 2009 diesel vehicle, and after the Contractor has supplied all required documentation to verify all steps of the process, NYSERDA reimburses the Contractor for the full voucher amount.

Note: Transit agencies that purchase BEV transit buses may choose not to Scrap a bus, in which case they may only be eligible to receive a lower incentive amount. The voucher amount is provided to Fleets by the Contractor at the point of purchase in the form of a discount off the total purchase price, making BEV and AFV acquisitions easier and less expensive and helping to distribute the benefits of BEV and AFV deployment within New York State. NYSERDA will not make a voucher payment unless all required documentation for Voucher Redemption is properly submitted to and approved by NYSERDA. If the Fleet does not provide proper documentation to the Contractor for Voucher Redemption, NYSERDA is NOT responsible for the deficit in funding for the vehicle purchase. Partial voucher payments will not be made on individual vehicles. For multi-vehicle voucher requests, separate payments may be made for individual vehicles.

For each model of Eligible Vehicle, NYSERDA will determine an estimated voucher amount—based on the price difference between the vehicle and a comparable diesel truck or bus—and post that information on the Program Website.¹ This allows prospective Vehicle Purchasers to know the estimated vehicle incentive amount prior to negotiating a vehicle price with the Contractor. NYSERDA, at its sole discretion, will determine the final value of the voucher at the time of approval. The final value of the voucher may differ from the value published by NYSERDA at the start of the application process, such as in cases where an Eligible Vehicle model's final Incremental Cost changed significantly from the approved Incremental Cost since it was approved for eligibility or based on the availability of funding. The project-specific information, such as Domicile address, may also impact the final voucher amount and will be determined when the application is approved.

The voucher amount is calculated as the lesser of a percentage of the Incremental Cost up to a maximum cap that varies by vehicle technology, weight class, and location (see **Error! Reference source not found.1** and 2). In all cases, a voucher can be issued for the eligible incremental cost percent cap of the net Incremental Cost of a new BEV or AFV truck or bus after all other incentives are accounted for, as well as fund source eligibility.

Class 4-8 BEVs and AFVs that operate as local freight trucks anywhere in the State may qualify for voucher funding at the funding amount listed in Table 1.

Table 1. Voucher amounts and caps by venicle technology and weight class (class 4-8 trucks)											
		Voucher Amounts and Caps									
Vehicle	Increm ental		Vehicle Weight Class (GVWR)								
Technology	Cost %		4		5		6		7	8	
BEV	95%	\$	100,000	\$	110,000	\$	125,000	\$	150,000	\$	185,000
PHEV	90%	\$	55,000	\$	60,000	\$	70,000	\$	100,000	\$	120,000
HEV	90%	\$	25,000	\$	35,000	\$	45,000	\$	50,000	\$	55,000
CNG	90%	\$	30,000	\$	40,000	\$	50,000	\$	55,000	\$	60,000
Propane	90%	\$	30,000	\$	40,000	\$	50,000	\$	55,000	\$	60,000

Table 1. Voucher amounts and caps by vehicle technology and weight class (Class 4-8 trucks)

Class 3 BEVs that operate as local freight trucks and Class 3-8 buses that are domiciled and operate in the 30 CMAQ-eligible New York counties (Table 3) may qualify for voucher funding at the funding level listed in Table 2.

Table 2. Voucher amounts and caps by vehicle technology and weight class for Class 3 trucks and Class 3-8 school, shuttle, and transit buses

	Voucher Amounts and Caps												
Vehicle	Increm ental	remental Vehicle Weight Class						ass (GV	s (GVWR)				
Technology	Cost %		3		4		5		6		7		8
BEV	80%	\$	60,000	\$	90,000	\$	100,000	\$	110,000	\$	120,000	\$	150,000

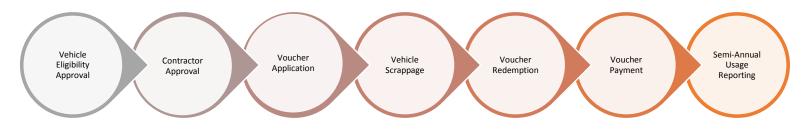
Albany	Kings (Brooklyn)	Ontario	Saratoga
Bronx	Livingston	Orange	Schenectady
Chautauqua	Monroe	Orleans	Schoharie
Dutchess	Montgomery	Putnam	Suffolk
Erie	Nassau	Queens	Wayne
Genesee	New York (Manhattan)	Rensselaer	Westchester
Greene	Niagara	Richmond (Staten Island)	
Jefferson	Onondaga	Rockland	

Table 3. New York counties eligible for CMAQ funding

The total funding for NYTVIP as of August 2019 is \$18.4 million. The Program may add additional funds over time. No Vehicle Purchaser may receive more than 25% of the total available funds under each of the funding sources in the NYTVIP. If additional funding is added to the Program, a Vehicle Purchaser who has already met this threshold may request vouchers for up to 25% of the new total funding source amount.²

Funding Source	NYS Agency	Vehicle Types	Amount
CMAQ	NYSDOT	Class 3-8 BEV	\$10M
Volkswagen	NYSDEC	Heavy Trucks (Class 8)	\$3.6M
Settlement	NIGDEC	Medium Trucks (Class 4-7)	\$4.8M
		TOTAL	\$18.4M

Figure 1. NYTVIP process steps



NYTVIP Process Steps

- Vehicle Eligibility Approval An Original Equipment Manufacturer (OEM), the OEM's authorized dealer, or Upfit/Retrofit Manufacturer (URM) submits a completed vehicle eligibility application to the Voucher Help Center (VHC). This application provides information on the vehicle to be reviewed for eligibility and on a comparable diesel vehicle to determine the applicable voucher amount. Once approved, vehicles are listed on the Program Website as Eligible Vehicles. (See Section 2.1 for details on vehicle eligibility requirements and process.)
- 2. Contractor Approval A Contractor authorized to sell an Eligible Vehicle submits an application to NYSERDA to become an approved Contractor (requirements detailed in Section 2.2). If the Contractor is a vehicle dealer and is not the OEM or URM, the Contractor must submit proof of OEM or URM authorization to sell the vehicle as part of the approval process. Approved Contractors may then market Program incentives to prospective Vehicle Purchasers and submit Voucher Applications to NYSERDA.
- 3. Voucher Application When a Vehicle Purchaser is ready to purchase an Eligible Vehicle from an approved Contractor, the Contractor submits a Voucher Application to reserve a voucher for that specific purchase (see Section 3.1 for details on the Voucher Application process). The full voucher incentive amount must be deducted from the total sale price of the vehicle at the point of sale and passed on to the Vehicle Purchaser. The voucher amount must be disclosed in the vehicle purchase order or lease with the Vehicle Operator. The Contractor cannot charge fees in association with processing the Voucher Application or the documentation required for payment. The Voucher Application must also identify the vehicle designated to be Scrapped by the Vehicle Purchaser. The VHC and NYSERDA will review the Voucher Application and notify the Contractor if there are any issues or missing information, or if the application is approved. If the application.
- 4. Vehicle Scrappage Once the Vehicle Purchaser takes delivery of the new Eligible Vehicle, the Vehicle Purchaser has 21 days to complete the Scrappage process (according to the requirements outlined in Section 3.2) for the vehicle identified to be Scrapped in the Voucher Application. Scrappage can occur any time between the date of voucher approval up to the 21 day deadline described previously. The Vehicle Purchaser must provide the Contractor with all required Scrappage documentation within this timeframe, and the Contractor must upload all Scrappage documentation to the NYSERDA Portal before the voucher can be redeemed.

- 5. Voucher Redemption Once the Vehicle Purchaser takes delivery of the new Eligible Vehicle, registers the new vehicle, pays for it in full (total vehicle cost minus the voucher amount), and satisfies all Scrappage requirements, the Contractor completes the Voucher Redemption process in the NYSERDA Portal. This consists of uploading all required documentation for final approval (see Section 3.3). This information must be uploaded for each individual vehicle for which the Contractor seeks to receive a voucher payment. Vouchers must be redeemed within 12 months of the Voucher Approval Date. Contractor may apply for a six-month extension by emailing a request to the VHC documenting the manufacturer's estimated dates for vehicle production and delivery. Such extensions are made at NYSERDA's sole discretion, and in no case will the redemption process be extended beyond 18 months. Vouchers that exceed the approved time limit will be cancelled; a Contractor may reapply for a voucher prior to the vehicle being delivered.
- 6. Voucher Payment The VHC and NYSERDA review the Voucher Redemption request, and if the request is approved, NYSERDA will issue a voucher payment to the Contractor. It is strongly recommended that Contractors enroll in Electronic Funds Transfer (EFT) payment processing as NYSERDA process EFT payments more frequently than paper check payments. To sign up for payment by EFT, complete an authorization form at

https://nyserda.seamlessdocs.com/f/EFTForm. Vouchers that have not been redeemed within 12 months of the Voucher Approval Date (or within 18 months of the Voucher Approval Date if an extension has been granted) will be canceled.

7. Semi-Annual Usage Reporting – The Vehicle Purchaser is required to submit Semi-Annual Usage Reports for a minimum of three years after voucher payment. The reports are always due on December 1 and June 1 of each year. NYSERDA reserves the right to recapture the incentive funds from the Vehicle Purchaser and/or bar the Vehicle Purchaser from participating in the NYTVIP if they do not provide timely and accurate Program Semi-Annual Usage Reports as required. See Section 4.0 "Reporting Requirements" for additional details.

Voucher Publicity

All Program participants shall collaborate with NYSERDA's Director of Communications to prepare any press releases and plan for any news conferences concerning work related to the Program. In addition, all participants shall notify NYSERDA's Director of Communications regarding any media interviews in which work related to this Program, including vehicles for which the purchase or lease was facilitated using vouchers, is referred to or discussed.

Program participants cannot use NYSERDA's, DOT's, nor DEC's corporate name, logo, identity, any affiliation, or any related logo, without prior written consent.

Program Contacts

All Program questions can be directed to the Voucher Help Center (VHC):

NYTVIP Voucher Help Center 866-595-7917 <u>NYTVIP@energycenter.org</u>

If you are unable to contact personnel at the VHC, or if you have an issue that the VHC cannot resolve, please contact the NYSERDA project manager responsible for the Program:

Patrick Bolton Senior Project Manager 17 Columbia Circle, Albany, New York 12203 (518) 862-1090 ext. 3322 Patrick.Bolton@nyserda.ny.gov

2 Program Eligibility

2.1 Vehicle Eligibility and Requirements

To qualify for voucher incentives through NYTVIP, Eligible Vehicles must meet the following requirements:

- A vehicle must be a class 3-8 All-Electric Vehicle (BEV), a class 4-8 Plug-in Hybrid Electric (PHEV) or conventional (non-plug-in) hybrid vehicle (HEV), or a class 4-8 vehicle running solely on compressed natural gas (CNG) or propane (Liquefied Petroleum Gas or LPG). Personal passenger vehicles are NOT eligible for Program funding.
- A vehicle that runs entirely or in part by combusting liquid or gaseous fuels (i.e., PHEV, HEV, CNG, or LPG) must meet the 0.02 g NOx/bhp-hr certification standard when operating in combustion mode to be eligible for Program funding.
- A vehicle must be purchased from a Contractor approved to participate in the Program (see Section 2.2). The OEM or URM must provide documentation to NYSERDA verifying the Incremental Cost of the vehicle(s) relative to a comparable diesel vehicle. In cases where the Incremental Cost is not immediately clear, such as with low-volume or specialty vehicles, NYSERDA may request the Contractor provide documentation of Incremental Cost as part of the Voucher Application in addition to the vehicle eligibility application.
- All Eligible Vehicles, other than Repowered Vehicles, must be new, including the vehicle chassis and drivetrain. Vehicles and/or vehicle chassis cannot be previously registered in any state, fully paid for by the Vehicle Purchaser (other than a vehicle down payment) or have been delivered to the Vehicle Purchaser prior to the Contractor applying for a voucher. Used vehicles (including vehicles used by dealers, OEMs, or other entities or for demonstration purposes) are NOT eligible. Repowered Vehicles are excepted from these requirements.
- Repowered Vehicles may be eligible for NYTVIP funding. For such projects, OEMs or URMs will provide documentation to NYSERDA that shows the cost of repowering a truck or bus relative to purchasing a new diesel-powered equivalent vehicle. For Repowered Vehicles, the Vehicle Purchaser must certify, in a manner approved by NYSERDA, that the vehicle has an expected operational lifespan after repowering of at least 10 years. Chassis may be reused for repowers (i.e., not destroyed in Scrappage) as typically only the engine is replaced. For the purposes of repowers, the entire cost of the repower is considered the Incremental Cost.
- Modifications that can significantly impact the vehicle's tailpipe emissions characteristics (e.g., through emissions retrofits, hardware, or software) are NOT permitted for five years from the date of vehicle delivery; this provision does not extend to fuel-fired heaters, which are permitted for use in BEVs.

- The vehicles must meet all federal and New York State requirements for operation. The OEM or URM must also certify that the vehicle model complies with all applicable federal safety standards for new motor vehicles and new motor vehicle equipment issued by the National Highway Traffic Safety Administration (NHTSA). The Federal Motor Vehicle Safety Standards (FMVSS) are found in Title 49 of the Code of Federal Regulations (CFR) Part 571.
- The final assembly of Eligible Vehicles must take place in the United States and must consist of significant value and effort. For a vehicle to be listed as eligible, its OEM or URM must submit documentation to NYSERDA regarding the location, actions performed, and total value of final assembly. Vehicles with components assembled entirely within the United States may note the location of assembly, excluding the action performed and the value.

The vehicle engine (if applicable), drive train, and battery pack (if applicable) must be covered by a manufacturer's warranty. Prior to approving a vehicle model as an Eligible Vehicle to be listed on the Program Website, NYSERDA may request that the OEM or URM provide copies of representative warranties for vehicle, engine, and/or powertrain components (e.g., battery pack) and documentation (such as warranty contracts) of the OEM's or URM's plans to provide warranty and routine vehicle service. The warranty must provide protection for a minimum of 36 months or 50,000 miles (whichever comes first). The first 12 months of the coverage period must be a full warranty covering, at a minimum, the engine or motor (whichever is applicable), powertrain components, parts, and labor. If the warranty for the remaining 24 months is prorated, the percentage of the original value of the vehicle component to be covered or refunded must be at least as high as the percentage of the prorated coverage period remaining. For the purpose of this computation, the age of the vehicle component in question must be expressed in intervals no larger than three months. For example, manufacturer warranty coverage of \$8,000 and seven years for the battery prorated beginning in year five must provide at least \$6,000 coverage after 66 months, \$4,000 coverage after 72 months, and \$2,000 coverage after 78 months. For the purpose of this computation, the age of the battery pack must be expressed in intervals no larger than three months.

If an OEM, URM, or their authorized dealer does not own a New York State repair facility or does not have a contract with a New York State entity to provide repair and warranty service (copy of contract must be provided and approved by NYSERDA), the OEM, URM, or authorized dealer must submit a written plan (including contracts) for how it intends to provide warranty service, replacement parts, and technical support in New York State. The maintenance/repair plan must be submitted to the VHC for approval. The plan must receive written approval from NYSERDA for vehicles to be eligible to receive incentives under the Program.

OEMs, URMs, or their authorized dealers, as part of submitting documentation to the VHC for vehicle eligibility, must submit the costs of the All-Electric or Alternative Fuel Vehicles they want to be included in the Program, and for each vehicle, the cost of a comparable conventional diesel vehicle with equivalent payload, vocation, and features. The difference in price between those two vehicles is the Incremental Cost. The applicable voucher amount may cover only a portion of the Incremental Cost up to the maximum voucher amount by weight class, vocation, and fuel type.

2.1.1 Vehicle Approval Process

- 1. Vehicle Eligibility Applicant Downloads Vehicle Eligibility Form The OEM, URM, or its authorized dealer downloads the vehicle eligibility application from the Program Website.
- 2. Vehicle Eligibility Applicant Enters Vehicle Information on Vehicle Eligibility Form Applicant enters general information about the vehicle for which they are requesting eligibility, including the following information, in the vehicle eligibility form:
 - Model year
 - Make and model
 - Fuel type (e.g., BEV, PHEV, HEV, CNG, LPG)
 - Gross Vehicle Weight Rating (GVWR)
 - Energy/environmental attributes (e.g., kWh/mile for BEVs or PHEVs operating in batteryonly mode, kg CO₂/mile for CNG or LPG vehicles or PHEVs operating in fuel mode)
 - Manufacturer suggested retail price (MSRP) (or Buyer's Sheet) indicating vehicle pre-tax cost and Incremental Cost of alternative fuel technology
 - Applicant must also indicate the pre-tax retail price of a comparable new diesel vehicle (i.e., a conventional diesel vehicle with equivalent payload)
 - Location of final vehicle assembly
 - Whether the vehicle uses an auxiliary fuel-fired heater (only allowed to be considered as part of the Incremental Cost if installed on BEVs)
- 3. Vehicle Eligibility Applicant Completes Certifications and Submits Application to VHC Applicant sends the completed vehicle eligibility form, including signed checklist and certifications page, along with required documentation to the VHC at NYTVIP@energycenter.org. Documentation shall include, at a minimum, the following items:
 - Completed vehicle eligibility application form
 - Attestation that the vehicle meets federal and State requirements
 - Documents justifying price of Eligible Vehicle and a comparable diesel vehicle
 - Name and contact information for a New York State repair facility under contract for servicing and repairing New York State vehicles or a written maintenance and repair plan if there are no New York State repair facilities
 - Proof of a guaranteed warranty for motor or engine, powertrain, parts, and labor for the minimum amount of time specified
- 4. NYSERDA Reviews Application NYSERDA and the VHC review the vehicle eligibility application and additional documentation for accuracy and completeness. If additional information is needed, NYSERDA or the VHC will notify the applicant via email. If NYSERDA or the VHC find that

the application is complete, and the vehicle(s) are eligible, the applicant will be notified of approval.

- NYSERDA Posts Eligible Vehicle(s) on Program Website NYSERDA will list the newly Eligible Vehicle(s) on the Program Website so Fleets know they can purchase the vehicle(s) through the Program.
- 6. Contractor Approval Needed to Sell Eligible Vehicles The entity that sells the Eligible Vehicle must apply to be an approved Contractor and specify the brand of Eligible Vehicle(s) they sell to be eligible to receive voucher funds.

2.1.2 Repowered Vehicles (Special Conditions for Repowered Vehicles)

A Repowered Vehicle is defined as an existing vehicle that had its diesel engine, dated six years old or older than the current model year, Scrapped and replaced with a new engine, motor, powertrain, and/or other Alternative Fuel Vehicle component. These vehicles may be eligible for NYTVIP funding, even though the process of producing and registering Repowered Vehicles is distinct in several ways from the process of producing and registering Replacement Vehicles described in Section 2.1.1. With the exception of special terms included in this section, Repowered Vehicles must meet all applicable NYTVIP terms and conditions set forth in this Implementation Manual.

Vehicle Eligibility

To be an eligible Repowered Vehicle, the at least six-year-old diesel engine must be replaced with an allelectric powertrain (i.e., must be converted to a BEV) and must be a class 3-8 vehicle domiciled and registered in a CMAQ eligible county, Table 3. All Incremental Cost percentages and caps listed in Table 4 apply to Repowered Vehicles. URMs or repower manufacturers must provide documentation to NYSERDA showing the total cost of repowering a truck or bus, which will serve as the cost basis for determining the applicable voucher amount. Repowered Vehicles must be certified by the vehicle owner and the entity performing the repower with an expected operational lifespan of at least 10 years.

Vehicle Scrappage Requirements

Because a Repowered Vehicle uses the frame of an existing vehicle, the Scrappage requirement to destroy the chassis by cutting or shearing both the chassis rails between the two axles does NOT apply to repowers. All other Scrappage and documentation requirements defined in Section 3.2 DO apply to Repowered Vehicles (e.g., three-inch hole in the old engine block, 21-day timeframe from vehicle delivery to complete Scrappage).

Repower OEM/Contractor

For Repowered Vehicles, the entity that makes the repower kit is considered a new vehicle OEM in the Program. The Contractor for a repower can be either the manufacturer, if they also perform the repower, or a dealer/installer that is approved by the manufacturer.

2.2 Contractor Eligibility and Requirements

In NYTVIP, the Contractor is the entity that sells an approved Eligible Vehicle to the Vehicle Purchaser. Entities interested in becoming Contractors that are approved to sell vehicles through NYTVIP must:

- Be any of the following types of entities:
 - A truck or bus dealership that has a written agreement with a medium- and/or heavy-duty vehicle OEM, and sells or leases complete Eligible Vehicles to Fleets or vehicle owner-operators
 - An OEM that builds and sells or leases complete Eligible Vehicles directly to Fleets or vehicle owner-operators
 - A truck or bus URM that has a written agreement with a medium or heavy-duty OEM, and upfits, retrofits, or performs final equipment installations on those new Replacement or Repowered Vehicles and sells or leases the completed Eligible Vehicle to a leasing company, Fleet or vehicle owner-operator
 - A retrofit kit company that produces and installs the kits on existing vehicles, such as a PHEV kit on an existing diesel-powered vehicle
- Have a valid business license for the past two years
- Be the entity that sells or leases the fully assembled and completed new Eligible Vehicle or Repowered Vehicle.
 - For example, an entity is not eligible to become a Contractor if it only sells the chassis to a URM that in turn completes the final vehicle manufacture and then sells the completed vehicle to the Vehicle Purchaser; in such a case, the entity that sells the completed vehicle to the Vehicle Purchaser would be eligible to apply to become an approved Contractor

Contractors are required to pass on the full Program incentive to a Vehicle Purchaser by reducing the purchase cost of Eligible Vehicles by the full incentive amount. Contractors may not charge fees to the Vehicle Purchaser in association with processing vouchers. Contractors must make all Program-related records available for review by NYSERDA during the first five years after the sale of a vehicle that receives support through the Program.

2.2.1 Contractor Approval Process

- Contractor Applicant Accesses Contractor Portal through Program Website To submit a Contractor application, the applicant accesses the online Contractor Portal from the Program Website.
- 2. Contractor Applicant Provides Company Information Once in the Contractor Portal, the applicant enters general company information and company contact details.
- 3. Contractor Applicant Indicates Which Vehicle(s) They Sell Applicant selects at least one make of Eligible Vehicle it plans to sell as part of the Program; if the applicant is not an OEM or URM,

the applicant uploads a letter from the OEM or URM authorizing the applicant to market and sell that brand's vehicles ("Vehicle Manufacturer Authorization").

- Contractor Applicant Completes Certifications and Submits Application Applicant reviews and completes the Contractor application, including OEM certification, Contractor Participation Agreement, Vehicle Manufacturer Authorization (if applicable), and certification statements, and submits completed Contractor application to NYSERDA for review.
- 5. NYSERDA Reviews Contractor Application NYSERDA and the VHC review Contractor application for completeness. If the Contractor application is incomplete or the applicant is not certified to sell the Eligible Vehicle(s), NYSERDA will notify the applicant. If the Contractor application is complete, NYSERDA will notify the applicant that they are now an approved Contractor. This approval will create an account for the Contractor in the NYSERDA Portal in Salesforce.
- 6. NYSERDA Lists Contractor on Program Website NYSERDA lists the Contractor on the list of approved Contractors on the Program Website.
 - NYSERDA will email the Contractor with a form to complete to receive payment via electronic funds transfer (EFT).
 - Once a Contractor has been approved in the Program, it is then approved to market the Program incentives to Fleets (see Section 2.3).

2.3 Fleet Eligibility and Requirements

Fleets eligible to participate in the Program (i.e., Vehicle Purchasers) may be commercial fleets, nonprofit agencies, or public fleet entities (excluding the federal government) that operate diesel vehicles that are registered and domiciled in New York State. Fleets must Scrap a currently operational dieselpowered vehicle with a model year 1992 through 2009 engine and of similar size and vocation to the Eligible Vehicle being purchased. To be eligible for Scrappage, a diesel vehicle meeting these criteria must also have been owned by the Vehicle Purchaser for at least the past two years immediately prior to Scrappage, must be fully functional and operational at the time of Scrappage, and must have been driven at least 5,000 miles in each of those two previous years.

Fleets are required to own and operate vehicles purchased with support from NYTVIP for a minimum of five years after Voucher Redemption for the vehicles. The vehicles must be continuously registered and domiciled in New York State and should continue to be domiciled in the same county as they are originally registered for the entire five-year period. Vehicles receiving Program incentives must travel a minimum of 5,000 miles or 1,000 hours per year for the entire five-year period. Any vehicles sold or retired before the required minimum five years, as stipulated in this Implementation Manual and agreed to in the Vehicle Purchaser/Vehicle Operator terms and conditions, are subject to prorated reimbursement penalty of 1.667% per month. For example, a new vehicle sold or retired after 30 months would have 30 months remaining. The early sale penalty would be 50% (i.e., 30/60) of the original incentive amount and must be reimbursed to NYSERDA within 60 days of the resale or retirement of the vehicle.

The class of the project vehicle as well as where it is to be domiciled (i.e. based and operated) play strong roles in determining the general eligibility and scrappage program requirements.

- Class 3 through 8 trucks that are funded through this program must conform to the Scrappage Requirements of section 3.2.
- All transit buses that are owned by a New York State transit agency to be domiciled in one of the 30 counties listed in Table 3 are exempt from the Scrappage Requirements of section 3.2.

For all program eligible trucks, the current registration of each vehicle to be scrapped must be provided. The county listed on the registration of this vehicle must in New York State. Purchasers of buses must provide a written attestation of the county the bus will be domiciled in.

The Vehicle Purchaser must operate the vehicle, or stipulate through a lease agreement that the Vehicle Operator operate the vehicle, in New York State for at least 80% of the vehicle's operating time and for a minimum of five years from the date of Voucher Redemption unless the vehicle is an emergency response vehicle, which may be deployed out of state, or the vehicle address identified in the Voucher Application is in a county that borders another state or Canada. In these two cases only, the vehicle may operate outside of New York for up to 25% of its mileage only if a written request is included with the Voucher Application and approved by NYSERDA or the VHC.

The Vehicle Purchaser must ensure that if the vehicle is part of a lease or rental agreement, the term of the agreement shall be no less than five years and the Vehicle Operator must agree to operate the vehicle in New York State for at least 80% of the time during the term of the lease agreement.

The Vehicle Purchaser or Vehicle Operator must register the vehicle receiving Program incentives with the New York State Department of Motor Vehicles and the vehicle registration must list **both a mailing address and a Domicile address in the State**.

Vehicle Purchasers and Vehicle Operators must make all Program-related records available for review by NYSERDA during the first five years after the purchase or lease of a vehicle that receives support through the Program.

2.3.1 Special Terms for Leased Vehicles

Vehicles purchased by a leasing or rental company and leased to a Fleet are Eligible Vehicles under the Program as long as the term of the vehicle lease is at least five years from the Voucher Approval Date. In these circumstances, the leasing or rental company is considered the Vehicle Purchaser. Any vehicle leasing or rental company that purchases a voucher-funded vehicle must identify a Fleet that will be the Vehicle Operator in the Voucher Application and supply at least a conditional lease (signed by both the leasing company and the Vehicle Operator) prior to voucher approval. The only condition on the lease can be that of receiving a voucher approval for the incentive application. The lease must be fully executed within one month of voucher approval to be eligible for Program incentives. A copy of this lease must be submitted to NYSERDA through the NYSERDA Portal as part of the Voucher Application process. A leasing company cannot request a voucher to purchase a demonstration vehicle with the intention of finding a prospective Fleet to lease the vehicle. The Vehicle Operator must be identified in the Voucher Application, and the draft lease agreement with the Vehicle Operator must be provided.

Any vehicle leasing or rental company that leases a vehicle purchased with a voucher must disclose the full voucher amount and voucher terms to the Vehicle Operator in the lease, which must reflect the full extent of capital cost reduction from the applicable voucher amount. It is the responsibility of the leasing company to ensure the Vehicle Operator signs a copy of the Vehicle Purchaser/Vehicle Operator terms and conditions and has this document submitted to the Contractor.

Both the leasing company and Vehicle Operator must sign the NYTVIP Vehicle Purchaser/Vehicle Operator terms and conditions document. A copy of the vehicle purchase agreement between the Contractor and the leasing company must also be submitted.

NYSERDA reserves the right to review lease agreements to confirm appropriate disclosures are made regarding the voucher amount received and other Program requirements. Leasing or rental companies must also provide NYSERDA with all requested information related to any vehicle purchased with a Program voucher (including lease agreements) within 10 days of a written request from the VHC for such information. The Vehicle Operator is also responsible for ensuring annual usage reports are accurate and submitted to NYSERDA as required in the Vehicle Purchaser/Vehicle Operator terms and conditions.

2.3.2 Reporting Requirements

A Semi-Annual Usage Report is a brief, online form with several basic questions about vehicle operation experience, including information on vehicle mileage, fuel use, maintenance issues, and vehicle location. Twice a year, Vehicle Purchasers, or in the case of leased vehicles, Vehicle Operators are required to submit Semi-Annual Usage Reports for NYSERDA to document the use, vehicle emissions changes due to installation of aftermarket equipment, and operating costs of NYTVIP-funded vehicles. Individual Fleets' information will not be made available to the public and is intended solely for NYSERDA's tracking of program analytics.

The reports must be submitted twice each year for three years following Voucher Redemption (six report periods) of each vehicle funded through the Program. Fleets that operate leased vehicles that have been purchased with vouchers are responsible for providing timely and accurate reports as well.

Failure to submit a Semi-Annual Usage Report in a timely manner is a violation of the terms and conditions of the NYSERDA funding and may result in the Vehicle Purchaser being subject to a prorated reimbursement penalty based on the number of missed reports as well as a ban from any further participation in the Program.

Data will be collected for the half-year periods ending May 30 and November 30, and NYSERDA will remind fleets to submit reports each June and December. To complete the Semi-Annual Usage Report, Vehicle Purchasers (or in the case of a lease, Vehicle Operators) will need at least:

- Vehicle Identification Numbers (VINs) for your purchased vehicles
- Drive cycle, range, and location information
- Fuel consumption and mileage information
- Maintenance cost information

Infrastructure or capital investment information (e.g., in fueling facilities)

For leased vehicles, the Vehicle Purchaser (leasing or rental company) is responsible for ensuring the Vehicle Operator submits the required Semi-Annual Usage Reports. This requirement should be included in the lease agreement with the Vehicle Operator.

Special Reporting Requirements for All-Electric Vehicles

As part of the Semi-Annual Usage Report, for each All-Electric Vehicle purchased with funding under the Program, in addition to the reporting requirements previously described, the Vehicle Purchaser/Vehicle Operator is required to compile operational and cost information for a minimum of three years after Voucher Redemption. All-electric reporting is required to include the following:

- Mileage and Electric Use Reporting All-Electric Vehicles funded under the Program must report vehicle odometer readings, or equipment hours of use, the amount of electricity used for battery charging (kWh) for the applicable reporting period, and for cumulative reporting.
- 2. Maintenance and Repairs All-Electric Vehicles funded under the Program must report maintenance and repair information, including associated costs, related to the All-Electric Vehicle for the applicable reporting period and cumulative reporting. Vehicle down time due to maintenance and repair needs shall be included. Vehicle Purchasers/Vehicle Operators must also provide maintenance and repair reporting for similar diesel-powered vehicles in enough detail to allow a technical evaluation.
- Driver Feedback Vehicle Purchasers/Vehicle Operators must collect feedback from drivers/users of All-Electric Vehicles funded under the Program each reporting period. Feedback will include any issues, positive or negative, on the All-Electric Vehicle driving experience.

Note: Vehicles receiving Program incentives must operate for a minimum of 5,000 miles or 1,000 hours per year.

Vehicle Purchasers should contact the Voucher Help Center with any questions or for assistance with the Semi-Annual Usage Report.

NYSERDA reserves the right to recapture incentive funds (i.e., recovering a prorated share of the applicable voucher amount) from the Vehicle Purchaser and/or bar the Vehicle Purchaser from receiving future vouchers if it does not provide timely and accurate Program Semi-Annual Usage Reports for the required three-year term.

3 Voucher Application and Redemption

Approved Contractors are authorized to market the Program incentives to Fleets and to submit applications for voucher funds when sales of Eligible Vehicles are made.

3.1 Voucher Application Process

The Voucher Application process consists of three steps: Voucher Application, NYSERDA application review, and NYSERDA approval notification.

Voucher Application

The Contractor works with the Vehicle Purchaser to complete the Voucher Application process. In the NYSERDA Portal, the Contractor will complete the following:

- 1. Create a new application and enter contact information for the Contractor and Fleet
- 2. Enter Domicile address(es)
- 3. Select Eligible Vehicle(s) to be sold
- 4. Enter details of new vehicle(s) and vehicle(s) to be Scrapped (a downloadable checklist of the required information can be found on the Program Website)
- 5. Agree to Program terms and conditions
- 6. Upload the following documents:
 - Signed Vehicle Purchaser/Vehicle Operator terms and conditions
 - Buyer's Order (vehicle purchase order/lease agreement) (may be provisional)
 - For purchases of Replacement Vehicles, the following is also required:
 - Copy of current vehicle registration for vehicle to be Scrapped
 - Photos of vehicle to be Scrapped (minimum image size of 1200 x 1800 pixels or 4 x 6 inches)
 - Front of vehicle to be Scrapped, clearly showing license plate
 - Photo of engine tag for engine to be Scrapped, clearly showing engine family and engine serial number³
 - Vehicle engine also showing color of the truck
 - Photo of side of vehicle to be Scrapped, clearly showing the official DOT federal ID number
 - Intact chassis (side photo that shows the whole truck)
- 7. Submit the application

NYSERDA Voucher Application Review

NYSERDA and the VHC review the Voucher Application for eligibility, accuracy, and completeness. If the Voucher Application is incomplete or inaccurate, NYSERDA or the VHC will notify the Contractor that they must resubmit the required information.

NYSERDA Voucher Approval Notification

Once NYSERDA determines the Voucher Application is complete and meets all applicable requirements, NYSERDA will notify the Contractor of voucher approval and reserve funds for the vehicle purchase. The voucher is valid for 12 months, after which it may be canceled. Prior to the expiration, the Contractor may request an extension of the voucher for six months (see section 3.1.1) by emailing a request to the VHC at NYTVIP@energycenter.org that verifies the expected delivery date of the vehicle such as a Line Setting Ticket from the vehicle manufacturer that shows the expected completion date.

3.1.1 Voucher Extension

A voucher must be redeemed within 12 months of the Voucher Approval Date as shown in the email the Contractor receives when the Voucher Application is approved. At any point within the 12-month period, a Contractor may request a voucher extension by sending an email, with supporting documentation such as a Line Setting Ticket from the vehicle manufacturer that shows the expected completion date, to the VHC. The email should indicate the expected date of vehicle delivery. A copy of the current registration and DOT inspection report may also be requested to ensure the vehicle to be Scrapped is still in service. Voucher extensions are available for up to an additional six months (180 days). No more than one extension will be granted per voucher. A voucher that is not extended or redeemed within 12 months will be deemed expired and canceled. Six-month extensions may be granted solely at NYSERDA's discretion and are not guaranteed to be approved. If granted, the voucher extension date, no later than 18 months from the date of original voucher approval. The Contractor is responsible for awareness of this date. If a voucher is not redeemed and is canceled, a Contractor may reapply to NYTVIP for the same vehicle with a new Voucher Application if the vehicle has not yet been delivered, subject to the availability of funds.

3.2 Vehicle Scrappage Requirements

To guarantee that voucher-supported vehicle projects result in material and verifiable emissions reductions and local air quality improvements, NYTVIP requires that voucher-supported vehicle purchases be accompanied by a corresponding Scrappage of a vehicle with a diesel engine from 1992 through 2009. Repowered Vehicles may Scrap a diesel engine that is at least six years old to repower with a BEV powertrain; in this case of repowers. See section 2.1.2., vehicles with diesel engines newer than model year 2009 may be eligible for engine Scrappage. Buses are exempt from the scrappage requirement.

Scrappage must be performed by an eligible scrappage facility, which are listed on the Program Website. Scrappage is a required step in the Voucher Redemption process. Failure to comply with all Scrappage requirements will result in non-payment of the rebate incentive to the Contractor. Contractors and Vehicle purchasers should be aware that NYSERDA is not responsible for any rebate incentive payments to the Contractor if the Scrappage requirements are not met. Vehicle Purchasers should also be aware that, depending on the contractual agreement between the Contractor and the Vehicle Purchaser, failure to meet the Scrappage requirements may result in the Vehicle Purchaser being required to pay the full (unreduced) price of the new vehicle to the Contractor.

Vehicle Purchasers must arrange for vehicle Scrappage and provide the Contractor with the date of scheduled Scrappage before they can take delivery of the new vehicle(s). Scrappage can occur anytime after approval of a voucher application. Upon taking delivery of the new vehicle(s), Vehicle Purchasers must complete and document Scrappage within 21 days. Replacement Vehicle projects must comply with the Scrappage requirements as outlined in the following section. Repowered Vehicle projects must comply with modified Scrappage requirements, which are outlined in Section 2.1.2. Transit agencies that purchase BEV transit buses may choose not to Scrap a bus, in which case they may only be eligible to receive a lower incentive amount.

3.2.1 Scrappage Definition

A vehicle is considered Scrapped when rendered inoperable and available for recycle, by cutting a three-inch hole in the engine block and disabling the chassis by cutting the vehicle's frame rails completely in half.

- To destroy the engine: Cut or drill a minimum three-inch diameter hole through the engine block.
- To destroy the chassis: Cut or shear both the chassis rails between the two axles (not applicable to Repowered Vehicles).

The vehicle must arrive at the Scrappage location with the chassis attached, the engine intact, and in drivable condition. Do not remove anything from the truck except for personal items. The Program cannot process vouchers until the Scrappage is satisfactorily completed and photographed. Failure to comply with Scrappage requirements will result in the rejection of a Voucher Redemption submission.

3.2.2 Scrappage Requirements

The following documents are required to be submitted to NYSERDA as part of the Scrappage process:

- 1. The completed vehicle scrappage certification (to be completed by Vehicle Purchaser and NYSERDA approved Scrappage facility)
- 2. "Before" photos of the vehicle being Scrapped: photos submitted at the time of Voucher Application will serve as the "before" Scrappage photos.
- 3. "After" photos of the vehicle being Scrapped (minimum image size of 1200 x 1800 pixels or 4 x 6 inches)
 - Engine destruction: At least two photos that are close-up from different angles, and another photo back a few feet showing that a 3-inch hole has been cut or drilled into the engine block (show some of the color of the truck in the photos).
 - Area of the cut chassis: A close-up photo of the cut (show some of the color of the truck), and another photo a little further back from the truck. This step does not apply to Repowered Vehicles.

• Interior shots of the cab, engine compartment, and passenger interior (if a bus) demonstrating that the vehicle was intact at the time of scrappage.

Scrappage must be performed at a NYSERDA approved facility. Eligible Scrappage facilities are located across New York State and adjacent states to facilitate convenient Scrappage. Additional guidance for vehicle Scrappage may be found on the Program Website. Both the Scrappage facility and the vehicle owner will be required to sign and submit certifications that the Scrappage was performed in accordance with Program rules.

The Vehicle Purchaser shall acknowledge that they may be responsible to the Contractor for the value of the voucher if they fail to complete the Scrappage requirement within a 21-day period after vehicle delivery and acceptance by the Vehicle Purchaser.

3.3 Voucher Redemption

Once a vehicle has been purchased and delivered, the remaining unpaid balance (if any) has been paid by the Vehicle Purchaser, a corresponding vehicle Scrappage has been completed (if required), and the purchased vehicle is ready to be placed into service, the Contractor may complete the Voucher Redemption process. The Contractor completes the Voucher Redemption process by returning to the NYSERDA Portal and submitting additional required documentation, including documentation on the vehicle that was Scrapped. It is strongly encouraged that the Contractor ensure the Scrappage of the old vehicle is completed prior to initiating the Voucher Redemption process.

3.3.1 Voucher Redemption Process

- 1. Contractor Accesses NYSERDA Portal Once a Voucher Application has been approved, the Contractor will receive an email approving the voucher. Once the vehicle has been delivered to the Vehicle Purchaser and the old vehicle has been Scrapped, the Contractor may redeem a voucher. To redeem a voucher, the Contractor returns to the NYSERDA Portal and selects the appropriate project for the voucher it wishes to redeem. A voucher may include multiple vehicle purchases for the same Fleet; each vehicle will constitute its own "milestone" within the redemption process for a given voucher. Contractors may request payment for some or all vehicles that are part of a single voucher at a time. Contractors should review the checklist available through the NYSERDA Portal and the Program Website of required information and documentation from the Vehicle Purchaser they don't already have.
- 2. Contractor Submits Voucher Redemption to NYSERDA The Contractor supplies additional vehicle information:
 - New vehicle license plate number
 - New vehicle VIN
 - Date of old vehicle Scrappage

The Contractor is required to upload the following documentation:

- Signed Vehicle Purchaser/Vehicle Operator terms and conditions document (this will have already been uploaded as part of the Voucher Application)
- Signed final invoice/vehicle purchase order must show the final purchase price less the voucher amount and any other additional incentive funding
- Financial documentation (proof of payment) copy of check, money/wire transfer, or financial arrangements identifying the lien holder and indicating terms of lease
- NYS Department of Motor Vehicles Registration or Vehicle Registration / Title Application (form MV-82)
- Factory Build Sheet, clearly indicating VIN and GVWR
- Copy of vehicle registration for Scrapped vehicle
- Photos of new vehicle (vehicle from left side, engine tag, VIN tag, odometer reading, and front showing plates)
- Photos of Scrapped vehicle (engine block with three-inch hole, disabled chassis cut in half)
- Additional documentation (see section 3.2.2) showing full compliance with the Scrappage process.

Note: A significant amount of the information required to redeem a voucher will need to be supplied by the Vehicle Purchaser. The Contractor is responsible for obtaining this documentation from the Vehicle Purchaser. If the Contractor cannot provide the documentation required to redeem a voucher, even if such documentation is unavailable through no fault of the Contractor, no payment will be made on the voucher. It is recommended that Contractors consider this obligation when entering into purchase contracts with Vehicle Purchaser to ensure their ability to receive this documentation from the Vehicle Purchaser.

- 3. NYSERDA Reviews and Approves Voucher Redemption Submission NYSERDA and the VHC will review the submitted information for completeness and eligibility. The review includes verifying whether the Vehicle Purchaser and delivered vehicle information match those listed on the voucher. If the Voucher Redemption submission is deemed complete and valid, NYSERDA will approve the submission. NYSERDA will then inform the Contractor of Voucher Redemption approval. If the Voucher Redemption submission is incomplete or inaccurate, NYSERDA will inform the Contractor of incomplete or inaccurate redemption documentation and the Contractor will have seven calendar days to correct, complete, and resubmit the documents for approval.
 - <u>If Voucher Redemption is Denied</u>: If a Voucher Redemption submission is denied, NYSERDA or the VHC will respond by email detailing the reasons that disqualify the Voucher Redemption submission.
 - <u>Appeals for Voucher Redemption Denials</u>: NYSERDA will consider appeals to the denial of a rebate application on a case-by-case basis and at its sole discretion. To submit an appeal, contact the VHC. NYSERDA is in no way obligated to consider an appeal.

4. NYSERDA Makes Voucher Payment to Contractor - Within 30 calendar days of NYSERDA approval of the Voucher Redemption submission, NYSERDA will pay the voucher amount to the Contractor, in accordance with the Prompt Payment Policy (see Section 3.4), also described in Exhibit B to the Contractor Participation Agreement (see Program Website).

3.4 Voucher Payment Process

Vouchers will be issued to Contractors via electronic payment. To sign up for electronic payment, Contractors must complete the form at <u>nyserda.seamlessdocs.com/f/EFTForm</u>. Per NYSERDA's Prompt Payment Policy, payments to Contractors can be expected within 30 days of voucher redemption approval.

A voucher will not be issued if the Vehicle Purchaser returns the vehicle prior to the voucher payment being issued. Contractors must notify the VHC if a vehicle is returned and request the voucher be canceled.

Furthermore, NYSERDA reserves the right to seek reimbursement from the Contractor if the Vehicle Purchaser returns the vehicle to the Contractor within 30 days of voucher payment.

Appendix A. Funding Source Rules

The total funding for NYTVIP as of August 2019 is \$18.4 million. The Program may add additional funds over time. The Program is currently funded by federal Congestion Mitigation and Air Quality Improvement (CMAQ) funds administered by the DOT and the Volkswagen settlement agreement resulting from Volkswagen's violation of oxides of nitrogen (NOx) emission standards, and is administered by the DEC. The Program rules have been designed to be consistent with the rules established by these funding sources and apply to all projects. NYSERDA will decide the source of funding for a specific voucher at its sole discretion.

The CMAQ program provides funding to support air quality improvements from mobile sources in areas that are or were designated as non-attainment for certain federal air quality standards.

- CMAQ funding can currently support battery electric vehicle projects in weight classes 3 through 8, but is limited to vehicles to be domiciled in counties that are either in non-attainment or maintenance status with respect to <u>National Ambient Air Quality Standards (NAAQS)</u> for any of the major criteria air pollutant categories (see **Error! Reference source not found.** in Appendix A below).
- These funds are subject to domestic content requirements of the <u>Buy America provisions</u> applicable to Federal Highway Administration (FHWA) for vehicles, which require "100% of steel, iron, and manufactured products" to be produced in the United States; the lone current exception, under the terms of a Buy America waiver granted to DOT for this Program, is for Class 3-8 All-Electric Vehicles for which final assembly is performed in the United States.

Albany	Kings (Brooklyn)	Ontario	Saratoga						
Bronx	Livingston	Orange	Schenectady						
Chautauqua	Monroe	Orleans	Schoharie						
Dutchess	Montgomery	Putnam	Suffolk						
Erie	Nassau	Queens	Wayne						
Genesee	New York (Manhattan)	Rensselaer	Westchester						
Greene	Niagara	Richmond (Staten Island)							
Jefferson	Onondaga	Rockland							

Table 4. New York counties eligible for CMAQ funding

The DEC VW Settlement program intends to remedy the pollution emitted from Volkswagen's diesel cars in New York State as a result of their implementation of "defeat devices" to evade regulations on emissions of oxides of nitrogen (NOx), a harmful pollutant that leads to smog formation.

VW funding can support clean transportation projects that fit within eligible mitigation action categories detailed in 10 action items included in the <u>Clean Transportation NY plan</u>; currently the categories the Program can support are Item 1 (Class 8 local freight trucks) and Item 6 (Class 4-7 local freight trucks).

- Funding can be used anywhere in New York State, but vehicle projects must be matched onefor-one with the verified retirement and Scrappage of a diesel engine from 1992 through 2009 and associated vehicle chassis to ensure that NOx pollution is definitively removed from the transportation system. Scrappage vehicles must have been registered in New York for the previous two years and driven at least 5,000 miles per year for those two years.
- In total, no more than 33% of funds can be spent on non-BEV technologies (i.e., PHEV, HEV, CNG, propane).

NYSERDA shall allocate voucher amounts from one or both funds based on project features and at its sole discretion; Contractors are not permitted to determine which funding source will apply to a project.

No Vehicle Purchaser may receive more than 25% of the total available funds under each of the funding sources in the NYTVIP. If additional funding is added to the Program, a Vehicle Purchaser that has already met this threshold may request vouchers for up to 25% of the new total funding source amount.⁴

The voucher amount is calculated as the lesser of a percentage of the Incremental Cost up to a maximum cap that varies by vehicle technology, weight class, and location (see **Error! Reference source not found.**1 and 2). In all cases, a voucher can be issued for the eligible percentage of the net Incremental Cost of a new BEV or AFV truck or bus after all other incentives are accounted for as well as fund source eligibility.

Class 4-8 BEVs and AFVs that operate as local freight trucks anywhere in the State may qualify for voucher funding at the funding amount listed in Table 1.

Class 3 BEVs that operate as local freight trucks and Class 3-8 buses that are domiciled and operate in the 30 CMAQ-eligible New York counties (Table 3) may qualify for voucher funding at the funding level listed in Table 2.

End Notes

- ¹ The final voucher amount for each Eligible Vehicle is subject to project-specific information, such as Domicile address, and the availability of funding.
- ² Fleets, including but not limited to entities sharing a common Taxpayer Identification Number (TIN), are considered a single Vehicle Purchaser even if they are part of different subsidiaries, divisions, or other organizational structures of a company, government agency, or other entity. NYSERDA or its designee may seek financial reimbursement or other remedies from a Vehicle Purchaser for non-disclosure or inaccurate disclosure of its TIN, ID#, or other information relating to common ownership or fiduciary control of the purchasing entity.
- ³ Voucher Applications must include an engine tag photo but may still be conditionally approved if engine tag is illegible. If engine tag is illegible or missing, Fleet or Contractor must request replacement tags from the engine manufacturer in order to complete Voucher Redemption
- ⁴ Fleets, including but not limited to entities sharing a common Taxpayer Identification Number (TIN), are considered a single Vehicle Purchaser even if they are part of different subsidiaries, divisions, or other organizational structures of a company, government agency, or other entity. NYSERDA or its designee may seek financial reimbursement or other remedies from a Vehicle Purchaser for non-disclosure or inaccurate disclosure of its TIN, ID#, or other information relating to common ownership or fiduciary control of the purchasing entity.



State of New York Andrew M. Cuomo, Governor

New York State Energy Research and Development Authority Richard L. Kauffman, Chair | Alicia Barton, President and CEO



Electric Power Transmission and Distribution (EPTD) DER Low-Cost Monitoring, Control, Backfeed Protection & Smart Inverters Program Opportunity Notice (PON) 4094 Up to \$5 Million Available All, some, or none, of the available funds may be awarded

Submissions are being accepted until August 15th, 2019 at 3:00 PM Eastern Time*

I. INTRODUCTION

The New York State Energy Research and Development Authority (NYSERDA) announces the availability of up to \$5 million in funds to support technology feasibility, product development, demonstration and commercialization of innovative technology that advances the vision for distributed energy resource (DER) systems in New York State. Proposals should focus on the following challenge areas:

- 1. Low cost monitoring and control
- 2. Preventing backfeed from energy storage systems
- 3. Smart inverter functions

NYSERDA is accepting Concept Papers and Full Proposals in the following categories:

	1 8 8	
Category	Maximum NYSERDA Funding Per Award	Total Project Cost Share
Category A: Product Development	No limit	50%
Category B: Demonstration Projects	No limit	50%
Category C: Engineering Studies	\$400,000	25%

Proposal Submission: Online submission is preferable. Proposers may submit Word, Excel, or PDF files (file formats include: csv, doc, docx, gif, jpeg, jpg, pdf, png, ppt, pptx, pps, ppsx, tif, txt, xls, xlsx, and zip). Individual files should be 100MB or less in file size. Proposal PDFs should be searchable and should be created by direct conversion from MS Word, or other conversion utility. Files should not be scanned. For ease of identification, all electronic files must be named using the proposer's entity name in the title of the document. NYSERDA will also accept proposals by mail or hand-delivery if online submission is not possible. For detailed instructions on how to submit a proposal (online or paper submission), click the link "Application Instructions and Portal Training Guide [PDF]" located in the "Current Opportunities" section of NYSERDA's website

(https://www.nyserda.ny.gov/Funding-Opportunities/Current-Funding-Opportunities.aspx).

If mailing or hand-delivering, proposers must submit two (2) paper copies of their submission with required attachments, along with a CD or DVD containing both a PDF and a MS Word digital copy of the Proposal, following the guidelines. Proposals must be accompanied with a completed and signed Proposal Checklist. Mailed or hand-delivered Proposals must be clearly labeled and submitted to:

Jillina Baxter, PON 4094 NYS Energy Research and Development Authority 17 Columbia Circle Albany, NY 12203-6399 No communication intended to influence this procurement is permitted except by contacting Sumit Bose (Designated Contact) (518) 862-1090 ext. 3130 or Christopher Cheng (Designated Contact) (518) 862-1090 ext. 3436 or Michael Razanousky (Designated Contact), (518) 862-1090 ex. 3245 or by e-mail <u>smartgrid@nyserda.ny.gov</u>. If you have contractual questions concerning this solicitation, contact Nancy Marucci, (518) 862-1090 ext: 3335 or by email use <u>NancySolicitations@nyserda.ny.gov</u>. Contacting anyone other than the Designated Contacts (either directly by the proposer or indirectly through a lobbyist or other person acting on the proposer's behalf) in an attempt to influence the procurement: (1) may result in a proposer being deemed a nonresponsible offeror, and (2) may result in the proposer not being awarded a contract.

* All proposals must be received by 3 p.m. Eastern Time on the date noted above. Late, faxed, or emailed proposals will not be accepted. Incomplete proposals may be subject to disqualification. It is the proposer's responsibility to ensure that all pages have been included in the proposal. Please note: for online submission, there are required questions that you will have to answer in addition to uploading attachments and you should allot at least 60 minutes to enter/submit proposals. The online proposal system closes promptly at 3 p.m. Eastern Time, files in process or attempted edits or submission after 3 p.m. Eastern Time on the date above, will not be accepted. If changes are made to this solicitation, notification will be posted on the "Current Opportunities" section of NYSERDA's website (https://www.nyserda.ny.gov/Funding-Opportunities/Current-Funding-Opportunities.aspx).

II. INNOVATION CHALLENGE AREAS

Reforming the Energy Vision (REV) is a comprehensive energy strategy for New York State that includes major deployments of distributed energy resources, for example solar power and energy storage systems. Deployment of these systems will lead to dramatic differences in future power distribution systems. Systematic improvements to grid investments and operations are needed to accommodate widespread adoption of distributed energy resources and enable market development as envisioned by REV.

This solicitation seeks to make investments in three areas that accelerate the safe, reliable integration of significant clean distributed energy resources with the New York State electric grid. All projects should thoroughly identify and address barriers to adoption. Particular attention should be given to utility acceptance of the solution, cybersecurity, impact to project finances and economic viability, and pathway to commercialization/adoption.

1. Low Cost Monitoring and Control

The purpose of this challenge area is to unlock the foundation of the digital grid by enabling the access and flow of data between DER systems and grid operators. This data allows analysis to inform decisions and actions for grid optimization, efficiency, safety, etc. Traditional approaches to monitoring and control can be cost prohibitive, particularly for smaller DER installations. The application of new lower cost monitoring and control technologies and procedures will increase the grid operator's visibility into system conditions. Expected benefits include enabling more integration of renewable and distributed energy resources, improving service quality, increasing overall reliability and resiliency of the distribution system, and ultimately reducing costs of DER projects, to utilities and utility customers. Data on customer voltage, understanding the impacts of distributed energy resources on local grid voltage and understanding load/consumption information can assist in multiple Distribution Management Systems (DERMS) and Distributed Energy Resource Management Systems (DERMS) control functions.

Proposers are encouraged to review monitoring and control information from the New York Interconnection Technical Working Group:

http://www3.dps.ny.gov/W/PSCWeb.nsf/All/DEF2BF0A236B946F85257F71006AC98E?OpenDocument

This challenge area is also open to control-related ideas on:

- Reliable, resilient and safe operation
- Managing sustained intentional islanding during grid failure
- Integration of DERs with flexible loads and helping future DER aggregators to quantify reserves, system objectives and constraints, customer usage patterns, and solar PV and storage forecasts.

Proposals in this focus area should advance approaches to monitoring and/or control between the utility and distributed energy resources. Along with lowering costs, this solicitation seeks to advance methods and technologies with many of the following attributes:

- Acquire, transmit, process and display operational information
- Establish data resolution, accuracy and latency requirements
- Safe to install
- Reduce time and resources required for installation
- Can be retrofitted
- Interoperable; ability to connect to a variety of utility DMS or aggregator DERMS
- Cybersecure
- Scalable

Proposals that include development of control systems must discuss the risks to DER owners if the owner is another party, for example, if the utility or a third-party aggregator assumes system control. Example risks include impacts on asset warranties, additional liability, and changes to equipment and property lease scenarios which may significantly affect the project return on investment (ROI). Proposals must clearly address these potential impacts, discuss solutions to mitigate risks, and demonstrate benefits to end-users.

2. Preventing Backfeed from Energy Storage Systems

This challenge area addresses the safe operation of energy storage systems, either stand-alone or paired with other resources in a hybrid system, by preventing backfeeding of electrical power to the grid through innovations in controls and hardware.

Existing methods for limiting backfeed, such as reverse power flow relaying, can be cost prohibitive, particularly for smaller systems. Of particular interest are systems that can be configured to allow backfeed at certain times while limiting it at others. This is particularly important because of the dispatchable nature of energy storage. Interconnection agreements may allow for export to the grid during certain time periods and restrict export at other times; for example, restricting export during times of minimum load on the circuit. Projects that advance utility acceptance of limiting backfeed via the DER's native control system are encouraged.

This challenge area is also open to innovation in methods such as ride-through and inertial response that inverterinterfaced resources can use to meet new standards, as well as ideas that can eventually lead to interconnection rules for the charging ("load") aspect of energy storage. In the case of hybrid solar + storage systems, if the solar and storage inverters are different and/or not co-located, there is a need to understand their interactions and novel ideas on their hardware/software configurations for protection and control are also encouraged.

3. Smart Inverter Functions

The purpose of this challenge area is to understand the technical feasibility and potential value of smart inverters and determine pathways to widespread adoption in New York State. Objectives of projects include, but are not limited to:

- Understand current and future smart inverter functionalities related to controls and communication.
- Understand operating characteristics of different smart inverter technologies.
- Verify smart inverter impacts on feeders across different geographies within NY state, including capacity to
 mitigate interconnection concerns, ability to increase hosting capacity and integration into distribution
 voltage optimization schemes.
- Evaluate inverter technology to better inform the utility's expected level of control and integration of smart inverters.
- Evaluate customer impacts and third-party integration of smart inverters.
- Develop and/or evaluate additional New York specific smart inverter use cases.
- Develop an aggregation platform for smart inverter monitoring & control: Leverage the vendor's existing aggregation platform to interact directly via a portal or through application programming interfaces (APIs) with smart inverters to support field demonstrations.
- Work with a utility for field demonstration of smart inverters. Customer types can include residential, commercial, industrial and utility-scale.
- Develop models, extract data and perform analytics to further inform learnings and understand the cost/ benefit of smart inverter PV/energy storage penetration, working with utilities.
- Integrate with utility's monitoring & control platform: work with a utility to integrate smart inverter monitoring and control technologies to facilitate direct interaction with smart inverters and to receive individual asset performance data.

Additional Information

This solicitation focuses on the successful commercialization of distinct advancements over the current state of technology/knowledge and should be clearly described in the proposal. All proposals should articulate a clear pathway to adoption in New York State. In addition to articulating the technical innovation, proposers must describe their commercialization strategy including customer discovery and channel strategy, competitive landscape, intellectual property, manufacturing and scaleup, key partners and team qualifications as appropriate. Teaming is encouraged and proposal teams should strive to have representation from all major parties that are needed to advance a proposal from concept to deployment in New York State.

Projects that innovate in the challenge areas both within the Joint Utilities of New York (Consolidated Edison, Orange and Rockland Utilities, New York State Electric and Gas, Rochester Gas and Electric, Central Hudson Gas and Electric, and National Grid) and other areas of New York (New York State Power Authority, municipal electric companies, cooperative electric organizations, out of state utilities) and meet the Program Requirements are eligible for funding under this solicitation. The program strives to coordinate its activities with the Reforming the Energy Vision (REV) initiative being pursued in New York State including the New York State Interconnection Technical and Policy Working Groups. All projects must demonstrate broad public benefits to New York State.

Proposals will be evaluated in three distinct project categories listed below in Section III and scored on the evaluation criteria listed in Section V of this solicitation. All submissions will be reviewed by a scoring committee comprised of both internal NYSERDA staff and outside experts. All Proposals will be evaluated according to the quality and level of detail provided within page limits. Proposals must include substantive documentation addressing all scoring criteria items. NYSERDA, at its discretion, may ask for an in-person presentation of a Proposal before making a funding decision.

NOTE: NYSERDA reserves the right to negotiate scope of work, budget and funding levels on all awarded projects. Efforts requesting more than \$250,000 from NYSERDA may be funded in phases separated by go/no-go milestones.

Projects proposed for funding must:

- Address an innovation challenge as described in Section II.
- Provide direct and quantifiable energy, environmental, and economic benefits to New York State such as emissions reductions (such as greenhouse gases and criteria air pollutants), increased deployment of clean distributed energy resources, job creation, product manufacturing and sales, increased resiliency and reliability, higher efficiency, and reduced electric costs.
- Thoroughly identify and attempt to address barriers to adoption. Particular attention should be given to utility acceptance of the solution, cybersecurity, impact to project finances and economic viability and pathway to commercialization/adoption.
- Include a project budget using the Attachment E1 Budget Form showing total project cost and proposer cost-share. Include a cost-sharing breakdown by project task in the Statement of Work.
- Satisfy recoupment obligations to NYSERDA for any new technology or product development effort requesting cumulative NYSERDA funding over \$75,000 (see terms and conditions in Attachment F, Sample Agreement).
- Demonstrate that the proposer and/or team of proposers are qualified to carry out the submitted project proposal.
- Provide a strong rationale as to how the project will overcome barriers impeding the implementation or adoption of any new or under-utilized technology. Benefits and risks to DER owners and end-users need to be addressed.
- For projects that develop technologies or products, emphasize development and/or applications of marketable products for near-term commercialization, rather than basic research, and provide an assessment of the addressable market, and discuss an appropriate commercialization path and potential for manufacturing in New York State. Note that even in early-stage projects, initial activities focusing on commercialization (or technology deployment) paths and challenges are essential to assessing benefits, risks, and future resource requirements.
- For demonstration projects, clearly identify how this project will bring the product closer to commercial readiness and how such demonstration will lead to increased use of the product in New York State. Demonstration projects must be installed within New York State.
- Provide a letter of support and commitment from all funding sources and partners / entities responsible for managing, operating and maintaining all electric delivery infrastructure impacted by project.
- Demonstrate that the project and funding request addresses a current challenge to technology advancement that is not being addressed adequately by current industry practices and/or federal and/or other state research priorities and funding. Include a cost and New York statewide public benefit analysis to justify allocation of funds.

Additional consideration for Proposers:

- A proposal may be considered non-responsive if it fails to comply with the requirements of this solicitation.
- Prior to an award being made, potential contractors may be required to demonstrate access to financial resources sufficient to perform the proposed work, technical experience and adequate facilities (or the

ability to access them), a good performance record, and the ability to qualify for an award under applicable laws and regulations.

- Preference will be given to proposers that provide higher cash contributions towards project costs.
- External funding partnerships are encouraged to leverage limited New York State resources. Proposers are encouraged to develop projects that leverage funding with external resources partners such as other research and development organizations.
- Proposers may be required to make an in-person presentation to NYSERDA prior to a final decision being made.

Funding Categories

Regardless of Category, Proposers should allocate a minimum of 10% of the project budget for commercialization/deployment or technology transfer related tasks, such as customer discovery, IP protection, business plan development, design for manufacturing and technology transfer in New York State.

Category A: New Product Development (No NYSERDA limit for funding request. Proposer total project cost share at or above 50%.)

Product development includes any work focused on bringing a new or improved product or service to
market, including technical feasibility, business case feasibility, market analysis, proof of concept, product
design, engineering, scale up, and field testing. Field testing is the stage in which a technology, not yet
commercially available with a warranty, is operated in real world conditions with results used for product
iteration, market validation, or customer engagement. Note that bench-scale testing and field verification
or testing may be included in Category A projects. Product Development projects may lead to a project
proposal under Category B: Demonstration Projects to prove out the potential product or technology at a
New York State site. Note: New Product Development projects are subject to NYSERDA's recoupment
terms described in Section VI. The entity responsible for commercializing the product should be the
Proposer.

Category B: Demonstration Projects (No NYSERDA limit for funding request. Proposer total project cost share at or above 50%.)

• Demonstration projects are intended to increase sales or usage of a commercialized product already in the marketplace or a novel combination of existing products, with results used to generate objective performance information for customers or policymakers. At this stage, the product is available for commercial sale with a warranty. While incremental improvements may be incorporated based on the demonstration results, the final product design is essentially complete. Projects under this category include demonstrations of new or under-utilized products and/or technologies that are past the technology readiness level (TRL) 6 or higher. This means that products and/or technologies have been tested in a relevant environment and are ready to be demonstrated in an operational environment. Projects in this category **should not** include technology or product development tasks. If technology or product development tasks are necessary, consider proposing in Category A or C. Proposals in this category should clearly identify how this project will bring the product or technology closer to commercial realization and how such demonstration will lead to increased use of the technology in New York State.

Category C: Engineering Studies (NYSERDA's share of funding for any project of this type will be limited to a maximum of \$400,000. Proposer total project cost share at or above 25%.)

• Engineering studies are intended to support project development activity such as detailed design, site assessment, economic analysis, and interconnection and permitting issues. Engineering studies area viable pathway to examine or develop novel applications of existing products or combinations of products where the project does not meet the definition of product development described above. Engineering

studies are expected to ultimately lead to a demonstration project or deployment in New York State. Note: Engineering Studies alone are not subject to recoupment; however, Engineering Studies exceeding \$75,000 performed as part of a staged-contract that includes New Product Development will be counted towards the recoupment obligation.

NOTE: NYSERDA reserves the right to negotiate scope of work, budget and funding levels on all awarded projects. Efforts requesting more than \$250,000 from NYSERDA may be funded in phases separated by go/no-go milestones.

Multiple Category Proposals

The proposer has the option of requesting multiple stage projects that include multiple project categories. For example, a proposer may request consideration of a project that involves a Category A product development followed by a Category B demonstration. Proposals seeking funding across multiple categories should briefly describe how the project will progress along the categories including significant milestones and provide an estimate of the total cost and schedule for each stage.

Any contract awarded to fund a multi-stage project does not in any way obligate NYSERDA to fund any more than the first stage.

- NYSERDA anticipates awarding contracts for either a single stage of a multistage project, or for multiple stages. In the case of a multi-stage award, NYSERDA anticipates issuing a contract with a maximum, "not-to-exceed" amount with subsequent stages only being awarded on a contingent basis as described below.
- NYSERDA reserves the right not to move forward with subsequent stages of a multi-stage award, dependent on project success and availability of funding. Later stages may be funded if, at NYSERDA's sole discretion, milestones from the previous stage have been satisfied, there is still significant potential market impact, and sufficient program funds remain.
- NYSERDA expects it may award more contingent funding than is available for this program.
- At the end of each stage, project outcomes will be evaluated to determine if the project will continue to be funded.
- The proposal must meet the minimum proposer cost share for each category that is funded.

Additional Program Requirements for Category B Demonstration Projects Only

Category B projects selected for funding **must**:

- (1) Have a <u>New York State demonstration site</u>.
- (2) Be installed within 36 months of contract execution.
- (3) Address safety issues, including public safety, that are applicable to the demonstration project.
- (4) Comply with all applicable building, fire, electrical, and interconnection codes, standards, and requirements.
- (5) Provide equipment sensors, instrumentation, and a complete data acquisition system for remote monitoring and reporting as specified below.
- (6) Demonstrate the technology viability and monitor the performance, characteristics, and benefits for a period adequate to meet project goals. If the period is under 12 months, the proposer must discuss why the proposed time is adequate. Unless the proposer demonstrates a compelling reason otherwise, at least 365 operating days of data will be required after commissioning.

(7) Present an economic analysis of the proposed technology demonstration including an estimated cost/benefit ratio, and a plan to measure the actual cost/benefit ratio during the demonstration.

Data Acquisition Requirements for Category B: Demonstration Projects Only

NYSERDA intends to provide system level operation and performance information, including economic performance information, to the general public on each of the demonstration projects funded under this solicitation. In order to meet this objective, each demonstration project must provide sufficient instrumentation and data transmittal, and analytical capabilities to allow the collection and analysis of technical and economic performance data.

The demonstration project proposal should include system operating data to be used for evaluation and generation of reports on the overall performance of the technology being demonstrated. Data acquisition sampling rates must be adequate to characterize the benefits and the value proposition of the proposed application. For example, sampling rates for applications designed to enhance power quality or system stability would be much higher than sampling rates for peak shaving or arbitrage applications. In the event that the demonstration system performs multiple activities, the system must provide for the collection of data for all activities. All raw and summary data collected at the project sites must be archived and protected from loss on permanent media.

Benefits Data Tracking and Reporting for Category B: Demonstration Projects Only

Data sufficient to demonstrate the energy, environmental, and/or economic benefits defined in the proposal must be measured, collected, analyzed, and recorded. For applications that claim multiple benefits, the proposed data and analysis methods must adequately support the claimed benefit for each of the benefits specified in the proposal.

Reporting Requirements for Category B: Demonstration Projects Only

The proposal must identify the project team member who will be responsible for the preparation and delivery of periodic written project reports. System operational summary information must be generated regularly and be included in progress reports. At a minimum, the system operational summary information must include the following:

- Raw data.
- System performance summary.
- Summary of system reliability and failure rates.
- A written summary of the economic benefit derived for the time period.
- A written summary of all operations and maintenance activities for the time period.
- System dispatch information and use patterns associated with the project, as appropriate.
- Energy consumption breakdown of parasitic loads introduced by the demonstration system, as appropriate.
- System performance under typical utility fault conditions, e.g. lightning strikes, primary phase to ground faults, voltage sags/spikes, electric outages, etc., as appropriate.
- System performance under user fault conditions, e.g. fault in customer plant, as appropriate.

Reports must be generated that consolidate all the information from the reports and summarize demonstration system performance for the preceding year.

Historical Performance Data Reporting for Category B: Demonstration Projects Only

Where appropriate to document project benefits, historical utility system operational data prior to the installation of the demonstration system is required in order to provide credible baseline data on electrical system performance before and after the installation of the demonstration system. Information concerning load profiles, peaks, overloads, faults, power quality events, and any other information required to fully characterize the

operation of the electrical utility at the demonstration site prior to installation of the demonstration system must be collected by the proposer for a reasonable period of time. Comparison information must be made part of the progress reports.

IV. **PROPOSAL REQUIREMENTS**

Proposal Submission: Online submission is preferable. Proposers may submit Word, Excel, or PDF files (file formats include: csv, doc, docx, gif, jpeg, jpg, pdf, png, ppt, pptx, pps, ppsx, tif, txt, xls, xlsx, and zip). Individual files should be 100MB or less in file size. Proposal PDFs should be searchable and should be created by direct conversion from MS Word, or other conversion utility. Files should not be scanned. For ease of identification, all electronic files must be named using the proposer's entity name in the title of the document. NYSERDA will also accept proposals by mail or hand-delivery if online submission is not possible. For detailed instructions on how to submit a proposal (online or paper submission), click the link "Application Instructions and Portal Training Guide [PDF] " located in the "Current Opportunities" section of NYSERDA's website (https://www.nyserda.ny.gov/Funding-Opportunities/Current-Funding-Opportunities.aspx).

If mailing or hand-delivering, proposers must submit (2) paper copies of their proposal along with a storage device containing both a PDF or MS Word digital copy of the proposal, following the above guidelines. Mailed or hand-delivered proposals must be clearly labeled and submitted to: Jillina Baxter, PON 3397, NYS Energy Research and Development Authority, 17 Columbia Circle, Albany, NY 12203-6399. Late proposals and proposals lacking the appropriate completed and signed Proposal Checklist may be returned. Faxed or e-mailed copies will not be accepted.

The proposer's goal should be to concisely present the information needed to fully address the evaluation criteria (see Section V). Proposals that grossly exceed the word limits or fail to follow the format guidelines may be rejected as non-responsive. Proposals deemed non-responsive will not be eligible for awards. If you believe proprietary information must be submitted to provide an adequate proposal, you must comply with the Section VII instructions for submitting proprietary material. Unnecessary attachments beyond those sufficient to present a complete, comprehensive, and effective proposal may reduce, rather than increase, a proposal's standing per the evaluation criteria. Each page of the proposal should state the name of the proposer, the PON number, and the page number. The proposal must be in the following format, with items in the sequence shown.

1. Procurement Lobbying Requirements - **State Finance Law sections 139-j and 139-k**. In compliance with §139-j and §139-k of the State Finance Law (see Section V, General Conditions below for additional information), proposers will be required to answer questions during proposal submission, which will include making required certification under the State Finance Law and to disclose any Prior Findings of Non-Responsibility.

2. Proposal Narrative. Complete the Proposal Narrative form-fillable document as part of the PON (Attachment

- A). The Funding Category must be clearly indicated. The Proposal Narrative contains the following sections:
 - Executive Summary
 - Problem Statement and Proposed Solution
 - State of Research and Technology Targets
 - o Attachment C: Technology Readiness Level/Commercial Readiness Level Calculator
 - Commercialization Potential of Proposed Product
 - Attachment D: Three-Year Financial Projects Worksheet (Category C)

- Demonstration Project Information (Category B Only)
- Study Information (Category C only)
- Statement of Work (Attachment B) and Schedule
- Project Benefits
- Budget
 - o Attachment E1: Budget Form (Excel)
 - o Attachment E2: Budget Form instructions
- Proposer Qualifications
- Letters of Support
- Attachments

Proposers must carefully review the Proposal Narrative to ensure that all required sections are completed. Failure to do so may result in the proposal being rejected as non-responsive.

V. PROPOSAL EVALUATION

Proposals will be reviewed by a Scoring Committee and will be scored and ranked according to the following criteria. After the submissions are reviewed, NYSERDA will issue a letter to each proposer indicating its Proposal evaluation results. Proposers receiving favorable evaluations will enter into contract negotiations with NYSERDA. After initial review of the Proposal, the Proposer, at NYSERDA's sole discretion, may be asked to address specific questions or provide additional information, either in writing or through an interview, as part of the Proposal scoring process (see Section VII. General Conditions). The proposer will be required to submit a detailed Statement of Work, budget, and schedule, and may also be asked to address specific recommendations of the Scoring Committee before contract award.

Evaluation Criteria:

Proposed Solution/Scope

- Does the proposed project specifically address a problem or opportunity identified in an Innovation Challenge Area in the PON and does it show potential to make significant progress in support of the Innovation Challenge Area?
- Is the proposed project likely to solve the problem or exploit the opportunity?
- Is the proposed work technically feasible, innovative, and superior to alternatives?
- Is the work strategy sound and does it have a clear commercialization strategy that is market-based and likely to be successful?
- Can the technical and commercial strategies be tested, measured, and adjusted with ease?
- Does the proposer exhibit an understanding of the state-of-the-art, competing products and alternative designs?
- Is an appropriate performance monitoring and data analysis effort included in the proposal?

New York State Impact & Project Benefits

- To what extent does the project support the Reforming the Energy Vision (REV) goals, grid modernization in general, the Clean Energy Standard, and the Clean Energy Fund goals in New York State?
- How significant are the potential reductions in GHG emissions or energy use resulting from the project?
- Will there be economic benefits in New York State in the form of subsequent manufacturing or technical service activity, intellectual property creation, revenue-generation, or job creation?
- Are the technical risks identified, appropriately addressed, and balanced by project benefits?
- Will a significant part of the work on the project take place in New York State?
- If monitoring baseline utility system operation is necessary to document system benefits, does the

Statement of Work include a provision to adequately gather baseline utility operational data?

• Are the risks to DER owners and end-users addressed and their impact factored in assessing project benefits?

Market Potential

- Does the proposed project address a current challenge or opportunity that is not being addressed by others?
- Is the implementation or commercialization strategy well-conceived and appropriate for the stage(s) of development?
- Has the proposer adequately and correctly described the target customer, defined their value proposition, and identified a real demand for the proposed solution?
- Does the proposed solution have the potential for wide-scale deployment in New York, nationally and globally?
- Is there a process or strategy in place to measure progress and success?
- How significant are the barriers to market entry and to mass adoption?
- Does the proposer demonstrate a clear understanding of the steps required to overcome these barriers?
- Have customers been identified and consulted regarding the value of the technology or solution?
- Does the proposal identify competing and alternate solutions, and clearly show why this product or concept is superior to, price competitive with, or provides value compared to alternative products or solutions?

Project Cost and Value

- Is the overall project cost justified based on the expected benefits?
- Relative to the project cost, how significant is the potential market or deployment opportunity?
- How appropriate are the proposer's co-funding contributions (sources and amounts) in view of the proposer's overall financial resources, degree of risk exposure, and potential to benefit from the work?
- Does the proposer have a reasonable plan for pursuing any additional funding necessary for full commercialization?

Project Team and Support

- To what degree does the team have relevant and necessary technical and commercial background and experience?
- Has the proposer previously commercialized any products?
- How firm are the commitments and support from essential participants, New York utilities or municipalities, co-founders, and other organizations?
- Has the proposer demonstrated support from necessary market enablers and potential customers?

Other Program Policy Factors

In addition to considering how project Proposals satisfy the Scoring Criteria listed above, NYSERDA reserves the right to make funding decisions based on other Program Policy Factors, including but not limited to:

New York State Energy Mission Alignment

- The degree to which the proposed project will advance the goals of the State Energy Plan / Clean Energy Fund / REV.
 - The State Energy Plan / Clean Energy Fund / REV goals include improving resilience and reducing greenhouse gas emissions. <u>https://rev.ny.gov/</u>
 - Project continues to contribute to one or more of NYSERDA's key statutory goals. <u>https://www.nyserda.ny.gov/About</u>

Program Portfolio Value and Optimization

- The degree to which NYSERDA ongoing funding, (including cost shares), will make a difference in the technology impact, acceleration of transformational advances and project success.
- The degree of overlap with other state and federal programs.
- The degree to which there are technical, market, organizational and/or environmental risks associated with the projects that outweigh the potential benefits.
- The past performance of the proposer on other technical and business endeavors, including NYSERDA and DOE, ARPA-E, NSF, (if the performance history is available).
- The degree of NYSERDA portfolio balance/optimization. The project(s) balance(s) and enhances the NYSERDA portfolio in one or more of the following areas:
 - Technological diversity
 - Organizational diversity
 - Geographic diversity
 - Technical or commercialization risk
 - Stage of technology development
 - Complimentary efforts to balance risk

Project Diversity, Leverage and Collaboration

- The consideration of the impact on, and benefits to, a diversity of communities/locations, including lowincome and rural communities, partnerships with minority serving and/or owned businesses.
- The degree of ongoing leverage; attracting other funding sources: building on the NYS capabilities: linking technologies and/or companies.
- The degree to which the applicant has enabled the resources (human, financial and physical) to be able to complete the project.
- The degree to which the project enables collaboration with nongovernmental and industry entities for demonstration of technologies and research applications to successfully facilitate technology transfer, leading to robust technology development and subsequent scaling and market adoption.
- The degree to which a proposer could attract investor funding as the project progresses, including seed, Series A, high net worth individuals and beyond.

VI. RECOUPMENT AND METRICS

Recoupment. For any new project **exceeding \$75,000** that involve product development and commercialization, including business development (see definition below), **NYSERDA will require a royalty based on sales and/or licensing of the new product developed** (Please see Attachment F, Sample Agreement for specific recoupment obligations).

Product Development and Commercialization: the method of bringing a new or improved product, system, or service to market, including technical feasibility, business case feasibility, market analysis, proof of concept, product design, engineering, scale up, and field testing. Field testing is the stage in which a technology, not yet commercially available with a warranty, is operated in real world conditions with results used for product iteration, market validation, or customer engagement.

Projects where NYSERDA's share of funding is \$75,000 or less will generally not require recoupment. However, should subsequent funds be awarded for further product development of the same or a substantially similar product, any funds previously received under the \$75,000 threshold will be added to the future recoupment obligation.

Please note: NYSERDA may decline to contract with awardees that are delinquent with respect to recoupment payments or sales reporting for any previous NYSERDA agreement.

Annual Metrics Reports. If awarded, the proposer will be required to submit to NYSERDA's Project Manager on an annual basis, a prepared analysis and summary of metrics addressing the anticipated energy, environmental and economic benefits that are realized by the project. All estimates shall reference credible sources and estimating procedures, and all assumptions shall be documented. Reporting shall commence the first calendar year after the contract is executed. Reports shall be submitted by January 31st for the previous calendar years' activities (i.e. reporting period). Please see Attachment G: Sample Metrics Reporting Guide for the metrics that you will be expected to provide and the reporting duration. NYSERDA may decline to contract with awardees that are delinquent with respect to metrics reporting for any previous or active NYSERDA agreement.

VII. GENERAL CONDITIONS

PROPRIETARY INFORMATION

Careful consideration should be given before confidential information is submitted to NYSERDA as part of your proposal. Review should include whether it is critical for evaluating a proposal, and whether general, nonconfidential information, may be adequate for review purposes. The NYS Freedom of Information Law, Public Officers law, Article 6, provides for public access to information NYSERDA possesses. Public Officers Law, Section 87(2)(d) provides for exceptions to disclosure for records or portions thereof that "are trade secrets or are submitted to an agency by a commercial enterprise or derived from information obtained from a commercial enterprise and which if disclosed would cause substantial injury to the competitive position of the subject enterprise." Information submitted to NYSERDA that the proposer wishes to have treated as proprietary, and confidential trade secret information, should be identified and labeled "Confidential" or "Proprietary" on each page at the time of disclosure. This information should include a written request to exempt it from disclosure, including a written statement of the reasons why the information should be exempted. See Public Officers Law, Section 89(5) 501. http://www.nyserda.ny.gov/About/and the procedures set forth in 21 NYCRR Part /media/Files/About/Contact/NYSERDA-Regulations.ashx. However, NYSERDA cannot guarantee the confidentiality of any information submitted.

OMNIBUS PROCUREMENT ACT OF 1992

It is the policy of New York State to maximize opportunities for the participation of New York State business enterprises, including minority- and women-owned business enterprises, as bidders, subcontractors, and suppliers on its procurement Agreements.

Information on the availability of New York subcontractors and suppliers is available from:

Empire State Development Division for Small Business 30 South Pearl Street Albany, NY 12245

A directory of certified minority- and women-owned business enterprises is available from:

Empire State Development Minority and Women's Business Development Division 30 South Pearl Street Albany, NY 12245 **State Finance Law sections 139-j and 139-k** - NYSERDA is required to comply with State Finance Law sections 139-j and 139-k. These provisions contain procurement lobbying requirements which can be found at https://online.ogs.ny.gov/legal/lobbyinglawfaq/default.aspx. Proposers are required to answer questions during proposal submission, which will include making required certification under the State Finance Law and to disclose any Prior Findings of Non-Responsibility (this includes a disclosure statement regarding whether the proposer has been found non-responsible under section 139-j of the State Finance Law within the previous four years).

Tax Law Section 5-a - NYSERDA is required to comply with the provisions of Tax Law Section 5-a, which requires a prospective contractor, prior to entering an agreement with NYSERDA having a value in excess of \$100,000, to certify to the Department of Taxation and Finance (the "Department") whether the contractor, its affiliates, its subcontractors and the affiliates of its subcontractors have registered with the Department to collect New York State and local sales and compensating use taxes. The Department has created a form to allow a prospective readily make certification. See, ST-220-TD contractor to such (available at http://www.tax.ny.gov/pdf/current forms/st/st220td fill in.pdf. Prior to contracting with NYSERDA, the prospective contractor must also certify to NYSERDA whether it has filed such certification with the Department. The Department has created a second form that must be completed by a prospective contractor prior to contacting and filed with NYSERDA. See, ST-220-CA (available at

<u>http://www.tax.ny.gov/pdf/current_forms/st/st220ca_fill_in.pdf</u> The Department has developed guidance for contractors which is available at <u>http://www.tax.ny.gov/pdf/publications/sales/pub223.pdf</u>

Contract Award - NYSERDA anticipates making multiple awards under this solicitation. A contract may be awarded based on initial applications without discussion, or following limited discussion or negotiations pertaining to the Statement of Work. Each proposal should be submitted using the most favorable cost and technical terms. NYSERDA may request additional data or material to support applications. NYSERDA will use the Sample Agreement (Attachment F) to contract successful proposals. NYSERDA may at its discretion elect to extend and/or add funds to any project funded through this solicitation. NYSERDA reserves the right to limit any negotiations to exceptions to standard terms and conditions in the Sample Agreement to those specifically identified in the checklist questions. Proposers should keep in mind that acceptance of all standard terms and conditions will generally result in a more expedited contracting process. NYSERDA expects to notify (proposers/applicants) in approximately 10 weeks from the proposal due date whether your proposal has been selected to receive an award. <u>NYSERDA may decline to contract with awardees that are delinquent with respect to any obligation under any previous or active NYSERDA agreement.</u>

Limitation - This solicitation does not commit NYSERDA to award a contract, pay any costs incurred in preparing a proposal, or to procure or contract for services or supplies. NYSERDA reserves the right to accept or reject any or all submissions received, to negotiate with all qualified sources, or to cancel in part or in its entirety the solicitation when it is in NYSERDA's best interest. NYSERDA reserves the right to reject submissions based on the nature and number of any exceptions taken to the standard terms and conditions of the Sample Agreement. NYSERDA reserves the right to disqualify proposers based upon the results of a background check into publicly available information and the presence of a material possibility of any reputational or legal risk in making of the award.

DISCLOSURE REQUIREMENT

The proposer shall disclose any indictment for any alleged felony, or any conviction for a felony within the past five years, under the laws of the United States or any state or territory of the United States and shall describe circumstances for each. When a proposer is an association, partnership, corporation, or other organization, this disclosure requirement includes the organization and its officers, partners, and directors or members of any similarly governing body. If an indictment or conviction should come to the attention of NYSERDA after the award of a contract, NYSERDA may exercise its stop-work right pending further investigation or terminate the agreement; the contractor may be subject to penalties for violation of any law which may apply in the particular circumstances.

Proposers must also disclose if they have ever been debarred or suspended by any agency of the U.S. Government or the New York State Department of Labor.

VENDOR ASSURANCE OF NO CONFLICT OF INTEREST OR DETRIMENTAL EFFECT

The proposer shall disclose any existing or contemplated relationship with any other person or entity, including any known relationships with any member, shareholders of 5% or more, parent, subsidiary, or affiliated firm, which would constitute an actual or potential conflict of interest or appearance of impropriety, relating to other clients/customers of the proposer or former officers and employees of NYSERDA, in connection with proposer's rendering services as proposed. If a conflict does or might exist, please describe how your company would eliminate or prevent it. Indicate what procedures will be followed to detect, notify NYSERDA of, and resolve any such conflicts.

The proposer must disclose whether it, or any of its members, or, to the best of its knowledge, shareholders of 5% or more, parents, affiliates, or subsidiaries, have been the subject of any investigation or disciplinary action by the New York State Commission on Public Integrity or its predecessor State entities (collectively, "Commission"), and if so, a brief description must be included indicating how any matter before the Commission was resolved or whether it remains unresolved.

PUBLIC OFFICERS LAW

For any resulting awards, the Contractor and its subcontractors shall not engage any person who is, or has been at any time, in the employ of the State to perform services in violation of the provisions of the New York Public Officers Law, other laws applicable to the service of State employees, and the rules, regulations, opinions, guidelines or policies promulgated or issued by the New York State Joint Commission on Public Ethics, or its predecessors (collectively, the "Ethics Requirements"). Proposers are reminded of the following Public Officers Law provision: contractors, consultants, vendors, and subcontractors may hire former NYSERDA employees. However, as a general rule and in accordance with New York Public Officers Law, former employees of NYSERDA may neither appear nor practice before NYSERDA, nor receive compensation for services rendered on a matter before NYSERDA, for a period of two years following their separation from NYSERDA service. In addition, former NYSERDA employees are subject to a "lifetime bar" from appearing before any state agency or authority or receiving compensation for services regarding any transaction in which they personally participated or which was under their active consideration during their tenure with NYSERDA.

Any awardee will be required to certify that all of its employees, as well as employees of any subcontractor, whose subcontract is valued at \$100,000 or more who are former employees of the State and who are assigned to perform services under the resulting contract, shall be assigned in accordance with all Ethics Requirements. During the term of any agreement, no person who is employed by the contractor or its subcontractors and who is disqualified from providing services under the contract pursuant to any Ethics Requirements may share in any net revenues of the contractor or its subcontractors derived from the contract. NYSERDA may request that contractors provide it with whatever information the State deems appropriate about each such person's engagement, work cooperatively with the State to solicit advice from the New York State Joint Commission on Public Ethics, and, if deemed appropriate by the State, instruct any such person to seek the opinion of the New York State Joint Commission on Public Ethics. NYSERDA shall have the right to withdraw or withhold approval of any subcontractor if utilizing such subcontractor for any work performed would be in conflict with any of the Ethics Requirements. NYSERDA shall have the right to terminate any contract at any time if any work performed is in conflict with any of the Ethics Requirements.

DUE DILIGENCE

NYSERDA, at its discretion, may conduct broad due diligence to validate any or all elements of an application and to assess applicants' prospects of success, including gathering information to assess a proposal relative to any of the topics listed in evaluation criteria, whether or not such topic is explicitly addressed in a proposal. NYSERDA may conduct due diligence on some or all proposals based on NYSERDA's current guidelines at the time of a review.

NYSERDA staff may follow up with proposers to request additional information or clarification regarding applicant's proposal, including questions regarding applicant's business prospects and resources, whether or not those questions are specifically related to the elements of the proposal. Additionally, customized due diligence may be conducted by internal or external staff or contractors based on questions on any proposal raised by NYSERDA staff and/or the Scoring Committee. Due diligence may include (but is not limited to): interviews of independent references and background checks of team members; assessment of prior business experience of any team member associated with a proposal; research on intellectual property claims; customer and partner reference checks; market research on the applicants' target market and any other related or possibly competitive technology or market area; research to validate any assumptions on current or future revenues, costs, capital needs, and financing prospects for proposers' business, including similar (or unrelated) technologies, processes, or competitive solutions; or any other research that could reasonably inform the evaluation of a proposal, or the prospects for commercial success of the proposers' business (whether directly related to, or unrelated to the specific elements in a proposal). Due diligence may include discussions with proposers' former and current business partners, employees, investors, customers, and competitors. Due diligence may be conducted by NYSERDA personnel or contractors including members of the scoring committee, before, during, or after a scoring process, and prior to finalization of a contract award, any information gleaned in diligence may be used to score or re-score a proposal

VIII. Attachments

- Attachment A Proposal Narrative Format
- Attachment B Statement of Work Template
- Attachment C TRL-CRL Calculator Workbook (Excel)
- Attachment D 3 Year Financial Projection Worksheet (Excel)
- Attachment E1 Budget Form (Excel)
- Attachment E2 Budget Form Instructions
- Attachment F Sample Agreement
- Attachment G1 Metrics Reporting Guide, Information Dissemination
- Attachment G2 Metrics Reporting Guide, Product Development
- Attachment G3 Metrics Reporting Guide, Demonstration



1

Retail Energy Storage Incentive Program Program Opportunity Notice (PON) 4112

NYSERDA reserves the right to extend and/or add funding to the solicitation should other program sources become available.

Retail Energy Storage Incentive Program Contractor

Applications Accepted through December 31, 2025

by 3:00 PM Eastern Time

The New York State Energy Research and Development Authority (NYSERDA)'s Retail Energy Storage Incentive Program ("Program") provides financial incentives for new gridconnected energy storage systems up to five megawatts (MW) of alternating current (AC) connection located either with load behind the meter or connected directly to the distribution system. Eligible energy storage systems are chemical, thermal, or mechanical systems compensated under a retail tariff or retail program that may be installed alone or paired with another distributed energy resource. Incentives are only available for permanent, stationary energy storage systems. Incentives are only available for Participating Contractors that have been approved in the Program. Participating Contractors must be fully responsible for all aspects of their energy storage projects funded under the Program. Funding for the Program has been allocated by the New York State Renewable Portfolio Standard (RPS); the New York State Clean Energy Fund (CEF) Fund; the Regional Greenhouse Gas Initiative (RGGI); the Order In the Matter of Energy Storage Deployment Program, dated December 13, 2018; and the Order Authorizing the Clean Energy Fund Framework, dated January 21, 2016.

Participating Contractor approvals will be granted on a first-come, first-served basis, and applications will be accepted through December 31, 2025. NYSERDA reserves the right to modify the application acceptance period. Participating Contractors will be approved to submit completed and signed Project Applications into the NYSERDA Portal, the Program database, as detailed in the Retail Energy Storage Incentive Program Manual.

To become a Participating Contractor in the Retail Energy Storage Incentive Program, interested parties must complete a Contractor Application in which they agree to abide by the terms and conditions of the Retail Energy Storage Incentive Participation Agreement and Program Manual. These documents are available online at https://www.nyserda.ny.gov/All-Programs/Programs/Energy-Storage/Developers-Contractors-and-Vendors/Retail-Incentive-Offer.

Energy storage project application submission: Participating Contractors must submit

completed and signed Project Application package into the NYSERDA Portal, the Program database, as detailed in the Program Manual.

Participating Contractor Application Submission: Potential Participating Contractors may apply, as detailed in the Retail Energy Storage Incentive Program Manual, on-line at: <u>https://www.nyserda.ny.gov/Funding-Opportunities/Current-Funding-Opportunities</u>, or submit one [1] clearly labeled, completed and signed Contractor Application package to:

NYS Energy Research and Development Authority 17 Columbia Circle Albany, NY 12203-6399 Contractor Application PON 4112 Attn: Ben Falber, Program Manager

Or by email to <u>energystorage@nyserda.ny.gov</u>.

Application questions may be sent to <u>energystorage@nyserda.ny.gov</u>. Please reference PON 4112 when contacting NYSERDA with questions.

All Contractual questions should be directed to Venice Forbes at (518) 862-1090, ext. 3507 or <u>VeniceSolicitations@nyserda.ny.gov</u>. All Technical questions should be directed to Benjamin Falber at (518) 862-1090, ext. 3050 or <u>energystorage@nyserda.ny.gov</u>.

Applications will not be accepted at any other NYSERDA location other than the address above. If changes are made to this solicitation, notification will be posted on NYSERDA's website at www.nyserda.ny.gov.

GENERAL CONDITIONS

Proprietary Information - Careful consideration should be given before confidential information is submitted to NYSERDA as part of your proposal. Review should include whether it is critical for evaluating a proposal, and whether general, non-confidential information, may be adequate for review purposes.

The NYS Freedom of Information Law, Public Officers law, Article 6, provides for public access to information NYSERDA possesses. Public Officers Law, Section 87(2)(d) provides for exceptions to disclosure for records or portions thereof that "are trade secrets or are submitted to an agency by a commercial enterprise or derived from information obtained from a commercial enterprise and which if disclosed would cause substantial injury to the competitive position of the subject enterprise." Information submitted to NYSERDA that the proposer wishes to have treated as proprietary, and confidential trade secret information, should be identified and labeled "Confidential" or "Proprietary" on each page at the time of disclosure. This information should include a written request to except it from disclosure, including a written statement of the reasons why the information should be excepted. See Public Officers Law, Section 89(5) and the procedures set forth in 21 NYCRR Part 501 <u>https://www.nyserda.ny.gov/About/-</u>

<u>/media/Files/About/Contact/NYSERDA-Regulations.ashx</u>. However, NYSERDA cannot guarantee the confidentiality of any information submitted.

Omnibus Procurement Act of 1992 - It is the policy of New York State to maximize opportunities for the participation of New York State business enterprises, including minority- and women-owned business enterprises, as bidders, subcontractors, and suppliers on its procurement Agreements.

Information on the availability of New York subcontractors and suppliers is available from:

Empire State Development Division for Small Business 625 Broadway Albany, NY 12207

A directory of certified minority- and women-owned business enterprises is available from:

Empire State Development Minority and Women's Business Development Division 625 Broadway Albany, NY 12207

State Finance Law sections 139-j and 139-k - NYSERDA is required to comply with State Finance Law sections 139-j and 139-k. These provisions contain procurement lobbying requirements which can be found at <u>https://online.ogs.ny.gov/legal/lobbyinglawfaq/default.aspx</u>. Proposers are required to answer questions during proposal submission, which will include making required certification under the State Finance Law and to disclose any Prior Findings of Non-Responsibility (this includes a disclosure statement regarding whether the proposer has been found non-responsible under section 139-j of the State Finance Law within the previous four years).

Tax Law Section 5-a - NYSERDA is required to comply with the provisions of Tax Law Section 5-a, which requires a prospective contractor, prior to entering an agreement with NYSERDA having a value in excess of \$100,000, to certify to the Department of Taxation and Finance (the "Department") whether the contractor, its affiliates, its subcontractors and the affiliates of its subcontractors have registered with the Department to collect New York State and local sales and compensating use taxes. The Department has created a form to allow a prospective contractor to readily make such certification. See, ST-220-TD http://www.tax.ny.gov/pdf/current_forms/st/st220td_fill_in.pdf). Prior to (available at contracting with NYSERDA, the prospective contractor must also certify to NYSERDA whether has filed such certification with the it Department. The Department has created a second form that must be completed by a prospective contractor prior to contacting and filed with NYSERDA. See, ST-220-CA (available at http://www.tax.ny.gov/pdf/current_forms/st/st220ca_fill_in.pdf). The Department has

developed guidance for contractors which is available at <u>http://www.tax.ny.gov/pdf/publications/sales/pub223.pdf</u>.

Contract Award - NYSERDA anticipates making multiple awards under this solicitation. A contract may be awarded based on initial applications without discussion, or following limited discussion or negotiations pertaining to the Statement of Work. Each offer should be submitted using the most favorable cost and technical terms. NYSERDA may request additional data or material to support applications. NYSERDA will use the Sample Agreement to contract successful proposals. NYSERDA may at its discretion elect to extend and/or add funds to any project funded through this solicitation. NYSERDA reserves the right to limit any negotiations to exceptions to standard terms and conditions in the Sample Agreement to those specifically identified in the checklist questions. Proposers should keep in mind that acceptance of all standard terms and conditions will generally result in a more expedited contracting process. NYSERDA expects to notify applicants in approximately 2-4 weeks from the receipt of an application whether your application has been selected to receive an award. NYSERDA may decline to contract with awardees that are delinquent with respect to any obligation under any previous or active NYSERDA agreement.

Accessibility Requirements - If awardees from this solicitation will be posting anything on the web, or if the awardee will produce a final report that NYSERDA will post to the web, the following language must be included. NYSERDA requires contractors producing content intended to be posted to the Web to adhere to New York State's Accessibility Policy. This includes, but is not limited to, deliverables such as: documents (PDF, Microsoft Word, Microsoft Excel, etc.), audio (.mp3, .wav, etc.), video (.mp4, .mpg, .avi, etc.), graphics (.jpg, .png, etc.), web pages (.html, .aspx, etc.), and other multimedia and streaming media content. For more information, see <u>NYSERDA's Accessibility Requirements</u>.

Limitation - This solicitation does not commit NYSERDA to award a contract or to pay any costs incurred in preparing any application. NYSERDA reserves the right to accept or reject any or all applications received, and to cancel in part or in its entirety the solicitation when it is in NYSERDA's best interest.

Disclosure Requirement - The proposer shall disclose any indictment for any alleged felony, or any conviction for a felony within the past five years, under the laws of the United States or any state or territory of the United States, and shall describe circumstances for each. When a proposer is an association, partnership, corporation, or other organization, this disclosure requirement includes the organization and its officers, partners, and directors or members of any similarly governing body. If an indictment or conviction should come to the attention of NYSERDA after the award of a contract, NYSERDA may exercise its stop-work right pending further investigation, or terminate the agreement; the contractor may be subject to penalties for violation of any law which may apply in the particular circumstances. Proposers must also disclose if they have ever been debarred or suspended by any agency of the U.S. Government or the New York State Department of Labor.

Vendor Assurance of No Conflict of Interest or Detrimental Effect - The proposer shall disclose any existing or contemplated relationship with any other person or entity, including any known relationships with any member, shareholders of 5% or more, parent, subsidiary, or affiliated firm, which would constitute an actual or potential conflict of interest or appearance of impropriety, relating to other clients/customers of the proposer or former officers and employees of NYSERDA, in connection with proposer's rendering services as proposed. If a conflict does or might exist, please describe how your company would eliminate or prevent it. Indicate what procedures will be followed to detect, notify NYSERDA of, and resolve any such conflicts. The proposer must disclose whether it, or any of its members, or, to the best of its knowledge, shareholders of 5% or more, parents, affiliates, or subsidiaries, have been the subject of any investigation or disciplinary action by the New York State Commission on Public Integrity or its predecessor State entities (collectively, "Commission"), and if so, a brief description must be included indicating how any matter before the Commission was resolved or whether it remains unresolved.

Public Officers Law - For any resulting awards, the Contractor and its subcontractors shall not engage any person who is, or has been at any time, in the employ of the State to perform services in violation of the provisions of the New York Public Officers Law, other laws applicable to the service of State employees, and the rules, regulations, opinions, guidelines or policies promulgated or issued by the New York State Joint Commission on Public Ethics, or its predecessors (collectively, the "Ethics Requirements"). Proposers are reminded of the following Public Officers Law provision: contractors, consultants, vendors, and subcontractors may hire former NYSERDA employees. However, as a general rule and in accordance with New York Public Officers Law, former employees of NYSERDA may neither appear nor practice before NYSERDA, nor receive compensation for services rendered on a matter before NYSERDA, for a period of two years following their separation from NYSERDA service. In addition, former NYSERDA employees are subject to a "lifetime bar" from appearing before any state agency or authority or receiving compensation for services regarding any transaction in which they personally participated or which was under their active consideration during their tenure with NYSERDA. Any awardee will be required to certify that all of its employees, as well as employees of any subcontractor, whose subcontract is valued at \$100,000 or more who are former employees of the State and who are assigned to perform services under the resulting contract, shall be assigned in accordance with all Ethics Requirements. During the term of any agreement, no person who is employed by the contractor or its subcontractors and who is disqualified from providing services under the contract pursuant to any Ethics Requirements may share in any net revenues of the contractor or its subcontractors derived from the contract. NYSERDA may request that contractors provide it with whatever information the State deems appropriate about each such person's engagement, work cooperatively with the State to solicit advice from the New York State Joint Commission on Public Ethics, and, if deemed appropriate by the State, instruct any such person to seek the opinion of the New York State Joint Commission on Public Ethics. NYSERDA shall have the right to withdraw or withhold approval of any subcontractor if utilizing such subcontractor for any work performed would be in conflict with any of the Ethics Requirements. NYSERDA shall have the right to

terminate any contract at any time if any work performed is in conflict with any of the Ethics Requirements.

For additional information about this program opportunity and to apply, please visit: <u>https://www.nyserda.ny.gov/All-Programs/Programs/Energy-Storage/Developers-Contractors-and-Vendors/Retail-Incentive-Offer</u>



Clean Heating and Cooling Community Campaigns Program Opportunity Notice (PON) 4114 Up to \$2.5 Million Available NYSERDA reserves the right to extend and/or add funding to the Solicitation should other program funding sources become available.

Proposals Due: September 18, 2019 by 3 PM Eastern Time

Program Summary: This New York State Energy Research and Development Authority (NYSERDA) Program Opportunity Notice (PON) 4114, the Clean Heating and Cooling Community Campaigns initiative, seeks proposals to implement communitybased outreach, education, and bulk procurement campaigns for clean heating and cooling (CH&C) technologies. Up to \$2.5 million is available through this PON. Similar to community campaigns used to support the adoption of solar photovoltaic technologies (i.e., "Solarize" campaigns), these campaigns aim to increase consumer awareness of CH&C technologies, reduce installed costs, and jump-start CH&C markets in local jurisdictions. Individual awards will not exceed \$550,000. Funding through this solicitation will offset costs for a paid campaign director, outreach initiatives, campaign events, volunteer development, increasing low-to-moderate income (LMI) customer participation, and workforce development and training. NYSERDA reserves the right to add or reduce the term and/or funding to awards.

Proposal Submission: Online submission is preferable. Proposers may submit Word, Excel, or PDF files (file formats include: csv, doc, docx, gif, jpeg, jpg, pdf, png, ppt, pptx, pps, ppsx, tif, txt, xls, xlsx, and zip). Individual files should be 100MB or less in file size. Proposal PDFs should be searchable and should be created by direct conversion from MS Word, or other conversion utility. Files should not be scanned. For ease of identification, all electronic files must be named using the proposer's entity name in the title of the document. NYSERDA will also accept proposals by mail or hand-delivery if online submission is not possible. For detailed instructions on how to submit a proposal (online or paper submission), click the link "Application Instructions and Portal Training <u>Guide</u> [PDF] " located in the "Current Opportunities" section of NYSERDA's website (https://www.nyserda.ny.gov/Funding-Opportunities/Current-Funding-Opportunities.aspx).

No communication intended to influence this procurement is permitted except by contacting program manager Scott Smith (Designated Contact) at (518) 862-1090, ext.

3344 or by e-mail <u>chccc@nyserda.ny.gov</u>., or project manager Sue Dougherty (Designated Contact) at (518) 862-1090, ext. 3127 or by e-mail <u>chccc@nyserda.ny.gov</u>. If you have contractual questions concerning this solicitation or cannot file through online submission, contact Nancy Marucci (Designated Contact) at (518) 862-1090, ext. 3335 or <u>NancySolicitations@nyserda.ny.gov</u>. Contacting anyone other than the Designated Contacts (either directly by the proposer or indirectly through a lobbyist or other person acting on the proposer's behalf) in an attempt to influence the procurement: (1) may result in a proposer being deemed a non-responsible offeror, and (2) may result in the proposer not being awarded a contract.

* All proposals must be received by 3 PM Eastern Time on the date noted above. Late, faxed, or emailed proposals will not be accepted. Incomplete proposals may be subject to disqualification. It is the proposer's responsibility to ensure that all pages have been included in the proposal. Please note: for online submission, there are required questions that you will have to answer in addition to uploading attachments and you should allot at least 60 minutes to enter/submit proposals. The online proposal system closes promptly at 3pm Eastern Time, files in process or attempted edits or submission after 3pm Eastern Time on the date above, will not be accepted. If changes are made to this solicitation, notification will be posted on the "Current Opportunities" section of NYSERDA's website (<u>https://www.nyserda.ny.gov/Funding-</u> Opportunities/Current-Funding-Opportunities.aspx).

I. Introduction

The heating and cooling of buildings is responsible for approximately 32% of all greenhouse gas (GHG) emissions in New York State. Demand for cooling will grow as our climate continues to warm. In support of New York State's nation-leading GHG emissions reduction goals—targeting 40% reduction of GHG emissions by 2030, and 80% by 2050—the New York State Energy Research and Development Authority (NYSERDA) has developed an integrated, long-term policy approach to addressing emissions from the heating and cooling sector.

Today, CH&C technologies occupy a niche position in the State's heating and cooling market. Several financial and non-financial barriers currently impede widespread market adoption, such as high upfront cost, supply chain barriers, consumer confidence and awareness barriers, and limited availability of affordable finance. Through this initiative NYSERDA intends to reduce these barriers by implementing community campaigns to promote local clustering of CH&C installations. Please refer to the <u>Renewable Heating and Cooling Policy</u> <u>Framework</u> for more information on applicable CH&C technologies, their market status, barriers and planned policy interventions.

Clean Heating and Cooling Community campaigns will be locally organized community outreach efforts at the county, city, town, borough or regional level aimed at getting groups of homes and small businesses to install CH&C technologies. Through a Campaign, the Community will (1) select one or more of the CH&C eligible technologies (see Section II) to promote; (2) organize to

deploy outreach and marketing strategies to educate the local residents and businesses on the benefits of the selected technology(ies); (3) competitively select one or more contractors to install CH&C for residents and businesses at discounted rates; and (4) provide reports to NYSERDA on the success of the campaign.

Community-based outreach, education, and bulk procurement campaigns, such as Solarize for photovoltaic (PV) solar technology, have been successful in reducing customer acquisition (and overall installation) costs, increasing consumer awareness of renewable technologies, and jump-starting solar PV markets in local jurisdictions. Since 2015, NYSERDA has successfully run a Solarize program as part of NY-SUN in collaboration with local governments, school districts, and other community organizations across the state.

The goals of Clean Heating and Cooling Community Campaigns include:

- Increase education and awareness of CH&C technologies
- Reduce costs associated with the purchase and installation of CH&C projects
- Increase local adoption of CH&C technologies
- Promote the installation of energy efficiency and load reduction improvement measures in coordination with CH&C installations
- Grow the available trained workforce
- Increase participation of LMI customers
- Identify campaign characteristics and approaches that are critical to success and should be replicated in other clean heating and cooling community campaigns

Funding is available for the following categories:

- Category A: Community Campaigns (required)¹
 - Multiple awards of up to \$75,000 per campaign inside Westchester County, Bronx County, New York County, Kings County, Richmond County, or Queens County. Maximum of four campaigns per Community.

¹ Applicants awarded funding for Category A under PON 3723 or PON 3922, but not awarded Category B and/or Category C, may reapply to Category B and/or Category C under this PON without reapplying for Category A.

- Multiple awards of up to \$50,000 per campaign outside of Westchester County, Bronx County, New York County, Kings County, Richmond County, or Queens County. Maximum of four campaigns per Community.
- Category B: Workforce Development and Training (optional)
 - Multiple awards of up to \$50,000 per Community
- Category C: LMI Customer Participation (optional)
 - Multiple awards of up to \$200,000 each

Proposal Submission Instructions

A proposing team or organization is referred to as a "Community" in this PON.

- Communities awarded under Category A for PONs 3723 and 3922 may directly apply for Categories B and/ or C without applying to Category A under this PON but may also apply for additional Category A funding under this PON.
- A Community that has not been awarded under Category A for the previous solicitations PON 3723 or PON 3922 are REQUIRED to apply for Category A under this PON; but may also apply for Category B and/or C.
- Each category that a Community applies to must include a proposal and a budget.
- A separate proposal must be submitted for each category.
- Communities previously awarded for Category B and or C under PON 3723 and PON 3922 may not apply for Category B and C under this PON.

NYSERDA Support

NYSERDA will provide the Communities with the following assistance during the 2- to 5-year contract duration:

- Direct financial support for multiple Communities to launch multi-year campaigns to select qualified installers and negotiate a reduced price for campaign enrollees.
- Feedback to Communities on plans for working with local financial institutions to develop point-of-sale financing offers and universities to

develop workforce development and training programs for Community campaign participants.

- A Technical Assistance Contractor to help select installers and provide technical support to Communities during implementation of the campaign, e.g., assistance in developing the content for marketing and outreach materials, training for Community volunteers, program administration, tracking, and analysis.
- Template documents for RFPs, installation best practices, and to assist marketing and outreach efforts. All contractors are expected to benefit from reduced customer acquisition costs, local marketing support, volume discounts, and other economies of scale. Some of the marketing support will come from leveraging the infrastructure that may have been developed in the Community during a previous Solarize campaign. While the CH&C templates and toolkits are still under development, communities can visit NYSERDA's Solarize website <u>here</u> to get a sense of what will be made available. NYSERDA will collaborate with selected proposers on development and finalization of CH&C templates and toolkits.

NYSERDA will be hosting a webinar for Proposers on August 20th, 2019 at 1PM ET. Proposers who intend to participate must register <u>here</u> by 12PM ET on August 19th, 2019. On the webinar, NYSERDA will review PON 4114 and proposal requirements.

II. Program Requirements

Eligibility

The community where the campaigns will be launched must be a county, city, town, borough, neighborhood (e.g. Flatbush) or region outside of Long Island with at least 40,000 residents.

Eligible Proposers

- Community based organizations (CBO)²
- Municipalities. As described further below, even if the municipality is not the proposer, it is required that the county, city, or borough government

² For the purpose of this funding opportunity, a CBO is defined as a public or private nonprofit organization that provides programs or services to address energy, environmental, housing, health, education, or other human service needs at the local level, has previously run Solarize campaigns or otherwise represents a Community in an organizing or advocacy role.

will be a supportive resource for the Community volunteer team during the campaign.

Team Members

Teaming is strongly encouraged and will increase the likelihood of an award. Team members recommended for partnership with the eligible proposers listed above include, but are not limited to:

- Local financial institutions
- Local education institutions which could include, K-12 schools, 2- or 4year, public or private college or university
- Local utilities
- Chamber of commerce

Category A: Community Campaigns

Each Community will recruit and hire or assign a Campaign Director. The Campaign Director (see below) will work with other team members on the elements of successful community campaigns listed below. The Campaign Director should be committed at least half time to the campaign. Proposers should enumerate their community specific approach to each category. In each category, a Community is also encouraged to propose activities additional to what is listed here.

Eligible Technologies

The Community will select at least one of the following CH&C technologies to promote as part of the CH&C Community Campaign initiative. Selecting multiple technologies provides residents and small businesses the opportunity to select the CH&C technology that best fits their needs and budget.

- Air-Source Heat Pumps (ASHPs): ASHPs provide space heating and cooling to residential and commercial buildings. ASHPs can be an efficient source of heating and cooling in cold climates like New York. Only cold-climate ASHP models (as defined by the Northeast Energy Efficiency Partnership) can be promoted by Communities through this program. For more information on this technology, click <u>here.</u>
- **Ground-Source Heat Pumps (GSHPs):** GSHPs (also referred to as geothermal heat pumps) provide space heating, space cooling, and, in some cases, hot water for residential and commercial buildings. GSHPs use an indoor heat pump unit and a heat exchanging ground loop buried

underground (or underwater) to transfer heat between the ground and the building. GSHPs typically use forced air distribution, so Communities with a prevalence of buildings with duct work or new construction efforts may be good candidates. For more information on this technology, click <u>here.</u>

- High Efficiency Low-emissions Biomass Heating: High-efficiency, lowemission wood heating systems provide a cleaner way to use wood for heat than traditional wood stoves and boilers. They can often integrate into existing heating distribution systems and can fulfill a building's heating and hot water needs. Because these advanced technologies are more efficient and cleaner burning, they burn less fuel and often save building owners money while reducing associated negative environmental impacts. The technologies eligible under this program include:
 - o Wood pellet boilers with thermal storage
 - o Advanced cordwood boilers with thermal storage
 - Wood pellet stoves

For more information on this technology, click here.

• Solar Heating and Cooling: Solar heating & cooling (SHC) technologies collect the thermal energy from the sun and use this heat to provide hot water, space heating, cooling, and pool heating for residential, commercial, and industrial applications.

Many solar heating and cooling installations in New York State and across the Northeast are designed and sized to serve hot water only, referred to as solar water heating or solar hot water (SHW). When both hot water and space heating uses are deployed, the system is referred to as a "solar combi-system." Buildings that do not have sufficient roof space for a solar PV system may still have enough roof space for a solar hot water system.

Solar air heating systems use solar energy to heat indoor spaces in commercial applications. Outside air is drawn in through the system and heated anywhere from 30-100 degrees above ambient before being ducted into the building's conventional HVAC system. The technology is also easily applied to municipal buildings such as affordable multi-residential housing, water treatment plants, schools, hospitals, vehicle maintenance garages, airports, universities and recreation facilities.

Like solar PV systems, the loss of solar insolation during the winter significantly affects production; thus, a secondary heating source is usually necessary during the winter. For more information on solar heating and cooling, click <u>here.</u>

• Heat Pump Water Heaters: Heat Pump Water Heaters (HPWH) are an affordable and energy efficient option for hot water in residential applications. HPWHs use electricity to transfer heat from indoor air to a tank to heat water and can be two to three times more efficient than an electric water heater. HPWHs also remove excess moisture from an indoor space and can be used as a dehumidifier. Certain HPWHs, while not classified by any entity as cold-climate capable, are certified by ENERGY STAR® and are allowable through this program. To learn more about these models, click here.

Heat Pump Ready

To optimize the performance of a clean heating and cooling system, it is important to ensure that the building envelope, distribution system, existing heating and cooling system, and electrical service are considered when determining the type of system and size of system necessary to meet the heating and cooling requirements of the building. Air sealing,³ insulation, and duct sealing can reduce heating/cooling loads and improve the overall energy efficiency of buildings and should be addressed when installing a new clean heating and cooling system.

Community campaigns must address the need to incorporate building envelope and duct improvements into the engineering and installation of clean heating and cooling systems by:

- Promoting NYSERDA and utility energy efficiency audit and incentive programs;⁴
- Selecting contractors or building science professionals⁵ to work with CH&C installers to provide energy assessments to identify opportunities to improve the overall efficiency of the building;

³ Air sealing can be blower door-assisted to identify sources of drafts and leaks, like those around recessed light fixtures, plumbing or electrical penetrations, attic covers, and other points of air infiltration of the building. Air sealing measures include weather-stripping or caulking of doors, windows, and skylights.

⁴ Including the NYSERDA's residential programs, as well as appliance and equipment rebates from utilities.

⁵ NYSERDA works with a network of certified residential and commercial contractors and engineering firms that provide energy assessment, "heat pump ready" services, and engineering studies.

• Educating residents and businesses on the importance and benefits of addressing the building envelope or distribution system before sizing and installing clean heating and cooling technology, as well as conducting education on how to effectively use heat pumps for supplemental heating and cooling.

The Technical Assistance provider will work with communities to determine the most effective approach for addressing building envelope and distribution system improvements into their campaigns, based on the objectives of the campaign and characteristics of the community. In addition, the Technical Assistance provider will help communities to identify programs and resources, educational materials, and other needs necessary to effectively incorporate building science considerations into the campaigns to ensure that installed clean heating and cooling systems are efficient and deliver the expected energy savings and environmental benefits.

Installer Selection

- Communities will be required to use a NYSERDA provided Request for Proposals template for installer selection. The selected installers will offer discounted pricing to participating Communities. As part of the installer selection process, selected Communities will appoint a Community review team, comprised of Community members and a Technical Assistance Contractor that NYSERDA will provide. The Community review team will evaluate qualified installers' proposals that have met threshold technical requirements.
- In the case of small companies that would not have the capacity to apply individually, multiple installers may partner.
- The Community will receive assistance from the Technical Assistance Contractor (see below) to support the bidding and registration process.

Outreach, Education, and Marketing

- Campaign events: Promotion and delivery of a series of events in the Community to educate residents and businesses on the benefits of CH&C technologies and spur enrollment.
- Campaigns should consider partnering with NYSERDA's local Clean Energy Communities Coordinators (CECC) for municipal outreach. You can find a list of CECCs <u>here</u>.
- Campaigns should also consider partnering with NYSERDA's Community Energy Engagement Program (CEEP) Community Energy Advisors for

residential, small business and multi-family building owner outreach. You can find a list of Community Energy Advisors <u>here</u>.

- Marketing and social media: Using the tool kit provided by NYSERDA (see below), develop and implement a plan to market the campaign.
- Open houses: Identify existing CH&C systems in the Community and arrange tours for enrollees of local CH&C systems.

Enroll, Track, and Close

- Enrollment and tracking: The Community will use a web-based system for enrollments and for tracking enrollee information including, but not limited to basic building/customer information, enrollment date, installer bids, contracting date, installation date, and inspection date.
- Campaign close: The Community will set a deadline for campaign enrollments.
- Reporting and lessons learned: Communities will provide monthly reports to NYSERDA on campaign activity. After the campaign is finished, the Community will work with the Technical Assistance Contractor to summarize the results, provide data on each installation to enable energy impact calculations, and develop lessons learned for future campaigns.

Category B: Workforce Development and Training

In early-stage CH&C markets like New York State, a lack of capacity to manufacture, distribute, design, install, and service reliable, high-quality, and standardized CH&C systems is a significant barrier to market scale. Many Heating, Ventilating, and Air Conditioning (HVAC), Solar Hot Water (SHW) and heat pump contractors have a limited understanding of how to sell, install, or price CH&C technologies and lack the proper training to educate consumers on lifecycle product performance and long-term cost savings potential. Similar challenges are seen among traditional designers, architects, and engineers.

In 2018, NYSERDA released a series of solicitations to support clean energy workforce development and training in New York State. NYSERDA has committed nearly \$70 million over the next 10 years to fund opportunities through the following solicitations:

• Energy Efficiency and Clean Technology Training (PON 3981): This program provides \$7 million in funding for training providers to develop and deliver training at all levels to meet employer needs. This funding is available for developing curriculum, delivering training, certification costs, hiring and training trainers, marketing; internships, job placement services,

apprenticeships, and for expanding the capacity of existing energy efficiency and clean energy training to meet a demonstrated business need related to hiring new workers or advancing existing workers.

- On-the-Job Training for Energy Efficiency and Clean Technology (PON 3982): This program provides \$10 million in wage support for clean energy businesses that hire new employees. This funding is available for On-the-Job Training (OJT) initiatives that advance the goals of the Clean Energy Fund (CEF) by developing a workforce equipped to implement energy efficiency and clean technology jobs. Incentives will be provided to businesses that hire workers for OJT so that new workers obtain field experience that cannot be gained by classroom training alone.
- New York State Clean Energy Internship Program (PON 4000): This
 program provides \$10.5 million to support intern wages for New York
 State businesses. This funding offers up to 90 percent reimbursement of
 intern wages to Clean Energy businesses on a sliding scale depending on
 the size of the business.

Among the Communities selected under Category A through this PON and through previous solicitations PON 3723 and PON 3922, additional awards will be made to Communities proposing a strategy to develop the local CH&C workforce. The Community's proposal must identify skill gaps in the local CH&C workforce and provide justification for the award. The Community should collaborate with experienced training partners.

Preference will be given to Communities that partner with NYSERDA training partners. A list of NYSERDA training partners can be found <u>here</u>. Should the Community partner with a training partner that is not on this list, the Community must demonstrate in its proposal its partner's qualifications and experience in workforce development and training. Preference will be given to an existing, vetted curriculum. If a new curriculum is proposed, the Community should justify the need and be prepared to support the accuracy and timeliness of proposed content.

Among the Communities selected under Category A through this PON and previous PON 3723, NYSERDA will award up to \$50,000 to Communities that propose effective and targeted workforce development and training initiatives. Any activities that are eligible for the Clean Energy Talent Pipeline solicitations should be proposed to PON 3981, 3982, or 4000 instead of to this solicitation.

Possible examples of workforce development and training strategies include:

• Partner with local community or technical colleges, or regional Boards of Cooperative Educational Services (BOCES), with HVAC Certification programs to coordinate applications for apprenticeships and/or on the job

training programs with CH&C technology installers. If eligible, the OJT would be funded through PON 3892.

- Partner with local experienced contractors to offer mentorship services to the less experienced HVAC and CH&C contractors.
- Work with local unemployment agencies to offer transportation to CH&C job sites.
- Conduct a local marketing, outreach and awareness campaign around the career opportunities in clean heating and cooling.

Category C: LMI Customer Participation

Nearly half of the households in New York State have low- to moderateincomes⁶. More than 2.3 million of these households have annual incomes below 60 percent of the state median income (SMI) and are eligible for energy bill payment assistance and no-cost energy efficiency and weatherization services. The financial burden of paying monthly energy bills can leave low- to-moderateincome New Yorkers stretching every dollar. A low-income household's energy burden⁷ can be more than 20 percent, compared to less than 6 percent energy burden for higher-income households.

Governor Cuomo's Reforming the Energy Vision (REV) initiative will provide New York State consumers and communities with new opportunities⁸ to participate in

⁷ A household's energy burden is defined as the ratio of energy costs to income.

⁸ Through the REV initiative, the NYS Public Service Commission (PSC) is considering opportunities to create access to community distributed generation (CDG) project for lowincome customers through Case 15-E-0082. In 2015, through Case 14-M-0024, the PSC enabled Community Choice Aggregation (CCA), which allows municipalities to procure the total amount of energy and related services being purchased by local residents or small businesses, effectively giving them more control to lower their overall energy costs. Through the value of DER proceeding, case 15-E-0751 the PSC is considering the compensation structure for DER in New York State. Under the Clean Energy Fund, which is a pillar of REV, NYSERDA has a strong commitment to provide access to clean energy solutions and energy affordability to LMI households through a series of initiatives that provide financial incentives for clean energy projects, as well as address the non-monetary barriers that can prevent clean energy projects from occurring.

⁶ NYSERDA Low- To Moderate-Income Market Characterization Report, February 2017. For detailed income eligibility guidelines, see <u>https://www.nyserda.ny.gov/All-</u> <u>Programs/Programs/EmPower-New-York/Eligibility-Guidelines</u> 55,176

their energy future by enabling the deployment of distributed energy resources (DER)⁹, such as CH&C projects. While these opportunities will provide consumers and communities with greater control over how they consume and source their energy, LMI communities often lack the technical expertise and financial resources to plan for, develop, and implement clean energy projects, preventing these communities from fully benefiting from the opportunities provided by REV.

LMI participation in community campaigns, such as Solarize, historically has been low due to higher barriers to installing clean energy faced by LMI households such as awareness of the benefits of clean energy technologies and limited financial resources. In certain regions or communities, such as where access to natural gas is limited, LMI households could benefit from increased access to CH&C technologies, reducing the risk of their exposure to volatile energy costs. The selected Community will be responsible for income determination when it implements its pilot project and should explain the basis for such determination in its proposal.

Communities are encouraged to propose a strategy to increase participation of LMI customers in campaigns. Among the Communities selected under Category A through this PON and previous solicitations, PON 3723 and PON 3922, multiple awards of up to \$200,000 may be made to Communities that propose effective ways to increase participation of LMI households in the campaign. This proposal does not need to be a detailed program description, but rather a four- to six-page proposal concept for how to enable participation of LMI households. NYSERDA may decide to work with the awarded proposer(s) to modify elements of the proposal to address state policy objectives related to energy affordability and access to distributed energy resources (DER) for LMI customers.

Examples of possible pilot projects to increase participation of LMI households include:

- Develop a pilot for one or more mobile home parks without access to natural gas to address energy efficiency and installation of heat pump solutions.
- Coordinate energy efficiency projects and CH&C installations that are tailored to LMI households, housing facilities, and apartment buildings.
- Partner with a philanthropic entity to offer reduced cost or credit enhanced financing to LMI households to reduce energy burdens.

⁹ DER is used to describe a wide variety of distributed energy resources, including end-use energy efficiency, demand response, distributed generation, and distributed storage.

- Identify opportunities to offer CH&C technologies as a long-term affordability solution for LMI customers.
- Test the affordability impacts of the incorporation of CH&C technologies as supplemental heat.

CH&C systems should only be proposed for locations where there is a clear economic benefit to the LMI household. Pilot projects should address critical market barriers for LMI households including:

- Building performance issues
- Access to affordable financing
- Awareness of the benefits of clean energy technologies

Roles and Responsibilities

Proposals should clearly identify each team member and its role in delivering a successful campaign.

Campaign Director

Communities will designate a Campaign Director. The main role of the Campaign Director is to be the primary contact between NYSERDA, the Community, and the installers. The Campaign Director's responsibilities will include:

- Develop a yearly Campaign Plan that will outline approaches to:
 - o technology selection
 - o installer selection
 - o outreach, education, and marketing
 - o and enrolling, tracking, and closing
- Manage the outreach and education efforts of the Core Volunteer Team (see description below) and additional volunteers
- Reach out to local community organizations, potential partners, and volunteers
- Form partnerships with large, local employers to promote the campaign to employees
- Organize volunteer distribution of information and marketing materials

- Organize and mobilize community networks over the course of the program
- Serve as point person for questions on program mechanics and basic CH&C information
- Develop communication tools unique to the community (i.e., Facebook page, Google group, etc.) based on the toolkit provided by NYSERDA
- Participate in check-in calls with NYSERDA and the installer(s)
- Participate in best practices sharing calls with other community campaigns

Core Volunteer Team

Communities will not only designate a Campaign Director to manage outreach efforts but will also develop a Core Volunteer Team. Experience from the Solarize program has demonstrated that defining the volunteer team structure at the onset of a campaign can be tremendously beneficial because it allows a Community to begin outreach immediately. It is recommended that each individual volunteer be considered for specific outreach efforts based on his or her interest and skillset. The roles listed below are not exhaustive and may or may not be applicable depending on Community-specific volunteer team structure. It is also understood that these roles may change or evolve throughout the campaign.

The following are examples of core volunteer roles:

- Chair of electronic communication and/or website
- Event planning
- Canvassing
- Volunteer development
- Outreach to resident organizations (civic groups, clubs, and places of worship)
- Person-to-person engagement and outreach

County, City, or Borough Representatives

It is required that the county, city, or borough government will be a supportive resource for the Community volunteer team during the campaign. Communities must demonstrate this through board resolutions and/or letters of support from a county official with decision-making authority, such as the County Executive. Proposals must include identification of the government representatives and resources that will be committed to the campaigns. The municipalities may support the campaign in several different ways:

- Utilizing municipal infrastructure for the benefit of the campaign, such as county email lists, mailers in tax bills or water bills, county press releases regarding the campaign, or announcements and links on a municipal website
- Providing space for community events, such as a Meet the Installer presentation, for minimal or no fee
- Leveraging county staff hours or additional funds
- Generally supporting the adoption of CH&C projects
- Collaborating with NYSERDA and the Technical Assistance Contractor on permitting review and streamlining efforts
- Collaborating with NYSERDA and the Technical Assistance Contractor on organizing code and safety trainings on selected CH&C technologies

These methods of support are not exhaustive and may or may not be applicable in each Community. However, the scope of municipal support will be reviewed as an important aspect of the Community selection process.

Financial Institutions

Proposers are encouraged to partner with a local bank or credit union to develop point-of-sale financing offers for community campaign enrollees. In comparison to the solar PV market, CH&C leasing models are not readily available. Most installers do not currently have a point of sale financing or lease they can offer customers for a CH&C system.

Education Institutions

Proposers are encouraged to partner with a local education institution. Collaborations with the higher education institution could include staffing campaigns with student and faculty volunteers, supporting local workforce development and training, showcasing an existing or new CH&C installation on campus and engaging faculty as campaign enrollees. Proposers teaming with education institution must include a letter of support for their proposal from a member of the higher education institution's administration with decision-making authority.

Proposers are also encouraged to collaborate with local community or technical colleges with HVAC certification programs. These colleges could support the community campaigns through apprenticeships with CH&C technology installers or to train students to become project inspectors (e.g., an IGSHPA Certified

Inspector). These students could assist with Quality Assurance work in the campaign.

Utilities

Proposers are encouraged to partner with the local electric and/or gas utility. This partnership can be beneficial to both parties as support from the utility can increase the likelihood of the success of a campaign. The utility can work to promote the campaign to a targeted list of their customers and otherwise help promote the campaign. Proposers should contact NYSERDA if they need assistance connecting with the local utility.

Available Funding

Up to \$2,500,000 is available through this PON¹⁰, consisting of:

Category A: Up to \$1,800,000 (multiple awards, up to \$300,000 each) for campaign support

Category B: Up to \$300,000 (multiple awards, up to \$50,000 each) to support additional workforce development and training initiatives to support the campaigns and local CH&C markets.

Category C: Up to \$400,000 (multiple awards, up to \$200,000 each) for Communities that propose an effective strategy to increase LMI household participation in the campaign.

III. Proposal Requirements

Category A:

Proposal Element	Description
Introduction, General Information, and Synopsis	Describe how you would run an effective Community campaign.
Describe Approach	Describe your approach to technology selection and which technologies the Community plans to include in the first campaign.
	Indicate how many campaigns, including campaign durations, the proposer is committing to run using this funding.

¹⁰ NYSERDA reserves the right to add to or reduce the term and/or funding to awards.

	Describe how the Community will leverage existing Solarize infrastructure.
	Indicate the availability of qualified installers for the selected technology(ies) that service the community and/or what steps will be taken to increase the number of qualified installers that service the community.
	Describe how building shell (insulation and air sealing) components will be addressed in the campaign.
Identify Community and Project Team	Indicate the factors that increase the likelihood of success in the target community such as:
	 The community has run another successful community campaign (e.g. Solarize).
	 The community is designated as a Clean Energy Community.
	The community has enabled <u>Property</u> <u>Assessed Clean Energy (PACE)</u> <u>financing.</u>
	 The community has a strong climate commitment.
	• The community has a high concentration of fuel oil, propane, and electric heat customers and/or an effort to eliminate fossil fuels.
	 The community has a natural gas restriction.
	Provide a list of all team members including: each member's role(s) and responsibilities in developing the proposal and implementing the project.
	Resumes of key individuals.

	The value and skills each member brings to the team and how their participation on the team strengthens the overall project. Designate a team lead who will be responsible for deliverables and outcomes. Each team member's existing NYSERDA contracts and commitments (if any).
Identify Challenges and Barriers to a Community Campaign	 Indicate anticipated challenges of a campaign specific to the target community and describe plans to overcome them. These challenges may include: Cost-effectiveness challenges. Inadequate access to low-cost investment capital. Limited customer awareness of and confidence in CH&C technologies. Supply chain gaps.
Project Impact	 Describe anticipated enrollments and installations as a result of the campaign(s). Develop a projection/goal for enrollment based on your Community's demographics and past experience. Develop a projection/goal for installations based on projected enrollment and past experience. Note: A spreadsheet is acceptable but should include a narrative.
Project Plan	Provide a project implementation plan that includes a timeline and budget.Please provide a budget(s) in the form of a table that indicates, by year, what the cost element is, describes the benefit/purpose, and indicates the amount. Please include a

separate budget for the LMI campaign and workforce development and training proposals if they are included.
Include answers to the following:
• Demonstrate commitment from all team members, institutions, and relevant stakeholders.
 Letters of support, as applicable.
 Identify and describe any anticipated barriers or challenges to project implementation and how the team plans to overcome them.

Category B:

Proposal Element	Description
Workforce Development and Training Strategy	 Proposers should include a workforce development and training component in their proposal. The workforce development and training proposal should indicate: The workforce development and training need, approach, and intended outcome. The training partner(s) and their qualifications. Preference will be given to NYSERDA training partners. A list of NYSERDA training partners can be found here. Who will be trained. What training courses will be used/developed and a description of the curriculum. Preference will be given to proposals that use existing curriculum, where available and appropriate.

• Whether the training will result in certification, continuing education or credit, and/or internship/apprenticeship.
 How the success of the workforce development and training will be measured and reported.
Proposers should provide a separate budget for this proposal element as described above.

Category C:

Proposal Element	Description
LMI Pilot Proposal	Develop a plan or series of strategies intended to target and increase the participation of the LMI residents within community campaigns.
	The LMI proposal should:
	• Characterize the LMI residents in the Community (e.g. how many LMI households there are, what fuels they use to heat their homes, etc).
	 Identify the target audience. Be clear on whether the pilot will address affordable building owners, low-income residents, moderate-income residents, or a combination. Present a clear plan for how the campaign will engage LMI residents or affordable building owners. Clearly articulate specific offerings for each customer type.
	 Explain how income eligibility will be determined.
	 Include expected outcomes such as increased enrollment and increased installations by LMI residents.

 Describe how the strategy contributes to an overall improvement in energy affordability for the targeted customers.
 Present a plan for measuring and verifying success.
 Present a clear plan for how the Community will ensure that CH&C systems are only installed at LMI residences where there is a clear economic benefit to the LMI residents.
 Present a clear articulation of incremental barriers to LMI resident adoption of clean energy and how they will be addressed.
 If the proposed project requires financial contributions from LMI customers, provide detail on the requirements.
 Describe how existing federal, state, and local LMI resources will be leveraged to increase success. Preference will be given to proposals that leverage resources beyond NYSERDA's programs.
Proposers should provide a separate budget for this proposal element as described above.

Unnecessary attachments beyond those sufficient to present a complete, comprehensive, and effective response will not influence the evaluation of the proposal. The proposal must be in the following format:

- Section 1: Introduction, General Information, and Synopsis (up to 2 pages)
- Section 2: Describe Approach (2-6 pages)
- Section 3: Identify Community and Project Team (1-2 pages)
- Section 4: Identify Challenges and Barriers to a Community Campaign (1-2 pages)
- Section 5: Project Impact (1-2 pages)
- Section 6: Project Plan (1-2 pages)

- Section 7: Optional Workforce Development and Training Strategy (2-4 pages)
- Section 8: Optional LMI Pilot Proposal (4-6 pages)
- Section 9: Qualifications (1-2 pages)
- Section 10: Statement of Work, Budget, and Timeline (2-4 pages)
- Appendices: Resumes of Key Personnel (1 page each)
- Letters of Support from Community residents, local government, local bank, local higher education institution official, the utility etc.

In compliance with §139-j and §139-k of the State Finance Law (see Section V, General Conditions below for additional information), proposers will be required to answer questions during proposal submission, which will include making required certification under the State Finance Law and to disclose any Prior Findings of Non-Responsibility.

IV. Proposal Evaluation

Proposals that meet solicitation requirements will be reviewed by a Scoring Committee using the Evaluation Criteria below listed in order of importance. NYSERDA reserves the right to select proposals based on the following factor(s):

Category A: Community Campaigns

- Is there a demonstrated commitment from local community leaders to support the campaign?
- Can and should the proposed plan be replicated in other communities?
- What CH&C technologies has the Community chosen? Is the choice welljustified and appropriate?
- Does the proposed campaign include building envelope improvements and air sealing?
- Is the community currently under a gas moratorium?
- Does the local municipality have an aggressive carbon reduction goal and plan?
- Does the Community have a sufficient capacity of qualified installers that service the area? If not, what is the plan to increase installer capacity?
- Have there been successfully completed CH&C project(s) in the Community?
- Has the Community run an active and successful community campaign (e.g. Solarize)?
- Is a local higher education institution included on the team?
- Is a financial institution included on the team?
- Is the local utility on the team?
- Is the team positioned to leverage community engagement and stimulate campaign participation?
- Has the local municipality enabled PACE financing?
- Is the Community designated as a Clean Energy Community?

- Does the Community have a high concentration of oil/propane or electric heat customers and/or an effort to eliminate No. 4 and No. 6 fuel oil?
- How supportive and involved will the municipality be of the campaign?
- Is the budget well justified and appropriate?
- References and Other Items:
 - Information provided by references
 - o Is the proposal well-organized, well-written, and complete?
- Relevant Experience and Qualifications:
 - o Qualifications, experience, and technical expertise
 - Other NYSERDA work and commitments
- Program Policy Factors:
 - The degree to which pricing and hourly rates are in line with the rest of the market.
 - Geographical diversity of Communities.
 - Diversity of CH&C technologies to be supported across campaigns.

Category B: Workforce Development and Training

- Does the proposal clearly identify skill gaps in the local CH&C workforce?
- Does the workforce development proposal provide a clear and well-conceived plan?
- Are the qualifications of the training provider sufficient?
- Is an existing, vetted curriculum used for training?
- Are the benefits of the proposed plan clear and do they justify the proposed investment?
- Does the proposed plan meet a well-described need?
- Is on the job training or apprenticeship included?
- Is the timing of the proposed plan appropriate and effective?
- Will the proposed plan provide clear and measurable benefit to the Community campaign?
- Is the budget well-justified and appropriate?

Category C: LMI Customer Participation

- Does the LMI proposal provide a clear and well-conceived plan?
- Is the proposed plan likely to increase LMI enrollment?
- Is the proposed plan likely to increase CH&C installation at LMI homes?
- Is the proposed plan one that could or should be replicated in other communities?
- Does the proposal address incremental barriers to installing clean energy that are faced by LMI residents?
- Does the proposed plan appropriately leverage other federal, state and local LMI resources beyond NYSERDA programs?

- Does the proposed pilot address the objectives of providing access to CH&C technologies while improving energy affordability and reducing energy burden from LMI customers?
- Is the budget well-justified and appropriate?

v. General Conditions

Proprietary Information - Careful consideration should be given before confidential information is submitted to NYSERDA as part of your proposal. Review should include whether it is critical for evaluating a proposal, and whether general, non-confidential information, may be adequate for review purposes. The NYS Freedom of Information Law, Public Officers law, Article 6, provides for public access to information NYSERDA possesses. Public Officers Law, Section 87(2)(d) provides for exceptions to disclosure for records or portions thereof that "are trade secrets or are submitted to an agency by a commercial enterprise or derived from information obtained from a commercial enterprise and which if disclosed would cause substantial injury to the competitive position of the subject enterprise." Information submitted to NYSERDA that the proposer wishes to have treated as proprietary, and confidential trade secret information, should be identified and labeled "Confidential" or "Proprietary" on each page at the time of disclosure. This information should include a written request to except it from disclosure, including a written statement of the reasons why the information should be excepted. See Public Officers Law, Section 89(5) and the procedures set forth in 21 NYCRR Part 501 https://www.nyserda.ny.gov/About/-/media/Files/About/Contact/NYSERDA-Regulations.ashx. However, NYSERDA cannot guarantee the confidentiality of any information submitted.

Omnibus Procurement Act of 1992 - It is the policy of New York State to maximize opportunities for the participation of New York State business enterprises, including minority- and women-owned business enterprises, as bidders, subcontractors, and suppliers on its procurement Agreements.

Information on the availability of New York subcontractors and suppliers is available from:

Empire State Development Division for Small Business 625 Broadway Albany, NY 12207

A directory of certified minority- and women-owned business enterprises is available from:

Empire State Development Minority and Women's Business Development Division 625 Broadway Albany, NY 12207 **State Finance Law sections 139-j and 139-k** - NYSERDA is required to comply with State Finance Law sections 139-j and 139-k. These provisions contain procurement lobbying requirements which can be found at

<u>https://online.ogs.ny.gov/legal/lobbyinglawfaq/default.aspx</u>. Proposers are required to answer questions during proposal submission, which will include making required certification under the State Finance Law and to disclose any Prior Findings of Non-Responsibility (this includes a disclosure statement regarding whether the proposer has been found non-responsible under section 139-j of the State Finance Law within the previous four years).

Tax Law Section 5-a - NYSERDA is required to comply with the provisions of Tax Law Section 5-a, which requires a prospective contractor, prior to entering an agreement with NYSERDA having a value in excess of \$100,000, to certify to the Department of Taxation and Finance (the "Department") whether the contractor, its affiliates, its subcontractors and the affiliates of its subcontractors have registered with the Department to collect New York State and local sales and compensating use taxes. The Department has created a form to allow a prospective contractor to readily make such certification. See, ST-220-TD (available at

<u>http://www.tax.ny.gov/pdf/current_forms/st/st220td_fill_in.pdf</u>). Prior to contracting with NYSERDA, the prospective contractor must also certify to NYSERDA whether it has filed such certification with the Department.

The Department has created a second form that must be completed by a prospective contractor prior to contacting and filed with NYSERDA. See, ST-220-CA (available at http://www.tax.ny.gov/pdf/current_forms/st/st220ca_fill_in.pdf). The Department has developed guidance for contractors which is available at http://www.tax.ny.gov/pdf/current_forms/st/st220ca_fill_in.pdf). The Department has

Contract Award - NYSERDA anticipates making multiple awards under this solicitation. A contract may be awarded based on initial applications without discussion, or following limited discussion or negotiations pertaining to the Statement of Work. Each offer should be submitted using the most favorable cost and technical terms. NYSERDA may request additional data or material to support applications. NYSERDA will use the Sample Agreement to contract successful proposals. NYSERDA may at its discretion elect to extend and/or add funds to any project funded through this solicitation. NYSERDA reserves the right to limit any negotiations to exceptions to standard terms and conditions in the Sample Agreement to those specifically identified in the checklist questions. Proposers should keep in mind that acceptance of all standard terms and conditions will generally result in a more expedited contracting process. NYSERDA expects to notify proposers in approximately 8 weeks from the proposal due date whether your proposal has been selected to receive an award. NYSERDA may decline to contract with awardees that are delinquent with respect to any obligation under any previous or active NYSERDA agreement.

Accessibility Requirements - If awardees from this solicitation will be posting anything on the web, or if the awardee will produce a final report that NYSERDA will post to the web, the following language must be included. NYSERDA requires contractors producing content intended to be posted to the Web to adhere to New York State's Accessibility Policy. This includes, but is not limited to, deliverables such as: documents (PDF, Microsoft Word, Microsoft Excel, etc.), audio (.mp3, .wav, etc.), video (.mp4, .mpg, .avi, etc.), graphics (.jpg, .png, etc.), web pages (.html, .aspx, etc.), and other multimedia and streaming media content. For more information, see <u>NYSERDA's</u> Accessibility Requirements.

Limitation - This solicitation does not commit NYSERDA to award a contract, pay any costs incurred in preparing a proposal, or to procure or contract for services or supplies. NYSERDA reserves the right to accept or reject any or all proposals received, to negotiate with all qualified sources, or to cancel in part or in its entirety the solicitation when it is in NYSERDA's best interest. NYSERDA reserves the right to reject proposals based on the nature and number of any exceptions taken to the standard terms and conditions of the Sample Agreement. NYSERDA reserves the right to disqualify proposers based upon the results of a background check into publicly available information and the presence of a material possibility of any reputational or legal risk in making of the award.

Disclosure Requirement - The proposer shall disclose any indictment for any alleged felony, or any conviction for a felony within the past five years, under the laws of the United States or any state or territory of the United States, and shall describe circumstances for each. When a proposer is an association, partnership, corporation, or other organization, this disclosure requirement includes the organization and its officers, partners, and directors or members of any similarly governing body. If an indictment or conviction should come to the attention of NYSERDA after the award of a contract, NYSERDA may exercise its stop-work right pending further investigation, or terminate the agreement; the contractor may be subject to penalties for violation of any law which may apply in the particular circumstances. Proposers must also disclose if they have ever been debarred or suspended by any agency of the U.S. Government or the New York State Department of Labor.

Vendor Assurance of No Conflict of Interest or Detrimental Effect - The proposer shall disclose any existing or contemplated relationship with any other person or entity, including any known relationships with any member, shareholders of 5% or more, parent, subsidiary, or affiliated firm, which would constitute an actual or potential conflict of interest or appearance of impropriety, relating to other clients/customers of the proposer or former officers and employees of NYSERDA, in connection with proposer's rendering services as proposed. If a conflict does or might exist, please describe how your company would eliminate or prevent it. Indicate what procedures will be followed to detect, notify NYSERDA of, and resolve any such conflicts.

The proposer must disclose whether it, or any of its members, or, to the best of its knowledge, shareholders of 5% or more, parents, affiliates, or subsidiaries, have been the subject of any investigation or disciplinary action by the New York State Commission on Public Integrity or its predecessor State entities (collectively, "Commission"), and if so, a brief description must be included indicating how any matter before the Commission was resolved or whether it remains unresolved.

Public Officers Law – For any resulting awards, the Contractor and its subcontractors shall not engage any person who is, or has been at any time, in the employ of the State to perform services in violation of the provisions of the New York Public Officers Law, other laws applicable to the service of State employees, and the rules, regulations, opinions, guidelines or policies promulgated or issued by the New York State Joint Commission on Public Ethics, or its predecessors (collectively, the "Ethics Requirements"). Proposers are reminded of the following Public Officers Law provision: contractors, consultants, vendors, and subcontractors may hire former NYSERDA employees. However, as a general rule and in accordance with New York Public Officers Law, former employees of NYSERDA may neither appear nor practice before NYSERDA, nor receive compensation for services rendered on a matter before NYSERDA, for a period of two years following their separation from NYSERDA service. In addition, former NYSERDA employees are subject to a "lifetime bar" from appearing before any state agency or authority or receiving compensation for services regarding any transaction in which they personally participated or which was under their active consideration during their tenure with NYSERDA.

Any awardee will be required to certify that all of its employees, as well as employees of any subcontractor, whose subcontract is valued at \$100,000 or more who are former employees of the State and who are assigned to perform services under the resulting contract, shall be assigned in accordance with all Ethics Requirements. During the term of any agreement, no person who is employed by the contractor or its subcontractors and who is disgualified from providing services under the contract pursuant to any Ethics Requirements may share in any net revenues of the contractor or its subcontractors derived from the contract. NYSERDA may request that contractors provide it with whatever information the State deems appropriate about each such person's engagement, work cooperatively with the State to solicit advice from the New York State Joint Commission on Public Ethics, and, if deemed appropriate by the State, instruct any such person to seek the opinion of the New York State Joint Commission on Public Ethics. NYSERDA shall have the right to withdraw or withhold approval of any subcontractor if utilizing such subcontractor for any work performed would be in conflict with any of the Ethics Requirements. NYSERDA shall have the right to terminate any contract at any time if any work performed is in conflict with any of the Ethics Requirements.

VI. Attachments:

Attachment A – Sample Agreement Attachment B – Category A Budget Attachment C – Categories B and C Budget



Electric Power Transmission and Distribution (EPTD) Future Grid Challenge Program Opportunity Notice (PON) 4128 Round 1 of 2 \$15 Million Available in Total with Up to \$3 Million Available per Challenge All, some, or none, of the available funds may be awarded

Round 1 Proposals Due: October 9,2019 by 3:00 PM EST (Round 2 to be announced at a later date)

The New York State Energy Research and Development Authority (NYSERDA) will issue a series of utility challenges through 2019 that have been defined in collaboration with New York State's Investor Owned Utilities (IOU). Each challenge is aligned with the host utility to improve the performance and validate value propositions in areas of significant potential, including productivity, resiliency, reliability and quality of the electric power delivery system. The host utilities will identify attributes to drive innovation and challenge the market place to develop systems that deliver solutions that are pertinent to their operational goals. Those attributes help establish a pathway for products and services to gain market entry.

Each Round of this solicitation will have one or more IOU challenges with available funding up to \$3 million per Challenge. Round 2 Challenges will be released at a date yet to be determined. NYSERDA will host a complimentary webinar to describe the host utility's challenge at the open of the round. Program updates can be found on NYSERDA's Smart Grid website:

https://www.nyserda.ny.gov/All-Programs/Programs/Smart-Grid-Program

Submissions must demonstrate significant improvements over the current state addressed by the challenges. The primary objective of the program is to accelerate the host utility's operational goals that promote a high performing smart grid with a diverse supply of clean energy generation resources, enhanced overall electric grid performance and enable customers to reduce their energy costs, energy consumption, and environmental impacts. Additional objectives include the development of smart grid technologies and their commercialization and deployment in New York State.

Round	Utility Challenge	Proposal Due Date ¹
1	Consolidated Edison	September 25, 2019
1	Orange & Rockland	
2 TBD TBD		TBD
1 - Dates are subject change. Proposers should check NYSERDA's website for the latest updates		

Proposal Submission – Online submission is preferable. Proposers may submit Word, Excel, or PDF files (file formats include: csv, doc, docx, gif, jpeg, jpg, pdf, png, ppt, pptx, pps, ppsx, tif, txt, xls, xlsx, and zip). Individual files should be 100MB or less in file size. Proposal PDFs should be searchable and should be

created by direct conversion from MS Word, or other conversion utility. Files should not be scanned. For ease of identification, all electronic files must be named using the proposer's entity name in the title of the document. NYSERDA will also accept proposals by mail or hand-delivery if online submission is not possible. For detailed instructions on how to submit a proposal (online or paper submission), click the link "Application Instructions and Portal Training Guide [PDF]" located in the "Current Opportunities" section of NYSERDA's website (https://www.nyserda.ny.gov/Funding-Opportunities/Current-Funding-Opportunities.aspx).

No communication intended to influence this procurement is permitted except by contacting Christopher Cheng (Designated Contact), (518) 862-1090 ext 3436, or Sumit Bose (Designated Contact) (518) 862-1090 ext 3130 or Michael Razanousky (Designated Contact) (518) 862-1090 ext 3245 or by e-mail <u>smartgrid@nyserda.ny.gov</u>. If you have contractual questions concerning this solicitation, contact Venice Forbes, (518) 862-1090 ext 3507 or by email <u>venicesolicitations@nyserda.ny.gov</u>. Contacting anyone other than the Designated Contacts (either directly by the proposer or indirectly through a lobbyist or other person acting on the proposer's behalf) in an attempt to influence the procurement: (1) may result in a proposer being deemed a non-responsible offerer, and (2) may result in the proposer not being awarded a contract.

* All proposals must be received by 3 p.m. Eastern Time on the date noted above. Late, faxed, or emailed proposals will not be accepted. Incomplete proposals may be subject to disqualification. It is the proposer's responsibility to ensure that all pages have been included in the proposal. Please note: for online submission, there are required questions that you will have to answer in addition to uploading attachments and you should allot at least 60 minutes to enter/submit proposals. The online proposal system closes promptly at 3 p.m. Eastern Time, files in process or attempted edits or submission after 3 p.m. Eastern Time on the date above, will not be accepted. If changes are made to this solicitation, notification will be posted on the "Current Opportunities" section of NYSERDA's website (https://www.nyserda.ny.gov/Funding-Opportunities/Current-Funding-Opportunities.aspx.

I. INTRODUCTION

The future transmission and distribution system will be dramatically different from that which is in place today. Systematic improvements to grid investments and operations are possible at all levels of the grid and are an essential element of the transformation of the grid and enable market development envisioned by NY's Reforming the Energy Vision (REV) initiative. In 2016, the Joint Utilities of New York filed their first Distributed System Implementation Plan (DSIP) that describes current capabilities and future goals to support REV. Each utility has since filed DSIP updates in 2018 that include their unique system challenges. This solicitation seeks to make investments that accelerate the realization of an advanced, digitally enhanced and dynamically managed high-performing electric grid for New York State. The focus of this solicitation will enable innovative solutions that directly address those unique challenges faced by each utility.

Projects that promote high performing smart grid technologies, components and/or systems within the New York regulated electric service territories (Consolidated Edison, Orange and Rockland, New York State Electric and Gas (Avangrid), Rochester Gas and Electric (Avangrid), Central Hudson Gas and Electric, and National Grid) and meet the Program Requirements are eligible for funding under this solicitation. Only those projects in Consolidated Edison and Orange and Rockland service territories will be considered for funding in Round 1. The program strives to coordinate its activities with the Reforming the Energy Vision

(REV) initiative being pursued in New York State. All projects must demonstrate broad public benefits to New York State.

Proposals will be evaluated in two distinct project categories listed below in Section III and scored on the evaluation criteria listed in Section VI of this solicitation. All of the submissions will be reviewed by a scoring committee comprised of both internal NYSERDA staff and outside experts including the host utility for the challenge area. All Proposals will be evaluated according to the quality and level of detail provided within page limits. Proposals must include substantive documentation addressing all scoring criteria items. NYSERDA, at its sole discretion, may ask for an in-person presentation of a Proposal before making a funding decision.

II. UTILITY CHALLENGE AREAS

This program will have two rounds. Each round will have a challenge area from one or more utility. Over the course of the solicitation, NYSERDA expects to issue the challenges for five IOU's: Consolidated Edison, Orange & Rockland, National Grid, Central Hudson Gas & Electric and Avangrid. Interested proposers should check each round for the specific Utility Challenge Area. NYSERDA reserves the right to add, delete, or modify any of the challenges over the course of the solicitation. All Proposals for Round 1 must address one of the following Utilities' Challenge Area.

1. Con Ed Challenge

See Attachment I. Questions regarding the challenge should be directed to the Designated Contact, Christopher Cheng, 518-862-1090 ext. 3436, <u>smartgrid@nyserda.ny.gov</u>

2. Orange & Rockland Challenge

See Attachment J. Questions regarding the challenge should be directed to the Designated Contact, Christopher Cheng, 518-862-1090 ext. 3436, <u>smartgrid@nyserda.ny.gov</u>

Do NOT contact the host utility with questions regarding this solicitation or to discuss potential proposals <u>under this solicitation</u>. All contact regarding this solicitation should be directed to the NYSERDA Designated Contact listed above.

III. PROJECT CATEGORIES

This solicitation includes two project categories. **Proposers must indicate under which category they are proposing.** Proposers should give careful consideration under which category to propose, as Proposal requirements differ, so inappropriate choices could negatively affect project selection results. Proposers are encouraged to contact NYSERDA (see cover page for instructions) with technical questions to promote complete understanding of the project categories as described below. One or both project categories may be utilized in a single proposal. The total NYSERDA funding request cannot exceed \$3 million.

Cost Sharing - The proposal should show non-NYSERDA funding of at least 25% of the total cost of the project. Cost sharing can be from the proposer, other team members, and other government or private sources. Contributions of direct labor (for which the laborer is paid as an employee) and purchased materials may be considered "cash" contributions. Unpaid labor, indirect labor, or other general overhead may be considered "in-kind" contributions. NYSERDA will not pay for efforts which have already been undertaken. The proposer or proposing team cannot claim as cost-share any expenses that have already

been incurred. Funding, either direct or in-kind, from the host utility may not be counted towards the 25% cost share requirement.

Category A: Product Development

Includes any work focused on bringing a new or improved product or service to market, including technical feasibility, business case feasibility, market analysis, proof of concept, product design, engineering, scale up, and field testing. Field testing is the stage in which a technology, not yet commercially available with a warranty, is operated in real world conditions with results used for product iteration, market validation, or customer engagement. Projects under this category include the development and commercialization of technologies and products for improving the resiliency, reliability, quality and efficiency of the electrical power delivery system. Note that bench-scale testing and field verification or testing may be included in Category A projects. Product Development projects may lead to a project proposal under Category B: Demonstration Projects to prove out the potential product or technology at a New York State site. Note: Product Development projects are subject to NYSERDA's recoupment terms described in Section VIII.

Category B: Demonstration

• A project intended to increase sales or usage of a commercialized product already in the marketplace, with results used to generate objective performance information for customers or policymakers. At this stage, the product is available for commercial sale and warranteed. While incremental improvements may be incorporated based on the demonstration results, the final product design is essentially complete. Projects in this category **should not** include technology or product development tasks. If technology or product development tasks are necessary, consider proposing in Category A. Projects in Category B should demonstrate innovative new or under-utilized products or technologies in pioneering applications. Proposers must clearly identify whether the demonstration project will support either transmission or local distribution operations.

NYSERDA reserves the right to negotiate the project category, scope of work, budget and funding levels on all awarded projects. Funding requests exceeding \$250,000 from NYSERDA shall be funded in phases separated by Go/No-Go decision points that will be evaluated by NYSERDA staff and the host utility.

Projects using both categories must also incorporate phases with Go/No-Go decision points. For example, a proposer may request consideration of a project that involves a Category A, Phase I Product Development, for product design of a new technology Go/No-Go Decision and then Category B, Demonstration, to validate performance.

- a. Projects with both categories shall briefly describe how it will complete the initial phase(s) and the following phase(s) along with significant milestones and provide an estimate of the total cost and schedule for each phase.
- b. Any contract awarded to fund projects with both categories does not in any way obligate NYSERDA to fund any more than the first phase. NYSERDA reserves the right to negotiate project Categories if it determines the project's efforts are a better fit for a different project Category.
 - i. NYSERDA anticipates issuing a contract with a maximum, "not-to-exceed" amount with subsequent phases only being awarded on a contingent basis as described below.
 - ii. NYSERDA reserves the right not to move forward with subsequent phases dependent on project success and availability of funding. Later phases may be funded if, in NYSERDA's

sole discretion, milestones from the previous phase have been satisfied, there is still significant potential market impact, and sufficient program funds remain.

- iii. NYSERDA expects it may award more contingent funding, due to project attrition, than is available for this program.
- iv. At the end of each phase, project outcomes will be evaluated to determine if the project will continue to be funded.

Winning proposers will be expected to conduct review meetings for all Go/No-Go Decisions and completion of phases.

NYSERDA encourages teaming arrangements that compliment core competencies to increase probability of success and commercialization of technologies that yield New York State benefits. Teams may include commercial firms, manufacturers, large original equipment manufacturers (OEM), industry associations, research organizations, universities, government agencies, corporate strategic partners, strategic investors, end-users, and other stakeholders. Include letters of commitment from each identified team member in the appendix to the proposal. To the extent possible, the team member responsible for commercializing the technology should be the proposer.

PROPOSERS ARE PROHIBITED FROM SEEKING LETTERS OF SUPPORT FROM THE HOST UTILITY DUE TO THEIR COLLABORATION WITH THE PON. Do not seek letters of support or commitment from the utility hosting the challenge area. The host utility's interest and support for the proposal will be incorporated through their participation in the proposal evaluation process. Proposers are reminded not to contact the host utility with questions regarding this solicitation or to discuss potential proposals under this solicitation with the host utility. Contacting the host utility may result in disqualification from eligibility. All contact regarding this solicitation should be directed to the NYSERDA Designated Contact listed in this solicitation.

IV. PROGRAM REQUIREMENTS

Projects proposed for funding must:

- 1. Address an innovative technology that improves the resiliency, reliability, performance, efficiency and provide new services for the electric power grid while meeting or exceeding the utility's requirement for the challenge area.
- Provide direct and quantifiable energy, environmental, and/or economic benefits to New York State such as emissions reductions (such as greenhouse gases and criteria air pollutants), job creation, product manufacturing and sales, increased resiliency and reliability, higher efficiency, and reduced electric costs.
- 3. Include a project budget using the Attachment E, Budget Form, showing total project cost and proposer cost share. Include a cost-sharing breakdown by project task in the Statement of Work (Sample Statement of Work included as Attachment B).
- 4. Satisfy recoupment obligations to NYSERDA for any new technology or product development effort requesting cumulative NYSERDA funding over \$75,000 upon product commercialization (see terms and conditions in Attachment F, Sample Agreement).
- 5. Demonstrate that the proposer and/or team of proposers are qualified to carry out the submitted project proposal.

- 6. Provide a strong rationale as to how the project will overcome barriers impeding the implementation or adoption of any new or under-utilized technology.
- 7. For projects that develop technologies or products, emphasize development and/or applications of marketable products for near-term commercialization, rather than basic research, and provide an assessment of the addressable market, and discuss an appropriate commercialization path and potential for manufacturing in New York State. Note that even in early-stage projects, initial activities focusing on commercialization (or technology deployment) paths and challenges are essential to assessing benefits, risks, and future resource requirements.
- 8. For demonstration projects, clearly identify how this project will increase sales or usage of a commercialized product already in the marketplace, generate objective performance information for customers or policymakers, and how such demonstration will lead to increased use of the product in New York State. Demonstration projects must be installed within New York State. See additional requirements for Demonstration Projects below.
- 9. Provide a letter of commitment from all funding sources and partners.
- 10. Demonstrate that the project and funding request addresses the utility challenge with technology advancements that are not being addressed adequately by current industry practices and/or federal and/or other state research priorities and funding. Include a cost and New York statewide public benefit analysis to justify allocation of funds.
- 11. At the end of the project, perform technology transfer meetings to the stakeholders in the state, industry and other utilities without disclosing utility-specific trade-secrets and/or intellectual property.

Other Considerations

- A proposal may be considered non-responsive if it fails to comply with the requirements of this solicitation.
- Prior to an award being made, potential contractors may be required to demonstrate access to financial resources sufficient to perform the proposed work, technical experience and adequate facilities (or the ability to access them), a good performance record, and the ability to qualify for an award under applicable laws and regulations.
- Preference will be given to proposers that provide higher cash contributions towards project costs.
- External funding partnerships are encouraged to leverage limited New York State resources. Proposers are encouraged to develop projects that leverage funding with external resources partners such as other research and development organizations.
- Proposers may be required to make an in-person presentation, at any time during the open solicitation period, to NYSERDA and host utility prior to a final decision being made.

ADDITIONAL PROGRAM REQUIREMENTS FOR CATEGORY B DEMONSTRATION PROJECTS ONLY

Projects selected for funding must:

- 1. Have a New York State demonstration site.
- 2. Be installed within 12 months of contract execution.
- 3. Address safety issues, including public safety, that are applicable to the demonstration project.
- 4. Comply with all applicable building, fire, electrical, and interconnection codes, standards, and requirements.
- 5. Provide equipment sensors, instrumentation, and a complete data acquisition system for remote monitoring and reporting as specified below.

- 6. Demonstrate the technology viability and monitor the performance, characteristics, and benefits for a period adequate to meet project goals. If the period is under 18 months, the proposer must discuss why the proposed time is adequate. Unless the proposer demonstrates a compelling reason otherwise, at least 365 operating days of data will be required after commissioning.
- 7. Present an economic analysis of the proposed technology demonstration including an estimated cost/benefit ratio, and a plan to measure the actual cost/benefit ratio during the demonstration. Commercially available proof of technology and its warranty is required.

Data Acquisition Requirements

NYSERDA intends to provide system level operation and performance information, including economic performance information, to all interested stakeholders (ex. New York electric utilities) and the general public on each of the demonstration projects funded under this solicitation. In order to meet this objective, each demonstration project must provide sufficient instrumentation and data transmittal, and analytical capabilities to allow the collection and analysis of technical and economic performance data.

The demonstration project proposal should include system operating data to be used for evaluation and generation of reports on the overall performance of the technology being demonstrated. Data acquisition sampling rates must be adequate to characterize the benefits and the value proposition of the proposed application. For example, sampling rates for applications designed to enhance power quality or system stability would be much higher than sampling rates for peak shaving or arbitrage applications. In the event that the demonstration system performs multiple activities, the system must provide for the collection of data for all activities. All raw and summary data collected at the project sites must be archived and protected from loss on permanent media.

Benefits Data Tracking and Reporting

Data sufficient to demonstrate the energy, environmental, and/or economic benefits defined in the proposal must be measured, collected, analyzed, and recorded. For applications that claim multiple benefits, the proposed data and analysis methods must adequately support the claimed benefit for each of the benefits specified in the proposal.

Reporting Requirements

The proposal must identify the project team member who will be responsible for the preparation and delivery of periodic written project reports. System operational summary information must be generated regularly and be included in progress reports. At a minimum, the system operational summary information must include the following:

- Raw data.
- System performance summary.
- Summary of system reliability and failure rates.
- A written summary of the economic benefit derived for the time period.
- A written summary of all operations and maintenance activities for the time period.
- System dispatch information and use patterns associated with the project, as appropriate.
- Energy consumption breakdown of parasitic loads introduced by the demonstration system, as appropriate.
- System performance under typical utility fault conditions, e.g. lightning strikes, primary phase to ground faults, voltage sags/spikes, electric outages, etc., as appropriate.
- System performance under user fault conditions, e.g. fault in customer plant, as appropriate.

Reports must be generated that consolidate all the information from the reports and summarize demonstration system performance for the preceding year.

Historical Performance Data Reporting

Where appropriate to document project benefits, historical utility system operational data prior to the installation of the demonstration system is required in order to provide credible baseline data on electrical system performance before and after the installation of the demonstration system. Information concerning load profiles, peaks, overloads, faults, power quality events, and any other information required to fully characterize the operation of the electrical utility at the demonstration site prior to installation of the demonstration system must be collected by the proposer for a reasonable period of time. Comparison information must be made part of the progress reports.

V. PROPOSAL REQUIREMENTS

Prior to Submission

Prior to submitting a Proposal to this solicitation, any proposers may communicate with NYSERDA's Designated Contact to discuss a concept and its potential responsiveness to this solicitation. Communication with NYSERDA staff prior to submission is entirely optional and is not required prior to submission.

Submissions and Review

Proposals determined to be compliant with application procedures and responsive to the solicitation will be subject to review by a scoring committee comprising NYSERDA, the host utility and external technical experts in accordance with Section VI, Proposal Scoring Criteria. Only the most technically meritorious Proposals will be awarded an invitation from NYSERDA to enter into a contract. Proposals not meriting an award for contracting may be debriefed.

To submit a Proposal, complete the Proposal Narrative form-fillable document as part of the PON (Attachment A). The Funding Category must be clearly indicated. The Proposal Narrative contains the following sections:

- Executive Summary
- Problem Statement and Proposed Solution
- State of Research and Technology Targets
 - Attachment C: Technology Readiness Level/Commercial Readiness Level Calculator
- Commercialization Potential of Proposed Product
 - Attachment D: Three-Year Financial Projections Worksheet
 - Demonstration Project Information (Category B)
- Statement of Work (Attachment B) and Schedule
- Project Benefits

•

- Budget Form (Attachment E)
- Proposer Qualifications
- Letters of Support
- Attachments

Proposers must carefully review the Proposal Narrative to ensure that all required sections are completed. Failure to do so may result in the proposal being rejected as non-responsive.

Note: The proposer's goal should be to concisely present the information needed to fully address the scoring criteria (see Section VI). Proposals that grossly exceed the word limits or fail to follow the format guidelines may be rejected as non-responsive. Proposals deemed non-responsive will not be eligible for awards. If you believe proprietary information must be submitted to provide an adequate proposal, you must comply with the Section VIII instructions for submitting proprietary material. Unnecessary attachments beyond those sufficient to present a complete, comprehensive, and effective proposal may reduce, rather than increase, a proposal's standing per the scoring criteria. Each page of the proposal should state the name of the proposer, the PON number (PON 4128), and the page number.

VI. PROPOSAL SCORING CRITERIA

Proposals will be reviewed by a Scoring Committee and will be scored and ranked according to the following criteria. After the submissions are reviewed, NYSERDA will issue a letter to each proposer indicating its Proposal evaluation results. Proposers receiving favorable evaluations will be invited to either submit a Proposal or enter into contract negotiations with NYSERDA. After initial review of the Proposal, the Proposer, at NYSERDA's sole discretion, may be asked to address specific questions or provide additional information, either in writing or through an interview, as part of the Proposal scoring process. The Proposer will be required to submit a detailed Statement of Work, Budget, and Schedule, and may also be asked to address specific recommendations of the Scoring Committee before contract award.

PROPOSAL SCORING CRITERIA:

Problem and Proposed Solution (All Categories) -

- Does the proposed project specifically address the problem or opportunity identified in the Challenge Area and does it show potential to make significant progress in support of the host utility's goals?
- Is the proposed work technically feasible, innovative, and superior to alternatives?
- Are the commercialization tasks likely to be effective in advancing the technology to market?
- Are fundamental scientific principles well understood and clearly presented?
- How appropriate are the cost, technical, performance and commercialization goals for the proposed technology or product?
- Does the proposer exhibit an understanding of the state-of-the-art, competing products and alternative designs?
- If the proposed work is a follow-on project to a previously co-funded NYSERDA or utility project, what was the outcome of the earlier phase?
- Does the proposed solution have a high potential for commercialization, addressing demonstrated customer needs and significant markets?

Proposed Work (Category B only) -

- How significant is the demonstration opportunity to New York State?
- How well does the proposed solution address the problem or opportunity?
- Is the proposed demonstration innovative and is it appropriate that the proposed demonstration be funded under this program as opposed to a NYSERDA program that provides incentives to install certified, commercially-ready technologies?
- Is the proposed demonstration well-conceived, technically feasible, and superior to alternatives?
- Does the proposer exhibit an understanding of the state-of-the-art, competing products and

alternative designs?

- Is an appropriate performance monitoring and data analysis effort included in the proposal?
- If the proposed work is follow-on to a previously co-funded NYSERDA or utility project, what was the outcome of the earlier phase?
- Will the proposer be able to meet the contractual considerations from the utility as described in Appendices I and J?

New York State Impact and Project Benefits (All Categories) -

- To what extent does the project support the Reforming the Energy Vision (REV) goals, grid modernization in general, the Clean Energy Standard, and the Clean Energy Fund goals in New York State?
- To what extent will there be economic benefits in New York State in the form of subsequent commercial activity and economic growth?
- Are the appropriate letters of support and/or commitments included in the proposal?
- How well are the potential benefits to New York State quantified?
- How likely is it that the projected benefits will be realized?
- Does the proposed project have favorable energy, efficiency, environmental and/or economic impacts in New York State? How significant are these impacts?
- Are the technical risks identified, appropriately addressed, and balanced by project benefits?
- Does the proposal address an innovative technology that improves performance, quality or reliability / resiliency of the electric power system?

Statement of Work and Schedule -

- How appropriate are the technical, performance and commercialization goals for the proposed project?
- Do the proposed technical and performance goals adequately allow for measurement and verification of the success of the proposed project?
- Does the work strategy in the Statement of Work include technical and business development tasks and is likely to achieve the technical, performance and commercialization goals?
- Does the Statement of Work include an economic analysis of the technology based on performance measurements?
- Is the Statement of Work well organized, complete, and appropriate for the technical, performance and commercialization goals identified?
- How realistic is the schedule for achieving the goals of the proposed project?
- Is the proposed level of effort reasonable to complete the proposed project?
- Are the proposed milestones and tasks reasonable and complete in details?
- Are Go/No-Go decision points incorporated at between logical task/phase completion and funding requests.

The following criteria apply to Category B projects only:

- Are the data acquisition, monitoring, and reporting plans reasonable and do they meet the requirements in Section IV, ADDITIONAL PROGRAM REQUIREMENTS FOR CATEGORY B DEMONSTRATION PROJECTS ONLY?
- Is the benefits tracking plan reasonable and does it meet the requirements in Section V, ADDITIONAL PROGRAM REQUIREMENTS FOR CATEGORY B DEMONSTRATION PROJECTS ONLY?
- If monitoring baseline utility system operation is necessary to document system benefits, does the Statement of Work include a provision to adequately gather baseline utility operational data?

Proposer / Team Qualifications -

- Has the proposer provided evidence of being qualified to perform the proposed work based on the qualifications of the organization(s) and the involved individual(s)?
- Were resumes of key individuals included in the proposal?
- To what degree does the proposer and team have the necessary technical and business background and experience?
- Has the proposer provided evidence of good past performance on other relevant projects?
- Is the proposing team appropriately organized?
- Are staff allocations and responsibilities reasonable?

Project Cost and Value (All Categories) -

- Is the overall project cost justified and reasonable based on the level of effort proposed and the expected outcome and benefits?
- How significant is the potential market opportunity relative to the project cost?
- How appropriate are the proposer's co-funding contributions (sources and amounts) with respect to the degree of risk, potential to benefit from the work, and financial status of the organization?
- How firm are the commitments and support from essential participants, co-funders, and related businesses and other organizations?
- Are the overhead rates reasonable and supported with appropriate documentation?
- Are equipment, facility, material, and travel costs based on reasonable estimates?
- Are the labor rates reflective of the industry?

Technology Transfer / Repeatability-

- Does the proposed technology have commercial applications at other New York State sites?
- Does the proposed project demonstrate an effective strategy and strong potential for the project to lead to future use of the technology in New York?
- Does the proposed technology address market needs?

Business/Commercialization Plan -

- Is the proposed product or concept likely to be successful?
- Are there sufficient markets or needs for the concept/technology?
- How significant is the commercial potential of this technology?
- How widely deployed can the technology be, both in New York and globally?
- Are the business and commercialization or replication plans appropriate for the type of project and stage of development?
- How significant are the barriers to market entry?
- Does the proposer demonstrate a clear understanding of the steps required to overcome these barriers?
- Have customers been identified and consulted regarding the value of the technology or solution?
- Is the value proposition of the technology well matched to the expressed needs of the customer segments being targeted?
- Does the proposal identify competing and alternate solutions, and clearly show why this product or concept is superior to, price competitive with, or provides value compared to alternative products or solutions?
- If follow-on financial resources are necessary, are plans to raise necessary financial resources likely to be successful?

- How well are the project tasks directed at identifying and fulfilling customer requirements? How far will execution of the work plan take the product to full commercialization?
- Would achievement of technical and business goals position the company to raise capital or realize revenue from the product before NYSERDA funding is exhausted?

Other Program Policy Factors – In addition to considering how project Proposals satisfy the Scoring Criteria listed above, NYSERDA reserves the right to make funding decisions on the basis of other Program Policy Factors, including but not limited to:

New York State Energy Mission Alignment

- The degree to which the proposed project will advance the goals of the State Energy Plan / Clean Energy Fund / REV.
 - The State Energy Plan / Clean Energy Fund / REV goals include improving resilience and reducing greenhouse gas emissions. <u>https://rev.ny.gov/</u>
 - Project continues to contribute to one or more of NYSERDA's key statutory goals. https://www.nyserda.ny.gov/About

Program Portfolio Value and Optimization

- The degree to which NYSERDA ongoing funding, (incl. cost shares), will make a difference in the technology impact, acceleration of transformational advances and project success.
- The degree of overlap with other state and federal programs.
- The degree to which there are technical, market, organizational and/or environmental risks associated with the projects that outweigh the potential benefits.
- The past performance of the proposer on other technical and business endeavors, including NYSERDA and DOE, ARPA-E, NSF, (if the performance history is available).
- The degree of NYSERDA portfolio balance/optimization. The project(s) balance(s) and enhances the NYSERDA portfolio in one or more of the following areas:
 - Technological diversity
 - o Organizational diversity
 - Geographic diversity
 - Technical or commercialization risk
 - Stage of technology development
 - Complimentary efforts to balance risk

Project Diversity, Leverage and Collaboration

- The consideration of the impact on, and benefits to, a diversity of communities/locations, including low-income and rural communities, partnerships with minority serving and/or owned businesses.
- The degree of ongoing leverage; attracting other funding sources: building on the NYS capabilities: linking technologies and/or companies.
- The degree to which the applicant has enabled the resources (human, financial and physical) to be able to complete the project.
- The degree to which the project enables collaboration with nongovernmental and industry entities for demonstration of technologies and research applications to successfully facilitate technology transfer, leading to robust technology development and subsequent scaling and market adoption.

• The degree to which a proposer could attract investor funding as the project progresses, including seed, Series A, high net worth individuals and beyond.

VII. RECOUPMENT AND METRICS

Recoupment - For any new projects exceeding \$75,000 in NYSERDA funding that involve product development, including business development, NYSERDA will require a royalty based on sales and/or licensing of the new product developed (Please see Attachment F, Sample Agreement for specific recoupment obligations). Recoupment is not required for demonstration projects. Please see the definitions below to determine if your project will be subject to recoupment. Please note that NYSERDA will make final determinations as to whether proposals fit within the demonstration or product development categories.

- <u>Product Development:</u> Includes any work focused on bringing a new or improved product or service to market, including technical feasibility, business case feasibility, market analysis, proof of concept, product design, engineering, scale up, and field testing. Field testing is the stage in which a technology, not yet commercially available with a warranty, is operated in real world conditions with results used for product iteration, market validation, or customer engagement. Projects under this category include the development and commercialization of technologies and products for improving the resiliency, reliability, quality and efficiency of the electrical power delivery system. Note that bench-scale testing and field verification or testing may be included in Category B: Demonstration Projects to prove out the potential product or technology at a New York State site. Note: Product Development projects are subject to NYSERDA's recoupment terms described in Section VII.
- <u>Demonstration</u>: a project intended to increase sales or usage of a commercialized product already in the marketplace, with results used to generate objective performance information for customers or policymakers. At this stage, the product is available for commercial sale and warranted. While incremental improvements may be incorporated based on the demonstration results, the final product design is essentially complete. Note: pilot deployments or other field demonstrations that will inform additional product development will be considered as a Product Development project and therefore subject to recoupment.

Projects where NYSERDA's share of funding is \$75,000 or less will generally not require recoupment. Please note: NYSERDA may decline to contract with awardees that are delinquent with respect to recoupment payments or sales reporting for any previous NYSERDA agreement.

Annual Metrics Reports – If awarded, the proposer will be required to submit to NYSERDA's Project Manager on an annual basis, a prepared analysis and summary of metrics addressing the anticipated energy, environmental and economic benefits that are realized by the project. All estimates shall reference credible sources and estimating procedures, and all assumptions shall be documented. Reporting shall commence the first calendar year after the contract is executed. Reports shall be submitted by January 31st for the previous calendar years' activities (i.e. reporting period). Please see Attachment H1 & H2: Sample Metrics Reporting Guides for the metrics that you will be expected to provide and the reporting duration. NYSERDA may decline to contract with awardees that are delinquent with respect to metrics reporting for any previous or active NYSERDA agreement.

VIII. GENERAL CONDITIONS

Confidential and Proprietary Information - Careful consideration should be given before confidential information is submitted to NYSERDA as part of your proposal. Review should include whether it is critical for evaluating a proposal, and whether general, non-confidential information, may be adequate for review purposes. The NYS Freedom of Information Law, Public Officers law, Article 6, provides for public access to information NYSERDA possesses. Public Officers Law, Section 87(2)(d) provides for exceptions to disclosure for records or portions thereof that "are trade secrets or are submitted to an agency by a commercial enterprise or derived from information obtained from a commercial enterprise and which if disclosed would cause substantial injury to the competitive position of the subject enterprise." Information submitted to NYSERDA that the proposer wishes to have treated as proprietary, and confidential trade secret information, should be identified and labeled "Confidential" or "Proprietary" on each page at the time of disclosure. This information should include a written request to except it from disclosure, including a written statement of the reasons why the information should be excepted. See Public Officers Law, Section 89(5) and the procedures set forth in 21 NYCRR Part 501 https://www.nyserda.ny.gov/About/-/media/Files/About/Contact/NYSERDA-Regulations.ashx.

Omnibus Procurement Act of 1992 - It is the policy of New York State to maximize opportunities for the participation of New York State business enterprises, including minority- and women-owned business enterprises, as bidders, subcontractors, and suppliers on its procurement Agreements.

Information on the availability of New York subcontractors and suppliers is available from:

Empire State Development Division for Small Business 625 Broadway Albany, NY 12207

A directory of certified minority- and women-owned business enterprises is available from:

Empire State Development Minority and Women's Business Development Division 625 Broadway Albany, NY 12207

State Finance Law sections 139-j and 139-k - NYSERDA is required to comply with State Finance Law sections 139-j and 139-k. These provisions contain procurement lobbying requirements which can be found at https://online.ogs.ny.gov/legal/lobbyinglawfaq/default.aspx. Proposers are required to answer questions during proposal submission, which will include making required certification under the State Finance Law and to disclose any Prior Findings of Non-Responsibility (this includes a disclosure statement regarding whether the proposer has been found non-responsible under section 139-j of the State Finance Law within the previous four years).

Tax Law Section 5-a - NYSERDA is required to comply with the provisions of Tax Law Section 5-a, which requires a prospective contractor, prior to entering an agreement with NYSERDA having a value in excess

of \$100,000, to certify to the Department of Taxation and Finance (the "Department") whether the contractor, its affiliates, its subcontractors and the affiliates of its subcontractors have registered with the Department to collect New York State and local sales and compensating use taxes. The Department has created a form to allow a prospective contractor to readily make such certification. See, ST-220-TD (available at http://www.tax.ny.gov/pdf/current_forms/st/st220td_fill_in.pdf). Prior to contracting with NYSERDA, the prospective contractor must also certify to NYSERDA whether it has filed such certification with the Department. The Department has created a second form that must be completed by a prospective contractor prior to contacting and filed with NYSERDA. See, ST-220-CA (available at http://www.tax.ny.gov/pdf/current_forms/st/st220td_fill_in.pdf). The Department has developed guidance for contractors which is available at http://www.tax.ny.gov/pdf/current_forms/st/st220td_fill_in.pdf). The Department has developed guidance for contractors which is available at http://www.tax.ny.gov/pdf/current_forms/st/st220ca_fill_in.pdf). The Department has developed guidance for contractors which is available at http://www.tax.ny.gov/pdf/current_forms/st/st220ca_fill_in.pdf). The Department has developed guidance for contractors which is available at http://www.tax.ny.gov/pdf/publications/sales/pub223.pdf

Contract Award - NYSERDA anticipates making multiple awards under this solicitation. NYSERDA anticipates a contract duration of up to three (3) years, unless NYSERDA management determines a different structure is more efficient based upon proposals received. A contract may be awarded based on initial applications without discussion, or following limited discussion or negotiations pertaining to the Statement of Work. Each proposal should be submitted using the most favorable cost and technical terms. NYSERDA may request additional data or material to support applications. NYSERDA will use the Sample Agreement (Attachment F) to contract successful proposals. NYSERDA may at its discretion elect to extend and/or add funds to any project funded through this solicitation. NYSERDA reserves the right to limit any negotiations to exceptions to standard terms and conditions in the Sample Agreement to those specifically identified in the checklist questions. Proposers should keep in mind that acceptance of all standard terms and conditions will generally result in a more expedited contracting process. NYSERDA expects to notify proposers in approximately six (6) weeks from the proposal due date whether your proposal has been selected to receive an award. NYSERDA may decline to contract with awardees that are delinquent with respect to any obligation under any previous or active NYSERDA agreement.

Recoupment - For any new product research and/or development, NYSERDA will generally require a royalty based on sales of the new product developed. NYSERDA's standard royalty terms are 1% of sales/ten percent (10%) of all license revenue accruing to the Contractor for products produced (for a period of fifteen years or until the Contractor pays NYSERDA an amount equal to the amount of funds paid by NYSERDA to the Contractor, whichever comes first).

Accessibility Requirements - If awardees from this solicitation will be posting anything on the web, or if the awardee will produce a final report that NYSERDA will post to the web, the following language must be included. NYSERDA requires contractors producing content intended to be posted to the Web to adhere to New York State's Accessibility Policy. This includes, but is not limited to, deliverables such as: documents (PDF, Microsoft Word, Microsoft Excel, etc.), audio (.mp3, .wav, etc.), video (.mp4, .mpg, .avi, etc.), graphics (.jpg, .png, etc.), web pages (.html, .aspx, etc.), and other multimedia and streaming media content. For more information, see <u>NYSERDA's Accessibility Requirements</u>.

Limitation - This solicitation does not commit NYSERDA to award a contract, pay any costs incurred in preparing a proposal, or to procure or contract for services or supplies. NYSERDA reserves the right to accept or reject any or all proposals received, to negotiate with all qualified sources, or to cancel in part or in its entirety the solicitation when it is in NYSERDA's best interest. NYSERDA reserves the right to reject proposals based on the nature and number of any exceptions taken to the standard terms and conditions of the Sample Agreement. NYSERDA reserves the right to disqualify proposers based upon the results of a background check into publicly available information and the presence of a material possibility of any reputational or legal risk in making of the award.

Disclosure Requirement - The proposer shall disclose any indictment for any alleged felony, or any conviction for a felony within the past five years, under the laws of the United States or any state or territory of the United States and shall describe circumstances for each. When a proposer is an association, partnership, corporation, or other organization, this disclosure requirement includes the organization and its officers, partners, and directors or members of any similarly governing body. If an indictment or conviction should come to the attention of NYSERDA after the award of a contract, NYSERDA may exercise its stop-work right pending further investigation or terminate the agreement; the contractor may be subject to penalties for violation of any law which may apply in the particular circumstances. Proposers must also disclose if they have ever been debarred or suspended by any agency of the U.S. Government or the New York State Department of Labor.

Vendor Assurance of No Conflict of Interest or Detrimental Effect - The proposer shall disclose any existing or contemplated relationship with any other person or entity, including any known relationships with any member, shareholders of 5% or more, parent, subsidiary, or affiliated firm, which would constitute an actual or potential conflict of interest or appearance of impropriety, relating to other clients/customers of the proposer or former officers and employees of NYSERDA, in connection with proposer's rendering services as proposed. If a conflict does or might exist, please describe how your company would eliminate or prevent it. Indicate what procedures will be followed to detect, notify NYSERDA of, and resolve any such conflicts.

The proposer must disclose whether it, or any of its members, or, to the best of its knowledge, shareholders of 5% or more, parents, affiliates, or subsidiaries, have been the subject of any investigation or disciplinary action by the New York State Commission on Public Integrity or its predecessor State entities (collectively, "Commission"), and if so, a brief description must be included indicating how any matter before the Commission was resolved or whether it remains unresolved.

Public Officers Law – For any resulting awards, the Contractor and its subcontractors shall not engage any person who is, or has been at any time, in the employ of the State to perform services in violation of the provisions of the New York Public Officers Law, other laws applicable to the service of State employees, and the rules, regulations, opinions, guidelines or policies promulgated or issued by the New York State Joint Commission on Public Ethics, or its predecessors (collectively, the "Ethics Requirements"). Proposers are reminded of the following Public Officers Law provision: contractors, consultants, vendors, and subcontractors may hire former NYSERDA employees. However, as a general rule and in accordance with New York Public Officers Law, former employees of NYSERDA may neither appear nor practice before NYSERDA, nor receive compensation for services rendered on a matter before NYSERDA, for a period of two years following their separation from NYSERDA service. In addition, former NYSERDA employees are subject to a "lifetime bar" from appearing before any state agency or authority or receiving compensation for services regarding any transaction in which they personally participated, or which was under their active consideration during their tenure with NYSERDA.

Any awardee will be required to certify that all of its employees, as well as employees of any subcontractor, whose subcontract is valued at \$100,000 or more who are former employees of the State and who are assigned to perform services under the resulting contract, shall be assigned in accordance with all Ethics Requirements. During the term of any agreement, no person who is employed by the contractor or its subcontractors and who is disqualified from providing services under the contract pursuant to any Ethics Requirements may share in any net revenues of the contractor or its subcontractors derived from the contract. NYSERDA may request that contractors provide it with whatever information

the State deems appropriate about each such person's engagement, work cooperatively with the State to solicit advice from the New York State Joint Commission on Public Ethics, and, if deemed appropriate by the State, instruct any such person to seek the opinion of the New York State Joint Commission on Public Ethics. NYSERDA shall have the right to withdraw or withhold approval of any subcontractor if utilizing such subcontractor for any work performed would be in conflict with any of the Ethics Requirements. NYSERDA shall have the right to terminate any contract at any time if any work performed is in conflict with any of the Ethics Requirements.

Due Diligence – NYSERDA, at its discretion, may conduct broad due diligence to validate any or all elements of an application and to assess applicants' prospects of success, including gathering information to assess a proposal relative to any of the topics listed in evaluation criteria, whether or not such topic is explicitly addressed in a proposal. NYSERDA may conduct due diligence on some or all proposals based on NYSERDA's current guidelines at the time of a review. NYSERDA staff may follow up with proposers to request additional information or clarification regarding applicant's proposal, including questions regarding applicant's business prospects and resources, whether or not those questions are specifically related to the elements of the proposal. Additionally, customized due diligence may be conducted by internal or external staff or contractors based on questions on any proposal raised by NYSERDA staff and/or the Scoring Committee. Due diligence may include (but is not limited to): interviews of independent references and background checks of team members; assessment of prior business experience of any team member associated with a proposal; research on intellectual property claims; customer and partner reference checks; market research on the applicants' target market and any other related or possibly competitive technology or market area; research to validate any assumptions on current or future revenues, costs, capital needs, and financing prospects for proposers' business, including similar (or unrelated) technologies, processes, or competitive solutions; or any other research that could reasonably inform the evaluation of a proposal, or the prospects for commercial success of the proposers' business (whether directly related to, or unrelated to the specific elements in a proposal). Due diligence may include discussions with proposers' former and current business partners, employees, investors, customers, and competitors. Due diligence may be conducted by NYSERDA personnel or contractors including members of the scoring committee, before, during, or after a scoring process, and prior to finalization of a contract award, any information gleaned in diligence may be used to score or re-score a proposal

IX. ATTACHMENTS

- Attachment A Proposal Narrative Format
- Attachment B Statement of Work Template
- Attachment C TRL-CRL Calculator Workbook
- Attachment D 3 Year Financial Projection Worksheet
- Attachment E Budget Form & Instructions
- Attachment F Sample Agreement
- Attachment G Business Model Canvas
- **Attachment H1 Product Development Metrics**
- **Attachment H2 Demonstration Metrics**
- Attachment I Consolidated Edison Challenge
- Attachment J Orange & Rockland Challenge



RICHARD L. KAUFFMAN Chair ALICIA BARTON President and CEO

Bulk Energy Storage Incentive Program Opportunity Notice (PON) 4139 Up to \$150,000,000 is available

NYSERDA reserves the right to extend and/or add funding to the solicitation should other program sources become available.

Bulk Energy Storage Incentive Program Bulk Energy Storage Incentive Applications Accepted through December 31, 2025 By 3:00 PM Eastern Time

The New York State Energy Research and Development Authority (NYSERDA)'s Bulk Energy Storage Incentive Program ("Bulk Storage" or "Program") provides financial incentives for new energy storage systems over 5 megawatts (MW) of power measured in alternating current (AC) that provide wholesale market energy, ancillary services and/or capacity services. Systems may be interconnected at the transmission, sub-transmission or distribution level and may provide distribution services in addition to wholesale services. Incentive funds will be deployed through a NYSERDA-administered declining incentive structure. Eligible energy storage systems are chemical, thermal, or mechanical systems physically located within New York State and interconnected into New York's bulk transmission system or an IOU's transmission or distribution system. Projects located in Con Edison's service territory are not currently eligible for incentives. Projects installed in LIPA's territory may become eligible in the future subject to the availability of Regional Greenhouse Gas Initiative (RGGI) funds. Incentives are only available for Contractors that are registered to do business in New York State and meet the program requirements contained in the Bulk Energy Storage Incentive Program Manual. Participating Contractors must be fully responsible for all aspects of their energy storage projects funded under the Program. Funding for the Program has been allocated by the New York State Renewable Portfolio Standard (RPS) and the Order In the Matter of Energy Storage Deployment Program, dated December 13, 2018. Complete Program requirements, incentive levels, and additional descriptions can be found in the Bulk Energy Storage Incentive Program Manual (Program Manual). Any changes to the Program Manual will be posted at https://www.nyserda.ny.gov/All-Programs/Programs/Energy-Storage/Developers-Contractors-and-Vendors/Bulk-Storage-Incentives

Project applications will be granted on a first-come, first-served basis, and will be accepted through December 31, 2025. NYSERDA reserves the right to modify the application acceptance period. Contractors shall submit completed and signed Project Applications as detailed in the Bulk Storage Incentive Program Manual.

To become a Contractor in the Bulk Storage Incentive Program, interested parties must complete a Project Application and agree to abide by the terms and conditions of the Bulk Storage Incentive Standard Agreement and Program Manual. These documents are available online at: https://www.nyserda.ny.gov/All-Programs/Programs/Energy-Storage/Developers-Contractors-and-Vendors/Bulk-Storage-Incentives

Energy storage project application submission: Contractors must submit completed and signed Project Application package to NYSERDA as detailed in the Program Manual.

Application Submission: Contractors may apply, as detailed in the Bulk Storage Incentive Program Manual, through a Project Application on-line at: <u>https://www.nyserda.ny.gov/All-Programs/Programs/Energy-Storage/Developers-Contractors-and-Vendors/Bulk-Storage-Incentives</u> or submit one [1] clearly labeled, completed and signed Project Application package to:

Contractor Application PON 4139 Attn: Program Manager NYS Energy Research and Development Authority 17 Columbia Circle Albany, NY 12203-6399 Or by email to energystorage@nyserda.ny.gov

In subsequent applications, the Contractor will certify that no changes have occurred to their qualifications. Application questions may be sent to <u>energystorage@nyserda.ny.gov</u>. Please reference PON 4139 when contacting NYSERDA with questions.

All Contractual questions should be directed to Venice Forbes at (518) 862-1090, ext. 3507 or <u>VeniceSolicitations@nyserda.ny.gov</u>. All Technical questions should be directed to Schuyler Matteson at (518) 862-1090, ext. 3123 or <u>energystorage@nyserda.ny.gov</u>.

Applications will not be accepted at any other NYSERDA location other than the address above. If changes are made to this solicitation, notification will be posted on NYSERDA's website at https://www.nyserda.ny.gov/Funding-Opportunities/Current-Funding-Opportunities

GENERAL CONDITIONS

Proprietary Information - Careful consideration should be given before confidential information is submitted to NYSERDA as part of your proposal. Review should include whether it is critical for evaluating a proposal, and whether general, non-confidential information, may be adequate for review purposes.

The NYS Freedom of Information Law, Public Officers law, Article 6, provides for public access to information NYSERDA possesses. Public Officers Law, Section 87(2)(d) provides for exceptions to disclosure for records or portions thereof that "are trade secrets or are submitted to an agency by a commercial enterprise or derived from

information obtained from a commercial enterprise and which if disclosed would cause substantial injury to the competitive position of the subject enterprise." Information submitted to NYSERDA that the proposer wishes to have treated as proprietary, and confidential trade secret information, should be identified and labeled "Confidential" or "Proprietary" on each page at the time of disclosure. This information should include a written request to except it from disclosure, including a written statement of the reasons why the information should be excepted. See Public Officers Law, Section 89(5) and the procedures set forth in 21 NYCRR Part 501 https://www.nyserda.ny.gov/About/-/media/Files/About/Contact/NYSERDA-Regulations.ashx. However, NYSERDA cannot guarantee the confidentiality of any information submitted.

Omnibus Procurement Act of 1992 - It is the policy of New York State to maximize opportunities for the participation of New York State business enterprises, including minority- and women-owned business enterprises, as bidders, subcontractors, and suppliers on its procurement Agreements.

Information on the availability of New York subcontractors and suppliers is available from:

Empire State Development Division for Small Business 625 Broadway Albany, NY 12207

A directory of certified minority- and women-owned business enterprises is available from:

Empire State Development Minority and Women's Business Development Division 625 Broadway Albany, NY 12207

Contract Award - NYSERDA anticipates making multiple awards under this solicitation. A contract may be awarded based on initial applications without discussion, or following limited discussion or negotiations pertaining to the Statement of Work. Each offer should be submitted using the most favorable cost and technical terms. NYSERDA may request additional data or material to support applications. NYSERDA will use the Sample Agreement to contract successful proposals. NYSERDA may at its discretion elect to extend and/or add funds to any project funded through this solicitation. NYSERDA reserves the right to limit any negotiations to exceptions to standard terms and conditions in the Sample Agreement to those specifically identified in the checklist questions. Proposers should keep in mind that acceptance of all standard terms and conditions will generally result in a more expedited contracting process. NYSERDA expects to notify applicants in approximately 2-4 weeks from the receipt of an application whether your application has been selected to receive an award. NYSERDA may decline to contract with awardees that are delinquent with respect to any obligation under any previous or active NYSERDA agreement.

Limitation - This solicitation does not commit NYSERDA to award a contract or to pay any costs incurred in preparing any application. NYSERDA reserves the right to accept or reject any or all applications received, and to cancel in part or in its entirety the solicitation when it is in NYSERDA's best interest.

Disclosure Requirement - The proposer shall disclose any indictment for any alleged felony, or any conviction for a felony within the past five years, under the laws of the United States or any state or territory of the United States and shall describe circumstances for each. When a proposer is an association, partnership, corporation, or other organization, this disclosure requirement includes the organization and its officers, partners, and directors or members of any similarly governing body. If an indictment or conviction should come to the attention of NYSERDA after the award of a contract, NYSERDA may exercise its stop-work right pending further investigation or terminate the agreement; the contractor may be subject to penalties for violation of any law which may apply in the particular circumstances. Proposers must also disclose if they have ever been debarred or suspended by any agency of the U.S. Government or the New York State Department of Labor.

Public Officers Law - For any resulting awards, the Contractor and its subcontractors shall not engage any person who is, or has been at any time, in the employ of the State to perform services in violation of the provisions of the New York Public Officers Law, other laws applicable to the service of State employees, and the rules, regulations, opinions, guidelines or policies promulgated or issued by the New York State Joint Commission on Public Ethics, or its predecessors (collectively, the "Ethics Requirements"). Proposers are reminded of the following Public Officers Law provision: contractors, consultants, vendors, and subcontractors may hire former NYSERDA employees. However, as a general rule and in accordance with New York Public Officers Law, former employees of NYSERDA may neither appear nor practice before NYSERDA, nor receive compensation for services rendered on a matter before NYSERDA, for a period of two years following their separation from NYSERDA service. In addition, former NYSERDA employees are subject to a "lifetime bar" from appearing before any state agency or authority or receiving compensation for services regarding any transaction in which they personally participated, or which was under their active consideration during their tenure with NYSERDA. Any awardee will be required to certify that all of its employees, as well as employees of any subcontractor, whose subcontract is valued at \$100,000 or more who are former employees of the State and who are assigned to perform services under the resulting contract, shall be assigned in accordance with all Ethics Requirements. During the term of any agreement, no person who is employed by the contractor or its subcontractors and who is disgualified from providing services under the contract pursuant to any Ethics Requirements may share in any net revenues of the contractor or its subcontractors derived from the contract. NYSERDA may request that contractors provide it with whatever information the State deems appropriate about each such person's engagement, work cooperatively with the State to solicit advice from the New York State Joint Commission on Public Ethics, and, if deemed appropriate by the State, instruct any such person to seek the opinion of the New York State Joint Commission on Public Ethics. NYSERDA shall have the right to withdraw or withhold approval of any subcontractor if utilizing such subcontractor for any work performed would be in conflict with any of the Ethics Requirements. NYSERDA shall have the right to terminate any contract at any time if any work performed is in conflict with any of the Ethics Requirements.

Attachments: Attachment A – Sample Agreement

Additional Information - Additional information is available at

https://www.nyserda.ny.gov/energystorage

New York State Energy Research and Development Authority Albany Buffalo 17 Columbia Circle, Albany, NY 12203-6399 726 Exc

(P) 1-866-NYSERDA | (F) 518-862-1091

nyserda.ny.gov | info@nyserda.ny.gov

Buffalo 726 Exchange Street Suite 821 Buffalo, NY 14210-1484 (P) 716-842-1522 (F) 716-842-0156 New York City 1359 Broadway 19th Floor New York, NY 10018-7842 (P) 212-971-5342 (F) 518-862-1091

West Valley Site Management Program

9030-B Route 219 West Valley, NY 14171-9500 (P) 716-942-9960 (F) 716-942-9961



Co-Investment Fund Program Opportunity Notice (PON) 4150 \$6,000,000 Available NYSERDA reserves the right to extend and/or add funding to the Solicitation should other program funding sources become available.

Proposals accepted through September 30, 2021 by 3:00 PM Eastern Time*

Program Summary: This New York State Energy Research and Development Authority (NYSERDA) Program Opportunity Notice (PON) 4150 Co-Investment Fund, seeks proposals from companies that have successfully closed investments from investors which have been previously "qualified" through NYSERDA Request for Qualifications (RFQL) 4150 Co-Investment Fund Investor Qualification. PON 4150 Co-Investment Fund makes non-dilutive matching investments directly in companies ranging from \$150,000 to up to \$500,000 based on a minimum 2:1 ratio of qualifying private capital investment to NYSERDA dollars. NYSERDA's goal is to mobilize more early-stage capital in the clean energy space by providing matching investments in promising clean energy companies alongside experienced and successful investors. Up to \$6 million of NYSERDA funding will be available initially through PON 4150. NYSERDA anticipates making at least twelve awards as a result of the PON. All, some, or none, of the available funds may be awarded through PON 4150. NYSERDA reserves the right to add or reduce time and/or funding to awarded contracts.

Proposal Submission: Online submission is preferable. Proposers may submit Word, Excel, or PDF files (file formats include: csv, doc, docx, gif, jpeg, jpg, pdf, png, ppt, pptx, pps, ppsx, tif, txt, xls, xlsx, and zip). Individual files should be 100MB or less in file size. Proposal PDFs should be searchable and should be created by direct conversion from MS Word, or other conversion utility. Files should not be scanned. For ease of identification, all electronic files must be named using the proposer's entity name in the title of the document. NYSERDA will also accept proposals by mail or hand-delivery if online submission is not possible. For detailed instructions on how to submit a proposal (online or paper submission), click the link "<u>Application Instructions and Portal Training Guide</u> [PDF] " located in the "Current Opportunities" section of NYSERDA's website (<u>https://www.nyserda.ny.gov/Funding-Opportunities/Current-Funding-Opportunities.aspx</u>).

No communication intended to influence this procurement is permitted except by contacting Nicholas Querques (Designated Contact) at (518) 862-1090, ext. 3086 or by e-mail <u>pon4150@nyserda.ny.gov</u>. If you have contractual questions concerning this solicitation, contact Venice Forbes (Designated Contact) at (518) 862-1090, ext. 3507 or <u>venicesolicitations@nyserda.ny.gov</u>. Contacting anyone other than the Designated Contacts (either directly by the proposer or indirectly through a lobbyist or other person acting on the proposer's behalf) in an attempt to influence the procurement: (1) may result in a proposer being deemed a non-responsible offerer; and (2) may result in the proposer not being awarded a contract.

* All proposals must be received by 3 PM Eastern Time on the date noted above. Late, faxed, or emailed proposals will not be accepted. Incomplete proposals may be subject to disqualification. It is the proposer's responsibility to ensure that all pages have been included in the proposal. Please note: for online submission, there are required questions that proposers will have to answer in addition to uploading attachments and proposers should allot at least 60 minutes to enter/submit proposals. The online proposal system closes promptly at 3 PM Eastern Time, files in process or attempted edits or submission after 3 PM Eastern Time on the date above, will not be accepted. If changes are made to this solicitation, notification will be posted on the "Current Opportunities" section of NYSERDA's website (https://www.nyserda.ny.gov/Funding-Opportunities/Current-Funding-Opportunities.aspx).

I. INTRODUCTION

NYSERDA is deploying \$800 million over 10 years as direct investments and wrap-around commercialization support for early-stage companies in the clean energy space. The goal is to invest primarily in "pre-Series B" technologies and companies to de-risk technology, define customers and validate markets, and build initial teams. NYSERDA's four primary areas of investment focus are: advanced buildings, clean transportation, renewable optimization and energy storage, and smart grid systems and distributed energy integration.

In recent years, NYSERDA's Technology and Business Innovation (TBI) unit has focused more holistically on the market and team when evaluating investments, in addition to deploying an active portfolio management approach to making investments, which is a best practice of sophisticated investors. By balancing technology, market, and team in making investment decisions, developing contracts, and managing projects, NYSERDA is looking to have a larger impact with its non-dilutive funding. Given that most investments made by TBI are in "pre-Series B" technologies and companies, it is imperative that NYSERDA curates and manages strong relationships with the full spectrum of the investment community, as these investors are a likely source of follow-on funding for most NYSERDA portfolio companies.

Through PON 4150 Co-Investment Fund, NYSERDA's goal is to mobilize more early-stage capital in the clean energy space by providing matching investments in promising clean energy companies alongside experienced and successful investors.

NYSERDA Context

Within the overall NYSERDA Technology to Market portfolio, NYSERDA's Co-Investment Fund is a critical component of the Investor, Corporate, and Customer Engagement initiative which aims to assist NYSERDA portfolio companies raise follow-on funding from investors, secure corporate/strategic partnerships, and/or land initial customers. In addition to the Investor, Corporate, and Customer Engagement initiative, NYSERDA supports six Clean Energy Incubators and a \$3 million Ignition Grant fund for clients of those incubators, one Proof-of-Concept Center and two new Cleantech Accelerators to support pre-seed/seed-stage teams and post-incubator companies, an Entrepreneurs-In-Residence program to provide mentoring and advisory services, a Manufacturing Corps program to help hardware companies scale with manufacturing development support, the 76West Clean Energy Competition, and several other acceleration and commercialization support programs for entrepreneurs and early-stage companies.

The subsequent sections of this PON are as follows:

- II. Program Requirements (page 2)
- III. Proposal Requirements (page 4)
- IV. Proposal Evaluation (page 5)
- V. General Conditions (page 7)
- VI. Attachments (page 9)

II. PROGRAM REQUIREMENTS

Proposer Eligibility Requirements

PON 4150 Co-Investment Fund is open to early-stage clean energy companies that meet all of the following eligibility requirements:

- 1. The company is based in New York State, or, if the company is not based in New York State, it must have a clear and compelling "demonstrated benefit in New York State";
- 2. The company meets the clean energy definition for this solicitation;
- 3. The company has raised less than \$20 million in private capital (not including grants or project finance capital) from investors prior to the close of the subject investment;
- 4. The company has successfully closed the subject investment from one or more investors which have been previously "qualified" through RFQL 4150; and

5. The company has applied for PON 4150 no more than six (6) months after successfully closing the subject investment. Eligible companies must have closed qualifying investments after March 15, 2019 or within six (6) months of the date they submit a proposal to PON 4150, whichever is later, without exception.

Clean Energy Definition

"Clean energy" is defined as hardware technologies, software technologies, services, or processes that broadly reduce energy consumption and greenhouse gas emissions and/or enable the transition to a sustainable and clean energy economy by increasing the supply of renewable energy and distributed energy resources, improving the efficiency and/or reducing the cost of energy utilization at the consumer and industrial scale, improving the processes and systems that use energy, or more effectively enabling energy solutions to permeate the marketplace. **Companies developing fossil fuel based or related technologies and solutions may not eligible for PON 4150.**

Demonstrated Benefit Definition

"Demonstrated benefit in New York State" is defined as business or related activity that non-New York State companies are involved with in New York State. Examples of activities that represent a "demonstrated benefit in New York State" could include, but are not limited to:

- Working with NYSERDA-supported Technology to Market assets and resources, such as Clean Energy Incubators, Proof-of-Concept Centers, Cleantech Accelerators, Manufacturing Corps, Entrepreneurs-In-Residence Program, 76West, etc.;
- Contributing to some aspect of clean energy projects in New York State, such as financing, installation, monitoring, servicing, etc.;
- Having some portion of a company's workforce, such as research and development, manufacturing, and/or sales, based in New York State; and/or
- Sourcing supply chain partners, vendors, investors, and/or service providers in New York State.

This list is non-exhaustive. NYSERDA reserves the right to make the final determination on whether or not a non-New York State company meets the "demonstrated benefit in New York State" requirement.

RFQL 4150 Co-Investment Fund Investor Qualification

Any firms or organizations that actively invest in early-stage clean energy companies are eligible to apply to RFQL 4150 Co-Investment Fund Investor Qualification, which requests information from investors that wish to qualify as a co-investor for companies seeking funds through PON 4150. More information about RFQL 4150 is located in the "Current Opportunities" section of NYSERDA's website (https://www.nyserda.ny.gov/Funding-Opportunities/Current-Funding-Opportunities.aspx).

Eligible companies must have successfully closed the subject investment from one or more investors which have previously "qualified" through RFQL 4150 prior to applying to PON 4150, without exception. The investor(s) "qualified" through RFQL 4150 must be a "significant" and/or "reasonable" portion of the subject investment that the company is applying for under PON 4150. NYSERDA reserves the right to make final determination on whether a "qualified" investor is a "significant" and/or "reasonable" portion of the subject investment in a company applying to PON 4150.

The current list of investors that have been "qualified" through RFQL 4150 is available on NYSERDA's website (<u>https://www.nyserda.ny.gov/co-investment-fund-qualified-investors</u>).

Available Funding and Terms

PON 4150 Co-Investment Fund makes \$6 million available initially for matching investments directly in companies alongside investors which have previously "qualified" through RFQL 4150 Co-Investment Fund Investor Qualification. This PON will make non-dilutive matching investments directly in companies ranging from \$150,000 to up to \$500,000 based on a minimum 2:1 ratio of qualifying private capital investment to NYSERDA dollars. **NYSERDA's investment will be structured as a non-dilutive grant, essentially a**

"risk-free, interest-free loan" with a recoupment provision, it will not follow the investment terms agreed to by the "qualified" investor(s) and/or other co-investor(s) in the qualifying round.

Proposers may submit no more than two proposals to PON 4150 over a twelve-month period. A single company that meets all eligibility criteria may be selected for up to two separate awards under this PON for an absolute maximum of \$500,000 per company over the course of the solicitation. Proposers that have an existing contract with NYSERDA must demonstrate their Proposed Statement of Work under PON 4150 is separate and distinct from all other ongoing NYSERDA contracts. However, any contract(s) awarded through PON 4150 may be supplementary to a proposer's ongoing NYSERDA contracts.

For all companies awarded funding through PON 4150 Co-Investment Fund, NYSERDA will give strong preference to situations where NYSERDA has the option to participate as a non-voting observer on the company's Board of Directors. This will provide NYSERDA the opportunity to more closely monitor the awardee's progress and contribute additional financial or other resources as appropriate while strengthening NYSERDA's relationships with other investors and partners that are also supporting the awardee.

Potential proposers and their investors are encouraged to review Attachment E - Sample Agreement for more information on the terms and conditions that the company will need to agree to if awarded a contract under PON 4150. The terms and conditions provided by NYSERDA in Attachment E - Sample Agreement are non-negotiable.

Potential Conflicts of Interest

The proposal must identify and describe the nature of any potential conflicts of interest among principals of the company proposing to PON 4150 or the "qualified" investor(s) and NYSERDA. Any possible conflicts of interest, actual and perceived, which could arise in connection with performance by team members of the proposal should be discussed, along with a description of how the proposer would resolve conflicts of interest. In the event that NYSERDA determines a team member may have a conflict of interest or the appearance of such, NYSERDA may: (1) take this into consideration in evaluating the proposal; (2) exclude the proposer from consideration for an award; (3) adjust the scope of work to avoid the conflict or appearance of conflict; or (4) negotiate other appropriate actions with the team member to avoid the conflict or appearance of conflict.

Other Considerations

In addition, proposers should note that:

- A proposal may be considered non-responsive if it fails to comply with the requirements above, the Proposal Requirements (see Section III), or the General Conditions (see Section V).
- Prior to an award being made, potential awardees may be required to demonstrate the following via formal documentation: (1) access to financial resources and human capital sufficient to perform the proposed work; (2) technical experience and adequate facilities (or the ability to access them); and/or (3) the ability to qualify for an award under applicable laws and regulations.
- Performance of awarded projects will be assessed on a continuous basis in order to ensure the awardee is meeting its commitments and achieving the milestones laid out in the Statement of Work.

III. PROPOSAL REQUIREMENTS

The proposer's goal should be to concisely present the information needed to fully address the Proposal Evaluation criteria (see Section IV). If proposers believe proprietary information must be submitted to provide an adequate proposal, they must comply with the General Conditions (see Section V) instructions for submitting proprietary material.

Procurement Lobbying Requirements

In compliance with §139-j and §139-k of the State Finance Law in the General Conditions (see Section V), proposers will be required to answer questions during proposal submission, which will include making required certification under the State Finance Law and to disclose any Prior Findings of Non-Responsibility.

Required Proposal Attachments

Eligible proposers must submit the following four required attachments in order for their proposal to be deemed responsive under PON 4150 Co-Investment Fund.

- 1. Attachment A Executed Investment Agreement
 - Fully Executed Investment Agreement, including the terms of the deal, dollars invested by all participating investors, including "qualified" investor(s), and use of proceeds plan for the subject investment.
 - No template provided.
- 2. Attachment B Verification of Funds
 - Bank statement verifying funds from the subject investment have been deposited into the proposer's bank account. Proposer may redact highly sensitive information from the bank statement so long as it does not impact NYSERDA's ability to verify funds from the subject investment have been successfully transferred.
 - No template provided.
- 3. Attachment C Investor Due Diligence Report
 - Investor Due Diligence Report, including the Qualified Investor Attestation, to be completed by "qualified" investor(s) from RFQL 4150 and submitted by the proposer.
 - Template provided.
- 4. Attachment D Proposed Statement of Work
 - Proposed Statement of Work that includes milestones and payments consistent with the use of proceeds plan from Attachment A Executed Investment Agreement. NYSERDA reserves the right to include one or more additional milestones that are not explicitly spelled out in the Executed Investment Agreement at its discretion.
 - Template provided.

Proposals that fail to include all of the required attachments may be rejected as non-responsive. Proposals should not be excessively long or submitted in an elaborate format. Unnecessary attachments beyond those required may reduce, rather than increase, a proposal's standing and competitiveness.

IV. PROPOSAL EVALUATION

Proposals that meet the solicitation requirements will be reviewed and scored by a Scoring Committee on a monthly basis according to the criteria in this section. At NYSERDA's discretion, proposers may be requested to interview with all or part of the Scoring Committee, or other NYSERDA staff or contractors, to address any potential questions or issues which arise based on the proposals. Proposers will be notified if they are requested to attend an interview. NYSERDA may also conduct additional due diligence assessments on any proposals to inform its selection process or confirm any information submitted by the proposer. After the proposals are reviewed, NYSERDA will issue a letter to each proposer indicating the proposal evaluation results. A proposer receiving a favorable evaluation will be required to negotiate a Statement of Work, schedule, and budget as part of Proposed Statement of Work - Attachment D, and may also be asked to address specific questions or recommendations of the Scoring Committee prior to any contract award.

Evaluation Criteria (In Order of Importance)

Clean Energy Impact

- The company is addressing a significant clean energy problem or opportunity.
- The company's technology, solution, service, or business model, if successful, will provide significant energy/climate impact and benefits in New York State.
- The company has targeted one or more product markets that are critical to realizing New York State's nation-leading energy and climate goals.

Team Qualifications

- The team is strong and balanced with founders, employees, and advisors that possess technical and business experience and expertise appropriate to the company's business challenges.
- The company has dedicated managers, investors, and partners that are clearly committed to supporting the company beyond the subject investment through to commercial viability.
- The team has managed the company responsibly and in a manner consistent with corporate governance best practices appropriate for the stage of development.
- The team, including the "qualified" and other key investor(s), were willing to give NYSERDA the option to participate as a non-voting observer on the company's Board of Directors.

Business Plan

- The company's business plans, including technical, business, energy/climate impact, and team elements, taken as a whole, and considering likely risks, have a good probability of achieving commercial success and outcomes which will support New York State's energy and climate goals.
- The "qualified" investor(s) performed rigorous due diligence on technical, business, energy/climate impact, and the team's merit prior to investing in the company.
- The "qualified" investor(s) were willing to share their due diligence process and findings on the company with NYSERDA.

Scope of Work

- The "qualified" investor(s) were a "significant" and/or "reasonable" portion of the subject investment.
- The work scope is closely aligned with the use of proceeds plan for the subject investment.
- The work scope positions the company to successfully raise follow-on funding from investors, secure corporate/strategic partnerships, and/or land initial customers.

Program Policy Factors

NYSERDA reserves the right to accept or reject proposals – or adjust award amounts – based on the following Program Policy Factors:

- The degree to which the proposal directly addresses NYSERDA's mission and strategic goals, including State Energy Plan and Reforming the Energy Vision goals.
- The proposer's track record and performance on current and past NYSERDA contracts, if applicable.
- The degree to which the proposer has the resources (human and financial) to be able to complete the project.
- The degree to which the proposal optimizes the use of available funding to achieve programmatic objectives.
- Availability of funding.
- Level of prior and current financial commitment to the proposer, or to proposers addressing similar market opportunities under this PON or other NYSERDA programs.

V. GENERAL CONDITIONS

Proprietary Information

Careful consideration should be given before confidential information is submitted to NYSERDA as part of any proposal. Review should include whether it is critical for evaluating a proposal, and whether general, non-confidential information, may be adequate for review purposes. The NYS Freedom of Information Law, Public Officers law, Article 6, provides for public access to information NYSERDA possesses. Public Officers Law, Section 87(2)(d) provides for exceptions to disclosure for records or portions thereof that "are trade secrets or are submitted to an agency by a commercial enterprise or derived from information obtained from a commercial enterprise and which if disclosed would cause substantial injury to the competitive position of the subject enterprise." Information submitted to NYSERDA that the proposer wishes to have treated as proprietary, and confidential trade secret information, should be identified and labeled "Confidential" or "Proprietary" on each page at the time of disclosure. This information should include a written request to except it from disclosure, including a written statement of the reasons why the information should be excepted. See Public Officers Law, Section 89(5) and the procedures set forth in 21 NYCRR Part 501 (available at https://www.nyserda.ny.gov/About/-/media/Files/About/Contact/NYSERDA-Regulations.ashx). However, NYSERDA cannot guarantee the confidentiality of any information submitted.

Omnibus Procurement Act of 1992

It is the policy of New York State to maximize opportunities for the participation of New York State business enterprises, including minority- and women-owned business enterprises, as bidders, subcontractors, and suppliers on its procurement Agreements.

Information on the availability of New York subcontractors and suppliers is available from:

Empire State Development Division for Small Business 625 Broadway Albany, NY 12207

A directory of certified minority- and women-owned business enterprises is available from:

Empire State Development Minority and Women's Business Development Division 625 Broadway Albany, NY 12207

State Finance Law Sections 139-j and 139-k

NYSERDA is required to comply with State Finance Law sections 139-j and 139-k. These provisions contain procurement lobbying requirements (available at

https://online.ogs.ny.gov/legal/lobbyinglawfaq/default.aspx). Proposers are required to answer questions during proposal submission, which will include making required certification under the State Finance Law and to disclose any Prior Findings of Non-Responsibility (this includes a disclosure statement regarding whether the proposer has been found non-responsible under section 139-j of the State Finance Law within the previous four years).

Tax Law Section 5-a

NYSERDA is required to comply with the provisions of Tax Law Section 5-a, which requires a prospective contractor, prior to entering an agreement with NYSERDA having a value in excess of \$100,000, to certify to the Department of Taxation and Finance (the "Department") whether the contractor, its affiliates, its subcontractors and the affiliates of its subcontractors have registered with the Department to collect New York State and local sales and compensating use taxes. The Department has created a form to allow a prospective contractor to readily make such certification. See, ST-220-TD (available at http://www.tax.ny.gov/pdf/current_forms/st/st220td_fill_in.pdf). Prior to contracting with NYSERDA, the prospective contractor must also certify to NYSERDA whether it has filed such certification with the Department.

The Department has created a second form that must be completed by a prospective contractor prior to contacting and filed with NYSERDA. See, ST-220-CA (available at <u>http://www.tax.ny.gov/pdf/current_forms/st/st220ca_fill_in.pdf</u>). The Department has developed guidance for contractors (available at <u>http://www.tax.ny.gov/pdf/publications/sales/pub223.pdf</u>.

Limitation

This solicitation does not commit NYSERDA to award a contract, pay any costs incurred in preparing a proposal, or to procure or contract for services or supplies. NYSERDA reserves the right to accept or reject any or all proposals received, to negotiate with all qualified sources, or to cancel in part or in its entirety the solicitation when it is in NYSERDA's best interest. NYSERDA reserves the right to reject proposals based on the nature and number of any exceptions taken to the standard terms and conditions of Attachment E - Sample Agreement. NYSERDA reserves the right to disqualify proposers based upon the results of a background check into publicly available information and the presence of a material possibility of any reputational or legal risk in making of the award.

Disclosure Requirement

The proposer shall disclose any indictment for any alleged felony, or any conviction for a felony within the past five years, under the laws of the United States or any state or territory of the United States, and shall describe circumstances for each. When a proposer is an association, partnership, corporation, or other organization, this disclosure requirement includes the organization and its officers, partners, and directors or members of any similarly governing body. If an indictment or conviction should come to the attention of NYSERDA after the award of a contract, NYSERDA may exercise its stop-work right pending further investigation, or terminate the agreement; the contractor may be subject to penalties for violation of any law which may apply in the particular circumstances. Proposers must also disclose if they have ever been debarred or suspended by any agency of the U.S. Government or the New York State Department of Labor.

Due Diligence

NYSERDA, at its discretion, may conduct broad due diligence to validate any or all elements of a proposal and to assess a proposer's prospects of success, including gathering information to assess a proposal relative to any of the topics listed in the Proposal Evaluation criteria (see Section IV), whether or not such topic is explicitly addressed in a proposal. NYSERDA may conduct due diligence on some or all proposals based on NYSERDA's current guidelines at the time of a review. NYSERDA staff or contractors may follow up with proposers or their "qualified" investor(s) to request additional information or clarification regarding the proposer's proposal, including questions regarding the proposer's business prospects and resources, whether or not those questions are specifically related to the elements of the proposal. Additionally, customized due diligence may be conducted by NYSERDA staff or contractors based on questions related to any proposal that are raised by NYSERDA staff and/or the Scoring Committee. Due diligence may include, but is not limited to:

- Interviews of independent references and background checks of team members;
- Assessment of prior business experience of any team member associated with a proposal;
- Research on or validation of intellectual property claims;
- Investor, customer, and partner reference checks;
- Market research on the proposer's target market and any other related or possibly competitive technology or market area;
- Research to validate any assumptions on current or future revenues, costs, capital needs, and financing prospects for the proposer's business, including similar (or unrelated) technologies, processes, or competitive solutions; and/or
- Any other research that could reasonably inform the evaluation of a proposal, or the prospects for commercial success of the proposer's business, whether directly related to, or unrelated to the specific elements in a proposal.

Due diligence may include discussions with proposer's former and current business partners, employees, investors, customers, and competitors. Due diligence may be conducted by NYSERDA staff or contractors, including members of the Scoring Committee, before, during, or after a scoring process, and prior to

finalization of a contract award, any information gleaned in the due diligence process may be used to score or re-score a proposal at NYSERDA's discretion.

Recoupment

For awards under this solicitation, NYSERDA will require a royalty based on sales by the awardee. NYSERDA's standard royalty terms are 1 percent (1%) of all forms of revenue (product sales, licensing, sublicensing, etc.) as reported by the awardee and accruing to the awardee for any products produced. This obligation is for a period of fifteen (15) years or until the awardee pays NYSERDA one times (1x) NYSERDA's outlay of capital to the awardee, whichever comes first.

VI. ATTACHMENTS

The following attachments are provided for companies proposing to PON 4150 Co-Investment Fund:

- Attachment A Executed Investment Agreement (Required, No Template Provided)
- Attachment B Verification of Funds (Required, No Template Provided)
- Attachment C Investor Due Diligence Report (Required, Template Provided)
- Attachment D Proposed Statement of Work (Required, Template Provided)
- Attachment E Sample Agreement (For Reference Only)
- Attachment F Metrics Reporting Guide (For Reference Only)



Commercial Broker Referral Program

Program Opportunity Notice (PON) 4209 September 2019

Applications accepted on a first-come, first-served basis dependent on funding availability, until December 31, 2020 by 3:00pm Eastern Time.

The New York State Energy Research and Development Authority (NYSERDA)'s Commercial Broker Referral Program ("Broker Program") provides financial incentives to commercial brokers ("Brokers") who refer customers to the NYSERDA Commercial Tenant Program. All commercial brokers are eligible, including tenant and landlord brokers. The Commercial Tenant Program supports commercial landlords and tenants in designing and building sustainable, energy efficiency workspaces, with the goal of reducing the energy consumption of tenant spaces and improving the overall energy performance of whole buildings. Brokers can apply to receive a \$5,000 incentive for every customer they refer to the Commercial Tenant Program that submits an approved application.

Broker Program requirements, incentive levels, payment request information and additional details can be found on the Commercial Tenant Program website, at <u>https://nyserda.ny.gov/All-Programs/Programs/Commercial-Tenant-Program/Brokers</u>. Any changes to the Commercial Broker Referral Program will be posted on this website.

Payment requests for the incentive will be accepted through December 31, 2020 and funds will be disbursed on a first-come, first-served basis. NYSERDA reserves the right to modify the incentive request acceptance period.

Additional Information: For more information about the Commercial Tenant Program, visit www.nyserda/ny.gov/CTP or refer to the <u>Commercial Tenant Program guidance document</u>.

Application Submission: Brokers must submit payment requests by following directions posted on the Commercial Tenant Program webpage, at https://nyserda.ny.gov/All-Programs/Programs/Commercial-Tenant-Program/Brokers. Brokers are strongly encouraged to submit payment requests online, but may also submit requests by email to commercialprograms@nyserda.ny.gov, or by mail:

Broker Referral Payment Request - PON 4072 Attn: Commercial Programs NYS Energy Research and Development Authority 17 Columbia Circle Albany, NY 12203-6399

All technical questions should be directed to Sophie Cardona at (212) 971-5342 ext. 3590 or <u>commercialprograms@nyserda.ny.gov</u>. All contractual questions should be directed to Venice Forbes at (518) 862-1090, ext. 3507 or <u>VeniceSolicitations@nyserda.ny.gov</u>. Payment request questions may be sent to <u>commercialprograms@nyserda.ny.gov</u>.

Applications will not be accepted at any other NYSERDA location other than the address listed above. If changes are made to this solicitation, notification will be posted on NYSERDA's website at https://www.nyserda.ny.gov/Funding-Opportunities/Current-Funding-Opportunities.aspx.

GENERAL CONDITIONS

Proprietary Information - Careful consideration should be given before confidential information is submitted to NYSERDA as part of your proposal. Review should include whether it is critical for evaluating a proposal, and whether general, non-confidential information, may be adequate for review purposes.

The NYS Freedom of Information Law, Public Officers law, Article 6, provides for public access to information NYSERDA possesses. Public Officers Law, Section 87(2)(d) provides for exceptions to disclosure for records or portions thereof that "are trade secrets or are submitted to an agency by a commercial enterprise or derived from information obtained from a commercial enterprise and which if disclosed would cause substantial injury to the competitive position of the subject enterprise." Information submitted to NYSERDA that the proposer wishes to have treated as proprietary, and confidential trade secret information, should be identified and labeled "Confidential" or "Proprietary" on each page at the time of disclosure. This information should include a written request to except it from disclosure, including a written statement of the reasons why the information should be excepted. See Public Officers Law, Section 89(5) and the procedures set forth in 21 NYCRR Part 501 https://www.nyserda.ny.gov/About/-/media/Files/About/Contact/NYSERDA-Regulations.ashx. However, NYSERDA cannot guarantee the confidentiality of any information submitted.

Omnibus Procurement Act of 1992 - It is the policy of New York State to maximize opportunities for the participation of New York State business enterprises, including minority- and women-owned business enterprises, as bidders, subcontractors, and suppliers on its procurement Agreements.

Information on the availability of New York subcontractors and suppliers is available from:

Empire State Development Division for Small Business 625 Broadway Albany, NY 12207

A directory of certified minority- and women-owned business enterprises is available from:

Empire State Development Minority and Women's Business Development Division 625 Broadway Albany, NY 12207

State Finance Law sections 139-j and 139-k - NYSERDA is required to comply with State Finance Law sections 139-j and 139-k. These provisions contain procurement lobbying requirements which can be found at https://online.ogs.ny.gov/legal/lobbyinglawfaq/default.aspx. Proposers are required to answer questions during proposal submission, which will include making required certification under the State Finance Law and to disclose any Prior Findings of Non-Responsibility (this includes a disclosure statement regarding whether the proposer has been found non-responsible under section 139-j of the State Finance Law within the previous four years).

Tax Law Section 5-a - NYSERDA is required to comply with the provisions of Tax Law Section 5-a, which requires a prospective contractor, prior to entering an agreement with NYSERDA having a value in excess of \$100,000, to certify to the Department of Taxation and Finance (the "Department") whether the contractor, its affiliates, its subcontractors and the affiliates of its subcontractors have registered with the Department to collect New York State and local sales and compensating use taxes. The Department has created a form to allow a prospective contractor to readily make such certification. See, ST-220-TD (available at http://www.tax.ny.gov/pdf/current_forms/st/st220td_fill_in.pdf). Prior to contracting with NYSERDA, the prospective contractor must also certify to NYSERDA whether it has filed

such certification with the Department.

The Department has created a second form that must be completed by a prospective contractor prior to contacting and filed with NYSERDA. See, ST-220-CA (available at http://www.tax.ny.gov/pdf/current_forms/st/st220-CA (available at http://www.tax.ny.gov/pdf/current_forms/st/st220-CA (available at http://www.tax.ny.gov/pdf/current_forms/st/st220ca_fill_in.pdf). The Department has developed guidance for contractors which is available at http://www.tax.ny.gov/pdf/publications/sales/pub223.pdf.

Contract Award - NYSERDA anticipates making multiple awards under this solicitation. NYSERDA may request additional data or material to support applications. NYSERDA may at its discretion elect to extend and/or add funds to any project funded through this solicitation. NYSERDA may request additional information to support payment requests. NYSERDA expects to notify customers in approximately 3-5 days from the receipt of a complete application whether the submission has been selected to receive an award. NYSERDA may decline to contract with awardees that are delinquent with respect to any obligation under any previous or active NYSERDA agreement.

Accessibility Requirements - If awardees from this solicitation will be posting anything on the web, or if the awardee will produce a final report that NYSERDA will post to the web, the following language must be included. NYSERDA requires contractors producing content intended to be posted to the Web to adhere to New York State's Accessibility Policy. This includes, but is not limited to, deliverables such as: documents (PDF, Microsoft Word, Microsoft Excel, etc.), audio (.mp3, .wav, etc.), video (.mp4, .mpg, .avi, etc.), graphics (.jpg, .png, etc.), web pages (.html, .aspx, etc.), and other multimedia and streaming media content. For more information, see <u>NYSERDA's Accessibility Requirements</u>.

Limitation - This solicitation does not commit NYSERDA to award a contract, pay any costs incurred in preparing a proposal, or to procure or contract for services or supplies. NYSERDA reserves the right to accept or reject any or all proposals received, to negotiate with all qualified sources, or to cancel in part or in its entirety the solicitation when it is in NYSERDA's best interest. NYSERDA reserves the right to reject proposals based on the nature and number of any exceptions taken to the standard terms and conditions of the Attachment E, Terms and Conditions. NYSERDA reserves the right to disqualify proposers based upon the results of a background check into publicly available information and the presence of a material possibility of any reputational or legal risk in making of the award.

Disclosure Requirement - The proposer shall disclose any indictment for any alleged felony, or any conviction for a felony within the past five years, under the laws of the United States or any state or territory of the United States, and shall describe circumstances for each. When a proposer is an association, partnership, corporation, or other organization, this disclosure requirement includes the organization and its officers, partners, and directors or members of any similarly governing body. If an indictment or conviction should come to the attention of NYSERDA after the award of a contract, NYSERDA may exercise its stop-work right pending further investigation, or terminate the agreement; the contractor may be subject to penalties for violation of any law which may apply in the particular circumstances. Proposers must also disclose if they have ever been debarred or suspended by any agency of the U.S. Government or the New York State Department of Labor.

ATTACHMENT

Attachment A - Broker Referral Form



Accelerate Southern Tier Program Opportunity Notice (PON) 4242 \$3,500,000 Available NYSERDA reserves the right to extend and add funding to the solicitation should other program funding sources become available.

Round 1 Proposals Due: November 19, 2019, by 3:00 PM Eastern Time*

Round 2 Proposals Due: July 15, 2020, by 3:00 PM Eastern Time*

Program Summary: This New York State Energy Research and Development Authority (NYSERDA) Program Opportunity Notice (PON) 4242 seeks proposals to develop and execute projects that promote the growth of a robust clean energy innovation ecosystem in New York's Southern Tier. PON 4242 Accelerate Southern Tier funds programs that accelerate the formation and growth of early-stage clean energy companies in the Southern Tier and continues development of the Southern Tier as a prominent geographic region that helps foster growth and scale for clean energy technology businesses. For the purposes of this PON, the "Southern Tier" is defined as all counties within the Southern Tier Regional Economic Development Council (REDC) as well as three counties from the Western New York REDC, including Allegany, Cattaraugus, and Chautaugua. Proposed projects should be designed to spur clean energy business formation and growth. Proposed projects may be new and unique, or replicate successful national or international program models. Up to \$3,500,000 of NYSERDA funding is available through this PON. Under this PON, NYSERDA will award contracts of up to \$750,000. Awarded contract(s) will be for a term of up to three (3) years with the possibility of extension for up to one (1) additional year. Projects need not be of such a scale that they require the maximum funding or term; proposals requesting considerably less funding, less time, or both are welcome. All, some or none, of the available funds may be awarded through PON 4242. NYSERDA reserves the right to add or reduce time and/or funding to awarded contracts.

Proposal Submission: Online submission is preferable. Proposers may submit Word, Excel, or PDF files (file formats include: csv, doc, docx, gif, jpeg, jpg, pdf, png, ppt, pptx, pps, ppsx, tif, txt, xls, xlsx, and zip). Individual files should be 100MB or less in file size. Proposal PDFs should be searchable and should be created by direct conversion from MS Word, or other conversion utility. Files should not be scanned. For ease of identification, all electronic files must be named using the proposer's entity name in the title of the document. NYSERDA will also accept proposals by mail or hand-delivery if online submission is not possible. For detailed instructions on how to submit a proposal (online or paper submission), click the link "Application Instructions and Portal Training Guide [PDF]" located in the "Current Opportunities" section of NYSERDA's website (<u>https://www.nyserda.ny.gov/Funding-Opportunities.aspx</u>).

No communication intended to influence this procurement is permitted except by contacting Colby Creedon (Designated Contact) at (518) 862-1090, ext. 3460 or by e-mail <u>pon4242@nyserda.ny.gov</u> or Nicholas Querques (Designated Contact) at (518) 862-1090, ext. 3086 or by e-mail <u>pon4242@nyserda.ny.gov</u>. If you have contractual questions concerning this solicitation, contact Venice Forbes (Designated Contact) at (518) 862-1090, ext. 3507 or <u>venicesolicitations@nyserda.ny.gov</u>. Contacting anyone other than the Designated Contacts (either directly by the proposer or indirectly through a lobbyist or other person acting on the proposer's behalf) in an attempt to influence the procurement: (1) may result in a proposer being deemed a non-responsible offeror; and (2) may result in the proposer not being awarded a contract.

* All proposals must be received by 3 PM Eastern Time on the date noted above. Late, faxed, or emailed proposals will not be accepted. Incomplete proposals may be subject to disqualification. It is the proposer's responsibility to ensure that all pages have been included in the proposal. Please note: for online submission, there are required questions that proposers will have to answer in addition to uploading attachments and proposers should allot at least 60 minutes to enter/submit proposals. The online proposal system closes promptly at 3 PM Eastern Time, files in process or attempted edits or submission after 3 PM Eastern Time on the date above, will not be accepted. If changes are made to this solicitation, notification will be posted on the "Current Opportunities" section of NYSERDA's website (https://www.nyserda.ny.gov/Funding-Opportunities/Current-Funding-Opportunities.aspx).

I. INTRODUCTION

New York's Southern Tier has become a hotbed of innovation that supports early-stage clean energy companies by operating business incubators, fostering strategic manufacturing partnerships, administering the 76West Clean Energy Competition, growing startup communities across the region, and supporting industries ripe for the adoption of clean energy products and services.

The goal of PON 4242 Accelerate Southern Tier is to enable organizations within the Southern Tier to build upon the region's early ecosystem development and clean energy business formation and acceleration success by developing and executing high-impact programs. Successful proposals will describe programming aimed at helping early-stage clean energy companies start and grow within the Southern Tier as well as attracting high-potential clean energy companies to the region. A successful proposal will address an unmet regional need by deploying programming interventions that spur innovation and encourage clean energy business formation and growth within the Southern Tier.

Objectives and Expected Outcomes

NYSERDA has strategically developed the Accelerate Southern Tier initiative to be a centerpiece of New York State's continued investment in projects that can catalyze the implementation of long-lasting business formation and growth programs in the region. The goal is to fund programs implemented by Southern Tier-based organizations that address regional unmet business formation and growth needs while helping New York State achieve its decarbonization goals via targeted investments and timely business support for clean energy companies. The objectives of this program include:

- Contributing to New York State's decarbonization goals with programming that accelerates clean energy companies' time to market.
- Facilitating clean energy company formation, attraction, and growth in the Southern Tier.
- Addressing a regional need with business formation and growth programming. The regional need may be general to the region that makes up the "Southern Tier", as defined by this PON, or specific to individual communities within the region (i.e., Ithaca, Binghamton, Corning, Fredonia, Alfred, etc.)

The subsequent sections of this PON are as follows:

- II. Program Requirements (page 3)
- III. Proposal Requirements (page 6)
- IV. Proposal Evaluation (page 7)
- V. General Conditions (page 8)
- VI. Attachments (page 12)

II. PROGRAM REQUIREMENTS

Eligibility and Proposer Qualifications

Any organization with a strong connection to the Southern Tier that has demonstrated an ability to assist early-stage companies from formation through growth-stage and scale up are eligible to submit proposals under this PON. Proposers may be existing NYSERDA-sponsored entities, venture development organizations not currently supported by NYSERDA, or other qualified organizations, including universities, colleges, community colleges, venture development organizations, industrial development agencies and economic development organizations, corporations, or philanthropic organizations. Proposers may be for-profit or non-profit entities.

Proposers should have a track record of providing business support to early-stage technology-based companies. Proposers should also be able to provide illustrative examples of early-stage technology-based companies that have directly benefited from their business support. NYSERDA reserves the right to verify any information contained in a proposal.

Preference will be given to organizations with a principal place of business in the "Southern Tier" as defined in the following paragraph. Organizations with a principal place of business outside of the defined region should be able to demonstrate a strong presence within the Southern Tier, or partner with organizations based in this region.

Southern Tier Definition

For the purposes of this PON, the "Southern Tier" is defined as all counties within the Southern Tier Regional Economic Development Council (REDC), including Delaware, Chenango, Broome, Tioga, Tompkins, Chemung, Schuyler, and Steuben as well as three counties from the Western New York REDC, including Allegany, Cattaraugus, and Chautauqua.



Clean Energy Definition

"Clean energy" is defined as hardware technologies, software technologies, services, or processes that broadly reduce energy consumption and greenhouse gas emissions and/or enable the transition to a sustainable and clean energy economy by increasing the supply of renewable energy and distributed energy resources, improving the efficiency and/or reducing the cost of energy utilization at the consumer and industrial scale, improving the processes and systems that use energy, or more effectively enabling energy solutions to permeate the marketplace. **Companies developing fossil fuel based or related technologies and solutions may not be eligible for support from projects funded through PON 4242.**

Available Funding and Cost Sharing

Up to \$3,500,000 of NYSERDA funding is available through this PON. The maximum award per contract will be \$750,000. All, some, or none, of the available funds may be awarded. Projects need not be of such a scale that they require the maximum funding; proposals requesting considerably less are welcome. NYSERDA reserves the right to add or reduce time and/or funding to awarded contracts.

Successful proposers will be required to provide cost sharing – at least 25% of the total project cost is required. The proposer's cost share may be cash or in-kind and may come from the proposer itself or partner organizations. Cash cost share is the preferred form of cost share.

Range/Scope of Services

Proposers are required to submit proposals for business formation and growth programming that will support early-stage clean energy companies and the broader innovation ecosystem in the Southern Tier. The proposed programming should illustrate a cohesive plan that advances the Southern Tier clean energy ecosystem by facilitating, helping, and catalyzing clean energy company formation and growth. Proposed programs should augment, and not compete with, existing regional business support programs supported by NYSERDA, Empire State Development/NYSTAR, and other funding agencies.

Proposed projects should be designed to spur clean energy business formation and growth. Proposed projects may be new and unique, or replicate successful national or international program models. Examples of prospective projects include, but are not limited to:

- Clean energy innovation fellowships;
- Energy storage or other critical industry supply chain development;
- "Greening" a Southern Tier industry (food/agriculture, transportation, advanced manufacturing, etc.) through specialized incubation of relevant clean energy startups or other means;
- Programming tailored to women and/or minority founders in clean energy;
- Attracting (and incubating) national or international clean energy companies;
- Fostering partnerships between large Southern Tier companies and early-stage clean energy companies; and/or
- Programming that will increase the number of early-stage clean energy companies forming, operating, and growing within the Southern Tier.

Other program ideas are welcome, and innovative programs with the potential for high impact are encouraged.

Proposals should illustrate: (1) a regional unmet clean energy ecosystem need; (2) a programmatic solution that addresses that regional need; (3) how the programmatic solution will be executed; and (4) how the programmatic solution helps drive clean energy business formation and growth impacts in the Southern Tier generally, or an individual community within the region.

Schedule and Teaming

The following guidelines should be considered when developing proposals:

- Projects are expected to begin within five (5) months after the proposal due date. Awarded contracts will be for an initial term of three (3) years with the possibility of extension for up to one (1) additional year and will be executed at NYSERDA's sole discretion.
- Teaming arrangements and collaboration are highly encouraged, where appropriate, to enhance the likelihood of project success and overall impact. Teams may include partners such as venture development organizations, investors, service providers, academic and research institutions, government agencies, and other incubators. Include letters of commitment or interest from each identified team member in an appendix to the proposal.

Letters of Commitment or Interest

If you are relying on any other organization to do some of the work, provide services or equipment, participate as a key partner, or share in the non-NYSERDA cost, include a letter from that organization describing its planned participation. Also include letters of interest or commitment from partners or other organizations critical to the development, implementation, and success of the project. Absence of letters of commitment or interest may be interpreted as meaning that the proposer does not have support from the subject parties. Letters may not be solicited from NYSERDA personnel. NYSERDA personnel includes NYSERDA employees and independent contractors delivering services to NYSERDA, such as Innovation Advisors.

Potential Conflicts of Interest

Identify the nature of any potential conflicts of interest among team members and partners in providing services to NYSERDA under this PON. Fully discuss possible conflicts of interest, actual and perceived, which could arise in connection with the performance by team members and partners of the proposed contract. Describe how your firm would resolve conflicts of interest. In the event that NYSERDA determines that a team member may have a conflict of interest or the appearance of such, NYSERDA may: (1) take this into consideration in evaluating the proposal; (2) exclude the proposer from consideration for an award; (3) adjust the scope of work to avoid the conflict or appearance of conflict; or (4) negotiate other appropriate actions with the team member to avoid the conflict or appearance of conflict.

Other Considerations

In addition, proposers should note that:

- A proposal may be considered non-responsive if it fails to comply with the requirements above, the Proposal Requirements (see Section III), or the General Conditions (see Section V).
- Prior to an award being made, potential awardees may be required to demonstrate the following via formal documentation: a strong track record; access to financial resources sufficient to perform the proposed work; technical experience and adequate facilities (or the ability to access them); and/or the ability to qualify for an award under applicable laws and regulations.
- Performance of awarded projects will be assessed continuously to ensure the contractor is meeting its commitments and achieving the milestones laid out in the Statement of Work.
- Note for Organizations Not Principally Located in the Southern Tier: Organizations responding to this PON that are not principally located in the "Southern Tier", as defined by this PON, are strongly encouraged to partner with organizations based in the region. Preference will be given to proposals submitted by organizations principally located within the Southern Tier.

III. PROPOSAL REQUIREMENTS

The proposer's goal should be to concisely present the information needed to adequately address the Proposal Evaluation criteria (see Section IV). Proposals that grossly exceed the page limits or fail to follow the format guidelines in Attachment A - Proposal Narrative may be rejected as non-responsive. If proposers believe proprietary information must be submitted to provide an adequate proposal, they must comply with the General Conditions (see Section V) instructions for submitting proprietary material.

Proposals should not be excessively long or submitted in an elaborate format that includes expensive binders or graphics. Unnecessary attachments beyond those sufficient to present a complete, comprehensive, and effective proposal may reduce, rather than increase, a proposal's standing per the evaluation criteria. Each page of the proposal should state the name of the proposer, the PON number, and the page number. The proposal must be in the following format, with items in the sequence shown.

Proposal Narrative

The purpose of Attachment A - Proposal Narrative is to concisely provide the information necessary to review the proposal according to the criteria laid out in the Proposal Evaluation criteria (see Section IV). Proposers must Complete Attachment A - Proposal Narrative form-fillable document as part of the PON. Attachment A - Proposal Narrative contains the following sections:

- I. Executive Summary
- II. Background, Opportunity, and Needs Assessment
 - Attachment B <u>Mission Model Canvas</u>
- III. Statement of Work, Milestone Payment Plan, and Schedule
- IV. Proposer Qualifications
- V. Project Benefits
- VI. Budget
- VII. Letters of Support
- VIII. Attachments

Proposers must carefully review Attachment A - Proposal Narrative to ensure that all required sections are completed. Failure to do so may result in the proposal being rejected as non-responsive.

Cost Sharing

The proposal should show non-NYSERDA funding of at least 25% of the total cost of the project. The 25% cost sharing requirement is a minimum indicator of the commitment of the proposer to leverage NYSERDA's funding. Cost sharing can be from the proposer, team members and partners, and other private or public sources. Contributions of direct labor (for which the laborer is paid as an employee) and purchased materials may be considered "cash" contributions. Unpaid labor, indirect labor, or other general overhead may be considered "in-kind" contributions. Cash cost share is the preferred form of cost share. NYSERDA will not pay for efforts which have already been undertaken. The proposer or proposing team cannot claim as cost-share any expenses that have already been incurred. The proposer must provide the cost sharing information and their organization's overhead rate as directed in Attachment A - Proposal Narrative.

IV. PROPOSAL EVALUATION

Proposals that meet the solicitation requirements will be reviewed by a Scoring Committee and will be scored and ranked according to the following criteria, **listed in order of importance**. At NYSERDA's discretion, proposers may be requested to interview with all or part of the Scoring Committee to address any potential questions or clarifications outlined in the proposals. Proposers will be notified if they are requested to attend an interview. After the proposals are reviewed, NYSERDA will issue a letter to each proposer indicating the proposal evaluation results. Proposers receiving favorable evaluations will be invited to enter into contract negotiations with NYSERDA. The proposer will be required to submit a detailed Statement of Work, schedule, and budget as part of Attachment A - Proposal Narrative and may also be asked to address specific questions or recommendations of the Scoring Committee prior to any contract award.

Requirements

A negative response to any one of the questions below will eliminate the proposal from further consideration. Does the proposal:

- Involve a Southern Tier-based entity as the principal proposer or a key partner?
- Focus programming on the "Southern Tier", as defined by this PON?
- Propose programming aimed at clean energy business formation and growth?
- Provide the required level of cost-sharing?

Evaluation Criteria in Order of Importance

Outcomes and Benefits

- The likelihood that the proposed programming will advance the development and growth of the Southern Tier's clean energy ecosystem and the likely magnitude of this development and growth.
- The extent of measurable economic benefits to the Southern Tier in the form of clean energy business attraction, formation, and growth.
- The likelihood that Southern Tier jobs will be created or retained as a result of the proposed programming.
- The clarity of the explanation of how the proposed programming is expected to lead to claimed outcomes and benefits.

Project Value

- The extent to which the cost of the project is justified with respect to the expected benefits and the potential impact on the Southern Tier clean energy ecosystem.
- The extent to which the expected benefits are high-impact, realistic, measurable, and logically tied to the proposed programming.
- The extent to which the resulting benefits are likely to be sustained after a contract with NYSERDA ends.
- The quality of the proposed measurement and reporting of project benefits.

Southern Tier Connection

- The extent to which the proposer is based in and/or connected to the Southern Tier and their involvement in supporting existing business formation and growth programs.
- The extent to which the proposer demonstrates a clear, long-term strategy for improving the Southern Tier clean energy ecosystem with business formation and growth support programs
- The extent of the proposer's understanding of business formation and growth challenges facing the Southern Tier.

• The extent to which proposed programming is tailored to addressing business formation and growth challenges.

Project Team and Partners

- The extent of the proposer's (including partners and subcontractors) background in starting, growing, and operating clean energy or technology-based companies.
- The extent of the proposer's (including partners and subcontractors) experience successfully
 executing business formation and growth programming targeting early-stage clean energy or
 technology-based companies.
- The degree of commitment from all essential team members and partners.
- The availability of human resources necessary to execute the project.

Budget and Scope of Work

- The extent to which the proposed scope of work is definitively focused on achieving project objectives and target outcomes.
- The extent to which the proposed scope compliments other efforts taken by the proposer.
- The extent to which task budgets are appropriate and matching contributions indicate a highdegree of commitment.
- The degree to which the applicant has the resources to complete the project.
- The extent to which proposed project optimizes the use of NYSERDA funding and cost share to accomplish project objectives.

Program Policy Factors

NYSERDA reserves the right to accept or reject proposals – or adjust award amounts – based on the following factor(s):

- The degree to which the proposed project directly addresses NYSERDA's mission and strategic goals, including State Energy Plan and Reforming the Energy Vision goals.
- The proposer's track record and performance on current and past NYSERDA contracts, if applicable.
- The degree to which the proposer has the resources (human and financial) to be able to complete the project.
- The degree to which the proposed project optimizes the use of available funding to achieve programmatic objectives.
- Availability of funding.
- Level of prior and current financial commitment to the proposer, or to proposers addressing similar market opportunities under this PON or other NYSERDA programs.
- Geographic coverage and distribution of awardees.
- Duplication of other proposed or awarded projects.

V. GENERAL CONDITIONS

Proprietary Information

Careful consideration should be given before confidential information is submitted to NYSERDA as part of your proposal. Review should include whether it is critical for evaluating a proposal, and whether general, non-confidential information, may be adequate for review purposes. The NYS Freedom of Information Law, Public Officers Law, Article 6, provides for public access to information NYSERDA possesses. Public Officers Law, Section 87(2)(d) provides for exceptions to disclosure for records or portions thereof that "are trade secrets or are submitted to an agency by a commercial enterprise or derived from information obtained from a commercial enterprise and which if disclosed would cause <u>substantial injury to the competitive position</u> of the subject enterprise." Information submitted to NYSERDA that the proposer wishes to have treated as proprietary, and confidential trade secret information, should be identified and labeled "<u>Confidential</u>" or "<u>Proprietary</u>" on each page at the time of disclosure. This information should include a written request to except it from disclosure, including a written statement of the reasons why the information should be excepted. See Public Officers Law, Section 89(5) and the procedures set forth in 21 NYCRR Part 501 <u>http://www.nyserda.ny.gov/About/-/media/Files/About/Contact/NYSERDA-Regulations.ashx</u>. However, NYSERDA cannot guarantee the confidentiality of any information submitted.

Omnibus Procurement Act of 1992

It is the policy of New York State to maximize opportunities for the participation of New York State business enterprises, including minority- and women-owned business enterprises, as bidders, subcontractors, and suppliers on its procurement Agreements.

Information on the availability of New York subcontractors and suppliers is available from:

Empire State Development Division For Small Business 625 Broadway Albany, NY 12207

A directory of certified minority- and women-owned business enterprises is available from:

Empire State Development Minority and Women's Business Development Division 625 Broadway Albany, NY 12207

State Finance Law sections 139-j and 139-k

NYSERDA is required to comply with State Finance Law sections 139-j and 139-k. These provisions contain procurement lobbying requirements which can be found at https://online.ogs.ny.gov/legal/lobbyinglawfaq/default.aspx. The attached Proposal Checklist calls for a signature certifying that the proposer will comply with State Finance Law sections 139-j and 139-k and the Disclosure of Prior Findings of Non-responsibility form includes a disclosure statement regarding whether the proposer has been found non-responsible under section 139-j of the State Finance Law within the previous four years.

Tax Law Section 5-a

NYSERDA is required to comply with the provisions of Tax Law Section 5-a, which requires a prospective contractor, prior to entering an agreement with NYSERDA having a value in excess of \$100,000, to certify to the Department of Taxation and Finance (the "Department") whether the contractor, its affiliates, its subcontractors and the affiliates of its subcontractors have registered with the Department to collect New York State and local sales and compensating use taxes. The Department has created a form to allow a prospective contractor to readily make such certification. *See*, ST-220-TD (available at http://www.tax.ny.gov/pdf/current_forms/st/st220td_fill_in.pdf). Prior to contracting with NYSERDA, the prospective contractor must also certify to NYSERDA whether it has filed such certification with the Department. The Department has created a second form that must be completed by a prospective contractor prior to contacting and filed with NYSERDA. *See*, ST-220-CA (available at

<u>http://www.tax.ny.gov/pdf/current_forms/st/st220ca_fill_in.pdf</u>). The Department has developed guidance for contractors which is available at <u>http://www.tax.ny.gov/pdf/publications/sales/pub223.pdf</u>.

Contract Award

NYSERDA anticipates making multiple awards under this solicitation. It may award a contract based on initial applications without discussion, or following limited discussion or negotiations pertaining to the Statement of Work. Each offer should be submitted using the most favorable cost and technical terms. NYSERDA may request additional data or material to support applications. NYSERDA will use the Sample Agreement to contract successful proposals. NYSERDA may at its discretion elect to extend and/or add funds to any project funded through this solicitation. NYSERDA reserves the right to limit any negotiations to exceptions to standard terms and conditions in the Sample Agreement to those specifically identified in the submitted proposal (see Proposal Checklist). Proposers should keep in mind that acceptance of all standard terms and conditions will generally result in a more expedited contracting process. NYSERDA expects to notify proposers in approximately ten (10) weeks from the proposal due date whether their proposal has been selected to receive an award. NYSERDA may decline to contract with awardees that are delinquent with respect to any obligation under any previous or active NYSERDA agreement.

Limitation

This solicitation does not commit NYSERDA to award a contract, pay any costs incurred in preparing a proposal, or to procure or contract for services or supplies. NYSERDA reserves the right to accept or reject any or all proposals received, to negotiate with all qualified sources, or to cancel in part or in its entirety the solicitation when it is in NYSERDA's best interest. NYSERDA reserves the right to reject proposals based on the nature and number of any exceptions taken to the standard terms and conditions of the Sample Agreement. NYSERDA reserves the right to disqualify proposers based upon the results of a background check into publicly available information and the presence of a material possibility of any reputational or legal risk in making of the award.

Reporting

If awarded, the proposer will be required to submit to NYSERDA on a periodic basis, a prepared analysis and summary of program funding leveraged from other sponsors for the proposed program itself as well as the following metrics for relevant program participant companies and graduates for at least four years after their graduation date:

- Private investment raised
- Project finance capital secured
- Grants awarded
- Strategic partnerships executed
- Revenue generated
- New products commercialized
- Jobs created/retained
- Liquidity events realized

All metrics shall be documented, certified, and published to the best of the contractor's ability, in a manner which does not present any competitive harm to incubator client companies and graduates. Reporting shall commence the first calendar quarter after the contract is executed. Reports shall be submitted thirty (30) days after the previous calendar quarter's activities (i.e., reporting period).

NYSERDA may decline to contract with awardees that are delinquent with respect to metrics reporting for any previous or active NYSERDA agreement.

Due Diligence

NYSERDA, at its discretion, may conduct broad due diligence to validate any or all elements of a proposal and to assess proposer's prospects of success, including gathering information to assess a proposal relative to any of the topics listed in evaluation criteria, whether or not such topic is explicitly addressed in a proposal. NYSERDA may conduct due diligence on some or all proposals based on NYSERDA's current guidelines at the time of a review. NYSERDA staff or contractors may follow up with proposers or their "qualified" investors to request additional information or clarification regarding proposer's proposal, including questions regarding the proposer's business prospects and resources, whether or not those questions are specifically related to the elements of the proposal. Additionally, customized due diligence may be conducted by NYSERDA staff or contractors based on questions on any proposal raised by NYSERDA staff and/or the Scoring Committee. Due diligence may include, but is not limited to:

- Interviews of independent references and background checks of team members;
- Assessment of prior business experience of any team member associated with a proposal;
- Research on or validation of intellectual property claims;
- Investor, customer, and partner reference checks;
- Market research on the proposer's target market and any other related or possibly competitive technology or market area;
- Research to validate any assumptions on current or future revenues, costs, capital needs, and financing prospects for the proposer's business, including similar (or unrelated) technologies, processes, or competitive solutions; and/or
- Any other research that could reasonably inform the evaluation of a proposal, or the prospects for commercial success of the proposer's business, whether directly related to, or unrelated to the specific elements in a proposal.

Due diligence may include discussions with proposer's former and current business partners, employees, investors, customers, and competitors. Due diligence may be conducted by NYSERDA staff or contractors, including members of the Scoring Committee, before, during, or after a scoring process, and prior to finalization of a contract award, any information gleaned in diligence may be used to score or re-score a proposal at NYSERDA's discretion.

Disclosure Requirement

The proposer shall disclose any indictment for any alleged felony, or any conviction for a felony within the past five years, under the laws of the United States or any state or territory of the United States and shall describe circumstances for each. When a proposer is an association, partnership, corporation, or other organization, this disclosure requirement includes the organization and its officers, partners, and directors or members of any similarly governing body. If an indictment or conviction should come to the attention of NYSERDA after the award of a contract, NYSERDA may exercise its stop-work right pending further investigation or terminate the agreement; the contractor may be subject to penalties for violation of any law which may apply in the particular circumstances. Proposers must also disclose if they have ever been debarred or suspended by any agency of the U.S. Government or the New York State Department of Labor.

VI. ATTACHMENTS

The following attachments are provided for entities proposing to PON 4242 Accelerate Southern Tier:

- Attachment A Proposal Narrative (Required, Template Provided)
- Attachment B Mission Model Canvas (Required, Template Provided)
- Attachment C <u>Sample Agreement</u> (For Reference Only)



Step One Resource Eligibility Submissions Due: Friday, May 24, 2019 by 3:00 p.m. Eastern Time (ET)* Step Two Application for Qualification Packages Due: Thursday, June 13, 2019 by 3:00 p.m. ET Step Three Bid Proposals Due: Tuesday, September 10, 2019 by 3:00 p.m. ET

NYSERDA SEEKS TO ACQUIRE APPROXIMATELY 1.5 MILLION NEW YORK TIER 1 ELIGIBLE RENEWABLE ENERGY CERTIFICATES ANNUALLY

The New York State Energy Research and Development Authority (NYSERDA) seeks to procure Tier 1 eligible Renewable Energy Certificates under the Renewable Energy Standard (RES), a component of the Clean Energy Standard (CES).

NYSERDA was created in 1975 by the New York State Legislature as a public benefit corporation. As designated in the Public Service Commission's (PSC) <u>Order Adopting a</u> <u>Clean Energy Standard</u>, issued and effective August 1, 2016, NYSERDA acts as the Central Administrator of the RES program.

RESRFP19-1 will be implemented through a three-step process, consisting of:

- Step One: A Resource Eligibility Determination step completed in the New York Generation Attribution Tracking System (NYGATS) through which the Tier 1 resource eligibility of the Bid Facility is determined, allowing participation in Step Two;
- 2. Step Two: An Application for Qualification step that will qualify Proposers to submit a Step Three Bid Proposal, based on demonstration that the Bid Facility meets certain threshold requirements; and
- 3. Step Three: A competitive Bid Proposal step.

Only those Proposers found eligible and qualified through the Step One and Two processes will be permitted to submit a Bid Proposal or otherwise participate in Step Three.

*Step One Resource Eligibility Determination: Requests for Step One Resource Eligibility Determination submissions in NYGATS must be completed by 3:00 p.m. ET on **Friday, May 24, 2019.**¹ Through the Step One process, a determination will be made as to the Tier 1 resource eligibility of the Bid Facility, which will determine its eligibility to participate in Step Two.

Step Two Application for Qualification: NYSERDA will open the Step Two Application for Qualification process on Thursday, May 2, 2019 (see Section IV). Step Two Application for Qualification packages must be **received by NYSERDA** by **3:00 p.m. ET on Thursday, June 13, 2019 via electronic submission**.² NYSERDA staff will be available to support Proposer's inquiries regarding Step Two Applications through the deadline at 3:00 p.m. Thursday, June 13, 2019. Applications may be submitted electronically by following the link for electronic submissions found on <u>NYSERDA's Current Funding Opportunities website</u>,³ located in the "Current Funding Opportunities" section of NYSERDA's website. Instructions for submitting electronically are provided in Attachment J to this RFP.

NYSERDA intends to notify all prospective Proposers as to their qualification status by Wednesday, July 24, 2019. Qualified Proposers will receive a Notice of Qualification and will be provided with detailed instructions for submitting a Step Three Bid Proposal.

Step Three Bid Proposal: Step Three Bid Proposals must be **received* by NYSERDA** by **3:00 p.m. ET on Tuesday, September 10, 2019 via electronic submission**. Instructions for submitting electronically and the link for electronic submissions will be included in a Proposer's Notice of Qualification. Additional information regarding NYSERDA's Renewable Energy Solicitations can be found on NYSERDA's Renewable Energy Solicitations Standard (RES) Tier 1 website.⁴

*It is recommended that Proposers set aside ample time, <u>well in advance of each</u> <u>deadline</u>, to gather the required information and documentation and to understand the requirements to complete the above processes.

All general questions about this RFP must be submitted via the Q&A feature of the <u>electronic submission website</u> (no phone calls).⁵ Project specific questions may be addressed to <u>res@nyserda.ny.gov</u> or the Messages feature on the <u>electronic</u> <u>submission website</u>, which will be available following the Proposers' Webinar.

No communication intended to influence this procurement is permitted except by contacting the Designated Contacts. The RESRFP19-1 Designated Contacts are Doreen Harris, Abbey DeRocker, Marci Brunner, Jennifer Phelps, Jeremy Wyble, and Bram Peterson. Contacting anyone other than the Designated Contacts (either directly

⁴ <u>https://www.nyserda.ny.gov/ces/rfp</u>

¹ See <u>https://www.nyserda.ny.gov/All-Programs/Programs/Clean-Energy-Standard/Renewable-Generators-and-Developers/RES-Tier-One-Eligibility/Certification</u>

² If you are unable to submit by electronic means, please contact a Designated Contact immediately.

³ <u>http://www.nyserda.ny.gov/Funding-Opportunities/Current-Funding-Opportunities.aspx</u>

⁵ The Q&A page is intended for general questions which are suitable for public review.

by the Proposer or indirectly through a lobbyist or other person acting on the Proposer's behalf) to influence the procurement: (1) may result in a Proposer being deemed a non-responsive offeror, and (2) may result in the Proposer not receiving an award.

Incomplete submittals will be subject to disqualification. It is the Proposer's responsibility to ensure that all required forms and attachments have been completed and submitted. Late packages will not be accepted and those lacking the appropriate completed and signed Step Two Application for Qualification Form may be returned. **Faxed, mailed, or e-mailed packages will not be accepted**.⁶ Packages will not be accepted by hand delivery at any NYSERDA location.

If changes are made to this solicitation, notification will be posted on the <u>NYSERDA's</u> <u>RES website</u>, the <u>electronic submission website</u> under the Announcements tab, and provided to those that provide their email address to NYSERDA via the <u>electronic</u> <u>submission website</u> or <u>NYSERDA's RES Renewable Generators and Developers Email</u> <u>Sign-Up Page</u>.⁷ Please check the website periodically, as well as immediately before submitting in Step Two or Step Three.

⁶ Unless otherwise agreed by NYSERDA. See footnote 2.

⁷ <u>https://www.nyserda.ny.gov/All-Programs/Programs/Clean-Energy-Standard/Renewable-Generators-and-Developers/Renewable-Generators-and-Developers-Email-List</u>

TABLE OF CONTENTS

NEW IT	EMS & IMPORTANT NOTES	5		
I.	BACKGROUND: THE NEW YORK STATE CLEAN ENERGY STANDARD			
	AND RENEWABLE ENERGY STANDARD	9		
II.	NOTIFICATION of RFP CHANGES	10		
III.	PROPOSERS WEBINAR & INQUIRIES	10		
IV.	SCHEDULE	11		
۷.	PARTICIPATING IN THIS RFP	12		
VI.	STEP ONE RESOURCE ELIGIBILITY DETERMINATION	13		
VII.	STEP TWO APPLICATION FOR QUALIFICATION	16		
VIII.	STEP TWO NOTICE OF QUALIFICATION	32		
IX.	STEP THREE BID PROPOSAL	34		
Χ.	NYSERDA PUBLIC OUTREACH			
XI.	STEP THREE BID PROPOSAL EVALUATION	41		
XII.	POST-AWARD PROCESS	44		
XIII.	RES STANDARD FORM AGREEMENT (ATTACHMENT H)	47		
XIV.	GENERAL CONDITIONS	47		
APPEN	IDIX 1 – INCREMENTAL ECONOMIC BENEFITS APPENDIX	51		
APPENDIX 2 - PROJECT VIABILITY APPENDIX				
	IDIX 3 - OPERATIONAL FLEXIBILITY AND PEAK COINCIDENCE APPEND			

NEW ITEMS & IMPORTANT NOTES

1) Transparency and Community Outreach

Our shared ability to fulfill New York's aggressive renewable energy goals depends upon Proposers' commitment to acting responsibly while interacting with the public, engaging New York State host communities, and developing projects. NYSERDA's counterparties, contractors, consultants and vendors are expected to adhere to high standards with regard to project development transparency and outreach activities. Proposers who submit a Step Three Bid Proposal will be required to develop and submit a Community Outreach Plan that promotes positive and meaningful public engagement and that reflects an understanding of local interests and concerns, provides high-quality and welltimed public educational opportunities, demonstrates a commitment to partnering with elected officials in proposed host communities, and elicits input from the public and affected agencies. **The Community Outreach Plan will be made available to the public by NYSERDA soon after Step Three Bid Proposals are received.** NYSERDA expects to be kept well-informed of project progress well-ahead of planned community outreach activities.

Through RESRFP19-1, a new Project Viability subcategory, Community Outreach, has been introduced. Proposers will be scored based on the quality of their Community Outreach Plan and the community outreach activities performed prior to submission of a Bid Proposal. See Section IX and Appendix 2 for additional information.

Public engagement, education about Large Scale Renewables, and open communication about the solicitation and permitting process are of utmost priority to NYSERDA. Shortly after Step Three Bid Proposals are submitted, NYSERDA will schedule and meet with local officials in the proposed host communities, in person and/or via teleconference. These meetings will be conducted without Proposer participation, but NYSERDA will notify the Proposer regarding the schedule for such meetings and provide a brief synopsis of such meetings after they conclude.

2) Consultation with New York State Department of Agriculture & Markets Notice of Intent

For awarded projects with a Nameplate Capacity less than 25 MW and located in a New York State agricultural district, Proposers will be required to provide to NYSERDA a report including all of the information required by Section 305(4)(b) of the Agriculture and Markets Law. NYSERDA may also require a 305 report prior to award decisions.

A map of the agricultural districts, by county, is available from <u>New York State Agriculture</u> and <u>Markets.</u>⁸

Projects subject to the Article 10 permitting process are not required to complete the process described above.

3) Energy Storage

On March 11, 2019, NYSERDA submitted the <u>NYSERDA Energy Storage Bulk Incentive</u> <u>Program Manual</u>⁹ to the Department of Public Service (DPS) under Case 18-E-0130. RESRFP19-1 incorporates, as appropriate, the requirements in Section VII, "Measurement and Verification," and Section IX, "Technical Requirements" of the Manual, including any changes to the Technical Requirements, which are expected to evolve as the industry develops. In addition:

- The storage equipment must consist of commercial products carrying a manufacturer's warranty. The warranty must cover the entire energy storage system including ancillary equipment and power electronics. Experimental, beta, or prototype equipment is not eligible.
- The storage system must be certified to meet minimum safety requirements by a Nationally Recognized Testing Laboratory as evidenced by specific UL listings defined in the Program Manual. These will evolve to meet current best practices in the storage industry. These UL listings must be received by the time that the system enters commercial operation.
- Energy storage systems and components must comply with all manufacturers' installation requirements, applicable laws, regulations, codes, licensing, and permit requirements. This includes, but is not limited to, SEQR; Article 10; the International Building Code Series as amended by the New York State Uniform Code Supplement; the National Electric Code¹⁰; New York State's Standard Interconnection Requirements; and all applicable State, city, town, or local ordinances or permit requirements, and any additional requirements of the local authority having jurisdiction (AHJ).

In addition, if an award includes Energy Storage, the Proposer must agree to reasonably participate in an Energy Storage Technical Working Group (ES TWG) and its associated activities.

NYSERDA has also updated the scoring methodology in Appendix 3, Operational Flexibility and Peak Coincidence, to reflect current and anticipated market conditions.

4) Prevailing Wage Requirement Clarification

Consistent with previous requirements, the 2019 RES Standard Form Agreement (Attachment H) includes Prevailing Wage requirements. Although successful Proposals

⁸ New York State Agriculture and Markets Agricultural Districts is available by county at <u>https://www.agriculture.ny.gov/AP/agservices/agricultural-districts.html</u>

⁹ Matter Master 18-E-0130, In the Matter of Energy Storage Deployment Program, March 11, 2019. The Energy Storage Bulk Incentive Program Manual may be updated occasionally. Check NYSERDA's 2019 RES Solicitation Resource page for updates.

¹⁰ National Electric Code, including Article 706, Energy Storage Systems and Article 210, Stand-Alone Systems.

will not be considered a public work under Article 8 of the NYS Labor Law, all laborers, workmen and mechanics (within the meaning of those terms under NYS Labor Law Article 8) performing Construction Activities with respect to the Bid Facility, must be paid wages and benefits in an amount not less than the Prevailing Rates (as determined under NYS Labor Law § 220 for construction activities in New York, or for construction activities elsewhere as determined by analogous state law) that would be applicable to a public work in the area where the Bid Facility Construction Activities occur. This requirement applies: (1) to all laborers, workmen and mechanics performing Construction Activities, whether direct employees of the Seller or of Seller's subcontractor(s), and (2) regardless of whether or not such employment was claimed as an Incremental Economic Benefit in the Step Three Bid Proposal.

See Section 18.10 of the RES Standard Form Agreement for more information.

5) Consolidation of Incremental Economic Benefits Categories

Four Economic Benefits categories have been consolidated into two categories, a) Long-Term Economic Benefits to New York State and b) Short-Term Economic Benefits to New York State. The eligibility of Incremental Economic Benefits have not changed, nor has the overall weight of this evaluation criteria.

See Appendix 1, Incremental Economic Benefits Appendix for more information.

6) Commercial Operation Milestone Date

The Public Service Commission's (PSC) <u>Order Approving the Phase 3 Implementation</u> <u>Plan</u> issued on December 14, 2018, allows two additional 6-month extension periods to the contractual Commercial Operation Milestone Date (COMD), for a total of six additional 6-month extension periods. The COMD for RESRFP19-1 is November 30, 2021 and may be extended to November 30, 2024.

7) Enhanced Financing Plan and Business Entity Description

NYSERDA has expanded the Financing Plan requirements and has introduced a requirement that proposers include a description of the Proposer's corporate structure including any affiliates, subsidiaries or business partners of any sort.

8) Increased Minimum Threshold Requirement for Project Development Experience

The Proposer or the principals in its development team must have experience in successfully developing at least one renewable generation project. In addition, Proposers must provide a management chart and organizational chart associated with the Proposal.

9) Enhanced Resource Assessment and Energy Production Estimate

The Resource Assessment and Energy Production Estimates must be consistent with and representative of the Bid Facility, long-term conditions at the site, and if applicable, Energy Storage, and must include data on a project lifetime scale consistent with the Bid Proposal.

I.BACKGROUND: THE NEW YORK STATE CLEAN ENERGY STANDARD AND RENEWABLE ENERGY STANDARD

On July 6, 2015, the New York State Energy Planning Board issued the 2015 State Energy Plan (SEP)¹¹ which stated the goal achieve 50 percent of the State's electricity be generated from renewable resources by 2030 (50 by 30 goal). In December 2015, Governor Cuomo directed the Department of Public Service (DPS) to develop a Clean Energy Standard (CES)¹² to help achieve the SEP goals.

The PSC <u>Order Adopting the Clean Energy Standard</u> issued on August 1, 2016, along with additional orders issued under Case 15-E-0302, Proceeding on Motion of the Commission to Implement a Large-Scale Renewable Program and a Clean Energy Standard (Orders), established the Renewable Energy Standard (RES) as the State's principal means of achieving the 50 by 30 goal. A component of the RES consists of a Tier 1 obligation on load serving entities (LSE) to procure Renewable Energy Certificates¹³ (RECs) associated with new renewable energy resources.

The Orders authorize NYSERDA, as central procurement administrator, to offer longterm contracts to generators for the purchase of Tier 1-eligible RECs, in the form of Tier 1 NYGATS certificates. Pursuant to the Orders, NYSERDA seeks to accomplish the RES objective by contracting with suppliers, through a series of competitive RFPs, for the RES Tier 1 RECs created by eligible generation resources.¹⁴ For the avoidance of doubt, NYSERDA seeks to acquire Tier 1-eligible RECs only, and will not have any claim to associated electric energy, capacity, or ancillary services associated with the RECs.

Information regarding current NYSERDA's implementation of the RES can be found on NYSERDA's CES website.¹⁵

https://www.governor.ny.gov/sites/governor.ny.gov/files/atoms/files/Renewable_Energy_Letter.pdf

¹³ While the PSC's August 1, 2016 Order references renewable energy "credits," NYGATS creates renewable energy certificates, and therefore that term is used in this RFP. The NYGATS certificates are created in one MWh denominations and are in all other ways consistent with the Order.

¹⁴ Directives pertaining to NYSERDA's RES Central Procurement role are contained in the February 22, 2017 Order Approving the Phase 1 Implementation Plan and the Final Phase 1 Implementation Plan filed by NYSERDA on March 24, 2017, the November 17, 2017 Order Approving the Phase 2 Implementation Plan and the Final Phase 2 Implementation Plan filed by NYSERDA on December 18, 2017, and the December 14, 2018 Order Approving the Phase 3 Implementation Plan and the Final Phase 3 Implementation Plan filed by NYSERDA on January 11, 2019. The March 9, 2017 Order on the Value of Distributed Energy Resources further clarifies the treatment of certain distributed energy resources (DERs) such resources under the CES and their eligibility to participate in NYSERDA's long term procurements for RECs.

¹⁵ <u>https://www.nyserda.ny.gov/Clean-Energy-Standard/</u>

¹¹ 2015 New York State Energy Plan is available from http://energyplan.ny.gov/

¹² Letter from Governor Andrew M. Cuomo to Audrey Zibelman, Chair, New York State Department of Public Service, December 2, 2105 (Cuomo Letter) available at

Information regarding NYSERDA's prior solicitations under the RES, RESRFP17-1 and RESRFP18-1, can be found on <u>NYSERDA's RES Solicitation website</u>.¹⁶

Information on the Renewable Portfolio Standard (RPS), the precursor to the CES, and past Main Tier solicitations can be found on <u>NYSERDA's website</u>.¹⁷

The CES/RES Orders can be accessed from the <u>NYS Public Service Commission's</u> <u>website</u>.¹⁸ All Proposers are strongly advised to review the Orders before participating in this RFP.

CAPITALIZED TERMS AND ABBREVIATIONS USED IN THIS RFP ARE DEFINED IN ARTICLE I OF THE <u>RES STANDARD FORM AGREEMENT (Attachment H)</u>.

II. NOTIFICATION of RFP CHANGES

Notification of any changes in RFP process or documents will be posted on <u>NYSERDA's</u> <u>RES Tier 1 website</u>, the <u>electronic submission website</u> under the Announcements tab, and sent via email to parties that have submitted contact information to NYSERDA's RESRFP19-1 solicitation via the <u>electronic submission website</u>.

III.PROPOSERS WEBINAR & INQUIRIES

NYSERDA will hold a webinar for Proposers on **Thursday, May 2, 2019 at 11:00 a.m. ET** (Albany, NY time). On the webinar, NYSERDA will review the Step One Resource Eligibility Determination, Step Two Application for Qualification, the Step Three Bid Proposal requirements, and the RES Standard Form Agreement. Questions will be taken and, to the extent possible, responses will be provided during the webinar. **Proposers who intend to participate must register by 12:00 noon Wednesday, May 1, 2019 on** <u>NYSERDA's website.</u>¹⁹

Proposers are encouraged to submit questions prior to the webinar via the <u>electronic</u> <u>submission website</u> under the Q&A feature. Written questions can be submitted at any time, but must be received before **5 p.m. on Thursday, May 9, 2019** to be included in NYSERDA's response. The written responses will supersede any responses given by NYSERDA during the Proposers' Webinar. All questions regarding the RFP documents or the process MUST be directed as indicated. Questions may not be submitted directly to any individual at NYSERDA, DPS Staff, or to individuals working for or on behalf of NYSERDA.

¹⁹ To register for the Proposers' Webinar please visit <u>https://nyserda-events.webex.com/nyserda-events/onstage/g.php?MTID=e7e0126c562473da3b6496ad6299719a3</u>

¹⁶ <u>https://www.nyserda.ny.gov/ces/rfp</u>

¹⁷ <u>https://www.nyserda.ny.gov/All-Programs/Programs/Clean-Energy-Standard/Renewable-Portfolio-</u> <u>Standard/Past-Main-Tier-Solicitations</u>

¹⁸ http://documents.dps.ny.gov/public/MatterManagement/CaseMaster.aspx?MatterCaseNo=15-e-0302

NYSERDA may post questions anonymously, along with NYSERDA's responses, on the <u>electronic submission website</u> under the Q&A feature, on or about Thursday, May 16, 2019.

Bid Facility-specific questions must be submitted through the Messages feature of the <u>electronic submission website</u>. Questions that reveal a Proposers' identify and/or commercial information should be submitted through the Messages feature. Proposers must register on the <u>electronic submission website</u> to gain access to the Messages feature. The Messages feature of the <u>electronic submission website</u> is available only to Proposers and is a secure communication between each Proposer and NYSERDA's Designated Contacts.

IV. SCHEDULE

The schedule for this RFP is as follows (all times ET):

1	RFP Release Date	Tuesday, April 23, 2019
2	Proposers' Webinar	Thursday, May 2, 2019
3	NYSERDA opens Step Two Application for Qualification	Thursday, May 2, 2019
4	New York Green Bank Informational Webinar	Thursday, May 9, 2019
5	Deadline – Proposers submit written questions	Thursday, May 9, 2019
6	NYSERDA responds to questions	Thursday, May 16, 2019
7	Deadline – Step One Resource Eligibility Determination	
	Submission	Friday, May 24, 2019
8	NYSERDA responds with Step One Resource Eligibility	
	Determination	Friday, June 7, 2019
9	Registration Deadline – Step Two Application for	
	Qualification (see Section VII)	Monday, June 10, 2019
10	Deadline – Step Two Application for Qualification	
	Submission	Thursday, June 13, 2019
11	NYSERDA responds with Step Two Application for	
	Qualification Determinations	Wednesday, July 24, 2019
12	Deadline – Step Three Bid Proposal Submission	Tuesday, September 10, 2019
13	NYSERDA notifies Proposers Receiving Awards	November 2019

New York Green Bank

The New York Green Bank (NYGB) is a \$1 billion New York State-sponsored investment fund and division of NYSERDA. NYGB's mission is to accelerate clean energy deployment in New York by working in collaboration with the private sector to transform financing markets. NYGB seeks to alleviate financing gaps in New York's clean energy markets and mobilize greater private sector activity to increase the available capital for clean energy projects. Supporting the expansion of Large-Scale Renewables in NY State is a strategic priority for NYGB. NYGB is prepared to support project developers and investors with a range of credit products and structures through various project financing stages, including and not limited to:

- Interconnection deposit financing;
- Long lead equipment financing;
- Construction financing; and
- Term loans, including subordinated debt to increase tenor and leverage.

NYGB will evaluate contracted revenues, including NYSERDA RECs as well as uncontracted wholesale power and capacity sales to support long-term financing.

To learn more about how NYGB can finance Large-Scale Renewable projects, NYGB will be holding a webinar on **May 9, 2019 at 2:00 p.m. ET**. To register for the NYGB informational webinar, click <u>here</u>.²⁰

Please note that the above dates are subject to change. Notification of any changes to the RFP process or documents will be posted on <u>NYSERDA's RES website</u> and sent via email to those parties who have submitted contact information to NYSERDA's RESRFP19-1 solicitation via the website. This does not relieve prospective Proposers of their responsibility to check NYSERDA's RES Solicitation website for news and updates.

V. PARTICIPATING IN THIS RFP

NYSERDA has designed this solicitation as a three-step process, consisting of:

- Step One: A Resource Eligibility Determination step completed in NYGATS through which the Tier 1 resource eligibility of the Bid Facility is determined, allowing participation in Step Two;
- Step Two: An Application for Qualification step that will qualify Proposers to submit a Step Three Bid Proposal, based on demonstration that the Bid Facility meets certain threshold requirements; and
- 3) Step Three: A competitive Bid Proposal step.

²⁰ To register for the NYGB webinar, please visit: <u>https://nyserda-</u>

events.webex.com/mw3300/mywebex/default.do?nomenu=true&siteurl=nyserda-

events&service=6&rnd=0.2082978758022801&main_url=https%3A%2F%2Fnyserda-

 $[\]frac{events.webex.com\%2Fec3300\%2Feventcenter\%2Fevent\%2FeventAction.do\%3FtheAction\%3Ddetail\%2}{6\%26\%26EMK\%3D4832534b0000004c1a85c12df1a7ff44d1152071dec1bf4ea16257d66766f131bfd7d7}{ebcd4b999\%26siteurl\%3Dnyserda-}$

events%26confViewID%3D125624575508643621%26encryptTicket%3DSDJTSwAAAARzw2RDWTM5v g_1RI6r-i05X6x7uvTVNmPLMhmt4buBCA2%26

STEP ONE – RESOURCE ELIGIBILITY DETERMINATION

VI. STEP ONE RESOURCE ELIGIBILITY DETERMINATION

To participate in this RFP each Bid Facility must possess a determination from NYSERDA that it is a Tier 1 RES eligible resource technology type qualifying under <u>Appendix A</u> of the <u>Order Adopting the Clean Energy Standard</u>. Pursuant to the Order, to participate in this RFP an eligible Bid Facility must also: (1) be located within the New York Control Area or in an adjacent control area and supply energy into New York State, in accordance with the RES Delivery Requirements in this RFP, and (2) have first commenced Commercial Operation on or after January 1, 2015, or (3) must produce new, incremental energy and Tier 1 RECs from new Bid Capacity above a historical baseline.

Resource Eligibility Determination requests are completed in NYGATS. To complete a Step One request, Proposers must create a NYGATS account, complete a project registration for the Bid Facility, and once the registration is approved, complete an application requesting either a Statement of Qualification ("SoQ" for facilities in operation at the time of request) or Provisional Statement of Qualification ("PSoQ" for facilities not yet in operation at the time of request). The SoQ/PSoQ certifies that a Bid Facility has met or will meet the eligibility requirements under Tier 1 of the RES.²¹ NYSERDA will notify the Proposer of its eligibility determination by posting a letter in the Proposer's NYGATS account associated with the Bid Facility.

For consideration through RESRFP19-1, **Proposers must complete a Resource Eligibility Determination submission by 3:00 p.m. ET on Friday, May 24, 2019** to allow NYSERDA to grant or deny an SoQ or PSoQ by 5 p.m. Friday, June 7, 2019.

For a Bid Facility with an existing SoQ or PSoQ, the Step Two Application for Qualification for the Bid Facility submitted under this RESRFP19-1 must be consistent with the existing SoQ or PSoQ. Some resource changes, for example a change in the Technology Type, Nameplate Capacity, In-Service Date, Control System Operator, New York Independent System Operator (NYISO) Zone, Electric Utility Company, Tariff Type, Vintage Type, Bid Facility address or other key project components will require Proposers to submit either (1) an SoQ or PSoQ revision, or (2) a request for a new SoQ or PSoQ. NYSERDA will work with the Proposer to rectify any discrepancies. If assistance is needed, please contact res@nyserda.ny.gov with a subject line "SoQ/PSoQ Assistance."

²¹ See <u>https://www.nyserda.ny.gov/All-Programs/Programs/Clean-Energy-Standard/Renewable-Generators-and-Developers/RES-Tier-One-Eligibility/Certification</u>

More information on the Resource Eligibility Determination process, including guidelines for documenting eligibility for certification, including the eligibility of distributed energy resources, upgrades, relocated facilities and facilities returning to service can be found on <u>NYSERDA's RES Tier 1 Eligibility website</u>.²² Training materials for using NYGATS to apply for an eligibility determination may be found on the <u>NYGATS website</u>.²³

Each Bid Facility must have a valid NYGATS ID and an SoQ or PSoQ to participate in Step Two.

Subsequent Tier 1 Eligibility Changes

Bid Facilities selected for an award under this RFP will not be subject to subsequent changes in RES eligibility rules; however, if the Bid Facility fails to maintain eligibility consistent with the RES requirements as they existed on the RFP Release Date,²⁴ such ineligibility will extend to the RECs associated with the Bid Facility's production throughout the entire period in which the Bid Facility fails to maintain eligibility.

Conformance with NYGATS Operating Rules

If awarded under RESRFP19-1, Proposers must obtain a valid NYGATS ID, Statement of Qualification, achieve Operational Certification, and operate in conformance with the NYGATS Operating Rules. Proposers must implement a Forward Certificate Transfer of Tier-1 RECs in NYGATS, up to the Annual REC Cap, into NYSERDA's NYGATS Account. NYSERDA will make payment for Tier-1 RECs from the Bid Facility delivered to NYSERDA's NYGATS account.

Energy Storage Eligibility

A Bid Facility paired with Energy Storage will be eligible for an award if the Energy Storage system is installed consistent with Section IX, Technical Requirements of NYSERDA's Bulk Storage Incentive Program Manual and either:

- 1) co-located with the generation behind a single wholesale or retail meter in the NYCA, or
- co-located with the generation behind a separate wholesale or retail meter in the NYCA, or
- 3) located in a separate location from the generation inside the NYCA.

Successful Proposers awarded a Contract Tenor in excess of 10 years must, prior to the commencement of construction, provide an executed Energy Storage operations and maintenance agreement for a term which is greater than or equal to the proposed Contract Tenor. See Section IX C(5) and Appendix 3.

²² <u>https://www.nyserda.ny.gov/All-Programs/Programs/Clean-Energy-Standard/Renewable-Generators-and-Developers/RES-Tier-One-Eligibility/Eligibility</u>

²³ https://www.nyserda.ny.gov/All-Programs/Programs/NYGATS

²⁴ Refer to the first page of this RFP or Section IV. Schedule, for the RFP Release Date

Eligibility Limitations

A Proposer may not condition the acceptance of one Step Three Bid Proposal based on the withdrawal or acceptance of other Proposals. A Step Three Bid Proposal may not be contingent on the receipt of the Production Tax Credit or Investment Tax Credit.

Tier 1 eligible RECs or environmental attributes that are the subject of a current NYSERDA RES contract, or that were the subject of an award under a previous NYSERDA RES or RPS Main Tier solicitation are not eligible under this RFP.

The following Energy Storage projects are not eligible for an award under this solicitation:

- An Energy Storage project for which either the Energy Storage or associated Bid Facility is owned by a regulated utility or the New York Power Authority;
- An Energy Storage project that has been awarded a utility Bulk Dispatch Rights Contract;
- An Energy Storage project that receives a NYSERDA Retail Storage Incentive, or a NYSERDA Bulk Storage Incentive;
- An Energy Storage project located outside of the NYCA;
- Pumped hydroelectric storage.

Note that, under the RES Standard Form Agreement (Attachment H), NYSERDA will make payment only for Tier 1 RECs delivered to NYSERDA's NYGATS Account. If the Energy Storage is charged from the co-located renewable generation, the energy discharged from the storage will generate Tier 1 RECs which will be eligible for payment. Should the Bid Facility/Energy Storage facility receive an award, the Proposer will be required, at the time of contracting, to demonstrate to NYSERDA's satisfaction that the project will be configured and metered in a way that will ensure that Tier 1 RECs are created only based on energy generated by the Tier 1 Bid Facility generating facility. Energy Storage facilities that are located separate and apart from the Bid Facility may store energy from the grid but will not create Tier 1 RECs and therefore the associated generation will not be eligible for payment under the RES Standard Form Agreement.

Awarded Proposers not including Energy Storage may add an Energy Storage component in the future, subject to fulfilling all existing terms of the RESRFP19-1 Agreement. Energy Storage advanced after the time of an award may participate in the NYSERDA Bulk Storage Incentive program or New York State Investor Owned Utility competitive procurements for bulk-sited energy storage.

STEP TWO – APPLICATION FOR QUALIFICATION

VII. STEP TWO APPLICATION FOR QUALIFICATION

Under Step Two, Proposers will submit a Step Two Application for Qualification package for each Bid Facility, containing the information and documentation that NYSERDA will evaluate to determine whether the Step Two Application for Qualification package demonstrates that the Bid Facility meets or exceeds the requirements in each of five Minimum Threshold categories (Site Control, Interconnection, Permitting, Project Development and Resource Assessment as explained below in Section C).

The Step Two Application for Qualification requires general information identifying the Bid Facility, the Proposer, and other relevant information. The Step Two Application for Qualification can only be completed if a Bid Facility has a valid NYGATS ID and an SoQ or PSoQ (see Section VI Step One Resource Eligibility Determination above regarding the certification process). Step Two Application for Qualification packages that are incomplete or that fail to complete Step One may be rejected.

Bid Facilities that satisfy the Minimum Threshold Requirements and provide a Bid Deposit will receive a Notice of Qualification allowing the Proposer to submit a Step Three Bid Proposal. The Notice of Qualification will also identify the Bid Facility's Maximum Contract Tenor and will provide Proposers with a description of and access to the process and forms to be used to submit a Step Three Bid Proposal.

Only those Proposers qualified through the Step Two Application for Qualification process will be permitted to submit Step Three Bid Proposals.

Deadline for Submitting a Step Two Application for Qualification package

The complete Step Two Application for Qualification package must be **received** by NYSERDA no later than **3:00 p.m. ET on Thursday**, **June 13**, **2019**, **via electronic submission**. **NYSERDA** strongly recommends that Proposers reserve ample time to address the requirements for each Bid Facility. The Step Two Application for Qualification package must be completed and submitted on-line, before the deadline.

Proposers are strongly encouraged to register for participation in this RFP by Monday, June 10, 2019. Proposers may register at <u>http://nyserda.ny.gov/ces/rfp</u>.

All electronic signatures must be provided as indicated. Failure to provide any attachments or information requested result in the Step Two Application for Qualification package being declared non-responsive and rejected. NYSERDA may request additional information and materials at any time. Step Two Application for Qualification packages become the property of NYSERDA. NYSERDA recommends that Proposers use Google Chrome when working in the Step Two Application for Qualification or Step Three Bid Proposal. Unnecessary attachments or lengthy responses beyond those

sufficient to present a complete, comprehensive, and effective response will not influence the evaluation of the proposal.

<u>Energy Storage</u>. Should a Proposer wish to submit a Step Three Bid Proposal which includes Energy Storage, the Proposer will need to complete two separate Step Two Applications for Qualification, one with and one without Energy Storage. Each Application for Qualification package must be accompanied by a separate Bid Deposit.

A complete Step Two Application for Qualification package consists of:

- A. Application for Qualification Form (Attachment A), including the Step Two Application for Qualification Threshold Eligibility Narrative (Attachment B);
- B. Minimum Threshold Requirement Supporting Documentation for the following five Project Viability categories:
 - a. Site Control;
 - b. Interconnection;
 - c. Permitting;
 - d. Project Development; and
 - e. Resource Assessment and Energy Production Estimate.
- C. Proof of Bid Deposit.

If the proposed Bid Facility is currently in operation and has been granted an SoQ, Proposers need only submit:

- 1) Application for Qualification Form (Attachment A);
- 2) Resource Assessment and Energy Production Estimate;
- 3) Proof of Bid Deposit.

A. Application for Qualification Form (Attachment A)

The information provided on the Application for Qualification Form and the Supporting Documentation provided under Section C (also see Appendix 2) will be evaluated by NYSERDA to determine whether the five Minimum Threshold Project Viability categories have been met or exceeded. A completed Application for Qualification Form must include, but is not limited to, the following fields:

1. <u>Step Two Application for Qualification Threshold Eligibility Narrative (Attachment B)</u>

The Proposer must provide an attachment containing a narrative describing how the Bid Facility, and if applicable, Energy Storage, meets or exceeds the Minimum Threshold Requirements in each Project Viability category (requirements are described in Section C, below).

2. <u>Bid Facility, Site, and Generating Equipment Description</u> Provide a complete description and overview of the Bid Facility, describing the area included in and surrounding the generation site, a description of the local zoning, and other applicable ordinances and municipal laws, existing land use (e.g., woodlands, brownfield, agriculture, other) and setting (e.g., rural, urban, suburban, other) and describe what the site(s) has been used for in the recent past. Include and describe the status and development stage of Bid Facility (development, construction, or operation). Include information about the specific technology or equipment considered or selected, major equipment to be used, manufacturer or vendors considered or selected, equipment acquisition status, and equipment contract/agreement status.

3. Bid Facility Interconnection Description

Identify the proposed interconnection point(s) and a complete description and overview of the preferred interconnection of the Bid Facility from the generation site, including what rights the Proposer has to the interconnection point(s), how the Proposer plans to gain interconnection site control and any rights that must be obtained by the Proposer or interconnecting utility for the interconnection. If interconnection point(s) is/are not controlled, provide a detailed plan and timeline for the acquisition of any additional rights necessary for the interconnection point(s) and for the right-of-way. Identify and describe the individual land parcels associated with the interconnection and any rights of way needed. If applicable, fully describe the relationship of the site to other adjacent infrastructure, including preferred or alternate point(s) of interconnection (POI). Please indicate whether there are significant risks or uncertainty associated with the preferred POI. If the Proposer is planning on using an adjacent parcel or if the right of way is controlled by or assignable to the interconnecting utility that will own the interconnection facilities, clearly explain this in the narrative. Specify and describe the current or new interconnection facilities (lines, transformers, switching equipment, system control protection, etc.) that the Proposer owns or is intending to construct or have constructed in order to deliver the proposed energy.

4. Energy Storage Site and Equipment Description, if applicable

Provide a complete description and overview of the Energy Storage,²⁵ describing the area included in and surrounding the Energy Storage site, a description of local zoning, other applicable ordinances and municipal laws, if the Energy Storage component is not co-located with the Bid Facility, describe the existing land use (e.g., woodlands, brownfield, agriculture, other) and setting (e.g., rural, urban, suburban, other) and describe what the Energy Storage site has been used for in the recent past. Include and describe the status and development stage of Energy Storage (development, construction, or operation). Include information about the specific technology or equipment considered or selected, major equipment to be used, manufacturer or vendors considered or selected, equipment acquisition status, and equipment contract/agreement status. See the list of requirements under New Items and Important Notes (p. 6).

²⁵ The description must include an overview of the Energy Storage component, including the Storage Unit(s), Interconnection Facilities up to the Point of Interconnection, Prevention Equipment, and Protective Apparatus together with all materials, equipment systems, structures, features and improvements necessary to safely store, charge and discharge electric energy.

5. Energy Storage Interconnection Description, if applicable

Provide a complete description and overview of the planned interconnection of the Energy Storage, including how the Proposer plans to gain interconnection site control and any rights that must be obtained by the Proposer or interconnecting utility for the Energy Storage interconnection. Identify and describe the individual land parcels associated with the Energy Storage interconnection and any rights of way needed. If applicable, fully describe the relationship of the site to other adjacent infrastructure, including planned or alternate points of interconnection. If the Proposer is planning on using an adjacent parcel or if the right of way is controlled by or assignable to the interconnecting utility that will own the interconnection facilities, clearly explain this in the narrative. Specify and describe the current or new interconnection facilities (lines, transformers, switching equipment, system control protection, etc.) that the Proposer owns or is intending to construct or have constructed in order to deliver the proposed energy.

6. Business Entity and Financing Plan Description

Proposers must submit a Financing Plan demonstrating a sufficient degree of planning and due diligence on how the Bid Facility is to be financed and describing their experience in successfully financing electrical generation projects.

Proposers must describe a plan to finance the proposed Bid Facility, including construction and term financing. The Financing Plan should include:

- a. A description of the business entity, the structure of the ownership entity, and Proposers' organization from a financial and legal perspective, including all general and limited partners, officers, directors, managers, members and shareholders, and involvement of any subsidiaries supporting the Project. Provide an organization chart showing the relationship among the different Project participants. For joint ventures, identify all owners and their respective interests.
- b. Evidence that the Proposer has the financial resources and financial strength to complete and operate the Bid Facility, and if applicable, Energy Storage, as proposed. If available, provide complete copies of the most recent audited financial statement and annual report for each Proposer; including affiliates of Proposer (if audited statements are not available, reviewed or compiled statements are to be provided).
- c. If available, the credit rating(s) from Standard & Poor's and Moody's (the senior unsecured long-term debt rating or if not available, the corporate rating) of Proposer and any affiliates and partners. Include a description of any current or recent credit issues/credit rating downgrade events regarding Proposer or affiliate entities raised by rating agencies, banks, or accounting firms.
- d. A description of the existing financial structure, projected financial structure (tied to milestones), and projected capital structure of the Bid Facility ownership entity.

- e. Expected sources of revenues other than RECs, including energy, capacity, and ancillary services produced by the proposed Bid Facility.
- f. Expected sources of debt and equity financing, including who will finance the Bid Facility (or candidates being considered to finance the Bid Facility) and the related financing mechanism or mechanisms that will be used, including the type of finance approach(es) (PPA, forward energy and/or capacity sale, financial hedge, or other) and intended or actual investors (specified, or by type, depending on financing role and status).
- g. Expected role of the Federal Production Tax Credit or Investment Tax Credit (or other incentives) on the financing of the Bid Facility, include presumed qualification year and percentage.

If applicable, include and describe:

- h. Bid Facility, and if applicable, Energy Storage, construction activities (provide supporting evidence that construction has begun as an attachment).²⁶
- i. Project financing arrangement and closing, with a description of the type of financing commitment (provide financial closing documentation or financing commitment(s) which address any contingencies as an attachment).
 - i. Expected role, if any, of financing options available through New York Green Bank.
- j. If hedges have been secured for the proposed Bid Facility, please describe what proportion of the annual energy production has been secured and for what duration.

For a Step Two Application for Qualification that includes Energy Storage, provide the business case or use case for the Energy Storage and describe what types of compensation and NYISO products the Energy Storage is intending to pursue and include a description of the Proposer or its affiliate's Energy Storage financing experience alone and/or with renewable energy facilities in similar detail to the requirements for renewable energy facilities described above.

To document the project finance experience of the Proposer or its affiliates,²⁷ the Proposer must complete Attachment G, for recently financed renewable or non-renewable energy electric generation facilities, specifying the following:

k. Project Name/Type, experience with similar technology,²⁸ capacity (MW), location, operating status, year of financial closing.

 ²⁶ For Bid Facilities described as "under construction," Proposers must provide evidence of authorization to proceed, or similar, for an Engineering, Procurement, Construction (EPC) contract, a major equipment purchase or similar material non-refundable capital commitment to constructing the Bid Facility.
 ²⁷ Proposer, its affiliates, or a senior executive or finance professional who is a principal of the Proposer. Experience of vendors or contractors to the bidding company do not count towards this requirement.
 ²⁸ Similar technology means the same resource and prime mover (e.g. solar or wind). It is not meant to distinguish between different solar technologies, for example.

- Description of finance approach used for the project, (for instance, project finance, balance sheet finance commitment, tax equity, YieldCo, host ownership, etc.). If applicable, include the value of financing (USD\$) by finance type. The response should identify whether projects were financed alone or together with other facilities; if the latter, describe the portfolio financed together.
- m. A description of Power & REC offtake arrangements (e.g., PPA(s), REC contracts, merchant, net metering, etc.).
- n. A clear indication of whose experience (corporate, affiliate, or individual's) is being described.

Supporting documentation required for Business Entity and Project Financing

- A Financing Plan, including all applicable components to the Bid Facility as proposed to NYSERDA described above, and
- Completed Attachment G, Project Financing Experience.

7. Bid Facility Project Schedule

If the Bid Facility, and if applicable, Energy Storage, is under development, the Step Two Application for Qualification package must include a completed Bid Facility Project Schedule, detailing key development milestones. Proposers must provide all project schedule details on the Project Schedule page of the Step Two Application for Qualification electronic submission.

Proposers shall include a narrative that describes each segment of the process, the required permit or approval, the status of the request or application and the basis for project success by the milestone date provided. This schedule should be consistent with Attachment E. List of Required Permits. If the Bid Facility is Operational, a completed Project Schedule is not required.

8. Confidentiality and Mandatory Questions

The Step Two Application for Qualification Form requests that the Proposer indicate whether Proposer wishes to have the information in the Application for Qualification package treated as proprietary or confidential trade secret information. NYSERDA is subject to and must comply with the requirements of New York's Freedom of Information Law ("FOIL" see Public Officers' Law Article 6). Information in any tangible form including any document that Proposer wishes to be protected from disclosure to third parties including any information provided as a part of a proposal must be marked "Confidential" or "Proprietary" at the time such information is provided to NYSERDA. NYSERDA reserves the right to make public, after the fifth anniversary of the Award Notification Date, the RES Standard Form Agreement (Attachment H) executed with any awarded project.

The Step Two Application for Qualification further requires that the Proposer to confirm that the Proposer, and the directors, employees and agents of Proposer and any affiliate of Proposer are not currently under investigation by any governmental agency and have not in the last four years been convicted or found liable for any act prohibited

by State or Federal law in any jurisdiction involving conspiracy, collusion or other impropriety with respect to offering on any contract, or have been the subject of any debarment action (detail any exceptions).

The Step Two Application for Qualification also includes the Proposer's attestation regarding the accuracy and truthfulness of the information and documentation provided by the Proposer.

B. Minimum Threshold Requirement Supporting Documentation – Project Viability

The supporting documentation for each Minimum Threshold Requirement should be uploaded as attachments as described in more detail below. Attachments should be clearly marked with the Bid Facility Name and NYGATS ID.

Minimum Threshold Requirements

The list below identifies the supporting documentation required to verify that the Bid Facility meets the Minimum Threshold Requirement for each category. **If the progress by a Bid Facility exceeds the minimum threshold in any category, documentation as to the additional level of progress achieved, beyond the minimum, should be provided; an opportunity to update this information is also afforded under Step Three.**²⁹ Bid Facilities that have exceeded the minimum thresholds may receive additional points as a part of the Project Viability evaluation in Step Three (see Section XI.A. Scoring Criteria and Appendix 2). Should a Bid Facility make incremental progress in any of the Project Viability categories between Step Two and Step Three, Proposers will have an opportunity to submit additional documentation in the associated Step Three Bid Proposal.

Threshold Category 1: Site Control

The Site Control minimum threshold includes three subcategories: Generation Facility Site Control, Interconnection Right of Way Site Control, and Energy Storage Site Control.

Generation Facility Site Control

Proposers must demonstrate an executed exclusivity agreement or letter of intent with site owner(s), or that the Proposer owns, has an executed lease for, easement for, or executed binding option with the site owner(s) for the Bid Facility. The full site needed for the Bid Facility must be covered by at least an exclusivity agreement(s) or letter(s) of intent, unless the site is greater than 15

²⁹ For example, under Category 2, Interconnection, for a 20 MW Bid Facility subject to NYISO jurisdiction, the documentation required to demonstrate achievement of the Minimum Threshold Requirement consists of a submitted interconnection request. If a Feasibility, System Impact, or Facilities Study has, in fact, been executed, attach a copy and provide confirmation of associated fees paid. The study will satisfy the Minimum Threshold Requirement and will also be considered as a part of the Project Viability evaluation in Step Three.

acres, in which case the exclusivity agreement(s) or letter(s) of intent must cover at least 50% of the site's acreage.

Interconnection Right of Way Control

Proposers must demonstrate that (i) an exclusivity agreement(s) or letter(s) of intent for the necessary rights of way, and/or (ii) an executed right of way agreement(s), which provide necessary rights to the developer (if the generator lead facilities will be merchant-owned), or (iii) that the right of way is controlled by or assignable to the interconnecting utility that will own the interconnection facilities, or (iv) that the Proposer owns, has executed lease for, easement for, or executed binding option for the necessary rights of way associated with the interconnection for the Bid Facility.

Energy Storage Site Control

A Bid Facility paired with Energy Storage, whether co-located with the generation or located in a separate location from the generation, must have at least an executed exclusivity agreement or letter of intent with the site owner(s). The full site needed for the Energy Storage must be covered by the exclusivity agreement(s) or letter(s) of intent.

Supporting Documentation Required for Site Control³⁰

Proposers must demonstrate that the proposed Bid Facility meets the threshold level of Generation Facility and Interconnection Right of Way Site Control by providing the following documents:

- Map of site plan/layout indicating project and parcel boundaries, to scale, with parcel designation by owner. The map should indicate the (anticipated) interconnection route and the (anticipated) interconnection point(s). If applicable, indicate the relationship of the site to other adjacent infrastructure, including planned or alternate points of interconnection. If available, include a project layout indicating the generation unit and the location of all major equipment and facilities on site. If proposing with Energy Storage co-located with the generator, clearly identify the location of Energy Storage. If proposing with Energy Storage not located with the generator, provide a separate map of the Energy Storage site plan/layout and (anticipated) interconnection route in the same attachment as the Bid Facility map.
- Summary description (table) of control status by parcel with parcel designation tied to site map using Attachment C.
- If available, GIS data containing the parcel boundaries that the project will occupy (SHP file format only).

³⁰ Unless the proposed Bid Facility is currently in operation (i.e., proposed Bid Facility is applying with an SoQ).

Threshold Category 2: Interconnection

Proposers must have researched the relevant interconnection process for the Bid Facility, determined what interconnection requirements are appropriate for the Bid Facility, and submitted a valid interconnection request (except for Behind-the-Meter Bid Facilities). Proposers submitting supporting documentation to substantiate their Interconnection progress should submit a recent, active (not withdrawn), valid Interconnection Request consistent with Bid Facility as proposed to NYSERDA. Interconnection Requests that have been withdrawn do not meet the Minimum Threshold Requirement. Documentation that does not reflect the Bid Facility as proposed may be rejected.

The threshold requirements vary by the size and location of the Bid Facility:

- Large Bid Facilities (greater than 20 MW) under the authority of the New York Independent System Operator (NYISO) or a similar interconnecting authority in an adjacent U.S. control area:³¹ Proposer has submitted a valid interconnection request and demonstrates that all initial fees have been paid.
- Small Bid Facilities (less than or equal to 20 MW) under jurisdiction of NYISO or a similar interconnecting authority in an adjacent U.S. control area:³²
 Proposer has submitted a valid interconnection request and demonstrates that all initial fees have been paid.
- Small Bid Facilities with a Non-Federal Energy Regulatory Commission (FERC) Interconnection:³³ Proposer has discussed the Bid Facility with the relevant interconnecting utility company and has identified the applicable requirements. Proposer has submitted a valid interconnection request and demonstrates that all initial fees have been paid.
- Behind-the-Meter Bid Facilities: Proposer has (i) contacted the local interconnecting utility regarding interconnection and (ii) has drafted interconnection request documents.
- Bid Facilities located in Ontario or Quebec, or other Bid Facilities that do not fall under any of the other interconnection categorizations: Proposers must demonstrate that the Bid Facility meets the equivalent threshold for projects of the same scale in the U.S.
- For Bid Facilities paired with Energy Storage: Proposer has discussed Energy Storage with the relevant interconnecting utility company and has identified the applicable requirements. Proposer has either (1) submitted a valid interconnection request for Energy Storage and demonstrates that all initial fees have been paid, or (2) prepared drafts of all initial Energy Storage interconnection application documents such that the interconnection request can be made within 3 months following an award from NYSERDA.

³¹ FERC Jurisdiction, Large Generator Interconnection

³² FERC Jurisdiction, Small Generator Interconnection, inclusive of 2 MW Fast Track

³³ Connecting Transmission Owner Interconnection under state jurisdiction (typically, utility distribution less than 5 MW).

Supporting Documentation for Interconnection³⁰

- The Proposer must demonstrate that the Bid Facility meets the threshold level of interconnection progress by providing a summary or other evidentiary documentation from the Interconnecting entity confirming the extent of interconnection activities <u>and</u> confirming payment of any necessary fees. For Behind-the-Meter Generators, Proposer must also provide a draft (ready for submission) of all interconnection request documents.
- If available, a one-line diagram.

Threshold Category 3: Permitting

Proposers must demonstrate awareness of all applicable permitting requirements and demonstrate that the Bid Facility is sufficiently advanced in planning for the permitting process. To fulfill this requirement, all Proposers must meet the following threshold requirements:

- 1) For all Bid Facilities:
 - a) Complete Attachment E, List of Required Permits, by providing a list of required permits at the local, state and federal level required to construct and operate the Bid Facility, and if applicable, Energy Storage. The list will be complete and identify all governing municipalities with jurisdiction or approval authority associated with the Bid Facility, and if applicable, Energy Storage, as proposed to NYSERDA. The complete response will include any special use/conditional use permits, air permits, FERC licenses, planning board approvals, U.S. Army Corps of Engineers (USACE) letters, SPDES permits and other applicable requirements. In Attachment E, additional permitting information is requested for Biomass and Biogas Bid Facilities only. Proposers must identify a contact for each jurisdiction (for example, hamlet, village, town, city, county, agency, authority, State, or other) associated with the permits.
 - For Bid Facilities subject to the Article 10 process, please specify the local official(s) associated with the Authority Having Jurisdiction (AHJ), such as the town supervisor, planning/zoning board lead/chair, and not the Article 10 Siting Board.
 - ii) If the Proposal includes Energy Storage, the Proposer will list all associated permits on the same Attachment E as provided for the Bid Facility. The permits associated with the Bid Facility and the Energy Storage should be delineated (e.g., Building Permit, Electrical Permit, Fire Permit, etc).
 - b) Confirmation from the appropriate governing authority(ies) (such as the town supervisor, planning/zoning board lead/chair) or Authorities Having Jurisdiction (AHJ's) that they are aware and well informed of the Bid Facility and the intention of the Proposer to seek an award from NYSERDA under this RFP.
 - c) A description of any local ordinances (including zoning prohibitions or moratoria) that would limit the Bid Facility's size, location, or schedule, and the Proposer's

plans to address these issues. If the Bid Facility or the Energy Storage are not currently zoned or permitted, identify present and required zoning and/or land use designations and provide a plan and timeline to secure the necessary approvals.

- d) Provide an initial review of (i) cultural, historic, archeological and natural heritage impacts, as may be required; and (ii) water bodies (e.g., streams, wetlands), fish and wildlife, and other applicable environmental impacts. Include any initial review measures that have identified strengths or weaknesses of the Bid Facility site related to long-term climate change resiliency.
- e) If available, provide site investigation status of applicable field studies (e.g., Environmental Site Assessment³⁴ Phase 1, Archaeological Phase 1, Geotechnical) and surveys (e.g., ALTA, topography, water bodies/wetlands, or other.) Where applicable, identify considerations that were assed in regard to the resiliency of the site related to long-term climate change.
- 2) For Bid Facilities subject to Article 10 (greater than or equal to 25 MW), the Proposer must describe its plan for advancing the Bid Facility through the Article 10 process. If the Bid Facility has not yet entered the Article 10 process, the Proposer must include a description of the Proposer's proposed Public Involvement Program Plan (PIP), a description of any approach regarding stipulations or other expectations, and target dates for each major step of the Article 10 process (PIP, Public Scoping Statement, and Application). If the Bid Facility has previously commenced the Article 10 process, the Proposer must also include the NYS DPS Case Number and must describe the current status and planned activities for advancing the Bid Facility through the rest of the Article 10 process, including target dates for major milestones and a description of the Proposer's approach regarding stipulations or other expectations.
- 3) For Bid Facilities within the NYCA not subject to Article 10 (less than 25 MW), the Proposer must describe its plan for advancing the Bid Facility through the SEQR process. If the Bid Facility has not yet entered the SEQR process, the Proposer must include a description of the Proposer's plan to advance the Bid Facility through SEQR, a description of any approach regarding conditions or other expectations, and target dates for each major step of the SEQR process (Steps 2-12 as outlined by the NYS DEC on <u>https://www.dec.ny.gov/permits/6189.html</u>). If the Bid Facility has previously commenced the SEQR process, the Proposer must describe the current status and planned activities for advancing the Bid Facility through the rest of the SEQR process, including target dates for major milestones and a description of

³⁴ ASTM International, formerly known as American Society for Testing and Materials, published a standard for conducting Phase I Environmental Site Assessments. See ASTM E1527-13, Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process, ASTM International, West Conshohocken, PA, 2013, <u>http://www.astm.org/cgi-bin/resolver.cgi?E1527-13</u>

the Proposer's approach regarding conditions, negative declarations, special-use permits, land-scaping permits, or other expectations.

If available, include as an attachment documentation demonstrating that: (a) that the local approval process is underway as demonstrated by initial applications and preliminary documents, or

(b) that a request for a zoning change or variance has been initiated with the appropriate local government. This includes:

- any NYS Department of Environmental Conservation (DEC) Environmental Assessment Form (EAF) submissions.³⁵ If applicable, evidence that the Lead Agency for the SEQRA process has been designated or is in the process of designation.
- ii) if available, applications for construction permit(s) that have been submitted to local authority(ies) with approval jurisdiction.
- iii) for hydroelectric facilities only, include the Bid Facility's FERC license expiry date or provide evidence that FERC licensing process has been initiated and notice of intent has been filed. If applicable, please identify the New York State Department of Environmental Conservation classification for the dam associated with the Bid Facility, available online at the New York State Dams Inventory Database.³⁶
- 4) For Bid Facilities not located in the NYCA, complete Attachment D. Environmental Assessment Form (EAF) modeled after the New York SEQRA Short Environmental Assessment Form.
- 5) For Bid Facilities including Energy Storage, either:

i) include any NYS Department of Environmental Conservation (DEC) EAF submissions³⁵ specific to Energy Storage. If applicable, evidence that the Lead Agency for the SEQRA process has been designated, or
 ii) complete Attachment D. EAF modeled after the New York SEQRA Short Environmental Assessment Form for Energy Storage.

6) For Biomass, Biogas, and Fuel Cell Bid Facilities, the Proposer shall have developed emissions profiles for the Bid Facility that are consistent with state/federal emission regulations and RES eligibility requirements.

<u>Supporting Documentation Required for Permitting</u>³⁰ The Proposer must demonstrate that it meets the threshold level of permitting progress by providing the following documents:

 ³⁵ See <u>https://www.dec.ny.gov/permits/6191.html</u> for a full list of NYS DEC EAF and SEQR forms.
 ³⁶ See <u>https://www.dec.ny.gov/lands/4991.html</u> for a full dataset of NYS Dams, the NYS DEC Dams Inventory.

- List of required permits, using Attachment E;
- Documentation from the local governmental authority confirming that a request for a zoning change or variance has been initiated or confirmation of Bid Facility awareness from the appropriate governing authority(ies);
- Documentation and descriptions sufficient to demonstrate progress on each of the applicable items delineated in the Permitting section above.
- Documents filed with the applicable local authority(ies) with approval jurisdiction;
- For Bid Facilities outside of the NYCA or Bid Facilities including Energy Storage, a completed EAF in Attachment D.

Threshold Category 4: Project Development

Proposers must demonstrate that they have experience in developing electric generation facilities. Specifically, the Proposer or the principals in its development team must have developed at least one renewable generation facility of similar or larger scale. NYSERDA will not consider aggregated portfolios of generation facilities as a project under this criterion. For the purposes of this criterion, similar scale is defined as follows:

- A project of at least 33% of the proposed Bid Facility capacity, in MW; or
- A project of at least 10% of the proposed Bid Facility capacity, in MW, if the Proposer has also successfully completed the same interconnection process in the same State or Jurisdiction as the proposed Bid Facility.

For a Proposal including a Bid Facility with Energy Storage, the Proposer must also demonstrate that it has experience in developing at least one Energy Storage system of similar or larger scale using the same technology as proposed.

The Proposer or the principals in its development team must have the required experience successfully developing at least one renewable generation project. Experience of vendors or contractors to the Proposer or the principals in its development team do <u>not</u> count towards this experience requirement.

Supporting Documentation Required for Project Development³⁰

The Proposer must demonstrate it meets the threshold level of project development experience by providing the following documentation:

- An organizational chart for the Bid Facility that lists the participants and identifies the corporate structure, including general and limited partners.
- A management chart that lists the key personnel dedicated to the Bid Facility.

• A list of specific projects successfully developed, specifying the nameplate capacity, technology,³⁷ commercial operation date, and location using Attachment F.

Threshold Category 5: Resource Assessment and Energy Production Estimate

Proposers are required to provide a Resource Assessment and an Energy Production Estimate for the Bid Facility to fulfill the Minimum Threshold Requirement.

The Minimum Threshold Requirements for the Bid Facility Resource Assessment and Energy Production Estimate are based on the Bid Facility's technology are comprised of:

- 1) A Resource Assessment, which approximates the renewable resource typically available on an annual basis to power the Bid Facility.
- 2) An Energy Production Estimate, which estimates the Bid Facility's ability to convert the renewable resource to electric power at the P(50)³⁸ level.

The Resource Assessment and Energy Production Estimates must be consistent with and representative of the Bid Facility, long-term conditions at the site, and if applicable, Energy Storage, as proposed to NYSERDA.

For Eligible Upgrades, provision of the Resource Assessment and Energy Production Estimate submitted through the Step One Resource Eligibility Determination process is sufficient to meet the Threshold Category 5 requirements.

Bid Facilities including Energy Storage shall include a P(50) Energy Production Estimate that considers Energy Storage for the Bid Facility, including anticipated losses resulting from the addition of Energy Storage. Solar facilities including Energy Storage must specify if the Energy Storage is AC or DC coupled.

Supporting Documentation Required for Resource Assessment and Energy Production Estimate:

Detailed instructions regarding the supporting documentation required to meet the Minimum Threshold Requirements for a Resource Assessment and Energy Production Estimates, by technology, are provided in Appendix 2 under Category 5.

³⁷ Resource and prime mover, e.g. solar; e.g., wind. Not meant to distinguish between different solar technologies, for example.

³⁸ P(50) represents a level of resource projection or production estimate with a 50% likelihood of being exceeded in any future year. The P(50) value shall be the expected value (i.e., the mean) based on the Proposer's Resource Assessment diligence in accordance with the minimum requirements listed in the section herein for the respective renewable technology.

C. Bid Deposit

The Step Two Application for Qualification package must be accompanied by a Bid Deposit, in the form of electronic wire deposit (preferred) or certified funds, in an amount determined by the Nameplate Capacity of the Bid Facility. Proposers must indicate that they have submitted a Bid Deposit with their application and attached proof of the provision of a Bid Deposit, such as a receipt.

Required Bid Deposit amounts are as follows based on the AC Nameplate Capacity of eligible generator.³⁹

Nameplate Capacity:	Bid Deposit:
Less than 5.00 MW	\$5,000
5.00 – 19.99 MW	\$20,000
20.00 – 49.99 MW	\$50,000
50.00 MW or more	\$100,000

All Bid Deposits must be clearly labeled with a unique identifier comprised of the facility's NYGATS ID and the RFP Tracking Number, in the format: GENXXXX_ RESRFP19-1, or PROXXXXX_RESRFP19-1, or IMPXXXXX_RESRFP19-1. Only Bid Facilities that have received confirmation of a Step One Resource Eligibility Determination are eligible to submit a Step Two Application for Qualification package.

Bid Deposits provided via electronic wire deposit must have this unique identifier included within the Payment Details/ Description. Bid Deposits provided via cashier's check must have this unique identifier clearly labeled within the Memo or elsewhere on the check.

If the Proposer is submitting Step Two Application for Qualification packages for more than one Bid Facility, a separate Bid Deposit must be submitted for each Bid Facility, and the Bid Facility must be clearly identified on the payment method in addition to the unique identifier, e.g. Bid Facility Name, GENXXXX_ RESRFP19-1 or PROXXXX_ RESRFP19-1 or IMPXXXXX_RESRFP19-1. If a Proposer wishes to submit a Step Three Bid Proposal which includes Energy Storage, the Proposer will need to complete two separate Step Two Applications for Qualification, one with and one without Energy Storage. Each Bid Proposal is required to be provided with a separate Bid Deposit.

Electronic Bid Deposit Instructions:

If paying via ACH: Name of Bank: Bank of America For the Account of: NYSERDA MAC 30 ABA #: 021000322

³⁹ The Nameplate Capacity is determined by the Tier-1 eligible generation in the NYGATS PSoQ or SoQ and does not include Energy Storage.

Account #: 6010316543 Description/reference: (NYGATS ID followed by RFP Tracking Number, e.g., GENXXXXX_ RESRFP19-1 or PROXXXXX_ RESRFP19-1 or IMPXXXXX_RESRFP19-1

If paying via wire: Name of Bank: Bank of America For the Account of: NYSERDA MAC 30 ABA #: 026009593 Account #: 6010316543 Description/reference: (NYGATS ID followed by RFP Tracking Number, e.g., GENXXXXX_ RESRFP19-1 or PROXXXXX_ RESRFP19-1 or IMPXXXXX_RESRFP19-1

If paying via Certified Funds:

If the Bid Deposit is provided via a cashier's check or other certified funds, the Bid Deposit must be clearly labeled with the facility's NYGATS ID followed by RFP Reference, e.g., GENXXXX_RESRFP19-1 or PROXXXXX_RESRFP19-1 or IMPXXXXX_RESRFP19-1, and sent to:

NYSERDA Finance Department, RESRFP19-1 NYS Energy Research and Development Authority 17 Columbia Circle Albany, NY 12203-6399

Return of Bid Deposit:

Bid Deposits will be refunded to Proposers who: (1) elect not to submit a Step Three Bid Proposal or (2) are deemed ineligible by NYSERDA to participate in Step Three. Bid Deposits will be refunded to Proposers whose Bid Proposals have not been selected for an award, if not before, upon the expiration of the time during which the Bid Proposal remains an open offer.

Bid Deposits will be refunded to Proposers whose Bid Proposals have been selected for an award upon execution of the RES Standard Form Agreement (Attachment H), and:

- for Operating Facilities with an SoQ, upon (i) unless otherwise agreed by NYSERDA in writing, NYSERDA's receipt that a Forward Transfer of NYGATS Certificates has been created, and (ii) the first Tier 1 REC transfer to NYSERDA's designated account has occurred.
- 2) for Facilities not yet operational with a PSoQ, upon NYSERDA's receipt of Contract Security as described in Section XII (3).

Bid Deposits will <u>not</u> be refunded if a facility is awarded a contract under RESRFP19-1 and Proposer fails to execute NYSERDA's RES Standard Form Agreement (Attachment H) within a reasonable time following notification of an award.

Requests for Additional Information

NYSERDA may request clarification and additional information from Proposers at any time throughout the duration of the solicitation. Such information will be subject to protection of proprietary information as described in Section XIV General Conditions below. NYSERDA recommends that Proposers mark materials provided to NYSERDA as Confidential. Proposers that do not respond promptly to such information requests or do not provide adequate information may be eliminated from further consideration or have the information in their Proposals modified by NYSERDA and/or the Technical Evaluation Panel to allow a reasonable and appropriate evaluation.

VIII.STEP TWO NOTICE OF QUALIFICATION

NYSERDA will evaluate each Step Two Application for Qualification package, including all threshold supporting documentation, for completeness and against the Minimum Threshold Requirement criteria specified in this RFP.

- Proposers whose Step Two Application for Qualification packages are found <u>not</u> to satisfy the minimum thresholds or to be deficient in some other respect will receive notification that they are not eligible to submit a Step Three Bid Proposal.
- Proposers deemed qualified to submit a Step Three Bid Proposal will be emailed a Notice of Qualification, which will include the Maximum Contract Tenor described below as well as instructions on how to submit a Step Three Bid Proposal.

Maximum Contract Tenor

Information provided with the Step Two Application for Qualification packages will also be used to determine the Maximum Contract Tenor available to the Bid Facility; the Notice of Qualification provided after Step Two Application for Qualification submission will include the applicable Maximum Contract Tenor. The Contract Tenor offered in Step Three for a particular Bid Facility will be limited by the term of the Maximum Contract Tenor. For all Bid Facilities not in Commercial Operation as of the RFP Release Date²⁴, the Maximum Contract Tenor will be calculated as the <u>lesser of</u>:

- (1) 20 years, or
- (2) the Bid Facility's Useful Life.

For all Bid Facilities in Commercial Operation as of the RFP Release Date,²⁴ the Maximum Contract Tenor applicable to the Bid Facility will be calculated as the <u>lesser of</u>:

- (1) 20 years (240 months) minus the number of years (months) between the year (month) of Commercial Operation and the RFP Release Date²⁴ (rounded to the nearest full year), or
- (2) The Bid Facility's Useful Life minus the number of years (months) between the year (month) of Commercial Operation and the RFP Release Date²⁴ (rounded to the nearest full year).

For a Return to Service Facility, the date of Commercial Operation for purposes of calculating the Maximum Contract Tenor shall be the original date of Commercial Operation prior to the outage. For a Relocated Facility, the date of Commercial Operation for purposes of calculating the Maximum Contract Tenor shall be the first date of Commercial Operation in the original control area.

The following table lists the Useful Life by resource for use in the calculations of Maximum Contract Tenor for this RFP. The Useful Life for Energy Storage is not included in any Maximum Contract calculation but is included for reference; the Step Three Bid Proposal should be consistent with the Resource's Useful Life both with and without Energy Storage, as applicable. This table was developed using references from published industry sources.

Table 1. Default Values for Useful Life used to determine Maximum Contract	
Tenor	

Resource	Useful Life (years)
Anaerobic Digestion	20
Biomass/Liquid Biofuel	20
Fuel Cell ⁴⁰	20
Hydroelectric (New or Upgrade)	50
Landfill Gas to Electricity	15
Solar PV	20
Tidal/Ocean	10
Wind	20
Energy Storage	20

⁴⁰ Proposers submitting Bid Proposals for Fuel Cell Bid Facilities offering a Contract Tenor longer than 10 years will be required to provide, prior to NYSERDA's execution of an Agreement, an executed Bid Facility operations and maintenance agreement with the Bid Facility's host customer for a term which is greater than or equal to the proposed Contract Tenor.

STEP THREE - BID PROPOSAL

IX. STEP THREE BID PROPOSAL

Proposers receiving a Notice of Qualification will be invited to submit a Step Three Bid Proposal which will require additional information including a Bid Price and more detailed information about the Bid Facility, the developer, and the maturity and experience of each. Additional information and materials beyond that identified in this RFP may also be requested by NYSERDA.

RESRFP19-1 is a competitive procurement. The RES Standard Form Agreement is a legally binding document; it is recommended that Proposers consult with an attorney. The CES Order, subsequent Implementation Plans & corresponding Orders, and NYS competitive procurement rules limit NYSERDA's ability to alter the terms of the RES Standard Form Agreement (Attachment H) issued with this RFP. However, as part of the Step Three Bid Proposal, Proposers may indicate terms of the Agreement that they wish to further discuss by providing an attachment in the form of a memorandum. The memorandum should specifically identify any terms and conditions that the Proposer wishes to clarify or negotiate prior to execution. When constructing the memorandum, please identify the Article in the Agreement and state the nature of the issue to be discussed. Should the Bid Facility receive an award, NYSERDA will contact Proposers to schedule a discussion regarding the terms identified in the memorandum.

The indication by a Proposer that it wishes to negotiate the terms of the RES Standard Form Agreement will have no impact on the scoring or evaluation of the Bid Proposal.

A. Deadline for Submitting a Step Three Bid Proposal

The Step Three Bid Proposal must be completed via electronic submission on-line before the deadline. The complete Step Three Bid Proposal must be **received** by NYSERDA no later than **3:00 p.m. ET on Tuesday, September 10, 2019, via electronic submission**. NYSERDA recommends that Proposers reserve ample time to address the Step Three Bid Proposal requirements for each Bid Facility. NYSERDA staff will be available to support Proposer's Step Three Bid Proposal inquiries through 3:00 p.m. on Tuesday, September 10, 2019.

B. Step Three Bid Proposal Scoring

Step Three Bid Proposals will be evaluated and scored based on: (1) the Bid Price, which will be weighted at 70% of the overall score, and (2) non-price factors, which will have a combined weight equaling 30% of the overall score.

The 30% non-price component is divided into three equally-weighted categories:

- 1. 10% Incremental Economic Benefits to New York State;
- 2. 10% Project Viability beyond the Minimum Threshold Requirements; and
- 3. 10% Operational Flexibility and Peak Coincidence.

Appendices 1, 2 and 3 provide detailed explanations of the scoring rubrics for each of the non-price categories; an overview of these categories is included below.

C. Submitting a Step Three Bid Proposal

The Notice of Qualification received by Proposers for Bid Facilities deemed qualified under Step Two will include instructions on how to submit a Step Three Bid Proposal. The Step Three Bid Proposal must be complete in all respects and uploaded using NYSERDA's specified website in accordance with the instructions provided. All electronic signatures must be provided as indicated.

With the Notice of Qualification, Proposers will be provided with a complete Step Three Bid Proposal package that consists of relevant instructions and access to an electronic application that includes the following:⁴¹

- Bid Facility Overview Confirmation or modification of the narrative description of the Bid Facility, Site, and Generating Equipment, and if applicable, Energy Storage Site and Generating Equipment, Interconnection Description, Project Schedule, Project Contacts, and Bid Facility Site Address provided in the Step Two Application for Qualification;⁴²
- 2) Bid Quantity, Bid Price, and Contract Tenor;
- 3) Incremental Economic Benefits Claims;
- 4) Project Viability
 - Instructions to provide documentation to demonstrate the current level of progress in any of the Project Viability Categories beyond the documentation provided in the Threshold Categories in Step Two (Site Control, Interconnection, Permitting, Project Development, and Resource Assessment and Energy Production Estimate);
 - b. Instructions to complete the Site Character subcategory;
 - c. Instructions to complete the Community Outreach subcategory, including the Community Outreach Plan;
- 5) Operational Flexibility and Peak Coincidence
 - a. Instructions to provide documentation to demonstrate dispatchability for the Bid Proposal, and if applicable, Energy Storage; and
- 6) Public Release of Bid Facility Information Form (Attachment I).

Any attachment provided to NYSERDA should state the Bid Facility Name, NYGATS ID, and the page number. Proposers should seek to balance responsiveness with brevity. Unnecessary attachments or lengthy responses beyond those sufficient to present a

⁴¹ If the proposed Bid Facility is currently in operation, the Step Three Bid Proposal package is only required to include applicable portions of the Bid Facility Overview; Bid Quantity, Bid Price, and Contract Tenor; if applicable, Operational Flexibility and Peak Coincidence attachments and information; and the Public Release of Bid Facility Information Form. The Bid Facility will receive no points in the Incremental Economic Benefits category and maximum points in all Project Viability categories except Site Character.
⁴² If incremental progress has been made since completing Step Two, a description of the updates and progress made must be included in the Step Three Bid Proposal.

complete, comprehensive, and effective response will not influence the evaluation of the proposal. Information submitted to NYSERDA that the Proposer wishes to have treated as proprietary, and confidential trade secret information, should be identified and labeled "Confidential" or "Proprietary" on each page at the time of disclosure.

The Proposer is responsible for the accuracy of all information delivered to NYSERDA. NYSERDA and the TEP will only consider Step Three Bid Proposals that are substantially complete and include all applicable and required information and representations. Failure to provide any information requested may result in the Step Three Bid Proposal being declared non-responsive and rejected.

The submission of a Step Three Bid Proposal will constitute a binding offer to contract under the terms of the RES Standard Form Agreement (Attachment H); such offer must remain open for a period of at least ninety (90) days from the Step Three Bid Proposal deadline.

Should a Proposer wish to submit a Bid Proposal with Energy Storage, the Proposer will also be required to submit a separate Bid Proposal without Energy Storage. The Bid Proposal with Energy Storage shall include a narrative overview of the proposed REC price adder for the system including Energy Storage.

1) Bid Facility Overview

NYSERDA will provide Proposers with access to an electronic Bid Facility Overview section that is based on the Bid Facility's characteristics and information provided to NYSERDA in the associated Step Two Application for Qualification. Proposers will be responsible for submitting one fully completed Bid Facility Overview for each Bid Facility. The Bid Facility Overview requests relevant details about the Proposer and Bid Facility and includes an attestation by the Proposer regarding the accuracy and truthfulness of the information and documentation provided by the Proposer. The Proposer will update relevant Bid Facility contacts, confirm the Bid Facility Site address, and will have the opportunity to confirm and/or update the information provided in the Step Two Application for Qualification. This includes: (1) Bid Facility, Site, and Generating Equipment Description, (2) Bid Facility Interconnection Description, if applicable, (4) Energy Storage Site and Equipment Description (if applicable) and (5) Energy Storage Interconnection Description (if applicable), (5) Business Entity and Financing Plan Description, and (6) Bid Facility Project Schedule.

If information provided to NYSERDA in the Step Three Bid Proposal reflects significant changes from the information provided in the Step Two Application for Qualification, the Proposer will include an explanation of these changes in its Step Three Bid Facility Overview using the template provided by NYSERDA.

2) Bid Quantity, Bid Price, and Contract Tenor

The Bid Quantity, Bid Price, and Contract Tenor section includes fields for the Proposer to calculate the annual number of Tier 1 RECs (Bid Quantity) offered to NYSERDA and the Contract Tenor, subject to the following restrictions:

- Proposers may submit bids for any Contract Tenor of a minimum of one year and a maximum of the Maximum Contract Tenor identified in the Bid Facility's Notice of Qualification.
- b) For wind, solar, and hydroelectric resource types, the Expected Annual Eligible Production and Bid Quantity shall not exceed the P(50) long-term Energy Production Estimate provided under Step Two or a P(50) provided under the Step Three Bid Proposal. The P(50) Energy Production Estimate must align with the 8760 hourly profile provided in Step Three that is representative of the production at the Bid Facility over the proposed Contract Tenor.
- c) The Bid Quantity Percentage shall be no less than thirty percent (30%) and no greater than one hundred percent (100%) of the Expected Annual Eligible Production.

Proposers will be responsible for submitting one Bid Price with each Bid Proposal. The Bid Price provides the fixed price to be paid for each Tier 1 REC associated with energy generated by the Bid Facility and accepted by NYSERDA for the term of the Contract Tenor.

3) Incremental Economic Benefits Claims

One of the non-price evaluation criteria will consider the Incremental Economic Benefits expected to accrue to New York because of the development, construction/modification, and operation of the Bid Facility. Incremental Economic Benefits are those that a Proposer can demonstrate: (1) will accrue after an award under this RFP, and (2) would not have accrued but for the award of a contract under this RFP.

Incremental Economic Benefits previously claimed with respect to a Bid Facility that is subject to a pending award under a previous solicitation or that is the subject of a current NYSERDA contract are not eligible for evaluation.

Proposers must provide complete information along with the supporting documentation or requested data in the following two categories. The types of components of the two categories are further described below:

- a) Long-Term Economic Benefits to New York State; and
- b) Short-Term Economic Benefits to New York State.

<u>Prevailing Wage</u>: All laborers, workmen and mechanics, within the meaning of NYS Labor Law Article 8, performing construction activities with respect to the Bid Facility and Energy Storage, if applicable, including, but not limited to, the staging, installation, erection and placement of Bid Facility and its electrical interconnection as well as startup and commissioning of the Bid Facility, whether through long-term or short-term employment, must be paid at least the applicable Prevailing Wage applicable in the area where the Bid Facility will be situated, erected and used, as published by the NYS Department of Labor (DOL)⁴³ or at least the equivalent Prevailing Wage requirements of the jurisdiction where the Bid Facility is located. This requirement applies: (1) to all laborers, workmen and mechanics performing construction activities, whether they be direct employees of the Seller or of Seller's subcontractor(s), and (2) regardless of whether or not Seller claimed such employment as an Incremental Economic Benefits in its Bid Proposal. (See RES Standard Form Agreement [Attachment H] Sections 4.04 and 18.10).

Independent audit and verification of the actual Incremental Economic Benefits of the Bid Facility and comparison to the level of claimed Incremental Economic Benefits will be required after the first three years of the Contract Delivery Term, as described in the RES Standard Form Agreement (Attachment H) Sections 5.02(c) and 6.03.

See Appendix 1 for a detailed description of eligibility and the evaluation and scoring process for Incremental Economic Benefits.

4) Project Viability

The Step Three Bid Proposal includes the following seven Project Viability subcategories:

- (a) Site Control;
- (b) Interconnection;
- (c) Permitting;
- (d) Project Development;
- (e) Resource Assessment and Energy Production Estimate;
- (f) Site Character; and
- (g) Community Outreach.

Proposers receiving a Notice of Qualification for participation in Step Three will be provided with the opportunity to demonstrate that they have exceeded the Minimum Qualification Threshold(s) for Project Viability beyond the information provided in Step Two Application for Qualification packages for Site Control, Interconnection, Permitting, Project Development, Resource Assessment and Energy Production Estimate.

Scoring for all Project Viability subcategories will be based on the Project Viability documentation received in Step Two and Step Three. See Appendix 2 for a detailed description of the evaluation and scoring process for Project Viability.

Site Character

Each Step Three Bid Proposal is eligible for non-price points under the Site Character category as described in Appendix 2. Proposals will be evaluated on the Proposer's commitment to site and construct the Bid Facility's Permanent Physical Footprint in

⁴³ For NYS DOL Prevailing Wage Schedules, please visit: <u>https://labor.ny.gov/workerprotection/publicwork/PWContents.shtm</u>

locations that avoid encroachment on land of agricultural importance to New York State. To earn points, Proposers must also agree to construct the Bid Facility in accordance with New York Department of Agriculture and Markets (DAM) Construction Standards (Exhibit E).

Community Outreach Plan

Each Step Three Bid Proposal must be accompanied by a Community Outreach Plan as described in Appendix 2. The Community Outreach Plan will be posted publicly on NYSERDA's website shortly after the Step Three Bid Proposal deadline. NYSERDA will not redact any information provided in the Community Outreach Plan. The Community Outreach Plan will be made available to the public by NYSERDA soon after Step Three Bid Proposals are received.

5) **Operational Flexibility and Peak Coincidence**

In this category, Proposers must provide complete information along with the supporting documentation or requested data to allow for an evaluation of the following two Operational Flexibility and Peak Coincidence subcategories.

- a) Load Matching; and
- b) If applicable, Energy Storage.

See Appendix 3 for a detailed description of the evaluation and scoring process for Operational Flexibility and Peak Coincidence.

a) The Load Matching category evaluates a Bid Facility located in the New York Control Area's (NYCA)'s ability to avoid over-generation or producing energy at times and in locations where production can be problematic. Bid Facilities located within the NYCA will provide a typical year's hourly production profile in an attachment format specified by NYSERDA that is consistent with the output from the Step Two Application for Qualification Threshold Resource Assessment and Energy Production Estimate or any updates provided in the Step Three Bid Proposal. External Bid Facilities (those outside of the NYCA) are not eligible for Load Matching points.

b) A Bid Facility paired with Energy Storage will be eligible for an award if the Energy Storage system is installed consistent with Section IX. Technical Requirements of NYSERDA's Bulk Storage Incentive Program Manual and either:

- 1) co-located with the generation behind a single wholesale or retail meter in the NYCA, or
- 2) co-located with the generation behind a separate wholesale or retail meter in the NYCA, or
- 3) located in a separate location from the generation inside the NYCA.

External Bid Facilities (those outside of the NYCA) are not eligible for Operational Flexibility and Peak Coincidence points.

If proposed for inclusion, Energy Storage must have a minimum Energy Storage capability, in Megawatt hours, determined by the Bid Facility's Nameplate Capacity. See Appendix 3 for a detailed description of the Minimum Requirements for Energy Storage. The Energy Storage must remain installed, maintained and operated in the originally constructed location where it achieves permission to operate until the Contract Tenor ends.

6) Attachment I. Public Release of Bid Facility Information

Each Step Three Bid Proposal must be accompanied by a completed Attachment I, Public Release of Bid Facility Information. This document will be posted publicly on NYSERDA's website shortly after the Step Three Bid Proposal deadline. Attachment I must be complete in all respects other than the NYISO Interconnection Queue Number and the Article 10 status fields, which may not be applicable to all submissions. A complete Attachment I must include a narrative of at least 300 words and must provide NYSERDA with a comprehensive description of the proposed Bid Facility, the current status of permitting/development/construction, an estimated date of facility operation, project benefits, and background information on the Proposer. If the proposal includes an Energy Storage component, Proposers must disclose such information in the Attachment I and include the location of the component within the facility. The information in Attachment I must be consistent with and not conflict with other information submitted in the Step Three Bid Proposal.

NYSERDA will not redact any information provided on Attachment I. Attachment I will be made available to the public by NYSERDA soon after Step Three Bid Proposals are received.

X. NYSERDA PUBLIC OUTREACH

Proposers who submit a Bid Proposal under Step Three will be required to develop and submit a Community Outreach Plan that promotes positive and meaningful public engagement and that reflects an understanding of local interests and concerns, provides high-quality and well-timed public educational opportunities, demonstrates a commitment to partnering with elected officials in proposed host communities, and elicits input from the public and affected agencies. NYSERDA expects to be kept well-informed of Bid Facility progress well-ahead of planned community outreach activities.

Through RESRFP19-1, a new Project Viability subcategory, Community Outreach, has been introduced. Proposers will be scored based on the quality of their Community Outreach Plan and the community outreach activities performed prior to submission of a Bid Proposal. See Section IX and Appendix 2 for additional information.

Public engagement, education about Large Scale Renewables, and open communication about the solicitation and permitting process are of utmost priority to NYSERDA. Shortly after Step Three Bid Proposals are submitted, NYSERDA will schedule and meet with local officials in the proposed host communities, in person and/or via teleconference. These meetings will be conducted without Proposer participation, but NYSERDA will notify the Proposer regarding the schedule for such meetings and provide a brief synopsis of such meetings after they conclude.

XI.STEP THREE BID PROPOSAL EVALUATION

NYSERDA will employ a scoring system comprised of four evaluation components totaling 100 points:

- 1) Incremental Economic Benefits: 10 points
- 2) Project Viability: 10 Points
- 3) Operational Flexibility and Peak Coincidence: 10 Points
- 4) Bid Price: 70 Points

Pursuant to the February 22, 2017, PSC Order Approving the Phase 1 Implementation Plan and the subsequent Orders,⁴⁴ a Technical Evaluation Panel (TEP), consisting of NYSERDA staff, DPS Staff, and Independent Evaluators (outside reviewers who possess proficiency in the evaluation of energy generation projects) will evaluate and award points for the non-price evaluation components of each Bid Proposal.⁴⁵ The Bid Price evaluation will be conducted by NYSERDA. The evaluation for each of these categories is described below.

A. Scoring Criteria

1. Incremental Economic Benefits: 10 Points Maximum

The TEP will evaluate and award up to 10 points to Bid Proposals based on the degree to which each Bid Proposal demonstrates a contribution to the two economic benefits categories listed in Section IX C(3). Only those Incremental Economic Benefits meeting the eligibility criteria and falling within the defined categories in Section IX C(3) will be considered for evaluation. The TEP will award a maximum of 10 points between the two categories in proportion to the level of eligible claims, normalized across all Bid Facilities by dividing each Bid Facility's eligible claims by that Bid Facility's Bid Capacity (\$/MW). The TEP will consider the support for each claim provided and additional weight will be attributed by the TEP to those expenditures and/or investments that are firm and credible and that create persistent and sustainable value in New York State. **See Appendix 1 for a detailed description of eligibility and the scoring process for Incremental Economic Benefits.**

2. Project Viability: 10 Points Maximum

The TEP will evaluate and award up to 10 points to Bid Proposals based on the extent to which the Bid Proposal demonstrates that the Bid Facility has exceeded the Minimum

⁴⁴ See <u>Final Phase 1 Implementation Plan</u>, the November 17, 2017 <u>PSC Order Approving the Phase 2</u> <u>Implementation Plan</u> and the subsequent <u>Final Phase 2 Implementation Plan</u>, the December 14, 2018 PSC <u>Order Approving the Phase 3 Implementation Plan</u> and the subsequent <u>Final Phase 3</u> <u>Implementation Plan</u>.

⁴⁵ The Order and subsequent Plans are available on NYSERDA's CES Orders, Reports, and Filings website: <u>https://www.nyserda.ny.gov/All-Programs/Programs/Clean-Energy-Standard/Important-Orders-Reports-and-Filings</u>

Threshold Requirements in the five categories listed in Section VII, the Proposer's commitment to site and construct the Bid Facility's Permanent Physical Footprint in locations that avoid overlap on land with agricultural importance to New York State, and the quality and content of the Proposer's Community Outreach Plan as described in Appendix 2. The TEP will award a maximum of 10 points across the combined seven subcategories in proportion to the level of achievement demonstrated. **See Appendix 2 for a detailed description of the scoring process for Project Viability.**

3. Operational Flexibility and Peak Coincidence: 10 Points Maximum The TEP will evaluate and award up to 10 points to Bid Proposals based on the evaluation of Operational Flexibility and Peak Coincidence in the two categories listed in Section IX C(5). The TEP will award a maximum of 10 points across the two categories in proportion to the level of value demonstrated. See Appendix 3 for a detailed description of the scoring process for Operational Flexibility and Peak Coincidence.

4. Bid Price: 70 Points Maximum

The Bid Price evaluation will be conducted by NYSERDA. For evaluation purposes only, Bid Prices will be converted according to the following calculation to allow for an equitable comparison between bids of varying Contract Tenor:

$$Bid Price Evaluation Metric = \frac{NPV of Expected Contract Payments}{Bid Quantity \times Contract Tenor}$$

Where:

NPV of Expected Contract Payments =
$$\sum_{2019}^{2041} \frac{(Bid\ Price \times Calendar\ Year\ Bid\ Quantity)_t}{(1+i)^{t-2019}}$$

t = Calendar Years 2019 - 2041

i = 6.66%⁴⁶

- a) Bid Facilities not in Commercial Operation as of the RFP Release Date, will be evaluated as if the Contract Delivery Term commences on December 1, 2021.
- b) Bid Facilities in Commercial Operation as of the RFP Release Date will be evaluated as if the Contract Delivery Term commences on December 1, 2019.

⁴⁶ The discount rate for Bid Price evaluation (DISCo Discount Rate or DDR) was established by the New York State Department of Public Service Office of Accounting, Audits and Finance.

NYSERDA will employ a maximum acceptable Bid Price Evaluation Metric; NYSERDA will not award a contract for a Bid Facility where the Bid Price Evaluation Metric is above the maximum acceptable Bid Price Evaluation Metric.

Bids will be sorted in ascending order per the Bid Price Evaluation Metric (BPEM). The lowest bid per the BPEM will receive the maximum points available for the Bid Price component (70 points) and the higher BPEMs will receive lower scores (less than 70 points). NYSERDA will implement a method ensures that the scores of higher BPEMs are sufficiently dispersed below the maximum of 70 points such that the final score that aggregates Bid Price, Incremental Economic Benefits, Project Viability, and Operational Flexibility and Peak Coincidence retains the intended scoring emphasis on price to the maximum reasonable extent.

B. Evaluation & Selection

Selection will be based on the TEP's final ranking, subject to the Portfolio Risk Assessment and the RFP's procurement target.

1. Preliminary Rank Order

A preliminary final ranking of Bid Proposals based on the sum of the TEP points awarded for the non-price categories (Incremental Economic Benefits Category, Project Viability Category, and Operational Flexibility and Peak Coincidence Category), and the points awarded for the Bid Price Evaluation Metric.

2. Portfolio Risk Assessment

Following the development of the preliminary rank order, NYSERDA and DPS, in consultation with the TEP members, will then consider whether to apply the following factors as they may apply to the preliminary award group in making a final award group recommendation, using information provided by the relevant Proposers.

The following portfolio risk assessment limits center around the ability of the portfolio to be constructed at the proposed locations and within the required timeframe. If considering whether to apply any of the limits, NYSERDA and DPS will consider the potential cost impact of such decision (relative to the generation portfolio that otherwise would have been selected), only exercising such a limit should the impact on the generation-weighted average cost of the portfolio increase by less than 10 percent with the application of the portfolio limits.

Such limits will include:

- (a) Diversity of resources: NYSERDA and DPS may constrain any eligible technology to comprise no more than 80 percent (80%) of the award group on an annual generation basis.
- (b) Diversity of owners: NYSERDA and DPS may constrain any owner or affiliate of an owner to comprise no more than 80 percent (80%) of the award group on an annual generation basis.
- (c) Developer limitation: NYSERDA and DPS may limit awards to a specific project owner to a capacity of no more than five times the renewable capacity of the largest project that the owner has successfully brought to commercial operation in the past.

3. Final Award Group

After completing the Portfolio Risk Assessment and any necessary processes below, NYSERDA and DPS will arrive at a final award group. NYSERDA and DPS may also establish a waitlist of Bid Facilities in rank order, for Bid Facility(ies) ranked below those Bid Facilities offered an initial award. Bid Proposals represent offers to contract and must remain open for a period of at least ninety (90) days from the deadline for submittal of a Step Three Bid Proposal.

NYSERDA reserves the right to reject or accept any or all bids. NYSERDA may consider information provided by Proposer in response to Section XIV(E) or otherwise obtained by NYSERDA as to indictments, convictions enforcement proceedings, investigations, and significant character or ethical questions in accepting or rejecting a bid. NYSERDA also reserves the right to solicit revised Bid Prices and/or to make counteroffers as it deems appropriate. Notification of a re-bid, counteroffer or selection will be made by voice communication and email to the Proposer's Designated Agent(s), as identified on the Step Three Bid Proposal of this RFP. Proposer's Designated Agent(s) must be authorized to respond and to commit to counteroffers on behalf of Proposer.

NYSERDA will then notify Proposers with Bid Facilities contained in the final award group both by voice and written communication to Proposers' Project Sponsor(s), Authorized Representative(s), and Designated Agent(s). The date upon which NYSERDA provides such written notification shall be the Award Notification Date. Once selected for an award, Proposers must negotiate a final version of the Agreement with NYSERDA.

XII. POST-AWARD PROCESS

1. Confidentiality

The Proposer shall not distribute any press release or contact the media until after the contract is executed by both parties and any New York State press releases regarding the awards have been issued. If the Proposer wishes to contact the press regarding the award, the Proposer must collaborate with NYSERDA's Large-Scale Renewables Team and the Director of Communications to prepare any press release and/or to plan for any announcement.

2. Provision of Contract for Execution

NYSERDA will prepare a conformed copy of the RES Standard Form Agreement (Attachment H) which will be delivered to the Proposer, in a manner to be agreed upon, for Proposer's execution and return.

NYSERDA may rescind awards to Proposers who fail to provide Contract Security within thirty (30) days of the Award Notification Date or who fail to execute the RES Standard Agreement (Attachment H) within a reasonable amount of time.

3. Provision of Contract Security

Unless otherwise agreed to by NYSERDA in writing, Contract Security in the amount of the product of the Bid Quantity and \$9.00 (plus any Additional Contract Security pledged- see X(B)(5), above) will be required within thirty (30) days of the Award Notification Date. NYSERDA accepts Contract Security in the form of cash, certified funds, or a Letter of Credit. The criteria for accepting a LOC includes:

- a) the issuing bank is a member of the New York Clearinghouse Association⁴⁷, or
- b) the issuing bank must have a credit rating of A or better by Standard and Poor's, A or better by Fitch, or, A2 or better by Moody's; and,
- c) the issuing bank must be a United States bank, or a United States branch of a foreign bank, with a New York branch preferred.

NYSERDA has included a standard form of letter of credit. If the issuing bank seeks modification to these terms, NYSERDA recommends that prior to submission, a draft of the Contract Security should be sent to NYSERDA for review.

4. Documents Required for Contracting Purposes

NYSERDA requires the following documents prior to contract execution:

- a) Post-Award Contracting Information Form, to be provided by NYSERDA to Seller, requesting information such as Legal Business Name, State of Incorporation, Tax Identification Number (EIN), and other contractual information.
- b) Pursuant to Tax Law Section 5-a, if not previously filed for the Seller, form Tax Law ST-220-TD is required. Please consult Publication 223, Questions and Answers Concerning Tax Law Section 5-1. If filing for the first time, please indicate the "Seller" under "Contractor name" on the form. This form is filed with the NYS Tax Department and NYSERDA does not need a copy. If previously filed for the Seller, a completed form Tax Law ST-220-CA. On this form, Sellers will indicate to NYSERDA that they have filed the ST-220-TD form or the Seller previously filed ST-220-TD with the Tax Department. As a reminder, please indicate the "Seller" under "Contractor name" on the form.
- c) Certificate of Incorporation

⁴⁷ Please see the owner bank membership for The Clearing House available from <u>https://www.theclearinghouse.org/about/owner-banks</u>

d) A certificate of an appropriate officer of the Seller, in form and substance certifying:

 (1) the names and signatures of the officers of the Seller authorized to sign any documents to be delivered to NYSERDA under the conformed RES Standard Form Agreement, and (2) the accuracy and completeness of resolutions of the Seller, authorizing and approving all matters in connection with the transactions contemplated in the conformed RES Standard Form Agreement (Attachment H). NYSERDA does not have a preferred standard. See RES Standard Form Agreement Section 6.05 Additional Documents for additional information.

5. DAM Section 305 Notice Information

For awarded Bid Facilities with a Nameplate Capacity less than 25 MW and located in a New York State agricultural district, Proposers will be required to provide to NYSERDA a report including all of the information required by Section 305(4)(b) of the Agriculture and Markets Law. NYSERDA may also require a 305 report prior to award decisions.

A map of the agricultural districts, by county, is available from <u>New York State Agriculture</u> and <u>Markets</u>⁴⁸.

6. Public Release of Bid Facility Information

If Bid Facility characteristics change between Bid Proposal and Award, Proposers are required to submit an updated Attachment I Public Release of Bid Facility Information to NYSERDA within 10 Business Days of such change. The updated Attachment I will be made available to the public by NYSERDA. NYSERDA will not redact any information provided on the updated Attachment I, in order to ensure transparency with the public.

⁴⁸ New York State Agriculture and Markets Agricultural Districts is available by county at <u>https://www.agriculture.ny.gov/AP/agservices/agricultural-districts.html</u>

XIII. RES STANDARD FORM AGREEMENT (ATTACHMENT H)

NYSERDA recommends that Proposers review the RES Standard Form Agreement (Attachment H) and all associated Exhibits prior to participating in RESRFP19-1. The RES Standard Form Agreement is a legally binding document; it is recommended that Proposers consult with an attorney.

CONDITIONS/CONTINGENCIES

NYSERDA may include conditions and/or contingencies to address matters concerning any issues regarding the viability or siting of a project, or where the build environment is contingent or conditional on governmental rescission, modification or change in local law, temporary or permanent.

XIV. GENERAL CONDITIONS

A. Proprietary Information

Careful consideration should be given before confidential information is submitted to NYSERDA as part of proposal Step Two Application for Qualification or a Step Three Bid Proposal. Proposers should consider and review whether information is critical for evaluation, and whether general, non-confidential information, may be adequate for review and evaluation purposes. The NYS Freedom of Information Law, Public Officers law, Article 6, provides for public access to information NYSERDA possesses. Public Officers Law, Section 87(2)(d) provides for exceptions to disclosure for records or portions thereof that "are trade secrets or are submitted to an agency by a commercial enterprise or derived from information obtained from a commercial enterprise and which if disclosed would cause substantial injury to the competitive position of the subject enterprise." Additional information submitted to NYSERDA that the Proposer wishes to have treated as proprietary, and confidential trade secret information, should be identified and labeled "Confidential" or "Proprietary" on each page at the time of disclosure. This information should include a written request to except it from disclosure, including a written statement of the reasons why the information should be excepted. See Public Officers Law, Section 89(5) and the procedures set forth in 21 NYCRR Part 501 http://www.nyserda.ny.gov/About/-/media/Files/About/Contact/NYSERDA-Regulations.ashx.

However, NYSERDA cannot guarantee the confidentiality of any information submitted. NYSERDA reserves the right to make public, after the fifth anniversary of the award date, the RES Standard Form Agreement executed with any awarded project.

B. State Finance Law Sections 139-j and 139-k

NYSERDA is required to comply with State Finance Law sections 139-j and 139-k. These provisions contain procurement lobbying requirements which can be found at <u>https://ogs.ny.gov/acpl/</u>. The Step Two Application for Qualification Form (Attachment A) calls for a signature certifying that the Proposer will comply with State Finance Law sections 139-j and 139-k and a disclosure statement regarding whether the Proposer has been found non-responsible under section 139-j of the State Finance Law within the previous four years.

C. Tax Law Section 5-a

NYSERDA is required to comply with the provisions of Tax Law Section 5-a, which requires a prospective contractor, prior to entering an agreement with NYSERDA having a value in excess of \$100,000, to certify to the Department of Taxation and Finance (the "Department") whether the contractor, its affiliates, its subcontractors and the affiliates of its subcontractors have registered with the Department to collect New York State and local sales and compensating use taxes. The Department has created a form to allow a prospective contractor to readily make such certification. See, ST-220-TD (available at http://www.tax.ny.gov/pdf/current_forms/st/st220td_fill_in.pdf). Prior to contracting with NYSERDA, the prospective contractor must also certify to NYSERDA whether it has filed such certification with the Department. The Department has created a second form that must be completed by a prospective contractor prior to contacting and filed with NYSERDA. See, ST-220-CA (available at

<u>http://www.tax.ny.gov/pdf/current_forms/st/st220ca_fill_in.pdf</u>). The Department has developed guidance for contractors which is available at http://www.tax.ny.gov/pdf/publications/sales/pub223.pdf.

D. Omnibus Procurement Act of 1992

It is the policy of New York State to maximize opportunities for the participation of New York State business enterprises, including minority- and women-owned business enterprises, as Proposers, subcontractors, and suppliers on its procurement Agreements.

Information on the availability of New York subcontractors and suppliers is available from:

Empire State Development Division for Small Business 30 South Pearl Street Albany, NY 12245

A directory of certified minority- and women-owned business enterprises is available from:

Empire State Development Minority and Women's Business Development Division 30 South Pearl Street Albany, NY 12245

E. Disclosure Requirement

The Proposer shall disclose any indictment for any felony, or any conviction for a felony within the past five years, under the laws of the United States or any state or territory of the United States, and shall describe circumstances for each. When a Proposer is an association, partnership, corporation, or other organization, this disclosure requirement includes the organization and its officers, partners, and directors or members of any similarly governing body. If an indictment, investigation, enforcement proceeding or conviction should come to the attention of NYSERDA after the award of a contract, NYSERDA may exercise its stop-work right pending further investigation, or terminate the agreement; the contractor may be subject to penalties for violation of any law which may apply in the particular circumstances. Proposers must also disclose if they have ever been debarred or suspended by any agency of the U.S. Government or the New York State Department of Labor.

F. Confidentiality

The Proposer shall not distribute any press release or contact the media until after the contract is executed by both parties and any New York State press releases regarding the awards have been issued. If the Proposer wishes to contact the press regarding the award, the Proposer must collaborate with NYSERDA's Large-Scale Renewables Team and the Director of Communications to prepare any press release and/or to plan for any announcement. NYSERDA reserves the right to make public, after the fifth anniversary of the Award Notification Date, the RES Standard Form Agreement (Attachment H) executed with any awarded project.

XV. LIST OF ATTACHMENTS

Appendix 1 – Incremental Economic Benefits Appendix

Appendix 2 – Project Viability Appendix

Appendix 3 – Operational Flexibility and Peak Coincidence Appendix

Attachment A – Step Two Application for Qualification Form (available May 2, 2019)

Attachment B – Step Two Application for Qualification Threshold Eligibility Narrative

Attachment C – Summary Description of Control Status by Parcel

Attachment D – Environmental Assessment Form

Attachment E – List of Required Permits

Attachment F – Project Development Experience

Attachment G – Project Financing Experience

Attachment H – RES Standard Form Agreement

Exhibit A – Standard Terms and Conditions for all NYSERDA Agreements

Exhibit B – Letter of Credit

Exhibit C – Prompt Payment Policy Statement

Exhibit D – Requirements for Biomass-Fueled Bid Facilities

Exhibit E – Department of Agriculture and Markets Construction Standards (available on or before July 24, 2019)

Attachment I – Public Release of Bid Facility Information

Attachment J – Instructions - Step Two Application for Qualification Submission (available May 2, 2019)

APPENDIX 1 – INCREMENTAL ECONOMIC BENEFITS APPENDIX

TABLE OF CONTENTS

INTRODUCTION	52
CATEGORY 1: LONG-TERM ECONOMIC BENEFITS TO NEW YORK STATE	53
CATEGORY 2: SHORT-TERM ECONOMIC BENEFITS TO NEW YORK STATE	54

INTRODUCTION

The Bid Proposal evaluation process for RES Tier 1 REC solicitations includes the application of an Incremental Economic Benefits evaluation that makes up 10% (10 points) of the overall Step Three scoring as described in Section XI(A)(1) Incremental Economic Benefits of the RFP. The inclusion of the Incremental Economic Benefits evaluation reflects the importance of positive impacts of the RES procurements on New York's economy. The Incremental Economic Benefits criterion employed in this RFP is intended to differentiate bids based on their effectiveness at meeting this objective.

In submitting a Step Three Bid Proposal, Proposers should include information and documentation necessary to allow the TEP to evaluate the Bid Facility for its contribution to both the long-term and short-term categories. NYSERDA may request additional documentation as a part of its review of Step Three Bid Proposals.

Incremental Economic Benefits are those that a Proposer can demonstrate: (1) will accrue after an award from this RFP, and (2) would not have accrued but for the award of a contract under this RFP. Only those Incremental Economic Benefits falling within the categories defined below will be considered, and in no instance will NYSERDA or its Technical Evaluation Panel (TEP) consider any indirect benefits or those created by any "multiplier effect" or other attribution method under which the creation of peripheral spending and jobs might be credited to direct capital infused into the economy.

Incremental economic benefits previously claimed with respect to a Bid Facility that is subject to a pending award under a previous solicitation or that is the subject of a current NYSERDA RPS or RES Standard Form Agreement are not eligible for evaluation.

All laborers, workmen and mechanics, within the meaning of NYS Labor Law Article 8, performing construction activities with respect to the Bid Facility and Energy Storage, if applicable, including, but not limited to, the staging, installation, erection and placement of Bid Facility and its electrical interconnection as well as start-up and commissioning of the Bid Facility, whether through long-term or short-term employment, must be paid at least the applicable Prevailing Wage applicable in the area where the Bid Facility will be situated, erected and used, as published by the NYS Department of Labor (DOL)⁴⁹ or at least the equivalent Prevailing Wage requirements of the jurisdiction where the Bid Facility is located. This requirement applies: (1) to all laborers, workmen and mechanics performing construction activities, whether they be direct employees of the Seller or of Seller's subcontractor(s), and (2) regardless of whether or not Seller claimed such employment as an Incremental Economic Benefits in its Bid Proposal.

As described in Section XIII of the RFP, independent verification of the actual Incremental Economic Benefits of the Bid Facility, and comparison to the level and

⁴⁹ For NYS DOL Prevailing Wage Schedules, please visit: <u>https://labor.ny.gov/workerprotection/publicwork/PWContents.shtm</u>

category of claimed Incremental Economic Benefits (Expected Total Dollars), will be required after the end of the first three years of the Contract Delivery Term where the Proposer will submit an economic benefits report prepared by a New York State certified, independent certified public accountant, demonstrating the actual Incremental Economic Benefits that resulted from the construction and operation of the Bid Facility under the categories and within the eligibility requirements listed in the RFP. The Economic Benefits Report will be funded at the Bidder's expense. Should the Bidder fail to reasonably demonstrate that the total dollar amount of Incremental Economic Benefits divided by Installed Bid Capacity, is at least 85% of Expected Total Dollars divided by the Bid Capacity in each category, NYSERDA may at its option upon Notice to Seller, modify the Agreement by reducing the Bid Price payable for the remainder of the Contract Delivery Term.

INCREMENTAL ECONOMIC BENEFITS CATEGORIES

The total of 10 points for Incremental Economic Benefits has been distributed among two categories. The Proposer will provide the Expected Total Dollars for each category; the Expected Total Dollars for each category will be added together and then be divided by the Bid Capacity of the Bid Facility for TEP evaluation purposes only.

The following table lists the Incremental Economic Benefits categories and the points available in each.

	Category	Maximum Points Awarded
1	Long-Term Economic Benefits to New York State	6.5
2	Short-Term Economic Benefits to New York State	3.5

The remainder of this Appendix will present the individual informational components of each of the four evaluation categories that make up the Incremental Economic Benefits criterion.

CATEGORY 1: LONG-TERM ECONOMIC BENEFITS TO NEW YORK STATE

Proposers should describe the degree to which the development, construction, and operation of the Bid Facility will directly create (add) long-term jobs and/or accrue long-term payments to the New York State economy, its municipalities and/or residents. Payments that will provide long-term royalties, production-based payments, land lease or land use payments or other forms of compensation are also eligible in this category. Payments for non-renewable fuels (e.g. natural gas) are not eligible for consideration in this category or in any Economic Benefits category. Eligible claims can include:

a) Employment of New York workers in the form of long-term jobs (jobs lasting longer than three years). These can include, but are not limited to, jobs

associated with operations and maintenance, plant management, long-term project development, or similar;

- New or increased local property tax payments to school districts, cities, towns, or other taxing jurisdictions;
- c) Payments in Lieu of Taxes (PILOT) agreements or other alternative taxing mechanisms and forms of compensation;
- d) Host community payments, mitigation/conservation payments, or other funds that will directly benefit the host community for more than three years, such as Proposer-funded projects that will not be linked to the Bid Facility (e.g. new building or infrastructure improvements to the host town(s), funds established in the host town to benefit local residents);
- e) Payments for leases of land in New York; and
- f) Payments associated with the production of electricity, such as fuel purchases, biomass sourced or harvested in New York, or purchases of landfill gas produced in New York.

CATEGORY 2: SHORT-TERM ECONOMIC BENEFITS TO NEW YORK STATE

Proposers should describe the degree to which both local and statewide economic activity will increase as a result of in-state purchases and short-term jobs. These can include:

- a) Employment of New York workers in the form of short-term jobs (jobs lasting less than three years). These can include NYS construction, rail and port workers, contractors and laborers, engineering or environmental service providers, consultants, financial service advisors, and legal service providers associated with the development and construction/modification of the Bid Facility;
- Employment of New York workers for ongoing operations and maintenance expenses which are anticipated through the first three (3) years of Commercial Operation;
- c) Land purchase payments associated with securing rights to a Bid Facility site;
- d) Purchases and/or consumption of local goods and services, such as, but not limited to, food, lodging, vehicles, equipment, and/or fuel; and

Purchases of materials sourced from within New York such as, but not limited to, gravel, steel, concrete and similar materials, purchases and use of equipment and products manufactured or assembled within New York, and/or the use of rental equipment or similar supplies sourced from within New York. Bid Facility components (e.g. wind turbines, solar panels) not manufactured within New York are not eligible for eligible for consideration in this category or in any Economic Benefits category.

List each type of purchase, service, or employment that will be used and provide total dollars, including New York State and local sales taxes, expected to be spent on all the purchases, consumption of local/in-state goods, or short-term employment from this

category from the Award Notification Date through the end of the first three (3) Contract Years of operation (Expected Total Dollars).

APPENDIX 2 - PROJECT VIABILITY APPENDIX

TABLE OF CONTENTS

INTRODUCTION	57
PROJECT VIABILITY CATEGORIES	
CATEGORY 1: SITE CONTROL	
CATEGORY 2: INTERCONNECTION	60
CATEGORY 3: PERMITTING	63
CATEGORY 4: PROJECT DEVELOPMENT	
CATEGORY 5: RESOURCE ASSESSMENT AND ENERGY PRODUCTION	
ESTIMATE	
CATEGORY 6: SITE CHARACTER	
CATEGORY 7: COMMUNITY OUTREACH	

INTRODUCTION

The Bid Proposal evaluation process for RES Tier 1 REC solicitations includes the application of a Project Viability evaluation criterion that makes up 10% (10 points) of the Step Three scoring as described in Section XI(A)(2), Project Viability of the RFP. The inclusion of the Project Viability evaluation reflects the importance of Bid Facility feasibility and ultimate Bid Facility completion toward meeting the RES procurement goals. Proposers will initially submit information and attachments with their Step Two Application for Qualification packages that will confirm that the Bid Facility meets the required Minimum Threshold Requirements, though Proposers may include with their Step Two application documentation that they have exceeded the Minimum Threshold Requirements in any of the categories (see Section VII and Section IX).

If the progress by a Bid Facility exceeds the Minimum Threshold Requirements in any category, documentation as to the additional level of progress achieved should be provided by the Proposer in Step Two.⁵⁰ As a part of the Step Three Bid Proposal, Proposers will be also be invited to demonstrate that they have exceeded the required Minimum Threshold Requirements, including but not limited to any additional progress made between the submittal dates for Steps Two and Three.

As a part of the Step Three evaluation, the TEP will award additional points to generation facilities that have demonstrably exceeded the Minimum Threshold Requirements under the individual Project Viability categories described below. Projects achieving only the Minimum Threshold Requirements will receive no points in the appropriate Project Viability category.

PROJECT VIABILITY CATEGORIES

The total of 10 points for Project Viability has been distributed among seven categories. For Categories 1 through 5, each Bid Proposal will be eligible for the maximum points available in that category, depending on the extent to which it exceeds the Minimum Threshold Requirements. For Category 6, the TEP will award points in accordance with the level of Proposers' commitments. For Category 7, the TEP will award points based on the quality of the Community Outreach Plan.

⁵⁰ For example, under Category 2, Interconnection, for a 20 MW Bid Facility subject to NYISO jurisdiction, the documentation required to demonstrate achievement of the Minimum Threshold Requirement consists of a submitted interconnection request. If a Feasibility, System Impact, or Facilities Study has, in fact, been executed, attach a copy. The Study will satisfy the Minimum Threshold Requirement and will also be considered as a part of the Project Viability evaluation in Step Three.

The following table lists the Project Viability categories and the points available in each:

	Project Viability Category	Maximum Points Awarded
1	Site Control	2.0
2	Interconnection	2.0
3	Permitting	1.5
4	Project Development	1.0
5	Resource Assessment and Energy Production Estimate	1.0
6	Site Character	1.5
7	Community Outreach Plan	1.0

The remainder of this Appendix will present the individual informational components of each of the seven evaluation categories that make up the Project Viability criterion. The tables shown below provide relevant details on descending levels of progress within each category.

PROJECT VIABILITY CATEGORY 1: SITE CONTROL

The Site Control evaluation category has two subcategories: Generation Facility Site Control, and Interconnection Right-of-Way (ROW) Site Control. Energy Storage Site Control is a Minimum Threshold Requirement but is not included as a subcategory in the Site Control evaluation.

The Minimum Threshold Requirements for Site Control are described in Section VII of RESRFP19-1. They require that the Proposer at least have entered *an exclusivity agreement or letter of intent* with the site owner(s) for percentages of the site (depending on site size) and the Interconnection Right-of-Way.

Generation Facility Site Control will be eligible for additional points based on the proportion of the total land area where the Bid Facility and interconnection facilities are or will be sited that the Proposer has under its control through *ownership, easement, executed lease or executed binding option for ownership or lease*.⁵¹

The Project Viability evaluation will award points based on the demonstration of additional site ownership or control. Proposed Bid Facilities that are currently in operation will receive maximum points awarded for this category.

⁵¹ Note that the Minimum Threshold Requirement requires the existence of exclusivity agreements or letters of intent. In order to receive additional points under Step Three, Proposers will be required to have <u>ownership interests or lease agreements</u> enforceable by the Proposer without further material agreement with the owner(s).

PROJECT VIABILITY CATEGORY 1.A: GENERATION FACILITY SITE CONTROL

Generation Facility Site Control Criterion			
Measure of Generator Site Control	Percent of Site Controlled (as a % of total parcel area)	Maximum Points Awarded	
Own, executed lease for, easement for, or executed binding option for a parcel	100%	1.50	
Own, executed lease for, easement for, or executed binding option for a parcel	75%	1.25	
Own, executed lease for, easement for, or executed binding option for a parcel	50%	1.00	
Own, executed lease for, easement for, or executed binding option for a parcel	25%	0.50	

PROJECT VIABILITY CATEGORY 1.B: INTERCONNECTION RIGHT-OF-WAY CONTROL

Interconnection right-of-way (ROW) control will be evaluated and awarded points under Step Three by the level of progress toward ROW control that the Proposer has achieved through either *ownership, executed lease, executed option, or by virtue of the interconnection ROW being controlled by or assignable to the interconnecting utility* that will own interconnection facilities. Proposed Bid Facilities that are currently in operation will receive maximum points awarded for this category.

Interconnection ROW Control Criterion	Maximum Points Awarded
100% of total area is either (i) owned, executed lease for, easement for, or executed binding option by the Proposer, <u>or</u> (ii) controlled by or assignable to the interconnecting utility that will own interconnection facilities	0.50
50% of total area is either (i) owned, executed lease for, easement for, or executed binding option by the Proposer, <u>or</u> (ii) controlled by or assignable to the interconnecting utility that will own interconnection facilities	0.25

SUPPORTING DOCUMENTATION REQUIRED FOR SITE CONTROL

Unless the Bid Facility is currently in operation, the Proposer may demonstrate that it has <u>exceeded</u> the Minimum Threshold Requirements for Generation Facility and ROW Site Control by providing updated site control maps and summary descriptions by parcel, demonstrating the percentage of the site controlled.

PROJECT VIABILITY CATEGORY 2: INTERCONNECTION

Proposer demonstration of progress toward generation facility interconnection (IC) differs based on the size of the generation facility and the jurisdictional authorities governing the interconnection (i.e., FERC, a regional transmission operator,⁵² a state agency, or a non-US agency).

The following two tables present the criteria that will be used to evaluate interconnection progress <u>exceeding</u> the Minimum Threshold Requirements. The first table is relevant to most grid-connected generators in the United States and the second table is relevant to Canadian generators, generators not in other categories, and eligible behind-the-meter (BTM) generators.

The Project Viability evaluation will award points based on the demonstration of progress in the interconnection process; Bid Facilities in operation or those with executed IC agreements will be awarded the maximum points available for this category.

⁵² New York Independent System Operator (NYISO) or adjacent RTOs that include New England Independent System Operator (NE-ISO) and PJM.

Grid-Connected Generators (U.S.)

Large Generator (>20 MW) NYISO or similar IC Authority in Adj. U.S. Control Area ⁵³	Small Generator (up to 20 MW) NYISO or similar IC Authority in Adj. U.S. Control Area ⁵⁴	Small Generator Non-FERC Interconnection ⁵⁵	Maximum Points Awarded
		or executed IC agreement or equivalent dictional requirements	2.0
Evidence pro Facilities Stu complete, an has accepte Allocation, o evidence of	udy is nd Proposer d the Cost r equivalent	Evidence provided that the utility company has completed the Coordinated Electric System Interconnection Review (CESIR), or equivalent evidence of progress	1.6
Evidence pro Feasibility S System Impa (SIS) (or equident complete. Documentat agreement with been reacher either of the relevant	tudy and act Study uivalent) are ion of vith ISO has ed to forego	[no process equivalent, n/a]	1.2
Evidence pro Feasibility S equivalent) i	tudy (or	Evidence provided that utility has provided at least a Preliminary Analysis Report (or equivalent) that indicates the Bid Facility is feasible including cost estimate for any required upgrades	0.6

 ⁵³ FERC Jurisdiction, Large Generator Interconnection
 ⁵⁴ FERC Jurisdiction, Small Generator Interconnection, inclusive of 2 MW Fast Track
 ⁵⁵ Connecting Transmission Owner (CTO) Interconnection under state jurisdiction (typically utility distribution less than 5MW).

Ontario & Quebec; Generators not in another category	Behind-the-Meter Generators (if eligible)	Maximum Points Awarded
Operating, interconnected, or has secured Ontario Energy Board Leave to Construct or a Generator License or equivalent.	Operating/interconnected.	2.0
Evidence provided that facilities study or equivalent is complete, and Proposer has accepted the cost allocation	Formal determination from the interconnecting utility resulting from a completed feasibility study that IC is permissible	1.6
Evidence provided that feasibility study and System Impact Study (SIS) (or equivalent) are complete. Documentation of agreement with IC authority has been reached to forego either of these, if relevant	Determination from the interconnecting utility that IC is feasible but that further study is necessary	1.2
Evidence provided that System Feasibility Impact Study (for IESO) (or equivalent) is complete	Informal determination from the interconnecting utility that IC is feasible	0.6

Canadian Generators, Generators Not in Other Categories, Eligible BTM Generators

SUPPORTING DOCUMENTATION REQUIRED FOR INTERCONNECTION

The Proposer may demonstrate that it has exceeded the Minimum Threshold Requirements for Interconnection by providing the following documents with either its Step Two Minimum Application for Qualification (preferred) or its Step Three Bid Proposal:

- A brief narrative summary of IC status including (but not limited to) stage of IC process completed (with applicable dates) and underway (with expected dates), IC authority, and if applicable, queue numbers.
- Copies of associated agreements or other evidence (required fees have been paid) supporting the claimed level of progress as listed in the tables above.

PROJECT VIABILITY CATEGORY 3: PERMITTING

The following two tables present the criteria necessary to evaluate permitting progress in excess of the Minimum Threshold Requirements. The first table covers informational requirements for wind, ground mounted solar, biomass, biogas, hydroelectric, and generators in other jurisdictions. The second table covers informational requirements for building mounted solar, fuel cells, and ocean and tidal energy facilities.

The Step Three Project Viability evaluation will award points based on the level of progress in the permitting process; Bid Facilities in operation or those that have acquired all non-ministerial necessary permits and approvals will be awarded the maximum points available for this category.

Hydroelectric in U.S. Jurisdictions ⁵⁶	Wind, Ground- Mounted Solar in NY	Biomass / Biogas in NY	Wind, Ground- Mounted Solar, Biomass or Biogas Requirements for Jurisdictions other than NY, and Canadian Hydroelectric	Maximum Points Awarded
Bid Facility is alr all non-ministeria	• • •	has permission to	operate or has secured	1.5
Draft application including an Environmental Impact Report or Preliminary licensing proposal submitted	All requirements Environmental (Act (SEQRA) fur fulfilled. Letter of declaration or con negative declars agency; or final Impact Statement accepted. If app documentation the hearing has been	Quality Review Ily defined or of negative onditional ation from lead Environmental nt (EIS) olicable, provide that Article 10	All requirements for environmental approval defined or fulfilled (e.g. Environmental Compliance Approval [ECA] or Environmental Activity and Sector Registry [EASR] registration in Ontario; Environmental Quality Act [EQA] assessment in Quebec)	1.0

Wind, Ground-Mounted Solar, Biomass/Biogas, Hydro

⁵⁶ This approach does not reduce points for hydroelectric licenses that may expire during the proposed contract term.

Hydroelectric in U.S. Jurisdictions ⁵⁶	Wind, Ground- Mounted Solar in NY	Biomass / Biogas in NY	Wind, Ground- Mounted Solar, Biomass or Biogas Requirements for Jurisdictions other than NY, and Canadian Hydroelectric	Maximum Points Awarded
Provide Environmental Impact Study Plan	Letter or signed approval form demonstrating that Local Zoning/ Ordinance requirements (such as Special Use/ Conditional Use Permit [SUP/CUP] or Permit by Rule [PBR] satisfied	Letter or signed approval form demonstrating that Local Zoning/ Ordinance requirements (such as CUP/SUP/PBR) satisfied. Draft Air Permit issued for review by New York State Department of Environmental Conservation (DEC) or equivalent authority	Local Zoning/Ordinance requirements satisfied (e.g. confirmation / comment letters from Ministry of Natural Resources [MNR] and Ministry of Tourism, Culture and Sport [MTCS] [ON] obtained)	0.5

Building-Mounted Solar	Fuel Cells	Ocean & Tidal ⁵⁷	Maximum Points Awarded
Operating or has secured all permits	Operating or has secured all permits	Bid Facility is already operating, has permission to operate or has secured all non-ministerial permits.	1.5
In addition to meeting all requirements below, all other ministerial permit applications submitted consistent with list provided in Threshold Qualification requirements	In addition to meeting all requirements below, all other ministerial permit applications, and air permit application, submitted consistent with list provided in the Threshold Qualification requirements	All requirements for environmental approval defined or fulfilled (e.g. ECA or EASR registration in Ontario; EQA assessment in Quebec)	1.0
Copy of construction permit issued by local jurisdictional authority	Copy of construction permit issued by local jurisdictional authority. For Bid Facilities requiring zoning applications, letter or signed approval form demonstrating that local zoning/ ordinance requirements satisfied.	Evidence that the key environmental & siting permit needed to proceed with the Bid Facility is complete	0.5

Building Mounted Solar, Fuel Cells, Ocean and Tidal, All Jurisdictions

SUPPORTING DOCUMENTATION REQUIRED FOR PERMITTING

The Proposer may demonstrate that it has exceeded the Minimum Threshold Requirements for Permitting by providing the following documents with either its Step Two Application for Qualification (preferred) or its Step Three Bid Proposal:

⁵⁷ To meet the "Key environmental & siting permit needed to proceed with the Bid Facility is complete" scoring level, facilities must demonstrate that all FERC and state environmental/siting permits are complete, and all other non-ministerial environmental/siting documents are approved or under final review. The key environmental/siting permits are those that are necessary for construction of the Bid Facility to proceed. To demonstrate that other documents are approved or under final review, the Proposer must identify all necessary permits and the status associated with their review and approval.

• List of permits and approvals and evidence supporting level of progress (e.g. letters, permits) as described in the tables above.

PROJECT VIABILITY CATEGORY 4: PROJECT DEVELOPMENT

The bidding company or the principals in its development team will be evaluated according to the extent of their prior experience in successfully developing similar projects.

The Step Three Project Viability evaluation will award points based on the level of Project Development experience demonstrated; proposals that demonstrate the development of two or more facilities of comparable scale⁵⁸ and similar technology,⁵⁹ at least one of which is in the state in which the Bid Facility is located, will be awarded the maximum points available for this category. NYSERDA will not consider aggregated portfolios of generation facilities as a project under this criterion. Proposed Bid Facilities that are currently in operation will receive maximum points awarded for this category.

Developer / Corporate Experience ⁶⁰	Maximum Points Awarded
Have developed two or more facilities of at least 50% of the Bid Facility's capacity and similar technology. One of the facilities developed is in the same state in which the Bid Facility is located.	1.0
Have developed one or more facilities of at least 50% of the Bid Facility's capacity and similar technology in the state in which the facility is located.	0.8
Have developed one or more facilities of at least 50% of the Bid Facility's capacity and similar technology, or two or more facilities of any renewable energy technology of at least 50% of the Bid Facility's capacity.	0.6
Have developed two of more facilities of any renewable energy technology of at least 25% of the Bid Facility's capacity.	0.4
Have developed one or more facilities of any renewable energy technology of 25% of the Bid Facility's capacity.	0.2

⁵⁸ Comparable scale is 50% or more of the proposed capacity.

⁵⁹ Similar technology is the same resource and prime mover, e.g. solar, wind. It is not meant to distinguish between different solar technologies, for example.

⁶⁰ The bidding company or the principals in its development team must have the required experience successfully developing projects as indicated in this table. Experience of vendors or contractors to the bidding company or the principals in its development team **do not count** towards this experience requirement.

SUPPORTING DOCUMENTATION REQUIRED FOR PROJECT DEVELOPMENT

Unless the Bid Facility is currently in operation, the Proposer may demonstrate that it has exceeded the Minimum Threshold Requirements for Project Development by providing the following documents with its either its Step Two Application for Qualification (preferred) or Step Three Bid Proposal:

Provide in Attachment F a list of specific projects successfully developed, specifying the nameplate capacity, technology⁶¹, commercial operation date (COD), and location supporting the claimed scoring level; for each project, identify whose experience is being claimed (e.g., corporate or specific individual that is a Proposer principal). If available, provide an external reference (for example, newspaper article or website link) to projects successfully developed.

PROJECT VIABILITY CATEGORY 5: RESOURCE ASSESSMENT AND ENERGY PRODUCTION ESTIMATE

Proposers are required to provide a Resource Assessment and an Energy Production Estimate for the Bid Facility that fulfills the technology-specific Minimum Threshold Requirements listed below and may also provide a Refined Resource Assessment and Energy Production Estimate for the Bid Facility, and if applicable, Energy Storage for Project Viability scoring consideration. The requirements for the Bid Facility Resource Assessment and Energy Production Estimate are based on the Bid Facility's technology (see technology specific sections below) and are comprised of:

- 1) A Resource Assessment, which approximates the renewable resource typically available on an annual basis to power the Bid Facility.
- 2) An Energy Production Estimate, which estimates the Bid Facility's ability to convert the renewable resource to electric power at the P(50)⁶² level.

To fulfill the Step Two Minimum Threshold Requirement, the Resource Assessment and Energy Production Estimates must be consistent with and representative of the Bid Facility, the long-term conditions at the site, and if applicable, Energy Storage as proposed to NYSERDA.

For Upgrades, provision of the Resource Assessment and Energy Production Estimate submitted through the Step One Resource Eligibility Determination process is sufficient to meet the Category 5 Minimum Threshold Requirements. Proposers must at minimum

⁶¹ Categorized by resource and prime mover, e.g. solar; e.g., wind. Not meant to distinguish between different solar technologies, for example.

⁶² P(50) represents a level of resource projection or production estimate with a 50% likelihood of being exceeded in any future year. The P(50) value shall be the expected value (i.e., the mean) based on the Proposer's Resource Assessment diligence in accordance with the minimum requirements listed in the section herein for the respective renewable technology.

re-submit this Resource Assessment and Energy Production Estimate as part of the Step Two Application for Qualification electronic submission.

Proposers may also provide a Refined Resource Assessment and Energy Production Estimate for the Bid Facility, and if applicable, Energy Storage including the supporting documentation described below. The Step Resource Assessment and Energy Production Estimate evaluation will award points based on the extent and quality of the Refined Resource Assessment and Energy Production Estimate.

Resource Assessment and Energy Production Estimate Criterion	Maximum Points Awarded
Refined Resource Assessment and Energy Production Estimate for Solar, Wind, Hydroelectric, Fuel Cell, Ocean/Tidal, or Biomass/Biogas Bid Facilities as specified by eligible technology below.	1.0
Resource Assessments and Energy Production Estimates that fall between the Minimum Threshold Requirement and the Refined Resource Assessment and Energy Production Estimates criteria.	Between 0 – 0.9

Refined Resource Assessments and Energy Production Estimates must be consistent with the Bid Facility design, long-term conditions at the Bid Facility, and if applicable, Energy Storage as proposed to NYSERDA. A Refined Resource Assessment and Energy Production Estimate is more specific than the documentation required in the Minimum Threshold Requirements, and is based on the Bid Facility's technology, design, and site-specific location. Such estimates must be prepared by a qualified independent 3rd-party (meteorologist, modeler, performance engineer, or analyst) with expertise in Resource Assessments and Energy Production Estimates for the Bid Facility's technology and is of financing-quality. In order to receive additional points, the requirements for the Bid Facility Resource Assessment and Energy Production Estimate are based on the Bid Facility's technology and are comprised of:

- 3) A Refined Resource Assessment, which approximates the potential of the renewable resource to be used by the Bid Facility.
- 4) A Refined Energy Production Estimate, which estimates the Bid Facility's ability to convert the renewable resource to electric power. In addition to providing a refined report, the '8760-hourly profile' for each year of the proposed tenor of the Agreement must also be provided.

Bid Facilities including Energy Storage shall include a P(50) Energy Production Estimate that considers Energy Storage for the Bid Facility, including anticipated losses resulting from the addition of Energy Storage. Solar facilities including co-located Energy Storage must specify if the Energy Storage is AC or DC coupled. The estimate that includes Energy Storage should reflect the Energy Storage size (MW), operating restrictions, charging, and start-up limitations (for example, cycles per year, time and energy required to go from the typical depth of discharge to typical full state of charge, the amount of energy delivered at typical full state of charge to typical depth of discharge).⁶³

<u>Solar</u>

Solar Minimum Threshold Requirement

The Minimum Threshold Requirement for an acceptable Resource Assessment and Energy Production Estimate must be consistent with the Bid Facility as described below.

- 1) Resource Assessment is a report that analytically evaluates the completeness, reliability, and percent of certainty of at least three (3), but ideally five (5) or more sources of measured data at a nearby meteorological station or via satellite-based models which are within 50 km of the Bid Facility for the following base meteorological data: global horizontal irradiance (GHI), diffuse irradiance (DIF), direct normal irradiance (DNI), ambient temperature (T). Provide a table with a column for each annual mean value per meteorological data source along with the number of years measured by the data source. State which meteorological source was found to be most representative of the site and describe why it was selected for use in the Energy Production Estimate. The Resource Assessment requirement can be met with a combination of any of the following:
 - a) NREL or similar government issued dataset Typical Meteorological Year (TMY2)⁶⁴ or National Solar Radiation Database (NSRDB) 1991-2010 (TMY3)⁶⁵ data from a site 50km or closer to the Bid Facility location.
 - b) A satellite-based resource estimate using Meteosat, GMS, GOES or AMTSAT or similar data (e.g. 3 Tier (now Vaisala)); Solar GIS; SolarAnywhere or Meteonorm.
 - c) At least one year of hourly measured site data. The measured data must be annually and climatologically adjusted via one or more high quality, long-term⁶⁶ reference station or data sets.
- 2) Energy Production Estimate is a report that which characterizes how well the Bid Facility will convert solar radiation into electric power on a project lifetime scale consistent with the Bid Proposal from a system performance model, using industry standard tools such as PVSyst or equivalent. The Proposer should include initial estimated inputs, parameters and technical losses, and describe the methods employed to estimate the losses, or the assumptions made to assign initial values. Any losses not accounted for in the performance model software shall be

⁶³ Proposers will need to complete two separate Resource Assessments for the separate Step Two Applications for Qualification, one with and one without Energy Storage. See Sections VI, VII (A) and IX (C).

⁶⁴ Available from NREL by State <u>http://rredc.nrel.gov/solar/old_data/nsrdb/1961-1990/tmy2/State.html</u>

⁶⁵ Available from NREL http://rredc.nrel.gov/solar/old_data/nsrdb/1991-2010/

⁶⁶ Long-term conditions are considered to be 10 years or more of data.

documented in a post-production loss summary section of the report and reflected in the net energy production estimate and net capacity factor percentage. The report outline for the Energy Production Estimate shall include:

- a) <u>Executive Summary</u>: briefly describe the location, facility capacity, P50 net energy (MWh), specific yield (kWh/kWp), net capacity factor;
- b) <u>Introduction</u>: describe the methods and software employed for assessing gross and net energy production, stage of the engineering design modeled;
- c) Solar Resource Selection: insert the Resource Assessment report here;
- d) <u>System Configuration</u>: tilt, azimuth, pitch, collector width, shade limit angle, ground coverage ratio, module and inverter manufacturer and model numbers, quantity of modules in series, quantity of strings per inverter, quantity of inverters;
- e) <u>System Loss Factor Inputs</u>: albedo factor, electrical effect, transposition model, array soiling, thermal loss factors, DC ohmic loss, light induced degradation, module quality, module mismatch, string mismatch, incidence effect, AC ohmic loss, transformer, auxiliary, grid limitations, and availability;
- f) Energy Estimate Losses: Irradiance values (global incident in collector plane, near shadings loss %, incidence angle modifier loss %, soiling loss factor %); PV system(loss due to irradiance level %, loss due to temperature %, electrical loss according to strings %, module quality loss %, light induced degradation %, array mismatch loss %, DC ohmic loss %); Inverter Losses (loss during operation %, loss over nominal inverter power %, loss due to power threshold %, loss over nominal voltage %, loss due to voltage threshold %, night consumption loss %); Other (AC ohmic loss %, external transformer loss %, other);
 - If bifacial module technology is being proposed, provide the additional Energy Production Estimate loss values: ground reflection on front, global incident on ground, ground reflection loss %, view factor from rear %, sky diffuse on rear %, beam effective on rear %, shadings loss on rear %, effective irradiation on rear %, and bifaciality factor.

Supporting Resource Assessment and Energy Production Estimate Documentation Required for Solar Bid Facilities:

• A Resource Assessment and Energy Production Estimate report as described above.

Solar Refined Resource Assessment and Energy Production Estimate Criteria

Proposers may submit a Refined Resource Assessment and Energy Production Estimate report for the Bid Facility, and if applicable, Energy Storage, building on the Minimum Threshold Requirements described above and including the requirements described below:

 Refined Resource Assessment is produced using a dataset with low uncertainty data set (e.g. using a Global Horizontal Irradiance (GHI) resource data set with less than or equal to 5% uncertainty) and location proximate to Bid Facility location (e.g. within 5 km of the Bid Facility project site).

- 2) Refined Energy Production Estimate shall be based on the Refined Resource Assessment described above, and includes:
 - a. Use of an advanced performance model, such as: PVSyst (v.6 or later);
 - b. Refined system loss factors noted in the Minimum Threshold Requirement section above which are representative of an engineering drawing set. An acceptable engineering drawing set includes a constrained site layout that shows the proposed Bid Facility's equipment with recent aerial imagery underlain, parcel boundaries and topography of the site and typically includes civil and electrical sheets which have been issued for permitting purposes. The engineering drawing set shall be provided as an attachment.
 - c. Monthly soiling loss profile that reasonably captures the effects of measured historical winter snowfall, rainfall patterns and other site-specific soiling factors (e.g, pollen, agricultural airborne particulates, or other);
 - d. A detailed near shading scene that accounts for the designed row pitch, module configuration, collector widths, tilts, topography of modules and near shadings (e.g. trees, buildings, transmission lines or other);
 - e. Far-shadings horizon profile representative of the Bid Facility site location;
 - f. System loss factors shall be expanded to include auxiliary and parasitic loss %, availability loss %, if applicable curtailment/operational loss % due to Utility/Transmission Operator requirements (e.g. deliverability limitations, VAR/Power Factor support, or other losses)
 - g. An uncertainty analysis that includes an initial estimate of Bid Facility net energy uncertainty, including projected annual degradation % profile;
 - h. Description of the planned operations and maintenance activities which allow the Bid Facility to achieve the modeled soiling loss assumptions (e.g. planned module washings, snow removal, or other); and
 - i. Major equipment datasheets (panels, inverter and mounting system).
 - j. An 8760 hourly profile of the Energy Production Estimated for each operating year of the proposed contract tenor.

<u>Wind</u>

Wind Minimum Threshold Requirement

The Minimum Threshold Requirement for an acceptable Resource Assessment and Energy Production Estimate must be consistent with the Bid Facility as described below.

- 1) Resource Assessment which characterizes the Bid Facility's wind resource and can be satisfied through either measured data or modeled data.
 - a. Measured Data: Wind and temperature measurements that are taken at elevations below the planned hub height must be extrapolated to represent hub height speed, direction and air density conditions. Measurement campaigns must include least six (6) continuous months of observed wind data on the site. The measured characteristics must be annually and climatologically adjusted via one

or more high quality, long-term⁶⁷ reference station or data sets. If measured data is used, the Resource Assessment must include, but is not limited to, the following:

- Measured data summary per meteorological tower including measurement period, long-term wind speed at hub height, and wind frequency and energy rose;
- Map including the following:
 - Proposed turbine layout;
 - Meteorological tower location(s);
 - Wind speed at hub height adjusted to on-site data.
- b. Modeled Data: Modeled data must be representative of long-term average Bid Facility conditions at hub height. If modeled data is used, the Resource Assessment must include, but is not limited to, the following:
 - Modeled wind frequency and energy rose;
 - Map including the following:
 - Proposed turbine layout;
 - Meteorological tower location(s);
 - Modeled wind speed or existing validated wind speed map at hub height produced by an experienced 3rd-party.
- 2) Energy Production Estimate which characterizes how well the Bid Facility will convert available wind into electric power. The Energy Production Estimate shall be presented on an annual and/or a project lifetime scale consistent with the Bid Proposal. It must be based upon the Resource Assessment described above and combined with an assumed project configuration consistent with the Bid Facility that must include, but is not limited to, the following:
 - a. Turbine specific details including manufacturer, model, hub height, rotor diameter, rated capacity, and number of turbines;
 - b. Energy output details including capacity, average hub height wind speed, P50 net energy, and net capacity factor;
 - c. Initial loss details including methods employed to estimate the losses, or the assumptions made to assign initial values. Initial estimated technical losses include wake effects, availability, electrical, turbine performance, environmental, and curtailment/operational strategies.

Supporting Resource Assessment and Energy Production Estimate Documentation Required for Wind Bid Facilities:

• A Resource Assessment (including map) and Energy Production Estimate as described above.

⁶⁷ Long-term conditions are considered to be 10 years or more of data.

Wind Refined Resource Assessment and Energy Production Estimate Criteria

Proposers may submit a Refined Resource Assessment and Energy Production Estimate for the Bid Facility, and if applicable, Energy Storage, building on the Minimum Threshold Requirements described above and including the requirements described below:

- 1) Refined Resource Assessment which characterizes the long-term hub-height wind conditions across the Bid Facility area that includes:
 - a. Monitoring Campaign: One (1) full year of data at the Bid Facility site with meteorological towers at least 2/3 of planned hub height of Bid Facility turbines. Towers must be equipped with 1) high quality wind speed, direction and temperature sensors or 2) sonic detection and ranging (sodar) and/or light detection and ranging (lidar) remote wind speed sensors.
 - b. Data Analysis: The independent 3rd-party must describe the methods used to perform 1) climatological data adjustment with one or more specified high quality reference stations 2) quality control, assurance and validation including adjustments performed to treat erroneous, bad, and/or suspect measurements (e.g., removal and/or treatment of sensor failure, icing, tower shadow, etc.), 3) data gap reconstruction, and 4) sensor measurement adjustment. Description should include reference stations used, the relationship(s) with the observed data, and assessment of their quality.
 - c. Vertical and Horizontal Extrapolation: A description of the 1) vertical extrapolation method and results in the context of the observations on site and the regional climatology, 2) wind flow modeling approach, that includes the model(s) used, model configuration and input data, use of onsite data and estimate of the model performance at the site.
 - d. Measured Data Summary per Meteorological Tower: meteorological tower location and elevation, measurement height, measurement period, average wind speed at measurement height, long-term wind speed at hub height, and wind frequency and energy rose.
 - e. Map: Include turbine layout, meteorological tower location(s), wind speed at hub height adjusted to on-site data, and surrounding wind farm locations, if applicable.
- 2) Refined Energy Production Estimate based on the Refined Resource Assessment and including at least 10 years of long-term average wind resource combined with a Bid Facility specific project configuration (i.e., turbine characteristics, layout, site conditions, and losses). The Refined Energy Production Estimate shall be based on an hourly P(50) 8760 schedule that considers long-term, net energy production presented on an annual and/or Bid Facility life time scale. The Refined Energy Production Estimate must include:
 - a. Turbine specific details including manufacturer, model, hub height, rotor diameter, rated capacity, and number of turbines;

- b. Energy output details for the full wind farm and on a per-turbine basis including hub height wind speed, P50 gross energy, P50 net energy, and net capacity factor;
- c. Detailed description of the methods and/or software employed for assessing gross and net energy production, including the wake model used. Eligible software packages include, but are not limited to:
 - OpenWind: <u>https://aws-dewi.ul.com/software/openwind/</u>
 - Wind Farmer: https://www.dnvgl.com/services/windfarmer-3766
 - WindPro: <u>https://www.emd.dk/windpro/</u>
 - WindFarm: <u>http://www.resoft.co.uk/</u>
- d. Turbine performance characteristics defined as accurately as possible for site conditions, including air density-adjusted power curves, cut-out and restart values, special operating packages (e.g. cold temperature packages), and any other site-specific operational characteristics;
- e. Brief description of surrounding wind farms and their wake impacts on the Bid Facility;
- f. Detailed estimates of wind resource and energy production uncertainties, including a total uncertainty on the net energy estimate;
- g. Curtailment criteria estimation including any known or expected curtailments associated with permitting (e.g. bat curtailments, noise curtailments), or grid conditions (e.g. grid-mandated curtailments);
- h. Detailed estimates of Bid Facility-specific technical losses and/or efficiencies associated with the six standard loss categories listed below. The Proposer should describe the methods employed to estimate the losses. The defined values must be aggregated into a total loss value that is used to convert gross energy generation estimates to net energy production estimates. Loss categories are as follows:
 - <u>Wake Effects</u>: includes the internal wake effects of the proposed Bid Facility turbines, as well as the effects of any existing or planned projects in the vicinity.
 - <u>Availability</u>: includes losses associated with the availability of the Bid Facility wind turbines, balance of plant and the grid.
 - <u>Electrical</u>: includes the electrical efficiency of the Bid Facility between the low or medium voltage side of the wind turbine transformer and the energy measurement point (meter), including any facility parasitic consumption.
 - <u>Turbine Performance</u>: includes all losses associated with any suboptimal plant performance and expected deviations from the assessed power curve, along with any losses expected from the hysteresis loop between high wind cut-out and re cut-in.
 - <u>Environmental</u>: includes loss effects due to environmental parameters such as icing, blade degradation, high/low temperature shutdown, exposure changes, etc.
 - <u>Curtailment/Operational Strategies</u>: includes the effects of curtailments, including any required for turbine loading, grid, or

environmental permits. Also includes the effects of any other operatordefined operational strategies, not captured in the power curve.

Hydroelectric

Hydroelectric Minimum Threshold Requirement

The Minimum Threshold Requirement for an acceptable Resource Assessment and Energy Production Estimate must be consistent with the Bid Facility as described below.

- Resource Assessment which characterizes expected P(50) stream flow from USGS gauges and net head assumptions for the Bid Facility Site, calculated based on monthly to daily average flow values derived from a robust set of relevant historical flow data. The expected P(50) stream flow estimate and related energy calculations should provide adequate and applicable data to demonstrate the amount of renewable resource available, based on a combination of measured or modeled data that includes:
 - a. Monthly historical stream flow averages from USGS gauges or similar sources (if not USGS, describe the source) for 20 years. If less than 20 years is available, specify the duration available.
 - b. Adjustments to calibrate measured values to expected flow available at the Bid Facility site, identifying the distance of the gauge from the Bid Facility site.
 - c. Adjustments to reasonably estimate applicable changes to available stream flow measurements (e.g., minimum flows, other water uses or interests, or flows available from upstream hydroelectric resources, if applicable) which may impact the quantity or temporal profile of water available to the Bid Facility.
 - d. Net head assumptions for the Bid Facility site.
 - e. Identification of expected energy production under normal conditions.
- Energy Production Estimate prepared by an independent NYS Professional Engineer not affiliated with the Proposer with monthly granularity, based on the resource estimate, reflecting historical statistics, and industry standard efficiency and loss estimates, that includes the following:
 - a. Estimates of the overall efficiency (e.g., taking into account the combination of turbine, generator and step-up efficiency factors) based on industry standards.
 - b. Estimate(s) for applicable losses.
 - c. Estimates of forced outage and planned maintenance based on typical industry standard factors.

For Bid Facilities with existing impoundment facilities, the Resource Assessment should demonstrate dam viability by including the most recent FERC dam condition report.

Supporting Minimum Threshold Requirements for Resource Assessment and Energy Production Estimate Documentation Required for Hydroelectric Bid Facilities:

• A Resource Assessment and Energy Production Estimate as described above.

Hydroelectric Refined Resource Assessment and Energy Production Estimate Criteria

Proposers may submit a Refined Resource Assessment and Energy Production Estimate for the Bid Facility, and if applicable, Energy Storage⁶⁸, building on the Minimum Threshold Requirements described above and including the requirements described below.

- 3) Refined Resource Assessment characterizes expected P(50) stream flow from USGS gauges and net head assumptions for the Bid Facility Site, calculated based on hourly average flow values derived from a robust set of relevant historical flow data, accounting for uncertainty and site-specific factors:
 - a. Historical stream flow data sourced from USGS gauges or similar (if not USGS, describe) that 1) are based on average daily flow values for a minimum of 20 consecutive years, 2) includes and identifies the distance of the gauge from the site and any adjustment(s) made to calibrate measured values to expected flow available at the site, 3) specifies the timeframe during which the evaluation process took place;
 - b. Net head (gross head minus the hydraulic losses of the waterways) calculations specific to the Bid Facility site and time of year;
 - c. Inclusion of any existing known operating limitations on dam or river system (seasonal minimal flows, flood control storage, permit restrictions, etc.) including flows available from upstream projects;
 - d. An assessment of the risk/uncertainty associated with water flow;
 - e. An assessment of sedimentation impacts.
- 4) Refined Energy Production Estimate which is based on the Minimum Threshold Requirement, and also take into account the following:
 - a. Specific efficiencies of individual plant structures, consisting of turbine, generator and step-up transformer, which vary according to turbine type, discharge and available head. Typically, these are provided by equipment manufacturers based on the specific Bid Facility design;
 - b. Electrical Losses;
 - c. Plant specific estimates of availability and forced outage rates;
 - d. Auxiliary load of the plant itself.

⁶⁸ Pumped Storage is an ineligible technology.

Fuel Cell

Fuel Cell Minimum Threshold Requirement

The Minimum Threshold Requirement for an acceptable Resource Assessment and Energy Production Estimate must be consistent with the Bid Facility as described below.

- Resource Assessment which includes a fuel assessment and fuel interconnection plan describing the Bid Facility's annual fuel quantity requirement, the type(s) and source(s) of the fuel, an assessment of available fuel for the Bid Facility, the Bid Facility's proximity to the fuel interconnection (ability to provide fuel at sufficient pressure to operate), and specification of known equipment or improvements necessary to connect the Bid Facility with the fuel supply.
- 2) Energy Production Estimate including a supply plan that describes how the fuel will be supplied, such as the percentage of the total fuel that will be procured from a spot market, Local Distribution Company (LDC) tariff, or longer-term contract (specify duration), and the transportation pipeline(s) used. If applicable, include a description of the gas supply and transportation tariff or proposed contractual arrangements, whether firm or interruptible, for the term proposed to NYSERDA.

Supporting Minimum Threshold Requirements for Resource Assessment and Energy Production Estimate Documentation Required for Fuel Cell Bid Facilities:

• A Resource Assessment and Energy Production Estimate as described above.

Fuel Cell Refined Resource Assessment and Energy Production Estimate Criteria

Proposers may submit a Refined Resource Assessment and Energy Production Estimate for the Bid Facility, and if applicable, Energy Storage, building on the Minimum Threshold Requirements described above and including the requirements described below, for up to 1.0 points.

- Refined Resource Assessment should be based on the Minimum Threshold Requirement standard, plus evidence that (i) the system is interconnected and operating, or (ii) delivery service is currently in place to the site to provide fuel at sufficient pressure and quantity to operate the system as proposed;
- 4) Refined Energy Production Estimate should be based on the Minimum Threshold Requirement as detailed above and also provide evidence that the fuel supply is provided either under gas utility tariff, or under a supply contract for greater than 75% of fuel required for Contact Tenor and Bid Facility as proposed.

Biomass and Biogas

Biomass and Biogas Minimum Threshold Requirement

The Minimum Threshold Requirement for an acceptable Resource Assessment and Energy Production Estimate must be consistent with the Bid Facility as described below, and includes a feedstock/fuel assessment, and if applicable, a fuel interconnection plan, in conjunction with a supply plan, prepared by a qualified independent 3rd-party not affiliated with the Proposer.

- Resource Assessment which includes a feedstock/fuel assessment that describes the Bid Facility's annual fuel quantity requirement, the type(s) and source(s) of the fuel, an assessment of available fuel for the Bid Facility, the Bid Facility's proximity to the fuel, specification of known equipment or improvements necessary to connect the Bid Facility with the fuel supply, and ability to provide fuel sufficient to operate.
- 2) Energy Production Estimate including a supply chain (and fuel interconnection for biogas) plan that describes how the fuel will be supplied, addressing if there is or will be sufficient fuel/feedstock to supply the Bid Facility throughout the life or term of the Contract Tenor proposed. The plan should address how fuel will be available (both in the short and long-term) at prices sufficient to support the Bid Facility. Proposers will include and describe the risks to the fuel/feedstock supply (e.g., disruption or price increase resulting in unsustainable operations). If applicable, describe any current operating permits and/or future permitting plans (e.g., future landfill expansions to meet the production consistent as proposed and waste disposal contract risks) or issues surrounding regulatory authority (including demographic and waste disposal trends) to support expansions. The information provided in the Permitting Project Viability Category (Attachments D and E, if applicable, and other documentation provided) should support the Production Estimate.

Supporting Resource Assessment and Energy Production Estimate Documentation Required for Biomass and Biogas Bid Facilities:

• A Resource Assessment and Energy Production Estimate as described above.

Biomass and Biogas Refined Resource Assessment and Energy Production Estimate Criteria

Proposers may submit a Refined Resource Assessment and Energy Production Estimate for the Bid Facility, and if applicable, Energy Storage, building on the Minimum Threshold Requirements described above and including the requirements described below.

Biomass and Biogas – Refined Standard Resource Assessment			
Wood/Ag/ Mixed Waste eligible feedstock/eligible technology combinations only	Landfill Gas	ADG (On-Farm, Food Processing)	ADG (Municipal/ Industrial WWTP)
Provide Bid Facility specific testing/analysis of	If applicable, for Bid Facilities relying on	Provide site/feedstock specific laboratory	Provide a more detailed risk analysis that

feedstocks, contingent contracts from key suppliers and supply/price risk assessment that includes stress tests on key variables such as loss of key suppliers or increased feedstock competition.	additional waste disposal to meet gas generation targets, Refined Resource Assessment shall also include an expert review of existing/planned waste disposal contracts and permit changes or updates. The assessment should also include risk analysis of potential failure modes on additional waste disposal.	analysis to support methane generation analysis. Resource Assessment will include expert review of AD technology, market/disposal analysis for digestate/effluents and risk analysis that includes alternative uses/demand for feedstocks including emergent markets, if any. Include a review of contingent contracts with key suppliers of imported substrates (including food waste).	addresses what-if scenarios for changes in baseline biosolids capture and supply/pricing changes for co- digested substrates as applicable. Review of contingent contracts with key suppliers of imported substrates if applicable. For co-digestion Bid Facilities, an expert review of site-specific AD technology performance and impact on disposal/market for digestate and effluent should be included.
---	---	--	--

- Refined Resource Assessment should be based on the Minimum Threshold Requirement standard, plus evidence that (i) the system is interconnected and operating, or (ii) delivery service is currently in place to the site to provide fuel at sufficient pressure and quantity to operate the system as proposed;
- 4) Refined Energy Production Estimate should be based on the Minimum Threshold Requirement as outlined above, and will describe, characterize, and identify fuel/feedstock supply and pricing (including key suppliers) and project-specific fuel/feedstock risk factors that convey potential impacts on Bid Facility operations. If applicable, it includes any by-product streams or waste disposal costs that are important to the Bid Facility's operation (e.g., ash/digestate being sold as fertilizer).

<u>Ocean/Tidal</u>

Ocean/Tidal Minimum Threshold Requirement

The Minimum Threshold Requirement for an acceptable Resource Assessment and Energy Production Estimate must be consistent with the Bid Facility as described below, prepared by a qualified independent 3rd-party not affiliated with the Proposer.

- 1) Resource Assessment which characterizes expected P(50) ocean wave, tidal range, tidal current, or ocean current energy resources. The Resource Assessment should identify the area of high energy consistent with Attachment C. Summary Description of Control Status by Parcel, quantify the average annual energy resource (e.g., total annual wave energy) and describe Bid Facility site specific parameters, such as significant wave height, wave energy period (peak and mean), and mean wave direction and type of quality of data (e.g., buoy measurements, radar measurements, modeled wave generation). The related energy calculations should provide adequate and applicable data to demonstrate the amount of renewable resource available based on measured or modeled data.
- 2) Energy Production Estimate which characterizes annual P(50) energy production with monthly granularity describing the process through which the Bid Facility converts available Ocean/Tidal energy into electric power. The Energy Production Estimate must be based on the Ocean/Tidal Resource Estimate (described above) and combined with an assumed Bid Facility configuration consistent with the Bid Facility that includes the Bid Facility layout, site conditions, planned maintenance, efficiencies and technical losses. The Energy Production Estimate shall be presented on an annual and/or Bid Facility lifetime scale, the methods and/or software employed for assessing gross and net energy production must be identified and described, and the experience and/or credentials of the author must be identified.

Ocean/Tidal Refined Resource Assessment and Energy Production Estimate Criteria

Proposers may submit a Refined Resource Assessment and Energy Production Estimate that build on the Minimum Threshold Requirements described above, and the evaluation will award points based on the extent and quality of the Refined Resource Assessment and Energy Production Estimate.

Supporting Resource Assessment and Energy Production Estimate Documentation Required for Tidal or Ocean Bid Facilities:

• A Resource Assessment and Energy Production Estimate as described above.

PROJECT VIABILITY CATEGORY 6: SITE CHARACTER

There is not a Minimum Threshold Requirement for Site Character in RESRFP19-1; this Project Viability Category is part of the Step Three Bid Proposal.

A total of 1.5 points for Site Character has been distributed among two categories. The following table lists the Site Character categories and the points available in each:

	Site Character Subcategory	Maximum Points Available
1	Avoids overlap with Prime Farmland	1.0
2	Avoids overlap with Parcels holding an Agricultural Assessment	0.5

Bid Proposals associated with Bid Facilities not yet operational and located in the NYCA will be evaluated according to the Proposer's level of willingness to site and construct the Bid Facility's Permanent Physical Footprint in locations that avoid overlap on land with agricultural importance to New York State by committing to avoid overlap with prime agricultural areas and to avoid development on parcels that at the time of the Bid held an agricultural assessment. Proposers may claim Site Character points in exchange for attesting that:

- The permanent generation, interconnection and, if applicable, Energy Storage footprint (Permanent Physical Footprint) associated with the Bid Facility will avoid land identified by the United States Department of Agriculture (USDA) as prime farmland and prime farmland if drained ("Prime Farmland"). NYSERDA has provided Proposers with an interactive, web-based Site Character map and downloadable GIS files (SHP format) available from <u>NYSERDA's RES solicitation</u> <u>website</u> to identify Prime Farmland areas associated with the Bid Facility's project parcels⁶⁹, and/or
- 2) The permanent generation, interconnection and, if applicable, Energy Storage footprint (Permanent Physical Footprint) associated with the Bid Facility will avoid parcels with an agricultural assessment at the time of Step Three Bid Proposal submittal. NYSERDA advises Proposers to consult with landowners or County Tax Assessment roles to determine if an agricultural assessment applies to a project parcel(s).

⁶⁹ RESRFP19-1 Project Viability Site Character Map and associated GIS files are available from <u>https://www.nyserda.ny.gov/ces/rfp</u>

Operating Bid Facilities and external Bid Facilities (those outside of the NYCA) are not eligible for Site Character points.

To earn points, Proposers submitting Step Three Bid Proposals for wind and solar Bid Facilities must also agree to construct the Bid Facility in accordance with New York Department of Agriculture and Markets (DAM) Construction Standards (Exhibit E).

To earn points, Proposers may attest that they will install the Bid Facility's generation and storage equipment such that they will avoid project overlap on Prime Farmland as outlined in the following table:

Project Viability - Site Character Percent of Bid Facility, Interconnection, and Energy Storage generation and other permanent equipment free of overlap with Prime Farmland	Maximum Points Awarded
95.00-100%	1.0
90.00-94.99%	0.5
80.00- 89.99%	0.25
Less than 80.00%	0

To earn points, Proposers may also attest that they will install the Bid Facility's generation and storage equipment such that they will avoid Bid Facility overlap on parcels with an agricultural assessment as outlined in the following table:

Project Viability - Site Character Percent of Bid Facility, Interconnection, and Energy Storage generation and other permanent equipment free of overlap on parcels with an agricultural assessment	Maximum Points Awarded
90.00-100%	0.5
80.00-89.99%	0.25
Less than 80.00%	0

Bid Facilities currently in operation within the NYCA and External Bid Facilities (those outside of the NYCA) are not eligible for Site Character points.

Proposers not selecting to attest that they will site and construct the Bid Facility such that it will avoid land of agricultural importance to New York State or avoid development on parcels that held an agricultural assessment will not receive any Site Character points.

SUPPORTING DOCUMENTATION REQUIRED FOR SITE CHARACTER

If the Bid Facility is under development, a Proposer may claim Site Character points by selecting any of the percentages indicated above; points will be awarded based on the extent to which the Proposer attests 1) that the Bid Facility's installed equipment will avoid overlap with a) Prime Farmland and/or b) land with an agricultural assessment, and 2) for Proposers submitting Step Three Bid Proposals for wind and solar Bid Facilities that the Bid Facility will be constructed in accordance with New York Department of Agriculture and Markets (DAM) Construction Standards (Exhibit E).

During NYSERDA's Operational Certification process, Bid Facilities for which Site Character points were awarded will be required to provide NYSERDA with a detailed site map, consistent with the final build, such that NYSERDA can determine the Bid Facility's adherence to the original claim(s) (Defined Percentage(s)). NYSERDA will calculate the percentage of the Bid Facility's Permanent Physical Footprint that is free from Prime Farmland, and/or parcels with an agricultural assessment.

NYSERDA will retain twenty-five percent (25%) of the Bid Facility's Contract Security. Such amount shall be refunded to Seller should NYSERDA determine, through Operational Certification (which will review the final site plan and the Site Character Map provided to Seller), that the percentage of overlap of the Permanent Physical Footprint of the Bid Facility is equal to or less than the Defined Percentage(s). Such amount shall be forfeited to NYSERDA by Seller should NYSERDA determine, through Operational Certification (which will review the final site plan and the Site Character Map provided to Seller), that the percentage of overlap of the Permanent Physical Footprint of the Bid Facility is greater than the Defined Percentage(s).

For wind and solar Bid Facilities where Site Character points were awarded, NYSERDA will retain twenty percent (20%) of the Bid Facility's Contract Security for a period of 365 days following the date upon which the Bid Facility achieves Commercial Operation. Upon such date, NYSERDA will: (1) refund the retained Contract Security; or (2) if the New York State Department of Agriculture & Markets (DAM) has notified NYSERDA that the Bid Facility was not constructed in accordance with the DAM Construction Standards (incorporated herein and made part hereof at Exhibit E), NYSERDA will provide written notice to Seller of DAM's claim and NYSERDA will retain such 20% of the Contract Security until (a) DAM notifies NYSERDA that suitable corrective action has been taken, at which point such amount shall be refunded to the Proposer, or (b) 180 days from the date upon which NYSERDA provided notice to Seller, in which case such amount shall be forfeited to NYSERDA by Seller.

CATEGORY 7: COMMUNITY OUTREACH

There is not a Minimum Threshold Requirement for Community Outreach in RESRFP19-1; this Project Viability Category is part of the Step Three Bid Proposal.

The public and local governments play an important role in the process of evaluating and advancing power plant siting in New York State, and in shaping developments that may be permitted in their communities. Proposers are responsible for planning and implementing a Community Outreach Plan that supports an open and inclusive public process and encourages feedback throughout the development and construction of proposed Bid Facility. An effective Community Outreach Plan reflects an understanding of local interests and concerns, provides high-quality and well-timed public education opportunities, demonstrates a commitment to partnering with the elected officials in proposed host communities, respectfully responds to opposition, and elicits input from the public and affected agencies.

For the Project Viability - Community Outreach subcategory 4(g), Bid Proposals will be evaluated on the quality and effectiveness of the Proposer's demonstrated commitment to building and implementing a robust Community Outreach Plan that is responsive to the current needs of the potential host communities and outlines strategies to maintain a transparent and responsive relationship throughout the Bid Facility's development.

Proposers must provide a complete Community Outreach Plan associated with the Bid Facility, and if applicable, Energy Storage, as described below.

- Outreach strategies the Proposer has implemented to date and will use to engage stakeholders and interested parties, including affected agencies, and to encourage public involvement throughout the pre-award, development, construction, and operation phases (consistent with the Project Milestone Schedule), including methods of communication and specific channels the Proposer intends to use to disseminate Bid Facility information.
- 2) Summary of outreach activities undertaken prior to submitting the Bid Proposal
- 3) Planned frequency of public engagement events and the anticipated duration, in years, of the public engagement events component of community outreach
- 4) Details of the direct benefits to the community the Proposer will advance, which may include a local ownership stake in the facility, reduced energy bills for those with homes or businesses in the Bid Facility's vicinity, and/or other direct benefits.
- 5) Details associated with any negotiations regarding payments in lieu of taxes or host community agreements.
- Describe local interests and concerns, including identifying any opposition or support groups around the Bid Facility and Proposer's strategy to mitigate opposition.

- 7) Describe the host community's status regarding New York State Real Property Tax Law (RPTL) § 487.⁷⁰
- 8) Identify strategies the Proposer will use to mitigate concerns raised by the public regarding the Bid Facility, and if applicable, Energy Storage. This may include visibility and viewshed Impact mitigation efforts, accommodations to co-locate agricultural activities, or other issues of importance to the host communities.
- 9) Strategy for ensuring that public engagement events are widely attended by a representative cross section of host community residents
- 10)Method for soliciting feedback and input from the public and affected agencies and the process for sharing feedback and responses publicly.

If the Bid Facility is larger than 25 MW, Proposers may submit a draft or filed Article 10 Public Involvement Program Plan (PIP) for the Bid Facility in satisfaction of the Community Outreach Plan requirement if such PIP meets the minimum requirements described above.

The TEP will award up to one point based on the quality of outreach already accomplished, outreach currently scheduled, and future outreach predicted to be done by the Proposer, as well as the quality, completeness and effectiveness of the plan as submitted. Proposer may submit letters of support from public officials or previous Community Outreach Plans they view as effective to demonstrate prior commitments to outreach. Proposers shall include an explanation of the most challenging Community Outreach issue they have encountered on other projects and how the Proposer successfully met this challenge.

The following table presents the criteria that will be used to evaluate community outreach plans exceeding the Minimum Qualification Threshold.

Community Outreach Plan	Maximum Points Awarded
Proposer has committed to transparency and identified strategic steps to maintain this commitment throughout the Bid Facility's development; identified and addressed roles of stakeholders; submitted a proposed timeline for future outreach activities; provided previous Community Outreach Plans with evaluation of effectiveness.	1.0
Proposer has committed to transparency; identified and addressed roles of stakeholders; submitted a proposed timeline for future outreach activities; provided previous Community Outreach Plans with evaluation of effectiveness.	0.8

⁷⁰ For more information on NYS RPTL § 487, see <u>https://www.tax.ny.gov/research/property/assess/manuals/vol4/pt1/sec4_01/sec487.htm</u>

Proposer has identified and addressed roles of stakeholders; submitted a proposed timeline for future outreach activities; provided previous Community Outreach Plans with evaluation of effectiveness.	0.6
Proposer has identified and addressed roles of stakeholders; submitted a proposed timeline for future outreach activities.	0.4
Proposer has submitted a proposed timeline for future outreach activities.	0.2

In addition, the Community Outreach Plan provided in the Step Three Bid Proposal will be made available to the public by NYSERDA shortly following submission of the Step Three Bid Proposal. The Community Outreach Plan will be made available to the public, in full and unredacted. Bid information included in the Community Outreach Plan is not considered confidential or proprietary.

SUPPORTING DOCUMENTATION REQUIRED FOR COMMUNITY OUTREACH

- A Community Outreach Plan, consistent with requirements as described above. This will be posted publicly in unredacted form.
- Description of the most challenging Community Outreach issue Proposer has encountered on other projects and how the Proposer successfully met this challenge. This will not be shared publicly.
- If applicable, documentation identifying the level of public support for the Bid Facility (e.g., letters of support from public officials) or copies of any agreements with any jurisdiction impacted by the Bid Facility. This will not be shared publicly.

APPENDIX 3 - OPERATIONAL FLEXIBILITY AND PEAK COINCIDENCE APPENDIX

TABLE OF CONTENTS

INTRODUCTION	. 88
CATEGORY 1: LOAD MATCHING	. 88
CATEGORY 2. ENERGY STORAGE (IF APPLICABLE)	. 91

INTRODUCTION

The Bid Proposal evaluation process for RES Tier 1 REC solicitations includes the application of an Operational Flexibility and Peak Coincidence (OpFlex) evaluation criterion that makes up 10% (10 points) of the Step Three scoring as described in Section XI(A)(3) of the RFP. The inclusion of this criterion is intended to incentivize renewable resources that provide grid services for cost minimization and reliability by addressing integration issues resulting from increased penetration of intermittent renewables, better matching generation to load, and encouraging dispatchable resources to balance the electric system, optimize generation dispatch, minimize operating reserve requirements, and address grid congestion and constraints. The criterion employed in this RFP are intended to differentiate bids based on their effectiveness at meeting these objectives, as best possible under current market rules.

As a part of the Step Three Bid Proposal, Proposers will be invited to demonstrate all the necessary information and documentation to evaluate the Bid Facility for its contribution to each OpFlex subcategory.

OPERATIONAL FLEXIBILITY AND PEAK COINCIDENCE CATEGORIES

A total of 10 points for OpFlex has been distributed among two categories. The following table lists the categories and the points available in each:

	Category	Maximum Points Available
1	Load Matching	4.0
2	Energy Storage (if applicable)	6.0

The remainder of this Appendix will present the individual informational components of each of the two evaluation categories that make up the OpFlex criterion. **The tables shown below provide relevant details on levels of scoring within each category.**

CATEGORY 1: LOAD MATCHING

The Load Matching category evaluates a Bid Facility's ability to avoid over-generation, or energy production at times and in locations where production can be problematic. Over-generation, for purposes of this criterion, means generation during periods when the system cannot accommodate the excess generation. The quantity of hours with negative locational based marginal prices, (LBMPs or spot energy prices) are a primary market indicator of locations where there is insufficient load to absorb the excess energy and/or transmission to export the energy. Production during these times in these zones could result in curtailments (including inducing curtailment of other renewable energy sources), and generally less efficient operation of the system. Additional generation, especially with production occurring during these low net load (or low LBMP) hours, could pose even greater issues with higher penetration.

This metric seeks to score a Bid Facility's impact accordingly, with higher scores for resources that are less likely to exacerbate issues of curtailment, negative energy pricing, and low-load dispatch based on a Bid Facility's expected energy production during the hours with lowest load in the Bid Facility's location. The Load Matching category therefore evaluates proposals based on the location (NYISO market Zone) of the Bid Facility.

Scoring will reflect periods where adding additional generation could create or exacerbate over-generation. Bid Facilities located in Zones G through K will receive 100% of the category points and do not need to provide further documentation to obtain the maximum points in this category, unless the Proposal includes Energy Storage.⁷¹ Bid Facilities located in Zones A through F will receive a score in proportion to its capacity factor during the lowest ten percent (10%) of historic (2017) annual load hours for NYISO Zones A through F in aggregate. The lowest ten percent (10%) of historic annual load hours for NYISO Zones A through F in aggregate is called the Over-Generation Period (OGP).

Bid Facilities located outside of the NYCA or NYISO Market Zones (External Facilities) are not eligible for Load Matching points.

Bid Facility Zone	Scoring	Maximum Points Awarded
Zones G-K	100% of category points (no P(50) annual expected hourly production profile is required, unless Step Three Bid Proposal includes Energy Storage)	4.0
Zones A-F	Score ⁷² = 75% of category points * [1-CF _{OGP}] where CF _{OGP} = Bid Facility's average capacity factor during the lowest 10% of aggregated Zone load hours	Up to 3.0; Scaled ⁷²

The Load Matching category scoring approach is summarized in the table below:

For Bid Facilities to be physically located within the NYCA that are proposing with Energy Storage, the score for this category is based on the characteristics of both the

⁷¹ Over-generation resulting from additional electricity production is typically not an issue in Zones G-K, but poses potential issues in Zones A-F. Please see the Energy Storage category for further explanation on the provision of P(50) 8760.

⁷² A Bid Facility with 0% average capacity factor (or no generation) during the lowest 10% of aggregated Zone load hours would receive 75% or 3.0 points of the Load Matching points available. A Bid Facility with 100% average capacity factor during the lowest 10% of aggregated Zone load hours would receive 0% or 0 points of Load Matching points available. Bid Facilities with average capacity factors between 0% and 100% would receive between 75% (3.0 points) and 0% (0 points) of Load Matching points available, based on the Bid Facility's average capacity factor.

Bid Facility and Energy Storage. Bid Facilities co-located with Energy Storage shall include the role of the Energy Storage in reshaping the production profile in the P(50) 8760. For Load Matching evaluation, NYSERDA will use the Energy Production Estimate provided in the Step Two Application for Qualification (described in Section VII Threshold Category 5: Resource Assessment and Energy Production Estimate), unless the Energy Production Estimate is updated in the Step Three Bid Proposal (described in Appendix 2).

SUPPORTING DOCUMENTATION REQUIRED FOR LOAD MATCHING

For Bid Facilities located in Zones A through F, the applicable capacity factors for evaluation purposes will be determined based on the Bid Facility's technology, as follows:

Solar: Proposers must provide, in a spreadsheet attachment template provided by NYSERDA, the typical first operational year's 8,760 hourly production profile and each year's profile thereafter of the proposed tenor consistent with the P(50) output from the system performance model used in the Step Two Application for Qualification or, if applicable, the report from a 3rd party independent Professional Engineer or analyst as provided in Step Three (for Project Viability, Category 5 Resource Assessment).

The hourly production profile will be used by the TEP to calculate the system's capacity factor during the bottom 10% of load hours based on 2018 annual aggregate NYISO load data for Zones A through F.

Wind: Proposers must provide, in a spreadsheet provided by NYSERDA, the typical first operational year's 8,760 hourly production profile and each year's profile thereafter of the proposed tenor consistent with the P(50) output from the model used in the Step Two Application for Qualification or, if applicable, the report from a 3rd party independent Professional Engineer, meteorologist or analyst as provided in Step Three (for Project Viability, Category 5 Resource Assessment).

Biogas, biomass, landfill gas, and fuel cells, and ocean: Bid Facilities of these resource types will be assigned a 95% capacity factor during the lowest 10% of load hours.

Hydroelectric and tidal: Proposers must provide, in a spreadsheet provided by NYSERDA, a typical year's 8,760 hourly production profile consistent with the P(50) output provided in the Step Two Application for Qualification or, if applicable, the report from a 3rd party independent Professional Engineer, as provided in Step Three (for Project Viability, Category 5 Resource Assessment).

The hourly production profile will be used by the TEP to calculate the system's capacity factor during the bottom 10% of load hours based on annual aggregate NYISO load data for Zones A through F.

CATEGORY 2. ENERGY STORAGE (IF APPLICABLE)

Energy Storage can provide various grid services and operational flexibility benefits, such as load shifting, regulation, operating reserves, and local distribution support. The bigger the system (capacity relative to the coupled renewable energy system) and the more hours of storage available (MWh relative to MW capacity), the greater the benefits. However, market rules today are not clear as to how Energy Storage can qualify to provide those services to NYISO, the electric distribution company, or the generator.⁷³

Thus, contributions of Energy Storage cannot be easily measured, but potential contributions can be valued. For the purposes of the Operational Flexibility and Peak Coincidence evaluation criteria, this scoring category values the ability to move energy over time to address the full range of challenges posed by intermittent renewables.

For purposes of this RFP, a Bid Facility may propose an Energy Storage system that is installed consistent with Section IX. Technical Requirements of NYSERDA's Bulk Storage Incentive Program Manual and:

- (1) co-located with the generation behind a single wholesale or retail meter in the NYCA, or;
- (2) co-located with the generation behind a separate wholesale or retail meter in the NYCA, or;
- (3) located in a separate location from the generation inside the NYCA (New York Control Area) and is subject to eligibility criteria specified in Sections VI, VII(A), and XI(C) of this RFP.

See the list of Energy Storage requirements under New Items and Important Notes (p. 6). Bid Facilities located outside of the NYCA or NYISO Market Zones **are not eligible for Energy Storage points.**

NYSERDA has established four renewable technology size tranches based on the Nameplate Capacity of the eligible renewable technology in the Step Three Bid Proposal:

- a) Up to 20 MW
- b) 20.01 to 59.99 MW
- c) 60.00 to 99.99 MW
- d) 100 MW and larger

⁷³ NYISO's report on The State of Storage: Energy Storage Resources in New York's Wholesale Electricity Markets is available on NYSERDA's RESRFP19-1 resources page: <u>https://www.nyserda.ny.gov/ces/rfp</u>

Energy Storage Scoring:

For all of the following equations, x is equal to the MWh of Energy Storage, and y is the Energy Storage score. The TEP will not award more than 6 points for Energy Storage.

For Bid Facilities with Renewable Generator Nameplate Capacities up to 20 MW:

Bid Facilities up to and including 20 MW in Nameplate Capacity proposing with Energy Storage have a minimum requirement of 1 MWh of Storage Capacity.⁷⁴ Proposals in the tranche will be converted to points using the following calculation:

y = 0.375x

For Bid Facilities with Renewable Generator Nameplate Capacities 20 – 59.99 MW:

Bid Facilities greater than 20 MW and less than 60 MW in Nameplate Capacity proposing with Energy Storage have a minimum requirement of 4 MWh of Storage Capacity. Proposals in the tranche will be converted to points using the following calculation:

y = 0.1875x

For Bid Facilities with Renewable Generator Nameplate Capacities 60 – 99.99 MW:

Bid Facilities greater than 60 MW and less than 100 MW in Nameplate Capacity proposing with Energy Storage have a minimum requirement of 4 MWh of Storage Capacity. Proposals in the tranche will be converted to points using the following calculation:

y = 0.1071x

For Bid Facilities with Renewable Generator Nameplate Capacities greater than or equal to 100 MW:

Bid Facilities greater than or equal to 100 MW in Nameplate Capacity proposing with Energy Storage have a minimum requirement of 4 MWh of Storage Capacity. Proposals in this tranche will be converted to points using the following calculation:

y = 0.075x

SUPPORTING DOCUMENTATION REQUIRED FOR ENERGY STORAGE

Proposers must provide:

 Documentation of the physical/technical parameters, i.e. the Storage Capacity (MWh) capability of the Energy Storage system, sufficient for the TEP to calculate a score for this category.

⁷⁴ Storage Capacity is the maximum amount of energy that is capable of being stored in an Energy Storage device, measured in Megawatt hours (MWh).



Ground Source Heat Pumps Rebate Program¹ Program Opportunity Notice (PON) 3620 \$ 26,500,000 Available NYSERDA reserves the rights to extend and/or add funding to this Solicitation should other Program funding become available.

Applications accepted through December 31, 2019² by 3:00 PM Eastern Time, or until funds are fully committed, whichever occurs first.

Program Summary: The Ground Source Heat Pumps Rebate Program ("the Program") will provide up to \$26,500,000 for the installation of ground source heat pump (GSHP) systems.³ Funding for GSHP systems has been allocated by the New York Public Service Commission through the Clean Energy Fund (CEF) and is available only for projects located on sites that pay, or, in the case of systems installed as part of new construction projects, will pay the System Benefits Charge (SBC) surcharge. Rebates must be passed along to Site Owners.

Rebates are available on a first-come, first-served basis as follows:

- Projects comprising small-scale GSHP systems (≤ 10 AHRI rated cooling tons) are eligible for a Rebate of \$1,500 per cooling ton; and
- Projects comprising large-scale GSHP systems (> 10 AHRI rated cooling tons) are eligible for a Rebate
 of \$1,200 per cooling ton

subject to the following incentive caps, regardless of the actual installed capacity:

- Rebates for single family residences are limited to \$15,000
- Rebates for large scale GSHP systems installed in a single building are limited to \$500,000
- Rebates for large scale GSHP systems installed at a single site with multiple buildings are limited to \$1,000,000

Applicants in areas affected by a utility natural gas moratorium may be eligible for enhanced programs in the recently announced Clean Energy Action Plan. This includes Consolidated Edison Company of New York, Inc. ("Con Ed") customers in Southern Westchester County and New York State Electric and Gas Corporation ("NYSEG") customers in Lansing, NY. Please use the tool located at http://www.nyserda.ny.gov/action-plan to determine your eligibility. In addition, to be eligible for NYSERDA programs, customers must pay into the System Benefits Charge:

 Projects comprising small-scale GSHP systems (≤ 10 AHRI rated cooling tons) are eligible for a Rebate of \$1,875 per cooling ton; and

¹ Capitalized terms used but not defined herein have the meanings assigned to them in the Manual, which can be found at https://beta.nyserda.ny.gov/All-Programs/Programs/Become-a-Contractor/Renewable-Heating-and-Cooling/GroundSource-Heat-Pump-Installers

² The NYS Public Service Commission has directed NYSERDA and the State's utilities to develop a common state-wide heat pump program. NYSERDA anticipates that the state-wide program will be available at the beginning of 2020. Should launch of the state-wide program be delayed NYSERDA may extend the open date for this PON.

³ NYSERDA may supplement or revise the funding available through this PON or any successor at any time.

 Projects comprising large-scale GSHP systems (> 10 AHRI rated cooling tons) are eligible for a Rebate of \$1,500 per cooling ton.

subject to the following incentives caps, regardless of the actual installed capacity:

- Rebates for single family residences are limited to \$18,750
- Rebates for large scale GSHP systems are limited to \$5,000,000 per project.

NYSERDA reserves the right to further limit the number and amounts of Rebates per Participating Installer, Participating Designer, Site Owner, site, or meter. No single Participant can receive more than 50% (\$13,250,000) of the funding available through this Program.

Eligible Participants in the Program are limited to GSHP system designers, installers, and drillers who meet Program requirements as specified in the Ground Source Heat Pump Rebate Manual (Manual), found here: https://nyserda.ny.gov/All-Programs/Programs/Become-a-Contractor/Renewable-Heating-and-Cooling/Ground-Source-Heat-Pump-Installers and have submitted a completed Participation Agreement.

Although not eligible to apply for or receive Rebates under the Program, any driller that wants to participate on Projects receiving a Rebate under this Solicitation must apply to become a Participating Driller.

Additional Program descriptions and all Program requirements are provided in the Manual.

Participant and Rebate Application Submission: Prospective Participants can find, complete, and submit a Participation Application, Participation Agreement and, once approved, in the case of Participating Designers and Participating Installers, Rebate Applications (including uploading any required attachments and documents thereto) via NYSERDA's Salesforce application <u>https://portal.nyserda.ny.gov/login</u>

Incomplete or inaccurate applications will not be accepted. Faxed or e-mailed applications will not be accepted. Applications will not be accepted unless completed and delivered via NYSERDA's Salesforce application https://portal.nyserda.ny.gov/login.

Contact Information: For all program questions, please contact Program staff at gshp@nyserda.ny.gov. or Elizabeth Markham at (518) 862-1090 ext. 3386.

All Contractual questions should be directed to: Nancy Marucci at <u>Nancy.Marucci@nyserda.ny.gov</u> or 518-8621090 ext. 3335.

If changes are made to this Solicitation, notification will be posted on https://www.nyserda.ny.gov/FundingOpportunities/Current-Funding-Opportunities.

NYSERDA reserves the right to make changes in the Rebate amount or availability (including the per Project Rebate cap and the total amount available) at any time. NYSERDA will make reasonable effort not to decrease Rebate levels within the term of this Program. If it becomes necessary to decrease the Rebate levels, NYSERDA will attempt to give as much notice as possible to Program Participants. Program changes will be posted on the NYSERDA website and can be found at the following web page: https://www.nyserda.ny.gov/Funding-Opportunities/Current-Funding-Opportunities.

Attachments:

- GSHP Rebate Manual
- GSHP Rebate Participation Agreement
- GSHP Rebate Past Project Form
- GSHP Rebate Large Project Technical Analysis Form
- GSHP Rebate Small Project Completion Form
- GSHP Rebate Large Project Completion Form

I. Introduction

Thermal energy used in the residential and commercial sectors for space heating and cooling and hot water accounts for 37% of net energy consumption and 32% of all combustion-based GHG emissions in New York State. Today, renewable heating and cooling (RH&C) technologies, in general, and GSHP systems, in particular, occupy a niche position in New York State, penetrating less than 1% of the heating and cooling market. Only a small fraction of statewide HVAC load can be cost effectively met by GSHP technology today, despite a large technical potential with significant opportunity to realize customer and societal benefits.

Several barriers currently stand in the way of widespread adoption, including: high upfront costs and low fossil fuel prices, inadequate access to low-cost investment capital, and limited customer awareness of and confidence in the technologies. Also, installing GSHP requires specialist contractors. Large-scale GSHP systems, in particular, are highly complex, face higher technical risk and, as a result, face higher pre-development costs.

The Ground Source Heat Pump Rebate Program (the "Program") will provide up to \$26,500,000 for the installation of ground source heat pump (GSHP) systems. Funding for GSHP systems has been allocated by the New York Public Service Commission through the Clean Energy Fund (CEF) and is available only for projects located on sites that pay, or, in the case of systems installed as part of new construction projects, will pay the SBC surcharge.

Rebates are available on a first-come, first-served basis as follows:

- Projects comprising small-scale GSHP systems (≤ 10 AHRI rated cooling tons) are eligible for a Rebate of \$1,500 per cooling ton; and
- Projects comprising large-scale GSHP systems (> 10 AHRI rated cooling tons) are eligible for a Rebate of \$1,200 per cooling ton,

subject to the following incentive caps:

- Rebates for single family residences are limited to \$15,000
- Rebates for large scale GSHP systems installed in a single building are limited to \$500,000
- Rebates for large scale GSHP systems installed at a single site with multiple buildings are limited to \$1,000,000

Applicants in areas affected by a utility natural gas moratorium may be eligible for enhanced programs in the recently announced Clean Energy Action Plan. This includes Consolidated Edison Company of New York, Inc. ("Con Ed") customers in Southern Westchester County and New York State Electric and Gas Corporation ("NYSEG") customers in Lansing, NY. Please use the tool located at http://www.nyserda.ny.gov/action-plan to determine your eligibility. In addition, to be eligible for NYSERDA programs, customers must pay into the System Benefits Charge:

- Projects comprising small-scale GSHP systems (≤ 10 AHRI rated cooling tons) are eligible for a Rebate of \$1,875 per cooling ton; and
- Projects comprising large-scale GSHP systems (> 10 AHRI rated cooling tons) are eligible for a Rebate of \$1,500 per cooling ton,

subject to the following incentive caps:

- Rebates for single family residences are limited to \$18,750
- Rebates for large scale GSHP systems are limited to \$5,000,000 per project

NYSERDA reserves the right to further limit the number and amounts of Rebates per Participating Installer, Participating Designer, Site Owner, site, or meter. No single Participant can receive more than 50% (\$13,250,000) of the funding available through this Program.

Additional Program description and requirements are provided in the Manual.

II. Program Requirements

Eligible Applicants for Program Participation and Rebates

An applicant to the Program can apply to become a Participating Installer, Participating Designer, and / or Participating Driller by completing and submitting a Participation Application and Participation Agreement at http://nyserda-site.force.com/Core_ConApp_Program_Page. Applicants must indicate the Program tier (small-scale GSHP system and/or large GSHP system) for which they intend to submit Rebate Applications.

If applicant's Participation Application and Participation Agreement are approved by NYSERDA, then the applicant will become a Participant (e.g., Participating Installer, Participating Designer, and / or Participating Driller).⁴

Only Participating Designers and Participating Installers are eligible to submit Rebate Applications. Participants need to be separately qualified for each tier and will be listed separately on NYSERDA's website. Each GSHP system MUST be installed by a Participating Installer.

A Participating Designer and Participating Installer (but not Participating Drillers) will initially be classified as provisional and may advance to full status by either:

- (i) Including in its Participation Application three projects it has either installed or designed (as the case may be) during the prior year that are deemed satisfactory by NYSERDA; or
- (ii) Completing three projects under the Program that NYSERDA deems satisfactory.

Participants that fail to perform in accordance with or adhere to the Program requirements may be placed on probation, suspended, or terminated depending upon the severity and scope of non-performance, at NYSERDA's discretion.

Further participation eligibility requirements are specified in the Manual, which can be found online at https://beta.nyserda.ny.gov/All-Programs/Programs/Become-a-Contractor/Renewable-Heating-andCooling/Ground-Source-Heat-Pump-Installers.

Eligible Project Requirements

To be eligible to receive a Rebate under this Solicitation, the Rebate Application and Project referenced in the Rebate Application must meet certain requirements, including, but not limited to, the following:

- All components installed as part of an approved GSHP system must be new. The use of used or refurbished equipment is not permitted under the Program.
- All approved GSHP systems, system components, and installations must comply with any and all
 manufacturers' installation requirements, applicable laws, regulations, codes, licensing and permit
 requirements including, but not limited to, the New York State Environmental Quality Review (SEQR), the
 New York State Building Code, New York State Plumbing Code, the National Electric Code, Fire Codes
 and all applicable State, city, town, or local ordinances or permit requirements.
- All GSHP systems must be designed to pre-defined standards as described in the Manual. Equipment must meet efficiency requirements as described in the Manual.
- All projects must provide equipment, design, and labor warranties to customers.

Each Project that is referenced in a Rebate Application is subject to NYSERDA-mandated quality assurance and performance verification standards.

⁴ If a Participant acts as more than one type of Participant, it should only complete and submit one Participation Agreement.

Additional information regarding these and additional Project application and Project eligibility and technical requirements are described in the Manual.

The purpose of these requirements is to ensure that GSHP systems installed under the Program are high performing and high quality. High-performing, high-quality installations are critical to enabling market growth. However, NYSERDA encourages innovation in design and installation practices that improve performance and lower costs. If an applicant for a Rebate can substantiate to NYSERDA's satisfaction that a deviation from a specific Program requirement will maintain or improve Project performance at a similar or lower cost, NYSERDA will consider granting a waiver for that specific requirement.

How to participate in the Program

Becoming a Participating Designer, Installer or Driller

Step 1 – Confirm eligibility: In order to be approved to participate in the Program, designers, installers and drillers must demonstrate that they meet the qualifications identified in Section 3 of the Manual.

Step 2 – Review Manual and Complete Participation Agreement: Prior to submitting a Participation Application, interested Participants must review the Manual and sign the Participation Agreement.

Step 3 – Submit Participation Application: To enroll, Participants must submit all required documentation, including the signed Participation Application and Participation Agreement.

A list of Participating Designers, Participating Installers, and Participating Drillers will be posted to NYSERDA's website, here: <u>https://www.nyserda.ny.gov/Contractors/Find-a-Contractor/Ground-Source-Heat-Pump-Systems</u>.

Submitting Rebate Applications

Step 1-Confirm Project Site Eligibility: All Sites must currently pay or, in the case of new construction, will pay the SBC surcharge. The charge will appear on the Site Owner's utility bill. To receive enhanced rebates a site must be located in an area affected by a utility company natural gas moratorium as announced in the Clean Energy Action Plan. This includes Consolidated Edison Company of New York, Inc. ("Con Ed") customers in Southern Westchester County and New York State Electric and Gas Corporation ("NYSEG") customers in Lansing, NY. Please use the tool located at http://www.nyserda.ny.gov/action-plan to determine your eligibility. In addition, to be eligible for NYSERDA programs, customers must pay into the System Benefits Charge.

Step 2- For Large-scale systems (>10 tons capacity) only: Complete Preliminary Technical Analysis: Before applying for a Rebate, the Participating Designer must complete a technical analysis and system design that meets the requirements outlined in the Manual.

Step 3-Apply for Rebate: Rebate Applications may only be submitted by the Participating Designer or Participating Installer involved in the Project referenced in the Rebate Application. The GSHP must be installed by a Participating Installer.

Step 4-Receive Award:

NYSERDA will notify the Participating Designer or Participating Installer of the status of each Rebate Application within thirty (30) Business Days of receipt, barring extenuating circumstances. If the Rebate Application meets all Program requirements and funding is available, NYSERDA will issue an approval email (for small-scale GSHP systems) or Award letter (for large-scale GSHP systems) to the Participant who submitted the Rebate Application via email that will provide details on the Rebate amount.

Step 5-Complete Project Milestones:

For small systems (≤10 tons capacity or installed in single-family residences):

Upon Project Completion, the Participant in cooperation with the System Owner will complete and submit the Project Completion Form in Salesforce and a completed GSHP manufacturer or distributor start-up sheet. If available, a summary of design software output, customer savings and economic summary and a summary of performance monitoring installed should also be submitted.

For large systems (>10 tons capacity):

Subject to NYSERDA's review and approval, a Participant will be eligible to receive a portion of the total Rebate amount (a "Milestone Payment") based upon the completion of intermediate milestones and submission of Milestone Deliverables, as described in the Manual. NYSERDA will review and either approve or deny each Milestone Deliverable.

Step 6- Receive Rebate Payment: Rebates will be paid to the Participant who submitted the Rebate Application. Upon approval of the Milestone Deliverables, payment will be issued according to NYSERDA's prompt payment policy (see Participation Agreement).

General Conditions

Proprietary Information - Careful consideration should be given before confidential information is submitted to NYSERDA as part of your proposal. Review should include whether it is critical for evaluating a proposal, and whether general, non-confidential information, may be adequate for review purposes.

The NYS Freedom of Information Law, Public Officers law, Article 6, provides for public access to information NYSERDA possesses. Public Officers Law, Section 87(2)(d) provides for exceptions to disclosure for records or portions thereof that "are trade secrets or are submitted to an agency by a commercial enterprise or derived from information obtained from a commercial enterprise and which if disclosed would cause <u>substantial injury</u> to the competitive position of the subject enterprise." Information submitted to NYSERDA that the proposer wishes to have treated as proprietary, and confidential trade secret information, should be identified and labeled <u>"Confidential"</u> or <u>"Proprietary"</u> on each page at the time of disclosure. This information should include a written request to except it from disclosure, including a written statement of the reasons why the information should be excepted. See Public Officers Law, Section 89(5) and the procedures set forth in 21 NYCRR Part 501 <u>http://www.nyserda.ny.gov/About/-/media/Files/About/Contact/NYSERDA-Regulations.ashx</u>. However, NYSERDA cannot guarantee the confidentiality of any information submitted.

Omnibus Procurement Act of 1992 - It is the policy of New York State to maximize opportunities for the participation of New York State business enterprises, including minority- and women-owned business enterprises, as bidders, subcontractors, and suppliers on its procurement Agreements.

Information on the availability of New York subcontractors and suppliers is available from:

Empire State Development Division for Small Business 625 Broadway Albany, NY 12207

A directory of certified minority- and women-owned business enterprises is available from:

Empire State Development Minority and Women's Business Development Division 625 Broadway Albany, NY 12207

State Finance Law sections 139-j and 139-k - NYSERDA is required to comply with State Finance Law sections 139-j and 139-k. These provisions contain new procurement lobbying requirements that can be found at https://online.ogs.ny.gov/legal/lobbyinglawfaq/default.aspx. The attached Proposal Checklist calls for a

signature certifying that the proposer will comply with State Finance Law sections 139-j and 139-k and the Disclosure of Prior Findings of Non-responsibility form includes a disclosure statement regarding whether the proposer has been found non-responsible under section 139-j of the State Finance Law within the previous four years.

Tax Law Section 5-a - NYSERDA is required to comply with the provisions of Tax Law Section 5-a, which requires a prospective contractor, prior to entering an agreement with NYSERDA having a value in excess of \$100,000, to certify to the Department of Taxation and Finance (the "Department") whether the contractor, its affiliates, its subcontractors and the affiliates of its subcontractors have registered with the Department to collect New York

7

State and local sales and compensating use taxes. The Department has created a form to allow a prospective contractor to readily make such certification. See, ST-220-TD (available at http://www.tax.ny.gov/pdf/current_forms/st/st220td_fill_in.pdf). Prior to contracting with NYSERDA, the prospective contractor must also certify to NYSERDA whether it has filed such certification with the Department. The Department has created a second form that must be completed by a perspective contractor prior to contacting and filed with NYSERDA. See, ST-220-CA (available at http://www.tax.ny.gov/pdf/current_forms/st/st220td_fill_in.pdf). The Department has developed guidance for contractors which is available at http://www.tax.ny.gov/pdf/current_forms/st/st220ca_fill_in.pdf). The Department has developed guidance for contractors which is available at http://www.tax.ny.gov/pdf/publications/sales/pub223.pdf.

Accessibility Requirements - NYSERDA requires contractors producing content intended to be posted to the Web to adhere to New York State's Accessibility Policy. This includes, but is not limited to, deliverables such as: documents (PDF, Microsoft Word, Microsoft Excel, etc.), audio (.mp3, .wav, etc.), video (.mp4, .mpg, .avi, etc.), graphics (.jpg, .png, etc.), web pages (.html, .aspx, etc.), and other multimedia and streaming media content. For more information, see <u>NYSERDA's Accessibility Requirements</u>.

Limitation - This solicitation does not commit NYSERDA to award a contract, pay any costs incurred in preparing a proposal, or to procure or contract for services or supplies. NYSERDA reserves the right to accept or reject any or all proposals received, to negotiate with all qualified sources, or to cancel in part or in its entirety the solicitation when it is in NYSERDA's best interest. NYSERDA reserves the right to disqualify proposers based upon the results of a background check into publicly available information and the presence of a material possibility of any reputational or legal risk in making of the award.

Disclosure Requirement - The proposer shall disclose any indictment for any alleged felony, or any conviction for a felony within the past five years, under the laws of the United States or any state or territory of the United States, and shall describe circumstances for each. When a proposer is an association, partnership, corporation, or other organization, this disclosure requirement includes the organization and its officers, partners, and directors or members of any similarly governing body. If an indictment or conviction should come to the attention of NYSERDA after the award of a contract, NYSERDA may exercise its stop-work right pending further investigation, or terminate the agreement; the contractor may be subject to penalties for violation of any law which may apply in the particular circumstances. Proposers must also disclose if they have ever been debarred or suspended by any agency of the U.S. Government or the New York State Department of Labor.



NY-Sun Residential/Nonresidential Incentive Program Program Opportunity Notice (PON) 2112 July 3, 2019

NY-Sun Residential & Nonresidential Incentive Program NY-Sun Project Applications and Contractor Applications Accepted August 12, 2010 through December 29, 2023 By 3:00 PM Eastern Time

The New York State Energy Research and Development Authority (NYSERDA) provides financial incentives and financing options for the installation by Contractors and Builders of new grid-connected solar electric photovoltaic (PV) systems for residential sites in any region that are 25kW or less, for nonresidential sites in Upstate and PSEG Long Island regions that are up to 750kW, and for nonresidential sites in Con Ed region that are up to 7.5MW. Incentives for nonresidential sites in Upstate region that are ranging from 750kW to 7.5MW are available through the Commercial/Industrial Program (PON 3082). Funding for the NY-Sun Incentive Program ("Program") has been allocated by the New York State Clean Energy Fund (CEF) and Regional Greenhouse Gas Initiative (RGGI) and the Order Authorizing the Clean Energy Fund Framework, dated January 21, 2016.

Incentives will be granted on a first-come, first-served basis, and PV project applications will be accepted through December 29, 2023, or until funds are fully committed, whichever comes first. Total incentives and/or financing available is subject to change. NYSERDA reserves the right to extend and/or add funding to the solicitation should other program funding sources become available.

Information on the MW block design, including real-time data on the current incentive levels for Upstate can be found by visiting <u>nyserda.ny.gov/upstate-dashboard</u> and for Long Island at <u>nyserda.ny.gov/LI-dashboard</u>, and for Con Ed at <u>nyserda.ny.gov/coned-dashboard</u>.

Additional incentives for solar PV installations are available for residential customer households who qualify as low-to-moderate income. The additional incentive provides a standard incentive of \$0.80/W in Upstate and Long Island regions and \$0.40/W in Long Island region, if available, and can apply for up to 6kW of the total system size. Funding for the additional incentive is available until exhausted. If MW block standard funding is exhausted prior to additional incentive, the additional incentive will continue at the standard incentive amount in place at time the MW block incentive was exhausted, until the funding for the additional incentive is exhausted as well.

Additional incentives for solar PV installations paired with an energy storage system are available for residential customer households in PSEG Long Island region. A higher incentive rate is available for residential customer households in PSEG Long Island region who qualify as low-to-moderate income.

Additional incentives for solar PV installations are available for nonresidential projects serving multifamily affordable housing properties, projects located on a brownfield or landfill, parking solar canopy or rooftop solar canopy, and projects pairing solar electric with an electrical energy storage system.

PV project application submission: Eligible Contractors and/or Builders must submit completed and signed Project Application package into the NYSERDA Portal, the Program database, as detailed in the Program Manual.

Contractor Eligibility Application submission: Potential Contractors and/or Builders may apply on-line at: <u>https://nyserda-portal.force.com/CORE_CONAPP_Program_Page</u>, or submit one [1] clearly labeled, completed and signed Contractor Application package to:

Contractor Application PON 2112 Attn: Program Manager NYS Energy Research and Development Authority 17 Columbia Circle Albany, NY 12203-6399 Or by email to <u>PVprocessing@nyserda.ny.gov</u>.

Contractor Application questions may be sent to <u>PVprocessing@nyserda.ny.gov</u>. Please reference PON 2112 when contacting NYSERDA with questions.

All Contractual questions should be directed to Venice Forbes at (518) 862-1090, ext. 3507 or <u>venicesoliciations@nyserda.ny.gov</u>. All Technical questions should be directed to Frank Mace at (518) 862-1090, ext. 3433 or <u>PVprocessing@nyserda.ny.gov</u>.

Applications will not be accepted at any other NYSERDA location other than the address above. If changes are made to this solicitation, notification will be posted on NYSERDA's website at <u>www.nyserda.ny.gov</u>.

WHAT IS THE NY-Sun Incentive Program?

The New York State Energy Research and Development Authority (NYSERDA) provides financial incentives and financing options for the installation by Contractors and Builders of new grid-connected solar electric photovoltaic (PV) systems for residential sites in any region that are 25kW or less, for nonresidential sites in Upstate and PSEG Long Island regions that are up to 750kW, and for nonresidential sites in Con Ed region that are up to 7.5MW. Incentives for nonresidential sites in Upstate region that are ranging from 750kW to 7.5MW are available through the Commercial/Industrial Program (PON 3082). Funding for the NY-Sun Incentive Program ("Program") has been allocated by the New York State Clean Energy Fund (CEF) and Regional Greenhouse Gas Initiative (RGGI) and the Order Authorizing the Clean Energy Fund Framework, dated January 21, 2016.

Incentives will be granted on a first-come, first-served basis and applications will be accepted through December 31, 2023, or until funds are fully committed, whichever comes first.

HOW DOES THE PROGRAM WORK?

Standard incentive

Cash incentives and/or financing is available for qualified customers who wish to install PV systems through applications submitted by a Participating Contractor. A Participating Contractor has signed a Participation Agreement (with NYSERDA, agreeing to abide by Program terms and conditions). The Participating Contractor have established relationships with Builders. Contractors are responsible for the quality of the builders. Builders are responsible for the installation and quality of project. Builders are responsible for maintaining a credentialed person on-staff.

Incentives are paid directly to the Contractor and must be applied in full to the cost of the PV system, thereby reducing the out-of-pocket cost to the customer.

A Builder must have demonstrated technical competence in the PV field and the Contractor/Builder is responsible for preparing and submitting all necessary project application and incentive paperwork to NYSERDA. A Builder must employ an individual who meets one of the three paths. The current three eligibility paths for Individuals are:

- North American Board of Certified Energy Practitioners (NABCEP): installers choosing this path must be NABCEP certified Solar PV Installers within 24 months of entering the PON 2112 Program to retain their eligibility.
- IBEW-NECA: Installers who are Journeymen Electrician with IBEW-NECA PV training, and meet all other program requirements may gain and retain eligibility.
- UL (Underwriters Labs): Installers who choose to become credentialed through the UL must fulfill the following requirement as a prerequisite to participate in the Program: Be certified by UL as a PV System Installer

More information on how to become a Contractor can be found in the *NY-Sun CONTRACTOR/BUILDER APPLICATION*. In general, incentives for a typical residential or commercial system cover approximately 25-35% of the installed cost of a PV system.

In addition to financing that may be offered through a Contractor, the Program offers financing through Green Jobs-Green New York (GJGNY). Information on financing options, terms and qualification criteria can be found on NYSERDA's web site at the following link:

http://www.nyserda.ny.gov/All-Programs/Programs/Residential-Financing-Options

PROGRAM REQUIREMENTS

The following rules apply to the Program and the payment of incentives:

Energy Efficiency Audit.

<u>Residential Projects:</u> A "Clipboard" Energy Efficiency Audit must be performed. A clipboard energy audit consists of two components: an interview of the home/building owners to ascertain energy use habits and the age of the building, and an inspection of the building to identify energy saving opportunities. The inspection component of the Clipboard Audit includes an assessment of the hard-wired lighting systems and free-standing light fixtures, appliance ages and whether they are ENERGY STAR[®] qualified, the presence of advanced power strips, existence of "vampire loads" related to consumer electronics and battery chargers, use of programmable thermostats or timers for air conditioners, age and condition of the doors and windows, and details on recent energy efficiency upgrades, such as installation of insulation. The Clipboard Audit should take no more than 60 minutes.

The Clipboard audit also includes a debriefing, during which the Participating Contractor will review with the homeowner the results of the Clipboard Audit. The Participating Contractor will also provide informational brochures on low cost/no cost tips for reducing energy consumption, as well as other NYSERDA, and utility, energy efficiency programs. The Participating Contractor will also leave a list of Home Performance Contractors who the homeowner can contact should they be interested in making more comprehensive energy efficiency improvements to their home. Customers will not be required to implement energy efficiency measures as a pre-requisite to receiving a PV incentive, except in the case that the PV installation is also applying to receive the Affordable Solar for All additional incentive. For installations applying for the Affordable Solar for All additional incentive application.

<u>Nonresidential Projects</u>: Building owners are provided with information on ENERGY STAR's Portfolio Manager Benchmarking Tool or other equivalent tool. If requested by the building owner, the Participating Contractor shall assist them to enter utility bill information into the Tool in order to produce a EUI (Energy Use Index) and, where applicable, an ENERGY STAR score. Customers will not be required to benchmark or implement energy efficiency measures as a pre-requisite to receiving Program incentives. A copy of the signed acknowledgement must accompany the application and be uploaded into the NYSERDA Portal at time of application.

Incentive highlights:

- Incentives are paid directly to "Contractor" but must be passed on in the full amount to the customer. Incentives will not be provided directly to customers purchasing or installing PV systems.
- Incentives are only available for new equipment and PV systems that have not been installed (partially or completely) prior to being submitted to NYSERDA in accordance with the terms and conditions of this Program.
- Incentives for residential projects are capped based on a PV system size that does not exceed 110% of the total kWh consumption for the previous 12 months of electric usage. For residential new construction, systems must be sized not to exceed 110% of the calculated yearly projected kWh of electric usage.
- All potential PV system output losses associated with shading, system orientation, tilt angle, etc., must be analyzed and detailed for each PV System by the Contractor/Builder. If your system is shaded by trees, faces east or west, or is installed on a flat roof, the kWh output of your PV System will be less than ideal. All impacts on system output must be quantified and are considered during the review of project applications submitted by the Contractor/Builder. Incentives are reduced in proportion to output losses when losses from factors such as shading and orientation exceed 30%.
- The Program uses a MW Block incentive structure that is designed to provide certainty and transparency to the industry regarding incentive levels, accounts for regional market differences, provides a clear signal to industry that New York intends to eliminate cash incentives in a reasonable timeframe, and allows for the elimination of those incentives sooner in regions where the market conditions can support it, based on market penetration, demand, and payback. Information on the Program progress through the MW Blocks will be provided through a Counter/Dashboard. The Counter/Dashboard is an online, publicly facing tool

that shows real-time progression in the current blocks, provides incentive levels and MW targets for subsequent blocks and provide details on the progress towards the overall NY-Sun Statewide PV initiative installed capacity goal of 3.175 GW.

Limitation

This solicitation does not commit NYSERDA to award a contract or to pay any costs incurred in preparing any application. NYSERDA reserves the right to accept or reject any or all applications received, and to cancel in part or in its entirety the solicitation when it is in NYSERDA's best interest.

Additional Information

Available on the NY-Sun Website at ny-sun.ny.gov.



NY-Sun Commercial/Industrial Incentive Program Program Opportunity Notice (PON) 3082 July 3, 2019

NY-Sun Commercial & Industrial Incentive Program NY-Sun Project Applications and Contractor Applications Accepted May 4, 2015 through December 29, 2023 By 3:00 PM Eastern Time

The New York State Energy Research and Development Authority (NYSERDA) provides performance-based incentives for the installation by Contractors of new grid-connected solar electric photovoltaic (PV) systems that are ranging from 750kW to 7.5MW in Upstate region. Incentives for residential sites in all regions, nonresidential sites 750kW or less in Upstate and PSEG Long Island regions, and nonresidential sites 7.5MW or less in Con Ed region are available through the NY-Sun Residential & Nonresidential Program (PON 2112). Funding for the NY-Sun Incentive Program ("Program") has been allocated by the New York State Clean Energy Fund (CEF) and Regional Greenhouse Gas Initiative (RGGI) and the Order Authorizing the Clean Energy Fund Framework, dated January 21, 2016.

Incentives will be granted on a first-come, first-served basis, and PV project applications will be accepted through December 29, 2023, or until funds are fully committed, whichever comes first. Total incentives available is subject to change. NYSERDA reserves the right to extend and/or add funding to the solicitation should other program funding sources become available.

Information on the MW block design, including real-time data on the current incentive levels for Upstate can be found by visiting <u>nyserda.ny.gov/upstate-dashboard</u>.

Additional incentives for solar PV installations are available for commercial & industrial projects located on a brownfield or landfill, and projects pairing solar electric with an electrical energy storage system.

PV project application submission: Eligible Contractors must submit completed and signed Project Application package into the NYSERDA Portal, the Program database, as detailed in the Program Manual.

Contractor Eligibility Application submission: Potential Contractors may apply on-line at: <u>https://nyserda-portal.force.com/CORE_CONAPP_Program_Page</u>, or submit one [1] clearly labeled, completed and signed Contractor Application package to:

Contractor Application PON 2112 Attn: Program Manager NYS Energy Research and Development Authority 17 Columbia Circle Albany, NY 12203-6399 Or by email to <u>PVprocessing@nyserda.ny.gov</u>.

Contractor Application questions may be sent to <u>PVprocessing@nyserda.ny.gov</u>. Please reference PON 3082 when contacting NYSERDA with questions.

All Contractual questions should be directed to Venice Forbes at (518) 862-1090, ext. 3507 or <u>venicesolicitations@nyserda.ny.gov</u>. All Technical questions should be directed to <u>Commercial.IndustrialPV@nyserda.ny.gov</u>.

Applications will not be accepted at any other NYSERDA location other than the address above. If changes are made to this solicitation, notification will be posted on NYSERDA's website at <u>www.nyserda.ny.gov</u>.

NY-Sun Commercial and Industrial Program

The New York State Energy Research and Development Authority (NYSERDA) offers performance-based financial incentives for the installation of new grid-connected solar electric photovoltaic (PV) systems that are ranging from 750kW to 7.5MW in Upstate region. Incentives for residential sites in all regions, nonresidential sites 750kW or less in Upstate and PSEG Long Island regions, and nonresidential sites 7.5MW or less in Con Ed region are available through the NY-Sun Residential & Nonresidential Program (PON 2112).

Funding for the NY-Sun Commercial & Industrial Program has been allocated as part of the Clean Energy Fund with additional funding made available through the Regional Greenhouse Gas Initiative (RGGI) for New York State (NYS) electricity customers and the Order Authorizing the Clean Energy Fund Framework, dated January 21, 2016. Incentives will be allocated on a first-come, first-served basis and applications will be accepted on a rolling basis through December 29, 2023, or until funds are fully committed, whichever comes first.

How Does the Program Work?

The NY-Sun Commercial and Industrial Program provides incentives based upon the performance of the PV System as a function of annual energy production. A detailed description of the Program and the terms and conditions under which it operates is provided in the NY-Sun Incentive Program Manual available at http://www.nyserda.ny.gov/solar-contractor-resources.

In addition to performance-based incentives, the program includes additional incentives for projects located on a landfill or brownfield, and for projects pairing solar electric with an electrical energy storage system. Participating Contractors may invoice for project incentives in three separate increments: one invoice when the system is installed, interconnected, and commercially operational and one in each of the two subsequent consecutive years (Performance Period) based upon measured annual kilowatt hour (kWh) output of the PV system (System Actual Annual Energy Production). For details, see NY-Sun Incentive Program Manual, Metering requirements.

Incentives are available for new customer-sited PV systems, greater than 750 kW per electric meter, that are connected to the electric distribution grid and displace utility provided electricity. Prior to submitting applications for incentives, organizations must become a Participating Contractor by registering with the NY-Sun Commercial and Industrial Program. Upon approval, the organization will be provided access to the NY- Sun Commercial and Industrial Program online applications platform.

To become a Participating Contractor in the NY-Sun Commercial and Industrial Program, interested parties must complete a Contractor Application in which they agree to abide by the terms and conditions of the NY Sun Incentive Program Participation Agreement and Program Manual. These documents are available on the NY-Sun website at <u>nyserda.ny.gov/become-a-solar-contractor</u>.

Applicants to the commercial and industrial program must provide three verifiable solar electric customer references (customer name, address, phone, and email) for completed, grid-connected solar electric installations that entered commercial operation in the past three years that, in aggregate, sum to at least 3MW. System size (kilowatts), interconnection date, and the applicant's role in the project must be specified. Construction photos for the projects listed as a reference are required.

Participating Contractors are responsible for preparing and submitting all required PV Project Incentive Application documentation to NYSERDA.

Financial Incentives

The incentive amounts identified on approved project applications in the NY-Sun Commercial and Industrial Program are Not-to-Exceed (NTE) values. The maximum dollar value of the NTE Incentive will be equal to the PV System Estimated Annual Energy Production for two years (Base Incentive) plus strategic location or integration incentives, when applicable.

The Base Incentive for an eligible project is based on two years of PV System Estimated Annual Energy

Production using a designated 13.4% Capacity Factor (CF) for fixed-mount systems at the incentive associated with the block in which the project application is approved by NYSERDA.

Limitation

This solicitation does not commit NYSERDA to award a contract or to pay any costs incurred in preparing any application. NYSERDA reserves the right to accept or reject any or all applications received, and to cancel in part or in its entirety the solicitation when it is in NYSERDA's best interest.

Additional Information

Forms are available on the NY-Sun Website at <u>ny-sun.ny.gov</u>.



RICHARD L. KAUFFMAN Chair ALICIA BARTON President and CEO

Energy Efficiency and Clean Technology Training Program Opportunity Notice PON 3981 \$4,000,000 Available NYSERDA reserves the right to extend and/or add funding to the Solicitation should other program funding sources become available.

Proposal Due Dates: Round 5 October 22, 2019; Round 6 January 23, 2020; Round 7 April 16, 2020; Round 8 July 9, 2020; Round 9 October 1, 2020; Round 10 January 14, 2021. Due dates beyond are subject to funding availability.

Through this Program Opportunity Notice (PON), NYSERDA will provide funding to training providers across the State to ensure that New York energy efficiency and clean technology businesses have an adequate supply of new and existing workers with the necessary occupational skills, credentials and experience to participate in the clean energy economy.

Projects funded through this PON are intended to develop and/or deliver training, hands-on experience and job placement assistance to ensure that new and existing workers have the skills that businesses need and to reduce the risk and expense associated with recruiting, onboarding, training, and retaining workers. Projects will also assist workers by reducing employment barriers and creating pathways to quality jobs. Preference will be given to projects that provide training and job placement services to priority populations, as identified below.

For the purposes of this solicitation:

- "Workers" include those individuals who design, manufacture, specify, sell, distribute, install, operate, maintain, repair, and inspect energy efficiency and clean energy technologies and systems.
- "Priority populations" include the following groups:
 - o Veterans
 - o Native Americans
 - o Individuals with disabilities
 - Low-income individuals, where the household's total income is below or at 60% of the State Medium Income, or the household has been determined eligible for or is receiving assistance through the Home Energy Assistance Program (HEAP), Temporary Assistance for Needy Families (TANF), Supplemental Nutrition Assistance Program (SNAP), or other human service benefit programs.
 - o Unemployed power plant workers
 - o Previously incarcerated individuals

 18- to 24-year-olds participating in work preparedness training programs, that include energy related technical training, such as BOCES, technical high schools, Conservation Corps, Youthbuild, AmeriCorps, etc.

In addition to the priority populations identified above, NYSERDA seeks to advance efforts to connect New Yorkers living in environmental justice communities¹ with job opportunities. In addition to the health and other negative impacts to quality of life caused by these environmental burdens, residents of potential environmental justice areas typically face multiple barriers of access to stable, living-wage employment. NYSERDA encourages proposers to include efforts to recruit residents from potential environmental justice areas, as defined by the New York State Department of Environmental Conservation. https://www.dec.ny.gov/public/911.html.

- "Energy efficiency and clean technology" areas that training can address under this PON include high efficiency heating, ventilation, and air conditioning (HVAC); renewable heating and cooling; high efficiency water heating; insulation and air sealing; high efficiency lighting and controls; building automation and controls; smart grid; energy storage; and related areas. All areas of focus for training should have measurable impacts on energy efficiency and reduction in greenhouse gas emissions. Additional targeted areas related to energy efficiency and clean technology areas may be considered if a compelling business case is presented or could be included in the future or addressed in additional PONs.
- "Training providers" providing training in eligible technology areas can include technical high schools, community colleges, universities, trade associations, manufacturers, unions, community-based organizations and non-for-profit organizations with a demonstrated track record in energy-related training and job preparedness or placement.
- Eligible activities that focus on the energy efficiency and clean technology areas identified above include, but are not limited to developing, modifying or implementing curriculum; delivering training (on-line, classroom, on-site, etc.); certification costs, equipment purchase for hands-on training; hiring and training trainers; marketing; internships; job placement services; pre-apprenticeships; and apprenticeships. Funding is also available to simply expand the capacity of existing energy efficiency and clean energy training to meet a demonstrated business need related to hiring new workers or advancing existing workers.

NYSERDA will accept proposals requesting between \$50,000 and \$250,000, with a 30% cost share, for high efficiency heating, ventilation, and air conditioning (HVAC); renewable heating and cooling; high efficiency water heating; insulation and air sealing; high efficiency lighting and controls; building automation and controls; smart grid; energy storage; and related areas. Solar electric is not an eligible technology at this time; if proposers have questions or know of a specific need for PV training, please contact the designated contact for this PON to discuss.

Cost share can be in the form of cash, labor costs, equipment donations, etc. Additional funding may be added to successful projects after the original contract award. Projects are anticipated to be completed within approximately two years.

Proposers <u>must</u> document a relationship with business/industry and the market <u>need</u> for proposed work. Proposals also must include a strategy for hands-on experience and job placement for projects addressing training for new workers. Proposals should also demonstrate sustainability after project competition.

All training must be designed to meet the needs of energy efficiency and clean energy companies within, or providing services to, the SBC/CEF territories. Training providers in eligible technology areas must have training locations located in System Benefits Charge/Clean Energy Fund (SBC/CEF) service territories, or New York State clean energy training providers that do not pay into the SBC/CEF will be required to document demographic information related to students or businesses served in any project funded under this PON to demonstrate that over 60 percent of the students and clean energy businesses that it will serve either live, or serve customers, in SBC/CEF service territory. If the 60 percent threshold is not met when an initiative is implemented, payments made through a contract may be prorated.

Proposal Submission: Online submission is preferable. Proposers may submit Word, Excel, or PDF files (file formats include: csv, doc, docx, gif, jpeg, jpg, pdf, png, ppt, pptx, pps, ppsx, tif, txt, xls, xlsx, and zip). Individual files should be 100MB or less in file size. Proposal PDFs should be searchable and should be created by direct conversion from MS Word, or other conversion utility. Files should not be scanned. For ease of identification, all electronic files must be named using the proposer's entity name in the title of the document. NYSERDA will also accept proposals by mail or hand-delivery if online submission is not possible. For detailed instructions on how to submit a proposal (online or paper submission), click the link "Application Instructions and Portal Training Guide [PDF] " located in the "Current Opportunities" section of NYSERDA's website (<u>https://www.nyserda.ny.gov/Funding-Opportunities.aspx</u>).

No communication intended to influence this procurement is permitted except by contacting Vicki Colello (Designated Contact) at (518) 862-1090, ext. 3273 or by e-mail WFinfo@nyserda.ny.gov or Adele Ferranti at (518) 862-1090, ext. 3206 or by e-mail WFinfo@nyserda.ny.gov (for technical questions). If you have contractual questions concerning this solicitation, contact Nancy Marucci (Designated Contact) at (518) 862-1090, ext. 3335 or NancySolicitations@nyserda.ny.gov. Contacting anyone other than the Designated Contacts (either directly by the proposer or indirectly through a lobbyist or other person acting on the proposer's behalf) in an attempt to influence the procurement: (1) may result in a proposer being deemed a non-responsible offerer, and (2) may result in the proposer not being awarded a contract.

* All proposals must be received by 3 pm Eastern Time on the date noted above. Late, faxed, or emailed proposals will not be accepted. Incomplete proposals may be subject to disqualification. It is the proposer's responsibility to ensure that all pages have been included in the proposal. Please note: for online submission, there are required questions that you will have to answer in addition to uploading attachments, and you should allot at least 60 minutes to enter/submit proposals. The online proposal system closes promptly at 3pm Eastern Time. Files in process or attempted edits or submission after 3 pm Eastern Time on the date above, will not be accepted. If changes are made to this solicitation, notification will be posted on the "Current Opportunities" section of NYSERDA's website (https://www.nyserda.ny.gov/Funding-Opportunities/Current-Funding-Opportunities.aspx.

I. Introduction

Clean energy businesses across the state have reported a shortage of qualified candidates to fill entry level and advanced positions and have cited skills gaps in trained workers as hiring requirements (credentials and experience) have changed and become more rigorous. Training curriculum is not keeping pace with changing business needs, and gaps are seen in both technical training and hands-on experience.

NYSERDA has been conducting research in the market to assess what actions are necessary to build a larger, better-qualified pool of workers for the growing clean energy economy. In discussions with energy businesses, several common issues were cited such as: lack of qualified candidates for open positions; skills gaps, as hiring requirements have changed and increased (credentials and experience); and, a shortage of updated curriculum to keep pace with current business needs.

As reported in the <u>2017 NY Clean Energy Industry Report</u>¹, employers report significant difficulty finding and retaining workers with the necessary skills:

- 75 percent of firms surveyed report overall hiring difficulty over the past 12 months.
- The highest reported deficiencies for open positions at hiring locations were for occupation-specific skills and relevant prior experience.

¹ New York Clean Energy Industry Report, 2017, NYSERDA. https://www.nyserda.ny.gov/-/media/Files/Publications/Clean-energy-industry/2017-clean-energy-industry-report.pdf

This difficulty in finding qualified applicants is impeding the growth of clean energy businesses. It is common practice for employers to spend six to twelve months and thousands of dollars to recruit, train and retain workers, leading to:

- Reduced profits
- Lost business opportunities especially related to new technologies/innovation
- Vacancies that are open for longer periods of time, adversely impacting the performance of other workers
- Higher turnover rates
- Negative impacts on customer service
- Longer times to full productivity for new hires
- Higher soft costs

Creating a talent pipeline, a proactive approach to defining, attracting and developing the right mix of critical talent in a pool of internal and external candidates, can help support and grow businesses throughout the supply chain. Through this funding opportunity, NYSERDA, working with training providers across the State, will create a talent pipeline to ensure that New York energy efficiency and clean technology businesses have an adequate supply of new and existing workers with the necessary occupational skills, credentials and experience to participate in the clean energy economy. NYSERDA also has program initiatives to support businesses hiring new workers and interns to support building a talent pipeline of energy efficiency and clean technology workers.

Projects funded through this PON are intended to develop and/or deliver training, hands-on experience and job placement assistance to ensure that new and existing workers have the skills businesses need, and to reduce the risk and expense associated with recruiting, onboarding, training, and retaining workers. Projects will also assist workers by reducing employment barriers and creating pathways to quality jobs. Preference will be given to projects that provide training and job placement services to priority populations, as identified below.

For the purposes of this solicitation:

- "Workers" include those individuals who design, manufacture, specify, sell, distribute, install, operate, maintain, repair, audit, and inspect energy efficiency and clean energy technologies and systems.
- "Priority populations" of potential new hires include the following groups:
 - o Veterans
 - o Native Americans
 - o Individuals with disabilities
 - Formerly incarcerated individuals
 - Low-income individuals, where the household's total income is below or at 60% of the State Medium Income, or the household has been determined eligible for or is receiving assistance through the Home Energy Assistance Program (HEAP), Temporary Assistance for Needy Families (TANF), Supplemental Nutrition Assistance Program (SNAP), or other human service benefit programs.
 - 18- to 24-year-olds participating in work preparedness training programs, that include energy related technical training, such as BOCES, technical high schools, Conservation Corps, Youthbuild, AmeriCorps, etc.

In addition to the priority populations identified above, NYSERDA seeks to advance efforts to connect New Yorkers living in environmental justice communities² with job opportunities. In addition to the health and other negative impacts to quality of life caused by these environmental burdens, residents of potential environmental justice

² A potential environmental justice area is defined as a community with a high population of minority or low-income residents that may bear a disproportionate share of the negative environmental consequences resulting from industrial, municipal and commercial operations or the execution of federal, state, local and tribal programs and policies.

areas typically face multiple barriers of access to stable, living-wage employment. NYSERDA encourages proposers to include efforts to recruit residents from potential environmental justice areas, as defined by the New York State Department of Environmental Conservation. https://www.dec.ny.gov/public/911.html

- "Energy efficiency and clean technology areas" that training can address under this PON include high efficiency heating, ventilation, and air conditioning (HVAC); renewable heating and cooling; high efficiency water heating; insulation and air sealing; high efficiency lighting and controls; building automation and controls; smart grid; energy storage; and related areas. All areas of focus for training should have measurable impacts on energy efficiency and reduction in greenhouse gas emissions. Additional targeted areas related to energy efficiency and clean technology areas may be considered if a compelling business case is presented or could be included in the future or addressed in additional PONs. As mentioned above, solar electric is not an eligible technology at this time. If proposers have questions or know of a specific need for PV training, please contact the designated contact to discuss.
- "Training providers" (description and requirements in Section II) providing training in eligible technology areas can include technical high schools, community colleges, universities, trade associations, manufacturers, unions, community-based organizations and non-for-profit organizations with a demonstrated track record in energy-related training and job preparedness or placement.

II. Program Requirements

Available Funding, Limitations, and Cost Share Requirements

Total funding for multiple rounds, denoted by proposal due dates for this solicitation is \$4 million. Future rounds of this solicitation may occur subject to funding availability. Additional funds may be added if available at NYSERDA's discretion. If changes are made to this solicitation, notification will be posted on NYSERDA's website at https://www.nyserda.ny.gov/Funding-Opportunities.

• NYSERDA will accept proposals requesting between \$50,000 and \$250,000 with a 30% cost share for eligible energy efficiency and clean technology areas as described above.

Proposals requesting less than \$50,000 or more than \$250,000 will not be considered. Additional funding may be added to successful projects after the original contract award. Projects are anticipated to be completed within approximately two years. NYSERDA anticipates making multiple awards under this solicitation, and all, or none, of the total available funds may be awarded in any round.

Cost share can include cash or in-kind services. Examples of eligible cost share include equipment supplied by manufacturers/businesses for hands-on training, training fees offset by a third party, training organization staff salaries, etc. See "Cost-Sharing" section below for more information.

Funding is available for the services and training activities detailed below. Funding for marketing expenses to attract trainees in programs designed to train new workers will be considered, up to a maximum of five percent (5%) of the total NYSERDA funding.

Food and refreshments, computers (and related equipment such as servers, software, etc.), motor vehicles of any kind, personal devices and cell phones <u>are not</u> eligible for NYSERDA funding. Reasonable, in-state travel is eligible for NYSERDA funding.

All trainings funded under this solicitation must be held in SBC/CEF service territories or, for New York State training locations outside of the SBC/CEF service territory, a New York State clean energy training provider must demonstrate that over 60 percent of the students and clean energy businesses that it will serve either live, or serve customers, in SBC/CEF service territory. **If the 60 percent threshold is not met when an initiative is implemented, payments made through a contract may be prorated.**

All training must be designed to meet the needs of energy efficiency and clean energy companies within, or providing services to, the SBC/CEF territories.

Training Activities Requested

NYSERDA seeks to support a variety of strategies to expand New York's talent pipeline for energy efficiency and clean technology workers under this PON. In general, activities should support: 1) enhancing the skills of existing workers consistent with business needs; and, 2) training and providing job preparedness and placement services to new workers for new jobs identified by businesses.

Eligible activities for which NYSERDA funding can be used must focus on sustainable training for the targeted energy efficiency and clean technology areas identified above and can include, but are not limited to: developing, modifying or implementing curriculum; delivering training (on-line, classroom, on-site, etc.); certification costs; equipment purchase for hands-on training; hiring and training trainers; marketing; internships (including costs for administering internships and intern wages); marketing as detailed above; job placement services; preapprenticeships; and apprenticeships. Funding is also available to simply expand the capacity of existing energy efficiency and clean energy training to meet a demonstrated business need related to hiring new workers or advancing existing workers.

Strategies may also include activities to provide training in languages other than English to meet business needs.

Technical training should be developed and implemented as part of a degree, certificate, continuing education, career pathway, apprenticeship or pre-apprenticeship or job preparedness program where possible. It is the intent of this program to support activities that will be continued after the NYSERDA contract is completed. Training on professional skills can be combined with technical skills training to meet specific employer needs.

Proposals may also include features such as the work of talent development intermediaries, as described further below, that are guided by business needs and that help bridge the gap between employers and talent. These organizations will help provide clean energy businesses with skilled and motivated job applicants.

Proposers are encouraged to "think outside the box" and propose training that accommodates learners of all types – for example, trainees still in school, transitioning incumbent workers who do not have a lot of free time during the work week to attend classes, etc.

Proposals that include and integrate several of the eligible activities outlined above, as examples, are more likely to have an impact on addressing skills gaps and be sustainable. As a result, such proposals are more likely to be funded than projects that only include one discrete element.

Specific Examples of Potential Projects and Services

1. A community college or technical high school that prepares trainees for jobs in the heating, ventilation and air conditioning (HVAC) industry, through a certificate or two-year degree program, may develop a project to add new content on high efficiency HVAC systems, including technologies such as air source heat pumps. The initiative would serve local business needs for more technicians with experience in efficient HVAC technologies. The project could include developing the new curricula, training for trainers, adding new high efficiency equipment to a training laboratory, an internship for trainees that provides opportunities to work with businesses on the new high efficiency technologies, and job placement support through the college's routine relationships with HVAC contractors that hire their trainees. Additionally, this type of project could be designed to significantly increase the number of graduates each year to meet businesses' hiring needs, as long as the program includes high energy efficiency equipment skills training.

- 2. Apprenticeships may be a component of a proposal combined with other strategies, or a single strategy in a proposal. Examples of eligible trades training and apprenticeship programs include Building and Construction, Air Conditioning, Refrigeration and Heating, Electrician, Laborers, Plumbing and Pipefitting, Welding, etc. A new apprenticeship program could be developed (See http://www.labor.ny.gov/apprenticeship/appindex.shtm) or an existing apprenticeship program could be enhanced by: 1) modifying training curriculum to address new opportunities, such as advanced building or lighting controls, building management systems, etc.; 2) training trainers; and, 3) purchasing equipment for hands-on training.
- 3. Various organizations assist businesses with recruiting and assessing potential talent; training/preparing recruits for specific occupations based on a skills gap analysis; and, most importantly, placing talent in jobs and devising a plan for retention and advancement. Such organizations include community-based groups, hiring halls, faith-based institutions, talent development agencies, workforce development systems, foundations, and other non-profits that act as talent development intermediaries to help connect businesses with skilled and motivated applicants. Strategies for connecting employers with prospective employees, by recruiting and training talent for specific clean energy jobs and facilitating job placement, can assist businesses by reducing costs and risks inherent to locating, training and hiring new workers and are eligible for funding under this PON. A community-based organization that works with employers to find local workers with the right skills could propose a project to provide new workers with the professional and technical skills that meet employers' needs for targeted energy efficiency and clean technology jobs. A proposer might, for example, form an agreement with ten energy efficiency/clean technology businesses that are seeking to hire 50 people in the next two years. A proposal could outline a plan to recruit potential hires, include a strategy for recruiting workers from potential environmental justice communities, provide occupation-specific technical and professional training for recruits, and outline a clear path to a career in energy efficiency or clean technologies. New workers would be given opportunities for hands-on experience through, for example, an internship and then placed in a targeted job. If applicable, supplemental technical training could be provided for new hires once they are placed in jobs, consistent with the employer's needs.

Training Providers Requirements

Training providers submitting proposals, or Applicants, must provide evidence of appropriate qualifications including, but not limited to:

- Experience in integrating new material into existing curricula and/or developing new stand-alone curricula approved by the New York State Department of Education for use at post-secondary education levels
- Accreditation by the NYS Education Department and/or training program accreditation by the Interstate Renewable Energy Council (IREC), the Building Performance Institute (BPI), or other similar national thirdparty entities
- Staff with documented experience in curricula development, delivery and maintenance, and evidencebased learning techniques
- Experience with or a strategy for engaging business and industry partners and professional organizations in training initiatives
- Experience with designing and/or implementing training that leads to additional training as part of a career path, certification, degree, continuing education credits, job experience or job placement.
- Credentialed and experienced staff

Training providers that meet more than one of the qualifications above (or demonstrate other qualifications) are preferred.

III. Proposal Requirements

Proposals must include the following:

- Documented gaps and opportunities in the **energy efficiency and/or clean technology** market for the training being proposed. Proposals should focus on skills identified by employers, occupations and opportunities for job placement or job advancement. Gaps can be demonstrated by feedback from businesses through sector partnership input, surveys, stakeholder meetings, business advisory groups, letters of commitment from businesses that the proposed training will serve, from employers that will place interns or interview trained workers, etc. Engagement by businesses/employers throughout the development and implementation of a training initiative is critical to success.
- Labor market data, job posting data, or other data, <u>where available</u>, to identify the employee and skills gaps, occupations targeted, regions of the state, and worker populations to be recruited and served.
 Examples of sources for labor market data include: the NYS Department of Labor; CUNY's Center for Urban Research; Workforce Investment Boards; NYC Labor Market Information Service; Burning Glass[®] Technologies; Indeed; Chmura Economics and Analytics; Cornell University; and Regional Economic Development Councils. It is anticipated that available data will be combined with business input and training experience to make the business case for training.
 - <u>Some helpful websites</u>:
 - LMI for Workforce Planning: <u>https://labor.ny.gov/workforcenypartners/lwda/lmi-for-workforce-planning.shtm</u>
 - Regional Labor Market Analysts: <u>https://www.labor.ny.gov/stats/lslma.shtm</u>
- Details on the population(s) the proposal is targeting to create a talent pipeline, by region, including any priority populations (as identified in Section I) to be trained and prepared for jobs.
- A description of the strategies to recruit trainees/workers for training in the target populations identified and plan/tasks for developing a pipeline of trainees to meet business demands.
- Teaming with employers for either upskilling existing workers or placement for new workers. Any proposals designed to prepare new workers for clean energy jobs MUST have: a hands-on experience element; a job placement plan with demonstrable connections to businesses that have job openings; and letters of commitment from employers to interview trainees that meet the job requirements.
- A plan for tracking trainees placed in new jobs for a minimum of 12 months.
- A strategy for continuing training developed/delivered with NYSERDA funds, after the project is completed.

<u>Proposers must address the proposal requirements listed above in **Attachment A**, which includes sections on: Background/Objectives; Scope of Work (sample is included within Attachment B); Schedule; Qualifications; Project Benefits; Budget; Cost-Sharing; Sustainability; Reporting; Letters of Commitment, etc. Unnecessary attachments beyond those sufficient to present a complete, comprehensive, and effective response will not influence the evaluation of the proposal.</u>

In compliance with §139-j and §139-k of the State Finance Law (see Section V, General Conditions below for additional information), proposers will be required to answer questions during proposal submission, which will include making required certification under the State Finance Law and to disclose any Prior Findings of Non-Responsibility.

Cost-Sharing

Proposals must show non-NYSERDA funding of at least 30 percent of the total cost of the project. Cost-sharing can be from the proposer, other team members, and other government or private sources. Contributions of direct labor (for which the laborer is paid as an employee) and purchased materials may be considered "cash" contributions. Unpaid labor, indirect labor, or other general overhead may be considered "in-kind" contributions. NYSERDA will not pay for efforts which have already been undertaken. The proposer or proposing team cannot

claim as cost share any expenses that have already been incurred. Proposers should show the cost-sharing plan in the recommended format, which is included in **Attachment A**.

IV. Proposal Evaluation

Proposals that meet solicitation requirements will be reviewed by a Scoring Committee using the Evaluation Criteria below. At NYSERDA's discretion, proposers may be requested to interview with all or part of the Scoring Committee to address any potential questions or clarify items outlined in the proposals. Proposers will be notified if they are requested to attend an interview. NYSERDA may request additional data or material to support proposals.

After the proposals are reviewed, NYSERDA will inform each proposer of the results within approximately eight weeks. Applicants receiving favorable evaluations may be asked to address specific questions or recommendations of the Scoring Committee or make modifications to the Scope of Work before being awarded funding. NYSERDA reserves the right to accept or reject any or all proposals received, to negotiate with all qualified sources, or to cancel the PON in part or in its entirety when it is in NYSERDA's best interest.

If a proposal meets the requirements of this solicitation, including the following, then it will be reviewed and ranked:

SBC/CEF requirements as described above must be met for all eligible technology areas.

- 1. Proposers must identify and justify the market need/business demand for occupational skills training for new or existing workers, related to specific energy efficiency and clean technology jobs as defined in Section I.
- 2. Applications that include training for new workers for specific energy efficiency and clean energy jobs with employers must include: a) clear worker experience and job placement plans/goals for new workers being trained; 2) commitment from an employer or employers to interview trainees that met the job requirements; and, c) a plan to track new hires once they have been placed in jobs.

Proposers must demonstrate partnerships with an employer or employers and the link between training efforts and energy efficiency and clean technology skills gaps identified by employers. Letters of commitment from industry/business must be included in the application.

Additionally, NYSERDA reserves the right to accept or reject proposals based on the following factors:

- The degree to which pricing and hourly rates are in line with the rest of the market.
- Distribution of participants across multiple sectors, throughout the supply chain, technology areas addressed, and geographic distribution across NYS to ensure that projects selected for funding optimize the use of available funding to achieve programmatic objectives.
- Changing market needs related to the state's energy goals.

NYSERDA can also limit the number of awards per applicant.

Evaluation Criteria

Documentation of Skills and Employment Gaps/Need for Training – 24 points

Has the proposer clearly outlined the gaps and opportunities in the market for the proposed training? Does the proposed strategy clearly address the identified skills gaps?

Has the proposer adequately described the strategy for building energy efficiency and clean technology training capacity (curriculum, trainers, equipment) in NYS that is employer-led and based on the occupational skills necessary to support business demands?

Has the proposer provided evidence such as labor market intelligence or employer input to show the need for training?

For needs related to hiring new employees, has the proposer demonstrated a commitment from employers to interview trainees that meet the job requirements?

Cost – 20 points

Is the budget section of the proposal clear and responsive?

Is the estimated cost per student served reasonable?

Has adequate cost-sharing been documented?

Has the proposer shown it is leveraging existing resources, building on programs currently available?

Proposer Qualifications – 20 points

Does the proposer have an existing network of sites where training can be conducted? If so, are the training facilities self-sustaining?

Will hands-on experiential learning be implemented?

Are proposed training sites located in SBC/CEF utility service territories?

If the proposer does not pay into the SBC/CEF, does the proposal have a plan for demonstrating that at least 60 percent of the students who will take the training reside in/will work in SBC/CEF service territory? Does the proposer have documented experience in developing and implementing technical training? Are resumes of proposed trainers included?

Are the education and experience of key personnel relevant to the training needs?

Is the overall capability of the training staff adequate and appropriate?

Has the proposer/team demonstrated recent experience designing and developing relevant training curricula? Has the proposer/team demonstrated recent experience in developing, marketing and delivering training to postsecondary education trainees or new or existing workers?

Scope of Work – 20 points

Does the Scope of Work (SOW) have well-defined tasks and deliverables to serve the goals of this solicitation? Are sufficient resources (staff, facilities, etc.) being devoted to the SOW and each individual task?

Has the proposer provided plans for granting CEUs for trainings it will conduct, if applicable?

Did proposer outline a strategy for continuation of the program after NYSERDA funding has ended? Does the SOW include clear worker experience and job placement tasks/goals/deliverables for new workers being trained?

Does the SOW included tasks and deliverables to track new hires once they have been placed in jobs?

Efforts to Train and Place Priority Populations that Need Assistance Entering the Energy Efficiency and Clean Technology Market – 11 points

Does the proposal contain a reasonable plan to identify opportunities to train or advance the skills of priority populations as described in the PON and to place them in jobs?

Does the proposal include a plan to recruit from potential environmental justice communities?

Other – 5 points

What is the proposer's previous experience with NYSERDA, if any?

Does proposal contain a plan to provide training in other languages?

Does proposal include training to accommodate various learners' needs?

Does the proposal integrate multiple elements such as curriculum development, training trainers, apprenticeships, etc.?

Has the proposer demonstrated a good grasp of market needs?

V. GENERAL CONDITIONS

Proprietary Information - Careful consideration should be given before confidential information is submitted to NYSERDA as part of your proposal. Review should include whether it is critical for evaluating a proposal, and whether general, non-confidential information, may be adequate for review purposes. The NYS Freedom of Information Law, Public Officers law, Article 6, provides for public access to information NYSERDA possesses. Public Officers Law, Section 87(2)(d) provides for exceptions to disclosure for records or portions thereof that "are

trade secrets or are submitted to an agency by a commercial enterprise or derived from information obtained from a commercial enterprise and which if disclosed would cause substantial injury to the competitive position of the subject enterprise." Information submitted to NYSERDA that the proposer wishes to have treated as proprietary, and confidential trade secret information, should be identified and labeled "Confidential" or "Proprietary" on each page at the time of disclosure. This information should include a written request to except it from disclosure, including a written statement of the reasons why the information should be excepted. See Public Officers Law, Section 89(5) and the procedures set forth in 21 NYCRR Part 501 https://www.nyserda.ny.gov/About/-//media/Files/About/Contact/NYSERDA-Regulations.ashx. However, NYSERDA cannot guarantee the confidentiality of any information submitted.

Omnibus Procurement Act of 1992 - It is the policy of New York State to maximize opportunities for the participation of New York State business enterprises, including minority- and women-owned business enterprises, as bidders, subcontractors, and suppliers on its procurement Agreements.

Information on the availability of New York subcontractors and suppliers is available from:

Empire State Development Division for Small Business 625 Broadway Albany, NY 12207

A directory of certified minority- and women-owned business enterprises is available from:

Empire State Development Minority and Women's Business Development Division 625 Broadway Albany, NY 12207

State Finance Law sections 139-j and 139-k - NYSERDA is required to comply with State Finance Law sections 139-j and 139-k. These provisions contain procurement lobbying requirements which can be found at https://online.ogs.ny.gov/legal/lobbyinglawfaq/default.aspx Proposers are required to answer questions during proposal submission, which will include making required certification under the State Finance Law and to disclose any Prior Findings of Non-Responsibility (this includes a disclosure statement regarding whether the proposer has been found non-responsible under section 139-j of the State Finance Law within the previous four years).

Tax Law Section 5-a - NYSERDA is required to comply with the provisions of Tax Law Section 5-a, which requires a prospective contractor, prior to entering an agreement with NYSERDA having a value in excess of \$100,000, to certify to the Department of Taxation and Finance (the "Department") whether the contractor, its affiliates, its subcontractors and the affiliates of its subcontractors have registered with the Department to collect New York State and local sales and compensating use taxes. The Department has created a form to allow a prospective contractor to readily make such certification. See, ST-220-TD (available at http://www.tax.ny.gov/pdf/current_forms/st/st220td_fill_in.pdf). Prior to contracting with NYSERDA, the prospective contractor must also certify to NYSERDA whether it has filed such certification with the Department.

The Department has created a second form that must be completed by a prospective contractor prior to contacting and filed with NYSERDA. See, ST-220-CA (available at http://www.tax.ny.gov/pdf/current_forms/st/st220-CA (available at http://www.tax.ny.gov/pdf/current_forms/st/st220-CA (available at http://www.tax.ny.gov/pdf/current_forms/st/st220-CA (available at http://www.tax.ny.gov/pdf/current_forms/st/st220ca_fill_in.pdf). The Department has developed guidance for contractors which is available at http://www.tax.ny.gov/pdf/publications/sales/pub223.pdf.

Contract Award - NYSERDA anticipates making multiple awards under this solicitation. NYSERDA anticipates a contract duration of at least two years, unless NYSERDA management determines a different structure is more efficient based upon proposals received. A contract may be awarded based on initial applications without discussion, or following limited discussion or negotiations pertaining to the Statement of Work. Each proposal

should be submitted using the most favorable cost and technical terms. NYSERDA may request additional data or material to support applications. NYSERDA will use the Sample Agreement to contract successful proposals. NYSERDA may at its discretion elect to extend and/or add funds to any project funded through this solicitation. NYSERDA reserves the right to limit any negotiations to exceptions to standard terms and conditions in the Sample Agreement to those specifically identified in the checklist questions. Proposers should keep in mind that acceptance of all standard terms and conditions will generally result in a more expedited contracting process. NYSERDA expects to notify proposers in approximately eight weeks from the proposal due date whether your proposal has been selected to receive an award. NYSERDA may decline to contract with awardees that are delinquent with respect to any obligation under any previous or active NYSERDA agreement.

Accessibility Requirements - If awardees from this solicitation will be posting anything on the web, or if the awardee will produce a final report that NYSERDA will post to the web, the following language must be included. NYSERDA requires contractors producing content intended to be posted to the Web to adhere to New York State's Accessibility Policy. This includes, but is not limited to, deliverables such as: documents (PDF, Microsoft Word, Microsoft Excel, etc.), audio (.mp3, .wav, etc.), video (.mp4, .mpg, .avi, etc.), graphics (.jpg, .png, etc.), web pages (.html, .aspx, etc.), and other multimedia and streaming media content. For more information, see <u>NYSERDA's Accessibility Requirements</u>.

Limitation - This solicitation does not commit NYSERDA to award a contract, pay any costs incurred in preparing a proposal, or to procure or contract for services or supplies. NYSERDA reserves the right to accept or reject any or all proposals received, to negotiate with all qualified sources, or to cancel in part or in its entirety the solicitation when it is in NYSERDA's best interest. NYSERDA reserves the right to reject proposals based on the nature and number of any exceptions taken to the standard terms and conditions of the Sample Agreement. NYSERDA reserves the right to disqualify proposers based upon the results of a background check into publicly available information and the presence of a material possibility of any reputational or legal risk in making of the award.

Disclosure Requirement - The proposer shall disclose any indictment for any alleged felony, or any conviction for a felony within the past five years, under the laws of the United States or any state or territory of the United States and shall describe circumstances for each. When a proposer is an association, partnership, corporation, or other organization, this disclosure requirement includes the organization and its officers, partners, and directors or members of any similarly governing body. If an indictment or conviction should come to the attention of NYSERDA after the award of a contract, NYSERDA may exercise its stop-work right pending further investigation or terminate the agreement; the contractor may be subject to penalties for violation of any law which may apply in the particular circumstances. Proposers must also disclose if they have ever been debarred or suspended by any agency of the U.S. Government or the New York State Department of Labor.

Vendor Assurance of No Conflict of Interest or Detrimental Effect - The proposer shall disclose any existing or contemplated relationship with any other person or entity, including any known relationships with any member, shareholders of 5% or more, parent, subsidiary, or affiliated firm, which would constitute an actual or potential conflict of interest or appearance of impropriety, relating to other clients/customers of the proposer or former officers and employees of NYSERDA, in connection with proposer's rendering services as proposed. If a conflict does or might exist, please describe how your company would eliminate or prevent it. Indicate what procedures will be followed to detect, notify NYSERDA of, and resolve any such conflicts.

The proposer must disclose whether it, or any of its members, or, to the best of its knowledge, shareholders of 5% or more, parents, affiliates, or subsidiaries, have been the subject of any investigation or disciplinary action by the New York State Commission on Public Integrity or its predecessor State entities (collectively, "Commission"), and if so, a brief description must be included indicating how any matter before the Commission was resolved or whether it remains unresolved.

Public Officers Law – For any resulting awards, the Contractor and its subcontractors shall not engage any person who is, or has been at any time, in the employ of the State to perform services in violation of the provisions of the New York Public Officers Law, other laws applicable to the service of State employees, and the rules, regulations,

opinions, guidelines or policies promulgated or issued by the New York State Joint Commission on Public Ethics, or its predecessors (collectively, the "Ethics Requirements"). Proposers are reminded of the following Public Officers Law provision: contractors, consultants, vendors, and subcontractors may hire former NYSERDA employees. However, as a general rule and in accordance with New York Public Officers Law, former employees of NYSERDA may neither appear nor practice before NYSERDA, nor receive compensation for services rendered on a matter before NYSERDA, for a period of two years following their separation from NYSERDA service. In addition, former NYSERDA employees are subject to a "lifetime bar" from appearing before any state agency or authority or receiving compensation for services regarding any transaction in which they personally participated or which was under their active consideration during their tenure with NYSERDA.

Any awardee will be required to certify that all of its employees, as well as employees of any subcontractor, whose subcontract is valued at \$100,000 or more who are former employees of the State and who are assigned to perform services under the resulting contract, shall be assigned in accordance with all Ethics Requirements. During the term of any agreement, no person who is employed by the contractor or its subcontractors and who is disqualified from providing services under the contract pursuant to any Ethics Requirements may share in any net revenues of the contractor or its subcontractors derived from the contract. NYSERDA may request that contractors provide it with whatever information the State deems appropriate about each such person's engagement, work cooperatively with the State to solicit advice from the New York State Joint Commission on Public Ethics. NYSERDA shall have the right to withdraw or withhold approval of any subcontractor if utilizing such subcontractor for any work performed would be in conflict with any of the Ethics Requirements. NYSERDA shall have the right to terminate any contract at any time if any work performed is in conflict with any of the Ethics Requirements.

VI. Attachments:

Attachment A – Funding Application Form Attachment B – Sample Agreement including Exhibit A - Template Statement of Work Attachment C – Budget Form

New York State Energy Research and Development Authority

Albany 17 Columbia Circle, Albany, NY 12203-6399 (P) 1-866-NYSERDA | (F) 518-862-1091

nyserda.ny.gov | info@nyserda.ny.gov

Buffalo 726 Exchange Street Suite 821 Buffalo, NY 14210-1484 (P) 716-842-1522 (F) 716-842-0156 New York City 1359 Broadway 19th Floor New York, NY 10018-7842 (P) 212-971-5342 (F) 518-862-1091
 West Valley Site

 Management Program

 9030-B Route 219

 West Valley, NY

 14171-9500

 (P) 716-942-9960

 (F) 716-942-9961



NY-Sun Residential/Nonresidential Incentive Program Program Opportunity Notice (PON) 2112 August 13, 2019

NY-Sun Residential & Nonresidential Incentive Program NY-Sun Project Applications and Contractor Applications Accepted August 12, 2010 through December 29, 2023 By 3:00 PM Eastern Time

The New York State Energy Research and Development Authority (NYSERDA) provides financial incentives and financing options for the installation by Contractors and Builders of new grid-connected solar electric photovoltaic (PV) systems for residential sites in any region that are 25kW or less, for nonresidential sites in Upstate and PSEG Long Island regions that are up to 750kW, and for nonresidential sites in Con Ed region that are up to 7.5MW. Incentives for nonresidential sites in Upstate region that are ranging from 750kW to 7.5MW are available through the Commercial/Industrial Program (PON 3082). Funding for the NY-Sun Incentive Program ("Program") has been allocated by the New York State Clean Energy Fund (CEF) and Regional Greenhouse Gas Initiative (RGGI) and the Order Authorizing the Clean Energy Fund Framework, dated January 21, 2016.

Incentives will be granted on a first-come, first-served basis, and PV project applications will be accepted through December 29, 2023, or until funds are fully committed, whichever comes first. Total incentives and/or financing available is subject to change. NYSERDA reserves the right to extend and/or add funding to the solicitation should other program funding sources become available.

Information on the MW block design, including real-time data on the current incentive levels for Upstate can be found by visiting <u>nyserda.ny.gov/upstate-dashboard</u> and for Long Island at <u>nyserda.ny.gov/LI-dashboard</u>, and for Con Ed at <u>nyserda.ny.gov/coned-dashboard</u>.

Additional incentives for solar PV installations are available for residential customer households who qualify as low-to-moderate income. The additional incentive provides a standard incentive of \$0.80/W in Upstate and Long Island regions and \$0.40/W in Long Island region, if available, and can apply for up to 10kW of the total system size. Funding for the additional incentive is available until exhausted. If MW block standard funding is exhausted prior to additional incentive, the additional incentive will continue at the standard incentive amount in place at time the MW block incentive was exhausted, until the funding for the additional incentive is exhausted as well.

Additional incentives for solar PV installations paired with an energy storage system are available for residential customer households in PSEG Long Island region. A higher incentive rate is available for residential customer households in PSEG Long Island region who qualify as low-to-moderate income.

PV project application submission: Eligible Contractors and/or Builders must submit completed and signed Project Application package into the NYSERDA Portal, the Program database, as detailed in the Program Manual.

Contractor Eligibility Application submission: Potential Contractors and/or Builders may apply on-line at: <u>https://nyserda-portal.force.com/CORE_CONAPP_Program_Page</u>, or submit one [1] clearly labeled, completed and signed Contractor Application package to:

Contractor Application PON 2112 Attn: Program Manager NYS Energy Research and Development Authority 17 Columbia Circle Albany, NY 12203-6399 Or by email to <u>PVprocessing@nyserda.ny.gov</u>.

Contractor Application questions may be sent to <u>PVprocessing@nyserda.ny.gov</u>. Please reference PON 2112 when contacting NYSERDA with questions.

All Contractual questions should be directed to Venice Forbes at (518) 862-1090, ext. 3507 or <u>venicesoliciations@nyserda.ny.gov</u>. All Technical questions should be directed to Frank Mace at (518) 862-1090, ext. 3433 or <u>PVprocessing@nyserda.ny.gov</u>.

Applications will not be accepted at any other NYSERDA location other than the address above. If changes are made to this solicitation, notification will be posted on NYSERDA's website at <u>www.nyserda.ny.gov</u>.

What is the NY-Sun Incentive Program?

The New York State Energy Research and Development Authority (NYSERDA) provides financial incentives and financing options for the installation by Contractors and Builders of new grid-connected solar electric photovoltaic (PV) systems for residential sites in any region that are 25kW or less, for nonresidential sites in Upstate and PSEG Long Island regions that are up to 750kW, and for nonresidential sites in Con Ed region that are up to 7.5MW. Incentives for nonresidential sites in Upstate region that are ranging from 750kW to 7.5MW are available through the Commercial/Industrial Program (PON 3082). Funding for the NY-Sun Incentive Program ("Program") has been allocated by the New York State Clean Energy Fund (CEF) and Regional Greenhouse Gas Initiative (RGGI) and the Order Authorizing the Clean Energy Fund Framework, dated January 21, 2016.

Incentives will be granted on a first-come, first-served basis and applications will be accepted through December 31, 2023, or until funds are fully committed, whichever comes first.

How Does the Program Work?

Standard Incentive

Cash incentives and/or financing is available for gualified customers who wish to install PV systems through applications submitted by a Participating Contractor. A Participating Contractor has signed a Participation Agreement (with NYSERDA, agreeing to abide by Program terms and conditions). The Participating Contractor have established relationships with Builders. Contractors are responsible for the quality of the builders. Builders are responsible for the installation and quality of project. Builders are responsible for maintaining a credentialed person on-staff.

Incentives are paid directly to the Contractor and must be applied in full to the cost of the PV system, thereby reducing the out-of-pocket cost to the customer.

A Builder must have demonstrated technical competence in the PV field and the Contractor/Builder is responsible for preparing and submitting all necessary project application and incentive paperwork to NYSERDA. A Builder must employ an individual who meets one of the three paths. The current three eligibility paths for Individuals are:

- North American Board of Certified Energy Practitioners (NABCEP): installers choosing this path must • be NABCEP certified Solar PV Installers within 24 months of entering the PON 2112 Program to retain their eligibility.
- IBEW-NECA: Installers who are Journeymen Electrician with IBEW-NECA PV training, and meet all other program requirements may gain and retain eligibility.
- UL (Underwriters Labs): Installers who choose to become credentialed through the UL must fulfill the following requirement as a prerequisite to participate in the Program: Be certified by UL as a PV System Installer

More information on how to become a Contractor can be found in the NY-Sun CONTRACTOR/BUILDER APPLICATION. In general, incentives for a typical residential or commercial system cover approximately 25-35% of the installed cost of a PV system.

In addition to financing that may be offered through a Contractor, the Program offers financing through Green Jobs-Green New York (GJGNY). Information on financing options, terms and gualification criteria can be found on NYSERDA's web site at the following link:

http://www.nyserda.ny.gov/All-Programs/Programs/Residential-Financing-Options

Program Requirements

The following rules apply to the Program and the payment of incentives:

Energy Efficiency Audit.

<u>Residential Projects:</u> A "Clipboard" Energy Efficiency Audit must be performed. A clipboard energy audit consists of two components: an interview of the home/building owners to ascertain energy use habits and the age of the building, and an inspection of the building to identify energy saving opportunities. The inspection component of the Clipboard Audit includes an assessment of the hard-wired lighting systems and free-standing light fixtures, appliance ages and whether they are ENERGY STAR[®] qualified, the presence of advanced power strips, existence of "vampire loads" related to consumer electronics and battery chargers, use of programmable thermostats or timers for air conditioners, age and condition of the doors and windows, and details on recent energy efficiency upgrades, such as installation of insulation. The Clipboard Audit should take no more than 60 minutes.

The Clipboard audit also includes a debriefing, during which the Participating Contractor will review with the homeowner the results of the Clipboard Audit. The Participating Contractor will also provide informational brochures on low cost/no cost tips for reducing energy consumption, as well as other NYSERDA, and utility, energy efficiency programs. The Participating Contractor will also leave a list of Home Performance Contractors who the homeowner can contact should they be interested in making more comprehensive energy efficiency improvements to their home. Customers will not be required to implement energy efficiency measures as a pre-requisite to receiving a PV incentive, except in the case that the PV installation is also applying to receive the Affordable Solar for All additional incentive. For installations applying for the Affordable Solar for All additional incentive application.

<u>Nonresidential Projects</u>: Building owners are provided with information on ENERGY STAR's Portfolio Manager Benchmarking Tool or other equivalent tool. If requested by the building owner, the Participating Contractor shall assist them to enter utility bill information into the Tool in order to produce a EUI (Energy Use Index) and, where applicable, an ENERGY STAR score. Customers will not be required to benchmark or implement energy efficiency measures as a pre-requisite to receiving Program incentives. A copy of the signed acknowledgement must accompany the application and be uploaded into the NYSERDA Portal at time of application.

Incentive highlights:

- Incentives are paid directly to "Contractor" but must be passed on in the full amount to the customer. Incentives will not be provided directly to customers purchasing or installing PV systems.
- Incentives are only available for new equipment and PV systems that have not been installed (partially or completely) prior to being submitted to NYSERDA in accordance with the terms and conditions of this Program.
- Incentives for residential projects are capped based on a PV system size that does not exceed 110% of the total kWh consumption for the previous 12 months of electric usage. For residential new construction, systems must be sized not to exceed 110% of the calculated yearly projected kWh of electric usage.
- All potential PV system output losses associated with shading, system orientation, tilt angle, etc., must be analyzed and detailed for each PV System by the Contractor/Builder. If your system is shaded by trees, faces east or west, or is installed on a flat roof, the kWh output of your PV System will be less than ideal. All impacts on system output must be quantified and are considered during the review of project applications submitted by the Contractor/Builder. Incentives are reduced in proportion to output losses when losses from factors such as shading and orientation exceed 30%.
- The Program uses a MW Block incentive structure that is designed to provide certainty and transparency to the industry regarding incentive levels, accounts for regional market differences, provides a clear signal to industry that New York intends to eliminate cash incentives in a reasonable timeframe, and allows for the elimination of those incentives sooner in regions where the market conditions can support it, based on market penetration, demand, and payback. Information on the Program progress through the MW Blocks will be provided through a Counter/Dashboard. The Counter/Dashboard is an online, publicly facing tool

that shows real-time progression in the current blocks, provides incentive levels and MW targets for subsequent blocks and provide details on the progress towards the overall NY-Sun Statewide PV initiative installed capacity goal of 3.175 GW.

Limitation

This solicitation does not commit NYSERDA to award a contract or to pay any costs incurred in preparing any application. NYSERDA reserves the right to accept or reject any or all applications received, and to cancel in part or in its entirety the solicitation when it is in NYSERDA's best interest.

Additional Information

Available on the NY-Sun Website at ny-sun.ny.gov.



NY-Sun Commercial/Industrial Incentive Program Program Opportunity Notice (PON) 3082 August 13, 2019

NY-Sun Commercial & Industrial Incentive Program NY-Sun Project Applications and Contractor Applications Accepted May 4, 2015 through December 29, 2023 By 3:00 PM Eastern Time

The New York State Energy Research and Development Authority (NYSERDA) provides performance-based incentives for the installation by Contractors of new grid-connected solar electric photovoltaic (PV) systems that are ranging from 750kW to 7.5MW in Upstate region. Incentives for residential sites in all regions, nonresidential sites 750kW or less in Upstate and PSEG Long Island regions, and nonresidential sites 7.5MW or less in Con Ed region are available through the NY-Sun Residential & Nonresidential Program (PON 2112). Funding for the NY-Sun Incentive Program ("Program") has been allocated by the New York State Clean Energy Fund (CEF) and Regional Greenhouse Gas Initiative (RGGI) and the Order Authorizing the Clean Energy Fund Framework, dated January 21, 2016.

Incentives will be granted on a first-come, first-served basis, and PV project applications will be accepted through December 29, 2023, or until funds are fully committed, whichever comes first. Total incentives available is subject to change. NYSERDA reserves the right to extend and/or add funding to the solicitation should other program funding sources become available.

Information on the MW block design, including real-time data on the current incentive levels for Upstate can be found by visiting <u>nyserda.ny.gov/upstate-dashboard</u>.

Additional incentives for solar PV installations are available for commercial & industrial projects located on a brownfield or landfill, and Community Distributed Generation (CDG) solar projects that did not qualify for a Market Transition Credit (MTC) under the Value Stack..

PV project application submission: Eligible Contractors must submit completed and signed Project Application package into the NYSERDA Portal, the Program database, as detailed in the Program Manual.

Contractor Eligibility Application submission: Potential Contractors may apply on-line at: <u>https://nyserda-portal.force.com/CORE_CONAPP_Program_Page</u>, or submit one [1] clearly labeled, completed and signed Contractor Application package to:

Contractor Application PON 2112 Attn: Program Manager NYS Energy Research and Development Authority 17 Columbia Circle Albany, NY 12203-6399 Or by email to <u>PVprocessing@nyserda.ny.gov</u>. Contractor Application questions may be sent to <u>PVprocessing@nyserda.ny.gov</u>. Please reference PON 3082 when contacting NYSERDA with questions.

All Contractual questions should be directed to Venice Forbes at (518) 862-1090, ext. 3507 or <u>venicesolicitations@nyserda.ny.gov</u>. All Technical questions should be directed to <u>Commercial.IndustrialPV@nyserda.ny.gov</u>.

Applications will not be accepted at any other NYSERDA location other than the address above. If changes are made to this solicitation, notification will be posted on NYSERDA's website at <u>www.nyserda.ny.gov</u>.

What is the NY-Sun Commercial and Industrial Program?

The New York State Energy Research and Development Authority (NYSERDA) offers performance-based financial incentives for the installation of new grid-connected solar electric photovoltaic (PV) systems that are ranging from 750kW to 7.5MW in Upstate region. Incentives for residential sites in all regions, nonresidential sites 750kW or less in Upstate and PSEG Long Island regions, and nonresidential sites 7.5MW or less in Con Ed region are available through the NY-Sun Residential & Nonresidential Program (PON 2112).

Funding for the NY-Sun Commercial & Industrial Program has been allocated as part of the Clean Energy Fund with additional funding made available through the Regional Greenhouse Gas Initiative (RGGI) for New York State (NYS) electricity customers and the Order Authorizing the Clean Energy Fund Framework, dated January 21, 2016. Incentives will be allocated on a first-come, first-served basis and applications will be accepted on a rolling basis through December 29, 2023, or until funds are fully committed, whichever comes first.

How Does the Program Work?

The NY-Sun Commercial and Industrial Program provides incentives based upon the performance of the PV System as a function of annual energy production. A detailed description of the Program and the terms and conditions under which it operates is provided in the NY-Sun Incentive Program Manual available at http://www.nyserda.ny.gov/solar-contractor-resources.

In addition to performance-based incentives, the program includes additional incentives for projects located on a landfill or brownfield, and Community Distributed Generation (CDG) solar projects that did not qualify for a Market Transition Credit (MTC) under the Value Stack. Participating Contractors may invoice for project incentives in three separate increments: one invoice when the system is installed, interconnected, and commercially operational and one in each of the two subsequent consecutive years (Performance Period) based upon measured annual kilowatt hour (kWh) output of the PV system (System Actual Annual Energy Production). For details, see NY-Sun Incentive Program Manual, Metering requirements.

Incentives are available for new customer-sited PV systems, greater than 750 kW per electric meter, that are connected to the electric distribution grid and displace utility provided electricity. Prior to submitting applications for incentives, organizations must become a Participating Contractor by registering with the NY-Sun Commercial and Industrial Program. Upon approval, the organization will be provided access to the NY- Sun Commercial and Industrial Program online applications platform.

To become a Participating Contractor in the NY-Sun Commercial and Industrial Program, interested parties must complete a Contractor Application in which they agree to abide by the terms and conditions of the NY Sun Incentive Program Participation Agreement and Program Manual. These documents are available on the NY-Sun website at <u>nyserda.ny.gov/become-a-solar-contractor</u>.

Applicants to the commercial and industrial program must provide three verifiable solar electric customer references (customer name, address, phone, and email) for completed, grid-connected solar electric installations that entered commercial operation in the past three years that, in aggregate, sum to at least 3MW. System size (kilowatts), interconnection date, and the applicant's role in the project must be specified. Construction photos for the projects listed as a reference are required.

Participating Contractors are responsible for preparing and submitting all required PV Project Incentive Application documentation to NYSERDA.

Financial Incentives

The incentive amounts identified on approved project applications in the NY-Sun Commercial and Industrial Program are Not-to-Exceed (NTE) values. The maximum dollar value of the NTE Incentive will be equal to the PV System Estimated Annual Energy Production for two years (Base Incentive) plus strategic location or integration incentives, when applicable.

The Base Incentive for an eligible project is based on two years of PV System Estimated Annual Energy

Production using a designated 13.4% Capacity Factor (CF) for fixed-mount systems at the incentive associated with the block in which the project application is approved by NYSERDA.

Limitation

This solicitation does not commit NYSERDA to award a contract or to pay any costs incurred in preparing any application. NYSERDA reserves the right to accept or reject any or all applications received, and to cancel in part or in its entirety the solicitation when it is in NYSERDA's best interest.

Additional Information

Forms are available on the NY-Sun Website at <u>ny-sun.ny.gov</u>.



Ground Source Heat Pumps Rebate Program¹ Program Opportunity Notice (PON) 3620 \$ 26,500,000 Available NYSERDA reserves the rights to extend and/or add funding to this Solicitation should other Program funding become available.

Applications accepted through December 31, 2019² by 3:00 PM Eastern Time, or until funds are fully committed, whichever occurs first.

Program Summary: The Ground Source Heat Pumps Rebate Program ("the Program") will provide up to \$26,500,000 for the installation of ground source heat pump (GSHP) systems.³ Funding for GSHP systems has been allocated by the New York Public Service Commission through the Clean Energy Fund (CEF) and is available only for projects located on sites that pay, or, in the case of systems installed as part of new construction projects, will pay the System Benefits Charge (SBC) surcharge on their electric bill. Rebates must be passed along to Site Owners.

Rebates are available on a first-come, first-served basis as follows:

- Projects comprising small-scale GSHP systems (≤ 10 AHRI rated cooling tons) are eligible for a Rebate of \$1,500 per cooling ton; and
- Projects comprising large-scale GSHP systems (> 10 AHRI rated cooling tons) are eligible for a Rebate
 of \$1,200 per cooling ton

subject to the following incentive caps, regardless of the actual installed capacity:

- Rebates for single family residences are limited to \$15,000
- Rebates for large scale GSHP systems installed in a single building are limited to \$500,000
- Rebates for large scale GSHP systems installed at a single site with multiple buildings are limited to \$1,000,000

Rebates will be paid to the Participating Designer or Participating Installer, but 100% of the rebate amount must be passed along or credited to the GSHP system owner without any right of setoff or deduction.

Customers in areas affected by a utility natural gas moratorium who pay the SBC surcharge may be eligible for enhanced programs in the recently announced Clean Energy Action Plan. This includes Consolidated Edison Company of New York, Inc. ("Con Ed") customers in Southern Westchester County and New York State Electric

¹ Capitalized terms used but not defined herein have the meanings assigned to them in the Manual, which can be found at https://beta.nyserda.ny.gov/All-Programs/Programs/Become-a-Contractor/Renewable-Heating-and-

Cooling/GroundSource-Heat-Pump-Installers

² The NYS Public Service Commission has directed NYSERDA and the State's utilities to develop a common state-wide heat pump program. NYSERDA anticipates that the state-wide program will be available at the beginning of 2020. Should launch of the state-wide program be delayed NYSERDA may extend the open date for this PON.

³ NYSERDA may supplement or revise the funding available through this PON or any successor at any time.

and Gas Corporation ("NYSEG") customers in Lansing, NY. Please use the tool located at http://www.nyserda.ny.gov/action-plan to determine your eligibility. Rebates for eligible customers in an area affected by a natural gas moratorium are as follows:

- Projects comprising small-scale GSHP systems (≤ 10 AHRI rated cooling tons) are eligible for a Rebate of \$1,875 per cooling ton; and
- Projects comprising large-scale GSHP systems (> 10 AHRI rated cooling tons) are eligible for a Rebate of \$1,500 per cooling ton.

subject to the following incentives caps, regardless of the actual installed capacity:

- Rebates for single family residences are limited to \$18,750
- Rebates for large scale GSHP systems are limited to \$5,000,000 per project.

NYSERDA reserves the right to further limit the number and amounts of Rebates per Participating Installer, Participating Designer, Site Owner, site, or meter. No single Participant can receive more than 50% (\$13,250,000) of the funding available through this Program.

Eligible Participants in the Program are limited to GSHP system designers, installers, and drillers who meet Program requirements as specified in the Ground Source Heat Pump Rebate Manual (Manual), found here: https://nyserda.ny.gov/All-Programs/Programs/Become-a-Contractor/Renewable-Heating-and-Cooling/Ground-Source-Heat-Pump-Installers and have submitted a completed Participation Agreement.

Although not eligible to apply for or receive Rebates under the Program, any driller that wants to participate on Projects receiving a Rebate under this Solicitation must apply to become a Participating Driller.

Additional Program descriptions and Program requirements are provided in the Manual.

Participant and Rebate Application Submission: Prospective Participants can find, complete, and submit a Participation Application, Participation Agreement and, once approved, in the case of Participating Designers and Participating Installers, Rebate Applications (including uploading any required attachments and documents thereto) via NYSERDA's Salesforce application <u>https://portal.nyserda.ny.gov/login</u>

Incomplete or inaccurate applications will not be accepted. Faxed or e-mailed applications will not be accepted. Applications will not be accepted unless completed and delivered via NYSERDA's Salesforce application https://portal.nyserda.ny.gov/login.

Contact Information: For all program questions, please contact Program staff at gshp@nyserda.ny.gov. or Elizabeth Markham at (518) 862-1090 ext. 3386.

All Contractual questions should be directed to: Nancy Marucci at <u>Nancy.Marucci@nyserda.ny.gov</u> or 518-8621090 ext. 3335.

If changes are made to this Solicitation, notification will be posted on https://www.nyserda.ny.gov/FundingOpportunities/Current-Funding-Opportunities.

NYSERDA reserves the right to make changes in the Rebate amount or availability (including the per Project Rebate cap and the total amount available) at any time. NYSERDA will make reasonable effort not to decrease Rebate levels within the term of this Program. If it becomes necessary to decrease the Rebate levels, NYSERDA will attempt to give as much notice as possible to Program Participants. Program changes will be posted on the NYSERDA website and can be found at the following web page: https://www.nyserda.ny.gov/Funding-Opportunities/Current-Funding-Opportunities.

I. Introduction

Thermal energy used in the residential and commercial sectors for space heating and cooling and hot water accounts for 37% of net energy consumption and 32% of all combustion-based GHG emissions in New York State. Today, renewable heating and cooling (RH&C) technologies, in general, and GSHP systems, in particular, occupy a niche position in New York State, penetrating less than 1% of the heating and cooling market.

The Ground Source Heat Pump Rebate Program (the "Program") will provide up to \$26,500,000 for the installation of ground source heat pump (GSHP) systems. Funding for GSHP systems has been allocated by the New York Public Service Commission through the Clean Energy Fund (CEF) and is available only for projects located on sites that pay, or, in the case of systems installed as part of new construction projects, will pay the SBC surcharge.

Rebates are available on a first-come, first-served basis as follows:

- Projects comprising small-scale GSHP systems (≤ 10 AHRI rated cooling tons) are eligible for a Rebate of \$1,500 per cooling ton; and
- Projects comprising large-scale GSHP systems (> 10 AHRI rated cooling tons) are eligible for a Rebate of \$1,200 per cooling ton,

subject to the following incentive caps:

- Rebates for single family residences are limited to \$15,000
- Rebates for large scale GSHP systems installed in a single building are limited to \$500,000
- Rebates for large scale GSHP systems installed at a single site with multiple buildings are limited to \$1,000,000

Customers in areas affected by a utility natural gas moratorium who pay the SBC surcharge may be eligible for enhanced programs in the recently announced Clean Energy Action Plan. This includes Consolidated Edison Company of New York, Inc. ("Con Ed") customers in Southern Westchester County and New York State Electric and Gas Corporation ("NYSEG") customers in Lansing, NY. Please use the tool located at http://www.nyserda.ny.gov/action-plan to determine whether the customer is eligible. Rebates for eligible customers in an area affected by a natural gas moratorium are as follows:

- Projects comprising small-scale GSHP systems (≤ 10 AHRI rated cooling tons) are eligible for a Rebate of \$1,875 per cooling ton; and
- Projects comprising large-scale GSHP systems (> 10 AHRI rated cooling tons) are eligible for a Rebate of \$1,500 per cooling ton,

subject to the following incentive caps:

- Rebates for single family residences are limited to \$18,750
- Rebates for large scale GSHP systems are limited to \$5,000,000 per project

NYSERDA reserves the right to further limit the number and amounts of Rebates per Participating Installer, Participating Designer, Site Owner, site, or meter. No single Participant can receive more than 50% (\$13,250,000) of the funding available through this Program.

Rebates will be paid to the Participating Designer or Participating Installer, but 100% of the rebate amount must be passed along or credited to the GSHP system owner without any right of setoff or deduction.

Additional Program descriptions and requirements are provided in the Manual.

II. Program Requirements

Eligible Applicants for Program Participation and Rebates

Qualified entities can apply to become a Participating Installer, Participating Designer, and / or Participating Driller by completing and submitting a Participation Application and Participation Agreement at http://nyserda-site.force.com/Core_ConApp_Program_Page. Applicants must indicate the Program tier (small-scale GSHP system and/or large GSHP system) for which they intend to submit Rebate Applications.

If applicant's Participation Application and Participation Agreement are approved by NYSERDA, the applicant will become a Participant (e.g., Participating Installer, Participating Designer, and / or Participating Driller).⁴

Only Participating Designers and Participating Installers are eligible to submit Rebate Applications. Participants need to be separately qualified for each tier and will be listed separately on NYSERDA's website. Each GSHP system MUST be installed by a Participating Installer.

A Participating Designer and Participating Installer (but not Participating Drillers) will initially be classified as provisional and may advance to full status by either:

- (i) Including in its Participation Application three projects it has either installed or designed during the prior year that are deemed satisfactory by NYSERDA; or
- (ii) Completing three projects under the Program that NYSERDA deems satisfactory.

Participants that fail to perform in accordance with or adhere to the Program requirements may be placed on probation, suspended, or terminated depending upon the severity and scope of non-performance, at NYSERDA's discretion.

Further participation eligibility requirements are specified in the Manual, which can be found online at https://beta.nyserda.ny.gov/All-Programs/Programs/Become-a-Contractor/Renewable-Heating-andCooling/Ground-Source-Heat-Pump-Installers.

Eligible Project Requirements

To be eligible to receive a Rebate under this Solicitation, the Rebate Application and Project referenced in the Rebate Application must meet certain requirements, including, but not limited to, the following:

- All components installed as part of an approved GSHP system must be new. The use of used or refurbished equipment is not permitted under the Program.
- All approved GSHP systems, system components, and installations must comply with any and all
 manufacturers' installation requirements, applicable laws, regulations, codes, licensing and permit
 requirements including, but not limited to, the New York State Environmental Quality Review (SEQR), the
 New York State Building Code, New York State Plumbing Code, the National Electric Code, Fire Codes
 and all applicable State, city, town, or local ordinances or permit requirements.
- All GSHP systems must be designed to pre-defined standards as described in the Manual. Equipment must meet efficiency requirements as described in the Manual.
- All projects must provide equipment, design, and labor warranties to customers.

Each Project that is referenced in a Rebate Application is subject to NYSERDA-mandated quality assurance and performance verification standards.

⁴ If a Participant acts as more than one type of Participant, it should only complete and submit one Participation Agreement.

Additional information regarding these and additional Project application and Project eligibility and technical requirements are described in the Manual.

The purpose of these requirements is to ensure that GSHP systems installed under the Program are high performing and high quality. High-performing, high-quality installations are critical to enabling market growth. However, NYSERDA encourages innovation in design and installation practices that improve performance and lower costs. If an applicant for a Rebate can substantiate to NYSERDA's satisfaction that a deviation from a specific Program requirement will maintain or improve Project performance at a similar or lower cost, NYSERDA will consider granting a waiver for that specific requirement.

How to participate in the Program

Becoming a Participating Designer, Installer or Driller

Step 1 – Confirm eligibility: In order to be approved to participate in the Program, designers, installers and drillers must demonstrate that they meet the qualifications identified in Section 3 of the Manual.

Step 2 – Review Manual and Complete Participation Agreement: Prior to submitting a Participation Application, interested Participants must review the Manual and sign the Participation Agreement.

Step 3 – Submit Participation Application: To enroll, Participants must submit all required documentation, including the signed Participation Application and Participation Agreement.

A list of Participating Designers, Participating Installers, and Participating Drillers will be posted to NYSERDA's website, here: <u>https://www.nyserda.ny.gov/Contractors/Find-a-Contractor/Ground-Source-Heat-Pump-Systems</u>.

Submitting Rebate Applications

Step 1-Confirm Project Site Eligibility: All Sites must currently pay or, in the case of new construction, will pay the SBC surcharge. The charge will appear on the Site Owner's utility bill. Rebate applicants installing large systems must not start construction of the GSHP loop field until approval of the application by NYSERDA.

To receive enhanced rebates a site must be located in an area affected by a utility company natural gas moratorium as announced in the Clean Energy Action Plan. This includes Consolidated Edison Company of New York, Inc. ("Con Ed") customers in Southern Westchester County and New York State Electric and Gas Corporation ("NYSEG") customers in Lansing, NY. Please use the tool located at http://www.nyserda.ny.gov/action-plan to determine your eligibility.

Step 2- For Large-scale systems (>10 tons capacity) only: Complete Preliminary Technical Analysis: Before applying for a Rebate, the Participating Designer must complete a technical analysis and system design that meets the requirements outlined in the Manual.

Step 3-Apply for Rebate: Rebate Applications may only be submitted by the Participating Designer or Participating Installer involved in the Project referenced in the Rebate Application. The GSHP must be installed by a Participating Installer.

Step 4-Receive Award:

NYSERDA will notify the Participating Designer or Participating Installer of the status of each Rebate Application within thirty (30) Business Days of receipt, barring extenuating circumstances. If the Rebate Application meets all Program requirements and funding is available, NYSERDA will issue an approval email (for small-scale GSHP systems) or Award letter (for large-scale GSHP systems) to the Participant that submitted the Rebate Application via email that will provide details on the Rebate amount.

Step 5-Complete Project Milestones:

For small systems (≤10 tons capacity or installed in single-family residences):

Upon Project Completion, the Participant in cooperation with the System Owner will complete and submit the Project Completion Form in Salesforce and a completed GSHP manufacturer or distributor start-up sheet. If available, a summary of design software output, customer savings and economic summary and a summary of performance monitoring installed should also be submitted.

For large systems (>10 tons capacity):

Subject to NYSERDA's review and approval, a Participant will be eligible to receive a portion of the total Rebate amount (a "Milestone Payment") based upon the completion of intermediate milestones and submission of Milestone Deliverables, as described in the Manual. NYSERDA will review and either approve or deny each Milestone Deliverable.

Step 6- Receive Rebate Payment: Rebates will be paid to the Participant who submitted the Rebate Application. Upon approval of the Milestone Deliverables, payment will be issued according to NYSERDA's prompt payment policy (see Participation Agreement).

General Conditions

Proprietary Information - Careful consideration should be given before confidential information is submitted to NYSERDA as part of your proposal. Review should include whether it is critical for evaluating a proposal, and whether general, non-confidential information, may be adequate for review purposes.

The NYS Freedom of Information Law, Public Officers law, Article 6, provides for public access to information NYSERDA possesses. Public Officers Law, Section 87(2)(d) provides for exceptions to disclosure for records or portions thereof that "are trade secrets or are submitted to an agency by a commercial enterprise or derived from information obtained from a commercial enterprise and which if disclosed would cause <u>substantial injury</u> to the competitive position of the subject enterprise." Information submitted to NYSERDA that the proposer wishes to have treated as proprietary, and confidential trade secret information, should be identified and labeled <u>"Confidential"</u> or <u>"Proprietary"</u> on each page at the time of disclosure. This information should include a written request to except it from disclosure, including a written statement of the reasons why the information should be excepted. See Public Officers Law, Section 89(5) and the procedures set forth in 21 NYCRR Part 501 <u>http://www.nyserda.ny.gov/About/-/media/Files/About/Contact/NYSERDA-Regulations.ashx</u>. However, NYSERDA cannot guarantee the confidentiality of any information submitted.

Omnibus Procurement Act of 1992 - It is the policy of New York State to maximize opportunities for the participation of New York State business enterprises, including minority- and women-owned business enterprises, as bidders, subcontractors, and suppliers on its procurement Agreements.

Information on the availability of New York subcontractors and suppliers is available from:

Empire State Development Division for Small Business 625 Broadway Albany, NY 12207

A directory of certified minority- and women-owned business enterprises is available from:

Empire State Development Minority and Women's Business Development Division 625 Broadway Albany, NY 12207

State Finance Law sections 139-j and 139-k - NYSERDA is required to comply with State Finance Law sections 139-j and 139-k. These provisions contain new procurement lobbying requirements that can be found at https://online.ogs.ny.gov/legal/lobbyinglawfaq/default.aspx. The attached Proposal Checklist calls for a signature certifying that the proposer will comply with State Finance Law sections 139-j and 139-k and the

Disclosure of Prior Findings of Non-responsibility form includes a disclosure statement regarding whether the proposer has been found non-responsible under section 139-j of the State Finance Law within the previous four years.

Tax Law Section 5-a - NYSERDA is required to comply with the provisions of Tax Law Section 5-a, which requires a prospective contractor, prior to entering an agreement with NYSERDA having a value in excess of \$100,000, to certify to the Department of Taxation and Finance (the "Department") whether the contractor, its affiliates, its subcontractors and the affiliates of its subcontractors have registered with the Department to collect New York State and local sales and compensating use taxes. The Department has created a form to allow a prospective contractor to readily make such certification. See, ST-220-TD (available at http://www.tax.ny.gov/pdf/current_forms/st/st220td_fill_in.pdf). Prior to contracting with NYSERDA, the prospective contractor must also certify to NYSERDA whether it has filed such certification with the Department. The Department has created a second form that must be completed by a perspective contractor prior to contracting and filed with NYSERDA. See, ST-220-CA (available at

<u>http://www.tax.ny.gov/pdf/current_forms/st/st220ca_fill_in.pdf</u>). The Department has developed guidance for contractors which is available at <u>http://www.tax.ny.gov/pdf/publications/sales/pub223.pdf</u>.

Accessibility Requirements - NYSERDA requires contractors producing content intended to be posted to the Web to adhere to New York State's Accessibility Policy. This includes, but is not limited to, deliverables such as: documents (PDF, Microsoft Word, Microsoft Excel, etc.), audio (.mp3, .wav, etc.), video (.mp4, .mpg, .avi, etc.), graphics (.jpg, .png, etc.), web pages (.html, .aspx, etc.), and other multimedia and streaming media content. For more information, see <u>NYSERDA's Accessibility Requirements</u>.

Limitation - This solicitation does not commit NYSERDA to award a contract, pay any costs incurred in preparing a proposal, or to procure or contract for services or supplies. NYSERDA reserves the right to accept or reject any or all proposals received, to negotiate with all qualified sources, or to cancel in part or in its entirety the solicitation when it is in NYSERDA's best interest. NYSERDA reserves the right to disqualify proposers based upon the results of a background check into publicly available information and the presence of a material possibility of any reputational or legal risk in making of the award.

Disclosure Requirement - The proposer shall disclose any indictment for any alleged felony, or any conviction for a felony within the past five years, under the laws of the United States or any state or territory of the United States, and shall describe circumstances for each. When a proposer is an association, partnership, corporation, or other organization, this disclosure requirement includes the organization and its officers, partners, and directors or members of any similarly governing body. If an indictment or conviction should come to the attention of NYSERDA after the award of a contract, NYSERDA may exercise its stop-work right pending further investigation, or terminate the agreement; the contractor may be subject to penalties for violation of any law which may apply in the particular circumstances. Proposers must also disclose if they have ever been debarred or suspended by any agency of the U.S. Government or the New York State Department of Labor.

Attachments:

- GSHP Rebate Manual
- GSHP Rebate Participation Agreement
- GSHP Rebate Large Project Technical Analysis Form
- GSHP Rebate Small Project Completion Form
- GSHP Rebate Large Project Completion Form
- Guidance on M&V Practices
- Best Practices
- GSHP Rebate Large System Application Guide
- GSHP Rebate Small System Application Guide
- GSHP Contractor Application Guide
- What to Expect When You Are Being Inspected
- Quality Assurance and Technical Requirements Lists
- Quality Assurance Templates
- Setback Requirements



RICHARD L. KAUFFMAN Chair ALICIA BARTON President and CEO

Energy Efficiency and Clean Technology Training Program Opportunity Notice PON 3981 \$7,000,000 Available NYSERDA reserves the right to extend and/or add funding to the

Solicitation should other program funding sources become available.

Proposal Due Dates: May 23, 2019; August 6, 2019; October 22, 2019; January 23, 2020. Due dates beyond May 23, 2019 are subject to funding availability.

Through this Program Opportunity Notice (PON), NYSERDA will provide funding to training providers across the State to ensure that New York energy efficiency and clean technology businesses have an adequate supply of new and existing workers with the necessary occupational skills, credentials and experience to participate in the clean energy economy.

Projects funded through this PON are intended to develop and/or deliver training, hands-on experience and job placement assistance to ensure that new and existing workers have the skills that businesses need and to reduce the risk and expense associated with recruiting, onboarding, training, and retaining workers. Projects will also assist workers by reducing employment barriers and creating pathways to quality jobs. Preference will be given to projects that provide training and job placement services to priority populations, as identified below.

For the purposes of this solicitation:

- "Workers" include those individuals who design, manufacture, specify, sell, distribute, install, operate, maintain, repair, and inspect energy efficiency and clean energy technologies and systems.
- "Priority populations" include the following groups:
 - o Veterans
 - o Native Americans
 - o Individuals with disabilities
 - Low-income individuals, where the household's total income is below or at 60% of the State Medium Income, or the household has been determined eligible for or is receiving assistance through the Home Energy Assistance Program (HEAP), Temporary Assistance for Needy Families (TANF), Supplemental Nutrition Assistance Program (SNAP), or other human service benefit programs.
 - o Unemployed power plant workers
 - o Previously incarcerated individuals
 - 18- to 24-year-olds participating in work preparedness training programs, that include energy related technical training, such as BOCES, technical high schools, Conservation Corps, Youthbuild, AmeriCorps, etc.

In addition to the priority populations identified above, NYSERDA seeks to advance efforts to connect New Yorkers living in environmental justice communities¹ with job opportunities. In addition to the health and other negative impacts to quality of life caused by these environmental burdens, residents of potential environmental justice areas typically face multiple barriers of access to stable, living-wage employment. NYSERDA encourages proposers to include efforts to recruit residents from potential environmental justice areas, as defined by the New York State Department of Environmental Conservation. <u>https://www.dec.ny.gov/public/911.html</u>.

- "Energy efficiency and clean technology" areas that training can address under this PON include high efficiency heating, ventilation, and air conditioning (HVAC); renewable heating and cooling; high efficiency water heating; insulation and air sealing; high efficiency lighting and controls; building automation and controls; smart grid; energy storage; and related areas. All areas of focus for training should have measurable impacts on energy efficiency and reduction in greenhouse gas emissions. Additional targeted areas related to energy efficiency and clean technology areas may be considered if a compelling business case is presented or could be included in the future or addressed in additional PONs.
- "Training providers" providing training in eligible technology areas can include technical high schools, community colleges, universities, trade associations, manufacturers, unions, community-based organizations and non-for-profit organizations with a demonstrated track record in energy-related training and job preparedness or placement.
- Eligible activities that focus on the energy efficiency and clean technology areas identified above include, but are not limited to developing, modifying or implementing curriculum; delivering training (on-line, classroom, on-site, etc.); certification costs, equipment purchase for hands-on training; hiring and training trainers; marketing; internships; job placement services; pre-apprenticeships; and apprenticeships. Funding is also available to simply expand the capacity of existing energy efficiency and clean energy training to meet a demonstrated business need related to hiring new workers or advancing existing workers.

NYSERDA will accept proposals requesting between \$50,000 and \$250,000, with a 30% cost share, for high efficiency heating, ventilation, and air conditioning (HVAC); renewable heating and cooling; high efficiency water heating; insulation and air sealing; high efficiency lighting and controls; building automation and controls; smart grid; energy storage; and related areas. Cost share can be in the form of cash, labor costs, equipment donations, etc. Additional funding may be added to successful projects after the original contract award. Projects are anticipated to be completed within approximately two years.

Proposers <u>must</u> document a relationship with business/industry and the market <u>need</u> for proposed work. Proposals also must include a strategy for hands-on experience and job placement for projects addressing training for new workers.

All training must be designed to meet the needs of energy efficiency and clean energy companies within, or providing services to, the SBC/CEF territories. Training providers in eligible technology areas must have training locations located in System Benefits Charge/Clean Energy Fund (SBC/CEF) service territories, or New York State clean energy training providers that do not pay into the SBC/CEF will be required to document demographic information related to students or businesses served in any project funded under this PON to demonstrate that over 60 percent of the students and clean energy businesses that it will serve either live, or serve customers, in SBC/CEF service territory. If the 60 percent threshold is not met when an initiative is implemented, payments made through a contract may be prorated.

Proposal Submission: Online submission is preferable. Proposers may submit Word, Excel, or PDF files (file formats include: csv, doc, docx, gif, jpeg, jpg, pdf, png, ppt, pptx, pps, ppsx, tif, txt, xls, xlsx, and zip). Individual files should be 100MB or less in file size. Proposal PDFs should be searchable and should be created by direct conversion from MS Word, or other conversion utility. Files should not be scanned. For ease of identification, all electronic files must be named using the proposer's entity name in the title of the document. NYSERDA will also accept proposals by mail or hand-delivery if online submission is not possible. For detailed instructions on how to submit a proposal (online or paper submission), click the link "Application Instructions and Portal Training Guide [PDF]" located in

the "Current Opportunities" section of NYSERDA's website (<u>https://www.nyserda.ny.gov/Funding-Opportunities/Current-Funding-Opportunities.aspx</u>).

No communication intended to influence this procurement is permitted except by contacting Vicki Colello (Designated Contact) at (518) 862-1090, ext. 3273 or by e-mail wfinfo@nyserda.ny.gov or Adele Ferranti at (518) 862-1090, ext. 3206 or by e-mail wfinfo@nyserda.ny.gov (for technical questions). If you have contractual questions concerning this solicitation, contact Nancy Marucci (Designated Contact) at (518) 862-1090, ext. 3335 or NancySolicitations@nyserda.ny.gov. Contacting anyone other than the Designated Contacts (either directly by the proposer or indirectly through a lobbyist or other person acting on the proposer's behalf) in an attempt to influence the procurement: (1) may result in a proposer being deemed a non-responsible offerer, and (2) may result in the proposer not being awarded a contract.

* All proposals must be received by 3 pm Eastern Time on the date noted above. Late, faxed, or emailed proposals will not be accepted. Incomplete proposals may be subject to disqualification. It is the proposer's responsibility to ensure that all pages have been included in the proposal. Please note: for online submission, there are required questions that you will have to answer in addition to uploading attachments, and you should allot at least 60 minutes to enter/submit proposals. The online proposal system closes promptly at 3pm Eastern Time. Files in process or attempted edits or submission after 3 pm Eastern Time on the date above, will not be accepted. If changes are made to this solicitation, notification will be posted on the "Current Opportunities" section of NYSERDA's website (https://www.nyserda.ny.gov/Funding-Opportunities/Current-Funding-Opportunities.aspx.

I. Introduction

Clean energy businesses across the state have reported a shortage of qualified candidates to fill entry level and advanced positions and have cited skills gaps in trained workers as hiring requirements (credentials and experience) have changed and become more rigorous. Training curriculum is not keeping pace with changing business needs, and gaps are seen in both technical training and hands-on experience.

NYSERDA has been conducting research in the market to assess what actions are necessary to build a larger, better-qualified pool of workers for the growing clean energy economy. In discussions with energy businesses, several common issues were cited such as: lack of qualified candidates for open positions; skills gaps, as hiring requirements have changed and increased (credentials and experience); and, a shortage of updated curriculum to keep pace with current business needs.

As reported in the <u>2017 NY Clean Energy Industry Report</u>¹, employers report significant difficulty finding and retaining workers with the necessary skills:

- 75 percent of firms surveyed report overall hiring difficulty over the past 12 months.
- The highest reported deficiencies for open positions at hiring locations were for occupation-specific skills and relevant prior experience.

This difficulty in finding qualified applicants is impeding the growth of clean energy businesses. It is common practice for employers to spend six to twelve months and thousands of dollars to recruit, train and retain workers, leading to:

- Reduced profits
- Lost business opportunities especially related to new technologies/innovation
- Vacancies that are open for longer periods of time, adversely impacting the performance of other workers
- Higher turnover rates

¹ New York Clean Energy Industry Report, 2017, NYSERDA. https://www.nyserda.ny.gov/-/media/Files/Publications/Clean-energy-industry/2017-clean-energy-industry-report.pdf

- Negative impacts on customer service
- Longer times to full productivity for new hires
- Higher soft costs

Creating a talent pipeline, a proactive approach to defining, attracting and developing the right mix of critical talent in a pool of internal and external candidates, can help support and grow businesses throughout the supply chain. Through this funding opportunity, NYSERDA, working with training providers across the State, will create a talent pipeline to ensure that New York energy efficiency and clean technology businesses have an adequate supply of new and existing workers with the necessary occupational skills, credentials and experience to participate in the clean energy economy. NYSERDA also has program initiatives to support businesses hiring new workers and interns to support building a talent pipeline of energy efficiency and clean technology workers.

Projects funded through this PON are intended to develop and/or deliver training, hands-on experience and job placement assistance to ensure that new and existing workers have the skills businesses need, and to reduce the risk and expense associated with recruiting, onboarding, training, and retaining workers. Projects will also assist workers by reducing employment barriers and creating pathways to quality jobs. Preference will be given to projects that provide training and job placement services to priority populations, as identified below.

For the purposes of this solicitation:

- "Workers" include those individuals who design, manufacture, specify, sell, distribute, install, operate, maintain, repair, audit, and inspect energy efficiency and clean energy technologies and systems.
- "Priority populations" of potential new hires include the following groups:
 - o Veterans
 - Native Americans
 - Individuals with disabilities
 - o Formerly incarcerated individuals
 - Low-income individuals, where the household's total income is below or at 60% of the State Medium Income, or the household has been determined eligible for or is receiving assistance through the Home Energy Assistance Program (HEAP), Temporary Assistance for Needy Families (TANF), Supplemental Nutrition Assistance Program (SNAP), or other human service benefit programs.
 - 18- to 24-year-olds participating in work preparedness training programs, that include energy related technical training, such as BOCES, technical high schools, Conservation Corps, Youthbuild, AmeriCorps, etc.

In addition to the priority populations identified above, NYSERDA seeks to advance efforts to connect New Yorkers living in environmental justice communities² with job opportunities. In addition to the health and other negative impacts to quality of life caused by these environmental burdens, residents of potential environmental justice areas typically face multiple barriers of access to stable, living-wage employment. NYSERDA encourages proposers to include efforts to recruit residents from potential environmental justice areas, as defined by the New York State Department of Environmental Conservation. https://www.dec.ny.gov/public/911.html

• "Energy efficiency and clean technology areas" that training can address under this PON include high efficiency heating, ventilation, and air conditioning (HVAC); renewable heating and cooling; high efficiency water heating; insulation and air sealing; high efficiency lighting and controls; building automation and controls; smart grid; energy storage; and related areas. **All areas of focus for training should have**

² A potential environmental justice area is defined as a community with a high population of minority or low-income residents that may bear a disproportionate share of the negative environmental consequences resulting from industrial, municipal and commercial operations or the execution of federal, state, local and tribal programs and policies.

measurable impacts on energy efficiency and reduction in greenhouse gas emissions. Additional targeted areas related to energy efficiency and clean technology areas may be considered if a compelling business case is presented or could be included in the future or addressed in additional PONs.

 "Training providers" (description and requirements in Section II) providing training in eligible technology areas can include technical high schools, community colleges, universities, trade associations, manufacturers, unions, community-based organizations and non-for-profit organizations with a demonstrated track record in energy-related training and job preparedness or placement.

II. Program Requirements

Available Funding, Limitations, and Cost Share Requirements

Total funding for multiple rounds, denoted by proposal due dates for this solicitation is \$7 million. Future rounds of this solicitation may occur subject to funding availability. Additional funds may be added if available at NYSERDA's discretion. If changes are made to this solicitation, notification will be posted on NYSERDA's website at https://www.nyserda.ny.gov/Funding-Opportunities.

NYSERDA will accept proposals requesting between \$50,000 and \$250,000 with a 30% cost share for high efficiency heating, ventilation, and air conditioning (HVAC); renewable heating and cooling; high efficiency water heating; insulation and air sealing; high efficiency lighting and controls; building automation and controls; smart grid; energy storage; and related areas. Proposals in these areas requesting less than \$50,000 or more than \$250,000 will not be considered. Additional funding may be added to successful projects after the original contract award. Projects are anticipated to be completed within approximately two years. NYSERDA anticipates making multiple awards under this solicitation, and all, or none, of the total available funds may be awarded in any round.

Cost share can include cash or in-kind services. Examples of eligible cost share include equipment supplied by manufacturers/businesses for hands-on training, training fees offset by a third party, training organization staff salaries, etc. See "Cost-Sharing" section below for more information.

Funding is available for the services and training activities detailed below. Funding for marketing expenses to attract trainees in programs designed to train new workers will be considered, up to a maximum of five percent (5%) of the total NYSERDA funding.

Food and refreshments, computers (and related equipment such as servers, software, etc.), personal devices and cell phones **are not** eligible for NYSERDA funding. Reasonable, in-state travel is eligible for NYSERDA funding.

All trainings funded under this solicitation must be held in SBC/CEF service territories or, for New York State training locations outside of the SBC/CEF service territory, a New York State clean energy training provider must demonstrate that over 60 percent of the students and clean energy businesses that it will serve either live, or serve customers, in SBC/CEF service territory. **If the 60 percent threshold is not met when an initiative is implemented, payments made through a contract may be prorated.**

All training must be designed to meet the needs of energy efficiency and clean energy companies within, or providing services to, the SBC/CEF territories.

Training Activities Requested

NYSERDA seeks to support a variety of strategies to expand New York's talent pipeline for energy efficiency and clean technology workers under this PON. In general, activities should support: 1) enhancing the skills of existing workers consistent with business needs; and, 2) training and providing job preparedness and placement services to new workers for new jobs identified by businesses.

Eligible activities for which NYSERDA funding can be used must focus on training for the targeted energy efficiency and clean technology areas identified above and can include, but are not limited to: developing, modifying or implementing curriculum; delivering training (on-line, classroom, on-site, etc.); certification costs; equipment purchase for hands-on training; hiring and training trainers; marketing; internships (including costs for administering internships and intern wages); marketing as detailed above; job placement services; preapprenticeships; and apprenticeships. Funding is also available to simply expand the capacity of existing energy efficiency and clean energy training to meet a demonstrated business need related to hiring new workers or advancing existing workers.

Strategies may also include activities to provide training in languages other than English to meet business needs.

Technical training should be developed and implemented as part of a degree, certificate, continuing education, career pathway, apprenticeship or pre-apprenticeship or job preparedness program where possible. Training on professional skills can be combined with technical skills training to meet specific employer needs.

Proposals may also include features such as the work of talent development intermediaries, as described further below, that are guided by business needs and that help bridge the gap between employers and talent. These organizations will help provide clean energy businesses with skilled and motivated job applicants.

Proposers are encouraged to "think outside the box" and propose training that accommodates learners of all types – for example, trainees still in school, transitioning incumbent workers who do not have a lot of free time during the work week to attend classes, etc.

Proposals that include and integrate several of the eligible activities outlined above, as examples, are more likely to have an impact on addressing skills gaps and be sustainable. As a result, such proposals are more likely to be funded than projects that only include one discrete element.

Specific Examples of Potential Projects and Services

- 1. A community college or technical high school that prepares trainees for jobs in the heating, ventilation and air conditioning (HVAC) industry, through a certificate or two-year degree program, may develop a project to add new content on high efficiency HVAC systems, including technologies such as air source heat pumps. The initiative would serve local business needs for more technicians with experience in efficient HVAC technologies. The project could include developing the new curricula, training for trainers, adding new high efficiency equipment to a training laboratory, an internship for trainees that provides opportunities to work with businesses on the new high efficiency technologies, and job placement support through the college's routine relationships with HVAC contractors that hire their trainees. Additionally, this type of project could be designed to significantly increase the number of graduates each year to meet businesses' hiring needs, as long as the program includes high energy efficiency equipment skills training.
- 2. Apprenticeships may be a component of a proposal combined with other strategies, or a single strategy in a proposal. Examples of eligible trades training and apprenticeship programs include Building and Construction, Air Conditioning, Refrigeration and Heating, Electrician, Laborers, Plumbing and Pipefitting, Welding, etc. A new apprenticeship program could be developed (See http://www.labor.ny.gov/apprenticeship/appindex.shtm) or an existing apprenticeship program could be enhanced by: 1) modifying training curriculum to address new opportunities, such as advanced building or lighting controls, building management systems, etc.; 2) training trainers; and, 3) purchasing equipment for hands-on training.
- 3. Various organizations assist businesses with recruiting and assessing potential talent; training/preparing recruits for specific occupations based on a skills gap analysis; and, most importantly, placing talent in jobs and devising a plan for retention and advancement. Such organizations include community-based

groups, hiring halls, faith-based institutions, talent development agencies, workforce development systems, foundations, and other non-profits that act as talent development intermediaries to help connect businesses with skilled and motivated applicants. Strategies for connecting employers with prospective employees, by recruiting and training talent for specific clean energy jobs and facilitating job placement, can assist businesses by reducing costs and risks inherent to locating, training and hiring new workers and are eligible for funding under this PON. A community-based organization that works with employers to find local workers with the right skills could propose a project to provide new workers with the professional and technical skills that meet employers' needs for targeted energy efficiency and clean technology jobs. A proposer might, for example, form an agreement with ten energy efficiency/clean technology businesses that are seeking to hire 50 people in the next two years. A proposal could outline a plan to recruit potential hires, include a strategy for recruiting workers from potential environmental justice communities, provide occupation-specific technical and professional training for recruits, and outline a clear path to a career in energy efficiency or clean technologies. New workers would be given opportunities for hands-on experience through, for example, an internship and then placed in a targeted job. If applicable, supplemental technical training could be provided for new hires once they are placed in jobs, consistent with the employer's needs.

Training Providers Requirements

Training providers submitting proposals, or Applicants, must provide evidence of appropriate qualifications including, but not limited to:

- Experience in integrating new material into existing curricula and/or developing new stand-alone curricula approved by the New York State Department of Education for use at post-secondary education levels
- Accreditation by the NYS Education Department and/or training program accreditation by the Interstate Renewable Energy Council (IREC), the Building Performance Institute (BPI), or other similar national thirdparty entities
- Staff with documented experience in curricula development, delivery and maintenance, and evidencebased learning techniques
- Experience with or a strategy for engaging business and industry partners and professional organizations in training initiatives
- Experience with designing and/or implementing training that leads to additional training as part of a career path, certification, degree, continuing education credits, job experience or job placement.
- Credentialed and experienced staff

Training providers that meet more than one of the qualifications above (or demonstrate other qualifications) are preferred.

III. Proposal Requirements

Proposals must include the following:

- Documented gaps and opportunities in the **energy efficiency and/or clean technology** market for the training being proposed. Proposals should focus on skills identified by employers, occupations and opportunities for job placement or job advancement. Gaps can be demonstrated by feedback from businesses through sector partnership input, surveys, stakeholder meetings, business advisory groups, letters of commitment from businesses that the proposed training will serve, from employers that will place interns or interview trained workers, etc. Engagement by businesses/employers throughout the development and implementation of a training initiative is critical to success.
- Labor market data, job posting data, or other data <u>where available</u> to identify the employee and skills gaps, occupations targeted, regions of the state, and worker populations to be recruited and served.
 Examples of sources for labor market data include: the NYS Department of Labor; CUNY's Center for Urban Research; Workforce Investment Boards; NYC Labor Market Information Service; Burning Glass[®]

Technologies; Indeed; Chmura Economics and Analytics; Cornell University; and Regional Economic Development Councils. It is anticipated that available data will be combined with business input and training experience to make the business case for training.

- Some helpful websites:
 - LMI for Workforce Planning: <u>https://labor.ny.gov/workforcenypartners/lwda/lmi-for-workforce-planning.shtm</u>
 - Regional Labor Market Analysts: <u>https://www.labor.ny.gov/stats/lslma.shtm</u>
- Details on the population(s) the proposal is targeting to create a talent pipeline, by region, including any priority populations (as identified in Section I) to be trained and prepared for jobs.
- A description of the strategies to recruit trainees/workers for training in the target populations identified and plan/tasks for developing a pipeline of trainees to meet business demands.
- Teaming with employers for either upskilling existing workers or placement for new workers. Any proposals designed to prepare new workers for clean energy jobs MUST have: a hands-on experience element; a job placement plan with demonstrable connections to businesses that have job openings; and letters of commitment from employers to interview trainees that meet the job requirements.
- A plan for tracking trainees placed in new jobs for a minimum of 12 months.

<u>Proposers must address the proposal requirements listed above in **Attachment A**, which includes sections on: Background/Objectives; Scope of Work (sample is included within Attachment B); Schedule; Qualifications; Project Benefits; Budget; Cost-Sharing; Reporting; Letters of Commitment, etc. Unnecessary attachments beyond those sufficient to present a complete, comprehensive, and effective response will not influence the evaluation of the proposal.</u>

In compliance with §139-j and §139-k of the State Finance Law (see Section V, General Conditions below for additional information), proposers will be required to answer questions during proposal submission, which will include making required certification under the State Finance Law and to disclose any Prior Findings of Non-Responsibility.

Cost-Sharing

Proposals must show non-NYSERDA funding of at least 30 percent of the total cost of the project. Cost-sharing can be from the proposer, other team members, and other government or private sources. Contributions of direct labor (for which the laborer is paid as an employee) and purchased materials may be considered "cash" contributions. Unpaid labor, indirect labor, or other general overhead may be considered "in-kind" contributions. NYSERDA will not pay for efforts which have already been undertaken. The proposer or proposing team cannot claim as cost share any expenses that have already been incurred. Proposers should show the cost-sharing plan in the recommended format, which is included in **Attachment A**.

IV. Proposal Evaluation

Proposals that meet solicitation requirements will be reviewed by a Scoring Committee using the Evaluation Criteria below. At NYSERDA's discretion, proposers may be requested to interview with all or part of the Scoring Committee to address any potential questions or clarify items outlined in the proposals. Proposers will be notified if they are requested to attend an interview. NYSERDA may request additional data or material to support proposals.

After the proposals are reviewed, NYSERDA will inform each proposer of the results within approximately eight weeks. Applicants receiving favorable evaluations may be asked to address specific questions or recommendations of the Scoring Committee or make modifications to the Scope of Work before being awarded funding. NYSERDA reserves the right to accept or reject any or all proposals received, to negotiate with all qualified sources, or to cancel the PON in part or in its entirety when it is in NYSERDA's best interest.

If a proposal meets the requirements of this solicitation, including the following, then it will be reviewed and ranked:

SBC/CEF requirements as described above must be met for all eligible technology areas.

- 1. Proposers must identify and justify the market need/business demand for occupational skills training for new or existing workers, related to specific energy efficiency and clean technology jobs as defined in Section I.
- 2. Applications that include training for new workers for specific energy efficiency and clean energy jobs with employers must include: a) clear worker experience and job placement plans/goals for new workers being trained; 2) commitment from an employer or employers to interview trainees that met the job requirements; and, c) a plan to track new hires once they have been placed in jobs.
- 3. Proposers must demonstrate partnerships with an employer or employers and the link between training efforts and energy efficiency and clean technology skills gaps identified by employers. Letters of commitment from industry/business must be included in the application.

Additionally, NYSERDA reserves the right to accept or reject proposals based on the following factors:

- The degree to which pricing and hourly rates are in line with the rest of the market.
- Distribution of participants across multiple sectors, throughout the supply chain, technology areas addressed, and geographic distribution across NYS to ensure that projects selected for funding optimize the use of available funding to achieve programmatic objectives.
- Changing market needs related to the state's energy goals.

NYSERDA can also limit the number of awards per applicant.

Evaluation Criteria

Documentation of Skills and Employment Gaps/Need for Training – 24 points

Has the proposer clearly outlined the gaps and opportunities in the market for the proposed training? Does the proposed strategy clearly address the identified skills gaps?

Has the proposer adequately described the strategy for building energy efficiency and clean technology training capacity (curriculum, trainers, equipment) in NYS that is employer-led and based on the occupational skills necessary to support business demands?

Has the proposer provided evidence such as labor market intelligence or employer input to show the need for training?

For needs related to hiring new employees, has the proposer demonstrated a commitment from employers to interview trainees that meet the job requirements?

Cost – 20 points

Is the budget section of the proposal clear and responsive?

Is the estimated cost per student served reasonable?

Has adequate cost-sharing been documented?

Has the proposer shown it is leveraging existing resources, building on programs currently available?

Proposer Qualifications - 20 points

Does the proposer have an existing network of sites where training can be conducted? If so, are the training facilities self-sustaining?

Will hands-on experiential learning be implemented?

Are proposed training sites located in SBC/CEF utility service territories?

If the proposer does not pay into the SBC/CEF, does the proposal have a plan for demonstrating that at least 60 percent of the students who will take the training reside in/will work in SBC/CEF service territory? Does the proposer have documented experience in developing and implementing technical training?

Are resumes of proposed trainers included?

Are the education and experience of key personnel relevant to the training needs?

Is the overall capability of the training staff adequate and appropriate?

Has the proposer/team demonstrated recent experience designing and developing relevant training curricula? Has the proposer/team demonstrated recent experience in developing, marketing and delivering training to postsecondary education trainees or new or existing workers?

Scope of Work – 20 points

Does the Scope of Work (SOW) have well-defined tasks and deliverables to serve the goals of this solicitation? Are sufficient resources (staff, facilities, etc.) being devoted to the SOW and each individual task? Has the proposer provided plans for granting CEUs for trainings it will conduct, if applicable? Did proposer outline a strategy for continuation of the program after NYSERDA funding has ended? Does the SOW include clear worker experience and job placement tasks/goals/deliverables for new workers being trained?

Does the SOW included tasks and deliverables to track new hires once they have been placed in jobs?

Efforts to Train and Place Priority Populations that Need Assistance Entering the Energy Efficiency and Clean Technology Market – 11 points

Does the proposal contain a reasonable plan to identify opportunities to train or advance the skills of priority populations as described in the PON and to place them in jobs?

Does the proposal include a plan to recruit from potential environmental justice communities?

Other – 5 points

What is the proposer's previous experience with NYSERDA, if any? Does proposal contain a plan to provide training in other languages? Does proposal include training to accommodate various learners' needs? Does the proposal integrate multiple elements such as curriculum development, training trainers, apprenticeships, etc.?

Has the proposer demonstrated a good grasp of market needs?

V. GENERAL CONDITIONS

Proprietary Information - Careful consideration should be given before confidential information is submitted to NYSERDA as part of your proposal. Review should include whether it is critical for evaluating a proposal, and whether general, non-confidential information, may be adequate for review purposes. The NYS Freedom of Information Law, Public Officers law, Article 6, provides for public access to information NYSERDA possesses. Public Officers Law, Section 87(2)(d) provides for exceptions to disclosure for records or portions thereof that "are trade secrets or are submitted to an agency by a commercial enterprise or derived from information obtained from a commercial enterprise and which if disclosed would cause substantial injury to the competitive position of the subject enterprise." Information, should be identified and labeled "Confidential" or "Proprietary" on each page at the time of disclosure. This information should include a written request to except it from disclosure, including a written statement of the reasons why the information should be excepted. See Public Officers Law, Section 89(5) and the procedures set forth in 21 NYCRR Part 501 https://www.nysERDA-Regulations.ashx. However, NYSERDA cannot guarantee the confidentiality of any information submitted.

Omnibus Procurement Act of 1992 - It is the policy of New York State to maximize opportunities for the participation of New York State business enterprises, including minority- and women-owned business enterprises, as bidders, subcontractors, and suppliers on its procurement Agreements.

Information on the availability of New York subcontractors and suppliers is available from:

Empire State Development Division for Small Business 625 Broadway Albany, NY 12207

A directory of certified minority- and women-owned business enterprises is available from:

Empire State Development Minority and Women's Business Development Division 625 Broadway Albany, NY 12207

State Finance Law sections 139-j and 139-k - NYSERDA is required to comply with State Finance Law sections 139-j and 139-k. These provisions contain procurement lobbying requirements which can be found at https://online.ogs.ny.gov/legal/lobbyinglawfaq/default.aspx Proposers are required to answer questions during proposal submission, which will include making required certification under the State Finance Law and to disclose any Prior Findings of Non-Responsibility (this includes a disclosure statement regarding whether the proposer has been found non-responsible under section 139-j of the State Finance Law within the previous four years).

Tax Law Section 5-a - NYSERDA is required to comply with the provisions of Tax Law Section 5-a, which requires a prospective contractor, prior to entering an agreement with NYSERDA having a value in excess of \$100,000, to certify to the Department of Taxation and Finance (the "Department") whether the contractor, its affiliates, its subcontractors and the affiliates of its subcontractors have registered with the Department to collect New York State and local sales and compensating use taxes. The Department has created a form to allow a prospective contractor to readily make such certification. See, ST-220-TD (available at http://www.tax.ny.gov/pdf/current_forms/st/st220td_fill_in.pdf). Prior to contracting with NYSERDA, the

prospective contractor must also certify to NYSERDA whether it has filed such certification with the Department.

The Department has created a second form that must be completed by a prospective contractor prior to contacting and filed with NYSERDA. See, ST-220-CA (available at http://www.tax.ny.gov/pdf/current_forms/st/st220-CA (available at http://www.tax.ny.gov/pdf/current_forms/st/st220-CA (available at http://www.tax.ny.gov/pdf/current_forms/st/st220-CA (available at http://www.tax.ny.gov/pdf/current_forms/st/st220ca_fill_in.pdf). The Department has developed guidance for contractors which is available at http://www.tax.ny.gov/pdf/publications/sales/pub223.pdf .

Contract Award - NYSERDA anticipates making multiple awards under this solicitation. NYSERDA anticipates a contract duration of at least two years, unless NYSERDA management determines a different structure is more efficient based upon proposals received. A contract may be awarded based on initial applications without discussion, or following limited discussion or negotiations pertaining to the Statement of Work. Each proposal should be submitted using the most favorable cost and technical terms. NYSERDA may request additional data or material to support applications. NYSERDA will use the Sample Agreement to contract successful proposals. NYSERDA may at its discretion elect to extend and/or add funds to any project funded through this solicitation. NYSERDA reserves the right to limit any negotiations to exceptions. Proposers should keep in mind that acceptance of all standard terms and conditions will generally result in a more expedited contracting process. NYSERDA expects to notify proposers in approximately eight weeks from the proposal due date whether your proposal has been selected to receive an award. NYSERDA may decline to contract with awardees that are delinquent with respect to any obligation under any previous or active NYSERDA agreement.

Accessibility Requirements - If awardees from this solicitation will be posting anything on the web, or if the awardee will produce a final report that NYSERDA will post to the web, the following language must be included. NYSERDA requires contractors producing content intended to be posted to the Web to adhere to New York State's Accessibility Policy. This includes, but is not limited to, deliverables such as: documents (PDF, Microsoft Word, Microsoft Excel, etc.), audio (.mp3, .wav, etc.), video (.mp4, .mpg, .avi, etc.), graphics (.jpg, .png, etc.), web pages

(.html, .aspx, etc.), and other multimedia and streaming media content. For more information, see <u>NYSERDA's</u> <u>Accessibility Requirements</u>.

Limitation - This solicitation does not commit NYSERDA to award a contract, pay any costs incurred in preparing a proposal, or to procure or contract for services or supplies. NYSERDA reserves the right to accept or reject any or all proposals received, to negotiate with all qualified sources, or to cancel in part or in its entirety the solicitation when it is in NYSERDA's best interest. NYSERDA reserves the right to reject proposals based on the nature and number of any exceptions taken to the standard terms and conditions of the Sample Agreement. NYSERDA reserves the right to disqualify proposers based upon the results of a background check into publicly available information and the presence of a material possibility of any reputational or legal risk in making of the award.

Disclosure Requirement - The proposer shall disclose any indictment for any alleged felony, or any conviction for a felony within the past five years, under the laws of the United States or any state or territory of the United States and shall describe circumstances for each. When a proposer is an association, partnership, corporation, or other organization, this disclosure requirement includes the organization and its officers, partners, and directors or members of any similarly governing body. If an indictment or conviction should come to the attention of NYSERDA after the award of a contract, NYSERDA may exercise its stop-work right pending further investigation or terminate the agreement; the contractor may be subject to penalties for violation of any law which may apply in the particular circumstances. Proposers must also disclose if they have ever been debarred or suspended by any agency of the U.S. Government or the New York State Department of Labor.

Vendor Assurance of No Conflict of Interest or Detrimental Effect - The proposer shall disclose any existing or contemplated relationship with any other person or entity, including any known relationships with any member, shareholders of 5% or more, parent, subsidiary, or affiliated firm, which would constitute an actual or potential conflict of interest or appearance of impropriety, relating to other clients/customers of the proposer or former officers and employees of NYSERDA, in connection with proposer's rendering services as proposed. If a conflict does or might exist, please describe how your company would eliminate or prevent it. Indicate what procedures will be followed to detect, notify NYSERDA of, and resolve any such conflicts.

The proposer must disclose whether it, or any of its members, or, to the best of its knowledge, shareholders of 5% or more, parents, affiliates, or subsidiaries, have been the subject of any investigation or disciplinary action by the New York State Commission on Public Integrity or its predecessor State entities (collectively, "Commission"), and if so, a brief description must be included indicating how any matter before the Commission was resolved or whether it remains unresolved.

Public Officers Law – For any resulting awards, the Contractor and its subcontractors shall not engage any person who is, or has been at any time, in the employ of the State to perform services in violation of the provisions of the New York Public Officers Law, other laws applicable to the service of State employees, and the rules, regulations, opinions, guidelines or policies promulgated or issued by the New York State Joint Commission on Public Ethics, or its predecessors (collectively, the "Ethics Requirements"). Proposers are reminded of the following Public Officers Law provision: contractors, consultants, vendors, and subcontractors may hire former NYSERDA employees. However, as a general rule and in accordance with New York Public Officers Law, former employees of NYSERDA may neither appear nor practice before NYSERDA, nor receive compensation for services rendered on a matter before NYSERDA, for a period of two years following their separation from NYSERDA service. In addition, former NYSERDA employees are subject to a "lifetime bar" from appearing before any state agency or authority or receiving compensation for services regarding any transaction in which they personally participated or which was under their active consideration during their tenure with NYSERDA.

Any awardee will be required to certify that all of its employees, as well as employees of any subcontractor, whose subcontract is valued at \$100,000 or more who are former employees of the State and who are assigned to perform services under the resulting contract, shall be assigned in accordance with all Ethics Requirements. During the term of any agreement, no person who is employed by the contractor or its subcontractors and who is disqualified from providing services under the contract pursuant to any Ethics Requirements may share in any net

revenues of the contractor or its subcontractors derived from the contract. NYSERDA may request that contractors provide it with whatever information the State deems appropriate about each such person's engagement, work cooperatively with the State to solicit advice from the New York State Joint Commission on Public Ethics, and, if deemed appropriate by the State, instruct any such person to seek the opinion of the New York State Joint Commission on Public Ethics. NYSERDA shall have the right to withdraw or withhold approval of any subcontractor if utilizing such subcontractor for any work performed would be in conflict with any of the Ethics Requirements. NYSERDA shall have the right to terminate any contract at any time if any work performed is in conflict with any of the Ethics Requirements.

VI. Attachments:

Attachment A – Funding Application Form Attachment B – Sample Agreement including Exhibit A - Template Statement of Work Attachment C – Budget Form

New York State Energy Research and Development Authority

Albany

17 Columbia Circle, Albany, NY 12203-6399 (P) 1-866-NYSERDA | (F) 518-862-1091

nyserda.ny.gov | info@nyserda.ny.gov

Buffalo 726 Exchange Street Suite 821 Buffalo, NY 14210-1484 (P) 716-842-1522 (F) 716-842-0156 New York City 1359 Broadway 19th Floor New York, NY 10018-7842 (P) 212-971-5342 (F) 518-862-1091

West Valley Site

Management Program 9030-B Route 219 West Valley, NY 14171-9500 (P) 716-942-9960 (F) 716-942-9961 New York State Energy Research and Development Authority (NYSERDA)

Clean Energy Communities Program Guidance Document

Program Opportunity Notice (PON) 3298

Revised April 15, 2019

APPLICATION DUE DATES

Clean Energy Communities Program: NYSERDA will accept applications for PON 3298 on a rolling basis until 3:00p.m. Eastern Time on September 30, 2019, until funds are exhausted, or until the solicitation is revised by NYSERDA, whichever comes first.



TABLE OF CONTENTS

INTRODUCTION

PRO	GRAM REQUIREMENTS	.3
	Eligible Applicants	.3
	Funding Levels	.3
	Application Process	.4

STEP 1: BECOME A CLEAN ENERGY COMMUNITY	6
Complete Four of Ten High-Impact Actions	6
Benchmarking	7
Clean Energy Upgrades	8
LED Street Lights	9
Clean Fleets	10
Solarize, Clean Heating and Cooling, or Solar for All Campaign	11
Unified Solar Permit	12
Energy Code Enforcement Training	13
Climate Smart Communities Certification	14
Community Choice Aggregation	15
Energize NY Finance	16

STEP 2: ACCESS GRANT FUNDING	17
Eligible Project Types	17
Ineligible Project Types	17
Proposal Requirements	17
Selection Criteria	
Project Benefits Metrics Report	

ENERAL CONDITIONS

INTRODUCTION

NYSERDA's Clean Energy Communities program is an opportunity for local governments to earn recognition and grant funding by demonstrating leadership in the area of clean energy. NYSERDA has identified ten high-impact actions that local governments can take to save money, create jobs, and improve the environment. High-impact actions include tracking of energy use in municipal buildings, training for improved energy code enforcement, and policies to support solar energy, among others. By completing four of the ten high-impact actions, the applying jurisdiction may earn the Clean Energy Community designation in addition to a grant of between \$5,000 and \$250,000 with no local cost share, to support additional clean energy projects. To earn the Clean Energy Community designation, at least two (2) of the high-impact actions must be completed after August 1, 2016. Funding is set aside to provide grants to 18 communities in each of New York State's Regional Economic Development Council (REDC) regions except for the New York City region where only New York City is eligible for a grant.

To help municipal staff prioritize and implement the high-impact actions and navigate the program, expert guidance is provided by dedicated and knowledgeable, local Clean Energy Communities Coordinators, at no cost to the local government. To access this support, please send an email to <u>cec@nyserda.ny.gov</u>.

High-Impact Action Toolkits, including step-by-step guidance, important forms, template legislation, and case studies, are available at <u>www.nyserda.ny.gov/cec</u>.

To check how many grants are currently available, please check the Clean Energy Communities - <u>Remaining Awards page</u> on NYSERDA's website.

The state-wide Clean Energy Communities Program is funded through the Regional Greenhouse Gas Initiative (RGGI) and the Clean Energy Fund (CEF).

PROGRAM REQUIREMENTS

Eligible Applicants

Municipalities (county, city, town, village, or Native American tribes and nations located within NYS) in New York State are eligible to apply for funds. Municipalities may form partnerships and submit a joint proposal, but one entity must be identified as the lead applicant on behalf of the group or consortium. A single municipality, or a group or consortium of municipalities, may choose to designate a non-municipal entity (private, non-profit, etc.) to be the lead applicant, but the lead applicant must provide letters of support from each municipality involved in the project. The lead applicant, if successful, will have a contractual obligation to NYSERDA and will act as the main point of contact for NYSERDA for all project-related matters. Municipalities who have previously received funding through Cleaner, Greener Communities PON 3106 Category 2 Flexible Funding Pilots are not eligible for funding under this solicitation. However, these municipalities are encouraged to apply for the Clean Energy Community designation.

Funding Levels

In each of New York State's Regional Economic Development Council (REDC) Regions, funding levels are as follows:

Municipality Size by Population	Numb in eac	Block 1 Awards Number of Awards in each Region and Amount		Block 2 Awards Number of Awards in each Region and Amount		<u>Block 3 Awards</u> 100 Awards Total - No more than 25 Awards in each Region
Large (40,000+)	2	\$250,000		2	\$150,000	¢5,000
Small/Medium (0-39,999)	4	\$100,000		10	\$50,000	\$5,000

Communities in Nassau and Suffolk Counties: PSEG Long Island is supporting grant awards for local governments in Nassau and Suffolk Counties except municipal utility communities (Village of Freeport, Village of Rockville Centre, and Village of Greenport) which NYSERDA will support.

Communities in Albany, Rensselaer, Columbia and Greene Counties: \$837,150 of additional grant funds are available through Lafarge Mitigation Funds for local governments in Albany, Rensselaer, Columbia and Greene Counties. This additional funding is made available through the settlement of a lawsuit by the State of New York against Lafarge North America, Inc.

- Up to \$30,000 in additional grant funds are available to each local government in these counties that has been designated a Clean Energy Community on a first-come first-serve basis until such funds are exhausted.
- Eligible projects to receive additional grant funds shall include those projects that meet the criteria of the Clean Energy Communities Program and that pertain to energy efficiency and/or air pollution reduction.
- Local governments in Albany, Rensselaer, Columbia and Greene Counties are eligible for the Block 3 grants described below as well as the \$30,000 Lafarge awards.

Block 3 Awards: \$500,000 of additional grant funds are available.

- Once all Block 1 and 2 awards are claimed in either the Large or Small/Medium categories in a region, a \$5,000 grant ("Block 3 grant") is available to each eligible local government that is designated a Clean Energy Community on a first-come first-serve basis until such funds are exhausted; Block 3 grant applicants need not meet the selection criteria applicable to earlier awards, but need only show Clean Energy Community designation.
- For example, after all Block 1 and 2 awards are claimed in the Small/Medium category in a region (even if Block 1 or 2 awards remain in the Large category), a Small/Medium community that earns the Clean Energy Community designation may earn a \$5,000 grant on a first-come first-serve basis until such funds are exhausted. Likewise, after all Block 1 and 2 awards are claimed in the Large category in a region (even if Block 1 or 2 awards remain in the Small/Medium category), a Large community that earns the Clean Energy Community designation may earn a \$5,000 grant on a first-come first-serve basis until such funds are exhausted.
- Up to 25 local governments in each REDC region may receive Block 3 grants
- Block 3 grants may be awarded retroactively to eligible local governments.
- Block 3 grants will be paid upon receipt of the CEC Grant Application. Local governments in Albany, Rensselaer, Columbia and Greene Counties that are awarded a Block 3 grant will have their Block 3 grant added to their \$30,000 Lafarge grant, until such time as the Lafarge grants are all claimed.
- Local governments are encouraged to use the Block 3 grant to offset the costs of the local government's clean energy activities.

How to Apply for Block 3: Local governments that are eligible for a Block 3 award shall complete and email a Clean Energy Communities Grant Application and W-9 form to <u>cec@nyserda.ny.gov</u> within 90 days of award notification or lose their funding.

Grants are available to designated Clean Energy Communities on a first-come-first-served basis until the funds are exhausted. NYSERDA reserves the right to adjust funding levels and eligibility criteria as necessary to ensure the success of the program. Any changes to this solicitation will be posted on the Clean Energy Communities website at www.nyserda.ny.gov/cec.

Questions

Program questions may be directed to Bradford Tito at 866-NYSERDA ext. 3545 or Bradford.Tito@nyserda.ny.gov.

Contractual questions may be directed to Thomas Rood at 866-NYSERDA ext. 3621 or Thomas.Rood@nyserda.ny.gov.

Application Process

The application process includes two steps. The first step is to document completion of at least four high-impact actions to earn the Clean Energy Community designation. Please visit <u>www.nyserda.ny.gov/cec</u> to submit action item documentation. In the second step, once you have been designated a Clean Energy Community, you are eligible to apply for a grant at <u>www.nyserda.ny.gov/cec</u>.

NYSERDA will accept applications on a rolling basis until 3:00p.m. Eastern Time on September 30, 2019, until funds are exhausted, or until the solicitation is revised by NYSERDA, whichever comes first.

STEP 1: BECOME A CLEAN ENERGY COMMUNITY

Demonstrate that you have completed at least four of the ten high-impact actions by submitting the required documentation at <u>www.nyserda.ny.gov/cec</u>. To earn the Clean Energy Community designation, at least two (2) of the high-impact actions must be completed after August 1, 2016. Applicants are encouraged to submit documentation in stages as each high-impact action is completed.

STEP 2: ACCESS GRANT FUNDING

Once the applying jurisdiction receives email confirmation that it has earned the Clean Energy Community designation, **the applicant has three months** to submit a proposal for grant funding at <u>www.nyserda.ny.gov/cec</u>. Proposals will be evaluated based on the listed selection criteria. Projects must be ready to commence within six months of NYSERDA award notification and should be completed within three years of contract execution.

STEP 1: BECOME A CLEAN ENERGY COMMUNITY

Complete Four of Ten High-Impact Actions

To become a Clean Energy Community, the applicant must demonstrate completion of at least four of the ten highimpact actions listed below by submitting the requested documentation using the online submittal form at <u>www.nyserda.ny.gov/cec</u>. To earn the Clean Energy Community designation, at least two (2) of the high-impact actions must be completed after August 1, 2016. More information on how to meet the requirements for each high-impact action, including what documentation is required, is provided on separate pages following the high level list below. Applicants are encouraged to submit documentation in stages as each high-impact action is completed. NYSERDA may independently verify completion of any high-impact action. NYSERDA may inspect or confirm the validity of the information provided or request additional information at any time. For assistance implementing these actions including technical support and toolkits that include step-by-step guidance, case studies, and template legislation, please visit <u>www.nyserda.ny.gov/cec</u>.

The High-Impact Actions include:

1. Benchmarking

Adopt a policy to report the energy use of municipal buildings on an annual basis. Large-population communities, as defined on page 7, may adopt legislation requiring the annual disclosure of energy use in large private buildings.

2. Clean Energy Upgrades

Achieve a 10 percent reduction in the greenhouse gas emissions from municipal buildings through energy efficiency upgrades and renewable energy.

3. LED Street Lights

Convert at least half of the municipal cobra-head-style street lights within the jurisdiction to energy-efficient LED technology.

4. Clean Fleets

Install at least one EV charging station with two Level 2 charging ports and/or other alternative fuel infrastructure or deploy at least one alternative fuel vehicle in the municipal fleet.

5. Solarize, Clean Heating and Cooling, or Solar for All Campaign

Undertake a Solarize, Clean Heating and Cooling, or Solar for All campaign to increase the number of customers that are benefiting from clean energy in the jurisdiction. Eligible Clean Heating and Cooling technologies include ground source heat pumps, air source heat pumps, solar heating and cooling, or biomass.

6. Unified Solar Permit

Adopt the New York State Unified Solar Permit to streamline the approvals process for local solar projects.

7. Energy Code Enforcement Training

Train code compliance officers in best practices in energy code enforcement through a structured training program provided by NYSERDA.

8. Climate Smart Communities Certification

Earn Climate Smart Community (CSC) Certification through compliance with this robust, comprehensive rating system.

9. Community Choice Aggregation

Transition to a cleaner, more affordable energy supply by facilitating the aggregated purchase of a 100% renewable electric supply for residential and small commercial customers within the jurisdiction.

10. Energize NY Finance

Allows property owners to pay back the cost of clean energy upgrades to their commercial or non-profit property through a special charge on their property tax bill.

1

Benchmarking

Applicable to All Communities

Rationale

Benchmarking is a policy that a local government adopts that requires the annual reporting of energy used in municipal buildings. In large communities, local governments may require the annual disclosure of energy used in large private buildings. It's important because buildings account for over 60% of the energy used in New York State. Setting up a system for measuring and sharing data on building energy use over time will allow owners and occupants to compare energy usage against other buildings, and better identify opportunities to cut energy waste. Collecting, reporting, and sharing benchmarking data regularly also helps the public and government agencies make smarter investment decisions, reward efficiency, and drive widespread, continuous improvement.

Requirements

Demonstrate completion of the Benchmarking action by submitting the following documentation:

For small and medium-size communities (0-39,999 population) and all county governments

Submit a copy of an executed local law, ordinance, or resolution (template legislation can be accessed in the Benchmarking toolkit at <u>www.nyserda.ny.gov/cec</u>) that requires the applying jurisdiction to make available to the public on the internet on an annual basis, energy use information for each municipal building that is owned or occupied by the applying jurisdiction that is 1,000 square feet or larger. At a minimum, publicly disclosed energy use information shall include each building's energy use intensity (EUI), annual greenhouse gas emissions, and an energy performance score where available. The legislation must require the following:

Benchmark

- Create an ENERGY STAR Portfolio Manager Account
- Gather basic information required by Portfolio Manager and set up property profile(s)
- Obtain monthly, whole building energy use data for all fuel types including, but not limited to, electricity, natural gas, fuel oil, chilled water, steam, and diesel
- Enter property uses and details into profile(s)
- Enter energy use data for all fuel types

Report

- Generate and review the building's report in Portfolio Manager
- Submit the report to the municipality through Portfolio Manager
- Make available to the public on the internet annual summary statistics for each covered property including Energy Use Intensity (EUI), annual greenhouse gas emissions, an energy performance score where available, and other descriptive information as required by Portfolio Manager

For large-size cities, towns, and villages (40,000+ population)

Submit a copy of an executed local law, ordinance, or resolution (template legislation can be accessed in the Benchmarking toolkit at <u>www.nyserda.ny.gov/cec</u>) as described for small and medium-size communities above, and/or to establish the same requirement for the owners of commercial and multifamily buildings 25,000 square feet or larger.

Date of Completion

• Date of completion for this action is defined as the date the legislation was fully adopted.

Recommendations

• Use benchmarking data to identify buildings with the greatest opportunity for energy and cost savings.

Resources

- Dedicated and knowledgeable local Clean Energy Coordinators are available to assist municipal staff as they implement this action. To access this support, please send an email to <u>cec@nyserda.ny.gov</u>.
- A toolkit of resources is available at <u>www.nyserda.ny.gov/cec</u>.

Clean Energy Upgrades

Applicable to All Communities

Rationale

Clean Energy Upgrades are energy efficiency and renewable energy projects in municipal buildings and facilities. By replacing outdated equipment with new smart and efficient technology, municipalities are well positioned to save energy and money over time. State programs can help get these projects accomplished with no or low up-front cost while generating net savings to your bottom line. Everything from municipal headquarters to public works facilities, fire stations, police precincts, parks facilities, and even water treatment plants are good candidates for upgrades. Perhaps most important, Clean Energy Upgrades show leadership and contribute to more sustainable communities.

Requirements

Demonstrate completion of the Clean Energy Upgrades action by submitting the following documentation:

- Submit an ENERGY STAR Portfolio Manager benchmarking report including energy use information for each municipal building that is owned or occupied by the applying jurisdiction that is 1,000 square feet or larger. The report shall include each building's energy use intensity (EUI), annual greenhouse gas emissions, and an energy performance score where available. The report should cover at least 12 months but not more than 36 months of energy use of the portfolio from the year(s) prior to the commencement date of the upgrades as the baseline.
- Submit succinct and relevant documentation that demonstrates a minimum 10 percent reduction in greenhouse gas emissions against the baseline with projects that are substantially complete by the date of submission. The documentation may include 1) an ASHRAE Energy Audit, 2) an approved pre-and-post engineering study that identifies implemented Energy Conservation Measures, 3) an executed contract or agreement, or 4) comparable information.
- Submit a complete Clean Energy Upgrades Calculator, available in the Clean Energy Upgrades toolkit at www.nyserda.ny.gov/cec. Please be sure to complete the most recent version. Information requested will include, but is not limited to, specific equipment or infrastructure upgrades and estimated energy savings of implemented measures.
- The required reduction in greenhouse gas emissions may be achieved with renewable energy sources including solar, community distributed generation (CDG), wind, geothermal, premium-efficiency wood pellets, anaerobic digester gas, or renewable energy certificates (RECs) which are retired on behalf of the Municipality in a <u>New York State Generation Attribute Tracking System</u> (NYGATS) Account (with reports on such retirements to the Municipality) in a manner that is compliant with the environmental attributes and delivery rules of the New York Public Service Commission Environmental Disclosure Program. The electrical energy associated with the renewable energy certificates must be consumed at retail in New York State.
- The upgrades must have been substantially complete after January 1, 2014.

Date of Completion

• Date of completion for this action is defined as the date the project achieves substantial completion.

Recommendations

- The New York Power Authority (NYPA) provides turn-key energy efficiency upgrades to municipal buildings of qualifying jurisdictions. Working closely with your team, NYPA and their contractors handle every aspect of design and construction. NYPA offers low-interest rate financing and projects can typically be accomplished with no or low up-front cost while generating net savings to your bottom line.
- Energy performance contracts can also be used to procure energy savings and facility improvements with no or low up-front capital costs.
- Consult your utility to identify incentives that may be available for energy efficiency improvements.

- Dedicated and knowledgeable local Clean Energy Coordinators are available to assist municipal staff as they implement this action. To access this support, please send an email to <u>cec@nyserda.ny.gov</u>.
- A toolkit of resources is available at <u>www.nyserda.ny.gov/cec</u>.

LED Street Lights

Applicable to communities that pay for the electricity for most street lights within the jurisdiction

Rationale

By replacing conventional street lights with energy efficient LED technology, communities can reduce street light energy use by as much as 65 percent, generating cost savings and emission reductions. In addition, street light projects can contribute to creating a well-lit, safer, and more attractive community. LED street lights last up to 100,000 hours and require much less maintenance than conventional street lights. The opportunity to incorporate smart, connected technology such as dimming functions, enhanced law enforcement response, and parking management offers a world of almost unlimited possibilities. Even those communities that do not own their own streetlights have options for converting street lights in their jurisdiction to LED.

Requirements

Demonstrate completion of the LED Street Lights action by submitting the following documentation:

- Submit a completed LED Street Light Certification Form (accessed in the LED Street Lights toolkit at <u>www.nyserda.ny.gov/cec</u>) or comparable information demonstrating that a minimum of 50 percent of all municipal and utility-owned cobra-head-style street lights have been converted to LED within the geographic jurisdiction. This documentation should include the number of street lights converted, including the proportion of converted cobra-head street lights to total cobra-head street lights.
- A minimum of 10 fixtures must be converted to LED to qualify per jurisdiction.

Date of Completion

• Date of completion for this action is defined as the date on which 50 percent of the streetlights or, for those communities with less than 20 streetlights, 10 fixtures were converted to LED.

Recommendations

- Consult with NYSERDA regarding which LED conversion and technology options make the most sense to meet your economic and operational goals.
- Check with your utility regarding options for converting street lights to LED.
- Municipalities that do not own their own street lights may pursue a negotiated agreement with their utility for transfer of ownership of the complete system of street lights and supporting infrastructure.
- Energy performance contracts may be used to upgrade street light systems with no or low up-front capital costs. Consider coupling the street light conversion with clean energy upgrades to municipal buildings or water / wastewater treatment infrastructure as part of a portfolio approach.
- The New York Power Authority (NYPA) offers a program to convert street lights to LEDs using low-interest rate financing.

- Dedicated and knowledgeable local Clean Energy Coordinators are available to assist municipal staff as they implement this action. To access this support, please send an email to <u>cec@nyserda.ny.gov</u>.
- A toolkit of resources is available at <u>www.nyserda.ny.gov/cec</u>.

Clean Fleets

Applicable to All Communities

Rationale

Clean Fleets is an effort by local governments to invest in alternative fuel vehicles and infrastructure while increasing opportunities for constituents to access electric vehicle charging stations. Compared to gasoline-powered cars, Electric Vehicles (EVs) are more energy efficient and cost about 50 to 70% less to operate per mile. Clean vehicles reduce greenhouse gas emissions and pollutants that cause smog and acid rain. Charging stations are being installed at a wide variety of locations across New York State. In communities large and small, urban and rural, there are sites well-suited to hosting charging stations.

Requirements

Demonstrate completion of the Clean Fleets action by submitting the following documentation:

Submit a completed Clean Fleets Certification Form (accessed in the Clean Fleets toolkit at <u>www.nyserda.ny.gov/cec</u>) or comparable information to demonstrate municipal provision of at least one electric vehicle charging station or compressed natural gas (CNG) fueling station. Electric vehicle charging stations must consist of either two (2) or more Level 2 charging ports or one (1) or more DC fast charge ports. Equipment may have been installed at any time prior to the application date, but must be active at the time of submittal. The municipality must own or lease the equipment. Alternative fuel supply infrastructure may be used for government operations or public use.

OR

• Submit a completed Clean Fleets Certification Form (accessed in the Clean Fleets toolkit at <u>www.nyserda.ny.gov/cec</u>) or comparable information to demonstrate municipal deployment of at least one alternative fuel vehicle in the municipality's fleet. Qualifying alternative fuel vehicles include plug-in hybrid vehicles, battery-electric vehicles, and CNG vehicles. Vehicles must be manufactured for use primarily on public streets, roads, and highways and have a maximum speed capability of at least fifty-five miles per hour. Vehicles may have been purchased or leased at any time prior to the application date, but must be active at the time of submittal.

Date of Completion

Date of completion for this action is defined as the date the equipment became operational.

Recommendations

- Applicants should gauge local and regional demand for alternative fueling stations and consider the most appropriate fuel type for the area.
- The first step in supporting alternative fuel transportation infrastructure is assessing the demand for and feasibility of an alternative fueling station.

- Dedicated and knowledgeable local Clean Energy Coordinators are available to assist municipal staff as they implement this action. To access this support, please send an email to <u>cec@nyserda.ny.gov</u>.
- A toolkit of resources is available at <u>www.nyserda.ny.gov/cec</u>.

Solarize, Clean Heating and Cooling, or Solar for All Campaign

Applicable to All Communities

Rationale

Community-scale campaigns can be an effective way to encourage adoption of new, innovative technologies to generate value and savings for consumers while advancing New York's clean energy goals. Solarize, Clean Heating and Cooling, and Solar for All each provide a model for how consumers can gain increased access to clean energy. Solarize is a short-term, local effort that brings together groups of potential solar customers through widespread outreach and education. Clean Heating and Cooling campaigns are aimed at getting groups of homes and businesses to install clean heating and cooling technologies including ground source heat pumps, air source heat pumps, solar heating and cooling, or biomass. Solar for All offers income-eligible households the opportunity to subscribe to community solar at no cost. Solar for All participants receive monthly credits on their electricity bills and there are no upfront costs, fees, or payments to participate. Well-organized campaigns are a great way to be active and visible in your community.

Requirements

Demonstrate completion of this action as follows:

- Submit documentation to demonstrate direct municipal participation in a campaign. Documentation should be dated and may include one or more of the following: a press release, a flyer from an event hosted by the jurisdiction, a website screenshot, a local press article, a passed resolution, information from a NYSERDA application referencing the municipality's role if the municipality is not the applicant (or the application itself, if the municipality is the applicant), or comparable information.
- For Solarize and Clean Heating and Cooling campaigns only, the applying jurisdiction must submit a completed Customer List (a template is available in the Solarize, Clean Heating and Cooling, or Solar for All Campaign toolkit at <u>www.nyserda.ny.gov/cec</u>) that includes the required number (see table below) of rooftop solar customers, Community Distributed Generation (CDG) customers, or customers installing Clean Heating and Cooling technologies including ground source heat pumps, air source heat pumps, solar heating and cooling, or biomass. The Customer List must include the location, name of the installer, and either the date contract was signed, the date the project was installed, the date the installation was permitted, or the date the NY Sun, <u>Ground Source Heat Pump Rebate, Air Source Heat Pump Program</u>, or <u>Renewable Heat NY</u> application was submitted.
- For Solar for All campaigns, a Customer List is not required. NYSERDA will independently verify 1) that the
 required number of customers have signed up or been placed on a wait list for Solar for All within the
 jurisdiction and 2) that these customers signed up after the date on which the applying jurisdiction began its
 campaign. Solar for All is only available for customers that pay the Systems Benefit Charge (SBC) on their electric
 bill and is not available on Long Island or in Municipal Utility communities.
- Submit a completed Solarize, Clean Heating and Cooling, or Solar for All Campaign Scoping Document which is available in the Solarize, Clean Heating and Cooling, or Solar for All Campaign toolkit at <u>www.nyserda.ny.gov/cec</u>). Before the applying jurisdiction starts the planning process, please send an email to <u>cec@nyserda.ny.gov</u> with a draft Scoping Document to allow NYSERDA an opportunity to provide feedback.

	Number of Required Customers		
Community Size	Solarize (Rooftop or CDG)	Clean Heating and Cooling	Solar for All
Large (40,000+)	10	10	25
Small/Medium (0-39,999)	10	5	10

Number of Required Customers

Date of Completion

• Date of completion for this action is defined as the date on which the campaign was launched.

Recommendations

• Team up with individuals, organizations, and nearby jurisdictions.

- Dedicated and knowledgeable local Clean Energy Coordinators are available to assist municipal staff as they implement this action. To access this support, please send an email to <u>cec@nyserda.ny.gov</u>.
- A toolkit of resources is available at <u>www.nyserda.ny.gov/cec</u>.

Unified Solar Permit

Applicable to All Communities that Enforce the Uniform Code for Private Buildings

Rationale

The Unified Solar Permit (revised October 2016) is a standardized permit application designed to streamline the approval process for installing solar in the community. The standardized permit is expected to cut costs by creating a uniform permitting process in municipalities across the State. As municipalities adopt the permit, installers and municipalities alike will save time and resources permitting solar electric systems. An expedited process will allow these standard systems to pass quickly though the jurisdictional review process, freeing up time for all involved parties, decreasing the overall installation time for customers, and allowing non-standard systems the necessary time for detailed review.

Requirements

Demonstrate completion of the Unified Solar Permit action by submitting the following documentation:

- Submit a copy of an executed local law, ordinance, or resolution adopting the New York State Unified Solar Permit (the permit can be accessed in the Unified Solar Permit toolkit at www.nyserda.ny.gov/cec)
- Submit a copy of the Unified Solar Permit being used by the applying jurisdiction.
- Please note that an updated version of the New York State Unified Solar Permit was released in October 2016. NYSERDA will only accept the new version of the permit.

Date of Completion

• Date of completion for this action is defined as the date on which the Unified Solar Permit was adopted.

Recommendations

- Review the NY-Sun Solar Guidebook for Local Governments which is a useful reference containing supporting
 documents for local governments and code officials. In addition to the New York State Unified Solar Permit, the
 guidebook includes topics such as roof top solar access requirements for firefighters and first responders,
 information on the Real Property Tax Law 487 exempting solar PV systems, a fact sheet for Agricultural Districts,
 a fact sheet for landowners considering solar leases, information on land use planning, and a model solar energy
 law.
- Consider a flat fee that fairly reflects the time needed for municipal staff to review and issue the solar permit.
- Post information on your website about the permit application process including timelines for permit application review and issuance.

- Dedicated and knowledgeable local Clean Energy Coordinators are available to assist municipal staff as they implement this action. To access this support, please send an email to <u>cec@nyserda.ny.gov</u>.
- A toolkit of resources is available at <u>www.nyserda.ny.gov/cec</u>.



Energy Code Enforcement Training

Applicable to All Communities that Enforce the Uniform Code for Private Buildings

Rationale

The Energy Code is a minimum building standard for energy efficiency, applicable to new construction and renovation of commercial and residential buildings in New York State. The Energy Code is a complex document and one of nine building codes in New York State, making implementation and enforcement complex and time consuming. Since buildings represent roughly 60% of New York's total energy consumption, there is significant opportunity for energy savings through improved Energy Code compliance.

Requirements

Demonstrate completion of the Energy Code Enforcement Training action as follows:

For small and medium-size communities (0-39,999 population)

At least one code official must complete a NYSERDA-approved Clean Energy Communities Energy Code Enforcement Training series including both residential and commercial workshops. Small and medium-size communities that enrolled in the Energy Code Enforcement Training prior to August 8, 2017 may complete the requirements as they were originally defined at enrollment, provided the community completes the training by April 1, 2018, or they have the option of participating in the offering as described above.

For large-size communities (40,000+ population)

This training module begins with a preliminary orientation meeting and is followed by collaborative plans review and joint onsite inspection (the footing and foundation inspection and the final inspection are not eligible) of two (2) building projects, followed by a close-out meeting summarizing the results of the module, including key considerations and guidance for moving forward. The local code enforcement officer and at least two other municipal staff, officials, or planning board and zoning board of appeals members must participate in the preliminary meeting and close-out meeting. The entire building department staff is encouraged to participate in all aspects of the training.

Submit a copy of the notification of completion email, or comparable information to earn credit for this action. For more information or to enroll in the training program, please send an email to <u>cec@nyserda.ny.gov</u> or visit <u>www.nyserda.ny.gov/cec</u>.

Date of Completion

• Date of completion for this action is defined as the date of the notification of completion email.

Recommendations

• Offer to host a training workshop by sending an email to <u>cec@nyserda.ny.gov</u>.

- Dedicated and knowledgeable local Clean Energy Coordinators are available to assist municipal staff as they implement this action. To access this support, please send an email to <u>cec@nyserda.ny.gov</u>.
- A toolkit of resources is available at <u>www.nyserda.ny.gov/cec</u>.

Climate Smart Communities Certification

Applicable to All Communities

Rationale

The Climate Smart Communities Certification (CSC) program provides local governments with a robust framework to guide their climate action and enables high-performing communities to achieve recognition for their leadership. Designed around the CSC pledge elements, the certification program recognizes communities for their accomplishments.

Requirements

Demonstrate completion of the Climate Smart Communities Certification action by submitting the following documentation:

- Submit a screenshot of the New York State Department of Environmental Conservation (NYSDEC) website or comparable information, that demonstrates your community has been listed as a Certified Climate Smart Community.
- For communities that have already been listed as Certified Climate Smart Communities, achieving a higher level of Climate Smart Communities Certification after August 1, 2016 shall be counted as a new action.

Date of Completion

• Date of completion for this action is defined as the date on which NYSDEC provides notification to the community regarding its achievement of a certification level.

Recommendations

• For more information, please visit the DEC website at http://www.dec.ny.gov/energy/56876.html. If you are interested in Climate Smart Communities, please contact the DEC Office of Climate Change at (518) 402-8448 or by email at climatechange@dec.ny.gov.

- Dedicated and knowledgeable local Clean Energy Coordinators are available to assist municipal staff as they implement this action. To access this support, please send an email to <u>cec@nyserda.ny.gov</u>.
- A toolkit of resources is available at <u>www.nyserda.ny.gov/cec</u>.

Community Choice Aggregation

Applicable to all Cities, Towns, and Villages

Rationale

Community Choice Aggregation (CCA) allows local governments to choose where the energy comes from for their community. CCA is a municipal energy procurement model that replaces the utility as the default supplier of electricity for virtually all homes and small businesses within your jurisdiction. CCA puts control of choosing energy supply in local hands. By pooling demand, communities build the clout necessary to negotiate lower rates with private suppliers, and are able to choose cleaner energy. A CCA can allow whole communities to participate in the clean energy economy by ensuring that a greater percentage of electricity is coming from renewable sources. CCA has the potential to simultaneously deliver lower monthly bills and cleaner energy for your constituents.

Requirements

Demonstrate completion of the CCA action by submitting the following documentation:

- Submit a copy of the adopted legislation authorizing the municipality's participation in an opt-out CCA program.
- Submit a copy of an executed electric service agreement between the applying jurisdiction and an Energy Services Company (ESCO) to supply electricity to participating customers on an opt-out basis that is a default 100% renewable clean energy product mix. The ESCO electric service agreement should provide that the ESCO will retire renewable energy certificates (RECs) on behalf of the Municipality in a <u>New York State Generation</u> <u>Attribute Tracking System</u> (NYGATS) Account (with reports on such retirements to the Municipality) in a manner that is compliant with the environmental attributes and delivery rules of the New York Public Service Commission Environmental Disclosure Program. The electrical energy associated with the renewable energy certificates must be consumed at retail in New York State.
- For communities that are already part of a CCA, executing a new contract or an addendum to the electric services agreement or a new contract after August 1, 2016 shall be counted as a new action.

Date of Completion

• Date of completion for this action is defined as the date on which the electric service agreement or addendum is fully executed.

Recommendations

• Consider partnerships to maximize value by offering CCA customers a range of clean energy products and services including community distributed generation (CDG) subscriptions and energy efficiency.

- Dedicated and knowledgeable local Clean Energy Coordinators are available to assist municipal staff as they implement this action. To access this support, please send an email to <u>cec@nyserda.ny.gov</u>.
- A toolkit of resources is available at <u>www.nyserda.ny.gov/cec</u>.

Energize NY Finance

Applicable to All Eligible Communities

Rationale

Energize NY Finance, also known as Property Assessed Clean Energy (PACE) Financing, is a program adopted by an eligible local government that allows property owners to pay back the cost of clean energy upgrades to their commercial or non-profit property. Energize NY Finance enables eligible commercially-owned buildings in New York State to secure funds to tackle significant energy upgrades and renewable energy projects. This financing structure is available through the Energy Improvement Corporation (EIC) for projects that aim to install permanent improvements that reduce energy costs in existing buildings. EIC is a local development corporation and a New York State nonprofit established specifically to assist municipalities and property owners achieve long-term energy savings and/or generate renewable power for use on site.

Requirements

Demonstrate completion of the Energize NY Finance action by submitting the following documentation:

• Submit a copy of the official letter from the Energy Improvement Corporation (EIC) confirming the local government's EIC membership or a screenshot of EIC's Participating Municipalities webpage that shows the applying jurisdiction listed as a current member.

Date of Completion

• Date of completion for this action is defined as the date the local government became an EIC member.

Recommendations

- If you are interested in establishing an Energize NY Finance program, please contact the Energy Improvement Corporation at (914) 302-7300 or by email at <u>info@energizeny.org</u>.
- Once adopted, promote Energize NY Finance as part of your community's economic development strategy.

- Dedicated and knowledgeable local Clean Energy Coordinators are available to assist municipal staff as they implement this action. To access this support, please send an email to <u>cec@nyserda.ny.gov</u>.
- A toolkit of resources is available at <u>www.nyserda.ny.gov/cec</u>.

STEP 2: ACCESS GRANT FUNDING

Applicants must earn the Clean Energy Community designation to be eligible for grant funding under this program. Once the applying jurisdiction receives email confirmation that it has earned the Clean Energy Community designation, **the applicant has three months** to submit a proposal for grant funding at <u>www.nyserda.ny.gov/cec</u>. Projects must be ready to commence within six months of award notification and should be complete within three years of contract execution. At NYSERDA's discretion, one extension of up to two months may be granted. Extension requests should be in writing to <u>cec@nyserda.ny.gov</u> and submitted at least two weeks prior to the deadline. It should outline the reasons for the extension and the amount of time requested. Communities that miss the submission deadline without having received an approved extension are at risk of losing their funding. No local cost share is required and up to 25% of the grant funds may be available as an advanced payment upon contract execution, subject to recapture for non-compliance or non-performance.

Eligible Project Types

Applicants must propose a project(s) or initiative(s) for funding. Good projects will score highly when evaluated according to the criteria outlined in the section of this document entitled "Selection Criteria."

Ineligible Project Types

Projects that do not meet the Selection Criteria outlined in the section of this document entitled "Selection Criteria" are not eligible.

Proposal Requirements

Projects will be scored and awarded on a rolling basis. No project or applicant is guaranteed funding. Applications will be reviewed as outlined below.

- The grant application is available at <u>www.nyserda.ny.gov/cec</u>.
- Attachments to PON 3298, described in more detail on the website, include the following:
 - o Grant Application (Attachment A)
 - Statement of Work (SOW) (Attachment B)
 - o Sample Agreement (Attachment C)
- A Signed Letter of Commitment(s) must be submitted in addition to Attachments A and B.
- NYSERDA may reach out to applicants via email with specific follow-up questions after reviewing proposals. Should NYSERDA request additional information, applicants will have five business days to respond in order for that information to be considered in the evaluation process.
- Applicants must earn a minimum of 60% of available selection criteria points to be considered eligible. If a proposal is found to be incomplete or if it does not earn a minimum of 60% of available selection criteria points, the applicant may reapply within two months of notification.
- Review meetings will be held periodically, on at least a quarterly basis, depending on the volume of applications.
- NYSERDA may condition awards upon applicant acceptance of requests for minor modifications to project scopes to ensure that NYSERDA program goals are met. NYSERDA reserves the right to request additional information.
- Eligible projects must meet the Minimum Requirements for standard project types as stated in the Statement of Work (SOW) (Attachment B).
- NYSERDA reserves the right to reject proposals that would otherwise be eligible for other existing NYSERDA or other New York State funding opportunities.
- NYSERDA, in order to avoid double-funding projects or measures within projects, may adjust awarded funding amounts at any time based on new information regarding other project funding secured.
- NYSERDA reserves the right to adjust award amounts at its sole discretion.
- Proposer shall not be reimbursed for expenses incurred prior to contract execution.
- Applicants must agree, or provide written exceptions, to NYSERDA's standard contracting Terms and Conditions, which can be found at <u>www.nyserda.ny.gov/cec</u>.

Selection Criteria

Applications will be evaluated based on the following criteria, with a total number of possible points allocated to each, as well as compliance with the minimum performance requirements stated in the sample SOW (Attachment B). Applicants must earn a minimum of 60% of the selection criteria points to be considered eligible.

- 1. To what extent does the proposer present a thorough, sound, detailed approach for accomplishing the objectives of their proposal within a reasonable timeframe? (25 possible points)
 - Is the project clearly and concisely defined?
 - Are project costs justified based on expected benefits?
 - Is the budget broken down by Task to match the Tasks established in the scope of work?
 - Is there an estimate of the timeframe for completing different phases of the project including the design phase and the construction/implementation phase?
- 2. To what extent does the project/initiative have a positive direct impact on energy use and greenhouse gas emissions? (30 possible points)
 - Is the proposal likely to achieve direct greenhouse gas emission reductions greater than 1 ton of CO2 equivalent annually per 10,000 residents?
 - Does the proposal provide a clear estimate along with a brief description/methodology to support these estimates, of annual energy savings and greenhouse gas emission reduction?
 - Does the proposal include an implementation component, not only a study or plan?
- 3. To what extent will efforts be made to collaborate with other municipalities and to transfer knowledge to the broader region and state? (15 possible points)
 - To what extent does the municipality provide specific tools and resources that other municipalities can use to facilitate collaboration or develop their own projects?
 - Is there a strategy in place to promote the project so that several other municipalities are made aware?
 - Will the municipality host an open house, presentation, website posting, or webinar to describe best practices and lessons learned from the project?
- 4. To what extent does the proposal involve an innovative and/or replicable approach? (15 possible points)
 - Does the project have the potential for wide-scale replication?
 - To what extent does the proposer document the potential for replication?
 - Does the proposal include a well-articulated strategy to overcome key barriers and to catalyze a market to achieve economic and environmental benefits through economies of scale?
- 5. To what extent will the project/initiative leverage public and private dollars and/or generate economic development benefits (i.e. temporary or permanent job creation and investment)? (15 possible points)
 - Does the proposal include cost-sharing? If cost-sharing is included, is it documented in the contract budget form?
 - Does the project provide direct economic development benefits including job creation or retention, savings, investment, or multiplier affects?
 - Approximately how many temporary or permanent jobs is the project likely to create?

Performance Requirements

In addition to the criteria above, projects will be assessed to determine if they comply with the performance requirements included in the Statement of Work (Attachment B) template posted to the CEC website. This template includes performance requirements for standard project types including conversion of street lights to LED, installation of solar, purchase of electric vehicles, installation of electric vehicle charging stations, and implementation of energy efficiency projects. Other projects may be proposed and approved. However, when a project includes a standard project type, clear expectations will ensure cost-effective projects are designed and implemented in a manner consistent with NYSERDA standards and best practices.

Metrics Report

It is important to begin considering project benefits at the application stage. Anticipated benefits associated with Clean Energy Communities projects shall be measured. Each successful applicant shall submit preliminary (design) and final (completion) quantified documentation of the benefits of the project, including greenhouse gas reductions and energy savings, determined and documented in Exhibit E of Attachment B, Statement of Work (SOW), which can be found on the <u>www.nyserda.ny.gov/cec</u> webpage. Each successful applicant shall design the project to achieve the benefits identified in these submissions. NYSERDA will use the Metrics Report to: assess activities in the project, capture the extent of benefits delivered, and gauge performance of the project and of the CEC Program. If requested, the Contractor shall coordinate with the NYSERDA Project Manager to schedule a date for a site inspection. NYSERDA may also request applicable documentation including, but not limited to, photos of the funded project components.

GENERAL CONDITIONS

Proprietary Information: Careful consideration should be given before confidential information is submitted to NYSERDA as part of your proposal. Review should include whether it is critical for evaluating a proposal, and whether general, non-confidential information, may be adequate for review purposes. The NYS Freedom of Information Law, Public Officers law, Article 6, provides for public access to information NYSERDA possesses. Public Officers Law, Section 87(2)(d) provides for exceptions to disclosure for records or portions thereof that "are trade secrets or are submitted to an agency by a commercial enterprise or derived from information obtained from a commercial enterprise and which if disclosed would cause substantial injury to the competitive position of the subject enterprise." Information submitted to NYSERDA that the proposer wishes to have treated as proprietary and confidential trade secret information, should be identified and labeled "Confidential" or "Proprietary" on each page at the time of disclosure. This information should include a written request to except it from disclosure, including a written statement of the reasons why the information should be excepted. See Public Officers Law, Section 89(5) and the procedures set forth in 21 NYCRR Part 501 http://www.nyserda.ny.gov/About/-/media/Files/About/Contact/NYSERDA-Regulations.ashx. However, NYSERDA cannot guarantee the confidentiality of any information submitted.

Procurement Lobbying Requirements - State Finance Law sections 139-j and 139-k

NYSERDA is required to comply with State Finance Law sections 139-j and 139-k. These provisions contain procurement lobbying requirements which can be found at

http://www.ogs.ny.gov/aboutogs/regulations/advisoryCouncil/StatutoryReferences.html

The attached Proposal Checklist calls for a signature certifying that the proposer will comply with State Finance Law sections 139-j and 139-k and the Disclosure of Prior Findings of Non-responsibility form includes a disclosure statement regarding whether the proposer has been found non-responsible under section 139-j of the State Finance Law within the previous four years.

Tax Law Section 5-a – NYSERDA is required to comply with the provisions of Tax Law Section 5-a, which requires a prospective contractor, prior to entering an agreement with NYSERDA having a value in excess of \$100,000, to certify to the Department of Taxation and Finance (the "Department") whether the contractor, its affiliates, its subcontractors and the affiliates of its subcontractors have registered with the Department to collect New York State and local sales and compensating use taxes. The Department has created a form to allow a prospective contractor to readily make such certification. *See,* ST-220-TD (available at http://www.tax.ny.gov/pdf/current_forms/st/st220td_fill_in.pdf). Prior to contracting with NYSERDA, the prospective contractor must also certify to NYSERDA whether it has filed such certification with the Department. The Department has created a second form that must be completed by a prospective contractor prior to contacting and filed with NYSERDA. *See,* ST-220-CA (available at http://www.tax.ny.gov/pdf/current_forms/st/st220.cg fill in.pdf. The Department has developed guidance for contractor prior to contacting and filed with NYSERDA. *See,* ST-220-CA (available at http://www.tax.ny.gov/pdf/current_forms/st/st220.cg fill in.pdf.

Omnibus Procurement Act of 1992 - It is the policy of New York State to maximize opportunities for the participation of New York State business enterprises, including minority- and women-owned business enterprises, as bidders, subcontractors, and suppliers on its procurement Agreements.

Information on the availability of New York subcontractors and suppliers is available from:

Empire State Development Division For Small Business 625 Broadway Albany, NY 12207

A directory of certified minority- and women-owned business enterprises is available from:

Empire State Development Minority and Women's Business Development Division 625 Broadway Albany, NY 12207

Contract Award

NYSERDA may award a contract based on initial applications without discussion, or following limited discussion or negotiations pertaining to the Statement of Work (Attachment B). Each offer should be submitted using the most favorable cost and technical terms. NYSERDA may request additional data or material to support applications. NYSERDA will use the Sample Agreement (Attachment C) to contract successful proposals. NYSERDA reserves the right to limit any negotiations to exceptions to standard terms and conditions in the Sample Agreement to those specifically identified in the submitted proposal. Proposers should keep in mind that acceptance of all standard terms and conditions will generally result in a more expedited contracting process. NYSERDA may decline to contract with awardees that are delinquent with respect to any obligation under any previous or active NYSERDA agreement.

Accessibility Requirements

NYSERDA requires contractors producing content intended to be posted to the Web to adhere to New York State's Accessibility Policy. This includes, but is not limited to, deliverables such as: documents (PDF, Microsoft Word, Microsoft Excel, etc.), audio (.mp3, .wav, etc.), video (.mp4, .mpg, .avi, etc.), graphics (.jpg, .png, etc.), web pages (.html, .aspx, etc.), and other multimedia and streaming media content. For more information, see <u>NYSERDA's Accessibility</u> <u>Requirements</u>.

Limitation

This solicitation does not commit NYSERDA to award a contract, pay any costs incurred in preparing a proposal, or to procure or contract for services or supplies. NYSERDA reserves the right to accept or reject any or all proposals received, to negotiate with all qualified sources, or to cancel in part or in its entirety the solicitation when it is in NYSERDA's best interest. NYSERDA reserves the right to reject proposals based on the nature and number of any exceptions taken to the standard terms and conditions of the Sample Agreement.

Disclosure Requirement

The proposer shall disclose any indictment for any alleged felony, or any conviction for a felony within the past five years, under the laws of the United States or any state or territory of the United States, and shall describe circumstances for each. When a proposer is an association, partnership, corporation, or other organization, this disclosure requirement includes the organization and its officers, partners, and directors or members of any similarly governing body. If an indictment or conviction should come to the attention of NYSERDA after the award of a contract, NYSERDA may exercise its stop-work right pending further investigation, or terminate the agreement; the contractor may be subject to penalties for violation of any law which may apply in the particular circumstances. Proposers must also disclose if they have ever been debarred or suspended by any agency of the U.S. Government or the New York State Department of Labor.

Disclaimer

All projects must address the qualifications and eligibility requirements listed in this Guidance Document. NYSERDA reserves the right to issue revisions to this solicitation at any time. Any revisions will be announced and posted on NYSERDA's website at <u>www.nyserda.ny.gov</u>. High-Impact Actions may be adjusted, phased out, or newly developed based on a variety of factors including, but not limited to, new opportunities to help communities drive local energy action, level of uptake in communities relative to other actions, changes in the regulatory environment, consistency with

NYSERDA and other New York State agency program offerings, and availability of external assistance, such as federal programs, tools, and resources.

Additional Resources

All program resources and guidelines can be found on the Clean Energy Communities webpage at the following location: <u>www.nyserda.ny.gov/cec</u>. All other questions about this solicitation should be submitted to NYSERDA, in writing, at <u>cec@nyserda.ny.gov</u>.

Attachments

Attachment A – Grant Application Attachment B – Statement of Work (SOW) Attachment C – Sample Agreement



Commercial New Construction Program Opportunity Notice (PON) 3609

\$38,678,748

NYSERDA reserves the right to extend and/or add funding to the Solicitation should other program funding sources become available.

Applications accepted 12/30/2017 through 12/31/2020 by 3:00 PM Eastern Time*

Program Summary:

The Commercial New Construction Program Opportunity Notice PON 3609 offers objective technical and financial support to building owners to effect a permanent transformation in the way buildings are designed and constructed in New York State. Technical support is offered on a first-come, first-served basis, subject to funding availability. Financial support is formally committed at the time NYSERDA issues a written pre-approval of the financial offer.

Application Submission:

Applicants must complete the Consolidated Funding Application (CFA) online at: http://www.nyserda.ny.gov/Funding-Opportunities/Consolidated-Funding-Application.aspx.

Assistance to answer questions on the Consolidated Funding Application is available at 1-866-NYSERDA (toll free), or via email at <u>cfa@nyserda.ny.gov</u>. Please reference Consolidated Funding Application for the Commercial New Construction Program.

No communication intended to influence this procurement is permitted except by contacting Stephen Finkle (Designated Contact) at (518) 862-1090, ext. 3505 or by e-mail <u>StephenNC@nyserda.ny.gov</u>, or Zachary Zill (Designated Contact) at (518) 862-1090, ext. 3092 or by e-mail <u>ZacharyNC@nyserda.ny.gov</u> (for technical questions). If you have contractual questions concerning this solicitation, contact Venice Forbes (Designated Contact) at (518) 862-1090, ext. 3507 or <u>VeniceSolicitations@nyserda.ny.gov</u> Contacting anyone other than the Designated Contacts (either directly by the proposer or indirectly through a lobbyist or other person acting on the proposer's behalf) in an attempt to influence the procurement: (1) may result in a proposer being deemed a non-responsible offerer, and (2) may result in the proposer not being awarded a contract.

* All applications must be received by 3:00 PM Eastern Time on the date noted above. Late, faxed, or emailed proposals will not be accepted. Incomplete proposals may be subject to disqualification. It is the proposer's responsibility to ensure that all pages have been completed/included in the application. Please note: for online submission, there are required questions that you will have to answer in addition to uploading attachments and you should allot at least 60 minutes to enter/submit applications. The online application system closes promptly at 5pm, files in process or attempted edits or submission after 3:00 PM Eastern Time on the date above, will not be accepted. If changes are made to this solicitation, notification will be posted on the "Current Opportunities" section of NYSERDA's website (https://www.nyserda.ny.gov/Funding-Opportunities/Current-Funding-Opportunities.aspx.

I. Introduction:

The Commercial New Construction Program Opportunity Notice PON 3609 offers objective technical and financial support to building owners to effect a permanent transformation in the way buildings are designed and constructed in New York State. Technical support is offered on a first-come, first-served basis, subject to funding availability. Financial support is formally committed at the time NYSERDA issues a written pre-approval of the financial offer.

II. Program Requirements:

ELIGIBLE PROJECTS

The Commercial New Construction Program is available for new construction and substantial renovations of commercial and institutional buildings in New York State.

New Construction - defined as a project involving a new building, or space within a new building, for which a registered architect or professional engineer has prepared and certified building plans. **Substantial Renovations** - defined as one of the following types of projects where a registered architect or professional engineer has prepared and certified building plans for:

- o Change of use and reconstruction of an existing building or space within;
- Construction work of a nature requiring that the building or space within be out of service for at least 30 consecutive days; or
- Reconstruction of a vacant structure or space within.

APPLICANT ELIGIBILITY

State, federal and local governments, businesses, not-for-profit and private institutions, public and private schools, colleges and universities and health care facilities that are electricity customers of a participating utility company, and that pay, or will pay, into the electric System Benefits Charge are eligible for support.

Customers in areas affected by a utility natural gas moratorium may be eligible for enhanced programs in the recently announced Clean Energy Action Plan. This includes Consolidated Edison Company of New York, Inc., ("Con Ed") customers in Southern Westchester and New York State Electric and Gas Corporation ("NYSEG") customers in Lansing, NY. Please use the tool located at <u>http://www.nyserda.ny.gov/ActionPlan</u> to determine your eligibility.

To ensure eligibility to participate NYSERDA requests that applications be submitted at the schematic design phase or earlier.

Applicants may not obtain financial support for the same energy efficiency measure through other NYSERDA programs or from programs offered by their local utility.

III. Application Requirements

APPLICATION MANAGEMENT

At no cost to the Applicant, a NYSERDA representative will be assigned to the project to assist Applicants. The representative will interface with the technical consultant (see below), review scopes of work and studies, and be available to answer questions from the Applicant.

TECHNICAL SUPPORT

NYSERDA provides technical support, which may require a cost share from the Applicant, to help Applicants and

their design teams assess and determine appropriate energy efficiency opportunities for the building. Applicants may select a technical consultant from a list maintained by NYSERDA, or may utilize the services of a provider of their choice, subject to NYSERDA approval. Technical support is also available for Applicants who incorporate Integrated Project Delivery in the project design and construction; and for commissioning of advanced heating, ventilating and air conditioning (HVAC) controls.

 Integrated Project Delivery (IPD) - as defined and described in Integrated Project Delivery – An Updated Working Definition, Version 3 Updated 7/15/14, published by the American Institute of Architects California Council. Copies are available through the California Council at www.aiacc.org.

FINANCIAL SUPPORT

NYSERDA provides financial support for deep energy savings and zero net site energy projects (see Attachment D: Commercial New Construction Support). Financial support is based upon the anticipated energy performance of the building relative to a designated baseline. Financial support covers a portion of the incremental costs of energy efficiency measures. Incremental costs are defined as the difference in cost between measures that would meet the designated baseline condition and the more efficient measures that will be installed in the building. Additional financial support is also available to offset a portion of the Applicant's cost for commissioning of advanced HVAC controls, to offset a portion of the Applicant's cost to include and execute Integrated Project Delivery in the building design, and to offset a portion of the Applicant's cost to incorporate a full range of Smart Building features in the project. See definitions below:

- **Designated Baseline** ASHRAE 90.1-2013 Appendix G (as amended) or the version of ASHRAE 90.1 Appendix G under which the project is permitted, whichever is later.
- **Zero Net Energy** projects where annually the energy generated by renewable on-site or distributed generation resources matches the building energy consumption.
- **Deep Energy Savings** projects where the predicted energy savings exceed the designated baseline by a percentage as stipulated in the project support summary.
- Smart Building an intelligent building which interconnects HVAC, lighting, plug loads, fire & life safety, security & access, people movement, analytics & management and smart metering to transform efficiency, comfort and safety for people and assets (source: Intel Corporation, Continental Automated Buildings Association Board Member)
- All-Electric Projects a project which excludes all fossil fuels from the building design.

NYSERDA will provide written pre-approval of energy efficiency measures qualified for financial support prior to measure installation. The pre-approval will be in the form of an Offer Letter. NYSERDA will not provide financial support for measures that are installed prior to NYSERDA issuance of the Offer Letter. Upon NYSERDA review and approval of the completed installation and supporting documents, a check or electronic transfer will be issued to the Applicant.

SUPPORT LEVELS

Support levels are categorized according to project size and complexity. Refer to Attachment D for descriptions and opportunities associated with each support level.

PROJECT INSPECTION, MEASUREMENT AND VERIFICATION

For projects receiving financial support, upon project completion NYSERDA may perform a field inspection to confirm installation of the energy efficiency measures. Financial support payments may be adjusted if measures are not installed or operating, or if project designs do not achieve stipulated performance targets.

All Applicants must provide site access to NYSERDA staff or its contractors after project completion for the measurement and verification.

IV. GENERAL CONDITIONS

GENERAL CONDITIONS

Proprietary Information - Careful consideration should be given before confidential information is submitted to NYSERDA as part of your application. Review should include whether it is critical for evaluating an application, and whether general, non-confidential information, may be adequate for review purposes.

The NYS Freedom of Information Law, Public Officers law, Article 6, provides for public access to information NYSERDA possesses. Public Officers Law, Section 87(2)(d) provides for exceptions to disclosure for records or portions thereof that "are trade secrets or are submitted to an agency by a commercial enterprise or derived from information obtained from a commercial enterprise and which if disclosed would cause substantial injury to the competitive position of the subject enterprise." Information submitted to NYSERDA that the proposer wishes to have treated as proprietary, and confidential trade secret information, should be identified and labeled "Confidential" or "Proprietary" on each page at the time of disclosure. This information should include a written request to except it from disclosure, including a written statement of the reasons why the information should be excepted. See Public Officers Law, Section 89(5) and the procedures set forth in 21 NYCRR Part 501 https://www.nyserda.ny.gov/About/-/media/Files/About/Contact/NYSERDA-Regulations.ashx. However, NYSERDA cannot guarantee the confidentiality of any information submitted.

Omnibus Procurement Act of 1992 - It is the policy of New York State to maximize opportunities for the participation of New York State business enterprises, including minority- and women-owned business enterprises, as bidders, subcontractors, and suppliers on its procurement Agreements.

Information on the availability of New York subcontractors and suppliers is available from:

Empire State Development Division for Small Business 625 Broadway Albany, NY 12207

A directory of certified minority- and women-owned business enterprises is available from:

Empire State Development Minority and Women's Business Development Division 625 Broadway Albany, NY 12207

State Finance Law sections 139-j and 139-k - NYSERDA is required to comply with State Finance Law sections 139-j and 139-k. These provisions contain procurement lobbying requirements which can be found at https://online.ogs.ny.gov/legal/lobbyinglawfaq/default.aspx Proposers are required to answer questions during proposal submission, which will include making required certification under the State Finance Law and to disclose any Prior Findings of Non-Responsibility (this includes a disclosure statement regarding whether the proposer has been found non-responsible under section 139-j of the State Finance Law within the previous four years).

Tax Law Section 5-a - NYSERDA is required to comply with the provisions of Tax Law Section 5-a, which requires a prospective contractor, prior to entering an agreement with NYSERDA having a value in excess of \$100,000, to certify to the Department of Taxation and Finance (the "Department") whether the contractor, its affiliates, its subcontractors and the affiliates of its subcontractors have registered with the Department to collect New York State and local sales and compensating use taxes. The Department has created a form to allow a prospective contractor to readily make such certification. See, ST-220-TD (available at http://www.tax.ny.gov/pdf/current_forms/st/st220td_fill_in.pdf). Prior to contracting with NYSERDA, the prospective contractor must also certify to NYSERDA whether it has filed such certification with the Department. The Department has created a second form that must be completed by a prospective contractor prior to contacting and filed with NYSERDA. See, ST-220-CA (available at

<u>http://www.tax.ny.gov/pdf/current_forms/st/st220ca_fill_in.pdf</u>). The Department has developed guidance for contractors which is available at <u>http://www.tax.ny.gov/pdf/publications/sales/pub223.pdf</u>.

Contract Award - NYSERDA anticipates making multiple awards under this solicitation. NYSERDA anticipates a contract duration of two years with options to renew unless NYSERDA management determines a different structure is more efficient based upon proposals received. A contract may be awarded based on initial applications without discussion, or following limited discussion or negotiations pertaining to the Statement of Work. Each application should be submitted using the most favorable cost and technical terms. NYSERDA may request additional data or material to support applications. NYSERDA will use the Sample Agreement to contract successful proposals. NYSERDA may at its discretion elect to extend and/or add funds to any project funded through this solicitation. NYSERDA reserves the right to limit any negotiations to exceptions to standard terms and conditions in the Sample Agreement (attached to this solicitation as Attachment A, B and C collectively) to those specifically identified in the checklist questions. Proposers should keep in mind that acceptance of all standard terms and conditions will generally result in a more expedited contracting process. NYSERDA expects to notify Applicants in approximately (30) weeks from the receipt of an application whether your application has been selected to receive an award. NYSERDA may decline to contract with awardees that are delinquent with respect to any obligation under any previous or active NYSERDA agreement.

Accessibility Requirements - If awardees from this solicitation will be posting anything on the web, or if the awardee will produce a final report that NYSERDA will post to the web, the following language must be included. NYSERDA requires contractors producing content intended to be posted to the Web to adhere to New York State's Accessibility Policy. This includes, but is not limited to, deliverables such as: documents (PDF, Microsoft Word, Microsoft Excel, etc.), audio (.mp3, .wav, etc.), video (.mp4, .mpg, .avi, etc.), graphics (.jpg, .png, etc.), web pages (.html, .aspx, etc.), and other multimedia and streaming media content. For more information, see <u>NYSERDA's Accessibility Requirements</u>.

Limitation - This solicitation does not commit NYSERDA to award a contract, pay any costs incurred in preparing a proposal, or to procure or contract for services or supplies. NYSERDA reserves the right to accept or reject any or all proposals received, to negotiate with all qualified sources, or to cancel in part or in its entirety the solicitation when it is in NYSERDA's best interest. NYSERDA reserves the right to reject proposals based on the nature and number of any exceptions taken to the standard terms and conditions of the Sample Agreement (attached to this solicitation as Attachment A, B and C collectively). NYSERDA reserves the right to disqualify proposers based upon the results of a background check into publicly available information and the presence of a material possibility of any reputational or legal risk in making of the award.

Disclosure Requirement - The proposer shall disclose any indictment for any alleged felony, or any conviction for a felony within the past five years, under the laws of the United States or any state or territory of the United States, and shall describe circumstances for each. When a proposer is an association, partnership, corporation, or other organization, this disclosure requirement includes the organization and its officers, partners, and directors or members of any similarly governing body. If an indictment or conviction should come to the attention of NYSERDA after the award of a contract, NYSERDA may exercise its stop-work right pending further investigation, or terminate the agreement; the contractor may be subject to penalties for violation of any law which may apply in the particular circumstances. Proposers must also disclose if they have ever been debarred or suspended by any agency of the U.S. Government or the New York State Department of Labor.

- V. Attachments:
- Attachment A Commercial New Construction Program Terms and Conditions
- Attachment B NYSERDA Prompt Payment Policy
- Attachment C Standard Terms and Conditions for all NYSERDA Agreements
- Attachment D Commercial New Construction Support



RICHARD L. KAUFFMAN Chair ALICIA BARTON President and CEO

Air-Source Heat Pump Program¹ Program Opportunity Notice (PON) 3653 \$ 10,950,000 Available NYSERDA reserves the right to extend and/or add funding to this Solicitation or any project should additional Program funding become available.

Applications accepted through December 31, 2019² by 3:00 PM Eastern Time, or until funds are fully committed, whichever occurs first.

Program Summary: NYSERDA's Air-Source Heat Pump Program ("the Program") will provide up to \$10,950,000 in incentives to Participating Installers for the installation of Program Qualified Air Source Heat Pump (ASHP) systems.³ The New York State Public Service Commission has allocated funding for this program through the Clean Energy Fund (CEF) to expand the ASHP market in New York and to support installations for customers who pay (or will pay in the case of new construction) the SBC/CEF surcharge on their electricity bills.

Incentives are available per installed Program Qualified ASHP system and are available only to Participating Installers on a first-come, first-served basis. Incentives include those that may be retained by the Participating Installer as well as additional incentives that will be paid to the Participating Installer but must be credited to site owners. Complete Program requirements, incentive levels and additional descriptions can be found in the Air Source Heat Pump Program Manual (Manual).

Participating Installer and Incentive Application Submission: Participating Installer Eligibility Applications and Incentive Applications (including uploading any required attachments and documents thereto) must be completed and submitted online at https://nyserda.ny.gov/ashp. Incomplete or inaccurate applications will not be accepted. Faxed or e-mailed applications will not be accepted.

¹ Capitalized terms used but not defined herein have the meanings assigned to them in the Manual, which can be found as an attachment in this PON or online at https://nyserda.ny.gov/ashp.

² The NYS Public Service Commission has directed NYSERDA and the State's utilities to develop a common statewide heat pump program. NYSERDA anticipates that the state-wide program will be available at the beginning of 2020. Should launch of the state-wide program be delayed NYSERDA may extend the open date for this PON.

³ NYSERDA may supplement or revise the funding available through this PON or any successor at any time.

Contact Information: For all program questions, please contact Program staff at products@nyserda.ny.gov or Kerry Hogan at (518) 862-1090 ext. 3509.

All Contractual questions should be directed to: Nancy Marucci at <u>NancySolicitations@nyserda.ny.gov</u> or 518-862-1090 ext. 3335.

If changes are made to this Solicitation, notification will be posted on https://www.nyserda.ny.gov/Funding-Opportunities/Current-Funding-Opportunities.

NYSERDA reserves the right to make changes in the incentive offering (including but not limited to amount, timing, recipient, structure, incentive caps and total budget available) at any time. NYSERDA will make reasonable effort not to decrease incentive level within the term of this Program. If it becomes necessary to change the incentive offering, NYSERDA will attempt to give reasonable notice to Program Participants. Program changes will be posted on the NYSERDA website and can be found at the following web page: https://www.nyserda.ny.gov/FundingOpportunities/Current-Funding-Opportunities.

I. Introduction

NYSERDA seeks to accelerate the adoption of ASHPs by working to develop supply chains and expand service networks so that they are available in the market and supported by key actors, such as ASHP installation contractors.

ASHPs offer customers improved performance over other code-compliant HVAC technologies, reduced energy bills and a lower carbon footprint, but have not been widely adopted in the state. While ASHPs have been used consistently in warmer climates as an efficient cooling system, recent advances in technology have been incorporated into new ASHP models allowing them to meet both the heating and cooling needs for customers in Northern climates. Market demand has begun to increase in New York, but action is needed to accelerate widespread adoption. Through PON 3653, incentives will be available to Program Installers to reduce the wholesale cost of the products and encourage sales, stocking, and service expansions.

The Program will provide up to \$10,950,000 in incentives for the installation of ASHP systems.⁴ The New York State Public Service Commission has allocated the funds for this program through the Clean Energy Fund (CEF) to support installations for customers who pay (or will pay in the case of new construction) the SBC/CEF surcharge on their electricity bills.

Incentives are available per installed Program Qualified ASHP system and are available only to Participating Installers on a first-come, first-served basis. Incentives include those that may be retained by the Participating Installer; additional incentives will be paid to the Participating Installer but must be credited to site owners. Complete Program requirements, incentive levels

⁴ NYSERDA may supplement or revise the funding available through this PON or any successor at any time.

and additional descriptions can be found in the Air Source Heat Pump Program Manual (Manual) which can be found as an attachment in this PON or online at https://nyserda.ny.gov/ashp.

II. Program Requirements

Eligible Applicants for Program Participation and Incentives

ASHP Installers interested in applying for eligibility to participate in the Program must complete and submit a Participating Installer Application, which can be found online at https://nyserda.ny.gov/ashp. Only Participating Installers are eligible to submit Incentive Applications.

Eligible Project Requirements

To be eligible to apply for and receive any Incentives under this Program, the ASHP(s) identified in each Incentive Application must be listed on the <u>ccASHP Specification Listing</u> at the time of installation.⁵ Each Incentive Application must demonstrate certain requirements, including, but not limited to, the following:

- All components installed as part of an ASHP system must be new; the use of used or refurbished equipment is not permitted under the Program.
- All ASHP systems, system components, and installations comply with all manufacturers' installation requirements, applicable laws, regulations, codes, licensing and permit requirements including, but not limited to, the New York State Environmental Quality Review (SEQR), the New York State Building Code, New York State Plumbing Code, the National Electric Code, Fire

Codes and all applicable State, city, town, or local ordinances or permit requirements.

- All ASHP equipment, design, and labor warranties have been provided to the customer.
- Provide installation specific data (i.e., qualifying ASHP Manufacturer, Indoor and Outdoor Unit Model Numbers, Installation Address, Utility, Primary Fuel Type, Displaced Heating System).

Each ASHP that is referenced in an Incentive Application is subject to NYSERDA-mandated quality assurance and performance verification standards.

⁵ The Northeast/Mid-Atlantic Air Source Heat Pump Working Group (facilitated by the Northeast Energy Efficiency Partnership), developed this Cold Climate Air-Source Heat Pump (ccASHP) Specification intended to identify ASHPs that are best suited to heat efficiently in cold climates (IECC climate zone 4 and higher).

Additional information regarding these and additional Project application and Project eligibility and technical requirements are described in the Manual.

These requirements help to ensure quality and performance for ASHP installations, which are critical to enable market growth. However, NYSERDA encourages innovation in design and installation practices that improve performance and lower costs. If an applicant for an Incentive can substantiate to NYSERDA's satisfaction that a deviation from a specific Program requirement will maintain or improve ASHP performance at a similar or lower cost, NYSERDA will consider granting a waiver for that specific requirement. All waivers must be approved in advance of the submission of the specific incentive application.

Becoming a Participating Installer

Step 1 – Review Manual and Program Participation Agreement: ASHP Installers must review the

Manual and Participation Agreement identifying all Program procedures, terms and conditions.

Step 2 – **Confirm eligibility:** To be approved to participate in the Program, ASHP Installers must demonstrate that they meet the qualifications identified in the Manual.

Step 3 – Submit Participating Installer Application and Agreement: To enroll, Participants must submit all required documentation, including the signed Participating Installer Application and the Participation Agreement.

A list of Participating Installers is posted to NYSERDA's website at <u>https://nyserda.ny.gov/ashp</u>.

Once NYSERDA approves your status as a Participating Installer, you may begin installing qualifying systems and submitting Incentive Applications.

Submitting Incentive Applications

Step 1 – Confirm Project Site Eligibility: All ASHP installation sites must currently pay or, in the case of new construction, will pay the SBC/CEF surcharge on their electricity bill. The charge will appear on the installation site owner's utility bill.

Step 2 – Install the ASHP.

Step 3 – Apply for Incentive: The ASHP must be installed by a Participating Installer, who submits the Incentive Application <u>once installation is complete and customer has been</u> <u>invoiced</u>.

Step 4 – Receive Confirmation of Award: NYSERDA will notify the Participating Installer on the status of each Incentive Application within thirty (30) Business Days of receipt, barring extenuating circumstances. If the Incentive Application meets all Program requirements and funding is available, NYSERDA will issue an approval email to the Participating Installer with details on the Incentive amount.

Step 5 – Receive Incentive Payment: Incentives will be paid to the Participating Installer. Payment will be issued according to NYSERDA's prompt payment policy (see Participation Agreement).

III. General Conditions

Proprietary Information - Careful consideration should be given before confidential information is submitted to NYSERDA as part of your proposal. Review should include whether it is critical for evaluating a proposal, and whether general, non-confidential information, may be adequate for review purposes.

The NYS Freedom of Information Law, Public Officers law, Article 6, provides for public access to information NYSERDA possesses. Public Officers Law, Section 87(2)(d) provides for exceptions to disclosure for records or portions thereof that "are trade secrets or are submitted to an agency by a commercial enterprise or derived from information obtained from a commercial enterprise and which if disclosed would cause <u>substantial injury to the competitive position</u> of the subject enterprise." Information submitted to NYSERDA that the proposer wishes to have treated as proprietary, and confidential trade secret information, should be identified and labeled "Confidential" or "Proprietary" on each page at the time of disclosure. This information should include a written request to except it from disclosure, including a written statement of the reasons why the information should be excepted. See Public Officers Law, Section 89(5) and the procedures set forth in 21 NYCRR Part 501

http://www.nyserda.ny.gov/About//media/Files/About/Contact/NYSERDA-Regulations.ashx. However, NYSERDA cannot guarantee the confidentiality of any information submitted.

Omnibus Procurement Act of 1992 - It is the policy of New York State to maximize opportunities for the participation of New York State business enterprises, including minorityand women-owned business enterprises, as bidders, subcontractors, and suppliers on its procurement Agreements. Information on the availability of New York subcontractors and suppliers is available from: Empire State Development Division for Small Business 625 Broadway Albany, NY 12207 A directory of certified minority- and women-owned business enterprises is available from:

Empire State Development

Minority and Women's Business Development Division 625 Broadway Albany, NY 12207

State Finance Law sections 139-j and 139-k - NYSERDA is required to comply with State Finance Law sections 139-j and 139-k. These provisions contain new procurement lobbying requirements that can be found at https://online.ogs.ny.gov/legal/lobbyinglawfaq/default.aspx.The attached Proposal Checklist calls for a signature certifying that the proposer will comply with State Finance Law sections 139-j and 139-k and the Disclosure of Prior Findings of Non-responsibility form includes a disclosure statement regarding whether the proposer has been found non-responsible under section 139-j of the State Finance Law within the previous four years.

Tax Law Section 5-a - NYSERDA is required to comply with the provisions of Tax Law Section 5-a, which requires a prospective contractor, prior to entering an agreement with NYSERDA having a value in excess of \$100,000, to certify to the Department of Taxation and Finance (the "Department") whether the contractor, its affiliates, its subcontractors and the affiliates of its subcontractors have registered with the Department to collect New York State and local sales and compensating use taxes. The Department has created a form to allow a prospective contractor to readily make such certification. *See*, ST-220-TD (available at http://www.tax.ny.gov/pdf/current_forms/st/st220td_fill_in.pdf). Prior to contracting with NYSERDA, the prospective contractor must also certify to NYSERDA whether it has filed such certification with the Department. The Department has created a second form that must be completed by a perspective contractor prior to contacting and filed with NYSERDA. *See*, ST-220-CA (available at http://www.tax.ny.gov/pdf/current_forms/st/st220td_fill_in.pdf). The Department has developed guidance for contractors which is available at http://www.tax.ny.gov/pdf/current_forms/st/st220td_fill_in.pdf). The Department has developed guidance for contractors which is available at http://www.tax.ny.gov/pdf/current_forms/st/st220ca_fill_in.pdf). The Department has developed guidance for contractors which is available at http://www.tax.ny.gov/pdf/publications/sales/pub223.pdf.

Accessibility Requirements - NYSERDA requires contractors producing content intended to be posted to the Web to adhere to New York State's Accessibility Policy. This includes, but is not limited to, deliverables such as: documents (PDF, Microsoft Word, Microsoft Excel, etc.), audio (.mp3, .wav, etc.), video (.mp4, .mpg, .avi, etc.), graphics (.jpg, .png, etc.), web pages (.html, .aspx, etc.), and other multimedia and streaming media content. For more information, see NYSERDA's Accessibility Requirements.

Limitation - This solicitation does not commit NYSERDA to award a contract, pay any costs incurred in preparing a proposal, or to procure or contract for services or supplies. NYSERDA reserves the right to accept or reject any or all proposals received, to negotiate with all qualified sources, or to cancel in part or in its entirety the solicitation when it is in NYSERDA's best interest. NYSERDA reserves the right to disqualify proposers based upon the results of a background check into publicly available information and the presence of a material possibility of any reputational or legal risk in making of the award.

Disclosure Requirement - The proposer shall disclose any indictment for any alleged felony, or any conviction for a felony within the past five years, under the laws of the United States or any state or territory of the United States, and shall describe circumstances for each. When a proposer is an association, partnership, corporation, or other organization, this disclosure

requirement includes the organization and its officers, partners, and directors or members of any similarly governing body. If an indictment or conviction should come to the attention of NYSERDA after the award of a contract, NYSERDA may exercise its stop-work right pending further investigation, or terminate the agreement; the contractor may be subject to penalties for violation of any law which may apply in the particular circumstances. Proposers must also disclose if they have ever been debarred or suspended by any agency of the U.S. Government or the New York State Department of Labor.

IV. Attachments:

- Attachment A Air-Source Heat Pump Program Manual
- Attachment B Air-Source Heat Pump Program Participation Agreement



REAL TIME ENERGY MANAGEMENT (RTEM) Program Opportunity Notice (PON) 3689 \$42.1 Million Available for Commercial RTEM \$5.7 Million Available for Industrial RTEM \$6.27 Million Available for Multifamily RTEM NYSERDA reserves the right to extend and/or add funding to the

Solicitation should other program funding sources become available

Applications accepted on a first-come, first-served basis dependent on funding availability until June 30, 2021 by 3:00 PM Eastern Time

The New York State Energy Research and Development Authority (NYSERDA) Real Time Energy Management ("RTEM") Program (the "Program") promotes effective, energy-efficient solutions for commercial, multifamily, and industrial sites and processes for practitioners in the energy management software and services sector. To accelerate the adoption of RTEM practices, NYSERDA is offering costshared support for integrating RTEM systems and services into existing buildings and facilities. This Program works in conjunction with NYSERDA RFQ 3691 Real Time Energy Management (RTEM) Qualified Vendor. **Only NYSERDA RTEM Qualified Vendors may be Applicants to this Program**.

RTEM technology is the combination of building data collection systems (sensors, meters, equipment feeds) with data analytics and building data information services that can show building management the actual state of building performance at any point in time. Service providers then capture the discreet data such as set points, power loads, flow rates, temperature and humidity, and feed the information back to site operators with key insights about operations and systems to fine-tune and identify capital projects.

Within the Industrial sector, RTEM technologies are often referred to as Energy Management Information Systems (EMIS) – software systems that store, analyze, and display energy consumption data collected from sensors, equipment feeds, and meters. EMIS for the industrial market offers entities the means to monitor energy consumption data in real-time and to identify operational changes and capital projects that will increase efficiency. EMIS incorporate environmental and production variables for a more thorough, holistic analysis of efficiency opportunities than energy consumption data alone.

NYSERDA's RTEM Qualified Vendor list consists of both RTEM System Providers and RTEM Service Providers. RTEM System Providers are defined as providers of the monitoring hardware and software used to extract, process, and store energy usage data. RTEM Service Providers are defined as consulting services that customers contract with to analyze the data from the RTEM system installation and provide, enable, and/or implement energy savings measures based on the data.

The Program offers cost-sharing for RTEM system implementation and services for up to five (5) years (see Program Incentives).



How to Apply:

RTEM Qualified Vendors with eligible projects can log on to <u>https://nyserdaportal.force.com/login</u> to complete an Application.

Building Owners and Managers in need of an RTEM Qualified Vendor can visit the NYSERDA list at <u>http://www.nyserda.ny.gov/Contractors/Find-a-Contractor/RTEM-Qualified-Vendors.</u>

RTEM questions should be directed to <u>rtem@nyserda.ny.gov</u> or Alexander Jahn (866-NYSERDA, ext. 3133). All Contractual questions should be directed to Venice Forbes (866-NYSERDA, ext. 3507) or <u>VeniceSoliciations@nyserda.ny.gov</u>.

*Incomplete or unsigned applications will be returned. NYSERDA reserves the right to close or extend the Solicitation at any time and/or add funding to the Solicitation should other program funding sources become available. If changes are made to this solicitation, notification will be posted on NYSERDA's website at www.nyserda.ny.gov



INTRODUCTION

NYSERDA's Real Time Energy Management (RTEM) Program (the "Program") is intended to accelerate market adoption of RTEM systems and services.

Furthermore, the Program will help to identify and expand the industry's best practices for leveraging RTEM technologies. The Program will focus on how to efficiently extract and analyze data that enables customers to receive the full potential of RTEM benefits.

Research shows that customers who unlock their site's energy data, at the system level, make better energy related decisions than if they were to use only monthly utility bills. NYSERDA seeks to demonstrate the value of comprehensive monitoring and metering analytics, and the advantages gained by obtaining system level energy usage data. The Program seeks to illustrate how customers can use RTEM to maximize energy performance and processes, improve equipment/building optimization, and provide better informed capital investment recommendations. The RTEM Program, is available to commercial, industrial, and multifamily customers. Some Program rules vary based on the sector.

This solicitation is divided into the following components: Section II: Eligibility Section III: Program Incentives Section IV: Application Requirements & Approval Process Overview Section V: General Conditions Section VI: List of Attachments

Definitions:

- **RTEM systems** are the monitoring hardware and software used to extract, process, and store energy usage data.
- **RTEM services** are ongoing consulting services that customers contract with to analyze energy usage data and provide, enable, and/or implement energy savings measures, such as energy efficiency or renewable energy, based on the data.
- **Qualified RTEM Vendors:** Any RTEM system, RTEM service, or RTEM system and service vendor who has qualified as a NYSERDA RTEM vendor through the RFQ 3691 process. Vendors qualified under the previous RFQ 3164 are considered qualified RTEM vendors.
- **Applicant** is the qualified RTEM vendor who is applying for an RTEM project cost-share incentive. Any qualified vendor may be the applicant. All project applications must include an RTEM service provider, unless the customer is granted an RTEM service waiver (Attachment B).
- **Customer** is the commercial, multifamily, or industrial facility owner or manager who is procuring the RTEM system and service.

II: ELIGIBILITY

ELIGIBLE APPLICANTS

NYSERDA intends for RTEM Qualified Vendors to apply to the Program with eligible participant site(s). Sites must work with an RTEM Qualified Vendor to receive project funding. To become an RTEM Qualified Vendor (RFQ 3691) apply on-line at http://nyserda-

site.force.com/CORE_CONAPP_Program_Page?programFamily=Commercial&programNa
me=Commercial_Real_Time_Energy_Management



Providers qualified to be an RTEM vendor for the commercial sector through RFQ 3164 are automatically qualified to apply for eligible commercial and multifamily sector RTEM projects. However, if a qualified vendor would like to apply for an RTEM project in the industrial sector, they will need to apply separately through RFQ 3691 to be qualified to serve the industrial sector.

If a provider is not already on NYSERDA's RTEM Qualified Vendor List, they are required to apply to RFQ 3691: RTEM Qualified Vendor. Applications to this Program from providers that are not on the RTEM Qualified Vendor List will not be approved until such time that the provider is accepted to the RTEM Qualified Vendor List. If the provider is rejected from the RTEM Qualified Vendor List, the project application will be rejected.

NYSERDA will make all system installation and service cost-share payments in this Program directly to the RTEM Project Applicant. If the RTEM System Provider is different from the RTEM Service Provider, then the RTEM Service Provider and the RTEM System Provider will be responsible for establishing their own payment arrangements. Customers can apply for a waiver to be exempted from the RTEM service requirement. In this instance, the RTEM System Provider would be the Project Applicant. Please see Attachment B for more details.

Building Owners and Facility Managers seeking NYSERDA funding for their sites must choose from NYSERDA's RTEM Qualified Vendor List. Firms interested in applying to be on the NYSERDA RTEM Qualified Vendor List may include but are not limited to: energy management system providers, Energy Service Companies (ESCOs), energy consultants, and engineering companies. Providers that fail to qualify for the list will not be eligible to submit applications to this Program.

ELIGIBLE PARTICIPANT SITES

Participants must be New York State electricity distribution customers of a participating utility company that pays into the System Benefits Charge (SBC). These utilities include Central Hudson Gas & Electric Corporation, Consolidated Edison, New York State Electric & Gas Corporation, National Grid, Orange and Rockland Utilities, Inc., and Rochester Gas and Electric Corporation.

Eligible participant sites include:

New York State commercial facilities which include, but are not limited to, office buildings, retail, colleges and universities, health care facilities, state and local governments, not-for-profit and private institutions, and public and private K-12 schools.

Higher education institutions must be REV Campus Challenge members to be eligible to apply. Any higher education institution in New York State can <u>become a REV Campus Challenge member</u>.

New York State industrial facilities which include, but not limited to, facilities involved in manufacturing, forest products, food and beverage processing, mining and extraction.

New York State multifamily buildings with five (5) or more units including rentals, cooperatives and condominiums.



ELIGIBLE PROJECTS

Awarded projects must be installed and commissioned within six-months of receiving a NYSERDA Purchase Order ("PO"). Extensions of up to twelve months may be requested. Failure to install within the six-month timeframe or the approved extension timeframe will result in project cancellation.

RTEM systems that are installed prior to the launch of this Program are not eligible to receive a System Installation Cost-Share (as defined in Section III below).

Existing operational RTEM systems and service agreements are eligible for service cost-share (as defined in Section III below) provided all other Program requirements are met.

For commercial facilities, a tenant space that relies on base-building energy equipment can participate in the Program. The tenant's building must either already have a qualified RTEM system installed or be in the process of pursuing an eligible RTEM project. In such cases, NYSERDA will cost share the additional cost of including a tenant in an RTEM project and increase total project cost-share incentive to a maximum of \$400,000 (see section III Program Incentives for funding details). All other Program rules apply. Tenant spaces with dedicated energy equipment (e.g. chillers, air handling units, pumps, rooftop units) are eligible to apply as a standalone RTEM project and receive cost-share for both system and services.

NYSERDA offers two levels of commercial RTEM projects, referred to as RTEM Basic and RTEM Premium. RTEM Premium projects are intended to pilot projects from RTEM's Qualified Vendors that go beyond the monitor and control of primary base building HVAC equipment. The broader goals for RTEM Premium are to (1) gain insight into more advanced projects so NYSERDA can continue to evolve the RTEM program to attract more sophisticated projects that are capable of transacting with the grid in real-time and (2) build demand from end-use customers for a market to service these projects and expand the abilities of RTEM vendors who are best positioned to offer this service. RTEM Premium seeks to drive technology deeper into commercial building systems and incentivize the development of more comprehensive systems, solutions, and services. This provides a higher level of incentive for RTEM systems that integrate multiple, interoperable systems within a building. Service must be included on all integrated systems.

RTEM Basic projects are defined as involving monitoring and control of primary base building HVAC equipment such as chillers, boilers, Dedicated Outdoor Air System (DOAS), Air Handling Unit System/Distribution, Variable Air Volume (VAVs), cooling towers, and/or pumps.

RTEM Premium projects are defined as an RTEM Basic system, as defined above with the additional requirements. RTEM Premium projects must also include the monitoring and control of:

- 1. All applicable building-level utility meters (electric, natural gas, steam, water)
- 2. Building-level, Power Quality Meter (certified for Class A measurement methods based on the current edition of IEC 61000-4-30) to monitor voltage, frequency, power factor, and apparent power (KVA)

And fully integrate two (2) secondary major systems. Examples include:

- 1. Lighting (interior/exterior)
- 2. Indoor Air Quality ventilation control (e.g. DCV., etc.)
- 3. Whole building/floor-level occupant detection/counting



And integrate one (1) additional ancillary system. Examples include:

- 1. Plug Loads (without existing control)
- 2. Terminal HVACs (e.g., PTAC, PTHP, Mini-Split)
- 3. Elevators/Escalators
- 4. Security / Access Control (e.g. turnstiles)
- 5. Building Weather Station
- 6. Occupant Comfort/Convenience App

Any additional data acquisition or metering devices/equipment can be proposed if fully integrated with the RTEM Premium systems and services. Vendors must provide proof of customer commitment, pending RTEM Premium application approval. RTEM Service Providers must provide a cybersecurity certificate and maintain data standards through Project Haystack for RTEM Premium projects.

Monitoring requirements:

All RTEM projects must monitor energy usage at levels more granular than the whole-building. The time frequency of energy data monitoring must be at least fifteen minutes or more frequent. Monitoring hardware must be permanently installed, and not intended for temporary use. All devices/components/controllers that are <u>integrated</u> with an eligible RTEM system and installed under the same application can be included for NYSERDA cost-share.

The following are ineligible for funding:

- Whole-building monitoring or the installation of sub-meters in tenant spaces without incorporating an eligible RTEM system.
- Site-Based (local) dedicated controllers and control stations where control sequences are programmed and executed in real-time, with or without remote monitoring and remote access capabilities, are ineligible.

III: PROGRAM INCENTIVES

All projects must include cost-sharing in the form of matching cash support from the site(s).

NYSERDA System Installation Cost-Share is 30%.

For RTEM Services (1-5 years eligible):

- NYSERDA Service Cost-Shares are 30% for years 1 3;
- Applicants submitting for more than three years of service length will receive a reduced cost share of 20% in years 4 5.



For RTEM Premium Projects, cost shares for both system and services increase from 30% to 50% of total project costs, with a cap of three (3) years of service.

There are two cost-share incentive options available. RTEM Applicants will be able to select, on projectby-project basis, either Option A or Option B, as seen below. It is important to note, system and service costs must be disclosed to NYSERDA, regardless of the payment option chosen. Additionally, for both options, payments will only be made to the RTEM Project Applicant. RTEM Project Applicants must disclose information regarding the NYSERDA RTEM cost-share amount for the participating site. RTEM Premium Projects are eligible for Option A and Option B, though NYSERDA's Cost-Share will remain 50%.

Incentive Levels:

Option A: available for when customers pay upfront costs for RTEM system installations. RTEM system cost-share is a one-time payment, RTEM service cost-share is an annual payment up to five years.

Option A Incentive Structure			
Incentive Type	NYSERDA Cost-Share		
RTEM System Installation	30%		
RTEM Service Years 1 – 3	30%		
RTEM Service Years 4 – 5	20%		

Option B: available when the RTEM system costs are embedded in the RTEM services costs, and the customer pays little or no upfront costs, allowing both the system and service cost sharing structure to be stretched over a five-year period.

Option B Incentive Structure			
Incentive Type	NYSERDA Cost-Share		
RTEM System/Service Years 1 – 3	30%		
RTEM System/Service Years 4 – 5	20%		



Additional requirements:

NYSERDA will issue a maximum of 5 years of cost-share regardless of contract length (i.e. system or service costs that extend past 5 years will not be eligible for cost-sharing).

If the RTEM system costs are embedded into the RTEM services costs, the incentive structure will provide cost sharing for the RTEM service, as well as a weighted portion of the systems costs. The system cost-sharing shall not exceed the length of the RTEM contract, nor the 5-year requirement mentioned above. The RTEM Qualified Vendor will indicate, to the extent possible, the expected costs of the RTEM systems and RTEM services payments in the contract.

FUNDING LIMITATIONS

Site Cap

Each Commercial sector qualifying project site is limited to receiving \$300,000 of program funding. RTEM Premium projects are capped at \$500,000 of program funding.

Each Multifamily and Industrial sector qualifying project site is limited to receiving \$155,000 of program funding. There is no Applicant funding cap.

Commercial Tenant Cap

NYSERDA will cost share the additional cost of including commercial tenant(s) in a RTEM project and increase total site cost-share incentive to a maximum of \$400,000.

Sites already receiving financial assistance in the form of grants through the New York Power Authority (NYPA) for compliance with Executive Order 88, or programs offered by their local utilities, are not eligible to receive incentives for the same activities under this Program. (Financing from NYPA or NY Green Bank is allowable in combination with cost-share from this Solicitation).

Cloud-based controls/analytics

Cloud-based analytic derived set-point changes, selection of control sequences or other generally supervisory modifications of fine tuning to site-based (local) controllers and control stations are eligible for inclusion into the RTEM system cost-share. Remote-initiated supervisory changes to setpoint and selections of control sequence functionalities implemented using the same communication and data infrastructures as the pathway to the cloud-based repository, analysis routines, and visualization displays can be included in the eligible RTEM system work scope. Output devices and equipment without local intelligences that are used to translate analytics into physical actions (examples include relays for digital outputs, 4-20ma or 0-10V for analog outputs) are considered protocol converters and are eligible for inclusion into the RTEM system.

NYSERDA recommends qualified RTEM System Providers submit control type of functions for review and pre-approval prior to project proposal.

Onsite machine and system control functionalities such as Building Automation and Building Management Systems are ineligible.



IV: APPLICATION REQUIREMENTS AND APPROVAL PROCESS OVERVIEW

APPLICANT:

Required: Applicants may apply on-line through a NYSERDA portal. The following documents will be requested:

- 1. Signed RTEM application agreement by RTEM Qualified Vendor
- 2. Current, complete electric utility bill of each site documenting the SBC payment
- 3. RTEM System/Service Contract: full signed contract agreement between RTEM Qualified Vendor(s) and customer
- 4. RTEM System/Service Contract Addendum: specific information from the RTEM System/Service Contract that is reformatted as an addendum for NYSERDA review (see Attachment C). NYSERDA evaluates the project based on the above submitted information. All Applications will be reviewed on a first-come, first-served basis until funds are fully committed. It is at NYSERDA's discretion to accept projects, dependent on projects meeting requirements.

After the Applicant submits the Application, NYSERDA or its contractor will review the application in its entirety and evaluate the RTEM system specifications and RTEM services offered. NYSERDA or its contractor will conduct a pre-installation site visit on at least the first two projects for all new Applicants. Applicants are encouraged to continuously engage with NYSERDA as they submit more projects for funding. Upon review and approval of the Application information and completion of the pre-installation site visit (if required), NYSERDA will notify the Applicant and site contact(s) that the Application is approved and issue a Purchase Order (PO) for the approved incentive amount.

Note: An Applicant proceeding with project demolition or installation prior to the NYSERDA conducted pre-installation site visit and approval will not receive a system installation cost-share. NYSERDA is not committed to cost-sharing a project until a PO is issued.

If at any time the project, RTEM system, or services do not meet the minimum requirements established by the Program, the Applicant will not be eligible to receive funds and the project will be cancelled.

PROGRAM DELIVERABLES:

Participation in the Program requires the Applicant to submit the following deliverables to NYSERDA during the project:

1. RTEM System/Service Contract Addendum – as stated above, prior to receiving a PO from NYSERDA. The Applicant will provide information and supporting documentation to NYSERDA to help summarize the projects scope of work and to ensure it meets the intent of the Program.



2. RTEM Installation and Commissioning Report – prior to receiving the system cost-share from NYSERDA.

The Applicant will provide information and supporting documentation to summarize the complete installation of the RTEM system and to explain the roles and responsibilities of project participants.

3. RTEM Service Reports

The Applicants will provide semi-annual information and supporting documentation to help summarize the performance of the project on a semi-annual basis. This includes a summary of energy usage over the given reporting period, pre and post analysis of any implemented energy savings measures (both capital and operation and maintenance (O&M) projects), and an account of potential future energy saving measures under consideration. The list shall also specify the expected energy savings and installation cost from each measure.

PROJECT PAYMENTS:

NYSERDA intends to issue progress payments based on the following:

- 1. System installation cost-share will be issued to the Applicant upon review and approval of installation and commissioning of the RTEM system. NYSERDA or its contractor will authorize the payment, the approval of required documents needed to prepare the RTEM Installation and Commissioning Report, and associated data. Failure to provide documents needed to complete the report within 30 days after the commissioning date may forfeit funding from this Program.
- 2. Service cost-share will be provided annually, after review and approval of all required Service Reports and associated data. This process will repeat each following year. If reporting is not received within the first six months after commissioning, and thereafter, Applicants may forfeit project funding from the Program.

V: GENERAL CONDITIONS

Proprietary Information - Careful consideration should be given before confidential information is submitted to NYSERDA as part of your proposal. Review should include whether it is critical for evaluating a proposal, and whether general, non-confidential information, may be adequate for review purposes.

The NYS Freedom of Information Law, Public Officers law, Article 6, provides for public access to information NYSERDA possesses. Public Officers Law, Section 87(2)(d) provides for exceptions to disclosure for records or portions thereof that "are trade secrets or are submitted to an agency by a commercial enterprise or derived from information obtained from a commercial enterprise and which if disclosed would cause substantial injury to the competitive position of the subject enterprise." Information submitted to NYSERDA that the proposer wishes to have treated as proprietary, and confidential trade secret information, should be identified and labeled "Confidential" or "Proprietary" on each page at the time of disclosure. This information should include a written request to except it from disclosure, including a written statement of the reasons why the information should be excepted. See Public Officers Law, Section 89(5) and the procedures set forth in 21 NYCRR Part 501 https://www.nyserda.ny.gov/About/-/media/Files/About/Contact/NYSERDA-Regulations.ashx. However, NYSERDA cannot guarantee the confidentiality of any information submitted.



Omnibus Procurement Act of 1992 - It is the policy of New York State to maximize opportunities for the participation of New York State business enterprises, including minority- and women-owned business enterprises, as bidders, subcontractors, and suppliers on its procurement Agreements.

Information on the availability of New York subcontractors and suppliers is available from:

Empire State Development Division for Small Business 625 Broadway Albany, NY 12207

A directory of certified minority- and women-owned business enterprises is available from:

Empire State Development Minority and Women's Business Development Division 625 Broadway Albany, NY 12207

State Finance Law sections 139-j and 139-k - NYSERDA is required to comply with State Finance Law sections 139-j and 139-k. These provisions contain procurement lobbying requirements which can be found at https://online.ogs.ny.gov/legal/lobbyinglawfaq/default.aspx . Proposers are required to answer questions during proposal submission, which will include making required certification under the State Finance Law and to disclose any Prior Findings of Non-Responsibility (this includes a disclosure statement regarding whether the proposer has been found non-responsible under section 139-j of the State Finance Law within the previous four years).

Tax Law Section 5-a - NYSERDA is required to comply with the provisions of Tax Law Section 5-a, which requires a prospective contractor, prior to entering an agreement with NYSERDA having a value in excess of \$100,000, to certify to the Department of Taxation and Finance (the "Department") whether the contractor, its affiliates, its subcontractors and the affiliates of its subcontractors have registered with the Department to collect New York State and local sales and compensating use taxes. The Department has created a form to allow a prospective contractor to readily make such certification. See, ST-220-TD (available at http://www.tax.ny.gov/pdf/current_forms/st/st220td_fill_in.pdf). Prior to contracting with NYSERDA, the prospective contractor must also certify to NYSERDA whether it has filed such certification with the Department.

The Department has created a second form that must be completed by a prospective contractor prior to contacting and filed with NYSERDA. See, ST-220-CA (available at <u>http://www.tax.ny.gov/pdf/current_forms/st/st220ca_fill_in.pdf</u>). The Department has developed guidance for contractors which is available at <u>http://www.tax.ny.gov/pdf/publications/sales/pub223.pdf</u>.

Contract Award - NYSERDA anticipates making multiple awards under this solicitation. NYSERDA may request additional data or material to support submissions including scope of work modifications or negotiations before issuing a Purchase Order. Each offer should be submitted using the most favorable cost and technical terms. NYSERDA may request additional data or material to support applications. A sample Purchase Order is available on request. NYSERDA expects to notify customers in approximately three (3) weeks from the receipt of a complete project package whether the submission has been selected to receive an award.



Accessibility Requirements - If awardees from this solicitation will be posting anything on the web, or if the awardee will produce a final report that NYSERDA will post to the web, the following language must be included. NYSERDA requires contractors producing content intended to be posted to the Web to adhere to New York State's Accessibility Policy. This includes, but is not limited to, deliverables such as: documents (PDF, Microsoft Word, Microsoft Excel, etc.), audio (.mp3, .wav, etc.), video (.mp4, .mpg, .avi, etc.), graphics (.jpg, .png, etc.), web pages (.html, .aspx, etc.), and other multimedia and streaming media content. For more information, see NYSERDA's Accessibility Requirements.

Limitation - This solicitation does not commit NYSERDA to award a contract, pay any costs incurred in preparing a proposal, or to procure or contract for services or supplies. NYSERDA reserves the right to accept or reject any or all proposals received, to negotiate with all qualified sources, or to cancel in part or in its entirety the solicitation when it is in NYSERDA's best interest. NYSERDA reserves the right to reject proposals based on the nature and number of any exceptions taken to the standard terms and conditions of the Sample Agreement. NYSERDA reserves the right to disqualify proposers based upon the results of a background check into publicly available information and the presence of a material possibility of any reputational or legal risk in making of the award.

Disclosure Requirement - The proposer shall disclose any indictment for any alleged felony, or any conviction for a felony within the past five years, under the laws of the United States or any state or territory of the United States and shall describe circumstances for each. When a proposer is an association, partnership, corporation, or other organization, this disclosure requirement includes the organization and its officers, partners, and directors or members of any similarly governing body. If an indictment or conviction should come to the attention of NYSERDA after the award of a contract, NYSERDA may exercise its stop-work right pending further investigation or terminate the agreement; the contractor may be subject to penalties for violation of any law which may apply in the particular circumstances. Proposers must also disclose if they have ever been debarred or suspended by any agency of the U.S. Government or the New York State Department of Labor.

VI: ATTACHMENTS

- Attachment A Terms and Conditions
- Attachment B Waiver of RTEM Service Requirement Request for RTEM Projects Attachment C – RTEM Contract Addendum Guidelines



On-site Energy Manager Pilot Program Opportunity Notice (PON) 3701

Applications accepted through December 30, 2022 by 3:00 PM Eastern Time*

This New York State Energy Research and Development Authority (NYSERDA) Program Opportunity Notice (PON) 3701 seeks applications from facilities interested in participating in the On-site Energy Manager Pilot (the "Pilot") to demonstrate how a dedicated On-site Energy Manager (OsEM) can improve a company's profitability by delivering energy, process, and operational improvements. As part of the Pilot, NYSERDA will cost-share of up to 75% of OsEM fees.

The Pilot targets commercial, industrial, and multifamily facilities, campuses, or portfolios that do not have an existing dedicated full-time OsEM. Applicants must show a desire to continue the role beyond the Pilot engagement period and must be willing to share results and lessons learned to further the Pilot's objective of increasing the penetration of energy managers.

Applicants seeking support for contracted OsEMs may select a consultant from the current list of NYSERDA Flexible Technical Assistance (FlexTech) Consultants. Applicants may also seek support for a new permanent hire or a hybrid of supplementing permanent staff with a Consultant.

A minimum of one webinar will be held regarding the Pilot. Additional information about the webinar and the Pilot in general can be found on the webpage: <u>www.nyserda.ny.gov/OSEM</u>.

Application Submission: Applications will be accepted via email to <u>OnSiteEnergyManager@nyserda.ny.gov</u> through December 30, 2022 or until all funds are fully committed. If Applicants intend to submit proposals with a claim of confidentiality, please consult <u>OnSiteEnergyManager@nyserda.ny.gov</u> first.

Questions should be directed as follows:

Commercial Program questions: Adam DeSio, 212-971-5342 ext. 3009, <u>AdamOsEM@nyserda.ny.gov</u> Industrial Program questions: Stacey Sabo, 716-842-1522 ext. 3037, <u>StaceyOsEM@nyserda.ny.gov</u> Multifamily Program questions: Simonne Li, 212-971-5342 ext. 3082, <u>SimonneOsEM@nyserda.ny.gov</u> All Contractual questions: Venice Forbes, 518-862-1090 ext. 3507, <u>VeniceSolicitations@nyserda.ny.gov</u>

*Late, incomplete, or unsigned applications will be returned. Faxed applications will not be accepted. Applications will not be accepted at any other NYSERDA location other than the address above. If changes are made to this solicitation, notification will be posted on NYSERDA's website at <u>www.nyserda.ny.gov</u>.

I. Introduction

The Pilot seeks to demonstrate the value of an OsEM role at a given facility such that the role becomes standardized and self-sustaining. Facilities will benefit from the successful energy and productivity projects that will be driven by OsEMs. Projects may include operation and maintenance improvements, behavioral changes, energy efficiency upgrades, process improvements, throughput and scrap reduction improvements, cost management, and other improvements such as water savings.

The purpose of the Pilot is to prove the business case for an OsEM role and to disseminate developed case studies and tools to the market for broader adoption. Pilot participants are required to share success stories and best practices to facilitate this market transformation activity. Post Pilot, participants who retain their OsEM and continue to demonstrate increased annual energy savings via reporting to NYSERDA may be eligible for a bonus payment (see Funding & Invoicing Section). Participants are encouraged to continue sharing success stories, even beyond the bonus period if applicable, through NYSERDA's website, Best Practice events, and other market transformation activities.

II. Eligibility Requirements

Eligible Applicants include NYS commercial, industrial, and multifamily facilities that pay into the electric System Benefits Charge (SBC).

In order to fully realize the benefit of energy management, the term of the OsEM contract will be a minimum of 12 months. Unless otherwise negotiated, all work cost-shared under this Pilot must be completed within 48 months of issuance of the Purchase Order (excluding the bonus payment period). The OsEM must begin work within 6 months of the issuance of the Notice to Proceed.

Applicants must:

- Not have an existing dedicated full time energy manager on-site.
- Effectively demonstrate the need for an OsEM per Attachment B: OsEM Concept.
- Perform the tasks listed in Attachment C: Scope of Work Requirements. Additional tasks related to energy
 management and productivity improvement may be added to the scope of work and will be subject to NYSERDA
 approval.

OsEM engagements must:

- Be at least 0.5 Full Time Equivalent (20 hours per week).
- Include cost-sharing in the form of cash support from the customer. In-kind contributions are allowed only in cases
 where the Applicant utilizes permanent staff.
- Use funds for OsEM services only and not for implementation or equipment purchase.

The OsEM must fall into one of the below designations:

- New permanent hire
 - Applicants seeking new permanent hires must secure the new hire within 3 months of receiving the NYSERDA Purchase Order.
- Supplementing permanent staff with contracted staff
- Contracted staff
 - Applicants utilizing contracted support may select a consultant from NYSERDA's FlexTech Consultant* list, which can be found at <u>www.nyserda.ny.gov/Contractors/Find-a-Contractor/FlexTech-Consultants</u>.
 - The specific Consultant staff member who will be performing the OsEM role must be identified in the scope of work submitted with the application. There must be one dedicated individual who performs the on-site services and is the direct customer contact. It is acceptable to have junior Consultant staff perform lower level administrative tasks, although such delegation should not hinder the Pilot's intention of demonstrating the business case for a dedicated energy manager. Resumes of all Consulting staff involved must be included in the proposal.

* Firms interested in applying to becoming a NYSERDA FlexTech Consultant may do so through RFP 3628: <u>http://www.nyserda.ny.gov/All-Programs/Programs/FlexTech-Program/Become-a-FlexTech-Consultant</u>.

III. OsEM Application & Required Documentation

Applications will be reviewed on a first-come, first-served basis dependent on funding availability. A complete application package consists of:

- Applicant Information and Certification (Attachment A)
- OSEM Concept (Attachment B) to justify the need for an OSEM.
- Scope of Work (per Scope of Work Requirements, Attachment C) with facility energy reduction goal, tasks, deliverables, and project schedule.
- Detailed budget (per Budget Template, Attachment D, or equivalent) including a breakout by task and by title, hourly rate, hours, and non-labor costs.
- **OsEM resume*** (for staff, contractor, or both depending on support sought) or job description. Please highlight:
 - Relevant qualifications such as licensed Professional Engineer (P.E.), Certified Energy Manager (CEM), Certified Energy Auditor (CEA), etc.
 - o Past experience as energy advisor to the sector
 - Demonstrated business acumen and leadership skills to be able to sell energy projects to upper management

* If the new permanent hire is not yet identified, the job description which reflects the Pilot criteria must be included. Resume of proposed candidate must be submitted once identified.

- Facility company organizational chart and reporting structure for OsEM role.
- Statement of commitment from facility's upper management (corporate officer or executive staff)

Application Review Process:

NYSERDA will review each application package for completeness and to ensure reasonableness across the following areas:

- OsEM experience, qualifications, and leadership skills
- OsEM integration
- Cost & time allocation
- Labor rates
- Energy savings target (for the cost-shared 12+ month engagement) relative to the facility's annual energy usage

After a complete application package is reviewed, NYSERDA will inform the Applicant of their selection status. NYSERDA intends to work with Applicants during the review process through the sharing of comments and recommendations for scope of work improvement to encourage successful applications. This may include:

- Making adjustments to the contract period and funding levels
- Reducing the NYSERDA cost-share based on hourly rates presented
- Making adjustments to the proposed scope of work and required reporting

Applications will be rejected when:

- The eligibility requirements set forth in Section II are not met.
- The application package is incomplete per Section III.
- Successful negotiation of the application package is not possible after comments and discussion with NYSERDA.

IV. Funding & Invoicing

Funding Overview:

Facility Consumption (aggregated)	OsEM Cost-Share (initial 12+ month term)	OsEM Bonus #1 (12 mo after initial term)	OsEM Bonus #2 (24 mo after initial term)	Maximum Possible
Greater than \$1M annual energy spend	Up to 75% cost-share not to exceed \$200,000	\$7,000	\$7,000	\$214,000
Less than \$1M annual energy spend	Up to 75% cost-share not to exceed \$100,000	\$5,000	\$5,000	\$110,000

OsEM Cost-Share:

- NYSERDA will contribute up to 75% towards the allowable OsEM fees. Per task and budget detail in the approved scope of work.
- At NYSERDA's discretion, after three project applications from a single owner-organization, the cost share may be limited to 50%.
- NYSERDA's cost-share for the OsEM will be paid directly to the Applicant.
- For Applicants with annual energy costs greater than \$1 million (all fuels), the maximum OsEM cost-share excluding bonus payments is \$200,000.
- For Applicants with annual energy costs less than \$1 million (all fuels) the maximum OsEM cost-share excluding bonus payments is \$100,000.

OsEM Bonus:

Applicants may be eligible for a bonus payment for each additional year of continued OsEM engagement, capped at 2 additional years, for a potential total agreement term of 72 months. Applicants will be required to demonstrate successful engagement of the OsEM during the initial term, as well as the continued value of the OsEM, in order to be considered for a bonus payment.

- Applicants will be required to report the continued energy saving impacts and financial investments to NYSERDA at the conclusion of each additional year.
- Reported energy savings impacts for each bonus year period must be equal to or greater than 1% of the site's prior 12 month energy consumption to receive a bonus payment.
- Bonus payment reporting requirements are outlined on NYSERDA's OsEM page: www.nyserda.ny.gov/OSEM.
- Bonus payments are subject to NYSERDA's review and approval.

Invoicing:

- Invoices for OsEM services should be broken out by non-labor costs, individuals, titles, hourly rates, dates and hours worked on each task.
- Invoices should also indicate the amount that is being invoiced concurrently to/paid for by the site. If applicable, NYSERDA may also require a copy of the customer's canceled check paying their OsEM engagement cost-share.
- Travel costs are limited to 3% of the total OsEM engagement cost.
- Invoices may be submitted no more frequently than monthly at <u>https://services.nyserda.ny.gov/Invoices/</u>.
- NYSERDA will issue the Bonus payments directly to the Applicant after review and approval of each bonus period report.
- NYSERDA reserves the right to withhold payment in cases where program deliverables are not being met, as outlined in the approved scope of work.

V. GENERAL CONDITIONS

Proprietary Information - Careful consideration should be given before confidential information is submitted to NYSERDA as part of your proposal. Review should include whether it is critical for evaluating a proposal, and whether general, non-confidential information, may be adequate for review purposes.

The NYS Freedom of Information Law, Public Officers law, Article 6, provides for public access to information NYSERDA possesses. Public Officers Law, Section 87(2)(d) provides for exceptions to disclosure for records or portions thereof that "are trade secrets or are submitted to an agency by a commercial enterprise or derived from information obtained from a commercial enterprise and which if disclosed would cause substantial injury to the competitive position of the subject enterprise." Information submitted to NYSERDA that the proposer wishes to have treated as proprietary, and confidential trade secret information, should be identified and labeled "Confidential" or "Proprietary" on each page at the time of disclosure. This information should include a written request to except it from disclosure, including a written statement of the reasons why the information should be excepted. See Public Officers Law, Section 89(5) and the procedures set forth in 21 NYCRR Part 501 https://www.nyserda.ny.gov/About/-/media/Files/About/Contact/NYSERDA-Regulations.ashx. However, NYSERDA cannot guarantee the confidentiality of any information submitted.

Omnibus Procurement Act of 1992 - It is the policy of New York State to maximize opportunities for the participation of New York State business enterprises, including minority- and women-owned business enterprises, as bidders, subcontractors, and suppliers on its procurement Agreements.

Information on the availability of New York subcontractors and suppliers is available from:

Empire State Development Division for Small Business 625 Broadway Albany, NY 12207

A directory of certified minority- and women-owned business enterprises is available from:

Empire State Development Minority and Women's Business Development Division 625 Broadway Albany, NY 12207

State Finance Law sections 139-j and 139-k - NYSERDA is required to comply with State Finance Law sections 139-j and 139-k. These provisions contain procurement lobbying requirements which can be found at https://online.ogs.ny.gov/legal/lobbyinglawfaq/default.aspx Proposers are required to answer questions during proposal submission, which will include making required certification under the State Finance Law and to disclose any Prior Findings of Non-Responsibility (this includes a disclosure statement regarding whether the proposer has been found non-responsible under section 139-j of the State Finance Law within the previous four years).

Tax Law Section 5-a - NYSERDA is required to comply with the provisions of Tax Law Section 5-a, which requires a prospective contractor, prior to entering an agreement with NYSERDA having a value in excess of \$100,000, to certify to the Department of Taxation and Finance (the "Department") whether the contractor, its affiliates, its subcontractors and the affiliates of its subcontractors have registered with the Department to collect New York State and local sales and compensating use taxes. The Department has created a form to allow a prospective contractor to readily make such certification. See, ST-220-TD (available at http://www.tax.ny.gov/pdf/current_forms/st/st220td_fill_in.pdf). Prior to contracting with NYSERDA, the prospective contractor must also certify to NYSERDA whether it has filed such certification with the Department.

The Department has created a second form that must be completed by a prospective contractor prior to contacting and filed with NYSERDA. See, ST-220-CA (available at http://www.tax.ny.gov/pdf/current_forms/st/st220ca_fill_in.pdf). The Department has developed guidance for contractors which is available at http://www.tax.ny.gov/pdf/current_forms/st/st220ca_fill_in.pdf). The Department has developed guidance for contractors which is available at http://www.tax.ny.gov/pdf/current_forms/st/st220ca_fill_in.pdf). The http://www.tax.ny.gov/pdf/current_forms/st/st220ca_fill_in.pdf). The http://www.tax.ny.gov/pdf/publications/sales/pub223.pdf .

Contract Award - NYSERDA anticipates making multiple awards under this solicitation. It may award a contract based on initial applications without discussion, or following limited discussion or negotiations. NYSERDA may request additional data or material to support submissions including scope of work modifications or negotiations before issuing a Purchase Order. Each application should be submitted using the most favorable cost and technical terms. Preference may be given to facilities with annual aggregated energy costs greater than \$500,000. NYSERDA will use Attachments A, C, D and E to contract successful applications. A sample Purchase Order is available on request. NYSERDA may at its discretion elect to

extend and/or add funds to any project funded through this solicitation. NYSERDA expects to notify customers in approximately three (3) weeks from the receipt of a complete application package whether the submission has been selected to receive an award.

Limitation - This solicitation does not commit NYSERDA to award a contract, pay any costs incurred in preparing a proposal, or to procure or contract for services or supplies. NYSERDA reserves the right to accept or reject any or all applications received, to negotiate with all qualified sources, or to cancel in part or in its entirety the solicitation when it is in NYSERDA's best interest. NYSERDA reserves the right to disqualify Applicants based upon the results of a background check into publicly available information and the presence of a material possibility of any reputational or legal risk in making of the award.

Disclosure Requirement – The Applicant shall disclose any indictment for any alleged felony, or any conviction for a felony within the past five years, under the laws of the United States or any state or territory of the United States, and shall describe circumstances for each. When a proposer is an association, partnership, corporation, or other organization, this disclosure requirement includes the organization and its officers, partners, and directors or members of any similarly governing body. If an indictment or conviction should come to the attention of NYSERDA after the award of a contract, NYSERDA may exercise its stop-work right pending further investigation, or terminate the agreement; the contractor may be subject to penalties for violation of any law which may apply in the particular circumstances. Proposers must also disclose if they have ever been debarred or suspended by any agency of the U.S. Government or the New York State Department of Labor.

VI. Attachments:

Attachment A: Applicant Information and Certification Attachment B: OsEM Concept Attachment C: Scope of Work Requirements Attachment D: Budget Template Attachment E: Terms and Conditions

APPLICANT INFORMATION (SITE CONTRACTING THE ON-SITE ENERGY MANAGER)

Applicant		Applicant Conta	ct ¹ and Title	
Address		City	State	Zip
Phone (include area code)	Fax (include area	code)	Em	ail Address
ON-SITE ENERGY MANAG	ER INFORMATI	ON		
On-Site Energy Manager N	ame	Consultant Firm	Name & Contract Num	ber (if applicable)
Address		City	State	Zip
Phone (include area code)		Email Address		
FACILITY DESCRIPTION	(CHOOSE COMM	IERCIAL OR I	NDUSTRIAL SUBSE	CTOR)
Commercial:				
Colleges & Universities	Given School K-12 School		Gereal Government	rnment
Healthcare	Hospitality		Local Govern	ment
Multifamily	Not-for-Profit		□ State Governm	nent
Commercial Office	Commercial Re	otail	□ Other	
☐ Industrial:				
Apparel	Beverage		Chemical	
Computer & electronic pr	oduct		Electrical equip Electrical	ipment,

appliance, & component	Fabricated metal product		pinent,
Gamma Furniture & related produce	et □ Food	Leather & allie	d product
□ Machinery	□ Nonmetallic mineral product	Deper Deper	
Detroleum & coal products	s 🖵 Plastics & rubber products	Primary metal	
Printing & related support product mills	activities	Textile mills	Textile
□ Tobacco products	Transportation equipment	U Wood product	
□ Miscellaneous			

Facility Square Footage:

FACILITY DESCRIPTION (CONTINUED)

Is the facility contributing to the System Benefits Charge (SBC) through their electric utility? \Box Yes \Box No

Electric Distribution Provider (Company Name)	
Electricity Costs & Consumption	Annual \$:
	Annual kWh:
Natural Gas Utility (Company Name)	
Natural Gas Costs & Consumption	Annual \$:
	Annual Therms:
Other Energy Costs & Consumption (please list fuel type)	Annual \$:
	Annual Usage:
Total Energy Cost	Annual \$:

Other

Does the facility have an existing On-site Energy Manager? □ Yes □ No

Target savings percent (expressed as a percentage of total annual usage by fuel type; please note goals should be expressed as the goal for entire engagement length and each fuel targeted in the goal should be listed)

APPLICANT CERTIFICATION

On-site Energy Manager Terms for applicants:

I, the Applicant, certify that the facility named in the scope of work is interested in On-site Energy Manager services and is requesting that NYSERDA set aside funds to reimburse the Applicant for certain eligible costs, as outlined in the scope of work, in pursuing an On-site Energy Manager project. I certify that the information provided is true to the best of my knowledge. I certify to comply with the Terms and Conditions in Attachment E.

I, the Applicant, also certify that NYSERDA does not provide any endorsement of the On-site Energy Manager's capabilities (Consultant or direct hire) to provide services outside of the Scope of Work to be conducted pursuant to this agreement.

The Customer acknowledges that neither NYSERDA nor the On-site Energy Manager is responsible for assuring that the design; engineering or installation of any recommendation of the technical service is proper or complies with any particular laws (including patent laws), codes, or industry standards as part of this Scope of Work.

Overall

NYSERDA does not make any representations of any kind regarding the results to be achieved or the adequacy or safety of any recommendation. NYSERDA does not endorse, guarantee, or warrant any particular manufacturer or product, and NYSERDA provides no warranties, expressed or implied for any product of service.

I authorize the New York State Energy Research and Development Authority (NYSERDA), and its designated representa- tives, to access energy billing and consumption data for my site(s). This authorization automatically terminates at the end of five years following the execution date of the Purchase Order associated with this Application.

As an authorized representative of the site(s) listed in this Application, I authorize NYSERDA, and its designated representatives, to access and utilize any and all energy consumption information and data. I understand that this information will be used to evaluate energy use patterns for the purpose of measuring energy performance and determining the potential and actual energy savings resulting from evaluated or implemented energy projects. I agree to cooperate with activities designed to evaluate program effectiveness, such as responding to questionnaires and allowing on-site inspection and measurement of installed measures. I understand that NYSERDA is subject to the NYS Freedom of Information Law, Public Officers law, Article 6, and that NYSERDA cannot guarantee confidentiality of any information submitted.

AUTHORIZED APPLICANT (ENTITY PAYING FOR THE ON-SITE ENERGY MANAGER)

Applicant Signature:

Name and Title (must be corporate officer or executive staff)

Organization (include area code) Phone

Applicant Federal ID#

Attachment B OsEM Concept

The OsEM concept must include and describe:

- 1. **Existing Conditions:** Identify existing facility conditions and assumptions that will allow for successful completion of the Scope of Work (SOW)
- 2. **Current state of energy management**: Describe the current energy management practices at the facility & the long-term need/ desire for an OsEM, including:
 - o Background that explains special need/desire for an OsEM
 - Plan for incorporating the OsEM into the broader team (account for operations and business process)
 - Description of existing:
 - 1. Organizational cultures (e.g. safety culture, quality, energy, etc.) and awareness training programs
 - 2. Energy tracking and monitoring system
 - 3. Cross-functional energy team

3. OsEM Integration

0

- Demonstrate how the OsEM will be incorporated into the existing business structure by including a description of:
 - i. the individual at the facility(ies) who will be responsible for overseeing the effort and ensuring successful integration of the OsEM.
 - ii. the intent to continue the role post Pilot engagement.
 - iii. how results and lessons learned will be shared to further the Pilot's objective of increasing the penetration of energy managers at commercial, industrial, and multifamily facilities.
 - iv. what data and other support will be available to the OsEM to enable successful performance of duties.
 - v. an on-site work space (with computer and phone).
 - Describe how the OsEM role will be fulfilled:
 - i. New permanent hire
 - 1. Applicants seeking new permanent hires must secure the new hire within 3 months of receiving the NYSERDA Purchase Order.
 - 2. If the new permanent hire is not yet identified, the job description which reflects the Pilot criteria must be included.
 - ii. Supplementing permanent staff with contracted staff
 - iii. Contracted staff
 - 1. Applicants utilizing contracted support may select a consultant from NYSERDA's FlexTech Consultant list, which can be found at <u>www.nyserda.ny.gov/Contractors/Find-a-Contractor/FlexTech-Consultants</u>.
 - 2. The specific Consultant staff member who will be performing the OsEM role must be identified in the scope of work. There must be one dedicated individual who performs the on-site services and is the direct customer contact. It is acceptable to have junior Consultant staff perform lower level administrative tasks, although such delegation should not hinder the Pilot's intention of demonstrating the business case for a dedicated energy manager. Resumes of all Consulting staff involved must be included in the proposal.

4. Facility energy acuity and project implementation history

- Provide existing corporate sustainability or energy goals
- o Highlight independent or peer recognition for energy projects
- Experience implementing energy efficiency projects on the scale proposed.

5. Preferred (not required) Experience

 Show ability to implement sizeable (>1,000 MWh electric or > 10,000 MMBtu fossil fuel), complicated (multi measure) energy and/or productivity projects

ATTACHMENT C SCOPE OF WORK REQUIREMENTS

The Scope of Work (SOW) must be submitted in Microsoft Word format (or comparable) and written as such for contracting (not as a proposal). The SOW must include:

1. OsEM engagement and site specific goals

- a. Identify the site energy reduction target for the cost-shared 12+ engagement and provide some discussion on reasonableness of target as well as how the facility plans to meet the target. The target should be based on total energy consumed on-site (electric and fuel).
- b. State the length of the engagement in months and the weekly commitment in hours.
- 2. **Required Tasks** (the tasks below must be included in the SOW; additional tasks related to energy management and productivity improvement may be added):
 - a. Initiate and develop an energy management plan (first draft within 3 months of contracting the OsEM) that is a living document that is updated throughout the engagement and works towards the facility provided energy goal.
 - b. Develop and/or maintain an energy tracking and monitoring system. Explain how the system will be used to report results.
 - c. Develop and/or maintain a cross-functional energy team and hold monthly meetings
 - d. Develop a strategy for energy savings Measurement & Verification
 - e. Conduct walkthrough audits and reports that identify savings opportunities (CapEx, O&M, etc) for further investigation; provide reports to NYSERDA and the facility for review and comment
 - f. Review maintenance operational schedules and procedures to identify operational savings opportunities and develop preventative (rather than reactive) maintenance plan; schedule at least 1 employee training session to address the identified operational misuses that impact energy
 - g. Develop and propose energy and productivity projects; including developing the business case
 - h. Reporting:
 - Quarterly savings reports that document results from both capital upgrades and operational changes
 - Project management check-ins with NYSERDA via conference call at least once per month
 - Final report that documents overall effort and progress against facility energy goal
 - i. Tool development:
 - o Case study, including savings metrics, for online publishing
 - Road map of the OsEM on-boarding process, for online publishing. The road map is expected to be a look-back of the participant's experience, with recommendations and adjustments made to reflect lessons learned during the process and best practices identified.
 - j. Peer to Peer Sharing: Show a willingness for peer to peer sharing throughout the Pilot
 - k. (OPTIONAL) Development of marketing materials highlighting and promoting projects
- 3. Schedule: Include a schedule incorporating all SOW tasks and indicate full time or part time OsEM engagement.
- 4. **Budget:** Include a detailed budget that shows hours and dollars allocated to each task of the scope of work. The budget must be reasonable and must show the portion of the budget being requested by NYSERDA and the portion that is the customer's responsibility. Budget Template (Attachment D) or equivalent must be completed.

5. Deliverables

- a. Minimum of two on-site (kick-off and exit) meetings, or other frequency at NYSERDA's discretion
- b. Energy Management Plan to be submitted at the conclusion of the first quarter.
- c. Quarterly Reports, including the following information
 - o Progress against goal
 - Description of and updates to the energy tracking and monitoring system
 - Agendas and write-ups from cross-functional energy team meetings

- Description of and updates to the energy savings Measurement & Verification plan
- New or updated reports from walkthrough audits that identify opportunities for further investigation
- Description of procedures put in place to address operational and maintenance misuses of energy; write-up summarizing the (planned or executed) employee operational and maintenance misuses training session (syllabus, employee feedback, results/outcomes, etc.)
- Proposed, evaluated, and implemented energy (capital upgrades and operational improvements) and productivity measure list, project descriptions, energy and cost savings analysis, and economic analysis

* NYSERDA reporting templates are posted on <u>www.nyserda.ny.gov/OsEM</u>. These templates are provided as a guide and not a required format, however, all information requested in each template must be reported.

- d. Project management check-ins with NYSERDA via conference call at least once per month.
- e. Final report that documents overall effort and progress against facility energy goal
- f. Case study, including savings metrics, for online publishing
- g. Road map of the OsEM on-boarding process (including best practices), for online publishing
- h. Bonus payment reporting, as applicable. Bonus Payment reporting details can be found on NYSERDA's OSEM website: <u>www.nyserda.ny.gov/OSEM</u>.

ATTACHMENT D EXAMPLE BUDGET TEMPLATE

				<u></u>		<u> </u>				1
Facilit	/y:									
Task			n; additional tasks re	elated to energy managem	ent and productiv	rity <i>Title</i>	Title	Title	TOTAL	
Task	improvement may	e added)				Rate	Rate	Rate		
1	Develop energy m	nagement plan								
2	Develop energy tr	cking & monitoring	system							
3	Develop a cross f	ctional energy tear	m and hold monthly n	neetings						
4	Develop a strateg	or energy savings	M&V at a corporate I	evel						
5	Conduct walkthro	h audits and report	íS							
6	Review O&M schr	lules and procedure	€S;							Ĺ
7	Schedule at least	ne (1) employee tra	ining session to add	ress energy awareness a	nd operational					
	issues									
8	Develop and impl	nent energy and pro	oductivity projects							
9		(Ins	sert additional Tasks	as needed)						
10		(Ins	sert additional Tasks	as needed)						
11a	On-site meetings	ick-off and exit)								
11b	Reporting: Monthl									
11v	Reporting: Quarte	y and Final Reports	<i>j</i>							
12a	Tool Development	Case study								
12b	Tool Development	Road map								
	Total Hours					0	0	0		Γ
	Hourly Charge-ou	Rate (Multiplier)								
	Total Labor Fee					\$0.00	\$0.00	\$0.00	\$0.00	

On-site Energy Manager Expenses (travel costs are limited to 3% of the total OsEM engagement cost)									
ltem			Amount		Unit			Unit Cost	Total
Expenses								\$0.00	\$0.00
Mileage				mile				\$0.00	\$0.00
								Total	\$0.00

Г

Pilot Engagement	
TOTAL BUDGET (total labor + expenses)	\$0.00
Customer Share (minimum 25%)	\$0.00
NYSERDA Requested Share (maximum 75%)	\$0.00

Bonus Payment Potential (if applicable)	
Year 1	\$0.00
Year 2	\$0.00
Total BONUS PAYMENTS	\$0.00

Total Potential NYSERDA Funding	
(NYSERDA cost share + total bonus	
payments)	\$0.00

ATTACHMENT E

EXHIBIT A TERMS & CONDITIONS

1. Approval

NYSERDA's approval of a complete Application shall be evidenced by the issuance of a Purchase Order (PO). The Applicant may not commence work with the On-Site Energy Manager until such PO has been issued.

2. Amounts Payable

The Applicant shall pay the Cost Share, identified in the PO, directly to the On-Site Energy Manager as set forth in a separate agreement between the Applicant and the On-Site Energy Manager. The NYSERDA Agreement with the Applicant is a not-to-exceed amount, based on the Applicant's scope of work, budget, and allowance for the potential bonus payment. The Applicant will be bound to the staff identified and hourly rates included in the approved scope of work and budget. The NYSERDA share shall not exceed 75% of the total cost of the On-Site Energy Manager's services, not to exceed the hourly rates included in the project budget, for the initial 12 or greater month work period. All NYSERDA payments will be based on approved invoices, and any backup documentation, when required. Should the total amount be lower than the original not-to-exceed amount, then NYSERDA reserves the right to lower the not-to-exceed amount accordingly. NYSERDA also reserves the right to seek a refund for monies paid if, at any time, it learns that the work was not completed as invoiced.

3. Inspections, Follow-up Visits and On-Site Monitoring

(a) NYSERDA reserves the right to make a reasonable number of visits to the facility. Such visit(s) will be at a time convenient to the Applicant and made with at least one week advance notice to the applicant by NYSERDA.

4. Payments

OsEM Cost-Share: The Applicant will submit invoices directly to NYSERDA. NYSERDA may require a copy of the Applicant's canceled check paying their On-site Energy Manager engagement cost-share. Invoices may be submitted no more frequently than monthly to https://services.nyserda.ny.gov/Invoices/.

OsEM Bonus: NYSERDA will issue the Bonus payments directly to the Applicant after review and approval of each bonus period report.

NYSERDA reserves the right to withhold payment in cases where program deliverables are not being met or where the Applicant has not met their scope of work or performance obligations.

5. Changes in the Program

Notwithstanding paragraph 21 (b), the program and these Terms & Conditions may be changed by NYSERDA at any time without notice. Approved applications, however, will be processed to completion under the Terms & Conditions in effect at the time of application to NYSERDA.

6. Indemnification

The Applicant shall protect, indemnify and hold harmless NYSERDA and the State of New York from and against all liabilities, losses, claims, damages, judgments, penalties, causes of action, costs and expenses (including, without limitation, attorneys' fees and expenses) imposed upon or incurred by or asserted against NYSERDA or the State of New York resulting from, arising out of or relating to Applicant's or its subcontractors' performance of this Agreement. The obligations of the Applicant under this Article shall survive any expiration or termination of this Agreement, and shall not be limited by any enumeration herein of required insurance coverage.

7. No Warranties

- (a) NYSERDA does not endorse, guarantee, or warrant any particular manufacturer or product, and NYSERDA provides no warranties, expressed or implied, for any product or services. The Applicant's reliance on warranties is limited to any warranties that may arise from, or be provided by contractors, vendors, etc.
- (b) The Applicant acknowledges that neither NYSERDA nor any of its consultants are responsible for assuring that the design, engineering and construction of the Project is proper or complies with any particular laws (including patent laws), codes, or industry standards. NYSERDA does not make any representations of any kind regarding the results to be achieved by the Project or the adequacy or safety of such measures.

8. Limit of Incentive Payments

NYSERDA reserves the right, for any reason, to stop approving applications and limit or stop making payments at any time without notice.

9. Release by the Applicant

The payment by the Applicant of the final invoice submitted shall release NYSERDA from any and all claims and liability the Applicant, its representatives, and assigns might otherwise have relating to this award.

10. Title to equipment

Title to all of the equipment purchased under this Agreement shall vest with the Applicant.

13 Vendor Selection

NYSERDA has the right not to allow a vendor, contractor, or direct hire of the Applicant to participate in this program.

14. Removal of Equipment

The Applicant agrees, as a condition of participation in the program, to remove and dispose of the equipment being replaced by the Project in accordance with all laws, rules, and regulations.

15. Miscellaneous

- (a) This Agreement (the Application and these Terms and Conditions) is the entire agreement between the parties and supersedes all other communications and representations.
- (b) If either NYSERDA or the Applicant desires to modify this Agreement, the modification must be in writing and approved by an authorized representative of both parties.

16. Audit

The Applicant shall keep, maintain, and preserve at its principal office throughout the term of the Agreement and for a period of five years after acceptance of the Work, full and detailed books, accounts, and records pertaining to this Agreement, including without limitation, all data, bills, invoices, payrolls, time records, expense reports, subcontracting efforts and other documentation evidencing, or in any material way related to, Applicant's performance under this Agreement.

NYSERDA shall have the right from time to time and at all reasonable times during this period to inspect and audit any and all books, accounts and records related to this Agreement or reasonably necessary to the performance of an audit at the office or offices of the Applicant where they are then being kept, maintained and preserved. Any payment made under the Agreement shall be subject to retroactive reduction for amounts included therein which are found by NYSERDA on the basis of any audit of the Applicant by NYSERDA, the State of New York or an agency of the United States not to constitute an allowable charge or cost hereunder.

17. Stop Work Order

- (a) NYSERDA may at any time, by written Order to the Applicant, require the Applicant to stop all or any part of the Work called for by this Agreement for a period of up to ninety (90) days after the Stop Work Order is delivered to the Applicant, and for any further period to which the parties may agree. Any such order shall be specifically identified as a Stop Work Order issued pursuant to this Section. Upon receipt of such an Order, the Applicant shall forthwith comply with its terms and take all reasonable steps to minimize the incurrence of costs allocable to the Work covered by the Order during the period of work stoppage consistent with public health and safety. Within a period of ninety (90) days after a Stop Work Order is delivered to the Applicant, or within any extension of that period to which the parties shall have agreed, NYSERDA shall either:
 - (i) by written notice to the Applicant, cancel the Stop Work Order, which shall be effective as provided in such cancellation notice, or if not specified therein, upon receipt by the Applicant, or
 - (ii) terminate the Work covered by such order as provided in the Termination Section of this Agreement.
- (b) If a Stop Work Order issued under this Section is cancelled or the period of the Order or any extension thereof expires, the Applicant shall resume Work. An equitable adjustment shall be made in the delivery schedule, the estimated cost, the fee, if any, or a combination thereof, and in any other provisions of the Agreement that may be affected, and the Agreement shall be modified in writing accordingly, if:
 - (i) the Stop Work Order results in an increase in the time required for, or in the Applicant's cost properly allocable to, the performance of any part of this Agreement, and
 - (ii) the Applicant asserts a claim for such adjustments within 30 days after the end of the period of Work stoppage; provided that, if NYSERDA decides the facts justify such action, NYSERDA may receive and act upon any such claim asserted at any time prior to final payment under this Agreement.
- (c) If a Stop Work Order is not cancelled and the Work covered by such Order is terminated, the reasonable costs resulting from the Stop Work Order shall be allowed by equitable adjustment or otherwise.
- (d) Notwithstanding the provisions of this Section, the maximum amount payable by NYSERDA to the Applicant pursuant to this Section shall not be increased or deemed to be increased except by specific written amendment hereto.

18. Termination

(a) This Agreement may be terminated by NYSERDA at any time during the term of this Agreement with or without cause, upon ten (10) days prior written notice to the Applicant. In such event, payment shall be paid to the Applicant for Work performed and expenses incurred prior to the effective date of termination in accordance with the provisions of the Article hereof entitled Incentive Payment and in reimbursement of any amounts required to be paid by the Applicant pursuant to Subcontracts; provided, however, that upon receipt of any such notice of termination, the Applicant shall cease the performance of Work, shall make no further commitments with respect thereto and shall reduce insofar as possible the amount of outstanding commitments (including, to the extent requested by NYSERDA, through termination of subcontracts containing provisions therefor).

(b) NYSERDA specifically reserves the right to terminate this agreement in the event that the certification filed by the Applicant in accordance with State Finance Law Sections 139-j and 139-k is found to have been intentionally false or intentionally incomplete, or that the certification filed by the Applicant in accordance with New York State Tax Law Section 5-a is found to have been intentionally false when made. Terminations under this subsection (b) will be effective upon Notice. (c) Nothing in this Article shall preclude the Applicant from continuing to carry out the Work called for by the Agreement after receipt of a Stop Work Order or termination notice at its own election, provided that, if the Applicant so elects: (i) any such continuing Work after receipt of the Stop Work Order or termination notice shall be deemed not to be Work pursuant to the Agreement, and (ii) NYSERDA shall have no liability to the Applicant for any costs of the Work continuing after receipt of the Stop Work Order or termination notice.

19. Suspension or Termination for Non-Responsibility

- (a) Suspension. NYSERDA, in its sole discretion, reserves the right to suspend any or all activities under this Agreement, at any time, when it discovers information that calls into question the Responsibility of the Applicant. In the event of such suspension, the Applicant will be given written notice outlining the particulars of such suspension. Upon issuance of such notice, the Applicant must comply with the terms of the suspension order. Contract activity may resume at such time as NYSERDA issues a written notice authorizing a resumption of performance under the Contract.
- (b) Termination. Upon written notice to the Applicant, and a reasonable opportunity to be heard with appropriate NYSERDA officials or staff, this Agreement may be terminated by NYSERDA at the Applicant's expense where the Applicant is determined by NYSERDA to be non-Responsible. In such event, NYSERDA may complete the contractual requirements in any manner it may deem advisable and pursue available legal or equitable remedies for breach.

Payments are not payable unless NYSERDA has approved the Invoice, and approved the other activities and documentation provided by the On-Site Energy Manager.

20. Independent Contractor

- (a) The status of the Applicant under this Agreement shall be that of an independent contractor and not that of an agent, and in accordance with such status, the Applicant, the subcontractors, and their respective officers, agents, employees, representatives and servants shall at all times during the term of this Agreement conduct themselves in a manner consistent with such status and by reason of this Agreement shall neither hold themselves out as, nor claim to be acting in the capacity of, officers, employees, agents, representatives or servants of NYSERDA nor make any claim, demand or application for any right or privilege applicable to NYSERDA, including, without limitation, vicarious liability, professional liability coverage or indemnification, rights or privileges derived from workers' compensation coverage, unemployment insurance benefits, social security coverage and retirement membership or credit. It is understood and agreed that the personnel furnished by Applicant to perform the Work shall be Applicant's employee(s) or agent(s), and under no circumstances are such employee(s) to be considered NYSERDA's employee(s) or agent(s), and shall remain the employees of Applicant, except to the extent required by section 414(n) of the Internal Revenue Code.
- (b) Applicant expressly acknowledges NYSERDA's need to be advised, on an immediate basis, of the existence of any claim or event that might result in a claim or claims against NYSERDA, Applicant and/or Applicant's personnel by virtue of any act or omission on the part of NYSERDA or its employees. Accordingly, Applicant expressly covenants and agrees to notify NYSERDA of any such claim or event, including but not limited to, requests for accommodation and allegations of harassment and/or discrimination, immediately upon Applicant's discovery of the same, and to fully and honestly cooperate with NYSERDA in its efforts to investigate and/or address such claims or events, including but not limited to, complying with any reasonable request by NYSERDA for disclosure of information concerning such claim or event even in the event that this Agreement should terminate for any reason.
- (c) <u>Relationship of the Parties</u>. It is understood and agreed that the personnel serving as the On-Site Energy Manager, to perform the services stipulated in the Scope of Work (SOW), under no circumstances are to be considered NYSERDA's employee(s) or agent(s), and shall remain the employees of the Applicant, except to the extent required by section 414(n) of the Internal Revenue Code.

The relationship of the parties to these Terms and Conditions, the Purchase Order, the On-Site Energy Manager Agreement with the Applicant, and the On-Site Energy Manager Scope of Work with NYSERDA is that of independent contractors. Nothing in this Agreement shall be construed as creating a partnership, joint venture, employment, agency, legal representation or other relationship between NYSERDA and the Applicant for any reason, including but not limited to unemployment, workers' compensation, employee benefits, expense reimbursement, vicarious liability, professional liability coverage or indemnification. Neither party shall have the right, power or authority to obligate or bind the other in any manner not specified in these Terms and Conditions, the Purchase Order, the On-Site Energy Manager Agreement with the Applicant, or the On-Site Energy Manager Scope of Work with NYSERDA.

21. Insurance

Section 21.01. Maintenance of Insurance; Policy Provisions The Applicant, at no additional cost to NYSERDA, shall maintain or cause to be maintained throughout the term of this Agreement, shall maintain or cause to be maintained throughout the term of this Agreement, insurance of the types and in the amounts specified in the Section hereof entitled <u>Types of Insurance</u>. All such insurance shall be evidenced by insurance policies, each of which shall:

(a) except policies in evidence of insurance required under Section 11.02(b), name or be endorsed to cover NYSERDA, the State of New York and the Applicant as additional insureds;

(b) provide that such policy may not be cancelled or modified until at least 30 days after receipt by NYSERDA of written notice thereof; and

(c) be reasonably satisfactory to NYSERDA in all other respects.

Section 21.02. <u>Types of Insurance</u>. The types and amounts of insurance required to be maintained under this Article are as follows:

(a) Commercial general liability insurance for bodily injury liability, including death, and property damage liability, incurred in connection with the performance of this Agreement, with minimum limits of \$1,000,000 in respect of claims arising out of personal injury or sickness or death of any one person, \$1,000,000 in respect of claims arising out of personal injury, sickness or death in any one accident or disaster, and \$1,000,000 in respect of claims arising out of property damage in any one accident or disaster; and

(b) Workers Compensation, Employers Liability, and Disability Benefits as required by New York State.

Section 21.03. <u>Notification of Claims/Events</u>. The Applicant expressly acknowledges NYSERDA's need to be advised, on an immediate basis, of the existence of any claim or event that might result in a claim or claims against NYSERDA, the Applicant and/or the Applicant's personnel by virtue of any act or omission on the part of NYSERDA or its employees. Accordingly, the Applicant expressly covenants and agrees to notify NYSERDA of any such claim or event, including but not limited to, requests for accommodation and allegations of harassment and/or discrimination, immediately upon the Applicant's discovery of the same, and to fully and honestly cooperate with NYSERDA in its efforts to investigate and/or address such claims or events, including but not limited to, complying with any reasonable request by NYSERDA for disclosure of information concerning such claim or event even in the event that these Terms and Conditions, the On-Site Energy Manager Agreement or the On-Site Energy Manager Scope of Work should terminate for any reason.

EXHIBIT B

REVISED 5/12

STANDARD TERMS AND CONDITIONS FOR ALL NYSERDA AGREEMENTS

(Based on Standard Clauses for New York State Contracts and Tax Law Section 5-a)

The parties to the Agreement agree to be bound by the following clauses which are hereby made a part of the Agreement:

1. <u>NON-DISCRIMINATION REQUIREMENTS</u>. To the extent required by Article 15 of the Executive Law (also known as the Human Rights Law) and all other State and Federal statutory and constitutional non-discrimination provisions, the Applicant will not discriminate against any employee or applicant for employment because of race, creed, color, sex, national origin, sexual orientation, age, disability, genetic predisposition or carrier status, or marital status. Furthermore, in accordance with Section 220-e of the Labor Law, if this is an Agreement for the construction, alteration or repair of any public building or public work or for the manufacture, sale or distribution of materials, equipment or supplies, and to the extent that this Agreement shall be performed within the State of New York, Applicant agrees that neither it nor its subcontractors shall, by reason of race, creed, color, disability, sex or national origin: (a) discriminate in hiring against any New York State citizen who is qualified and available to perform the work; or (b) discriminate against or intimidate any employee hired for the performance of work under this Agreement. If this is a building service Agreement as defined in Section 230 of the Labor Law, then, in accordance with Section 239 thereof, Applicant agrees that neither it nor its subcontractors shall, by reason of race, creed, color, national origin, age, sex or disability: (a) discriminate in hiring against any New York State citizen who is qualified and available to perform the work; or (b) discriminate in hiring against any New York State citizen who is qualified and available to perform the genes that neither it nor its subcontractors shall, by reason of race, creed, color, national origin, age, sex or disability: (a) discriminate in hiring against any New York State citizen who is qualified and available to perform the work; or (b) discriminate any employee hired for the performance of work under this contract. Applicant is subject to fines of \$50.00 per person per day for any vio

2. <u>WAGE AND HOURS PROVISIONS</u>. If this is a public work Agreement covered by Article 8 of the Labor Law or a building service Agreement covered by Article 9 thereof, neither Applicant's employees nor the employees of its subcontractors may be required or permitted to work more than the number of hours or days stated in said statutes, except as otherwise provided in the Labor Law and as set forth in prevailing wage and supplement schedules issued by the State Labor Department. Furthermore, Applicant and its subcontractors must pay at least the prevailing wage rate and pay or provide the prevailing supplements, including the premium rates for overtime pay, as determined by the State Labor Department in accordance with the Labor Law. Additionally, effective April 28, 2008, if this is a public work contract covered by Article 8 of the Labor Law, the Applicant understands and agrees that the filing of payrolls in a manner consistent with Subdivision 3-a of Section 220 of the Labor Law shall be a condition precedent to payment by NYSERDA of any NYSERDA-approved sums due and owing for work done upon the project.

3. <u>NON-COLLUSIVE BIDDING REQUIREMENT</u>. In accordance with Section 2878 of the Public Authorities Law, if this Agreement was awarded based upon the submission of bids, Applicant warrants, under penalty of perjury, that its bid was arrived at independently and without collusion aimed at restricting competition. Applicant further warrants that, at the time Applicant submitted its bid, an authorized and responsible person executed and delivered to NYSERDA a non-collusive bidding certification on Applicant's behalf.

4. <u>INTERNATIONAL BOYCOTT PROHIBITION</u>. If this Agreement exceeds \$5,000, the Applicant agrees, as a material condition of the Agreement, that neither the Applicant nor any substantially owned or affiliated person, firm, partnership or corporation has participated, is participating, or shall participate in an international boycott in violation of the Federal Export Administration Act of 1979 (50 USC App. Sections 2401 et seq.) or regulations thereunder. If such Applicant, or any of the aforesaid affiliates of Applicant, is convicted or is otherwise found to have violated said laws or regulations upon the final determination of the United States Commerce Department or any other appropriate agency of the United States subsequent to the Agreement's execution, such Agreement, amendment or modification thereto shall be rendered forfeit and void. The Applicant shall so notify NYSERDA within five (5) business days of such conviction, determination or disposition of appeal. (See and compare Section 220-f of the Labor Law, Section 139-h of the State Finance Law, and 2 NYCRR 105.4).

5. <u>SET-OFF RIGHTS</u>. NYSERDA shall have all of its common law and statutory rights of set-off. These rights shall include, but not be limited to, NYSERDA's option to withhold for the purposes of set-off any moneys due to the Applicant under this Agreement up to any amounts due and owing to NYSERDA with regard to this Agreement, any other Agreement, including any Agreement for a term commencing prior to the term of this Agreement, plus any amounts due and owing to NYSERDA for any other reason including, without limitation, tax delinquencies, fee delinquencies or monetary penalties relative thereto.

6. <u>PROPRIETARY INFORMATION</u>. Notwithstanding any provisions to the contrary in the Agreement, Applicant and NYSERDA acknowledge and agree that all information, in any format, submitted to NYSERDA shall be subject to and treated in

accordance with the NYS Freedom of Information Law ("FOIL," Public Officers Law, Article 6). Pursuant to FOIL, NYSERDA is required to make available to the public, upon request, records or portions thereof which it possesses, unless that information is statutorily exempt from disclosure. Therefore, unless the Agreement specifically requires otherwise, Applicant should submit information to NYSERDA in a non-confidential, non-proprietary format. FOIL does provide that NYSERDA may deny access to records or portions thereof that "are trade secrets or are submitted to an agency by a commercial enterprise or derived from information obtained from a commercial enterprise and which if disclosed would cause substantial injury to the competitive position of the subject enterprise." [See Public Officers Law, § 87(2)(d)]. Accordingly, if the Agreement specifically requires submission of information in a format Applicant considers a proprietary and/or confidential trade secret, Applicant shall fully identify and plainly label the information "confidential" or "proprietary" at the time of disclosure. By so marking such information, Applicant represents that the information has actual or potential specific commercial or competitive value to the competitors of Applicant. Without limitation, information will not be considered confidential or proprietary if it is or has been (i) generally known or available from other sources without obligation concerning its confidentiality; (ii) made available by the owner to others without obligation concerning its confidentiality; or (iii) already available to NYSERDA without obligation concerning its confidentiality. In the event of a FOIL request, it is NYSERDA's policy to consider records as marked above pursuant to the trade secret exemption procedure set forth in 21 New York Codes Rules & Regulations § 501.6 and any other applicable law or regulation. However, NYSERDA cannot guarantee the confidentiality of any information submitted. More information on FOIL, and the relevant statutory law and regulations, can be found at the website for the Committee on Open Government (http://www.dos.state.ny.us/coog/foil2.html) and NYSERDA's Regulations, Part 501 (http://www.nyserda.ny.gov/en/About/~/media/Files/About/Contact/NYSERDARegulations.ashx).

7. IDENTIFYING INFORMATION AND PRIVACY NOTIFICATION. (a) FEDERAL EMPLOYER

IDENTIFICATION NUMBER and/or FEDERAL SOCIAL SECURITY NUMBER. As a condition to NYSERDA's obligation to pay any invoices submitted by Applicant pursuant to this Agreement, Applicant shall provide to NYSERDA its Federal employer identification number or Federal social security number, or both such numbers when the Applicant has both such numbers. Where the Applicant does not have such number or numbers, the Applicant must give the reason or reasons why the payee does not have such numbers.

(b) PRIVACY NOTIFICATION. The authority to request the above personal information from a seller of goods or services or a lessor of real or personal property, and the authority to maintain such information, is found in Section 5 of the State Tax Law. Disclosure of this information by Applicant to the State is mandatory. The principal purpose for which the information is collected is to enable the State to identify individuals, businesses and others who have been delinquent in filing tax returns or may have understated their tax liabilities and to generally identify persons affected by the taxes administered by the Commissioner of Taxation and Finance. The information will be used for tax administration purposes and for any other purpose authorized by law.

8. <u>CONFLICTING TERMS</u>. In the event of a conflict between the terms of the Agreement (including any and all attachments thereto and amendments thereof) and the terms of this Exhibit B, the terms of this Exhibit B shall control.

9. <u>GOVERNING LAW</u>. This Agreement shall be governed by the laws of the State of New York except where the Federal supremacy clause requires otherwise.

10. <u>NO ARBITRATION</u>. Disputes involving this Agreement, including the breach or alleged breach thereof, may not be submitted to binding arbitration (except where statutorily required) without the NYSERDA's written consent, but must, instead, be heard in a court of competent jurisdiction of the State of New York.

11. <u>SERVICE OF PROCESS</u>. In addition to the methods of service allowed by the State Civil Practice Law and Rules ("CPLR"), Applicant hereby consents to service of process upon it by registered or certified mail, return receipt requested. Service hereunder shall be complete upon Applicant's actual receipt of process or upon NYSERDA's receipt of the return thereof by the United States Postal Service as refused or undeliverable. Applicant must promptly notify NYSERDA, in writing, of each and every change of address to which service of process can be made. Service by NYSERDA to the last known address shall be sufficient. Applicant will have thirty (30) calendar days after service hereunder is complete in which to respond.

12. <u>CRIMINAL ACTIVITY</u>. If subsequent to the effectiveness of this Agreement, NYSERDA comes to know of any allegation previously unknown to it that the Applicant or any of its principals is under indictment for a felony, or has been, within five (5) years prior to submission of the Applicant's proposal to NYSERDA, convicted of a felony, under the laws of the United States or Territory of the United States, then NYSERDA may exercise its stop work right under this Agreement. If subsequent to the effectiveness of this Agreement, NYSERDA comes to know of the fact, previously unknown to it, that Applicant or any of its principals is under such indictment or has been so convicted, then NYSERDA may exercise its right to terminate this Agreement. If the Applicant knowingly withheld information about such an indictment or conviction, NYSERDA may declare the Agreement null and void and may seek legal remedies against the Applicant and its principals. The Applicant or its principals may also be subject to penalties for any violation of law which may apply in the particular circumstances. For an Applicant which is an association, partnership, corporation, or other organization, the provisions of this paragraph apply to any such indictment or

conviction of the organization itself or any of its officers, partners, or directors or members of any similar governing body, as applicable.

13. <u>PERMITS</u>. It is the responsibility of the Applicant to acquire and maintain, at its own cost, any and all permits, licenses, easements, waivers and permissions of every nature necessary to perform the work.

14. <u>PROHIBITION ON PURCHASE OF TROPICAL HARDWOODS</u>. The Applicant certifies and warrants that all wood products to be used under this Agreement will be in accordance with, but not limited to, the specifications and provisions of State Finance Law Section 165 (Use of Tropical Hardwoods), which prohibits purchase and use of tropical hardwoods, unless specifically exempted by NYSERDA.

15. <u>OMNIBUS PROCUREMENT ACT OF 1992</u>. It is the policy of New York State to maximize opportunities for the participation of New York State business enterprises, including minority and women-owned business enterprises as bidders, subcontractors and suppliers on its procurement contracts.

Information on the availability of New York State subcontractors and suppliers is available from:

NYS Department of Economic Development Division for Small Business 30 South Pearl St -- 7th Floor Albany, New York 12245 Telephone: 518-292-5220 Fax: 518-292-5884 http://www.esd.ny.gov

A directory of certified minority and women-owned business enterprises is available from:

NYS Department of Economic Development Division of Minority and Women's Business Development 30 South Pearl St -- 2nd Floor Albany, New York 12245 Telephone: 518-292-5250 Fax: 518-292-5803 http://www.empire.state.ny.us

The Omnibus Procurement Act of 1992 requires that by signing this Agreement, Applicants certify that whenever the total amount is greater than \$1 million:

(a) The Applicant has made reasonable efforts to encourage the participation of New York State Business Enterprises as suppliers and subcontractors, including certified minority and women-owned business enterprises, on this project, and has retained the documentation of these efforts to be provided upon request to the State;

(b) The Applicant has complied with the Federal Equal Opportunity Act of 1972 (P.L. 92-261), as amended;

(c) The Applicant agrees to make reasonable efforts to provide notification to New York State residents of employment opportunities on this project through listing any such positions with the Job Service Division of the New York State Department of Labor, or providing such notification in such manner as is consistent with existing collective bargaining contracts or agreements. The Applicant agrees to document these efforts and to provide said documentation to the State upon request; and

(d) The Applicant acknowledges notice that the State may seek to obtain offset credits from foreign countries as a result of this contract and agrees to cooperate with the State in these efforts.

16. <u>RECIPROCITY AND SANCTIONS PROVISIONS</u>. Bidders are hereby notified that if their principal place of business is located in a country, nation, province, state or political subdivision that penalizes New York State vendors, and if the goods or services they offer will be substantially produced or performed outside New York State, the Omnibus Procurement Act 1994 and 2000 amendments (Chapter 684 and Chapter 383, respectively) require that they be denied contracts which they would otherwise obtain. NOTE: As of May 15, 2002, the list of discriminatory jurisdictions subject to this provision includes the states of South Carolina, Alaska, West Virginia, Wyoming, Louisiana and Hawaii. Contact NYS Department of Economic Development for a current list of jurisdictions subject to this provision.

17. <u>COMPLIANCE WITH NEW YORK STATE INFORMATION SECURITY BREACH AND NOTIFICATION ACT</u>. Applicant shall comply with the provisions of the New York State Information Security Breach and Notification Act (General Business Law Section 899-aa; State Technology Law Section 208).

18. <u>PROCUREMENT LOBBYING</u>. To the extent this Agreement is a "procurement contract" as defined by State Finance Law Sections 139-j and 139-k, by signing this Agreement the Applicant certifies and affirms that all disclosures made in accordance with State Finance Law Sections 139-j and 139-k are complete, true and accurate. In the event such certification is found to be intentionally false or intentionally incomplete, NYSERDA may terminate the agreement by providing written notification to the Applicant in accordance with the terms of the agreement.

19. <u>COMPLIANCE WITH TAX LAW SECTION 5-a</u>. The following provisions apply to Applicants that have entered into agreements in an amount exceeding \$100,000 for the purchase of goods and services:

- a) Before such agreement can take effect, the Applicant must have on file with the New York State Department of Taxation and Finance an Applicant Certification form (ST-220-TD).
- b) Prior to entering into such an agreement, the Applicant is required to provide NYSERDA with a completed Applicant Certification to Covered Agency form (Form ST-220-CA).
- c) Prior to any renewal period (if applicable) under the agreement, the Applicant is required to provide NYSERDA with a completed Form ST-220-CA.

Certifications referenced in paragraphs (b) and (c) above will be maintained by NYSERDA and made a part hereof and incorporated herein by reference.

NYSERDA reserves the right to terminate this agreement in the event it is found that the certification filed by the Applicant in accordance with Tax Law Section 5-a was false when made.

20. <u>IRANIAN ENERGY SECTOR DIVESTMENT</u>. In accordance with Section 2879-c of the Public Authorities Law, by signing this contract, each person and each person signing on behalf of any other party certifies, and in the case of a joint bid or partnership each party thereto certifies as to its own organization, under penalty of perjury, that to the best of its knowledge and belief that each person is not on the list created pursuant to paragraph (b) of subdivision 3 of <u>section 165-a of the State</u> <u>Finance Law</u> (See <u>www.ogs.ny.gov/about/regs/ida.asp</u>).

EXHIBIT C

NYSERDA PROMPT PAYMENT POLICY STATEMENT

504.1. <u>Purpose and Applicability</u>. (a) The purpose of this Exhibit is to provide a description of Part 504 of NYSERDA's regulations, which consists of NYSERDA's policy for making payment promptly on amounts properly due and owing by NYSERDA under this Agreement. The section numbers used in this document correspond to the section numbers appearing in Part 504 of the regulations.¹

(b) This Exhibit applies generally to payments due and owing by the NYSERDA to the Applicant pursuant to this Agreement. However, this Exhibit does not apply to Payments due and owing when NYSERDA is exercising a Set-Off against all or part of the Payment, or if a State or Federal law, rule or regulation specifically requires otherwise.

504.2. Definitions. Capitalized terms not otherwise defined in this Exhibit shall have the same meaning as set forth earlier in this Agreement. In addition to said terms, the following terms shall have the following meanings, unless the context shall indicate another or different meaning or intent:

(a) "Date of Payment" means the date on which NYSERDA requisitions a check from its statutory fiscal agent, the Department of Taxation and Finance, to make a Payment.

(b) "Designated Payment Office" means the Office of NYSERDA's Controller, located at 17 Columbia Circle, Albany, New York 12203.

(c) "Payment" means payment properly due and owing to Applicant pursuant to Exhibit A of this Agreement.

(d) "Prompt Payment" means a Payment within the time periods applicable pursuant to Sections 504.3 through 504.5 of this Exhibit in order for NYSERDA not to be liable for interest pursuant to Section 504.6.

(e) "Payment Due Date" means the date by which the Date of Payment must occur, in accordance with the provisions of Sections 504.3 through 504.5 of this Exhibit, in order for NYSERDA not to be liable for interest pursuant to Section 504.6.

(f) "Proper Invoice" means a written request for Payment that is submitted by an Applicant setting forth the description, price or cost, and quantity of goods, property or services delivered or rendered, in such form, and supported by such other substantiating documentation, as NYSERDA may reasonably require, including but not limited to any requirements set forth in Exhibits A or B to this Agreement; and addressed to NYSERDA's Controller, marked "Attention: Accounts Payable," at the Designated Payment Office.

(g)(1) "Receipt of an Invoice" means:

(i) if the Payment is one for which an invoice is required, the later of:

(a) the date on which a Proper Invoice is actually received in the Designated Payment Office during normal business hours; or

(b) the date by which, during normal business hours, NYSERDA has actually received all the purchased goods, property or services covered by a Proper Invoice previously received in the Designated Payment Office.

(ii) if the Agreement provides that a Payment will be made on a specific date or at a predetermined interval, without having to submit a written invoice the 30th calendar day, excluding legal holidays, before the date so specified or predetermined.

(2) For purposes of this subdivision, if the Agreement requires a multifaceted, completed or working system, or delivery of no less than a specified quantity of goods, property or services and only a portion of such systems or less than the required goods, property or services are working, completed or delivered, even though the Applicant has invoiced NYSERDA for the portion working, completed or delivered, NYSERDA will not be in Receipt of an Invoice until the specified minimum amount of the systems, goods, property or services are working, completed or delivered.

(h) "Set-off" means the reduction by NYSERDA of a payment due an Applicant by an amount equal to the amount of

¹ This is only a summary; the full text of Part 504 can be accessed at: <u>http://www.nyserda.ny.gov/en/About/~/media/Files/About/Contact/NYSERDARegulations.ashx</u>)

an unpaid legally enforceable debt owed by the Applicant to NYSERDA.

504.3. <u>Prompt Payment Schedule</u>. Except as otherwise provided by law or regulation or in Sections 504.4 and 504.5 of this Exhibit, the Date of Payment by NYSERDA of an amount properly due and owing under this Agreement shall be no later than thirty (30) calendar days, excluding legal holidays, after Receipt of a Proper Invoice.

504.4. Payment Procedures.

(a) Unless otherwise specified in this Agreement, a Proper Invoice submitted by the Applicant to the Designated Payment Office shall be required to initiate payment for goods, property or services. As soon as any invoice is received in the Designated Payment Office during normal business hours, such invoice shall be date-stamped. The invoice shall then promptly be reviewed by NYSERDA.

(b) NYSERDA shall notify the Applicant within fifteen (15) calendar days after Receipt of an Invoice of:

- (1) any defects in the delivered goods, property or services;
- (2) any defects in the invoice; or
- (3) suspected improprieties of any kind.

(c) The existence of any defects or suspected improprieties shall prevent the commencement of the time period specified in Section 504.3 until any such defects or improprieties are corrected or otherwise resolved.

(d) If NYSERDA fails to notify an Applicant of a defect or impropriety within the fifteen (15) calendar day period specified in subdivision (b) of this section, the sole effect shall be that the number of days allowed for Payment shall be reduced by the number of days between the 15th day and the day that notification was transmitted to the Applicant. If NYSERDA fails to provide reasonable grounds for its contention that a defect or impropriety exists, the sole effect shall be that the Payment Due Date shall be calculated using the original date of Receipt of an Invoice.

(e) In the absence of any defect or suspected impropriety, or upon satisfactory correction or resolution of a defect or suspected impropriety, NYSERDA shall make Payment, consistent with any such correction or resolution and the provisions of this Exhibit.

504.5. Exceptions and Extension of Payment Due Date. NYSERDA has determined that, notwithstanding the provisions of Sections 504.3 and 504.4 of this Exhibit, any of the following facts or circumstances, which may occur concurrently or consecutively, reasonably justify extension of the Payment Due Date:

(a) If this Agreement provides Payment will be made on a specific date or at a predetermined interval, without having to submit a written invoice, if any documentation, supporting data, performance verification, or notice specifically required by this Agreement or other State or Federal mandate has not been submitted to NYSERDA on a timely basis, then the Payment Due Date shall be extended by the number of calendar days from the date by which all such matter was to be submitted to NYSERDA and the date when NYSERDA has actually received such matter.

(b) If an inspection or testing period, performance verification, audit or other review or documentation independent of the Applicant is specifically required by this Agreement or by other State or Federal mandate, whether to be performed by or on behalf of NYSERDA or another entity, or is specifically permitted by this Agreement or by other State or Federal provision and NYSERDA or other entity with the right to do so elects to have such activity or documentation undertaken, then the Payment Due Date shall be extended by the number of calendar days from the date of Receipt of an Invoice to the date when any such activity or documentation has been completed, NYSERDA has actually received the results of such activity or documentation have been corrected or otherwise resolved.

(c) If an invoice must be examined by a State or Federal agency, or by another party contributing to the funding of the Contract, prior to Payment, then the Payment Due Date shall be extended by the number of calendar days from the date of Receipt of an Invoice to the date when the State or Federal agency, or other contributing party to the Contract, has completed the inspection, advised NYSERDA of the results of the inspection, and any deficiencies identified or issues raised as a result of such inspection have been corrected or otherwise resolved.

(d) If appropriated funds from which Payment is to be made have not yet been appropriated or, if appropriated, not yet been made available to NYSERDA, then the Payment Due Date shall be extended by the number of calendar days from the date of Receipt of an Invoice to the date when such funds are made available to NYSERDA.

504.6. <u>Interest Eligibility and Computation</u>. If NYSERDA fails to make Prompt Payment, NYSERDA shall pay interest to the Applicant on the Payment when such interest computed as provided herein is equal to or more than ten dollars (\$10.00). Interest shall be computed and accrue at the daily rate in effect on the Date of Payment, as set by the New York State Tax Commission for corporate taxes pursuant to Section 1096(e)(1) of the Tax Law. Interest on such a Payment shall be computed for the period beginning on the day after the Payment Due Date and ending on the Date of Payment.

504.7. Sources of Funds to Pay Interest. Any interest payable by NYSERDA pursuant to Exhibit shall be paid only from the same accounts, funds, or appropriations that are lawfully available to make the related Payment.

504.8. Incorporation of Prompt Payment Policy Statement into Contracts. The provisions of this Exhibit shall apply to all Payments as they become due and owing pursuant to the terms and conditions of this Agreement, notwithstanding that NYSERDA may subsequently amend its Prompt Payment Policy by further rulemaking.

504.9. Notice of Objection. Applicant may object to any action taken by NYSERDA pursuant to this Exhibit that prevents the commencement of the time in which interest will be paid by submitting a written notice of objection to NYSERDA. Such notice shall be signed and dated and concisely and clearly set forth the basis for the objection and be addressed to the Vice President, New York State Energy Research and Development Authority, at the notice address set forth in this Agreement. The Vice President of NYSERDA, or his or her designee, shall review the objection for purposes of affirming or modifying NYSERDA's action. Within fifteen (15) working days of the receipt of the objection, the Vice President, or his or her designee, shall notify the Applicant either that NYSERDA's action is affirmed or that it is modified or that, due to the complexity of the issue, additional time is needed to conduct the review; provided, however, in no event shall the extended review period exceed thirty (30) working days.

504.10. <u>Judicial Review</u>. Any determination made by NYSERDA pursuant to this Exhibit that prevents the commencement of the time in which interest will be paid is subject to judicial review in a proceeding pursuant to Article 78 of the Civil Practice Law and Rules. Such proceedings shall only be commenced upon completion of the review procedure specified in Section 504.9 of this Exhibit or any other review procedure that may be specified in this Agreement or by other law, rule, or regulation.

504.11. Court Action or Other Legal Processes.

(a) Notwithstanding any other law to the contrary, the liability of NYSERDA to make an interest payment to an Applicant pursuant to this Exhibit shall not extend beyond the date of a notice of intention to file a claim, the date of a notice of a claim, or the date commencing a legal action for the payment of such interest, whichever occurs first.

(b) With respect to the court action or other legal processes referred to in subdivision (a) of this section, any interest obligation incurred by NYSERDA after the date specified therein pursuant to any provision of law other than Public Authorities Law Section 2880 shall be determined as prescribed by such separate provision of law, shall be paid as directed by the court, and shall be paid from any source of funds available for that purpose.



Multifamily New Construction Program Program Opportunity Notice (PON) 3716 \$26,850,000 Available

NYSERDA reserves the right to extend and/or add funding to the Solicitation should other program funding sources become available.

Applications accepted from January 2019 through December 31, 2020 by 3:00 PM Eastern Time or until funds are fully committed, whichever occurs first*.

The Multifamily New Construction Program (MF NCP) offers technical support and incentives to developers of multifamily high rise new construction and gut rehabilitation projects. The multi-tiered incentive structure is intended to promote increased levels of performance, up to and inclusive of net zero energy performance, identifying replicable and integrated design solutions by focusing on cost optimization analysis and financing strategies that recognize operational costs and management of perceived risks. The goal is to increase awareness of and demand for advanced clean energy solutions while strengthening the capacity of clean energy professionals to deliver design and construction services. Use of solar photovoltaic generation and other renewable energy systems, as well ground source heat pumps and other innovative technologies, are encouraged to achieve the higher performance targets. The Applicant is expected to hire a NYSERDA-approved Primary Energy Consultant to act as the primary resource for their participation. MF NCP significantly but not exclusively targets the Low to Moderate Income (LMI) housing sector, supporting New York State and New York City housing agencies as well as other funding authorities in their efforts to secure efficient, durable, resilient and healthy housing. MF NCP is closely aligned with NYSERDA's Low-Rise Residential New Construction Program (LR NCP) to more seamlessly support the higher performance multifamily new construction market.

Application Submission: To access support through MF NCP, an application must be submitted through the NYSERDA Portal as detailed in the Application section of this PON. Electronic submission is preferable. NYSERDA will also accept proposals by mail or hand-delivery if electronic submission is not possible.

If you have technical questions concerning this procurement, contact Patrick Fitzgerald (Designated Contact) at <u>PatrickNC@nyserda.ny.gov</u> or (518) 862-1090, ext. 3385, or Zachary Zill (Designated Contact) at <u>ZacharyNC@nyserda.ny.gov</u> or (518) 862-1090, ext. 3092. If you have contractual questions concerning this solicitation, contact Tara Mae Tobler (Designated Contact) at (518) 862-1090, ext. 3444 or <u>TaraMaeSolicitations@nyserda.ny.gov</u>. Contacting anyone other than the Designated Contacts (either directly by the proposer or indirectly through a lobbyist or other person acting on the proposer's behalf) in an attempt to influence the procurement may result in (1) the proposer being deemed a non-responsible offerer, and/or (2) the proposer not being awarded a contract.

* All applications must be received by 3 pm Eastern Standard Time on the date noted above. Late, faxed, or emailed proposals will not be accepted. Incomplete proposals may be subject to disqualification. It is the proposer's responsibility to ensure that all pages have been included in the proposal. Please note: for electronic submission, there are required questions that you will have to answer in addition to uploading attachments and you should allot at least 60 minutes to enter/submit proposals. The electronic proposal system closes promptly at pm, files in process or attempted edits or submission after 3 pm Eastern Standard Time on the date above, will not be accepted. If changes are made to this solicitation, notification will be posted on NYSERDA's web site at https://www.nyserda.ny.gov/.

1 Introduction

MF NCP offers technical support and incentives to developers of multifamily high rise new construction and gut rehabilitation projects. The multi-tiered incentive structure is intended to promote increased levels of performance, up to and inclusive of net zero energy performance, identifying replicable and integrated design solutions by focusing on cost optimization analysis and financing strategies that recognize operational costs and management of perceived risks. The goal is to increase awareness of and demand for advanced clean energy solutions while strengthening the capacity of clean energy professionals to deliver design and construction services. Use of solar photovoltaic generation and other renewable energy systems, as well ground source heat pumps and other innovative technologies, are encouraged to achieve the higher performance targets. The Applicant is expected to hire a NYSERDA-approved Primary Energy Consultant to act as the primary resource for their participation.

MF NCP significantly but not exclusively targets the LMI housing sector, supporting New York State and New York City housing agencies as well as other funding authorities in their efforts to secure efficient, durable, resilient and healthy housing. MF NCP is closely aligned with NYSERDA's LR NCP to more seamlessly support the higher performance multifamily new construction market.

For additional information and related documents, please visit the Multifamily New Construction website page at: https://www.nyserda.ny.gov/All-Programs/Programs/Low-Rise-Residential/Mid-and-High-Rise-Multifamily-Buildings

2 Program Eligibility, Incentives and Application Processes

2.1 Establishing a project

The following section describes the requirements for MF NCP eligibility.

2.1.1 Eligibility Requirements

Applicants will be required to execute a MF NCP Terms and Conditions (Attachment A) with NYSERDA and deliver completed projects that, at a minimum, meet MF NCP requirements as detailed in PON 3716 and other MF NCP documents. To be eligible for MF NCP participation, a project must be, or be capable of and intend to be, a New York State electricity distribution customer of a participating utility company that pays into the System Benefits Charge. Project eligibility is fuel-neutral. Applicants in areas affected by a utility natural gas moratorium may be eligible for enhanced programs in the recently announced Clean Energy Action Plan. This includes Consolidated Edison Company of New York, Inc., ("Con Ed") customers in Southern Westchester and New York State Electric and Gas Corporation ("NYSEG") customers in Lansing, NY. Please use the tool located at http://www.nyserda.ny.gov/action-plan to determine your eligibility.

Requests by Applicants who had previously applied to PON 3319 but have not yet been issued an Award Letter from NYSERDA will be accepted to participate in PON 3716 in lieu of PON 3319. Additionally, requests by Applicants who had previously applied to PON 3319 and have been issued an Award Letter from NYSERDA to participate but who have not yet received an incentive payment from NYSERDA will also be accepted to participate in PON 3716 in lieu of PON 3716 in lieu of PON 3319.

NYSERDA has the sole discretion for determining an Applicant's eligibility to participate.

2.1.1.1 Project Size

The project must be a multifamily building(s) with four (4) or more stories.

Low-rise buildings, defined as having three (3) or fewer stories, are not eligible for MF NCP, and may apply to NYSERDA's PON 3717 Low-Rise Residential New Construction Program (LR NCP). For additional information on the LR NCP, please visit: <u>http://www.nyserda.ny.gov/All-Programs/Programs/Low-Rise-Residential/Low-Rise-Residential-New-Construction-Multifamily.</u>

2.1.1.2 Eligible Types of Construction

The MF NCP will accept both new construction and gut rehabilitation, as defined below:

New Construction: A new building, or portion within a new building, where a licensed professional architect or engineer has prepared and certified the building plans.

Gut Rehabilitation: Substantial renovation, one of the following types of projects where a licensed professional architect or engineer has prepared and certified the building plans:

- Change of use and reconstruction of an existing building or space within;
- Construction work of a nature requiring that the building or space within be out of service for at least 30 consecutive days;
- Reconstruction of a vacant structure or space within.

2.1.1.3 Intended Use

The primary intended use of the building should be residential.

Projects may contain non-residential (commercial and/or retail) space if that space does not consist of more than 50 percent of the occupiable square footage of the entire building. Commercial and/or retail space within a primarily residential building supported by MF NCP may be eligible to access additional support through NYSERDA's Commercial New Construction Program. For additional information on the Commercial New Construction Program, please visit: <u>https://www.nyserda.ny.gov/All-Programs/Programs/New-Construction-Program</u>.

Commercial facilities, such as motels/hotels, group homes, dormitories, shelters, monasteries, nunneries, assisted living facilities and nursing homes are not typically eligible for MF NCP but may be deemed by NYSERDA as eligible either in whole or in part, based on a case-by-case review of the intended use, expected occupancy, and compliance path indicated by the Applicant.

Supportive Housing, single room occupancy (SRO) facilities, and senior living residences may be deemed by NYSERDA as eligible for MF NCP, based on a case-by-case review. Supportive Housing is defined as residences that are owned and operated by non-profit organizations. Tenants are individuals and families who require both affordable permanent housing and support services, have lease agreements, pay rent (often a percentage of their income) and abide by the terms of their lease. This includes people who have been homeless, have histories of substance abuse, are coping with mental illness, have chronic illnesses like HIV/AIDS, are young adults aging out of foster care, are homeless veterans, or are grandparents raising grandchildren.

This is not a comprehensive list of property types that are eligible for MF NCP. Special circumstances may be reviewed by NYSERDA and considered for eligibility on a case-by-case basis. Sole discretion for determination of eligibility and access to LR NCP benefits resides with NYSERDA.

2.1.1.4 ENERGY STAR Eligibility

Projects that have applied to MF NCP that meet the Performance Path with ENERGY STAR requirements are eligible to apply directly to the EPA for the ENERGY STAR MFHR label for the units within the building. Use the EPA's ENERGY STAR Multifamily New Construction Program Decision Tree to determine whether your project qualifies for the ENERGY STAR label:

https://www.energystar.gov/index.cfm?c=bldrs_lenders_raters.nh_mfhr_bldg_eligibility.

All of the EPA's ENERGY STAR MFHR referenced documentation is located at: https://www.energystar.gov/index.cfm?c=bldrs_lenders_raters.nh_mfhr_guidance.

Please refer to the EPA for more information on the ENERGY STAR MFHR Certification Process: <u>https://www.energystar.gov/index.cfm?c=bldrs_lenders_raters.nh_mfhr_certification.</u>

2.1.2 Definition of a Project

For the purposes of MF NCP, a project is defined as a building or group of identical buildings. The Primary Energy Consultant will develop one Performance Path Calculator, one Building Performance Plan, or one Modified Prescriptive Path Calculator for each project. Each building in a project must adhere to the requirements of the approved compliance path, including the applicable testing and verification protocols. Each building may be subject to a separate Open Wall Inspection.

A group of buildings that includes more than one building design must apply to MF NCP as multiple projects. The Applicant must submit a separate Application Package for each building design. At the Energy Modeling Milestone, the Applicant must submit a separate Performance Path Calculator, Building Performance Plan or Modified Prescriptive Path Calculator for each design.

Final determination of how a project is defined is at NYSERDA's discretion.

2.1.3 Determining Market Type

Eligibility to seek Low to Moderate Income (LMI) incentives can be established for the entire project if the majority of dwelling units will have a household income of no more than 80 percent of the State or Area Median Income (whichever is greater). Projects not meeting this majority threshold will be considered Market Rate. Eligibility to seek LMI incentives for individual dwelling units within any Market Rate project can also be established based on the thresholds stated above. When any related proxy does not require 100% of households to meet LMI requirements, the number of dwelling units associated with the project at each household income level must be clearly detailed in the submitted documentation. Eligibility to seek LMI incentives must be established through reliance on one of the proxies detailed in Table 2.1.

2.1.3.1 Low to Moderate Income (LMI)

To establish eligibility for the LMI incentive amounts and project caps, documentation must be submitted as soon as possible and prior to NYSERDA's payment of any incentive. There are three methods to verify that the project is eligible for LMI incentives:

- Proxy: NYSERDA allows certain proxies to be submitted to verify the project or individual dwelling units are eligible for incentives LMI. Please see Table 2.1 for approved proxies. Additional proxies may be considered by NYSERDA to establish eligibility for LMI incentives on a case-by-case basis. The number of eligible LMI dwelling units for projects funded through NYS Housing Finance Agency's (HFA's) 80/20 Program or NYC HDC's 80/20 or Mixed Income Programs may be established based on their regulatory funder's award letter or contract documents. Additional proxies may be considered by NYSERDA to establish eligibility for LMI incentives on a case-by-case basis.
- Rent Roll: The Rent Roll method applies only to gut rehabilitation projects that do not meet the LMI eligibility proxies; or to projects funded through NYS HFA's 80/20 Program or NYC HDC's 80/20 or Mixed Income Programs. This method may not be combined with the Resident Income method. Applicants must submit the annual rent, size, and occupancy for each apartment in the project. The majority of dwelling units must have a calculated household income no greater than 80 percent of the State or Area Median Income based on the assumption that 30 percent of household income is applied to housing costs (i.e. rent). A calculation spreadsheet tool is available upon request.
- Resident Income: The Resident Income method applies only to gut rehabilitation projects that do not meet the LMI eligibility proxies; or to projects funded through NYS HFA's 80/20 Program or NYC Housing Development Corporation's (HDC's) 80/20 or Mixed Income Programs. This method may not be combined with the Rent Roll method. Applicants must submit signed Resident Income Certification forms with supporting documentation for a majority of the project's dwelling units. Resident Income Certification Instructions and related forms are available upon request.

2.1.3.2 Market Rate

Eligible projects that do not qualify for LMI incentives amounts and project caps as detailed above may be eligible for Market Rate incentives.

Table 2.1 Low to Moderate (LMI) Proxies

ELIGIBILITY PROXY	DESCRIPTION	TYPE OF DOCUMENTATION ¹
1. US HUD, USDA-RD, and other Federally Regulated LMI Housing	 Properties that receive subsidies from US HUD or USDA-RD based on household income may be defined as LMI, based on household income criteria detailed in the contract or award, including regulatory control or structures such as: Section 8 Contract Sections 202, 236, 811 Public Housing Authorities 	Submit a copy of the US HUD contract or contract award notice.
2. NYS HCR- Regulated LMI Housing	Properties with subsidized mortgages or contracts that place them under the regulatory control of NYS HCR may be defined as LMI, based on household income criteria detailed in the NYS HCR contract or award.	Submit a copy of NYS HCR contract or contract award notice.
3. Low-Income Housing Tax Credits	Properties that receive tax credits may be defined as LMI based on household income criteria detailed in the tax credit award notice.	Submit a copy of tax credit award notice from NYS HCR or NYC HPD.
4. NYC HPD- Regulated LMI Housing (or similar local housing agencies)	Properties with loans, mortgages, or deeds of purchase (HDFC incorporation) from NYC HPD or similar local housing agencies may be defined as LMI, based on household income criteria detailed in the award documentation.	Submit documentation of current mortgage, loan closing, HDFC incorporation, or deeds.
5. SONYMA Mortgage Insurance	Properties subsidized for LMI residents with SONYMA subsidized financing through the NYS HFA may be defined as LMI, based on household income criteria detailed in the contract or award.	Submit a copy of loan closing/ mortgage insurance award documents.
6. Participation in NYS HFA's 80/20 Program or similar HFA- regulated offerings	Properties that have been accepted into the HFA's 80/20 Program, or similar HFA-regulated offering, may be defined as LMI based on household income criteria detailed in the contract or award.	Submit a copy of the award letter or HFA contract documents.
7. Participation in NYC HDC's 80/20 or Mixed Income Programs or similar HDC-regulated offerings	Properties that have been accepted into the NYC HDC's 80/20 or Mixed Income Program, or similar HDC-regulated offering, may be defined as LMI based on household income criteria detailed in the contract or award.	Submit a copy of the award letter or HDC contract documents.

Glossary of Terms:

USDA-RD – United States Department of Agriculture Rural Development

US HUD – United States Department of Housing and Urban Development

NYS HCR – New York State Housing and Community Renewal NYS HFA – New York State Housing Finance Agency

NYC HDC – New York City Housing Development Corporation

NYC HPD - New York City Housing and Preservation Development

SONYMA – State of New York Mortgage Agency

2.2 Incentives

Projects that have received a funding commitment from NYSERDA for Performance Tier 2 or Tier 3, and that have met all those requirements, are eligible to request payment of the corresponding incentives. The incentives available through MF NCP are based on market type, the performance tier committed to by the project's Applicant, and the number of dwelling units.

2.2.1 Calculating Project Incentives

There are separate incentive schedules for LMI and Market Rate projects. Additionally, different incentives are offered to projects based on the project's performance tier and number of dwelling units associated with the project.

For projects that have up to 50 dwelling units, the incentive per dwelling unit amount listed for "Up to 50 dwelling units" applies to all dwelling units. For projects that have more than 50 dwelling units, the first 50 dwelling units receive the incentive per dwelling unit amount listed for "Up to 50 dwelling units," and the balance of the units receive the incentive per unit amount listed for "More than 50 dwelling units."

Examples:

A Tier 2 project with 40 LMI-qualified dwelling units would be eligible to receive:

A Tier 2 project with 80 LMI-qualified dwelling units would be eligible to receive: (50 dwelling units x\$1,000/unit) + (30 dwelling units x\$600) = \$68,000

Per project incentives are capped based on market type, year of application and performance tier.

Market Rate						LMI						
	p to 50 Iling units		re than 50 Iling units		Сар	Performance Tier	Up to 50 dwelling units		More than 50 dwelling units			Сар
\$	-	\$	-	\$	-	Tier 1	\$	-	\$	-	\$	-
\$	450	\$	200	\$	200,000	Tier 2	\$	1,000	\$	600	\$	200,000
\$	1,600	\$	1,400	\$	300,000	Tier 3	\$	3,500	\$	3,100	\$	300,000
Customers in areas affected by a utility natural gas moratorium may be eligible for the enhanced Tier 3 incentives listed just below, based on the eligiblity requirements as detailed in section 2.1.1 of this PON 3716.												
\$	2,000	\$	1,800	\$	500,000	Tier 3	\$	4,400	\$	3,900	\$	600,000

2.2.2 EPA-Recognized Multifamily High-Rise Review Organization (MRO)

Projects following the Performance Path must engage an EPA-recognized MRO to complete the review and approval of their Energy Modeling and As-Built Deliverables, and the MRO must also be a NYSERDA-qualified Primary Energy Consultant. Projects that have submitted their application to PON 3716 or PON 3319 prior to January 1, 2019 may be eligible for additional support for the Primary Energy Consultant to secure the services of an MRO. This support would provide reimbursement of costs incurred for delivery of MRO services up to a maximum of \$3,500 per eligible project, and the MRO fees must be based on the MRO's standard rate schedule. Once the Primary Energy Consultant has selected and contracted with the MRO, a copy of their agreement must be submitted to NYSERDA. If NYSERDA accepts the agreement, a Task Work Order (TWO) Agreement between the MRO and NYSERDA will be executed to allow NYSERDA's payment directly to the MRO. Payment of 50% of the eligible MRO services, up to costs incurred, will be available following NYSERDA's approval of Milestone 1. The balance of the MRO's fee identified in the TWO Agreement, up to costs incurred, would be available for payment following NYSERDA's approval of Milestone 3.

2.2.3 Mentoring Support for Tier 3 Projects

The Applicant may request an additional incentive to support delivery of mentorship services by a NYSERDAqualified Primary Energy Consultant that has additionally been qualified to deliver mentoring support for the performance path identified in their application. The mentoring incentive of \$100 per dwelling unit, up to a maximum of \$10,000 per project for costs incurred, may be available to any project team pursuing MF NCP Tier 3 level of performance, or certification to a high-performance certification such as Passive House, for the first or second time. Eligible services may include support which targets building design and certification, assistance with energy modeling, mechanical systems design review, façade consulting including airtightness testing, or training of the construction management, oversight, field verification, and contractor teams involved with the project which are specific to the performance standards being pursued by the project team. After the project team has selected their mentor and a contract has been executed, a copy of their agreement must be submitted to NYSERDA. If NYSERDA accepts the agreement, a Task Work Order (TWO) Agreement between the mentor and NYSERDA will be executed. This Agreement will allow NYSERDA's direct payment to the Primary Energy Consultant for delivery of those mentoring fees deemed eligible for payment. The incentive payment schedule will follow Section 2.2.6.

2.2.4 Targeted Incentives in Support of Smart Buildings Solutions

The Applicant may request an additional incentive of \$100 per dwelling unit to support the design and installation of smart buildings solutions which are predicted to enhance the building's energy and operational performance, up to a maximum of \$100,000 per project for costs incurred. Eligible smart buildings solutions will result in the construction of an intelligent building which interconnects HVAC, lighting, plug loads, fire & life safety, security & access, people movement, analytics & management and smart metering to transform efficiency, comfort and safety for people and assets. To be eligible for this incentive, the proposed technology or solution cannot be eligible for incentives through another NYSERDA program. The Applicant must submit documentation of the proposed solution for NYSERDA's review and consideration. If NYSERDA approves the Applicant's proposal and commits the funding, payment of the incentives to the Applicant will follow the schedule as detailed in section 2.2.6

2.2.5 Targeted Incentives in Support of Innovative Technologies

The Applicant may request an additional incentive of \$100 per dwelling unit to support the design and installation of innovative technologies and solutions, up to a maximum of \$100,000 per project for costs incurred. The Applicant must propose to demonstrate the integrated use of innovative technologies or solutions that are unique, not yet widely used nor generally accepted in the market to demonstrate the economic viability and predicted performance. To be eligible for this incentive, the proposed technology or solution cannot be eligible for incentives through another NYSERDA program. The Applicant must submit their proposed use of innovative technologies or solutions for NYSERDA's review and consideration at the time of application by uploading the proposal in the attachments section of their project's Application within the NYSERDA portal. If NYSERDA accepts the Applicant's proposal and commits the funding, payment of the incentives to the Applicant will follow the schedule as detailed in section 2.2.6.

2.2.6 Incentive Payment Schedules

The Applicant will receive the incentives that NYSERDA has approved for their project after each Milestone has been approved.

Incentive payment at each Milestone is a set percentage of the total approved incentive. The incentive payment schedule is based on compliance path and performance tier.

To receive the full incentive amount, projects must verify that they have achieved the performance targets specified in their approved performance tier or tasks associated with the additional incentives detailed in sections 2.2.2 through 2.2.5, and each Milestone must be approved by NYSERDA. If the project does not meet the performance target, the Primary Energy Consultant must contact NYSERDA prior to submittal. NYSERDA will provide the adjusted incentive amount, if applicable.

	MF NCP - Incentive Payment Schedule					
	Milestone 1		Milestone 2		Milestone 3	
	Performance Path, PHI, PHIUS	MoPP	Performance Path, PHI, PHIUS	MoPP	Performance Path, PHI, PHIUS	MoPP
Performance Tier	erformance Tier		LMI and Market	Rate		
Tier 1	N/A	N/A	N/A	N/A	N/A	N/A
Tier 2	25%	N/A	25%	50%*	50%	50%*
Tier 3	10%	N/A	35%	N/A	55%	N/A

^{*}gut rehabs only

2.2.7 Renewable Energy, Ground Source Heat Pumps, and Other Innovative Technologies

Applicants to MF NCP are encouraged to incorporate solar photovoltaics² and other renewable energy systems, as well ground source heat pumps and other innovative technologies, into their projects to achieve the performance targets. Applicants are not restricted from receiving targeted incentives additionally available from other NYSERDA programs to support those types of installations.

2.3 **Project Application**

Applicants will submit project applications, monitor the status of applications, submit documentation packages, and perform other program-related activities through the NYSERDA Portal. The project application will progress through each status shown below.

Project Application Flow



2.3.1 Unsubmitted Status

All project applications are generated in and submitted through the portal. Unsubmitted status is reached once an Applicant generates the application. The incentive rate is not confirmed until the application has been submitted.

2.3.2 Submitted Status

The project application moves to submitted status once the Applicant has submitted the application and any documents, inclusive of acceptance of the MF NCP Terms and Conditions signed by the Applicant, to the portal.

The following additional documents may be uploaded to the portal at any time, and must be received prior to incentive being paid:

- Low to Moderate Income Documentation (for projects requesting LMI incentive rates)
- EPA's ENERGY STAR MFHR Developer Partnership Agreement (if not previously submitted and for Performance Path with ENERGY STAR projects only): to be completed by the developer/owner responsible for the project's design, financing and construction. A copy of the Agreement can be obtained

² Projects that otherwise meet the Tier 3 requirements intending to seek NYSERDA's commitment for and payment of those Tier 3 incentives will be required to locate the solar electric array(s) on-site, co-located with the project's buildings. Project applicants may seek a waiver from NYSERDA to allow a properly sized solar electric array to be located on a remote site and in a manner that allows a remote net metering arrangement to achieve the required offset of the project's predicted energy use. To receive NYSERDA's approval of the waiver request, the Applicant must demonstrate the solar electric array's ownership is structured in a manner that assures its output will be dedicated to the project.

from the following ENERGY STAR website: https://www.energystar.gov/index.cfm?c=bldrs_lenders_raters.nh_mfhr_dev_partners.

The Applicant must submit all project applications electronically using the portal. The Applicant will be able to assign access to a project after they have initiated the application by identifying additional roles (contacts) on the project application, and designating read-only access or read-write access. Read-write access will allow the Applicant to collaborate with their Primary Energy Consultant to submit the application.

The project application must be signed by the Applicant either electronically in the portal, or by printing the Certification Statement and uploading the signed document to the portal as an attachment.

Applicants that are unable to submit a project application electronically may contact NYSERDA at <u>ResMFNCP@nyserda.ny.gov</u> or by calling 1-800-284-9069 to request a hard copy application.

2.3.3 Under Review Status

Upon receipt of a project application, program staff will move the application to under review status. At this time the application will move into the queue for technical review.

2.3.3.1 Technical Review

Once the project application has been received, the project may undergo a full technical review inclusive of a Scoping Session with the project team, to confirm that the project can achieve the stated performance and meets all program requirements, as described in this PON 3716.

If a project application has missing or inaccurate information or documents, the Applicant will be asked to provide the correct information in the portal.

2.3.4 Pending Approval Status

When the project application has passed technical review, the application will be moved to pending approval status. In this status, the purchase order is finalized and funding for the application is set aside.

2.3.5 Approved Status

When the project application has been approved by NYSERDA, the Applicant will receive their project Award Letter via email notification.

While in approved status, the Applicant may submit a project cancellation request, project extension request, project modification request, or project incentive payment request.

2.3.5.1 Project Cancellation Requests

Requests to cancel a project must be done through the portal by submitting a request for cancellation to NYSERDA. Should an Applicant decide to move forward with a project after cancellation, the Applicant must submit a new project Application Package. In this case, the incentive level and all rules in effect at the time the new application is submitted will apply.

2.3.5.2 Project Extension Requests

To request an extension, the Applicant must submit a project extension request through the NYSERDA portal. NYSERDA will approve extensions on a limited case-by-case basis. Project extensions may be granted for legitimate and verifiable reasons which are beyond the control of the Applicant or Primary Energy Consultant. No other requests will be considered.

2.3.5.3 Project Modification Requests

To request a modification to an approved project, the Applicant must submit a project modification request through the NYSERDA portal. Any projects that has not yet completed Milestone 3 may request access to the incentives detailed in sections 2.2.2 through 2.2.6. Market-rate projects that have not previously been paid an incentive may request access to the modified per project cap per the table in section 2.2. A project modification request must

state the original project award amount, performance tier, and unit count, the proposed performance tier and unit count, as well as the reason for the change. NYSERDA will review the request, and may elect to calculate, apply, and approve the modification, inclusive of an adjusted incentive amount (if applicable).

2.3.5.4 Project Incentive Payment Requests

The Applicant will receive the total project incentive in up to three installments based on each Milestone's requirement. To request the incentive payment for each Milestone, the Applicant must submit a project's Milestone deliverables through the NYSERDA Portal. The deliverables will be reviewed by NYSERDA, and when all deliverables have been accepted, the project incentive payment request will be processed.

2.3.6 Completed Status

The project has achieved completed status once construction is complete, all deliverables have been accepted, and final payment has been approved by NYSERDA.

2.3.7 Contact Information

Eligibility, Intake and Application Inquiries - A team of individuals reviews each Application and responds to inquiries related to applications, eligibility and intake. Inquiries should be directed to NYSERDA at <u>ResMFNCP@nyserda.ny.gov</u> or by calling 1-800-284-9069 to request assistance. After receiving emailed confirmation that the Application has been received, all project-related correspondence between the Applicant and NYSERDA should occur through the NYSERDA portal, unless otherwise directed.

2.4 SEQR

While the project application is under review, the Applicant and Primary Energy Consultant will submit the information required for NYSERDA to complete the State Environmental Quality Review (SEQR). If the proposed design exceeds the limits listed on the SEQR, the Primary Energy Consultant must coordinate with the Applicant and take the following steps:

For projects located in New York City: Confirm that the Applicant has filed a City Environmental Quality Review (CEQR) or that the project was included on a CEQR that was created by another entity.

- If the Applicant has the CEQR number, the Applicant or Primary Energy Consultant can submit it through the NYSERDA portal, allowing the CEQR documentation to be located on the city portal.
- If the CEQR number is not available, the Applicant or Primary Energy Consultant must submit a copy of the CEQR documentation through the NYSERDA portal.
- If neither is available, the Applicant must provide a letter confirming the CEQR was not required by New York City.

For projects located outside of New York City or for projects where the Applicant was not required to complete a CEQR, the Applicant or their Primary Energy Consultant must complete the Short Environmental Assessment Form (SEAF) and submit a copy of the completed form to NYSERDA. The SEAF asks several questions about the "proposed action," which refers to the HVAC systems that exceed the limits listed on the SEQR.

2.5 Scoping Session

Once NYSERDA has approved the project's application, NYSERDA or its designee will schedule a Scoping Session with the Applicant, the Primary Energy Consultant and the project team. The intent of the Scoping Session is to discuss general project information and review MF NCP requirements and responsibilities for each party. The Scoping Session may also identify additional documents required to allow the project to be established in NYSERDA's financial systems. Knowledgeable representatives from both the Applicant and Primary Energy Consultant are required to attend the Scoping Session. After the Scoping Session, if all parties agree to move forward with the project in MF NCP, and the SEQR process has been completed, NYSERDA will send a MF NCP Project Award Letter to the Applicant verifying that the application is approved to participate in the MF NCP. Final approval and issuance of the MF NCP Project Award Letter are at NYSERDA's discretion.

3 Technical Requirements

MF NCP offers project teams technical support and guidance to achieve higher levels of energy performance as well as health and safety throughout the planning and construction process. Projects must meet the requirements detailed in this document, and achieve their approved performance targets to receive NYSERDA's financial incentives (if applicable).

3.1 Compliance Paths

At the time of application, projects must select one of the following compliance paths:

3.1.1 Performance Path with ENERGY STAR®

This compliance path follows the standards developed by the US Environmental Protection Agency (EPA) for the ENERGY STAR Multifamily High Rise (MFHR) program. This pathway requires the Primary Energy Consultant to create a model of the proposed building design based on the American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) standards and compare it to a baseline model. Additionally, for projects pursuing Tier 2 or Tier 3, the difference in the source energy use predicted by the two models must equal or exceed the performance target specified in the project's approved performance tier. Projects following the Performance Path with ENERGY STAR are required to adhere to all ENERGY STAR MFHR Performance Path Prerequisites and ENERGY STAR MFHR Testing & Verification Protocols. See Section 2.1.1.4 for information on ENERGY STAR MFHR eligibility, and Section 4 for more information on this pathway.

3.1.2 Passive House Institute US (PHIUS)

Projects following this compliance path must meet the requirements of the PHIUS+ Multifamily Certification Standard developed by the Passive House Institute US (PHIUS). The project must contract with a Certified Passive House Consultant (CPHC[®]) and a PHIUS+ Verifier, and must pursue, and obtain, certification by PHIUS. In addition to meeting the PHIUS requirements, projects pursuing PHIUS+ certification are required to submit the ENERGY STAR MFHR Photo Template. Refer to Section 5.3.2 for more details on this template, and Section 5 for more information on this pathway.

3.1.3 Passive House Institute (PHI)

Projects following this compliance path must meet the requirements of the Passive House Standard developed by the Passive House Institute (PHI). The project must contract with a certified PHI Consultant or Designer and an accredited PHI Certifier, and must pursue, and obtain, certification by PHI. In addition to meeting the PHI requirements, projects pursuing PHI certification are required to submit the ENERGY STAR MFHR Photo Template. Refer to Section 6.3.2 for more details on this template.

PHI is currently developing a third-party verification program. Until PHI's verification program is established, projects following this compliance path must record the results of all testing and verification in the corresponding sections of the ENERGY STAR MFHR Testing & Verification Workbook. Once released, NYSERDA will evaluate PHI's verification program and consider allowing that process to replace this requirement for PHI projects. Refer to Section 6.3.2 for more details on verification, and Section 6 for more information on this pathway.

3.1.4 Modified Prescriptive Path (MoPP)

This compliance path requires the project to meet the set of requirements specified in the Modified Prescriptive Path Requirements (Attachment C) as set forth in Section 7, including completion of the ENERGY STAR MFHR Testing & Verification Protocols. Inclusion of these requirements is considered to equal or exceed the performance target specified in the project's approved performance tier. This pathway does not result in an ENERGY STAR label, but may result in the New York Energy \$mart designation from NYSERDA. Refer to Section 7 for more information on this pathway.

3.2 **Performance Tiers**

At the time of application, projects must select and commit to meeting one of the following performance tiers. Each performance tier is associated with specific performance requirements. Higher tiers are associated with increasing levels of performance and higher incentives. To be eligible to receive the associated incentives, the project must achieve the performance target associated with its approved performance tier.

3.2.1 Tier 1

Tier 1 is available to new construction projects following the Performance Path with ENERGY STAR or the MoPP.

Projects following the Performance Path with ENERGY STAR must achieve certification under the EPA's ENERGY STAR Multifamily High Rise (MFHR) program. To find out more about the EPA's program, rules and requirements, please visit the EPA website at

https://www.energystar.gov/index.cfm?c=bldrs_lenders_raters.nh_multifamily_highrise.

Projects that pursue either Passive House compliance path and were designed to achieve either Tier 2 or 3 but do not receive the associated certification from the applicable standards setting organization may qualify for Tier 1 if the project meets the associated Energy Modeling and As-Built Milestone requirements for that compliance path, and if their As-Built Deliverables are complete and approvable except for achieving certification from the applicable standard organization.

3.2.2 Tier 2

Tier 2 is available to new construction and gut rehabilitation projects following the Performance Path with ENERGY STAR, the PHI path or the PHIUS+ path.

Tier 2 is also available to gut rehabilitation projects following the MoPP.

New construction projects following the Performance Path with ENERGY STAR must, at minimum, achieve a performance rating of 25% above ASHRAE Standard 90.1 without inclusion of renewable or distributed generation, where the performance rating is calculated using source energy (see Section 4.3.4 for more information). The version of ASHRAE 90.1 that must be used is dependent on what version of NYS Energy Code the project is permitted under. If the project is performance rating is in reference to ASHRAE 90.1-2010. If the project is permitted under ECCC of NYS) 2014, then the project's performance rating is in reference to ASHRAE 90.1-2010. If the project is permitted under ECCC of NYS 2016, then the project's performance rating must be in reference to ASHRAE 90.1-2013, as defined by ECCC NYS 2016. Additionally, the project must achieve certification under the EPA's ENERGY STAR Multifamily High Rise (MFHR) program. To find out more about the EPA's program, rules and requirements, please visit the EPA website at

https://www.energystar.gov/index.cfm?c=bldrs_lenders_raters.nh_multifamily_highrise.

Projects following either Passive House path must meet the minimum requirements of the applicable Passive House standard, achieving certification to either PHI or PHIUS+.

Gut rehabilitation projects following the Performance Path with ENERGY STAR must achieve certification under the EPA's ENERGY STAR Multifamily High Rise (MFHR) program. To find out more about the EPA's program, rules and requirements, please visit the EPA website at

https://www.energystar.gov/index.cfm?c=bldrs_lenders_raters.nh_multifamily_highrise.

3.2.3 Tier 3

Tier 3 is available to new construction projects following the Performance Path with ENERGY STAR, the PHI path or the PHIUS path. Tier 3 is available to gut rehabilitation projects following the Performance Path with ENERGY STAR, with an adjusted baseline equivalent to that required of a new construction project.

Projects following the Performance Path with ENERGY STAR must, at a minimum, achieve a performance rating of 35% above ASHRAE Standard 90.1 without inclusion of any renewable or distributed generation and a performance rating of 42% above ASHRAE Standard 90.1 including any renewable or distributed generation, where the performance rating is calculated using source energy (refer to Section 4.3.4 for more information). The version of ASHRAE 90.1 that must be used is dependent on what version of NYS Energy Code the project is permitted under ECCC NYS 2014, then the project's performance rating is in reference to ASHRAE 90.1-2010. If the project is permitted under ECCC NYS 2016, then the project's performance rating is in reference to ASHRAE 90.1-2013, as defined ECCC NYS 2016. Additionally, the project must achieve certification under the EPA's ENERGY STAR Multifamily High Rise (MFHR) program. To find out

more about the EPA's program, rules and requirements, please visit their website at https://www.energystar.gov/index.cfm?c=bldrs_lenders_raters.nh_multifamily_highrise.

Projects following the PHI path must be designed, constructed, and certified to PHI standards and must achieve, at maximum, a Primary Energy Demand calculation of 33 kBtu/ft²/year without inclusion of any renewable or distributed generation, and a Primary Energy Demand calculation of 29 kBtu/ft²/year including any renewable or distributed generation. Calculation of this Primary Energy Demand threshold must rely on use of the PHI-required energy modeling tool; and the project must meet the minimum PHI requirements needed for the project to be certified as meeting the PHI standard. Both Primary Energy Demand thresholds may exclude the energy use attributed to amenities, such as dishwashers, laundry and exterior lighting, per Section 5.5.1.

Projects following the PHIUS path must be designed, constructed, and certified to PHIUS+ standards and must achieve, at maximum, a Primary Energy Demand calculation of 5,200 kWh/person/year without inclusion of any renewable or distributed generation, and a Primary Energy Demand calculation of 4,200 kWh/person/year including any renewable or distributed generation. Calculation of this Primary Energy Demand threshold must rely on use of the PHIUS-required energy modeling tool; and the project must meet the minimum PHIUS+ requirements needed for the project to be certified as meeting the PHIUS+ standard. Both Primary Energy Demand thresholds may exclude the energy use attributed to amenities, such as dishwashers, laundry and exterior lighting, per Section 6.5.1. Projects intending to be designed, constructed and certified to PHIUS+ 2018 will be recognized as meeting the kWh/person/year requirements and will not be required to separately calculate the value of kWh/person/year without inclusion of renewables. Exclusion of energy use associated with the listed amenities will not be allowed for projects electing to meet PHIUS+ 2018 and following this alternative approach.

3.3 Incentive and Incentive Caps

The incentives available through MF NCP are based on market type, the year the complete application was submitted, number of dwelling units, and performance tier. Refer to Section 2.2 for more details.

4 Performance Path with ENERGY STAR

This section details the requirements of the Performance Path with ENERGY STAR and the associated deliverables.

4.1 Deliverables Requirements

For the Applicant to receive the NYSERDA incentives approved for their project, the Applicant must submit the required deliverables as detailed in the Milestones below. These deliverables may be reviewed by NYSERDA and the incentives will only be paid if these submittals are approved by NYSERDA. All deliverables listed in this section must be submitted through the NYSERDA portal.

4.1.1 Milestone 1: Energy Modeling

The first NYSERDA incentive is available to the Applicant when the project has reached design completion, the MRO has submitted their approval of the energy model and related documents, and NYSERDA has approved the Energy Modeling deliverables. These deliverables must show that the project achieves the performance target and meets the requirements of the ENERGY STAR MFHR Performance Path. If the energy model indicates the intended performance target will not be met, the Primary Energy Consultant must contact the NYSERDA prior to submittal.

Projects following the Performance Path must engage with an EPA-recognized Multifamily High-Rise Review Organization (MRO) to complete the review and approval of their Energy Modeling Deliverables. The Energy Modeling Deliverables must be submitted no later than 30 days after approval has been provided by the MRO, typically following the Buildings Department's final approval of New Building Architectural, Mechanical, and Plumbing plans. The Buildings Department's approval shall be submitted through the NYSERDA Portal upon receipt but must be received by the time deliverables associated with the Open Wall Milestone 2 deliverables are submitted. The Primary Energy Consultant should submit emailed notification through the NYSERDA portal when the Energy Modeling deliverables are submitted to the MRO for review.

Milestone 1 Deliverables	Document Obtained From:
Applicant-Primary Energy Consultant Contract (signed by both parties)	Primary Energy Consultant created document
LMI Documentation (if not previously submitted)	See Table 2.1
Buildings Department's final New Building approval of Architectural, Mechanical, and Plumbing plans (if available)	Permitting office that approved the Construction Documents
Proposed Performance Path Calculator	EPA
ENERGY STAR MFHR Testing & Verification Worksheets	EPA
Statement of Energy Design Intent	EPA
As Designed Energy Modeling files*	Primary Energy Consultant created documents
Proof of review and approval by MRO	EPA-recognized MRO
Complete Construction Documents (CDs) must be submitted upon NYSERDA's request but should not be submitted through the NYSERDA Portal as Milestone 1 Deliverables.	Applicant/Developer/Design Team

*For eQUEST models, please submit the .inp, .pd2, and .prd files

** Statement of Energy Design Intent will be submitted after the Energy Modeling deliverables are approved

4.1.2 Milestone 2: Open Wall

The second NYSERDA incentive is available to the Applicant when NYSERDA has approved the Open Wall Deliverables. The Applicant must submit a set of complete Open Wall deliverables through the NYSERDA portal at

least two weeks before the project reaches the Open Wall Milestone, allowing NYSERDA or the NYSERDAdesignated Site Inspector time to coordinate attending the Open Wall inspection, at NYSERDA's option. If the above grade wall assembly has changed since the Energy Modeling Milestone, the Primary Energy Consultant must contact NYSERDA when submitting Milestone 2 deliverables.

	Milestone 2 Deliverables	Document Obtained From:
	Site Inspection Request Form (Attachment D)	NYSERDA's website
	ENERGY STAR MFHR Photo Template	EPA
	ENERGY STAR MFHR Testing & Verification Worksheets	EPA
	Buildings Department's final New Building approval of Architectural, Mechanical, and Plumbing plans (if not previously submitted)	Permitting office that approved the Construction Documents

4.1.3 Milestone 3: As-Built

The third NYSERDA incentive is available to the Applicant when the project construction is complete, and NYSERDA has approved the As-Built Deliverable and Data Release Authorization Forms (DRAFs). These deliverables must show that the project meets or exceeds the performance target specified in its approved performance tier and meets the requirements of the ENERGY STAR MFHR Performance Path Prerequisites. If the project does not meet the performance target, the Primary Energy Consultant must contact NYSERDA prior to submittal.

The Primary Energy Consultant must work with the Applicant to determine whether to submit Tenant DRAFs (Attachment F) or to follow the alternative process to allow NYSERDA to access the utility consumption information directly.

- DRAFs: All projects are eligible to follow the DRAF process. The Applicant must submit the Owner DRAF (Attachment E), which must include utility information for all common areas of the building, and Tenant DRAFs (Attachment F), which must include utility information for a representative sample of apartments. The apartment sample shall consist of at least 10 percent of the apartments with no fewer than five apartments. Of the 10 percent sample, at least one of each apartment type (e.g. studio, 1 bedroom, large 1 bedroom) must be represented. Additionally, a list of all apartment numbers and their corresponding apartment type (e.g. studio, large 1 bedroom) must be provided.
- As an alternative to submitting the Tenant DRAFs (Attachment F) and associated list of apartments, the Applicant must complete and sign the utility's Letter of Authorization, complete the application tab of the utility's Aggregated Consumption Data Request form (if applicable), compile all documents listed in the appropriate table below, and submit through the NYSERDA portal r. All data is kept strictly confidential and only used to estimate the energy performance of the whole building, not of individual apartments. To be eligible to follow this approach, the project's electric and/or gas utility must provide aggregated data.

_	Milestone 3 Deliverables	Document Obtained From:
	As-Built Performance Path Calculator	EPA
	ENERGY STAR MFHR Photo Template	EPA
	ENERGY STAR MFHR Testing & Verification Worksheets	EPA
	As-built Energy Modeling files*	Primary Energy Consultant created documents
	Proof of review and approval by MRO	EPA-recognized MRO

*For eQUEST models, please submit the .inp, .pd2, and .prd files

DRAF Deliverables:

Owner DRAF (Attachment E) (for all common area utility accounts) (executed)	NYSERDA's website
Tenant DRAFs (Attachment F) (executed)	NYSERDA's website
List of each apartment number and type (e.g., studio, 1 bedroom)	Applicant created document

Alternative DRAF Deliverables*:

Owner DRAF (Attachment E) (for all common area utility accounts) (executed)	NYSERDA's website
Utility's Letter of Authorization*	Con Edison: http://www.coned.com/energyefficiency/city_benc hmarking.asp
Utility's Aggregated Consumption Data Request	Con Edison: <u>http://www.coned.com/energyefficiency/city_benc</u> <u>hmarking.asp</u> National Grid: <u>http://www.nyc.gov/html/gbee/downloads/pdf/201</u> 7_national_grid_nyc_benchmarking_data_reques t_form.pdf
Copy of utility bill for project address and account numbers	Applicant/Developer
Lease-up date (date when the building will be occupied)	Applicant

** Use this option as an alternative to submitting Tenant DRAF Deliverables and list of apartments

* The signatory of this Authorization Form must be the utility account holder

4.2 Software Requirements

The modeling software used to determine the project's energy savings must satisfy the requirements detailed in ASHRAE 90.1-2010 Appendix G simulation and documentation requirements, as modified in the ENERGY STAR MFHR Simulation Guidelines. The Simulation Guidelines contains a list of examples of simulation programs that meet the requirements. The Simulation Guidelines can be obtained from the following ENERGY STAR website: https://www.energystar.gov/index.cfm?c=bldrs_lenders_raters.nh mfhr guidance.

4.3 Associated Deliverables

4.3.1 Performance Path Calculator

The ENERGY STAR MFHR Performance Path Calculator is the comprehensive reporting tool populated and submitted by the Applicant and Primary Energy Consultant to NYSERDA. It documents general information about the project, details regarding the project's scope of work and achievement of the performance target. The Performance Path Calculator is a Microsoft Excel spreadsheet that assists the Primary Energy Consultant in analyzing model inputs and outputs. Instruction tabs within that document provide further information. For projects that are permitted under ECCC of NYS 2016, the Performance Path Calculator_AppG2016 version must be used and can be obtained from the following ENERGY STAR website:

https://www.energystar.gov/index.cfm?c=bldrs_lenders_raters.nh_mfhr_guidance.

4.3.2 Testing and Verification Protocols and Worksheets

Projects following the Performance Path must meet the requirements of the ENERGY STAR MFHR Testing & Verification Protocols. The ENERGY STAR MFHR Testing & Verification Protocols are mandatory requirements for the inspection, testing, and verification of components related to the project's energy performance. All inspections, diagnostic tests, and photo documentation described within the Protocols are required for each of the participating project's components and systems. Results of testing and verification must be documented in the ENERGY STAR MFHR Testing & Verification Worksheets and ENERGY STAR MFHR Photo Template. The ENERGY STAR

MFHR Testing & Verification Protocols, Worksheets, and Photo Template can be obtained from the following ENERGY STAR website: <u>https://www.energystar.gov/index.cfm?c=bldrs_lenders_raters.nh_mfhr_guidance.</u>

4.3.3 ENERGY STAR MFHR Performance Path Prerequisites

Projects following the Performance Path must meet the requirements of the ENERGY STAR MFHR Performance Path Prerequisites. Though the MF NCP Performance Path is performance-based and does allow trade-offs between various building components, the ENERGY STAR MFHR Performance Path Prerequisites provide a lower limit to the trade-offs for many building components. The ENERGY STAR MFHR Performance Path Prerequisites can be obtained from the following ENERGY STAR website:

https://www.energystar.gov/index.cfm?c=bldrs lenders raters.nh mfhr guidance.

Additionally, for projects following the Performance Path, residential or nonresidential floors above unconditioned spaces, including but not limited to parking garages, must meet the Building Envelope Requirements in ASHRAE 90.1-2007 Tables 5.5-4 through 5.5-6, for the appropriate climate zone.

4.3.4 Simulation Guidelines

The ENERGY STAR MFHR Simulation Guidelines is a companion document to ASHRAE 90.1 Appendix G. It contains the methodology to assist Primary Energy Consultants in developing the Baseline Building Design, Proposed Building Design, and As-Built models for each project. The EPA currently has two versions of the Simulation Guidelines: one appropriate for projects permitted under ECCC of NYS 2014, which refers to ASHRAE 90.1-2010, and one appropriate for projects permitted under ECCC of NYS 2016, which refers to ASHRAE 90.1-2013 Excerpt. Both versions of the Simulation Guidelines are published by the EPA at their ENERGY STAR website: https://www.energystar.gov/index.cfm?c=bldrs_lenders_raters.nh_mfhr_guidance.

4.3.4.1 Compliance with ENERGY STAR MFHR Program

All projects following the Performance Path shall demonstrate the EPA's ENERGY STAR Multifamily High Rise (MFHR) program requirements have been met by following the EPA's ENERGY STAR MFHR Simulation Guidelines.

4.3.4.2 Compliance with MF NCP Tier 2 and Tier 3 Performance Targets

To demonstrate compliance with the MF NCP performance targets for Tier 2 and 3 Performance Path projects, which are above and beyond the minimum ENERGY STAR requirements, the following guidance must be followed.

Calculating Performance Rating, based on Source Energy

The Proposed Building Performance and Baseline Building Performance must each be calculated as the sum of predicted **source energy use** by end use, not energy cost, as required to demonstrate compliance with the EPA's program. The site energy consumption for each end use shall be taken from the report generated by the simulation program as described in Section G1.4 of Appendix G.

To determine the project's performance rating, follow the steps in the EPA's ENERGY STAR Simulation Guidelines Section 3.2, except in lieu of converting the site energy consumption to energy cost, convert the site energy consumption to source energy consumption, using the appropriate source-to-site energy conversions for each fuel type using the following source-to-site conversion factors shown below.

Energy Type	Source-to-Site Ratio	
Electricity (grid purchase)	2.55	
Natural gas	1.05	
Fuel oil	1.01	
Propane	1.01	

Air sealing

Projects *may* pursue performance credit for air sealing. To receive this credit, the actual air leakage rate measured during the inspection phase of the project as part of the ENERGY STAR MFHR Testing and Verification

Protocols conducted on the building, must be below 0.4 cfm/ft² at 75 Pa. To model the energy savings, the air leakage rate used to calculate the infiltration rates for the *Baseline Building Design* shall be 0.4 cfm/ft² at 75 Pa. In the Energy Modeling Deliverables, the air leakage rate used to calculate the infiltration rates must be no less than 0.35 CFM/ft² at 75 Pa for the *Proposed Design*. In the As-Built model, the actual measured air leakage rate shall be used to calculate the infiltration rates for the *Proposed Design*. The air leakage rate of the building envelope shall be converted to appropriate units for the simulation program using one of the methods in ASHRAE 90.1-2013 Section G3.1.1.4.

Note: Currently, the ENERGY STAR MFHR Program does not allow this measure for projects following ASHRAE 90.1-2010. As such, projects following ASHRAE 90.1-2010 must be able to meet the MFHR performance rating target of 15% without this credit.

4.4 Quality Control (QC) Processes

NYSERDA and its designees may perform two different types of QC on each MF NCP project: technical reviews and site inspections. This section explains how these apply to projects following the Performance Path.

4.4.1 Technical Reviews

Projects following the Performance Path must engage with an EPA-recognized Multifamily High-Rise Review Organization (MRO) to complete the review and approval of their Energy Modeling and As-Built Deliverables. As detailed in Section 2.2.2, projects that have submitted Applications to NYSERDA prior to January 1, 2019 may be eligible for additional incentives to support the Primary Energy Consultant's engagement of an MRO. Once the MRO has completed their review and provided approval, they must submit their written approval to the NYSERDA Portal as a deliverable for that Milestone.

A technical review process may occur at the Energy Modeling and As-Built Milestones of each Performance Path project to verify that the project is meeting the performance target, in addition to meeting all requirements of the ENERGY STAR MFHR Performance Path Prerequisites. Failure to meet the performance target and all requirements of the ENERGY STAR MFHR Performance Path Prerequisites will result in termination of the project.

Primary Energy Consultants are expected to QC their work and to submit a high-quality model along with fully completed tools and documents. Primary Energy Consultant status may be affected if a good-faith effort is not made. If at any time, NYSERDA deems submitted deliverables as incomplete or missing information, the deliverables will be rejected and returned to the Applicant for appropriate corrective action.

At the Energy Modeling Milestone, NYSERDA may elect to verify that simulation outputs are reasonable, evaluate the general quality of the model, review deliverables to ensure that ASHRAE 90.1 Appendix G and the ENERGY STAR MFHR Simulation Guidelines were followed, and evaluate whether the projected savings are consistent with the features of the design.

At the As-Built Milestone, NYSERDA may also elect to review the model, Performance Path Calculator, and ENERGY STAR MFHR Testing & Verification Worksheets as during the Modeling Milestone. Additionally, NYSERDA may review the ENERGY STAR MFHR Photo Template to ensure that all deliverables reflect the installed conditions.

4.4.2 Site Inspections

Open Wall site inspections may be attended by NYSERDA or a NYSERDA-designated Site Inspector on all Performance Path projects.

Applicant and Primary Energy Consultant representatives are required to attend the site inspections. These representatives must have detailed knowledge of the project and must be prepared to answer any project-related questions that arise.

The Applicant must submit the Open Wall deliverables through the NYSERDA portal at least two weeks prior to the achievement of the Open Wall Milestone. The Applicant must remain in communication with the construction site superintendent or construction manager regarding the construction schedule and any anticipated deviations that may affect the inspection.

The timing of the Open Wall Milestone is based on the type of installed above-grade wall insulation:

- Exterior insulation: Inspection should occur when approximately 30% of windows have been installed. This allows the Site Inspector to view cross sections of the above-grade wall assemblies at window rough openings, as well as air-sealing details at installed windows.
- Insulated concrete form (ICF): Inspection should occur when approximately 30% of windows have been
 installed. This allows the Site Inspector to view cross sections of the above-grade wall assemblies at
 window rough openings, as well as air-sealing details at installed windows.
- Exterior Insulation and Finishing Systems (EIFS): Inspection should occur when 30% of the EIFS has been installed.
- Interior insulation only: Inspection should occur when 30% of insulation is installed and visible.
- Exterior insulation with interior insulation: Inspection should occur when 30% of interior insulation is installed and visible.
- Pre-fabricated exterior wall assemblies and modular construction: Inspection should occur when 30% of the pre-fabricated assemblies have been installed on-site. The Primary Energy Consultant may need to visit the pre-fabrication facility to complete required testing and verification. The Primary Energy Consultant must provide photo documentation of components that will not be visible during the Open Wall inspection.

The Applicant must contact NYSERDA early in construction to determine the Open Wall Milestone for projects with above-grade wall insulation types or combinations not listed here.

If the Applicant fails to submit the Open Wall deliverables at least two weeks prior to the achievement of the Open Wall Milestone or the Primary Energy Consultant/Applicant is unresponsive to attempts to schedule the Open Wall inspection, the project will be required to expose sections of walls for inspection and all remaining incentive payments will be in jeopardy.

NYSERDA or a NYSERDA-designated Site Inspector may ask to see the construction drawings while on site to verify the planned installation of any components that cannot be visually inspected because either it has been covered or installation has not commenced.

For any completed component no longer visible during the inspection (below-grade exterior insulation, roof insulation, pre-fabricated assembly items, etc.), the Applicant must submit photographs using the ENERGY STAR MFHR Photo Template before the Site Inspection Report can be approved.

NYSERDA or a NYSERDA-designated Site Inspector may inspect all installed measures from the Detailed Measures tab of the Performance Path Calculator, as well as all installed ENERGY STAR MFHR Performance Path Prerequisites. NYSERDA or a NYSERDA-designated Site Inspector may develop a report detailing the Open Wall inspection findings, which will be shared through NYSERDA's portal. The report may contain Additional Requirements or Action Items for measures and prerequisites. Additional Requirements can be resolved at the As-Built Milestone. Action Items must be resolved before the Open Wall Incentive can be paid. The report will provide an explanation of what is required to resolve Additional Requirements and Action Items.

If severe violations of the ENERGY STAR MFHR Performance Path Prerequisites are discovered during this inspection, NYSERDA reserves the right to request that the Applicant instruct the construction team to remove sections of sealed walls to fully inspect insulation and air sealing components. Additionally, NYSERDA reserves the right to require a second Open Wall inspection to take place once all the required corrections are complete.

Failure to meet the requirements of this Open Wall inspection may result in termination of the project.

4.5 Additional Requirements

4.5.1 ENERGY STAR Benchmarking

Building performance is as much a function of proper building management as the design and construction. Therefore, after earning the ENERGY STAR for the project, the developer or building owner must commit to benchmarking their building in Portfolio Manager for a period of two years to maintain their listing on the ENERGY STAR website.

Portfolio Manager is an online, interactive energy management tool that allows Applicants to measure and track their building's energy and water consumption, identify investment priorities, and verify improvements over time. Multifamily housing communities can use Portfolio Manager to track weather-normalized energy use intensity (EUI), energy costs, greenhouse gas emissions, and water consumption. For more information on how to use Portfolio Manager, see the Portfolio Manager Multifamily Housing – Quick Start Guide at the following ENERGY STAR website: https://www.energystar.gov/index.cfm?c=bldrs_lenders_raters.nh mfhr benchmarking.

To accomplish this goal, the developer, building owner, or an entity working on their behalf must have the capability to evaluate utility consumption of the residential-associated spaces independent of any commercial/retail space. These non-residential associated parts of the building shall be separately metered (or sub-metered) for electricity, gas, fuel oil, water, steam, and hot water for domestic and/or space heating purposes. The developer or building owner should also work with tenants to secure consumption information. If the building is direct-metered for utilities to the apartments, the building owner must secure signed releases from individual apartment occupants to allow for benchmarking. In addition, the building owner must provide a signed release for the common area/whole-building utility meters. All data uploaded to Portfolio Manager is strictly confidential and only used to estimate the energy performance of the whole building, not of individual apartments.

NOTE: Receipt of NYSERDA incentives and the ENERGY STAR label will not be delayed due to this EPA requirement.

4.5.2 Gut Rehabilitation Projects

Gut rehabilitation projects following the Performance Path must meet the same requirements as newly constructed buildings. There are no allowances or exceptions for gut rehabilitation projects under the Performance Path.

For projects that are permitted under ECCC NYS 2014, the Performance Path relies on the modeling requirements of ASHRAE 90.1-2010 Appendix G, as supplemented by the ENERGY STAR MFHR Simulation Guidelines. ASHRAE 90.1-2010 Appendix G Table G3.1 does allow the following adjustment: for existing building envelopes, the baseline building design shall reflect existing conditions prior to any revisions that are part of the scope of work being evaluated. This is allowed for Tier 2 projects permitted under ECCC NYS 2014, but not allowed for any Tier 3 projects.

For projects that are permitted under ECCC NYS 2016, the Performance Path relies on the modeling requirements of ASHRAE 90.1-2013 Appendix, as defined by ECCC NYS 2016. ASHRAE 90.1-2013 Appendix G Table G3.1 does not include this allowance.

5 Passive House Institute US (PHIUS)

This section details the requirements of the Passive House Institute US (PHIUS) path and the associated deliverables.

5.1 Deliverables Requirements

For the Applicant to receive the NYSERDA incentives approved for their project, the Applicant must submit the required deliverables as detailed in the Milestones below. These deliverables may be reviewed by NYSERDA and the incentives will only be paid if these deliverables are approved by NYSERDA. All deliverables listed in this section must be submitted through the NYSERDA portal.

5.1.1 Milestone 1: Energy Modeling Deliverables

The first NYSERDA incentive is available to the Applicant when the project has reached design completion and NYSERDA has approved the Energy Modeling deliverables. The deliverables must show that the project is designed to achieve the primary energy demand thresholds and meets the requirements of the PHIUS+ Multifamily Certification Standard. If the energy model indicates the required performance thresholds will not be met, the Primary Energy Consultant must contact the NYSERDA prior to submittal. The Applicant must show that a Certified Passive House Consultant (CPHC) and a PHIUS+ Verifier have been hired to work on this project to be eligible for this incentive. Additionally, the project must be pre-certified by PHIUS prior to submittal to NYSERDA.

The Energy Modeling deliverables must be submitted no later than 30 days after the project has received PHIUS pre-certification and proof of pre-certification must be submitted through the NYSERDA portal upon receipt. The Buildings Department's approval shall also be submitted upon receipt but must be received by the submission of the deliverables associated with Open Wall Milestone 2.

Milestone 1 Deliverables	Document Obtained From:
Applicant-Primary Energy Consultant Contract (signed by both parties)	Primary Energy Consultant created document
LMI Documentation (if not previously submitted)	See Table 2.1
Proposed BPP	NYSERDA's website
As Designed WUFI modeling files	PHIUS
Proof of Pre-certification	PHIUS
Buildings Department's final New Building approval of Architectural, Mechanical, and Plumbing plans (if available)	Permitting office that approved the Construction Documents
Complete Construction Documents (CDs) must be submitted upon NYSERDA's request but should not be submitted through the NYSERDA Portal as Milestone 1 Deliverables.	Applicant/Developer/Design Team

5.1.2 Milestone 2: Open Wall Deliverables

The second NYSERDA incentive is available to the Applicant when NYSERDA has approved the Open Wall Deliverables. The Applicant must submit a complete set of Open Wall deliverables through the NYSERDA portal at least two weeks before the project reaches the Open Wall Milestone, allowing NYSERDA or the NYSERDA designated Site Inspector time to coordinate attending the Open Wall inspection, at NYSERDA's option. If the above grade wall assembly has changed since the Energy Modeling Milestone, the Primary Energy Consultant must contact NYSERDA when submitting Milestone 2 deliverables.

	Milestone 2 Deliverables	Document Obtained From:
	Site Inspection Request Form (Attachment D)	NYSERDA's website
	ENERGY STAR MFHR Photo Template	EPA
	PHIUS+ Quality Control Workbook for Multifamily Projects	PHIUS
	Buildings Department's final New Building approval of Architectural, Mechanical, and Plumbing plans (if not previously submitted)	Permitting office that approved the Construction Documents

5.1.3 Milestone 3: As-Built

The third NYSERDA incentive is available to the Applicant when the project construction is complete and NYSERDA has approved the As-Built Deliverables and Data Release Authorization Forms (DRAFs). These deliverables must show that the project meets or exceeds the performance thresholds specified in its approved performance tier and meets the requirements of the PHIUS+ Multifamily Certification Standard. The submitted WUFI model file must have been reviewed and approved by PHIUS prior to submittal to NYSERDA. If the project does not meet the performance thresholds, the Primary Energy Consultant must contact NYSERDA prior to submittal.

The Primary Energy Consultant must work with the Applicant to determine whether to submit Tenant DRAFs (Attachment F) or to follow the alternative process to allow NYSERDA to access the utility consumption information directly.

- DRAFs: All projects are eligible to follow the DRAF process. The Applicant must submit the Owner DRAF (Attachment E), which must include utility information for all common areas of the building, and Tenant DRAFs (Attachment F), which must include utility information for a representative sample of apartments. The apartment sample shall consist of at least 10 percent of the apartments with no fewer than five apartments. Of the 10 percent sample, at least one of each apartment type (e.g., studio, 1 bedroom, large 1 bedroom) must be represented. Additionally, a list of all apartment numbers and their corresponding apartment type (e.g. studio, large 1 bedroom) must be provided.
- As an alternative to submitting the Tenant DRAFs (Attachment F) and associated list of apartments, the Applicant must complete and sign the utility's Letter of Authorization, complete the application tab of the utility's Aggregated Consumption Data Request form (if applicable), compile all deliverables listed in the appropriate table below, and submit through the NYSERDA portal. To be eligible to follow this approach, the project's electric and/or gas utility must provide aggregated data. All data is kept confidential as per NYSERDA's guidelines and regulations, and only used to estimate the energy performance of the whole building, not of individual apartments.

 Milestone 3 Deliverables	Document Obtained From:
As-Built Building Performance Plan	NYSERDA's website
ENERGY STAR MFHR Photo Template	EPA
PHIUS+ Quality Control Workbook for Multifamily Projects	PHIUS
As-built WUFI modeling files	PHIUS
PHIUS+ Certificate	PHIUS

DRAF Deliverables:

I		Owner DRAF (Attachment E) (for all common area utility accounts) (executed)	NYSERDA's website	
1		Tenant DRAFs (Attachment F) (executed)	NYSERDA's website	
		List of each apartment number and type (e.g., studio, 1 bedroom)	Applicant created document	

Alternative DRAF	Deliverables*:
------------------	----------------

Owner DRAF (Attachment E) (for all common area utility accounts) (executed)	NYSERDA's website
Utility's Letter of Authorization**	Con Edison: http://www.coned.com/energyefficiency/city_benc hmarking.asp
Utility's Aggregated Consumption Data Request	Con Edison: <u>http://www.coned.com/energyefficiency/city_benc</u> <u>hmarking.asp</u> National Grid: <u>http://www.nyc.gov/html/gbee/downloads/pdf/201</u> 7_national_grid_nyc_benchmarking_data_reques <u>t_form.pdf</u>
Copy of utility bill for project address and account numbers	Applicant/Developer
Lease-up date (date when the building will be occupied)	Applicant

* Use this option as an alternative to submit Tenant DRAF Deliverables and list of apartments

** The signatory of this Authorization Form must be the utility account holder

5.2 Software Requirements

All MF NCP projects pursuing the PHIUS path must model the project using WUFI Version 3.0.3.0, 3.1.0, or 3.1.1 and following PHIUS+ Multifamily Certification Standard Book V1.01. The use of other versions of WUFI software or certification standard is subject to MF NCP review, must receive pre-approval by NYSERDA, and may result in a change to the performance threshold.

5.3 Associated Deliverables

5.3.1 Building Performance Plan

This calculator is used by the Primary Energy Consultant to capture details regarding the project's recommended scope of work and achievement of the required performance threshold(s) for projects following either Passive House compliance path. This document also collects project cost information and verification that the Certified Passive House Consultant (CPHC) and a PHIUS+ Verifier have been hired by the Applicant.

5.3.2 Testing & Verification Documents

In addition to following all requirements of the PHIUS Passive House certification, projects following the PHIUS path are also required to document the results of testing and verification in the ENERGY STAR MFHR Photo Template. The Photo Template can be obtained from the following ENERGY STAR website: https://www.energystar.gov/index.cfm?c=bldrs_lenders_raters.nh_mfhr_guidance.

5.4 Quality Control (QC) Processes

NYSERDA may perform two different types of QC on each MF NCP project: technical reviews and site inspections. This section explains how these apply to projects following the PHIUS path.

5.4.1 Technical Reviews

A technical review process may occur at the Energy Modeling and As-Built Milestones of each project pursuing PHIUS+ certification to verify that the project is meeting all MF NCP requirements. Failure to meet the performance thresholds and all MF NCP requirements may result in termination of the project.

Primary Energy Consultants are expected to QC their work and to submit a high-quality model along with fully completed tools and deliverables. Primary Energy Consultant status may be affected if a good-faith effort is not made. If at any time NYSERDA deems the deliverables as incomplete or missing significant information, the submitted deliverables will be rejected and returned to the Applicant for appropriate corrective action.

At the Energy Modeling Milestone 1, NYSERDA may review the model, the Building Performance Plan, and PHIUS+ Quality Control Workbook for Multifamily Projects to verify that all MF NCP requirements have been met, in addition to meeting the performance thresholds. Additionally, NYSERDA may elect to verify that simulation outputs are reasonable, evaluate the general quality of the model, and evaluate whether the projected energy use is consistent with the features of the design.

At the As-Built Milestone 3, NYSERDA may also review the model, the Building Performance Plan, and PHIUS+ Quality Control Workbook for Multifamily Projects as during the Modeling Milestone. Additionally, NYSERDA may review the ENERGY STAR MFHR Photo Template to ensure that all deliverables reflect the installed conditions.

5.4.2 Site Inspections

Open Wall inspections may be attended by NYSERDA or a NYSERDA-designated Site Inspector on all projects pursuing PHIUS+ certification.

Applicant and Primary Energy Consultant representatives are required to attend these site inspections. These representatives must have detailed knowledge of the project and must be prepared to answer any project-related questions that arise.

The Applicant must submit the Open Wall Deliverables through the NYSERDA portal at least two weeks prior to the achievement of the Open Wall Milestone. The Applicant must remain in communication with the construction site superintendent or construction manager regarding the construction schedule and any anticipated deviations that may affect the inspection.

The timing of the Open Wall Milestone is based on the type of installed above-grade wall insulation:

- Exterior insulation: Inspection should occur when approximately 30% of windows have been installed. This allows the Site Inspector to view cross sections of the above-grade wall assemblies at window rough openings, as well as air-sealing details at installed windows.
- Insulated concrete form (ICF): Inspection should occur when approximately 30% of windows have been installed. This allows the Site Inspector to view cross sections of the above-grade wall assemblies at window rough openings, as well as air-sealing details at installed windows.
- Exterior Insulation and Finishing Systems (EIFS): Inspection should occur when 30% of the EIFS has been installed.
- Interior insulation only: Inspection should occur when 30% of insulation is installed and visible.
- Exterior insulation with interior insulation: Inspection should occur when 30% of interior insulation is installed and visible.
- Pre-fabricated exterior wall assemblies and modular construction: Inspection should occur when 30% of the pre-fabricated assemblies have been installed on-site. The Primary Energy Consultant may need to visit the pre-fabrication facility to complete required testing and verification. The Primary Energy Consultant must provide photo documentation of components that will not be visible during the Open Wall inspection.

The Applicant must contact NYSERDA early in construction to determine the Open Wall Milestone for projects with above-grade wall insulation types or combinations not listed here.

If the Applicant fails to submit the Open Wall deliverables at least two weeks prior to the achievement of the Open Wall Milestone or the Primary Energy Consultant/Applicant is unresponsive to attempts to schedule the Open Wall inspection, the project will be required to expose sections of walls for inspection and all remaining incentive payments will be in jeopardy.

NYSERDA or a NYSERDA-designated Site Inspector may ask to see the construction drawings while on site to verify any component that cannot be visually inspected because either it has been covered or installation has not commenced.

For any completed component no longer visible during the inspection (below-grade exterior insulation, roof insulation, pre-fabricated assembly items, etc.), the Applicant must submit photographs using the ENERGY STAR MFHR Photo Template before the Site Inspection Report can be approved.

NYSERDA or a NYSERDA-designated Site Inspector may inspect all installed measures from the BPP. A report detailing the Open Wall inspection findings may be developed, which NYSERDA or the NYSERDA-designated Site Inspector will share through the portal. The report may contain Additional Requirements or Action Items for measures and prerequisites or requirements. Additional Requirements can be resolved at the As-Built Milestone. Action Items must be resolved before the Open Wall Incentive can be paid. The report will provide an explanation of what is required to resolve Additional Requirements and Action Items.

If severe violations of the BPP are discovered during this inspection, NYSERDA reserves the right to request that the Applicant instruct the construction team to remove sections of sealed walls to fully inspect insulation and air sealing components. Additionally, NYSERDA reserves the right to require a second Open Wall inspection to take place once all the required corrections are complete.

Failure to meet the requirements of this Open Wall inspection may result in termination of the project

5.5 Additional Requirements

5.5.1 Modeling Guidelines

All MF NCP projects following the PHIUS path shall follow the PHIUS+ Multifamily Certification Standard Book V1.01, with the following additional requirements:

- Any deviations from program defaults for operating assumptions, such as source-to-site conversion, plug loads and hours of operation, are subject to review and must be specifically noted in the BPP.
- If a project includes an HVAC configuration or system type that cannot be explicitly modeled in the WUFI software, the Primary Energy Consultant or CPHC must work directly with PHIUS staff to ensure that the energy use of that system is accurately captured in the model.
- Any calculations performed outside of the approved version of WUFI, including but not limited to HVAC systems that are not directly supported, capturing power of continuously running fans integral to heating/cooling units, methodology for aggregating heating systems of different types or efficiency for input into WUFI, etc. must be submitted to NYSERDA and are subject to NYSERDA approval.

At the Applicant's and Primary Energy Consultant's option, the model used to show compliance with the MF NCP Tier 3 performance thresholds, which are above and beyond minimum PHIUS certification requirements, may choose to alter their model as follows. Note the project is still required to meet all PHIUS certification requirements without this allowance.

• When calculating the Primary Energy Demand metric to determine a project's compliance with the performance thresholds specified in its approved performance tier, the project may choose to exclude the energy use associated with optional amenities, including dishwashers, laundry facilities, and exterior lighting. If excluded, however, that component must, at minimum, meet the modified prescriptive path requirement for that component as defined in the Modified Prescriptive Path Requirements (Attachment C) (e.g., dishwashers and clothes washers must be ENERGY STAR® certified). Additional optional amenities, such as vending machines, on-site gym equipment, etc. may be excluded with prior NYSERDA approval.

5.5.2 ENERGY STAR Benchmarking

NYSERDA requires benchmarking for all PHIUS path projects. Building performance is as much a function of proper building management as the energy conservation measures incorporated into the structure. Therefore, after completing the MF NCP project, the developer or building owner must commit to benchmarking their building in Portfolio Manager.

Portfolio Manager is an online, interactive energy management tool that allows Applicants to measure and track their building's energy and water consumption, identify investment priorities, and verify improvements over time. Multifamily housing communities can use Portfolio Manager to track weather-normalized energy use intensity (EUI), energy costs, greenhouse gas emissions, and water consumption. For more information on how to use Portfolio Manager, see the Portfolio Manager – Multifamily Housing Quick Start Guide document at the following ENERGY STAR website: https://www.energystar.gov/index.cfm?c=bldrs_lenders_raters.nh_mfhr_benchmarking.

To accomplish this goal, the developer, building owner, or an entity working on their behalf must have the capability to evaluate the utility consumption of the residential-associated spaces independent of any commercial/retail space. These non-residential associated parts of the building shall be separately metered (or sub-metered) for electricity, gas, fuel oil, water, steam, and hot water for domestic and/or space heating purposes. The developer or building owner should also work with tenants to secure consumption information. If the building is direct-metered for utilities to the apartments, the building owner must secure signed releases from individual apartment occupants to allow for benchmarking. In addition, the building owner must provide a signed release for the common area/whole-building utility meters. All data uploaded to Portfolio Manager is strictly confidential and only used to estimate the energy performance of the whole building, not of individual apartments.

6 Passive House Institute (PHI)

This section details the requirements of the Passive House Institute (PHI) path and the associated deliverables.

6.1 Deliverables Requirements

For the Applicant to receive the NYSERDA incentives approved for their project, the Applicant must submit the required deliverables as detailed in the Milestones below. These deliverables may be reviewed by NYSERDA and the incentives will only be paid if these deliverables are approved by NYSERDA. All documents listed in this section must be submitted through the NYSERDA portal.

6.1.1 Milestone 1: Energy Modeling

The first NYSERDA incentive is available to the Applicant when the project has reached design completion and NYSERDA has approved the Energy Modeling deliverables. The deliverables must show that the project is designed achieve the primary energy demand thresholds and meets the requirements of PHI Passive House standard. If the energy model indicates the performance thresholds will not be met, the Primary Energy Consultant must contact the NYSERDA prior to submitting the deliverables. The Applicant must show that a PHI Consultant or Designer and PHI Certifier have been hired to work on this project to be eligible for this incentive. Additionally, the submitted PHPP modeling file must have been reviewed and found to be compliant with the PHI standard by both the PHI Consultant or Designer and Certifier prior to submittal to NYSERDA.

The Energy Modeling deliverables must be submitted no later than 30 days after the project has received PHI precertification and the proof of pre-certification must be submitted through the NYSERDA portal t. The Buildings Department's approval shall also be submitted upon receipt but must be received by the submission of the deliverables associated with the Open Wall Milestone.

Milestone 1 Deliverables	Document Obtained From:
Applicant-Primary Energy Consultant Contract (signed by both parties)	Primary Energy Consultant created document
LMI Documentation (if not previously submitted)	See Table 2.1
Proof of Pre-certification	PHI
Proposed Building Performance Plan	NYSERDA's website
As Designed PHPP modeling files	PHI
Buildings Department's final New Building approval of Architectural, Mechanical, and Plumbing plans (if available)	Permitting office that approved the Construction Documents
Complete Construction Documents (CDs) must be submitted upon NYSERDA's request but should not be submitted through the NYSERDA Portal as Milestone 1 Deliverables.	Applicant/Developer/Design Team

6.1.2 Milestone 2: Open Wall

The second NYSERDA incentive is available to the Applicant when NYSERDA has approved the Open Wall Deliverables. The Applicant must submit a complete set of Open Wall deliverables through the NYSERDA portal at least two weeks before the project reaches the Open Wall Milestone, allowing NYSERDA or the NYSERDAdesignated Site Inspector time to coordinate attending the Open Wall inspection. If the above grade wall assembly has changed since the Energy Modeling Milestone, the Primary Energy Consultant must contact NYSERDA when submitting Milestone 2 deliverables.

Milestone 2 Deliverables	Document Obtained From:
Site Inspection Request Form (Attachment D)	NYSERDA's website
ENERGY STAR MFHR Photo Template	EPA
ENERGY STAR MFHR Testing & Verification Worksheets	EPA
Buildings Department's final New Building approval of Architectural, Mechanical, and Plumbing plans (if not previously submitted)	Permitting office that approved the Construction Documents

6.1.3 Milestone 3: As-Built

The third NYSERDA incentive is available to the Applicant when the project construction is complete and NYSERDA has approved the As-Built Deliverables and Data Release Authorization Forms (DRAFs). These deliverables must show that the project meets or exceeds the performance thresholds specified in its approved performance tier and meets the requirements of the PHI Passive House standard. The submitted PHPP model file must have been reviewed and approved by both the PHI Consultant/Designer and Certifier prior to submittal to NYSERDA. If the project does not meet the performance thresholds, the Primary Energy Consultant must contact NYSERDA prior to submittal.

The Primary Energy Consultant must work with the Applicant to determine whether to submit Tenant DRAFs (Attachment F) or to follow the alternative process to allow the NYSERDA-designated liaison to access the utility consumption information directly.

- DRAFs: All projects are eligible to follow the DRAF process. The Applicant must submit the Owner DRAF (Attachment E), which must include utility information for all common areas of the building, and Tenant DRAFs (Attachment F), which must include utility information for a representative sample of apartments. The apartment sample shall consist of at least 10 percent of the apartments with no fewer than five apartments. Of the 10 percent sample, at least one of each apartment type (e.g., studio, 1 bedroom, large 1 bedroom) must be represented. Additionally, a list of all apartment numbers and their corresponding apartment type (e.g. studio, large 1 bedroom) must be provided.
- As an alternative to submitting the Tenant DRAFs (Attachment F) and associated list of apartments, the Applicant must complete and sign the utility's Letter of Authorization, complete the application tab of the utility's Aggregated Consumption Data Request form (if applicable), compile all deliverables listed in the appropriate table below, and submit through the NYSERDA portal. All data is kept confidential as per NYSERDA's guidelines and regulations, and only used to estimate the energy performance of the whole building, not of individual apartments. To be eligible to follow this approach, the project's electric and/or gas utility must provide aggregated data.

Milestone 3 Deliverables	Document Obtained From:
As-Built Building Performance Plan	NYSERDA's website
ENERGY STAR MFHR Photo Template	EPA
ENERGY STAR MFHR Testing & Verification Worksheets	EPA
As-built PHPP modeling files	PHI
PHI Certificate	PHI

DRAF Deliverables:

Owner DRAF (Attachment E) (for all common area utility accounts) (executed)	NYSERDA's website	
Tenant DRAFs (Attachment F) (executed)	NYSERDA's website	
List of each apartment number and type (e.g., studio, 1 bedroom)	Applicant created document	

Alternative DRAF Deliverables*:

Owner DRAF (Attachment E) (for all common area utility accounts) (executed)	NYSERDA's website
Utility's Letter of Authorization**	Con Edison: http://www.coned.com/energyefficiency/city_benc hmarking.asp
Utility's Aggregated Consumption Data Request	Con Edison: <u>http://www.coned.com/energyefficiency/city_benc</u> <u>hmarking.asp</u> National Grid: <u>http://www.nyc.gov/html/gbee/downloads/pdf/201</u> 7_national_grid_nyc_benchmarking_data_reques t_form.pdf
Copy of utility bill for project address and account numbers	Applicant/Developer
Lease-up date (the date when the building will be occupied)	Applicant

* Use this option as an alternative to submit Tenant DRAF Deliverables and list of apartments

** The signatory of this Authorization Form must be the utility account holder

6.2 Software Requirements

All MF NCP projects pursuing the PHI path must model the project using PHPP Version 9.5 and following PHI Passive House Standard v9.5 – PH Classic. The use of other versions of PHPP software or certification standard is subject to MF NCP review, must receive pre-approval by NYSERDA, and may result in a change to the performance thresholds.

6.3 Associated Deliverables

6.3.1 Building Performance Plan

This calculator is used by the Primary Energy Consultant to capture details regarding the project's recommended scope of work and achievement of the required performance threshold(s) for projects following either Passive House compliance path. This document also collects project cost information and verification that the PHI Consultant or Designer and PHI Certifier has been hired by the Applicant.

6.3.2 Testing and Verification Worksheets

MF NCP projects following the PHI compliance path are required to report all performance testing results in the ENERGY STAR MFHR Testing & Verification Worksheets and ENERGY STAR MFHR Photo Template. Note that where the requirements stated in the Testing & Verification Worksheets conflict with PHI requirements, the PHI requirement stands.

The ENERGY STAR MFHR Testing & Verification Worksheets and Photo Template can be obtained from the following ENERGY STAR website:

https://www.energystar.gov/index.cfm?c=bldrs_lenders_raters.nh_mfhr_guidance.

6.4 Quality Control (QC) Processes

NYSERDA may perform two different types of QC on each MF NCP project: technical reviews and site inspections. This section explains how these apply to projects following the PHI path.

6.4.1 Technical Reviews

A technical review process may occur at the Energy Modeling and As-Built Milestones of each PHI path project to verify the project is meeting all MF NCP requirements. Failure to meet the performance thresholds and all MF NCP requirements may result in termination of the project.

Primary Energy Consultants are expected to QC their work and to submit a high-quality model along with fully completed tools and deliverables. Primary Energy Consultant status may be affected if a good-faith effort is not made. If at any time during, NYSERDA deems the deliverables as incomplete or missing information, the deliverables will be rejected and returned to the Applicant for appropriate corrective action.

At the Energy Modeling Milestone 1, the NYSERDA may review the model, the Building Performance Plan, and ENERGY STAR MFHR Testing & Verification Worksheets to verify that all MF NCP requirements have been met, in addition to meeting the performance thresholds. Additionally, NYSERDA may elect to verify that simulation outputs are reasonable, evaluate the general quality of the model, and evaluate whether or not the projected energy use is consistent with the features of the design.

At the As-Built Milestone, NYSERDA may also review the model, the Building Performance Plan, and ENERGY STAR MFHR Testing & Verification Worksheets as during the Modeling Milestone. Additionally, the NYSERDA may review the ENERGY STAR MFHR Photo Template to ensure that all submittal documents reflect the installed conditions.

6.4.2 Site Inspections

Open Wall inspections may be attended by the NYSERDA or a NYSERDA-designated Site Inspector on all projects pursuing PHI certification.

Applicant and Primary Energy Consultant representatives are required to attend these site inspections. These representatives must have detailed knowledge of the project and must also be prepared to answer any project-related questions that arise.

The Applicant must submit the Open Wall Deliverables through the NYSERDA portal at least two weeks prior to the achievement of the Open Wall Milestone. The Applicant must remain in communication with the construction site superintendent or construction manager regarding the construction schedule and any anticipated deviations that may affect the inspection.

The timing of the Open Wall Milestone is based on the type of installed above-grade wall insulation:

- Exterior insulation: Inspection should occur when approximately 30% of windows have been installed. This allows the Site Inspector to view cross sections of the above-grade wall assemblies at window rough openings, as well as air-sealing details at installed windows.
- Insulated concrete form (ICF): Inspection should occur when approximately 30% of windows have been installed. This allows the Site Inspector to view cross sections of the above-grade wall assemblies at window rough openings, as well as air-sealing details at installed windows.
- Exterior Insulation and Finishing Systems (EIFS): Inspection should occur when 30% of the EIFS has been installed.
- Interior insulation only: Inspection should occur when 30% of insulation is installed and visible.
- Exterior insulation with interior insulation: Inspection should occur when 30% of interior insulation is installed and visible.
- Pre-fabricated exterior wall assemblies and modular construction: Inspection should occur when 30% of the pre-fabricated assemblies have been installed on-site. The Primary Energy Consultant may need to visit the pre-fabrication facility to complete required testing and verification. The Primary Energy

Consultant must provide photo documentation of components that will not be visible during the Open Wall inspection.

The Applicant must contact NYSERDA early in construction to determine the Open Wall Milestone for projects with above-grade wall insulation types or combinations not listed here.

If the Applicant fails to submit the Open Wall Deliverables at least two weeks prior to the achievement of the Open Wall Milestone or the Primary Energy Consultant/Applicant is unresponsive to attempts to schedule the Open Wall inspection, the project will be required to expose sections of walls for inspection and all remaining incentive payments will be in jeopardy.

NYSERDA or a NYSERDA-designated Site Inspector may ask to see the construction drawings while on site to verify any component listed on the Open Wall Checklist that cannot be visually inspected because either it has been covered or installation has not commenced.

For any completed component no longer visible during the inspection (below-grade exterior insulation, roof insulation, pre-fabricated assembly items, etc.), the Applicant must submit photographs using the ENERGY STAR MFHR Photo Template before the Site Inspection Report can be approved.

NYSERDA or a NYSERDA-designated Site Inspector may inspect all installed measures from the BPP. A report detailing the Open Wall inspection findings may be developed, which NYSERDA or the NYSERDA-designated Site Inspector will submit in the portal. The report may contain Additional Requirements or Action Items for measures and prerequisites or requirements. Additional Requirements can be resolved at the As-Built Milestone. Action Items must be resolved before the Open Wall Incentive can be paid. The report will provide an explanation of what is required to resolve Additional Requirements and Action Items.

If severe violations of the BPP are discovered during this inspection, NYSERDA reserves the right to request that the Applicant instruct the construction team to remove sections of sealed walls to fully inspect insulation and air sealing components. Additionally, NYSERDA reserves the right to require a second Open Wall inspection to take place once all the required corrections are complete.

Failure to meet the requirements of this Open Wall inspection may result in termination of the project.

6.5 Additional Requirements

6.5.1 Modeling Guidelines

All MF NCP projects following the PHI path shall follow the PHI Passive House Standard v9.5 – PH Classic, with the following additional requirements:

- Any deviations from program defaults for operating assumptions, such as source-to-site conversion, plug loads and hours of operation, are subject to review and must be specifically noted in the BPP.
- If a project includes an HVAC configuration or system type that cannot be explicitly modeled in the PHPP software, the project team must work directly with PHI staff to ensure that the energy use of that system is accurately captured in the model.
- Any calculations performed outside of the approved version of PHPP, including but not limited to HVAC systems that are not directly supported, capturing power of continuously running fans integral to heating/cooling units, methodology for aggregating heating systems of different type or efficiency for input into PHPP, etc. must be submitted to NYSERDA, and are subject to NYSERDA approval.

At the Applicants and Primary Energy Consultants option, the model used to show compliance with the MF NCP Tier 3 performance thresholds, which are above and beyond PHI minimum certification requirements, may choose to alter their model as follows. Note the project is still required to meet all PHI certification requirements without this allowance.

• When calculating the Primary Energy Demand metric to determine a project's compliance with the performance thresholds specified in its approved performance tier, the project may choose to exclude the energy use associated with optional amenities, including dishwashers, laundry facilities, and exterior

lighting. If excluded, however, that component must, at minimum, meet the modified prescriptive path requirement for that component as defined in the Modified Prescriptive Path Requirements (Attachment C) (e.g., dishwashers and clothes washers must be ENERGY STAR® certified). Additional optional amenities, such as vending machines, on-site gym equipment, etc., may be excluded with prior NYSERDA approval.

6.5.2 ENERGY STAR Benchmarking

NYSERDA requires benchmarking for all PHI path projects. Building performance is as much a function of proper building management as the energy conservation measures incorporated into the structure. Therefore, after completing the MF NCP, the developer or building owner must commit to benchmarking their building in Portfolio Manager.

Portfolio Manager is an online, interactive energy management tool that allows Applicants to measure and track their building's energy and water consumption, identify investment priorities, and verify improvements over time. Multifamily housing communities can use Portfolio Manager to track weather-normalized energy use intensity (EUI), energy costs, greenhouse gas emissions, and water consumption. For more information on how to use Portfolio Manager, see the Portfolio Manager – Multifamily Housing Quick Start Guide document at the following ENERGY STAR website: https://www.energystar.gov/index.cfm?c=bldrs_lenders_raters.nh_mfhr_benchmarking.

To accomplish this goal, the developer, building owner, or an entity working on their behalf must have the capability to evaluate the utility consumption of the residential-associated spaces independent of any commercial/retail space. These non-residential associated parts of the building shall be separately metered (or sub-metered) for electricity, gas, fuel oil, water, steam, and hot water for domestic and/or space heating purposes. The developer or building owner should also work with tenants to secure consumption information. If the building is direct-metered for utilities to the apartments, the building owner must secure signed releases from individual apartment occupants to allow for benchmarking. In addition, the building owner must provide a signed release for the common area/whole-building utility meters. All data uploaded to Portfolio Manager is strictly confidential and only used to estimate the energy performance of the whole building, not of individual apartments.

6.5.3 Gut Rehabilitation Projects

Gut rehabilitation projects following the PHI compliance path to meet Tier 2 requirements can meet the requirements of the Classic category of the Passive House Institute's EnerPHit Standard. MF NCP projects following the EnerPHit standard can demonstrate the requirements are met through the EnerPHit component method or the energy demand method. Projects must also meet all MF NCP requirements for projects following the PHI compliance path as detailed in this Section 6. In addition, the Primary Energy Consultant must submit documentation through the NYSERDA Portal when an exemption for EnerPHit is requested and when an exemption is approved by PHI.

7 Modified Prescriptive Path (MoPP)

This section describes the requirements for the MoPP. This compliance path does not result in an ENERGY STAR label for the final project's units, but may result in the New York Energy \$mart designation from NYSERDA.

New Construction projects following the MoPP will be eligible for Tier 1 only. Gut rehabilitation projects following the MoPP may be eligible for Tier 2.

7.1 MoPP Requirements and Deliverables

For the Applicant to receive the NYSERDA incentives approved for their project, the Applicant must submit the required deliverables as detailed in the Milestones below. These deliverables may be reviewed by NYSERDA. The incentives will only be paid if these deliverables are approved by NYSERDA. All deliverables listed in this section must be submitted through the NYSERDA portal.

7.1.1 Milestone 1: Energy Modeling Deliverables

The deliverables must show that the project achieves the performance target and meets the requirements detailed in the Modified Prescriptive Path Requirements (Attachment C) and the ENERGY STAR MFHR Testing & Verification Protocols. Note there are no incentives associated with this Milestone.

These deliverables must be submitted prior to or when the Open Wall Deliverables are submitted.

 Milestone 1Deliverables	Document Obtained From:
Applicant-Primary Energy Consultant Contract (signed by both parties)	Primary Energy Consultant created document
LMI Documentation (if not previously submitted)	See Table 2.1
Proposed Modified Prescriptive Path Calculator	NYSERDA's website
Complete Construction Documents (CDs) must be submitted upon NYSERDA's request but should not be submitted through the NYSERDA Portal as Milestone 1 Deliverables.	Applicant/Developer/Design Team

7.1.2 Milestone 2: Open Wall

For the MoPP, the first NYSERDA incentive is available to the Applicant when NYSERDA has approved the Open Wall deliverables. The Applicant must submit a complete set of Open deliverables through the NYSERDA portal at least two weeks before the project achieves the Open Wall Milestone, allowing NYSERDA or the NYSERDA-designated Site Inspector time to coordinate attending the Open Wall inspection. If the above grade wall assembly has changed since the Energy Modeling Milestone, the Primary Energy Consultant must contact NYSERDA when submitting Milestone 2 deliverables.

Milestone 2 Deliverables	Document Obtained From:
Site Inspection Request Form (Attachment D)	NYSERDA's website
ENERGY STAR MFHR Photo Template	EPA
ENERGY STAR MFHR Testing & Verification Worksheets	EPA
Buildings Department's final New Building approval of Architectural, Mechanical, and Plumbing plans (if not previously submitted)	Permitting office that approved the Construction Documents

7.1.3 Milestone 3: As-Built

The second incentive is available to the Applicant when the project construction is complete, and NYSERDA has approved the As-Built Deliverables and Data Release Authorization Forms (DRAFs). These deliverables must show that the project has complied with all Modified Prescriptive Path Requirements (Attachment C) and the ENERGY STAR MFHR Testing & Verification Protocols. If the project does not comply, the Primary Energy Consultant must contact NYSERDA prior to submittal.

The Primary Energy Consultant must work with the Applicant to determine whether to submit Tenant DRAFs (Attachment F) or to follow the alternative process to allow the NYSERDA-designated liaison to access the utility consumption information directly.

- DRAFs: All projects are eligible to follow the DRAF process. The Applicant must submit the Owner DRAF (Attachment E), which must include utility information for all common areas of the building, and Tenant DRAFs (Attachment F), which must include utility information for a representative sample of apartments. The apartment sample shall consist of at least 10 percent of the apartments with no fewer than five apartments. Of the 10 percent sample, at least one of each apartment type (e.g., studio, 1 bedroom, large 1 bedroom) must be represented. Additionally, a list of all apartment numbers and their corresponding apartment type (e.g. studio, large 1 bedroom) must be provided.
- As an alternative to submitting the Tenant DRAFs (Attachment F) and associated list of apartments, the Applicant must complete and sign the utility's Letter of Authorization, complete the application tab of the utility's Aggregated Consumption Data Request form (if applicable), compile all deliverables listed in the appropriate table below, and submit through the NYSERDA portal. All data is kept strictly confidential and only used to estimate the energy performance of the whole building, not of individual apartments. To be eligible to follow this approach, the project's electric and/or gas utility must provide aggregated data.

 Milestone 3 Deliverables	Document Obtained From:
As-Built Modified Prescriptive Path Calculator	NYSERDA's website
ENERGY STAR MFHR Photo Template	EPA
ENERGY STAR MFHR Testing & Verification Worksheets	EPA

Owner DRAF (Attachment E) (for all common area utility accounts) (executed)*	NYSERDA's website	
Tenant DRAFs (Attachment F) (executed)	NYSERDA's website	
List of each apartment number and type (e.g., studio, 1 bedroom)	Applicant created document	

DRAF Deliverables:

Owner DRAF (Attachment E) (for all common area utility accounts) (executed)	NYSERDA's website	
Utility's Letter of Authorization**	Con Edison: http://www.coned.com/energyefficiency/city_ben chmarking.asp	
Utility's Aggregated Consumption Data Request	Con Edison: <u>http://www.coned.com/energyefficiency/city_ben</u> <u>chmarking.asp</u> National Grid: <u>http://www.nyc.gov/html/gbee/downloads/pdf/20</u> <u>17_national_grid_nyc_benchmarking_data_req</u> <u>uest_form.pdf</u>	
Copy of utility bill for project address and account numbers	Applicant/Developer	
Lease-up date (date when the building will be occupied)	Applicant	

Alternative DRAF Deliverables*:

* Use this option as an alternative to submit Tenant DRAF Deliverables and list of apartments

** The signatory of this Authorization Form must be the utility account holder

7.2 Associated Deliverables

7.2.1 Modified Prescriptive Path Calculator

In lieu of submitting the Building Performance Plan, Applicants must submit the Modified Prescriptive Path Calculator for MoPP projects. This calculator includes a checklist where the Primary Energy Consultant and Applicant confirm that all Modified Prescriptive Path Requirements (Attachment C) and ENERGY STAR MFHR Testing & Verification Protocols are met. It also calculates estimated savings based on project-specific data for NYSERDA reporting purposes. It incorporates the ENERGY STAR MFHR Testing & Verification Worksheets, as well as tabs that report information to NYSERDA. There is extensive linking between the tabs in this document to reduce the amount of data entry required of the Primary Energy Consultant.

The cells and tabs are color-coded to guide the Primary Energy Consultant in properly filling in the calculator. All cells that require the Primary Energy Consultant to input information are blue.

- *Modified Prescriptive Path Checklist*: This tab outlines the Modified Prescriptive Path Requirements (Attachment C) in checklist form. In addition to checking each box to indicate that the requirement has been met, certain components require basic information be entered. These cells are colored blue.
- Savings: This tab calculates the savings of each measure and the entire project, based on MF NCP-wide assumptions. No information should be changed in this sheet; it is for NYSERDA informational purposes only.
- Testing & Verification Worksheets (Remainder of the tabs): After the final plan review confirms all recommendations have been integrated into the construction documents, the ENERGY STAR MFHR T&V Worksheets must be completed in compliance with the T&V Protocols. They list the measures and building components to be inspected, mandatory requirements to be confirmed, and any additional relevant information identified during the plan review. Once completed, they are used to document that each Modified Prescriptive Path requirement and each measure included in the As-Built deliverables and building meets all requirements and follows ENERGY STAR MFHR T&V Protocols.

7.2.2 Testing and Verification Protocols and Worksheets

Projects following the Modified Prescriptive Path (See Attachment C) must meet the requirements of the ENERGY STAR MFHR Testing & Verification Protocols. The ENERGY STAR MFHR Testing & Verification Protocols are mandatory requirements for the inspection, testing, and verification of components related to the project's energy performance. All inspections, diagnostic tests, and photo documentation described within the Protocols are required for each of the participating project's components and systems. Results of testing and verification must be

documented in the ENERGY STAR MFHR Testing & Verification Worksheets (included in the Modified Prescriptive Path Calculator) and ENERGY STAR MFHR Photo Template. The Testing & Verification Protocols and Photo Template can be obtained from the following ENERGY STAR website: https://www.energystar.gov/index.cfm?c=bldrs_lenders_raters.nh_mfhr_guidance.

7.3 Quality Control Processes

NYSERDA may perform two different types of quality control on each MF NCP project: technical reviews and site inspections. This section explains how these apply to projects following the Modified Prescriptive Path.

7.3.1 Technical Reviews

A technical review process may occur at each Milestone of each Modified Prescriptive Path project. Failure to meet the Modified Prescriptive Path Requirements may result in termination of the project.

Primary Energy Consultants are expected to QC their work and submit high-quality and fully completed tools and deliverables. Primary Energy Consultant status may be affected if a good-faith effort is not made. If at any time, NYSERDA deems the deliverables as incomplete or missing information, the deliverables will be rejected and returned to the Applicant for appropriate corrective action.

7.3.2 Site Inspections

Open Wall inspections may be attended by NYSERDA or a NYSERDA-designated Site Inspector on all Modified Prescriptive Path projects.

Applicant and Primary Energy Consultant representatives are required to attend these site inspections. These representatives must have detailed knowledge of the project and must also be prepared to answer any project-related questions that arise.

The Applicant must submit the Open Wall Deliverables through the NYSERDA portal at least two weeks prior to the achievement of the Open Wall Milestone. The Applicant must remain in communication with the construction site superintendent or construction manager regarding the construction schedule and any anticipated deviations that may affect the inspection.

The timing of the Open Wall Milestone is based on the type of installed above-grade wall insulation:

- Exterior insulation: Inspection should occur when approximately 30% of windows have been installed. This allows the Site Inspector to view cross sections of the above-grade wall assemblies at window rough openings, as well as air-sealing details at installed windows.
- Insulated concrete form (ICF): Inspection should occur when approximately 30% of windows have been installed. This allows the Site Inspector to view cross sections of the above-grade wall assemblies at window rough openings, as well as air-sealing details at installed windows.
- Exterior Insulation and Finishing Systems (EIFS): Inspection should occur when 30% of the EIFS has been installed.
- Interior insulation only: Inspection should occur when 30% of insulation is installed and visible.
- Exterior insulation with interior insulation: Inspection should occur when 30% of interior insulation is installed and visible.
- Pre-fabricated exterior wall assemblies and modular construction: Inspection should occur when 30% of the pre-fabricated assemblies have been installed on-site. The Primary Energy Consultant may need to visit the pre-fabrication facility to complete required testing and verification. The Primary Energy Consultant must provide photo documentation of components that will not be visible during the Open Wall inspection.

The Applicant must contact NYSERDA early in construction to determine the Open Wall Milestone for projects with above-grade wall insulation types or combinations not listed here.

If the Applicant fails to submit the Open Wall deliverables at least two weeks prior to the achievement of the Open Wall Milestone or the Primary Energy Consultant/Applicant is unresponsive to attempts to schedule the Open Wall

inspection, the project will be required to expose sections of walls for inspection and all remaining incentive payments will be in jeopardy.

NYSERDA or a NYSERDA-designated Site Inspector may ask to see the construction drawings while on site to verify any component that cannot be visually inspected because either it has been covered or installation has not commenced.

For any completed component no longer visible during the inspection (below-grade exterior insulation, roof insulation, pre-fabricated assembly items, etc.), the Applicant must submit photographs using the ENERGY STAR MFHR Photo Template before the Site Inspection Report can be approved.

NYSERDA or a NYSERDA-designated Site Inspector may inspect all installed measures from the Modified Prescriptive Path Calculator, as well as all installed Modified Prescriptive Path Requirements (Attachment C). A report detailing the Open Wall inspection findings may be developed by NYSERDA and shared through the portal. The report may contain Additional Requirements or Action Items for measures and prerequisites or requirements. Additional Requirements can be resolved at the As-Built Milestone. Action Items must be resolved before the Open Wall Incentive can be paid. The report will provide an explanation of what is required to resolve Additional Requirements and Action Items.

If severe violations of the Modified Prescriptive Path Requirements are discovered during this inspection, NYSERDA and the Site Inspector reserve the right to request that the Applicant instruct the construction team to remove sections of sealed walls to fully inspect insulation and air sealing components. Additionally, NYSERDA reserves the right to require a second Open Wall inspection to take place once all the required corrections are complete.

Failure to meet the requirements of this Open Wall inspection may result in termination of the project.

7.4 Additional Requirement

7.4.1 ENERGY STAR Benchmarking

NYSERDA requires benchmarking for all MoPP projects. Building performance is as much a function of proper building management as the energy conservation measures incorporated into the structure. Therefore, after completing the MF NCP project, the developer or building owner must commit to benchmarking their building in Portfolio Manager.

Portfolio Manager is an online, interactive energy management tool that allows Applicants to measure and track their building's energy and water consumption, identify investment priorities, and verify improvements over time. Multifamily housing communities can use Portfolio Manager to track weather-normalized energy use intensity (EUI), energy costs, greenhouse gas emissions, and water consumption. For more information on how to use Portfolio Manager, see the Portfolio Manager – Multifamily Housing Quick Start Guide document at the following ENERGY STAR website: https://www.energystar.gov/index.cfm?c=bldrs_lenders_raters.nh mfhr benchmarking.

To accomplish this goal, the developer, building owner, or an entity working on their behalf must have the capability to evaluate the utility consumption of the residential-associated spaces independent of any commercial/retail space. These non-residential associated parts of the building shall be separately metered (or sub-metered) for electricity, gas, fuel oil, water, steam, and hot water for domestic and/or space heating purposes. The developer or building owner should also work with tenants to secure consumption information. If the building is direct-metered for utilities to the apartments, the building owner must secure signed releases from individual apartment occupants to allow for benchmarking. In addition, the building owner must provide a signed release for the common area/whole-building utility meters. All data uploaded to Portfolio Manager is strictly confidential and only used to estimate the energy performance of the whole building, not of individual apartments.

8 GENERAL CONDITIONS

Proprietary Information - Careful consideration should be given before confidential information is submitted to NYSERDA as part of your proposal. Review should include whether it is critical for evaluating a proposal, and whether general, non-confidential information, may be adequate for review purposes.

The NYS Freedom of Information Law, Public Officers law, Article 6, provides for public access to information NYSERDA possesses. Public Officers Law, Section 87(2)(d) provides for exceptions to disclosure for records or portions thereof that "are trade secrets or are submitted to an agency by a commercial enterprise or derived from information obtained from a commercial enterprise and which if disclosed would cause substantial injury to the competitive position of the subject enterprise." Information submitted to NYSERDA that the proposer wishes to have treated as proprietary, and confidential trade secret information, should be identified and labeled "Confidential" or "Proprietary" on each page at the time of disclosure. This information should include a written request to except it from disclosure, including a written statement of the reasons why the information should be excepted. See Public Officers Law, Section 89(5) and the procedures set forth in 21 NYCRR Part 501 https://www.nyserda.ny.gov/About/-/media/Files/About/Contact/NYSERDA-Regulations.ashx. However, NYSERDA cannot guarantee the confidentiality of any information submitted.

Omnibus Procurement Act of 1992 - It is the policy of New York State to maximize opportunities for the participation of New York State business enterprises, including minority- and women-owned business enterprises, as bidders, subcontractors, and suppliers on its procurement Agreements.

Information on the availability of New York subcontractors and suppliers is available from:

Empire State Development Division for Small Business 625 Broadway Albany, NY 12207

A directory of certified minority- and women-owned business enterprises is available from:

Empire State Development Minority and Women's Business Development Division 625 Broadway Albany, NY 12207

State Finance Law sections 139-j and 139-k - NYSERDA is required to comply with State Finance Law sections 139-j and 139-k. These provisions contain procurement lobbying requirements which can be found at https://online.ogs.ny.gov/legal/lobbyinglawfaq/default.aspx Proposers are required to answer questions during proposal submission, which will include making required certification under the State Finance Law and to disclose any Prior Findings of Non-Responsibility (this includes a disclosure statement regarding whether the proposer has been found non-responsible under section 139-j of the State Finance Law within the previous four years).

Tax Law Section 5-a - NYSERDA is required to comply with the provisions of Tax Law Section 5-a, which requires a prospective contractor, prior to entering an agreement with NYSERDA having a value in excess of \$100,000, to certify to the Department of Taxation and Finance (the "Department") whether the contractor, its affiliates, its subcontractors and the affiliates of its subcontractors have registered with the Department to collect New York State and local sales and compensating use taxes. The Department has created a form to allow a prospective contractor to readily make such certification. See, ST-220-TD (available at

<u>http://www.tax.ny.gov/pdf/current_forms/st/st220td_fill_in.pdf</u>). Prior to contracting with NYSERDA, the prospective contractor must also certify to NYSERDA whether it has filed such certification with the Department.

The Department has created a second form that must be completed by a prospective contractor prior to contacting and filed with NYSERDA. See, ST-220-CA (available at

<u>http://www.tax.ny.gov/pdf/current_forms/st/st220ca_fill_in.pdf</u>). The Department has developed guidance for contractors which is available at <u>http://www.tax.ny.gov/pdf/publications/sales/pub223.pdf</u>.

Contract Award - NYSERDA anticipates making multiple awards under this solicitation. A contract may be awarded based on initial applications without discussion, or following limited discussion or negotiations pertaining to the project. Each offer should be submitted using the most favorable cost and technical terms. NYSERDA may request additional data or material to support applications. NYSERDA will use the Sample Agreement to contract successful proposals. NYSERDA may at its discretion elect to extend and/or add funds to any project funded through this solicitation. NYSERDA reserves the right to limit any negotiations to exceptions to standard Terms and Conditions (Attachment B) to those specifically identified in the checklist questions. Proposers should keep in mind that acceptance of all standard terms and conditions will generally result in a more expedited contracting process. NYSERDA expects to notify the applicant in approximately four weeks from the receipt of a complete application whether the application has been selected to receive an award. NYSERDA may decline to contract with awardees that are delinquent with respect to any obligation under any previous or active NYSERDA agreement.

Accessibility Requirements - If awardees from this solicitation will be posting anything on the web, or if the awardee will produce a final report that NYSERDA will post to the web, the following language must be included. NYSERDA requires contractors producing content intended to be posted to the Web to adhere to New York State's Accessibility Policy. This includes, but is not limited to, deliverables such as: documents (PDF, Microsoft Word, Microsoft Excel, etc.), audio (.mp3, .wav, etc.), video (.mp4, .mpg, .avi, etc.), graphics (.jpg, .png, etc.), web pages (.html, .aspx, etc.), and other multimedia and streaming media content. For more information, see <u>NYSERDA's Accessibility Requirements</u>.

Limitation - This solicitation does not commit NYSERDA to award a contract, pay any costs incurred in preparing a proposal, or to procure or contract for services or supplies. NYSERDA reserves the right to accept or reject any or all proposals received, to negotiate with all qualified sources, or to cancel in part or in its entirety the solicitation when it is in NYSERDA's best interest. NYSERDA reserves the right to reject proposals based on the nature and number of any exceptions taken to the standard Terms and Conditions (Attachment B). NYSERDA reserves the right to disqualify proposers based upon the results of a background check into publicly available information and the presence of a material possibility of any reputational or legal risk in making of the award.

Disclosure Requirement - The proposer shall disclose any indictment for any alleged felony, or any conviction for a felony within the past five years, under the laws of the United States or any state or territory of the United States, and shall describe circumstances for each. When a proposer is an association, partnership, corporation, or other organization, this disclosure requirement includes the organization and its officers, partners, and directors or members of any similarly governing body. If an indictment or conviction should come to the attention of NYSERDA after the award of a contract, NYSERDA may exercise its stop-work right pending further investigation, or terminate the agreement; the contractor may be subject to penalties for violation of any law which may apply in the particular circumstances. Proposers must also disclose if they have ever been debarred or suspended by any agency of the U.S. Government or the New York State Department of Labor.

9 Attachments

- Attachment A Terms and Conditions
- Attachment B Modified Prescriptive Path Requirements
- Attachment C Site Inspection Request Form
- Attachment D Owner Data Release Authorization Form
- Attachment E Tenant Data Release Authorization Form



NYSERDA reserves the right to extend and/or add funding to the Solicitation should other program funding sources become available.

Applications accepted from January 2019 through December 31, 2020 by 3:00 PM Eastern Time or until funds are fully committed, whichever occurs first. *

The Low-rise Residential New Construction Program (LR NCP) offers technical support and incentives to developers of single family, low-rise multi-unit, and low-rise multifamily new construction, as well as gut rehabilitation projects. The multi-tiered incentive structure is intended to promote increased levels of performance, up to and including net zero energy performance, identifying replicable and integrated design solutions by focusing on cost optimization analysis and financing strategies that recognize operational costs and management of perceived risks. The goal is to increase awareness of, and demand for, advanced clean energy solutions while strengthening the capacity of clean energy professionals to deliver design and construction services. Use of solar photovoltaic generation and other renewable energy systems, as well ground source heat pumps and other innovative technologies, are encouraged to achieve the higher performance targets. The Applicant is expected to hire a Home Energy Rater to act as the primary resource for their participation. LR NCP significantly but not exclusively targets the Low- to Moderate-Income (LMI) housing sector, supporting New York State and New York City housing agencies as well as other funding authorities in their efforts to secure efficient, durable, resilient and healthy housing. LR NCP is closely aligned with NYSERDA's Multifamily New Construction Program (MF NCP) to more seamlessly support the higher performance multifamily new construction market.

Application Submission: To submit a project application for incentives to the LR NCP, eligible applicants must submit a New Construction Project Application into the NYSERDA Portal, the Program database, as detailed in the Application section below.

Technical questions concerning this procurement, may be directed to Lori Borowiak (Designated Contact) at LoriNC@nyserda.ny.gov or (518) 862-1090 ext. 3004, or Patrick Fitzgerald (Designated Contact) at PatrickNC@nyserda.ny.gov or (518) 862-1090, ext. 3385.

Contractual questions concerning this solicitation, may be directed to Tara Mae Tobler (Designated Contact) at (518) 862-1090, ext. 3444 or <u>TaraMaeSolicitations@nyserda.ny.gov</u>. Contacting anyone other than the Designated Contacts (either directly by the proposer or indirectly through a lobbyist or other person acting on the proposer's behalf) in an attempt to influence the procurement may result in (1) the proposer being deemed a non-responsible offerer, and/or (2) the proposer not being awarded a contract.

* All applications must be received by 3pm Eastern Time on the date noted above. Late, faxed, or emailed proposals will not be accepted. Incomplete proposals may be subject to disqualification. It is the proposer's responsibility to ensure that all pages have been completed/included in the application. The portal application closes promptly at 3pm on the date listed above. Files in process, or attempted edits or submission after 3pm Eastern Time on the date above, will not be accepted. If changes are made to this solicitation, notification will be posted on the "Current Opportunities" section of NYSERDA's website (https://www.nyserda.ny.gov/Funding-Opportunities/Current-Funding-Opportunities.aspx.

1 INTRODUCTION

NYSERDA's LR NCP is funded through fees paid by electricity distribution customers. NYSERDA, a public benefit corporation established by law in 1975, administers Clean Energy Fund programs as directed by the Public Service Commission.

LR NCP was developed, in part, through collaboration with New York State's homebuilders and in coordination with the United States Environmental Protection Agency (EPA) and the Residential Energy Services Network (RESNET). RESNET has adopted the Mortgage Industry National Home Energy Rating System (HERS) Standards as the national procedure for completing a Home Energy Rating to evaluate a newly constructed home's energy efficiency. RESNET Standards and Guidelines are relied on by the EPA's ENERGY STAR[®] Certified Homes Program and the U.S. Department of Energy's (DOE) Zero Energy Ready Homes Program, as well as by the International Energy Conservation Code and several other standards setting organizations. NYSERDA's LR NCP relies on the EPA's ENERGY STAR Certified Homes Program and other standards setting organizations to promote and encourage the adoption of innovative building practices and advanced technologies.

1.1 LR NCP Glossary of Terms:

Applicant - The site owner, property developer, or builder responsible for the management and construction of a project

Builder – The individual or entity managing the construction of a project. The builder must have a current Partnership Agreement with the EPA ENERGY STAR Certified Homes Program, and meet all requirements as detailed in the PON 3717.

Home Energy Rater (Rater) –the Builder or Applicant hires The Home Energy Rater to provide modeling, verification and testing to complete a Home Energy Rating on the dwelling units of a project. The Rater completes the Home Energy Rating in accordance with RESNET's "Mortgage Industry National Home Energy Rating System Standards" including amendments and interpretations as adopted by RESNET's Board of Directors; as well as in accordance with the EPA's ENERGY STAR Certified Homes Program technical standards and requirements, including completion of all relevant checklists.

RESNET-accredited Rating Quality Assurance Provider (Provider) - Home Energy Raters must be affiliated with a RESNET-accredited Provider accepted and approved by NYSERDA as a Primary Energy Consultant. The Provider is responsible for oversight, training, certification, quality assurance, and quality control services in support of their affiliated Home Energy Raters.

• In NYSERDA's portal, Providers are designated as Primary Energy Consultants

EPA ENERGY STAR Certified Homes Program - This program is published, promoted, and administered by the United States Environmental Protection Agency, establishing building specifications and performance requirements for the construction of homes and dwelling units that are more energy efficient than the applicable building code.

1.2 LR NCP Benefits

For Consumers: New York State homeowners and renters gain access to more energy efficient, healthy, safe, durable, and comfortable newly constructed homes.

For the Applicant: Technical assistance and targeted financial incentives are offered to encourage the integration of advanced building design features with use and reliance on highly efficient equipment, appliances, and lighting.

For Providers and their affiliated Home Energy Raters: Training and technical support are offered, in addition to financial incentives offered through this PON 3717 intended to encourage home builders' and developers' use of, and reliance on, these building science professionals.

1.3 LR NCP Overview

Applicants are offered access to incentives intended to encourage the design and construction of residential dwelling units that meet the requirements detailed in this PON 3717.

Submission of a signed project application inclusive of agreement to the LR NCP Terms and Conditions is required for all LR NCP projects (single family, multi-unit and multifamily), seeking an incentive. Participation in the LR NCP requires the Applicant to identify the builder that is an active ENERGY STAR Partner with the EPA, the RESNET Home Energy Rater that is participating through NYSERDA's Request for Proposals (RFP 3771) and will serve the project, and the RESNET-accredited Rating Quality Assurance Provider, referred to as the Primary Energy Consultant also participating through RFP 3771.

Home Energy Raters must be affiliated with a RESNET-accredited Rating Quality Assurance Provider accepted by NYSERDA as an approved Primary Energy Consultant. The NYSERDA-approved Primary Energy Consultant delivers the necessary oversight, training, certification, quality assurance and quality control services in support of their affiliated Home Energy Raters.

1.4 LR NCP Eligibility

To be eligible for LR NCP participation, the dwelling unit or project must be, or be capable of and intend to become, a New York State electricity distribution customer of a participating utility company that pays into the System Benefit Charge (SBC). Applicants in areas affected by a utility natural gas moratorium may be eligible for enhanced programs in the recently announced Clean Energy Action Plan. This includes Consolidated Edison Company of New York, Inc., ("Con Ed") customers in Southern Westchester and New York State Electric and Gas Corporation ("NYSEG") customers in Lansing, NY. Please use the tool located at http://www.nyserda.ny.gov/action-plan to determine your eligibility.

For the purposes of LR NCP, low-rise residential new construction is defined as the ground-up new construction of dwelling unit(s) contained within residential buildings of not more than three (3) stories in height. Additionally, residential buildings that are more than three (3) stories in height and determined to be eligible to participate in the EPA's ENERGY STAR Certified Homes Program, will be considered for eligibility on a case-by-case basis. Dwelling units which will be "gut-rehabbed" or that are within a mixed-use building will also be considered by NYSERDA for eligibility on a case-by-case basis. Gut rehabilitation (rehab) projects that are not able to meet specific aspects of the EPA ENERGY STAR Certified Homes Program requirements may be eligible to participate and receive program benefits offered through PON 3717. Those gut rehab projects would not be designated as EPA ENERGY STAR Certified Homes but may be eligible for the New York Energy \$mart designation. Technical requirements are provided in more detail within the Performance Requirements section below.

Buildings which, per the Building Code of New York State, are defined as Institutional or are R-1 and primarily transient in nature, such as motels/hotels, group homes, dormitories, shelters, monasteries, nunneries, assisted living facilities and nursing homes are not typically eligible for LR NCP but may be deemed by NYSERDA as eligible either in whole or in part, based on a case-by-case review of the intended use, expected occupancy, and compliance path indicated by the Applicant.

Supportive Housing, single room occupancy (SRO) facilities, and senior living residences may be deemed by NYSERDA as eligible for LR NCP, based on a case-by-case review. Supportive Housing is defined as residences that are owned and operated by non-profit organizations. Tenants are individuals and families who require both affordable permanent housing and support services, have lease agreements, pay rent (often a percentage of their income) and abide by the terms of their lease. This includes people who have been homeless, have histories of substance abuse, are coping with mental illness, have chronic illnesses like HIV/AIDS, are young adults aging out of foster care, are homeless veterans, or are grandparents raising grandchildren.

This is not a comprehensive list of property types that are eligible for LR NCP. Special circumstances may be reviewed by NYSERDA and considered for eligibility on a case-by-case basis. Sole discretion for determination of eligibility and access to LR NCP benefits resides with NYSERDA.

2 **APPLICATION**

2.1 Definition of a Project

For the purposes of LR NCP, a project is defined as a single-family home, a multifamily building, a group of buildings, or a planned residential development or neighborhood. All residential-associated space within each multifamily building in a project must adhere to the requirements of the LR NCP, including the applicable testing and verification protocols.

To seek a commitment of incentive funding, the builders or developers must submit a complete New Construction Project Application to NYSERDA.

Final determination of how a project is defined is at NYSERDA's discretion.

2.2 **Project Application**

Applicants will submit project applications for incentives, monitor the status of applications, submit deliverable documentation, and perform other program-related activities via the NYSERDA Portal. The project application will progress through each status shown below.

Project Application Flow



2.2.1 Unsubmitted Status

All project applications are generated in and submitted through the portal. Unsubmitted status is reached once an Applicant generates the application. The incentive rate is not confirmed until the application has been submitted.

2.2.2 Submitted Status

The project application moves to submitted status once the Applicant has submitted the application and any documents, inclusive of acceptance of the LR NCP Terms and Conditions signed by the Applicant, to the portal.

The following additional documents may be uploaded to the portal at any time, and must be received prior to any incentive being paid:

- Low-to-Moderate Income Documentation (for projects requesting LMI incentive rates)
- Proof of ENERGY STAR Builder Partnership Agreement
- Building Permit (if available), or purchase contract with home buyer (for single-family homes)
- Access to construction documents

Low-rise Residential New Construction Program

The Applicant must submit all project applications electronically using the portal. The Applicant will be able to assign access to a project after they have initiated the application by identifying additional roles (contacts) on the project application and designating read-only access or read-write access. Read-write access will allow the Applicant to collaborate with their Home Energy Rater, Provider (Primary Energy Consultant), or builder to submit the application.

The project application must be signed by the Applicant either electronically in the portal, or by printing the Certification Statement and uploading the signed document to the portal as an attachment.

Applicants that are unable to submit a project application electronically may contact NYSERDA at <u>ResMFNCP@nyserda.ny.gov</u> or by calling 1-800-284-9069 to request a hard copy application.

2.2.3 Under Review Status

Upon receipt of a project application, program staff will move the application to under review status. At this time the application, will move into the queue for technical review.

2.2.3.1 Technical Review

Once the project application has been received, the project may undergo a full technical review inclusive of a Scoping Session with the project team, to confirm that the project can achieve the stated performance and meets all program requirements, as described in this PON 3717.

If a project application has missing or inaccurate information or documents, the Applicant will be asked to provide the correct information in the portal.

2.2.4 Pending Approval Status

When the project application has passed technical review, the application will be moved to pending approval status. In this status, the purchase order is finalized and funding for the application is set aside.

2.2.5 Approved Status

When the project application has been approved by NYSERDA, the Applicant will receive their project award letter via email notification.

Applicants have until sixty days following the date in the award letter to complete the project, finalize the rating, and submit for final project incentive request approval. Projects that do not meet the deadline and have no extension on file will be in jeopardy of cancellation.

While in approved status, the Applicant may submit a project cancellation request, project extension request, project modification request, or project invoice request.

2.2.5.1 Project Cancellation Requests

Requests to cancel a project must be done through the portal by submitting a request for cancellation to NYSERDA. Should an Applicant decide to move forward with a project after cancellation, the Applicant must submit a new project application package. In this case, the incentive level and all rules in effect at the time the new application is submitted will apply.

2.2.5.2 Project Extension Requests

To request an extension, the Applicant must submit a project extension request to NYSERDA through the portal. NYSERDA will approve extensions on a limited case-by-case basis. Project extensions may be granted for legitimate and verifiable reasons which are beyond the control of the Applicant, builder, or customer. No other requests will be considered.

2.2.5.3 Project Modification Requests

To request a modification to an approved project, the Applicant must submit a project extension request to NYSERDA through the portal. A project modification request must state the original project award amount, performance tier, and unit count, the proposed performance tier and unit count, as well as the reason for the change. NYSERDA will review the request, and may elect to calculate, apply, and approve the modification, inclusive of an adjusted incentive amount (if applicable).

2.2.5.4 Project Incentive Requests

The Applicant will receive the total project incentive in one installment, unless it is expressly stated in the application project Description that the project will complete in phases. To request the incentive, the Applicant must submit a project payment request to NYSERDA through the portal, upon completion of the project deliverables in the portal.

The deliverable submission must include:

- Home Energy Rating Certificate for each dwelling unit of the project that reflects the dwelling unit's condition when the confirmed Home Energy Rating was performed
- ENERGY STAR v3.1 Home Report (required only for projects that include PV)
- Building Permit (if not provided with project application)

2.2.6 Completed Status

The project has achieved completed status once construction is complete, all deliverables have been accepted, and final payment has been approved by NYSERDA.

2.3 Determining Market Type

Eligibility to seek Low- to Moderate-Income (LMI) incentives can be established for the entire project if the majority of dwelling units will have a household income of no more than 80 percent of the State or Area Median Income (whichever is greater). Projects not meeting this majority threshold will be considered Market Rate. Eligibility to seek LMI incentives for individual dwelling units within any Market Rate project can also be established based on the thresholds stated above, when any related proxy does not require 100% of households to meet LMI requirements, the number of dwelling units associated with the project at each household income level must be clearly detailed in the submitted documentation. Eligibility to seek LMI incentives must be established through reliance on one of the proxies detailed in Table 2.1.

2.3.1 Low- to Moderate-Income (LMI)

To establish eligibility for the LMI incentive amounts, documentation shall be submitted as soon as possible and prior to NYSERDA's payment of any incentive. NYSERDA allows certain proxies to be submitted to verify the project or individual dwelling unit are eligible for LMI incentives as detailed in Table 2.1 of this section. Additional proxies may be considered by NYSERDA to establish eligibility for LMI incentives on a case-by-case basis.

2.3.2 Market Rate

Eligible projects and dwelling units that do not qualify for LMI incentive amounts as detailed above may be eligible for Market Rate incentives.

TABLE 2.1 LOW- TO MODERATE-INCOME (LMI) PROXIES

ELIGIBILITY PROXY	DESCRIPTION	TYPE OF DOCUMENTATION
1.US HUD, USDA-RD, and other Federally Regulated LMI Housing	 Properties that receive subsidies from US HUD or USDA-RD based on household income may be defined as LMI, based on household income criteria detailed in the contract or award, including regulatory control or structures such as: Section 8 Contract Sections 202, 236, 811 Public Housing Authorities 	Submit a copy of the US HUD contract or contract award notice.
2.NYS HCR-Regulated LMI Housing	Properties with subsidized mortgages or contracts that place them under the regulatory control of NYS HCR may be defined as LMI, based on household income criteria detailed in the NYS HCR contract or award.	Submit a copy of NYS HCR contract or contract award notice.
3.Low-Income Housing Tax Credits	Properties that receive tax credits may be defined as LMI based on household income criteria detailed in the tax credit award notice.	Submit a copy of tax credit award notice from NYS-HCR or NYC HPD.
4.NYC HPD-Regulated LMI Housing (or similar local housing agencies)	Properties with loans, mortgages, or deeds of purchase (HDFC incorporation) from NYC HPD or similar local housing agencies may be defined as LMI, based on household income criteria detailed in the award documentation.	Submit documentation of current mortgage, loan closing, HDFC incorporation, or deeds.
5.SONYMA Mortgage Insurance	Properties subsidized for LMI residents with SONYMA subsidized financing through the NYS HFA may be defined as LMI, based on household income criteria detailed in the contract or award.	Submit a copy of loan closing/ mortgage insurance award documents.
6.Participation in NYS HFA's 80/20 Program or similar HFA- regulated offerings	Properties that have been accepted into the NYS HFA's 80/20 Program, or similar HFA-regulated offering, may be defined as LMI based on household income criteria detailed in the contract	Submit a copy of the award letter or NYS HFA or similar HFA contract documents.
7.Participation in NYC HDC's 80/20 or Mixed Income Programs or similar HDC-regulated offerings	Properties that have been accepted into the NYC HDC's 80/20 or Mixed Income Program, or similar HDC-regulated offering, may be defined as LMI based on household income criteria detailed in the contract or award.	Submit a copy of the award letter, NYC HDC contract documents, or similar HDC- regulated contract documents.

Glossary of Terms:

USDA-RD- United States Department of Agriculture Rural Development US HUD- United States Department of Housing and Urban Development NYS HCR- New York State Housing and Community Renewal NYS HFA- New York State Housing Finance Agency NYC HDC- New York City Housing Development Corporation NYC HPD- New York City Housing and Preservation Development SONYMA- State Of New York Mortgage Agency

3 INCENTIVE SUMMARY AND REQUIREMENTS

LR NCP offers incentives for projects meeting the requirements detailed in *PON 3717*, and the *LR NCP Terms and Conditions*. Incentives will be paid based on the Applicant having met the technical requirements detailed in those documents within the required timeframe.

Per Dwelling Unit Incentives							
Market Rate			LMI				
Mu	lti-unit	For 1-2 family homes and	homes and Performance		homes and Performance Multi-unit		For 1-2 family homes and the
Up to 50 Dwelling units	More than 50 Dwelling units	the first 10 attached townhouses	Tier	Up to 50 Dwelling units	More than 50 dwelling units	first 10 attached townhouses	
\$0	\$0	\$0	Tier 1	\$0	\$0	\$0	
\$450	\$200	\$950	Tier 2	\$1000	\$600	\$1,700	
\$1,600	\$1,400	\$4,000	Tier 3	\$3,500	\$3,100	\$4,200	
Customers in areas affected by a utility natural gas moratorium may be eligible for the enhanced Tier 3 incentives listed just below, based on the eligibility requirements as detailed in section 1.4 of this PON 3717.							
\$2,000	\$2,000 \$1,800 \$5,000 Tier 3 \$4,400 \$3,900 \$		\$5,200				
\$2,000 \$1,800 \$5,000 Tier 3 \$4,400 \$3,900 \$5,200							

 RESNET Accredited Provider Incentive per Dwelling Unit

 RESNET Accredited Provider Incentive
 \$100

3.1 **Project Incentives**

The Applicant is eligible to receive per dwelling unit incentives for the design and construction or gutrehabilitation of residential dwelling units that have met all requirements of PON 3717. Townhome developments seeking formal Program commitment which have more than ten units will receive the 1-2 family home incentive for the first ten units and the multi-unit incentive for the additional units.

The fully executed incentive award letter issued by NYSERDA will establish the incentive amount the project will be eligible to request.

3.1.1 Per Dwelling Unit Incentive

To be eligible to receive LR NCP incentives for any dwelling unit, the required deliverables must be submitted to NYSERDA within sixty (60) days of the Rater's last applicable confirmed Home Energy Rating as identified on the Home Energy Rating Certificate, or within sixty days of the Date identified in NYSERDA's letter of commitment to the project, whichever comes first. All project deliverables must be uploaded to the project page in NYSERDA's New Construction Portal.

The deliverables submitted through the portal must include:

- Home Energy Rating Certificate that reflects the dwelling unit's condition when the confirmed Home Energy Rating was performed
- ENERGY STAR v3.1 Home Report (required only for projects that include PV)
- Building Permit (if not provided with project application)
- Data Release Authorization Forms (required for multifamily projects that are master-metered, and required for the common area-meter of multifamily buildings with common areas).

If Approved for incentives to support Smart Buildings or Innovative Solutions (as described in Section 3.4 and 3.5), the following additional deliverables are required:

- Verification the installation, as proposed, is complete, including photo documentation of the completed installation,
- Documentation that the originally proposed design or specifications have been delivered,
- Documentation of costs incurred to complete the work as proposed and installed.

If additional documentation or corrective action is required, NYSERDA or NYSERDA's Designated Contact will notify the Applicant and their Home Energy Rater by email of incomplete or unqualified submissions and will cancel the project with no action taken after thirty (30) days, if the matter has not been resolved.

NYSERDA's commitment of incentives may be provided prior to or during construction for low-rise multi-unit or multifamily projects and planned residential neighborhood developments, as well as single-family homes. Projects that have already initiated construction at the time of application must be able to meet all Rating and Inspection requirements. If an Applicant elects to change the performance tier it is pursuing prior to the submittal of the Incentive Submission Package, the Applicant shall notify NYSERDA in writing or via email. To change to a higher performance tier, the project must receive explicit approval from NYSERDA.

3.2 Provider Incentives

RESNET-accredited Rating Quality Assurance Providers approved to serve LR NCP as Primary Energy Consultants are offered an incentive for dwelling units that meet LR NCP requirements. It is the Provider's responsibility to collect and manage information related to their affiliate Raters' project activities. The Provider's eligibility for incentive payments shall be embodied in the project deliverables and the Monthly Report submissions described in Section 5.4 Requirements for RESNET-accredited Providers.

3.2.1 Payment Request and Approval

Upon upload of the project Home Energy Rating deliverables (as defined by NYSERDA), the Provider will raise an invoice within the NYSERDA portal for the Provider incentive payment. NYSERDA's approval of incentive payment(s) to the Provider will be based on review and acceptance of the Monthly Report inclusive of modeling software or data output files. If incentive payments for any dwelling units submitted as part of the Monthly Report cannot be approved, notification will be given to the Provider by NYSERDA or its designee. The Provider may resubmit denied documentation, inclusive of the relevant modeling software or data output files once any outstanding issues have been resolved. Deficiencies which result in denial and non-payment of the incentive may include, but are not limited, to the following:

- The relevant project incentive was not submitted to portal for payment of the per-unit incentive; or
- The relevant project incentive was not compliant with LR NCP requirements and was therefore not approved.

3.3 Mentoring Support for Tier 3 Projects

The Applicant may request an additional incentive to support delivery of mentorship services by a NYSERDA-qualified Primary Energy Consultant that has additionally been qualified to deliver mentoring support for the performance path identified in their application. The mentoring incentive of \$200 per dwelling unit, up to a maximum of \$10,000 per project for costs incurred, may be available to any

project team pursuing LR NCP Tier 3 level of performance, or certification to a high-performance certification such as Passive House, for the first or second time. Eligible services may include support which targets building design and certification, assistance with energy modeling, mechanical systems design review, façade consulting including airtightness testing, or training of the construction management, oversight, field verification, and contractor teams involved with the project which are specific to the performance standards being pursued by the project team. After the project team has selected their mentor and a contract has been executed, a copy of their agreement must be submitted to NYSERDA. If NYSERDA accepts the agreement, a Task Work Order (TWO) Agreement between the mentor and NYSERDA will be executed, allowing NYSERDA's payment directly to the Primary Energy Consultant providing these services for those mentoring fees deemed by NYSERDA to be eligible for payment following completion and acceptance of those services. The incentive payment schedule will follow be in accordance with the TWO Agreement executed between NYSERDA and the Primary Energy Energy Consultant.

3.4 Targeted Incentives in Support of Smart Buildings Solutions

The Applicant may request an additional incentive of \$200 per dwelling unit to support the design and installation of smart buildings solutions which are predicted to enhance the building's energy and operational performance, up to a maximum of \$20,000 per project for costs incurred. Eligible smart buildings solutions will result in the construction of an intelligent building which interconnects HVAC, lighting, plug loads, fire & life safety, security & access, people movement, analytics & management and smart metering to transform efficiency, comfort and safety for people and assets¹. To be eligible for this incentive, the proposed technology or solution cannot be eligible for incentives through another NYSERDA program. The Applicant must submit documentation of the proposed solution for NYSERDA's review and consideration at the time of application or as a requested modification to an approved application. If NYSERDA approves the Applicant's proposal and commits the funding, payment of the incentives to the Applicant will follow section 3, and as specifically detailed in section 3.1.1.

3.5 Targeted Incentives in Support of Innovative Technologies

The Applicant may request an additional incentive of \$200 per dwelling unit to support the design and installation of innovative technologies and solutions, up to a maximum of \$20,000 per project for costs incurred. The Applicant must propose to demonstrate the integrated use of innovative technologies or solutions that are unique, not yet widely used nor generally accepted in the market to demonstrate the economic viability and predicted performance. To be eligible for this incentive, the proposed technology or solution cannot be eligible for incentives through another NYSERDA program. The Applicant must submit their proposed use of innovative technologies or solutions for NYSERDA's review and consideration at the time of application by uploading the proposal in the attachments section of their project's Application within the NYSERDA portal. If NYSERDA accepts the Applicant's proposal and commits the funding, payment of the incentives to the Applicant will follow section 3, and as specifically detailed in section 3.1.1.

3.6 Renewable Energy, Ground Source Heat Pumps, and Other Innovative Technologies

Applicants to LR NCP are encouraged to incorporate solar photovoltaics and other renewable energy systems, as well ground source heat pumps and other innovative technologies, into their projects to achieve the performance targets. Applicants participating in LR NCP are not restricted from receiving targeted incentives additionally available from other NYSERDA programs to support those types of installations.

¹ Intel Corporation, Continental Automated Buildings Association Board Member

4 PERFORMANCE REQUIREMENTS

To participate and access LR NCP incentives, all dwelling units must, at minimum, meet the relevant version of the EPA ENERGY STAR Certified Homes Program, except where specific relief is allowed for gut rehabilitation projects and as detailed within Sections 4.6 and 4.7. Additional LR NCP requirements are detailed throughout this section.

4.1 Minimum Performance Requirements Associated with Each Tier

The following table represents the minimum performance requirements for all projects participating in LR NCP, separated by tier. Gut Rehabilitation of Historic Buildings are eligible for potential allowances, as described in Section 4.7.

	Tier 1	Tier 2	Tier 3
			EPA ENERGY STAR Certified Homes <u>Version 3.1</u> plus additional requirements detailed throughout this document, including the following:
Minimum Performance Requirements	EPA ENERGY STAR Certified Homes <u>Version</u> <u>3.0</u> plus additional	EPA ENERGY STAR Certified Homes <u>Version</u> <u>3.1</u> plus additional	The as-built dwelling unit must achieve a HERS Index ≤10, inclusive of installed solar PV.
	requirements detailed throughout this document	requirements detailed throughout this document	Dwelling units with a conditioned floor area >1,500 S.F. must achieve a HERS Index ≤ 40 prior to inclusion of Solar PV.
			Dwelling units with a conditioned floor area ≤1,500 S.F. must achieve a HERS Index ≤ 50 prior to inclusion of Solar PV.

For Tier 3 projects, Photovoltaic (PV) arrays shall be modeled such that predicted output in the energy model matches the predicted output verified by the solar contractor. Please seek guidance from NYSERDA for software-specific procedures. Projects which otherwise meet the Tier 3 requirements intending to seek NYSERDA's commitment for and payment of those Tier 3 incentives will typically be required to locate the solar electric array(s) on-site, co-located with the project's buildings. Project applicants may seek a waiver from NYSERDA to allow for a properly sized solar electric array to be located on a remote site and in a manner which allows a remote net metering arrangement to achieve the required offset of the project's predicted energy use. To receive NYSERDA's approval of the waiver request, the applicant must demonstrate the solar electric array's ownership is structured in a manner which assures its output will be dedicated to the project. Additionally, Tier 3 projects may seek up to 7% increase to the pre-PV HERS Index threshold for projects using REM/Rate v15.0 or newer modeling software, based on submission of a waiver request, and its approval by NYSERDA or NYSERDA's designee.

4.2 Envelope Air Leakage Minimum Performance Requirements

All dwelling units must meet the Envelope Air Leakage limits established by the 2016 Energy Conservation Construction Code of New York State, with the following exceptions:

For detached one-and-two-family dwellings permitted prior to October 3, 2016, Envelope Air Leakage may not exceed air changes at a pressure difference of 50 Pascals with respect to the outdoors, as listed in the Table below.

REQUIREMENT	Minimum Performance Requirements
	CZ 4: Maximum 5 ACH50
Envelope Air leakage	CZ 5,6: Maximum 4 ACH50
	Use of guarded blower door or whole-building testing to establish compliance with this standard is prohibited.

4.3 Mechanical Systems Minimum Performance Requirements and Minimum Equipment Efficiencies

The following table lists the minimum performance requirements and minimum equipment efficiencies required for all projects participating in LR NCP. Minimum performance requirements for central mechanical systems not listed in section 4.3 are listed in Section 4.4. Applicants intending to certify as PHIUS+ or PHI, or those who can demonstrate that the building's design will achieve an equivalent level of energy performance, may request waiver exemption from section 4.3 requirements.

EQUIPMENT ^{1, 2}	Minimum Performance Requirements	
Gas/Propane-fired Furnaces or Boilers (including indirect domestic hot water boilers)	90 AFUE or currently ENERGY STAR certified	
Oil Furnace or Boilers	86 AFUE or currently ENERGY STAR certified	
	Must meet current <u>NEEP Cold Climate Air-source Heat</u> <u>Pump specifications</u> .	
Air-source Heat Pumps & Ductless Mini-splits	Air-cooled heat pumps sized between 65 and 240 KBtu/h must meet the following minimum efficiencies: Cooling: 11.1 EER/11.6 IEER; Heating: 3.3 COP (@ 47 degrees Fahrenheit Dry-Bulb).	
Variable Refrigerant Flow (VRF) or Variable Refrigerant Volume (VRV) Multi-split Air Conditioning and Heat Pump Equipment	Must have AHRI rating per AHRI Standard 1230 with matched indoor and outdoor units	
Geothermal Heat Pumps	ENERGY STAR certified	
Combination Boiler (Space Heating and Domestic Water Heating)	Must be direct vent unit; specifically approved by the manufacturer for combination use; ENERGY STAR certified and provide priority domestic hot water controls. If heating hot water loop is charged with potable water, provide automatic warm weather recirculation system.	
	CZ 4 only: SEER 14.5 / 12 EER	
Conventional Split-Systems or Packaged A/C	Air conditioners, air cooled sized between 65 and 240 KBtu/h must meet the following minimum efficiencies: 11.5 EER/12.0 IEER.	
Small-duct, High Velocity Split-System A/C	SEER 13	
Space Constrained A/C / Heat Pump Condenses	Air Conditioners: SEER 12	
Space-Constrained A/C / Heat Pump Condenser	Heat Pumps: SEER 12; HSPF 7.4	

Packaged Terminal Air Conditioner (PTAC)	13.8 (0.300 X Cap/1000) EER	
Packaged Terminal Heat Pump (PTHP)	Cooling: 14.0 (0.3 X Cap/1000) EER; Heating: 3.7- (0.052 X Cap/1000) COP. "Cap" means rated capacity of the product in Btu/h. If < 7,000 Btu/h, use 7,000; if > 15,000, use 15,000 in the calculation.	
Room Air Conditioners	ENERGY STAR certified	
On-Demand Gas-Fired Tankless Water Heater ENERGY STAR certified		
Heat Pump Water Heaters	ENERGY STAR certified	
Solar Thermal DHW Systems	Must comply with NYSERDA's Solar Thermal Program, if available.	
Air-cooled chillers, with or without condensers	Pre-Approval required. Contact NYSERDA or <u>NYSERDA's designated representative</u> to discuss minimum performance requirements.	
Domestic Hot Water (DHW) Distribution Systems	Boilers (inclusive of space heating boilers and boilers creating domestic hot water) with an input >300,000 Btu/h shall have a minimum thermal efficiency of 87%; Re-circulating hydronic or DHW system piping carrying liquid at temperatures greater than 105°F must have minimum 1" of insulation with K \leq 0.27 Btu/in./hr·ft2·°F; Indirect Water Heaters or Storage Tanks shall have a tank standby loss of 1.5°F/hr or less.	

Any sealed combustion appliance which is configured for combustion air to be piped directly from outside the building's thermal envelope must be installed in that manner.

² Equipment specified for multifamily buildings that are not listed in this table must meet the efficiencies listed in ASHRAE 189.1-2011, and this alternative is subject to NYSERDA's review and acceptance of the proposed alternative equipment. Consideration should be given to the possibility of installing multiple units that meet the minimum efficiency ratings of Table IV.

4.4 Multifamily Building Minimum Performance Requirements,

The following table lists the additional minimum performance requirements specific to multifamily buildings participating in the LR NCP. Buildings intending to certify as PHIUS+ or PHI may request a waiver exemption from section 4.4 requirements.

ITEM	Multifamily Building - Minimum Performance Requirements	
Performance testing and the HERS Rating	Dwelling units in multifamily buildings must be individually performance tested and individually HERS Rated, per RESNET Guidelines for Multifamily Energy Ratings. See Section 4.5 for Home Energy Rating Sampling requirements.	
Residential-associated Common Space	Residential-associated space within multifamily buildings shall not be included as part of the dwelling unit's HERS Rating. The ENERGY STAR Certified Homes Program's Thermal Enclosure Checklist and Water Management Requirements must be inspected for and completed, with all requirements met. Wall penetrations including mechanical, fire suppression, fire extinguisher cabinets or trash chutes must be sealed to prevent air flow into or through vertical chases. Building entry and exit doors shall have weather-stripping installed.	
Envelope Air Leakage Testing	Dwelling units within buildings defined as R-2, R-3, or R-4 per section 310 of the Building Code of New York State shall be tested to verify an envelope air leakage rate not exceeding 0.30 CFM ₅₀ per square foot of enclosure surface area	

Central Distribution Hydronic Heating Systems	For hydronic distribution systems without automatic balancing valves, all supply/return headers must be designed in a "reverse return" configuration (i.e. first riser supplied is the last returned, etc.) and/or sized based on a water velocity of less than 4 ft/s. Total pressure drop of terminal unit branch piping and fittings between a supply and return riser must be significantly greater than the total pressure drop from the top to the bottom of these risers. Calculations and assumptions for sizing circulating pumps must meet ASHRAE Handbook, HVAC Systems and Equipment or equivalent industry accepted standard.	
Commercial Indirect Storage Tanks	R-12.5 minimum thermal insulation required	
Central DHW Systems	Temperature setting of storage water heaters must not exceed 140 F and temperatures measured at faucets and showerheads shall not exceed 125 F. Self-contained thermostatic or electronic mixing valves shall be used to	
	control hot water temperature for central systems.	
Common Area Lighting	Fixtures in residential-associated common space shall be high efficacy per ECCC 2016 definition.	
Occupancy Controls	All residential-associated common space, except those spaces intended for 24-hour occupation or where automatic shutoff would endanger the safety of occupants, must have occupancy sensors or automatic bi-level controls.	
Exit Signs and Emergency Lighting	All exit signs shall be specified as LED (not to exceed 5W per face) or photo-luminescent and shall conform to local building code.	
Outdoor Lighting	80% of outdoor lighting fixtures shall be ENERGY STAR certified and have ENERGY STAR certified lamps installed. Alternatively, 100% of outdoor lighting fixtures must have high-efficacy lamps installed. High efficacy: ENERGY STAR certified CFLs/LEDs, T-8 or smaller, or lamps with 60 lumens/W for lamps over 40W; 50 lumens/W for lamps over 15W to 40W; 40 lumens/W for lamps 15W or less. Fixtures shall include automatic switching or photocell controls for lighting not intended for 24-hour operation, per code.	
Elevator Shafts	Elevator shaft(s) must be insulated in relation to unconditioned space and elevator doors must be gasketed properly if exposed to unconditioned space.	
	Enclosed garages must be depressurized relative to occupied or inhabited spaces.	
Parking Garages	Heated garages (including plenums in garage ceilings) are not allowed. Piping location shall be within the conditioned space or grouped properly and insulated to prevent freezing if outside conditioned space. Energy code compliant heat trace is allowed. Include the wattage within limits set in the stairwell electric wattage total, if any.	
	Ice Prevention – Installation of radiant heat, either wall- or ceiling- mounted or within the garage floors or sidewalks is only allowed as a safety feature, and written authorization from NYSERDA is required. This measure must comply with current energy code	
Motors	Three-phase motors 1 HP or larger shall be NEMA premium efficiency or greater. VFD motors may be utilized if documentation confirms performance is equal to or better than a comparable NEMA Premium motor.	
Ventilation	Residential associated common space ventilation systems shall be designed and tested to satisfy minimum requirements of ASHRAE 62.1-	

	2013, without exceeding minimum rates by more than 50%. Natural ventilation strategies for residential associated common spaces are allowed as outlined in ASHRAE 62.1-2013.
Residential-associated Common	Use of electric resistance heating equipment is generally discouraged in common areas. However, electric resistance heating is allowed in limited load areas (stairwells and mechanical closets, etc.), if the system output will be less than 2,000 watts, total ² and a high-limit thermostatic control of $< 50^{\circ}$ F is installed.
Area HVAC Systems	Visual inspection of duct sealing details shall include the following at a minimum: ALL transverse joints and take offs, duct transitional junctions and gaps between take-off boot and gypsum board has been effectively sealed. Mastic and other UL-181 compliant material has been applied within temperature range and per all other manufacturer's requirements.

4.5 Home Energy Rating Sampling

Projects electing to apply sampling protocols must comply with the RESNET National Standard for Sampled Ratings. Additionally, sampling for projects participating in NYSERDA's LR NCP shall be limited to Blower Door and Duct Leakage testing only.

4.6 Gut-Rehabilitation Projects

A separate project application package must be submitted for each gut rehabilitation project. NYSERDA will consider each project's eligibility to participate and seek incentives on a project-byproject basis.

4.6.1 Pre-Existing Conditions

The pre-existing condition of the building(s) must be confirmed by the Rater through a site visit or detailed photographic report. This verification process must occur following submission of the project application package but prior to demolition or the installation of any improvements to the dwelling units or buildings.

4.6.2 Technical Waiver Requests

All dwelling units and common area spaces included in the gut rehabilitation project must meet the LR NCP requirements. The most desirable path is that all requirements associated with designation as a New York ENERGY STAR Certified Home are met, inclusive of the <u>U.S. EPA's requirements for gut</u> rehabilitation projects.

When New York ENERGY STAR Certified Homes requirements are not deemed economically justified, the LR NCP Energy \$mart designation and incentives associated with the project's performance may be available as an alternative path. Permission to use this alternative must be sought through a technical waiver request which identifies those specific requirements in question.

For the technical waiver request to be considered for acceptance, the applicant must demonstrate the specific New York ENERGY STAR Certified Homes standard(s) or requirement(s), as detailed within this document and U.S.EPA publications, that would not be technically feasible or economically justified. The waiver request must propose alternative methods to accomplish the intent of those standards or requirements which would not be met.

² Requests for alternative use of electric resistance heating equipment in any common area may be considered by NYSERDA but requests will only be considered under very limited circumstances, and only when solutions which are allowed would not be economically feasible. It is the proposer's sole responsibility to justify the value of this consideration.

If the proposed alternative methods negatively impact the energy savings projected to be achieved in the dwelling unit(s), an economic analysis must be submitted that includes the cost, savings and return on investment for compliance with the requirement, and the proposed alternative. The project must still meet the minimum ENERGY STAR Reference Design HERS Index Target assigned to the project, calculated through use of RESNET-approved Rating software inclusive of the proposed alternative methods.

4.7 Gut-Rehabilitation of Historic Buildings

Historic buildings, as defined in the relevant energy code, need not comply with other sections of that code. To the greatest extent possible under the restrictions that may have been imposed by the historic governing authority, and while considering what is technically feasible or economically justified, the projects must strive to meet all performance requirements in section 4, as well as ENERGY STAR certification, to maximize the energy savings that will be achieved. LR NCP requires Tier 1 projects to meet the ENERGY STAR v3.0 Reference Design HERS Index Target as calculated through use of RESNET-approved Rating software. LR NCP requires projects seeking Tier 2 or Tier 3 incentives to meet the ENERGY STAR v3.1 Reference Design HERS Index Target as calculated through use of RESNET-approved Rating software. Relief from these requirements can be requested through a waiver request as detailed in Sections 4.6.2. Eligibility for relief will be considered on a case by case basis.

5 PROJECT STAKEHOLDER REQUIREMENTS

5.1 Requirements for Applicants of Multi-Unit/Multifamily, Tier 3 and Gut-rehab Projects

To participate and access LR NCP benefits, Applicants of multi-unit and multifamily projects, of projects intending to seek Tier 3 incentives, or of gut-rehab projects must engage with a qualified builder. To be qualified, the builder must become an active partner of the EPA's ENERGY STAR Certified Homes Program. The Builder and Rater must work cooperatively to verify compliance with the LR NCP requirements. The RESNET-accredited Provider and their affiliated Rater shall serve as the Builder's primary source for technical support and guidance regarding this Program, the EPA's ENERGY STAR Certified Homes program and any Home Energy Rating delivered with Program support. Incentive commitments to multi-unit, multifamily, Tier 3 and gut-rehab projects will be made for the duration of design, construction and verification of the project, as agreed to as the completion date in the project award letter.

Following completion of the project, the Applicant must provide NYSERDA or its designees access to the electricity, fuel, and water consumption data for the entire common area and a representative sample of the dwelling units as outlined in the Data Release Authorization Form (DRAF) following the building(s)' receipt of a Certificate of Occupancy.

5.2 Requirements for Applicants of Tier 2 Single-Family Homes

Applicants of Tier 2 single-family homes must engage with a qualified builder. To be qualified, the builder must become an active partner of the EPA's ENERGY STAR Certified Homes Program. The Builder and Rater must work cooperatively to verify compliance with the LR NCP requirements. The RESNET-accredited Provider and their affiliated Rater shall serve as the Builder's primary source for technical support and guidance regarding this Program, the EPA's ENERGY STAR Certified Homes program and any Home Energy Rating delivered with Program support.

Applicants of Tier 2 single-family homes may submit project applications for individual homes, or may submit one (1) project application for multiple single-family homes (each home identified in the project application as an individual site) which will be built within a twelve-month period. NYSERDA will make

incentive commitments to Tier 2 single-family homes on an annual basis, any homes not completed within twelve months of the original commitment will be required to submit a new project application.

5.3 Requirements for Home Energy Ratings

In addition to meeting all LR NCP requirements, all Home Energy Ratings must meet the following:

- Home Energy Ratings must be completed by Home Energy Raters whose company is
 participating through NYSERDA's RFP 3771: New Construction Initiatives Support Services.
- Home Energy Ratings must be completed in accordance with RESNET's "Mortgage Industry National Home Energy Rating System Standards" including updates as adopted by RESNET's Board of Directors;
- Home Energy Ratings must be completed in accordance with the EPA's ENERGY STAR Certified Homes program technical standards and requirements, including completion of all relevant checklists; and
- A registered Home Energy Rating Certificate (HERC) must be generated by the Rater for the confirmed Home Energy Rating whenever Program incentives will be sought for that dwelling unit. The Builder shall cooperate with the Rater to ensure appropriate access is provided, allowing the Rater to view the dwelling unit during all relevant stages of construction, to ensure the dwelling unit's as-built construction is accurately reflected on the HERC. The HERC, generated by the Rater with support from Rater's RESNET-accredited Provider, must reflect the dwelling unit's condition when the confirmed Home Energy Rating is performed, and must include the auto-generated output to confirm compliance with the relevant version of Energy Conservation Construction Code of New York State.

5.4 Requirements for RESNET-Accredited Providers

RESNET-Accredited Providers must be participating as Primary Energy Consultants through NYSERDA's RFP 3771: New Construction Initiatives Support Services for projects and Provider's to qualify for incentives.

5.4.1 Quality Assurance/Quality Control

The Provider's Quality Assurance (QA) Plan, which complies with RESNET's QA requirements as well as all Program requirements, must include the following, and be available to NYSERDA upon request:

- Description of the Provider's sampling methodology used to establish on-site inspection activities, including frequency of visits for each affiliate Rater's projects;
- Site inspection, documentation, and reporting protocols;
- Sample on-site inspection report, and copies of all standard forms;
- Protocol for review and approval of any submission by affiliate Raters regarding deviation from RESNET, EPA, or Program standards or requirements, in particular to accommodate perceived conflicts with NYS or local building code;
- Protocol to ensure all Home Energy Ratings performed in New York State by affiliate Raters are reported to the Provider, NYSERDA, and the EPA, whenever ENERGY STAR labeling, Program support, or Program incentives are sought;
- Dispute resolution policy;

In addition to the one percent on-site field evaluation required by RESNET, Providers must perform RESNET compliant on-site field evaluations of their affiliate Raters at the minimum additional rate of two percent, to achieve a combined three percent on-site field evaluation of all confirmed Home Energy Ratings completed annually with Program support. If the number of required field QA inspections

Low-rise Residential New Construction Program

exceeds the number of units available for field QA as per RESNET requirements (903.4.2.4 through 903.4.2.4.2.3 of the RESNET Standards – Advisory Version), one field QA per every 33 units of multifamily development shall count toward the annual field QA requirement quota after all units available for field QA as per RESNET requirements are included. Tier 2 projects shall always be prioritized over Tier 1 projects for on-site field evaluations. Additionally, one percent of all on-site field evaluations shall be performed on Tier 3 projects when available. In accordance with the RESNET Standards, round up to the next whole number when the percentage calculation yields a decimal point when determining the number of on-site evaluations to complete for a rater (E.g. 101 homes x 3% = 3.03 means that 4 on-site evaluations shall be completed). At minimum, one on-site field evaluation per year will be completed for each affiliate Rater with the following exceptions: The Provider's affiliate Raters who do not perform Home Energy Ratings in New York State but serve the Provider in another capacity in New York State, such as their QA Designee or QA Designee Delegate, are exempt from the minimum on-site QA requirement.

5.4.2 Monthly Reports

NYSERDA, or its Designee, shall identify the dwelling units that have been successfully submitted for a project incentive payment at the end of each reporting period.

The modeling software or data output files associated with each confirmed Home Energy Rating must be submitted for each dwelling unit identified by NYSERDA or its Designee. The software file's naming convention as directed by NYSERDA must reference the dwelling unit's address, be saved into a .zip format, and be uploaded to NYSERDA's portal saved as a deliverable to the associated project's Task Work Order, coincident with submission of the Monthly Report. Quarterly submissions of modeling software or data output files may be permitted (submission in March, June, September and December) if the Provider's monthly submission is less than 10 units.

Monthly Reports must be submitted in the NYSERDA-approved format, and include the following information:

• All confirmed Home Energy Ratings completed during previous month must be listed by home address, identifying the affiliate Rater, Builder or Developer, date of the Confirmed Rating, Home Energy Rating System (HERS) Index, any participation in other NYSERDA programs, if known, and the affiliate Rater's and Provider's summarized observations regarding concerns or cause(s) for non-compliance;

Upon request by NYSERDA or its Designee, the Provider must submit the following information:

- All RESNET and Program Field and File QA inspections conducted during the requested timeframe shall be listed by home address, identifying the affiliate Rater, Builder or Developer, date of inspection, QA inspector's name, HERS Index and shall include a detailed narrative of observations including compliance, remediation, as well as concerns or cause(s) for noncompliance;
- Activities or actions taken as a result of deficiencies uncovered during field QA inspections should be identified in the Monthly Report, including:
 - o Technical support provided to the affiliate Raters by the Provider;
 - Dispute resolution activities associated with any issues identified during the reporting period, unresolved issues identified during previous reporting period(s), and the process for achieving satisfactory resolution of either shall be clearly identified;
 - Field inspection reports for activities completed during the reporting period, demonstrating that the Provider's QA inspection activity levels satisfy the required percentage based on final Ratings submitted;

5.4.3 Home Energy Rating Certificates

A Home Energy Rating Certificate (HERC), must be generated by the Provider for the confirmed Home Energy Rating of every dwelling unit through use of NYSERDA-approved RESNET-accredited software which has the capability to evaluate and auto-generate reports including indication of compliance with the relevant version of the Energy Conservation Construction Code of New York State (ECCCNYS). <u>www.resnet.us/programs/software/directory.htm</u> provides a list of RESNET-accredited software. The HERC must reflect the results of the confirmed Home Energy Rating and the heading must identify it as a Confirmed Rating. The Provider shall provide a copy of the HERC to the Builder for every confirmed Home Energy Rating; The HERC shall indicate that the home, or dwelling units for multi-unit buildings, complies with the applicable version of the Energy Conservation Construction Code of New York State.

5.4.4 Building File Upload

The Provider is required to submit complete modeling software files or data output files associated with each Home Energy Rating to NYSERDA for every dwelling unit served by an affiliate Rater, if Program incentives will be sought. NYSERDA or its Designee will provide reasonable technical support to assist the Provider's fulfillment of these modeling software or data output file submission requirements.

5.4.5 Sampling

Sampling protocols may be applied by a Rater if their affiliate Provider is a RESNET-accredited Home Energy Sampling Provider and must comply with protocols specified in Chapter 6 of the RESNET Standards. If sampling is utilized on a project, the data associated with the sampled units must be included within the deliverables submission and include a description of the sampling controls that were inspected and/or tested for, the unit type breakdown, and the sampling rate of each type of unit. Sampling is not allowed for any required health and safety testing.

5.4.6 Coordination with ENERGY STAR Builders

The Provider shall ensure that the affiliate Rater coordinates with any ENERGY STAR Builder to affirm the Applicant's project deliverables associated with confirmed Home Energy Ratings are complete and accurate. To be eligible to receive any Program incentives associated with that dwelling unit, submission of the project deliverables in NYSERDA's portal must be made within sixty (60) days of the affiliate Rater's confirmed Home Energy Rating. Exception to this sixty (60) day limitation: project deliverables for multi-unit projects should be submitted in accordance with the NYSERDA-approved completion schedule, and with NYSERDA's commitment letter for the project.

6 GENERAL CONDITIONS

Proprietary Information - Careful consideration should be given before confidential information is submitted to NYSERDA as part of your proposal. Review should include whether it is critical for evaluating a proposal, and whether general, non-confidential information, may be adequate for review purposes.

The NYS Freedom of Information Law, Public Officers law, Article 6, provides for public access to information NYSERDA possesses. Public Officers Law, Section 87(2)(d) provides for exceptions to disclosure for records or portions thereof that "are trade secrets or are submitted to an agency by a commercial enterprise or derived from information obtained from a commercial enterprise and which if disclosed would cause substantial injury to the competitive position of the subject enterprise." Information submitted to NYSERDA that the proposer wishes to have treated as proprietary, and confidential trade secret information, should be identified and labeled "Confidential" or "Proprietary" on

Low-rise Residential New Construction Program

each page at the time of disclosure. This information should include a written request to except it from disclosure, including a written statement of the reasons why the information should be excepted. See Public Officers Law, Section 89(5) and the procedures set forth in 21 NYCRR Part 501 https://www.nyserda.ny.gov/About/-/media/Files/About/Contact/NYSERDA-Regulations.ashx. However, NYSERDA cannot guarantee the confidentiality of any information submitted.

Omnibus Procurement Act of 1992 - It is the policy of New York State to maximize opportunities for the participation of New York State business enterprises, including minority- and women-owned business enterprises, as bidders, subcontractors, and suppliers on its procurement Agreements.

Information on the availability of New York subcontractors and suppliers is available from: Empire State Development

Division for Small Business 625 Broadway Albany, NY 12207

A directory of certified minority- and women-owned business enterprises is available from: Empire State Development Minority and Women's Business Development Division 625 Broadway Albany, NY 12207

State Finance Law sections 139-j and 139-k - NYSERDA is required to comply with State Finance Law sections 139-j and 139-k. These provisions contain procurement lobbying requirements which can be found at https://online.ogs.ny.gov/legal/lobbyinglawfaq/default.aspx Proposers are required to answer questions during proposal submission, which will include making required certification under the State Finance Law and to disclose any Prior Findings of Non-Responsibility (this includes a disclosure statement regarding whether the proposer has been found non-responsible under section 139-j of the State Finance Law within the previous four years).

Tax Law Section 5-a - NYSERDA is required to comply with the provisions of Tax Law Section 5-a, which requires a prospective contractor, prior to entering an agreement with NYSERDA having a value in excess of \$100,000, to certify to the Department of Taxation and Finance (the "Department") whether the contractor, its affiliates, its subcontractors and the affiliates of its subcontractors have registered with the Department to collect New York State and local sales and compensating use taxes. The Department has created a form to allow a prospective contractor to readily make such certification. See, ST-220-TD (available at http://www.tax.ny.gov/pdf/current_forms/st/st220td_fill_in.pdf). Prior to contracting with NYSERDA, the prospective contractor must also certify to NYSERDA whether it has filed such certification with the Department.

The Department has created a second form that must be completed by a prospective contractor prior to contacting and filed with NYSERDA. See, ST-220-CA (available at http://www.tax.ny.gov/pdf/current_forms/st/st220-CA (available at http://www.tax.ny.gov/pdf/current_forms/st/st220-CA (available at http://www.tax.ny.gov/pdf/current_forms/st/st220ca_fill_in.pdf). The Department has developed guidance for contractors which is available at http://www.tax.ny.gov/pdf/current_forms/st/st220ca_fill_in.pdf). The Department has developed http://www.tax.ny.gov/pdf/current_forms/st/st220ca_fill_in.pdf).

Contract Award - NYSERDA anticipates making multiple awards under this solicitation. A contract may be awarded based on initial applications without discussion, or following limited discussion or negotiations pertaining to the Statement of Work. Each application should be submitted using the most favorable cost and technical terms. NYSERDA may request additional data or material to support applications. NYSERDA will use the Sample Agreement to contract successful proposals. NYSERDA may at its discretion elect to extend and/or add funds to any project funded through this solicitation.

Low-rise Residential New Construction Program

NYSERDA reserves the right to limit any negotiations to exceptions to standard terms and conditions in the Sample Agreement to those specifically identified in the checklist questions. Proposers should keep in mind that acceptance of all standard terms and conditions will generally result in a more expedited contracting process. NYSERDA expects to notify applicants approximately four (4) weeks from the receipt of a complete application as to whether the application has been selected to receive an award. NYSERDA may decline to contract with awardees that are delinquent with respect to any obligation under any previous or active NYSERDA agreement.

Accessibility Requirements - If awardees from this solicitation will be posting anything on the web, or if the awardee will produce a final report that NYSERDA will post to the web, the following language must be included. NYSERDA requires contractors producing content intended to be posted to the Web to adhere to New York State's Accessibility Policy. This includes, but is not limited to, deliverables such as: documents (PDF, Microsoft Word, Microsoft Excel, etc.), audio (.mp3, .wav, etc.), video (.mp4, .mpg, .avi, etc.), graphics (.jpg, .png, etc.), web pages (.html, .aspx, etc.), and other multimedia and streaming media content. For more information, see <u>NYSERDA's Accessibility Requirements</u>.

Limitation - This solicitation does not commit NYSERDA to award a contract, pay any costs incurred in preparing a proposal, or to procure or contract for services or supplies. NYSERDA reserves the right to accept or reject any or all proposals received, to negotiate with all qualified sources, or to cancel in part or in its entirety the solicitation when it is in NYSERDA's best interest. NYSERDA reserves the right to reject proposals based on the nature and number of any exceptions taken to the standard terms and conditions of the Sample Agreement. NYSERDA reserves the right to disqualify proposers based upon the results of a background check into publicly available information and the presence of a material possibility of any reputational or legal risk in making of the award.

Disclosure Requirement - The proposer shall disclose any indictment for any alleged felony, or any conviction for a felony within the past five years, under the laws of the United States or any state or territory of the United States and shall describe circumstances for each. When a proposer is an association, partnership, corporation, or other organization, this disclosure requirement includes the organization and its officers, partners, and directors or members of any similarly governing body. If an indictment or conviction should come to the attention of NYSERDA after the award of a contract, NYSERDA may exercise its stop-work right pending further investigation or terminate the agreement; the contractor may be subject to penalties for violation of any law which may apply in the particular circumstances. Proposers must also disclose if they have ever been debarred or suspended by any agency of the U.S. Government or the New York State Department of Labor.

7 ATTACHMENTS

- Attachment A LR NCP Terms and Conditions
- Attachment B Owner Data Release Authorization Form
- Attachment C Tenant Data Release Authorization Form



Proposal submissions accepted until December 31,2019 3:00PM EST or until all funds are committed.

Proposal Scoring Rounds will commence in May 2019 and continue monthly. Any, all, or none of the available funds may be committed in any Scoring Round.

Table of Contents

I.	INTRODUCTION	2
II.	SOLICITATION TOPICS AND REQUIREMENTS	6
А	Priority Technical Challenge Areas for Pillar #1	6
С	hallenge Area 1: Array Performance and Control Optimization	6
С	hallenge Area 2: Cost-Reducing Turbine Support Structures for the U.S. Market	8
С	hallenge Area 3: Floating Structure Mooring Concepts for Shallow and Deep Waters	11
С	hallenge Area 4: Power System Design and Innovation	13
В	Priority Technical Challenge Areas for Pillar #2	15
С	hallenge Area 1: Comprehensive Wind Resource Assessment	15
С	hallenge Area 2: Development of a Metocean Reference Site	18
	Priority Technical Challenge Areas for Pillar #3	
	hallenge Area 1: Heavy Lift Vessel Alternatives	
	hallenge Area 2: Offshore Wind Digitization Through Advanced Analytics	
С	challenge Area 3: Technology Solutions to Accelerate U.S. Supply Chain	
D	0. References	28
E	. Funding Categories	31
F.	. Project Requirements	32
III.	PROPOSAL REQUIREMENTS	37
A	Cost-Sharing	39
В		
С	Annual Metrics Reports	39
IV. F	PROPOSAL EVALUATION CRITERIA	40
А	Project Benefits and Value	40
В	. Innovation, State of the Art and Technical Merit	40
С	Project Plan, Scope, Risks and Challenges	40
D	. Team Experience and Capabilities	41

NEW YORK STATE OF OPPORTUNITY.

		Up to \$7,000,000 Available
Pro	gram Scoring	41
Pro	gram Policy Evaluation Factors	42
V.	GENERAL CONDITIONS	
Α.	Proprietary Information	43
В.	Omnibus Procurement Act of 1992	43
C.	State Finance Law sections 139-j and 139-k	43
D.	Tax Law Section 5-a	44
Ε.	Contract Award	44
F.	Accessibility Requirements	44
G.	Limitation	45
Н.	Disclosure Requirement	45
I.	Vendor Assurance of No Conflict of Interest or Detrimental Effect	45
J.	Public Officers Law	45
VI.	ATTACHMENTS	46

I. INTRODUCTION

In June 2018, the U.S. Department of Energy (DOE) announced the selection of the New York State Energy Research and Development Authority (NYSERDA), the Renewables Consulting Group (RCG), the Carbon Trust (CT), and the Advanced Energy Research and Technology Center (AERTC) at Stony Brook University to form a nationwide research and development consortium for the offshore wind industry. The National Offshore Wind Research and Development Consortium ("the Consortium") is a nationally focused, independent, not-for-profit organization comprised of key offshore wind industry stakeholders and research institutions. The Consortium is dedicated to managing industry-prioritized research and development of offshore wind to maximize economic benefits for the United States. The U.S. DOE award is for \$20.5 million, at least \$2 million of which will directly fund U.S. federally-funded research and development centers (FFRDCs). This award will be matched by NYSERDA.

The Consortium seeks to fulfill, in part, a long-term vision for offshore wind in the United States that is supported by current policy for an all-inclusive energy strategy. To achieve this vision, the Consortium supports a strategy of identifying the technology innovations needed to address challenges and lower costs in each of the five U.S. offshore regions, allowing offshore wind to compete in all regional electricity markets without subsidies. The necessary cost reductions can be realized in part through targeted research and development (R&D) that removes or reduces technological and supply chain barriers to deployment and lowers development risk to investors. The Consortium envisions conducting this research as desktop studies, design development, and computer analysis, as well as hardware development with supporting demonstration and validation activities.

In November 2018 the Consortium released its initial Research and Development Roadmap (Roadmap) to advance offshore wind technology, drive wind technology innovation and combat climate change. Established in response to industry-led feedback, the Roadmap establishes a long-term vision for

innovative offshore wind technology development in the United States and identifies key priorities for establishing the industry as a leading national clean energy sector.

Focusing on the research and development priorities identified in the Roadmap, available research funds will be distributed through a series of competitive solicitations over the next four years. These competitive solicitations will reflect the three Research Pillars described in the original U.S. DOE funding opportunity announcement (DOE FOA 1767):

Pillar #1: Offshore Wind Plant Technology Advancement

Pillar #2: Offshore Wind Power Resource and Physical Site Characterization

Pillar #3: Installation, Operations and Maintenance, and Supply Chain

This solicitation seeks proposals to address the specific Technical Challenge Areas outlined in Section II. Future revisions of this solicitation may add additional Challenge Areas, or update or remove existing ones. Proposals for research on topics other than those identified in Section II, as per the current revision of the Solicitation at the time the proposal is submitted, are not in scope for this solicitation and will be considered non-responsive.

NYSERDA and the Consortium intend to support projects with the best research organizations to achieve maximum impact. Proposals are welcomed from all geographic locations. It should be noted that, as a condition of the award, a waiver from the U.S. DOE will be required for any funded work that will be undertaken outside of the United States.

Proposal Submission: Proposers may submit multiple proposals provided that each proposal concerns a separate and distinct topic. Each individual proposal must be submitted as a single file, inclusive of all supporting documents. Online submission is preferred. Proposers may submit Word, Excel, or PDF files (file formats include: csv, doc, docx, gif, jpeg, jpg, pdf, png, ppt, pptx, pps, ppsx, tif, txt, xls, xlsx, and zip). Individual files should be 100MB or less in file size. Proposal PDFs should be searchable and should be created by direct conversion from MS Word, or other conversion utility. Files should not be scanned. For ease of identification, all electronic files must be named using the proposer's entity name in the title of the document. NYSERDA will also accept proposals by mail or hand-delivery if online submission is not possible. For detailed instructions on how to submit a proposal (online or paper submission), click the link "Application Instructions and Portal Training Guide [PDF] " located in the "Current Opportunities" section of NYSERDA's website (<u>https://www.nyserda.ny.gov/Funding-Opportunities/Current-Funding-Opportunities.aspx</u>).

No communication intended to influence this procurement is permitted. For technical questions about this proposal, contact Richard Bourgeois at (518) 862-1090, ext. 3484 or by email at nationaloffshorewind@nyserda.ny.gov or Scott Egbert, Program Manager at (518) 862-1090, ext. 3113 or by email at nationaloffshorewind@nyserda.ny.gov Questions regarding Attachments B2-B4 should be directed to Steve Wolk at (518) 862-1090, ext. 3021 or by email at nationaloffshorewind@nyserda.ny.gov

If you have contractual questions or questions about NYSERDA's processes and policies regarding this solicitation, contact Nancy Marucci at (518) 862-1090, ext. 3335 or by email at NancySolicitations@nyserda.ny.gov. Contacting anyone other than the Designated Contacts (either



directly by the proposer or indirectly through a lobbyist or other person acting on the proposer's behalf) in an attempt to influence the procurement: (1) may result in a proposer being deemed a non-responsible offerer, and (2) may result in the proposer not being awarded a contract.

Scoring Rounds:

Proposals will be accepted at any time up until the due date noted above. During this period, several Scoring Rounds are anticipated. Scoring Rounds will occur approximately monthly, as proposals are received. Dates for the Scoring Rounds will not be published. NYSERDA reserves the right to change the interval of Scoring Rounds without notice or publication. **Any, all, or none of the available program funds may be awarded in any Scoring Round**: therefore, proposers are encouraged to submit as soon as their proposals are ready for review. Proposals not selected for award can be updated based on feedback and be resubmitted up to twice yearly.

* All Proposals must be received by 3pm Eastern Time on the date noted above. Late, faxed, or emailed proposals will not be accepted. Incomplete proposals may be subject to disqualification. It is the proposer's responsibility to ensure that all pages have been completed/included in the application. Please note: for online submission, there are required questions that you will have to answer in addition to uploading attachments and you should allot at least 60 minutes to enter/submit applications. The online application system closes promptly at 3pm, files in process or attempted edits or submission after 3pm Eastern Time on the date above, will not be accepted. If changes are made to this solicitation, notification will be posted on the "Current Opportunities" section of NYSERDA's website (https://www.nyserda.ny.gov/Funding-Opportunities/Current-Funding-Opportunities.aspx .

Guidance for Federally Funded Research and Development Centers (FFRDCs):

Federally Funded Research and Development Centers (FFRDCs), including but not limited to DOE national laboratories, are eligible to receive awards under this Solicitation as either a prime recipient or subrecipient. Except where noted below, all requirements for proposal submission and project execution apply equally to FFRDCs and to other applicants.

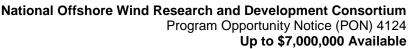
Proposals from or including FFRDCs will be evaluated and selected for award according to the procedures and criteria described in this Solicitation. No preference in evaluation and selection of awardees will be given to proposals from or including FFRDCs.

The DOE Wind Energy Technologies Office (WETO) will directly fund up to a total of \$2 million of research activity at DOE/NNSA FFRDCs under their standardized Annual Operating Plan (AOP) procedures if those FFRDCs are selected by the Consortium as project awardees, whether as prime recipients or subrecipients. After the total of \$2 million in direct funding by WETO has been reached, the Consortium may make additional awards to DOE/NNSA FFRDCs. However, FFRDC funding, in aggregate, may not exceed 25% of the total of DOE's and NYSERDA's funding for Consortium solicitations.

Whether the FFRDC is proposed as the prime recipient or as a subrecipient to another proposer, the appropriate authorization must be included in the proposal as a Letter of Support as follows:

• Authorization for non-DOE/NNSA FFRDCs

The federal agency sponsoring the FFRDC must authorize in writing the use of the FFRDC on the proposed project and this authorization must be submitted with the proposal. The use of a FFRDC must be consistent with its authority under its award.



• Authorization for DOE/NNSA FFRDCs

NYSERD/

NEW YORK

STATE OF

The cognizant Contracting Officer for the FFRDC must authorize in writing the use of the FFRDC on the proposed project and this authorization must be submitted with the proposal. The following wording is acceptable for this authorization:

"Authorization is granted for the Laboratory to participate in the proposed project. The work proposed for the laboratory is consistent with or complementary to the missions of the laboratory and will not adversely impact execution of the DOE-assigned programs at the laboratory."

If a DOE/NNSA FFRDC is selected for award as a prime or subrecipient, during the contracting process the FFRDC must provide a DOE Field Work Proposal (FWP) in accordance with the requirements in DOE Order 412.1, Work Authorization System.

Either NYSERDA, if an FFRDC is the prime recipient, or the prime recipient, if an FFRDC is a subrecipient, will be the responsible authority regarding the settlement and satisfaction of all contractual and administrative issues including, but not limited to disputes and claims arising out of any agreement between the prime recipient and the FFRDC.

If an FFRDC is selected for award as a prime recipient and is funded directly by WETO, the FFRDC must still execute an agreement, such as a cooperative research and development agreement, with NYSERDA to arrange work structure, project execution schedule, and performance obligations. Similarly, an FFRDC selected for award as a subrecipient and funded directly by WETO must execute an appropriate agreement with the prime recipient pursuant to the FFRDC's designated role in the project.

Budget amounts proposed by or awarded to DOE/NNSA FFRDCs, even if funded directly by WETO, will count toward the budget limits for the funding categories given in Section II.

DOE/NNSA FFRDC representatives may direct their questions on the AOP process and format to Shane Beichner (<u>shane.beichner@ee.doe.gov</u>). All other inquiries should be directed to designated contacts listed for this Solicitation.



II. SOLICITATION TOPICS AND REQUIREMENTS

The following challenge area descriptions include examples of projects that would address the challenge as a guide for prospective proposers. Guidelines for quantifying the benefits of proposed projects to the U.S. offshore wind industry are also provided.

Proposals for research on topics other than the Challenge Areas described are not in scope for this solicitation and will be considered non-responsive. However, Challenge Areas may be added, deleted or modified in future revisions of this solicitation. Similarly, the Roadmap will be continually revised in response to research and commercialization results.

Construction of new research facilities or modification of existing facilities will not be funded under this solicitation. However, this solicitation may support research and equipment related to such facilities. For example, a reference site planning process, procurement of instrumentation, advancement of state-ofthe-art instrumentation, establishment of data collection and reporting protocols that ensure relevance of results to industry and other stakeholders, and validation campaigns utilizing the reference site.

A. Priority Technical Challenge Areas for Pillar #1

Challenge Area 1: Array Performance and Control Optimization

Challenge Statement

To date, efforts to improve annual energy production and increase reliability have focused more on individual wind turbine refinement than on the challenges and rewards of operating multi-turbine arrays to perform most efficiently as fully integrated wind plants. As offshore turbines and projects grow larger, new plant-wide design approaches and control strategies are needed to optimize energy capture, minimize turbine downtime, and reduce overall cost, based on an enhanced understanding of wake characteristics, wind profiles, and other atmospheric conditions at U.S. offshore wind sites.

Objective

The main objective of this challenge is to enable wind plant performance optimization through development of new methods, tools, and designs based on technology innovation and computer modeling of advanced plant controls.



Recent studies such as the FP7 Cluster Design project; ECN Far and Large Offshore Wind Farm program: Wind Farm Wake Modeling, Fatigue Loads and Control; the DOE's Atmosphere to Electrons (A2e) program; and Carbon Trust Wind Farm Control Trials; indicate array performance and control optimization can improve lifetime economic performance through increased power production and reduced O&M costs as well as extend the lifetime of the asset. Moreover, the pitch and yaw-based control strategy estimates could result in a combined 0.5-3.5% increase in energy yield, and therefore, impact levelized cost of energy reduction. Also, employing array optimization strategies could enable load reductions of up to 50% for certain wind turbine components, which will reduce fatigue and turbine maintenance and O&M costs (Carbon Trust, 2017).

Several studies have been undertaken to understand atmospheric conditions, wake characteristics, and their effects on energy production at European offshore wind sites and on U.S. land-based wind sites through the DOE's A2e program. However, there is a need to better understand the atmospheric conditions at all U.S. wind energy areas (Atlantic, Pacific, Gulf of Mexico, and Great Lakes), taking into account differences in the wind conditions between U.S. and European sites. Understanding these differences is important as it will lead to improving the atmospheric models used to predict offshore wind plant loads and performance in the U.S. and inform how wind plant performance could be impacted. As the number and size of offshore wind plants built in U.S. waters increases, such methods and tools are needed to improve the wind plant annual energy production, increase reliability, and reduce O&M costs.

Proposals in this area are expected to demonstrate innovations that can lead to higher wind plant output and/or lower plant operating costs in a comprehensive cost model that accounts for improvements. Indirect effects on the market and U.S. supply chain should also be described.

Example Project Types

The following list provides example project types that could address this challenge. This list is meant as a reference and is not intended to be exclusive. All project proposals will be considered provided they contribute to the objectives of addressing this Challenge Area.

- Model the performance and assess the physical behavior of ultra-large rotors (200+ meters) in a large-scale array, including examining possible behavioral deviations from current understandings (e.g., wake expansion ground/surface effects).
- Assess how best to optimize whole wind plant control systems to maximize energy capture for varying wind directions and atmospheric conditions found in U.S. wind energy areas.
- Assess the best approach to wake steering strategies to reduce intra-array turbulence and power losses within existing and future U.S. wind energy areas. For reference, the A2e program conducted similar studies for onshore wind plants (DOE, 2016).
- Enhance optimization methods by developing offshore wind models for ascertaining least-cost plant layouts, considering real-world site conditions such as siting restrictions due to fishing etc.
- Near-term solutions to refine layout planning.

Proposers are encouraged to seek inputs from, or partner with, equipment manufacturers and other members of the supply chain in order to maximize applicability to commercial offshore wind plants, as well as to provide insight on commercialization pathways for new technologies.

Additionally, to avoid duplication of effort and build on the overall state-of-the-art, proposals should seek opportunities to build on prior research efforts and leverage existing programs in wind plant optimization. One example relevant to this challenge area is the A2e program supported by the DOE, which seeks to reduce the cost of both land-based and offshore wind energy through an improved understanding of the complex physics governing electricity generation by wind plants.

Challenge Area 2: Cost-Reducing Turbine Support Structures for the U.S. Market

Challenge Statement

VODK

ORTUNITY.

NYSERDA

Fixed-bottom turbine support structure designs developed for Europe may not be optimal for the U.S. market due to differences in seabed characteristics, extreme weather conditions, environmental and regulatory constraints, available installation vessels, and maturity of the domestic supply chain. Technology solutions are needed to optimize monopiles, jackets, gravity-base, suction buckets, transition pieces and/or other types of foundation designs in order to lower overall cost and ensure suitability under the specific conditions of U.S. offshore wind regions.

Objective

The main objective for this challenge is to develop fixed-bottom support structure design options (including transition piece designs) more suitable for U.S. site conditions and that facilitate the advancement of U.S. manufacturing capabilities relative to existing baseline designs. Design modifications will be proposed and evaluated, and new support structures designs will be identified to suit site conditions or enable support structure manufacturing within the U.S.

Background

Most offshore wind turbines installed to date are mounted on fixed-bottom substructures embedded into the seabed. This is largely due to the easy transferability of skills and knowledge from the oil and gas industry, as well as the relatively shallow water depths available for siting projects. With more than 40% of the U.S. offshore wind resource located in water depths of 60 meters or less, the use of fixed-bottom substructures is feasible in many U.S. offshore locations (DOE, 2017) and offers the best near-term solution for the initial U.S. offshore wind projects.

To date, monopiles make up the majority of installed offshore wind substructures in Europe. However, their dominance in the industry is decreasing as other substructures are better suited for some sites due to varying site conditions. In addition, alternative substructures may offer greater cost reductions in U.S. waters and may be more easily fabricated by the domestic supply chain. The Block Island offshore wind



project off Rhode Island is one example where a jacket substructure was chosen in order to utilize U.S. fabricators in the Gulf of Mexico, reducing the overall cost of the wind plant.

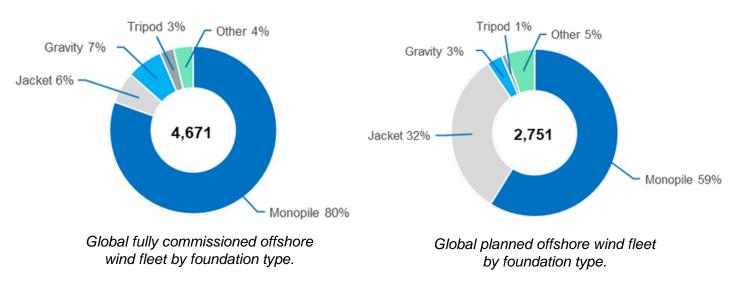


Figure 1. Global Offshore Wind Fleet Source: <u>GRIP</u>, The Renewables Consulting Group, 2018

Though there are several different sub-structure designs available, the market is predominantly dominated by three existing available designs: monopiles, jackets, and gravity-base, all designed and developed based on European offshore site conditions. Assessments of the suitability of existing available support structures targeted for U.S. specific conditions are needed. These assessments are encouraged to quantify, but are not limited to, the following variables:

- Support structure mass and cost scaling;
- Domestic installation capabilities;
- The development of calculation methods suitable for U.S. soils and seabed conditions;
- Domestic supply chain opportunities;
- Alternative installation methods to mitigate possible environmental impacts;
- Alternative installation methods to avoid negative cost impacts due to Jones Act restrictions;
- Extreme wind and wave resiliency; and
- Water depth.

In addition to assessing the suitability of existing designs for U.S. site conditions, there are a number of opportunities to develop innovative products or solutions that are more suited to U.S. conditions, supply chain and vessel availability. Such as:

- Innovative substructure designs or design modifications to existing substructures;
- Innovative materials used as an alternative to steel, such as advances in composite concrete, that are more cost effective, provide necessary strength, and supplied by U.S. manufacturers (Wind Power Engineering, 2018);
- Substructure solutions that reduce the dependency on foreign flagged or expensive heavy lift vessels;



- An innovative or optimized approach to fabricating substructures (e.g., increasing the modularity of a substructure) that will increase the efficiency of quayside fabrication; and
- Options that extend the lifetime of the substructure, delaying the need to decommission and reducing the overall levelized cost of energy.

As the offshore wind industry continues to develop, there is a great opportunity to innovate, modify, and optimize offshore substructures to match U.S. offshore conditions, manufactured and installed by U.S.-based companies.

Substructures and foundations account for 13.9% of the capital expenditure for a fixed-bottom offshore wind plant (NREL, 2016), and this percentage can vary significantly with water depth, bottom conditions, and the capability of the local supply chain. There is the potential for these projects to have a marked impact on reducing the capital expenditure for substructures and enable development at some sites where existing substructure technology is not feasible. However, large levelized cost of energy reductions may not be possible unless the innovation affects multiple areas of the cost breakdown structure such as installation and construction.

These projects will enable potential U.S. substructure suppliers to design and develop substructures that are better fit for purpose, without having to take on the entire design and development cost themselves, which could be prohibitive. These projects may also identify gaps in the supply chain that can help inform and focus wider domestic supply chain enabling activities such as use of existing facilities and indigenous materials.

Example Project Types

The following list provides example project types that could address this challenge. This list is meant as a reference and not intended to be exclusive. All project proposals will be considered provided they contribute to the objectives of addressing this Challenge Area. For the purpose of this challenge, the term "existing fixed-bottom substructures" refers to the transition piece, monopiles, jackets, gravity base, suction buckets, tripods, and tri-pile support structures only.

- Technical assessment of existing fixed-bottom support structures for suitability in U.S. offshore site conditions.
- Technical assessment of the types of modifications required to make existing support structures more suited to U.S. site conditions:
 - Likely overall cost implications of any modifications;
 - Ability to be installed without the use of a heavy-lift vessel;
 - Capability of U.S. supply chain to deliver modifications; or
 - Demonstrated ability to mitigate a technology barrier (e.g., difficult soils types) to deployment in the U.S.
- Supply chain gap analysis for manufacturing current fixed-bottom support structures;
- Innovative substructure designs or design modifications to existing substructures delivered by the U.S. supply chain;



- Innovative materials that can be used as an alternative to steel, such as advances in composite concrete, that are more cost effective, provide the necessary strength, and supplied by U.S. manufacturers;
- An innovative or optimized approach to fabricating substructures (e.g., increasing the modularity of a substructure) that will increase the efficiency of quay side fabrication; and
- Options that extend the lifetime of the substructure, delaying the need to decommission and reducing the overall levelized cost of energy

All prospective proposals for this challenge are encouraged to seek inputs from, or partner with an offshore wind developer, a U.S. offshore wind substructure supplier or include an advisory group comprising of developers and/or substructure suppliers to ensure the direction of the project and outcomes can be commercially applied. Additionally, proposals should identify research and/or partners who have been working on this challenge to demonstrate research will further the overall state-of-the-art.

Challenge Area 3: Floating Structure Mooring Concepts for Shallow and Deep Waters

Challenge Statement

Anchoring floating offshore wind systems in both shallow water depths (between 60 and 100m found off the U.S. Atlantic coast) and depths of 500 meters or more (Pacific Coast), poses design, installation, and cost challenges. Innovative mooring and anchoring technologies and methods are needed to manage loads on the substructure and anchors, incorporate alternative materials, optimize safety factors, and lower cost. Such innovations should consider potential impacts of increasing line spread, potential environmental and navigation impacts, and long-term performance. Based on factors such as varying water depth, seabed conditions, extreme wind and wave conditions, and seismic activity, the technology needs for floating wind mooring and anchoring systems will vary by region.

Objective

The main objective of this challenge is to identify new shallow and/or deep-water mooring concepts that are effective, easy to install, and lower technical risk. The impact of these projects will be to enable a greater number of potential development sites, as deployment at very deep or very shallow sites is presently perceived as expensive or high risk.

Background

Shallow Water Mooring Concepts

Current mooring systems (especially catenary mooring types) become more expensive at shallower water depths due to the need to avoid snap loading and anchor uplift forces; constrained watch circles; and the need to balance stiffer motion frequencies with wave excitation. Large platform motions in storms can cause localized tension spikes (snap loads) in mooring lines when a line re-engages after momentarily going slack (Hsu, 2017). Shallow water depths may also increase anchor loads and introduce unfavorable load vectors, requiring local seabed condition optimization. Alternative design



Program Opportunity Notice (PON) 4124 Up to \$7,000,000 Available

configurations and mooring solutions are needed to address shallow water issues, including load management solutions, optimized safety factors and new materials, without adding cost at sites representative of U.S. seabed conditions.

Deep Water Mooring Concepts

A steep drop of the continental shelf off the Pacific coast, combined with minimizing visual impact by locating projects far from shore, will likely lead to Pacific floating wind projects regularly being sited in water exceeding 500 m depth. Technology concepts are sought to demonstrate mooring and anchors system designs that assess the following:

- Practical floating wind system depth limits;
- Potential to exceed assumed practical limits (e.g., 1000 m maximum depth) for the Pacific coast and Hawaii;
- Mooring line spread requirements—how they scale with depth for the California and Hawaii;
- BOEM wind energy call areas, and how they can be optimized; and
- Optimized anchor designs and methods for installation in deep water and at sites prone to seismically induced soil liquefaction.

Whether optimized for shallow regions or deep-water conditions, new mooring concepts should demonstrate feasibility using dynamic mooring analysis for major International Electrotechnical Commission (IEC) design load cases and system cost models. Concepts should also comply with applicable recommended design, installation, and operations practices for floating systems in U.S. waters. Consideration will also be given to design concepts for any depth that minimize conflicts with existing offshore commercial and recreational activities and stakeholders, such as commercial fishing groups.

Mooring systems may include catenary spread moorings, tension leg moorings, or taut mooring systems, suitable for expected soil conditions or hybrid solutions. Proposed designs for optimized mooring systems may use novel line materials and configurations, potentially including components such as buoys, clump weights, and buoyant towers, with emphasis on components and installation methods that utilize U.S. suppliers and installers.

The global floating offshore wind supply chain is currently in its infancy; however, with the considerable expertise the U.S. already has through the oil and gas (O&G) sector, there is the opportunity for O&G suppliers to diversify to floating wind and become global offshore wind supply chain leaders. Furthermore, many of the proposed projects for this challenge will likely require some form of technical innovation. These projects will support the growth of the U.S. floating offshore wind supply chain by enabling domestic supply chain companies to benefit from these innovative mooring systems.

Example Project Types

The following list provides example project types that could address this challenge. This list is meant as a reference and not intended to be exclusive. All project proposals will be considered provided they contribute to the objectives of addressing this Challenge Area. All prospective proposals for this challenge are encouraged to seek inputs from, or partner with, a U.S. offshore wind substructure supplier or include an advisory group comprising of developers and/or substructure suppliers to ensure the direction of the project and outcomes can be commercially applied. Additionally, proposals should identify research and/or partners who have been working on this challenge to demonstrate that the research will further the overall state-of-the-art.

National Offshore Wind Research and Development Consortium Program Opportunity Notice (PON) 4124



Up to \$7,000,000 Available

- New mooring designs to minimize cost and maximize performance for various platform types:
 - Designs optimized for use in shallow water;
 - Designs and methods to automate/expedite anchor and mooring line installation, including hook up, as well as solutions for lowering O&M costs by facilitating easy disconnect and reconnect of the platform from the mooring system;
 - Development and qualification of synthetic materials for applications specific to mooring systems; or
 - Tethering solutions incorporating springs, elastomers, and other specialized components for improved dynamic response within mooring systems.
- Anchor designs for challenging seabed conditions (e.g., rock);
- Technical studies of fatigue mechanisms in floating wind mooring systems for improved understanding of conditions leading to failure and facilitation of future system optimization;
- Development of loading, redundancy, and Operations & Maintenance (O&M) inspection concepts, strategies, and guidelines, appropriate to the offshore wind industry;
- Assess the potential for fluid soil/structure interaction dynamics to impact the stability limits (including seismic conditions);
- Assessment of the potential impact of mooring lines and electric array cables on fishing activity; and
- Possible mooring line and array cable design configurations that could reduce any identified potential impacts to fishing activity.

Challenge Area 4: Power System Design and Innovation

Challenge Statement

Rapid deployment of offshore wind in the U.S. will create significant technical challenges for utilities, developers, regulators, and policymakers seeking to introduce offshore wind with minimal grid disruption at the lowest possible cost. Power system technology solutions are needed to lower individual project cost, reduce transmission losses, and enable aggregation strategies that address potential integration problems.

Objective

The main objective for this challenge is to reduce the cost and/or risk of bringing electricity to land from an offshore wind plant and distributing it to the grid. Uncertainty around interconnection can raise contingencies and finance costs as well as make the array cabling more expensive.

Background

Transmission infrastructure typically accounts for 10–20% of offshore wind capital expenditure, of which 8–12% typically accounts for the cost of cable supply and installation. Lessons learned from European offshore wind plants have shown that cable related incidents account for 80% of insurance claims and approximately 60% relate directly to cable damage during construction (Carbon Trust, 2018). Typically,

NEW YORK STATE OF OPPORTUNITY.

the design of the offshore wind transmission infrastructure is influenced by several factors (NREL, 2014): Site characteristics; for example, distance to shore, water depths, and seabed geology

- Number and type of wind turbines and related construction and maintenance operations/requirements;
- Turbine spacing and cable configuration;
- Reliability (dependent on many factors);
- Electrical line losses;
- Location of substation platform(s);
- The significant cost savings estimate of 5-6% of overall project cost can be achieved through advancements in transmission system design (NREL, 2014). These advancements may include the following:
 - Innovative power system simulation software tools that can be used for electrical/cabling system design for both offshore and onshore applications
 - o Layout optimization assessment to minimize electrical losses
 - o Innovative or modified inter-array cable designs that are more cost efficient
 - o Innovative or modified export cable designs that are lighter and more cost efficient
 - Medium Voltage Direct Current (MVDC) wind turbines that eliminate the need for turbine mounted transformers

The criticality of the transmission infrastructure in connecting the offshore wind plant to the land-based grid means there is great motivation for continued improvement and optimization to limit risks, reduce the levelized cost of energy and increase reliability.

It is considered that power system projects will financially enable the U.S. supply chain to develop innovative electrical infrastructure that would have otherwise been cost-prohibitive for them to design on their own. Projects will also provide a clear vision on where the industry is focusing its efforts, and therefore, what technical trends the supply chain and regulators should focus on for future offshore wind electrical system advancement. As most of the equipment is currently imported to the U.S., there is a considerable opportunity for tier 1 suppliers to develop U.S. supply lines.

Example Project Types

The following list provides example project types that could address this challenge. This list is meant as a reference and not intended to be exclusive. All project proposals will be considered provided they contribute to the objectives of addressing this Challenge Area. All prospective proposals for this challenge are encouraged to seek inputs from, or partner with an offshore wind developer or include an advisory group comprising of developers to ensure the direction of the project and outcomes can be commercially applied. Additionally, proposals should identify research and/or partners who have been working on this challenge to demonstrate that the research will further the overall state-of-the-art.

- Technical assessment of the most critical power system infrastructure barriers or enablers to developing offshore wind;
- Innovative power system technologies/designs/architectures that lower individual project cost, reduce risks, reduce losses, or enable longer distance transmission through the application of

new power conversion systems, cable technology, or array power system technology that are fully tested and compliant with U.S. standards, such as:

- Medium Voltage Direct Current (MVDC) dynamic cables;
- MVDC breakers; or
- High-voltage array cables.

NYSERDA

- Technology solutions to reduce cost through the elimination of the offshore substation;
- Technology advances that lower cost and increase U.S. market availability of both turbine-toturbine array cables and array-to-shore export cables; and
- Assessment of existing onshore grid systems, future requirements, and the potential upgrades needed to ensure uptake of large amounts of offshore wind power.

B. Priority Technical Challenge Areas for Pillar #2 Challenge Area 1: Comprehensive Wind Resource Assessment

Challenge Statement

NEW YORK

STATE OF OPPORTUNITY.

Currently, the most comprehensive wind resource assessment of U.S. offshore territory is a 2016 assessment conducted by the National Renewable Energy Laboratory (NREL), with inputs from multiple models (NREL 2016). However, the assessment has several key limitations, and has not been fully validated against existing measured data. Further efforts at assessing the wind resource within the US exclusive economic zone are needed which better quantify the resource and its uncertainty at multiple heights where turbines operate, with a time-varying component, to enable more accurate modeling of power output, operational costs and grid integration.

Objective

The objective of this challenge is to update, improve and expand upon current U.S. offshore wind resource assessments in all regions where offshore wind may be deployed, using state-of-the-art meso-scale models with the best available input data and undertaking an assessment at multiple time scales to enable studies on resource adequacy, energy estimation and grid impacts.

Background

Offshore wind geo-spatial resource assessments have been used by public and private entities alike to make major planning decisions that impact the U.S. offshore wind industry. Based on the relative lack of historical measured wind data offshore, as well as the time and expense associated with new on-site measurement campaigns, the industry frequently relies upon mesoscale models that are run with a variety of inputs, including, for example, reanalysis data and measured climate data (radiosonde, buoy, or land-based).

The most recent national offshore wind resource assessment of the outer continental shelf and Great Lakes was conducted in 2016 by NREL. However, there are some limitations to the data in that assessment that warrant a more comprehensive analysis. For example, the assessment relies on



multiple modeled datasets corresponding to differing geographic areas, which have not been validated with actual in situ wind speed measurements at various hub heights.

In the continental United States, data from 0 to 50 nautical miles (nm) from shore utilize one dataset developed by AWS Truepower (now part of Underwriters Laboratories), while data from 50 to 200 nm from shore utilize another dataset, the Wind Integration National Dataset (WIND) Toolkit, developed by NREL. The AWS and WIND Toolkit datasets have considerably different model configurations; the AWS dataset relies on the Mesoscale Atmospheric Simulation System (MASS), developed internally by AWS several years ago, while the WIND Toolkit is based on simulations from the open-source Weather Research and Forecasting (WRF) mesoscale model, developed and maintained by the National Center for Atmospheric Research (NCAR). The AWS and WIND Toolkit datasets also differ considerably in their input data sources to the model (e.g., sea surface temperature boundary condition, elevation and land use datasets) and model physics (e.g., planetary boundary layer parameterization, radiation parameterization). These modeling differences have resulted in significant disparities between the two datasets over the entire US (land and sea) in their estimations of wind speed at all time scales, which can propagate to much larger uncertainties in downstream analyses such as life cycle cost of energy, capacity expansion, and grid integration.

A significant limitation is that the 2016 resource assessment is averaged over a typical meteorological year, but it does not provide a temporal component, which is necessary for proper characterization of the resource and grid integration factors. Furthermore, the primary map (see Figure below) presents wind speeds only at a hub height of 100 m, while future offshore wind turbines are expected to be erected with hub heights 120 m or higher, and with maximum tip heights exceeding 200 m. Finally, consideration could be given to the benefits of a higher spatial resolution, currently limited to a 2-by-2-km grid in the 2016 resource assessment, to allow for more in-depth planning.



2016 offshore wind resource map (Source: NREL)

NEW YORK STATE OF OPPORTUNITY. NYSERDA

National Offshore Wind Research and Development Consortium Program Opportunity Notice (PON) 4124

Up to \$7.000,000 Available

The goal of this challenge is to increase the offshore wind resource assessment knowledge base specific to U.S. waters. The proposed projects will contribute to this broader goal by addressing elements of it, through updating the mesoscale analysis used in NREL's 2016 map as well as through other projects targeting the improvement of the knowledge base, using state-of-the-art technology and methods to help ensure all offshore wind potential in U.S. waters with is mapped, taking into account:

- Multiple heights to fit the scale of future wind turbine technology,
- Time-dependent aspects to aid in financial calculations and grid integration studies,
- A spatial resolution that allows for in-depth project development.

Example Project Types

With the aim of achieving the goal of this challenge, proposals are sought for an updated mesoscale analysis and map of the U.S. offshore wind resource, building on NREL 2016 data to incorporate more accurate datasets.

The following list provides example project types that could address this challenge. This list is meant as a reference and not intended to be exclusive. All project proposals will be considered provided they contribute to the objectives of addressing this Challenge Area. It is desired that project outputs will be compatible with each other, to the extent possible, to support building a common database; therefore, data should be provided in an appropriate and convenient format for public dissemination.

- New methodology to integrate multiple datasets including remote sensing and satellite input more seamlessly into a final composite wind resource model
- Improvement and development of meso-scale models using state-of-the-art technology
- Expansion of models to include multiple heights up to 200 m
- Inclusion of time-varying components in models and better uncertainty quantification.
- Studies on the trends of changing atmospheric conditions that may alter the available wind
 resource for an offshore wind project installed over the next decade, or research enabling those
 studies. Longer term research studies that help quantify potentially significant deviations from
 historical data and patterns shall also be considered. These studies may include science-based
 estimates of future changes to the frequency or severity of extreme events on a geo-spatial basis.
- Scientific studies to develop new methodology and validate model-based wind resource assessments using existing LIDAR field observations and surface buoys data.

Proposers are encouraged to seek inputs from, or partner with, an offshore wind developer in order to ensure maximum applicability to the development of commercial offshore wind plants. Additionally, proposals should identify partners who have been working in the area of this challenge to avoid redundancy and to ensure that the research will advance the overall state-of-the-art within the industry.



Challenge Area 2: Development of a Metocean Reference Site

Challenge Statement

Though the U.S. offshore wind industry is entering a period of rapid growth, there is still significant uncertainty relating to metocean conditions in the U.S. offshore environment. A significant part of the uncertainty is due to the lack of high-quality meteorological field observations in the regions where wind turbines may be deployed. This uncertainty has implications for system design, financing, and O&M strategies. As such, there's a critical need for metocean reference measurement stations at locations representative of future U.S. offshore wind sites, where high-quality, long-term measurements of various metocean quantities may be made and instruments used by U.S. offshore wind developers can be efficiently calibrated and verified. Though high-quality metocean datasets will have a multitude of applications, both within the wind industry and beyond, the reference station can help developers verify proper function of test equipment and validate on-site measurement systems deployed in offshore wind energy areas, both current and future.

Objective

The main objective of this challenge is to develop or advance a metocean reference site that can be used to test and validate regional wind resource observations and characterize new metocean measurement technology that is open to all industry parties.

Per the terms of the U.S. DOE cooperative agreement with NYSERDA, this Solicitation will not fund improvements to infrastructure or construction of new facilities. Projects that develop technology to enable and improve the collection of data using existing infrastructure, or projects leveraging infrastructure built using funds other than from this solicitation, will be considered.

Background

The US offshore wind industry is poised for rapid growth in the coming years, with multiple gigawatts under development and increasing areas of the U.S. outer continental shelf being identified as suitable for future developments. To realize the industry's full potential, accurate information is needed about the resource characteristics and external design conditions of both the atmospheric and subsea environments at heights and depths relevant to wind turbines and their associated structures. The community of users for such information spans nearly all aspects of the industry, including design, development, construction, operations, and financing, and spans all phases of project life, from predevelopment to decommissioning.

In this context, the development of one or more metocean reference sites, akin to the FINO (Forschungsplattformen In Nord- und Ostsee) reference stations in northern Europe, is needed in an open ocean location representative of the existing BOEM Wind Energy Areas, in which innovative methods in wind resource observations and site characterization can be tested and validated. A complementary land-based reference station may also be needed where more detailed fixed met mast measurements can be conducted at higher elevations for ground-truth assessments. Technologies that

National Offshore Wind Research and Development Consortium Program Opportunity Notice (PON) 4124



Up to \$7,000,000 Available

are used to perform resource assessments, which may include improved floating and scanning LiDAR systems, large area scanning systems, remote temperature profiling, wave height measurements, SST, etc., need to be verified and validated against standard, vetted observations within a controlled reference test area. Transparent methods for assessing individual methods/sensors, open to the industry at large, are also needed, as are best practices and standards for ensuring that the quality and consistency of testing and validation practices meet the high standards necessary for building confidence in new technology and facilitating growth in a dynamic, capital-intensive market.

Although not the main mission of the reference site, long-term monitoring of oceanographic parameters for climate and weather modeling would benefit the industry and may have wider applications for other U.S. businesses that operate in the ocean environment.

Example Project Types

The following list provides example project types that could address this challenge. This list is meant as a reference and not intended to be exclusive. All project proposals will be considered provided they contribute to the objectives of addressing this Challenge Area.

- Development of an offshore and/or complementary land-based meteorological reference station that can be used for data collection, and for testing and validation of offshore wind instrumentation and data. A reference site should demonstrate the ability to reduce uncertainty in energy yield assessments for Wind Energy Areas and assess possible differences/similarities with northern European baseline records (e.g. FINO). Note that project award funding may not be applied for the construction or upgrade of facilities and infrastructure.
- Development of measurement systems or techniques for use in gathering and/or validating highquality metocean data at an offshore and/or complementary land-based reference station. Measurements may be in relation to wind conditions, other atmospheric conditions, sea surface conditions, or subsea conditions.
- Development of best practices relating to the testing, validation and calibration of measurement systems against reference station measurements, for use at proposed or operational wind sites.
 Proposed best practices should be applicable to an existing or planned metocean reference station.
- Design of floating reference stations that may be deployed in deep water.

All prospective proposals for Challenge Area 2 are encouraged to seek inputs from, or partner with, any and all of the following: manufacturers of offshore wind turbines or substructures, offshore wind developers, certified verification agents, and turbine or substructure installers to ensure the project has maximum commercial applicability and benefit to the industry. Additionally, proposals should identify research that can be leveraged and/or partners who have been working on this challenge or are developing relevant infrastructure in order to demonstrate that the research will further the overall state-of-the-art and will be put into application for the benefit of the industry.



C. Priority Technical Challenge Areas for Pillar #3 Challenge Area 1: Heavy Lift Vessel Alternatives

Challenge Statement

Heavy lift vessels are generally used for all major offshore wind plant construction activities, including installing wind rotor nacelles and support structure components at the offshore site. Turbine growth trends indicate that turbines will continue to increase in power generation capacity and size, thus heavy lift vessels will be required to increase their lifting capacity at a commensurate pace. Larger vessels that can accommodate the increased turbine weight and tower height are continuously needed. However, weight lifting capacity and boom height tend to drive vessel costs up rapidly. Therefore, the ability to install ever-larger turbines may be limited if the lift capacity of available vessels cannot increase accordingly. The continuous upscaling of heavy lift vessels may not be the only, or the best, way to meet the installation requirements for ultra-large wind turbines that are expected to continue to grow in size over the next decade. This challenge area seeks to explore alternative methods for installing these large machines that best utilize existing U.S. maritime laws, while simultaneously meeting the cost requirements of the offshore wind industry.

Objective

The main objective of this challenge is to develop alternative, innovative solutions for offshore heavy lift works such as new ship designs, the repurposing of existing U.S.-flagged vessels, or new, efficient lifting techniques for specific components. Vessel alternatives must be considered alongside turbine/foundation system design (fixed-bottom and floating) to enable cost-effective and efficient assembly and installation of ever larger wind turbines, in compliance with the Jones Act, and with the potential for deployment throughout the world.

Per the terms of the U.S. DOE cooperative agreement with NYSERDA, this Solicitation will not fund improvements to vessels or construction of new vessels. Projects that develop innovative vessel designs or alternative methodologies will be considered. Please refer to the Example Project Types for this Challenge Area for further guidance.

Background

To date the offshore wind industry has been deeply reliant on the use of heavy lift vessels that transport and install the heavier components of an offshore wind turbine (e.g. foundation, rotor nacelle, blades etc.) to an offshore wind plant. This is especially true in Europe where an increase in offshore wind development has led to a high demand and long lead time for adequate heavy lift vessels.

The Merchant Marine Act of 1920, also known as the Jones Act, requires that delivery of any goods between two ports in the United States be conducted by a U.S.-flagged, U.S.-built vessel. This generally restricts European vessels from being brought to the U.S. to support construction operations. At present there are no Jones Act compliant vessels capable of carrying out the heavy lifts necessary to install

current and future turbines, which require lifting heights greater than those previously encountered in the U.S. offshore oil and gas industry.

This challenge provides an opportunity to identify cost-effective alternative approaches to using heavy lift vessels, for both the U.S. and global markets.

Increased Turbine Capacity Challenges

As the wind industry pursues cost competitiveness through larger offshore turbines, the physical size of each component has grown rapidly. In March 2018, General Electric announced development of the 12 MW Haliade-X with 107 m blades, a rotor diameter of 220 m, and a blade tip height of 260 m, which is comparable in height to New York City's Chrysler Building. It is expected that other turbine manufacturers will soon follow with even larger capacity turbines. Industry projections foresee a turbine capacity range of 10-15 MW active on the market in the early 2020s. This development, while a positive step for the industry, comes with challenges associated with the construction and installation methodologies, presenting the need for new solutions to be designed, built to loadout and/or installed.

Some heavy lift vessel companies in Europe have used their experience with heavy lift operations in the oil and gas industry to transition to the wind industry, however the use of foreign-flagged vessels is extremely limited due to the Jones Act.

Jones Act Compliance

The Merchant Marine Act, 1920 (also known as the Jones Act) requires any vessel that is transporting merchandise between two points in the U.S. to be U.S. built, U.S.-flagged and U.S.-owned. As U.S. offshore wind plants are sited in U.S. waters, any vessel transporting components to or from an offshore wind plant would be required to comply with this act. Though there are a number of U.S. vessels that can support the construction of an offshore wind plant in U.S. waters, there is currently no Jones Act compliant heavy lift vessel with the capacity to install the heavier turbine components (e.g. the nacelle) at the heights required.

The lack of U.S. heavy lift vessels poses a challenge to development of offshore wind plants in the U.S. but also provides an opportunity for the industry to develop innovative approaches to installing offshore wind turbines that are compliant with the Jones Act.

The Block Island Wind Farm (5 x 6 MW turbines), the first U.S. offshore wind project, was built using a system of Jones Act compliant feeder barges which delivered the turbine components to a non-compliant European-flagged heavy lift vessel parked at the offshore site as a part of an assembly line-type system. As the number and size of turbines to be installed in the U.S. increase, more cost effective and innovative solutions will be needed. This is to not only manage heavier lifts, but also to manage the logistical implications of a longer project construction duration due to the increased number of turbines being installed.



Though Challenge Area 1 concerns heavy lift vessels, the requirement for Jones Act compliant vessels is not limited to installation vessels only. Other vessels involved in offshore project installation and operations include tugs and feeder barges, crew transfer, and service operations vessels, all of which need to be compliant and in sufficient number to meet the demand of the growing U.S. market.

Example Project Types

The following list provides example project types that could address this challenge. This list is meant as a reference and not intended to be exclusive. All project proposals will be considered provided they contribute to the objectives of addressing this Challenge Area. All prospective proposals for this challenge are encouraged to seek inputs from, or partner with an offshore wind developer, a U.S. offshore wind vessel operator or include an advisory group comprising of developers and/or vessel experts to ensure the direction of the project and outcomes can be commercially applied. Additionally, proposals should identify research that can be leveraged and/or partners who have been working on this challenge to demonstrate that the research will further the overall state-of-the-art.

- Technical assessment of existing Jones Act-compliant vessels, their suitability to serve the offshore wind industry, and potential modifications to repurpose for current and future wind turbine sizes,
 - Include design/redesign solutions, timelines for implementation, and detailed cost estimates;
- A new, innovative vessel design and/or installation approach to accommodate for current and future wind turbines sizes, for both fixed-bottom and floating turbine installations, in the U.S;
- Supply chain gap analysis for manufacturing wind-specific tools and equipment on installation vessels;
- Technical assessment of tools and equipment which will need to be upgraded on heavy lift installation vessels (blade yokes, x-frames, blade racks, etc.);
- Alternative, innovative heavy lifting installation methodologies including a corresponding Health & Safety plan to implement alongside these methodologies.

It is the intent of this Challenge Area to fund technical analyses and innovative design and engineering activities. Per the terms of the U.S. DOE cooperative agreement with NYSERDA, this Solicitation will not fund construction or adaptation of new vessels or infrastructure.

Challenge Area 2: Offshore Wind Digitization Through Advanced Analytics

Challenge Statement

With the number of offshore wind turbines installed in U.S. waters set to increase, system reliability is likely to become a growing concern. In an offshore environment, the cost of component damage/failure or operations and maintenance (O&M) is significantly more expensive to manage because accessibility and logistics are far more complicated. Managing these issues on a reactive basis has proven to be expensive and inefficient, however, with current advances in analytics and technology there is the

opportunity through intelligent advanced data analysis to optimize O&M strategies, reducing the need for technicians to go offshore, and ultimately reduce the levelized cost of energy (LCOE).

Objective

The objective of this challenge is to optimize the installation and O&M phases of an offshore wind plant using advanced analytics, and component and system health monitoring technologies, to:

- Increase efficiency in both the installation and O&M phases (measured by possible metrics such as lower cost, decreased downtime, increased turbine availability, or increased energy capture);
- Achieve demonstrable reductions in component level damage and failures; and
- Reduce the labor hours spent offshore and the associated safety risk to personnel.

Per the terms of the U.S. DOE cooperative agreement with NYSERDA, this Solicitation will not fund improvements to infrastructure or construction of new facilities. Projects that develop technology to enable and improve the collection of data using existing infrastructure, or projects leveraging infrastructure built using funds other than from this solicitation, will be considered.

Background

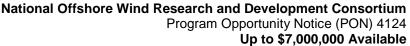
At present there is a considerable amount of data being collected across offshore wind plants, mostly through turbine and plant level Supervisory Control and Data Acquisition (SCADA) systems. The SCADA system acts as a central 'nerve center' for the wind plant connecting individual turbines, the substation and meteorological stations to a central computer. SCADA systems are predominantly used to support analyses on the productivity of the wind plant and therefore focus primarily on collecting data to monitor the turbines' operating status, health condition, real-time and long-term performance, as well as efficiency (e.g. orientation, yaw, etc.).

In addition, comparatively little data is being collected to monitor the health of other components that make up the offshore wind plant, such as foundations and electrical cables etc., to assess damage or likelihood of failure. Issues on these components are usually identified during physical component inspections, (for which there is currently little guidance or industry standards) and may only be identified once the damage has progressed to a more serious (expensive) state.

One offshore wind industry trend has been to increase the number of remote sensors across the various offshore wind plant components to enhance the remote monitoring capabilities and to better identify, predict, and diagnose component damage and potential failures. The use of condition monitoring sensors on electrical cables is becoming more common practice as is the use of sensors on steel foundations to monitor the extent of internal corrosion. However, the use of these sensors is still limited, and data collected does not receive the proper level of analyses to enable it to inform O&M.

Furthermore, offshore wind developers are also starting to use remote monitoring sensors during installation to verify that all components have been installed correctly and that no damage occurred during construction. This is particularly true for cable installation since a large proportion of insurance claims on electric cables result from over bending or snagging during installation, causing damage to the

WYORK IE OF ORTUNITY



internal conductors. Unfortunately, the development rate of new innovations in wind plant health prognostics, advanced analytical diagnostics, and new predictive maintenance strategies have not kept pace with the ever-increasing volumes of data being collected.

There is the opportunity to not only considerably improve and increase the technology used to capture component status data, but also develop a holistic integrated system that can collect, analyze, and interpret all component level data and make O&M decisions remotely. This would allow for fault detection during construction as well as facilitating better O&M planning leading to a more efficient maintenance process, reduced O&M cost and a reduced need for technicians going offshore.

As a world leader in advanced technology and analytics, the U.S. has the opportunity to combine this expertise with offshore wind knowledge to develop US-specific innovative approaches to reducing the cost and risk of offshore wind, through digitized advanced analytics.

Example Project Types

The following list provides example project types that could address this challenge. This list is meant as a reference and not intended to be exclusive. All project proposals will be considered provided they contribute to the objectives of addressing this Challenge Area.

Solutions are sought that can demonstrate increased reliability at component, system, turbine or plant level, and/or reduce at sea labor hours for O&M personnel on the U.S. fleet of offshore wind turbines.

Innovations under this topic may include:

- Remote repair capabilities featuring advanced sensors, artificial intelligence, and turbine-based robotics;
- Inspections using drones and autonomous vessels;
- Self-healing concepts to reduce manual repairs;
- Development of machine learning to facilitate lower cost offshore O&M;
- Demonstration and development of guidance on industry best practice for U.S. offshore wind component inspections;
- Increasing and improving the use of data analytics and big data management to increase offshore wind reliability;
- Condition monitoring sensor development for cables and sub-structures during installation and operation;
- Improving the understanding of asset lifetime integrity through advanced sensors;
- Better methodologies/technologies for assessing and mitigating marine environmental issues impacts in real-time;
- User friendly holistic integrated systems that can track the status of all major components and sub-systems in the wind plant to inform O&M planning.



All prospective proposals for this challenge are encouraged to seek inputs from, or partner with an offshore wind developer, a U.S. offshore wind component supplier, or include an advisory group comprising of developers and/or sub-structure suppliers to ensure the direction of the project and outcomes can be commercially applied. Additionally, proposals should identify research that can be leveraged and/or partners who have been working on this challenge to demonstrate that the research will further the overall state-of-the-art.

Challenge Area 3: Technology Solutions to Accelerate U.S. Supply Chain

Challenge Statement

Many of the components, subcomponents, and infrastructure for the initial phase of commercial offshore wind projects in the U.S. will be imported due to lack of qualified U.S. manufacturing and supply capabilities. This challenge area seeks projects to accelerate the maturation of the U.S. supply chain through technology solutions involving ports and harbor infrastructure, manufacturing sector growth, and enhanced marine operations capabilities. Successful projects will benefit developers, ratepayers, and state governments seeking economic growth and stability, and will bolster the U.S. manufacturing sector.

Objective

The objective of this challenge is to develop new technologies and concepts which can help to accelerate the U.S. supply chain towards the goal of promoting local content used in offshore wind plants. Successful concepts should result in increased utilization of existing U.S. manufacturing and new manufacturing (e.g. substructures that use the oil & gas supply chain, or an ultra-large locally manufactured blade etc.) that take advantage of local or regional manufacturing and assembly capabilities. Proposed projects need not be limited to existing design configurations but may offer collaborative innovations that introduce combinations of new materials, new strategies for deployment, and new advanced manufacturing methods that leapfrog current U.S. market constraints.

Background

As the U.S offshore wind market begins to take shape, one of the prevailing questions posed to the key manufacturers is, "When will offshore wind components be produced in the U.S.?". With a growing pipeline of projects projected to be built along the Atlantic coast within the next decade and a lack of qualified U.S. manufacturing and supply capabilities, many of the components, subcomponents, and infrastructure for the initial phase of commercial wind projects in the U.S. will be imported. Moreover, there is an urgent need for fit-for purpose, U.S. flagged supporting vessels that are required as part of the wider construction and O&M fleet to enable the rapid development of offshore wind.

Proposed demonstration projects have relied on imported turbines, while Block Island Wind Farm was assembled using European-built turbines and a foreign-flagged installation vessel. However, the Block Island project has also shown the potential for U.S. produced and installed components, with steel jacket foundations having been supplied by fabricators from the Gulf of Mexico's oil and gas industry. This is a

NEW YORK STATE OF OPPORTUNITY.

good starting point for the U.S. offshore industry, proving that certain wind plant requirements can already be met by using the existing supply chain companies in the U.S. The open question to be addressed by manufacturers and support vessel operators is whether they can match the demand of the U.S. offshore project pipeline.

In order to answer the question of when more offshore components will be produced in the U.S., it is vital to determine how the U.S. supply chain can be accelerated to most effectively encourage investment in U.S. offshore wind manufacturing. Studies have indicated that factors such as infrastructure development, logistics optimization, and project timelines can all affect the degree to which local content that can be effectively incorporated into an offshore project. While the U.S. has a strong supply chain for the land-based wind industry, the translation to offshore is not an easy task as much of that competency is geographically located in the inland U.S. states rather than on the coasts, and the scale of components is much larger offshore. This poses logistical challenges for existing land-based manufacturing facilities seeking to transition to the offshore supply chain.

In terms of capital expenditures, turbines, support structures, and the electrical infrastructure account for the largest cost of an offshore wind plant and have the most reliance on the port and vessel capabilities. At present, U.S. port and vessel capabilities have not adapted to match the proposed pipeline of projects. The lack of Jones Act compliant heavy lift vessels (see Challenge Area 1), as well as the need for more fit-for-purpose construction and O&M support vessels, will drive future offshore wind projects to seek cost-effective alternatives.

Another vital part of U.S. supply chain development to enable U.S. offshore wind development will be to accelerate the training and growth of the domestic workforce. With the promise of numerous jobs along the eastern seaboard, training programs are being implemented throughout the region to prepare the American workforce for this new offshore frontier. This is an opportunity for researchers and developers to develop training centers and create new ways of training technicians (offshore, electrical, welders, etc.) and managers to master the execution and operation of an offshore wind turbine and do so in a safe and efficient manner. The use of technology can create new methods to train the workforce in ways that were not imaginable ten years ago.

Example Project Types

The following list provides example project types that could address this challenge. This list is meant as a reference and not intended to be exclusive. All project proposals will be considered provided they contribute to the objectives of addressing this Challenge Area. All prospective proposals for this challenge are encouraged to seek inputs from, or partner with an offshore wind developer, a U.S. offshore wind component supplier, or include an advisory group comprising of developers and/or substructure suppliers to ensure the direction of the project and outcomes can be commercially applied. Additionally, proposals should identify research that can be leveraged and/or partners who have been working on this challenge to demonstrate that the research will further the overall state-of-the-art. Analyses of the skill sets and/or tooling required to implement any proposed technology or method are welcome as part of the project in order to maximize the opportunity to increase the supply chain.



Projects under this Challenge area might include:

- Studies to assess current supply chain capabilities, limits and barriers to help identify gaps and likely bottlenecks in the first phase of U.S. offshore wind development. These studies should provide sufficient horizon planning to help inform longer term investments in infrastructure;
- Design of an innovative U.S.-focused standardized training program, in compliance with federal regulations, for offshore wind technicians or fabricators to build experienced local workforces;
- Development of unique teaching strategies to be utilized at planned offshore wind training centers;
- Support for the planning of a network of national offshore wind training centers;
- Redesign of a major wind plant component to utilize U.S. expertise and manufacturing competencies, and reduce costs;
- Development of a modularized component design that can be manufactured and installed using unique U.S. supply chain capabilities;
- Development of a lean manufacturing process for serial production of turbine components in order to reduce LCOE.
- Development and prototyping of innovative technologies and concepts, e.g. new vessel designs, that have potential to improve offshore construction and/or operations and Maintenance (O&M) logistics, while also supporting development of the U.S. supply chain.

It is the intent of this Challenge Area to fund technical analyses and innovative design and engineering activities. Per the terms of the U.S. DOE cooperative agreement with NYSERDA, this Solicitation will not fund construction or adaptation of new vessels or infrastructure.



D. References

American Meteorological Society – Offshore Wind Energy Committee, 2013. *The Need for Expanded Meteorological and Oceanographic Data to Support Resource Characterization and Design Condition Definition for Offshore Wind Power Projects in the United States*. [ONLINE] Available at: http://usmodcore.com/files/AMS_Offshore_Wind_APT_FinalReport_May2013.pdf. [Accessed 22 January 2019]

AWS Truepower, LLC, 2012, *Wind Resource Maps and Data: Methods and Validation*, [ONLINE] Available at: <u>https://aws-dewi.ul.com/assets/Wind-Resource-Maps-and-Data-Methods-and-Validation1.pdf</u>. [Accessed 17 January 2019]

AWS Truepower, LLC, 2012, *Description of the MesoMap System*, [ONLINE] Available at: <u>https://aws-dewi.ul.com/assets/Description-of-the-MesoMap-System1.pdf</u>. [Accessed 17 January 2019]

AWS Truepower, prepared for the U.S. Department of Energy, 2015. *Metocean Data Needs* Assessment for U.S. Offshore Wind Energy. [ONLINE] Available at:

http://usmodcore.com//content/file/AWST_MetoceanDataNeedsAssessment_DOE_FinalReport_14Ja

n2015.pdf. [Accessed 22 January 2019]

Carbon Trust, Floating Wind Joint Industry Project, May 2018. Phase I Summary Report [ONLINE] Available at: <u>https://www.carbontrust.com/media/675868/flw-jip-summaryreport-phase1.pdf</u>. [Accessed 15 November 2018]

Carbon Trust, June 2015. Floating Offshore Wind: Market and Technology Review [ONLINE] Available at: <u>https://www.carbontrust.com/media/670664/floating-offshore-wind-market-technology-review.pdf</u>. [Accessed 15 November 2018]

Carbon Trust, Offshore Wind Accelerator, 2018. Cable Installation. [ONLINE] Available at: <u>https://www.carbontrust.com/offshore-wind/owa/cables/</u>. [Accessed 15 November 2018]

Carbon Trust, Offshore Wind Accelerator, 2018. Electrical Systems. [ONLINE] Available at: https://www.carbontrust.com/offshore-wind/owa/electrical/. [Accessed 15 November 2018]

Carbon Trust, 2017. Wind Farm Control Trials. [ONLINE] Available at: https://www.carbontrust.com/offshore-wind/owa/demonstration/wfct/. [Accessed 11 November 2018]

Carbon Trust, 2015, Cable Burial Risk Assessment Methodology: Guidance for the Preparation of Cable Burial Depth of Lowering Specification. [ONLINE] Available at: <u>https://www.carbontrust.com/media/622265/cable-burial-risk-assessment-guidance.pdf</u> [Accessed 12 March 2019]

Draxl, C. & Clifton, A. & Hodge, B & McCaa, J., 2015, *The Wind Integration National Dataset (WIND) Toolkit*, Applied Energy 151: 355-366, 10.1016/j.apenergy.2015.03.121.

Department of Energy, Atmosphere to Electrons [ONLINE] Available at <u>https://a2e.energy.gov/</u>. [Accessed 29 November 2018]

Department of Energy, Atmosphere to Electrons, 2016. Wake Steering Experiment. [ONLINE] Available at https://a2e.energy.gov/projects/wake. [Accessed 22 November 2018]



Up to \$7,000,000 Available ECN, Far and Large Offshore Wind (FLOW) program, 2014. Wind Farm Wake Modelling, Fatigue Loads and Control. [ONLINE] Available at: <u>http://www.flow-offshore.nl/page/wind-farm-wake-</u> modelling-fatigue-loads-and-control. [Accessed 11 November 2018]

European Commission, FP7 Cluster Design, 2017. A tool box for offshore wind farm cluster designs. [ONLINE] Available at: <u>https://cordis.europa.eu/project/rcn/101379/reporting/en</u>. Accessed 11 November 2018]

General Electric, 2018, *Haliade-X Offshore Wind Turbine Platform*. [ONLINE] Available at: <u>https://www.ge.com/renewableenergy/wind-energy/turbines/haliade-x-offshore-turbine</u> [Accessed 12 December 2018]

Golightly, Chris, Future Offshore Foundations (conference paper), November 2017, Anchoring & Mooring for

Floating Offshore Wind. [ONLINE] Available at:

https://www.researchgate.net/profile/Chris_Golightly/publication/321011241_Anchoring_Mooring_for Floating_Offshore_Wind_Brussels_8th_November_2017/links/5a072405aca272ed279e52e5/Ancho ring-Mooring-for-Floating-Offshore-Wind-Brussels-8th-November-2017.pdf. [Accessed 15 November 2018]

Hsu, Wei-ting, et al, Marine Structures, Vol. 55, Sep 2017. [ONLINE] Available at: <u>https://www.sciencedirect.com/science/article/pii/S0951833917300886?via%3Dihub</u>. [Accessed 15 November 2018]

HVPD, A subsea threat to the offshore renewable insurance market [ONLINE] Available at: <u>https://www.hvpd.co.uk/files/3213/9455/6011/HVPD_-</u> <u>Subsea_Threat to the Offshore_Renewable_Insurance_Market.pdf</u> [Accessed 26 February 2019]

National Offshore Wind Research and Development Consortium, 2018. Research and Development Roadmap, Initial Release Version 1.0. [ONLINE] Available at: https://www.nyserda.ny.gov/All%20Programs/Programs/Offshore%20Wind/Economic%20Opportunities/RD. [Accessed 30 November 2018]

National Renewable Energy Laboratory, 2015. Software Models Performance of Wind Plants. [ONLINE] Available at: <u>https://www.nrel.gov/docs/fy15osti/63378.pdf</u>. [Accessed 11 November 2018]

National Renewable Energy Laboratory. 2016. 2016 Offshore Wind Energy Resource Assessment for the United States. [ONLINE] Available at: <u>https://www.nrel.gov/docs/fy16osti/66599.pdf</u>. [Accessed 17 January 2019]

National Renewable Energy Laboratory, 2017. Enabling the SMART Wind Power Plant of the Future Through Science-Based Innovation [ONLINE] Available at: https://www.nrel.gov/docs/fy17osti/68123.pdf. [Accessed 22 November 2018]

National Renewable Energy Laboratory, 2014. Offshore Wind Plant Electrical Systems. [ONLINE] Available at: <u>https://www.boem.gov/NREL-Offshore-Wind-Plant-Electrical-Systems/</u> [Accessed 15 November 2018]

Navigant (prepared for U.S. Department of Energy), 2013, U.S. offshore wind manufacturing and supply chain development. [ONLINE] Available at:



https://www1.eere.energy.gov/wind/pdfs/us_offshore_wind_supply_chain_and_manufacturing_devel opment.pdf [Accessed 01 March 2019]

New Energy Update, 2018, *Building the U.S. offshore wind supply chain: how do we do it*? [ONLINE] Available at:

https://www.energycentral.com/system/files/ece/nodes/258443/supply_chain_paper_draft1.pdf [Accessed 22 February 2019]

NYSERDA, 2017, U.S. Jones Act Compliant Offshore Wind Turbine Installation Vessel Study. [ONLINE] Available at: <u>https://www.nyserda.ny.gov/-/media/Files/Publications/Research/Biomass-Solar-Wind/Master-Plan/US-Jones-Act-Compliant-Offshore-Wind-Study.pdf</u> [Accessed 12 December 2018]

Offshore Renewable Energy Catapult, 2017, *Offshore Wind Farm Substructure Monitoring And Inspection.* [ONLINE] Available at: <u>https://ore.catapult.org.uk/app/uploads/2018/01/Offshore-wind-farm-substructure-monitoring-and-inspection-report-.pdf</u> [Accessed 26 February 2019]

Offshore Wind Journal, *Cable incidents are largest cause of losses in offshore wind industry.* [ONLINE] Available at: <u>https://www.owjonline.com/news/view,cable-incidents-are-largest-cause-of-losses-in-offshore-wind-industry_44199.htm</u> [Accessed 26 February 2019]

Poulsen, T., and Lema, R., 2017, *Is the supply chain ready for the green transformation? The case of offshore wind logistics.* Renewable and Sustainable Energy Reviews 73: 758-771, <u>https://doi.org/10.1016/j.rser.2017.01.181</u>

Public Policy Center, UMass Dartmouth, 2018, *What will determine offshore wind supply chain development in the U.S.* [ONLINE] Available at: http://publicpolicycenter.org/osw_supplychain_factors/ [Accessed 22 February 2019]

U.S. Department of Energy, 2013, Assessment of Vessel Requirements for the U.S. Offshore Wind Sector. [ONLINE] Available at:

https://www.energy.gov/sites/prod/files/2013/12/f5/assessment_vessel_requirements_US_offshore_ wind_report.pdf [Accessed 12 December 2018]

U.S. Department of Energy, Office of Energy Efficiency and Renewable Energy, 2017. U.S. Conditions Drive Innovation in Offshore Wind Foundations. [ONLINE] Available at: <u>https://www.energy.gov/eere/articles/us-conditions-drive-innovation-offshore-wind-foundations</u>. [Accessed 12 November 2018]

Wind Power Engineering & Development, 2018. U.S. offshore wind industry needs improved foundations. [ONLINE] Available at: <u>https://www.windpowerengineering.com/projects/offshore-wind/u-s-offshore-wind-industry-needs-improved-foundations/</u>. [Accessed 12 November 2018]

Wind Energy The Facts, *SCADA and Instruments*. [ONLINE] Available at: <u>https://www.wind-energy-the-facts.org/scada-and-instruments.html</u> [Accessed 25 February 2019]



Wind Power Monthly, 2018. Vessels Go Supersize. [ONLINE] Available at: https://www.windpowermonthly.com/article/1465996/vessels-go-supersize [Accessed 12 December 2018]

E. Funding Categories

Three (3) categories of research will be considered for funding:

- A. Technical Feasibility Studies: Category A is for feasibility studies that conduct preliminary research into the concepts underlying new products, systems, strategies or services as a first stage of development. These studies are necessary precursors to ultimate product development and commercialization. Feasibility studies may include conceptual design, technology and market assessments, and similar early-stage studies. Funding for projects in this category will be limited to \$300,000. It is expected that all proposals will include a budget that is commensurate with the proposed project plan and proposers will justify their proposed budget in terms of reasonable costs and scope.
- B. New Product, Systems, Service or Strategy Development: Category B includes efforts that are crucial to the development of a marketable product, system, strategy or service and any testing or validation of an innovation that is not already commercially available. Funding for projects in this category will be limited to \$800,000. It is expected that all proposals will include a budget that is commensurate with the proposed project plan and proposers will justify their proposed budget in terms of reasonable costs and scope.
- C. Demonstration of Technologies, Systems or Services: Category C is aimed at demonstrating and testing innovative offshore wind technologies, systems, strategies or services that have undergone product development and require testing to reach commercialization or are already commercially available but have not yet been sufficiently demonstrated in the U.S. to gain industry acceptance. This includes hardware, software, and market development initiatives. An example could be a new mooring concept that is in use in Europe but not yet demonstrated or sold in the U.S. Funding for projects in this category will be limited to \$1,500,000. It is recognized that some demonstration projects, particularly large-scale demonstrations, may require additional funding. As such proposers are encouraged to seek additional funds, in-kind contributions or access to facilities from various offshore wind stakeholders. It is expected that all proposals will include a budget that is commensurate with the proposed project plan and proposers will justify their proposed budget in terms of reasonable costs and scope.

Proposers must select <u>at least one (1) funding category per proposal</u>, which must be indicated in the proposal. Proposals that do not identify a funding category may not be reviewed. If the funding category selected does not match the scope of the project, NYSERDA may at its discretion evaluate the project in terms of a category that in its determination better matches the proposed scope. If such a proposal receives is selected for award, it will be subject to the requirements of the funding category to which it has been assigned.

National Offshore Wind Research and Development Consortium



Program Opportunity Notice (PON) 4124 Up to \$7,000,000 Available

Multi-phase project proposals, i.e. a single project that spans more than one funding category, will be considered. For example, a proposed project may include Category B Product Development (Phase I) followed by a Category C Product Demonstration (Phase II). Each proposed project Phase must adhere to the requirements of the appropriate funding category for that Phase including required documentation and recommended maximum funding levels. NYSERDA may, at its discretion, select one or more phases for award without selecting other proposed phases. With respect to the proposal requirements (see Section III), multi-phase project proposals must submit all required attachments and fill out all required sections of the Proposal Forms for each phase per the instructions of Attachment B.

All multi-phase projects must include Go/No-Go decision points following each Phase. To proceed to the next phase the Contractor must demonstrate its progress in meeting the technical and commercial milestones of the prior Phase. The Contractor will not be permitted to proceed to the next Phase or submit invoices for work performed in that Phase without written approval, which may be granted or withheld at NYSERDA's sole discretion.

Similarly, Go/No-Go decision points will be required within each project Phase or at one or more points within a single-phase project, typically after each approximate \$250,000 allotment of NYSERDA funding.

Project schedules must take into account a U.S. DOE Go/No-Go decision point at the beginning of each Budget Period, as follows:

Budget Period 1: from October 1 2018 to December 31 2019 Budget Period 2: from January 1 2020 to December 31 2020 Budget Period 3: from January 1 2021 to December 31 2021 Budget Period 4: from January 1 2022 to September 30 2025

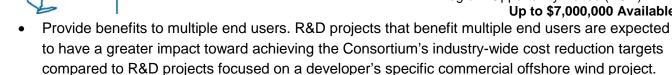
If a DOE no-go decision is reached at the conclusion of a Budget Period, milestones complete prior to the no-go decision may be invoiced. Work completed after the no-go decision may not be invoiced. Milestones partially completed may be partially invoiced, with an allowable amount determined at NYSERDA's sole discretion.

The proposed Statement of Work is subject to negotiation and NYSERDA may offer to fund any of the proposal's phases therein at a lower level than that requested, such as by offering to fund a feasibility study rather than a proposed prototype development effort.

F. Project Requirements

Project Scope. To qualify for funding, proposals must:

- Address issues essential for cost reduction, deployment, and industry expansion specific to offshore regions of the U.S. Proposals offering research topics already being addressed by other international projects, must explain why further research is necessary.
- Adhere to the challenges identified in Section II of this solicitation. Although the Technical Challenges and Roadmap will be updated in the future, it is expected the Consortium will continue to maintain an industry-focused, prioritized offshore wind R&D agenda that enables early U.S. offshore wind project development, LCOE reduction, and geographic industry expansion beyond the currently designated Wind Energy Areas.



Project Schedule, Phasing and Teaming. The following guidelines should be considered when developing proposals:

- Projects are expected to begin as soon as is feasibly possible with a project schedule estimate of: 6 – 18 months for Category A; 18 - 30 months for Category B; and Category C will be negotiated based on the scope and goals of the project.
- Teaming Agreements which include an end user such as an offshore wind developer or a key
 member of the offshore wind supply chain are strongly encouraged, to enhance the likelihood of
 successful commercialization. Teams may include offshore wind developers, turbine
 manufacturers, supply chain members, research organizations, universities, national
 laboratories, end-users, or other stakeholders.
- Proposals must state the existing Technology Readiness Level (TRL) of any technology being proposed and what the expected TRL of that technology will be at the end of the proposed project, as a direct result of having undertaken the project. See Attachment B3, Technology and Commercialization Readiness Level Calculator.

Project Benefit Quantification. The following guidelines should be considered when developing proposals:

The potential impact on LCOE and Offshore Risks

NEW YORK

STATE OF

NYSERDA

All proposals should provide an explanation of how the proposed project will impact the levelized cost of energy (LCOE), component level cost reduction or offshore risks and an estimation of when the impact on LCOE will be achieved. Explanations should consider the overall positive effect on reducing the cost of energy or risk rather than focus on any one component of levelized cost of energy to the detriment of others. For example, a proposal that reduces capital cost may increase risk and negatively impact the ability to finance offshore wind development projects.

Where relevant, all proposals should provide an explanation on how the project may impact risks and costs associated with health and safety. Projects that seek to reduce health and safety risks should clearly describe and wherever possible quantify the direct and indirect positive effects of the project on these risks.

It is expected that all LCOE calculations will be justified with evidence and analysis. Any estimates considered to be unrealistic or overly optimistic may be amended or disregarded. The below methodology provides a high-level approach to calculating LCOE. For consistency, it is recommended that all proposers use this approach.

High level methodology to calculating LCOE

One of the most common metrics for judging the benefit of a specific innovation or technical advancement is to calculate its impact on the levelized cost of energy. The levelized cost of electricity

NYSERDA



(LCOE) is the net present value of the unit-cost of electricity over the lifetime of a generating asset. Proposers should implement the following equation to estimate the LCOE impact:

$$LCOE = \frac{(FCR \times CapEx) + OpEx}{AEP_{net}}$$

where:

FCR	= fixed charge rate (%)	fixed charge rate (%)	
CapEx	 capital expenditures (\$/kW) 		
OpEx	 average annual operational expenditures (\$/kW/year 	r)	
AEP _{net} =	net average annual energy production (kWh/year).		

The Fixed Charge Rate (FCR) represents the annual revenue per dollar of investment required to pay the carrying charges on that investment, which include finances charges, incomes taxes, inflation and depreciation¹. To ensure consistency of financial assumptions among project proposals, a real FCR of 6% should be assumed by applicants in their LCOE calculations.

Innovations that have the greatest impact could affect multiple elements of the LCOE equation. Other innovations may implement a higher cost component that will be offset by greater benefits in another area. For example, an advanced control system may increase turbine cost but may enable higher capacity factors that decrease LCOE by large amount. As part of the LCOE analysis, proposers should specify which cost elements are affected how they are affected and by what percentage they increase or decrease. Highest scoring proposals will provide thorough analysis to demonstrate the cost reduction potential and when the cost reduction is likely to be achieved.

¹ Further information on FCR and LCOE calculations in general may be found here: www.nrel.gov/docs/fy18osti/72167.pdf



Positive Impacts on the Supply Chain

All proposals shall provide an explanation on how the proposed project could have a positive impact on advancing the U.S. offshore wind supply chain. It is understood that some projects may not have a direct impact on the U.S. supply chain, in this case a description of indirect impacts resulting from the proposed project is encouraged.

Commercialization Strategy

All proposals will be required to include a summary and explanation of foreseeable follow-on efforts that will be required to enable the commercial use of the results obtained from that project in offshore wind plants in the U.S. All proposals for an innovative or modified technology/ methodology are required to provide a commercialization plan that details the expected path to commercialization or how the innovation will enable commercialization, and the necessary milestones in achieving this.

Although an award may support certain stages of commercialization, there should not be an expectation that NYSERDA or Consortium funding will support all stages required to reach commercialization. Any proposal for innovative designs, methods, or advanced systems must ensure they are compliant with U.S. regulations and best practices and may require further engineering effort, component and system validation testing, or infield demonstrations.

It is recognized that for some projects, considerable stakeholder engagement may be required to achieve the desired dissemination and utilization of results. Proposals will be encouraged to highlight where industry buy-in is needed, who the key stakeholders are, and provide a brief summary of how this industry integration could be achieved.

Timeframe for applying the results/technology

All proposals will be encouraged to provide a Gantt Chart indicating the expected time frame to complete the proposed scope of work, and where relevant, the expected time frame to reach technology commercialization. This should include a high-level breakdown of the time required to undertake follow-on tasks to reach commercialization. It is recognized that the time frame to apply the results from a project depends on the type of project being proposed; however, proposals are encouraged that maximize project outputs in a highly efficient timeframe and can be quickly adopted by the U.S. offshore wind industry.



Letters of Commitment or Interest.

If relying on any other organization to provide data, conduct a portion of the work, provide services, equipment or facilities, or contribute funds, a letter from that organization describing its planned participation and financial commitment must be included. In particular, if the project is dependent on data being provided by an offshore wind developer(s), a letter of commitment from the developers must be provided clearly describing how the data will be used and for what purposes.

Also include letters of interest or commitment from businesses or other organizations critical to the future commercialization, demonstration, or implementation of the project. This is especially critical when partnering with an offshore wind developer or offshore wind supply chain members.

Absence of letters of commitment or interest may be interpreted as meaning that the proposer does not have support from the subject parties. Project award will be contingent on the proposer securing the relevant committed data, work, services, equipment, facilities or funds as required by the project.

NEW YORK STATE OF OPPORTUNITY.

III. PROPOSAL REQUIREMENTS

Incomplete proposals may be subject to disqualification. It is the proposer's responsibility to ensure that all pages have been included in the proposal.

The proposer must submit a proposal using the instructions and attachments listed below. The goal should be to concisely present the information needed to fully address the Proposal Evaluation Criteria (Section IV). Proposals that exceed the word limits or fail to follow the format guidelines will be rejected as non-responsive. If you believe proprietary or confidential information must be submitted to provide an adequate proposal, please clearly indicate in your proposal which information is proprietary and confidential and mark that information accordingly. Attachments beyond those requested will not be considered.

Each page of the proposal should state the name of the proposer, the PON number, and the page number. All proposers are required to submit, at minimum, the following documents:

- Attachment A: Proposal Narrative (with required attachments)
- Attachment B1: Statement of Work
- Attachment C1: Milestone Payment Schedule
- Attachment C2: DOE Sub-Recipient Budget Justification

Instructions for all attachments are provided in the Attachment A Proposal Narrative file

Required sections of the Proposal Narrative differ according to the Funding Category being proposed. Additional attachments may also be required based on the proposed Funding Category or Categories.

Funding Category A

- Executive Summary
- Problem Statement and Proposed Solution
- State of Research and Technology Targets
- TRL/CRL Calculator (Attachment B3)
- Commercialization Potential of Proposed Solution
- Feasibility Study Information
- Statement of Work (Attachment B1) and Schedule
- Project Benefits
- Budget
- Proposer Qualifications
- Letters of Commitment
- Attachments

National Offshore Wind Research and Development Consortium Program Opportunity Notice (PON) 4124 Up to \$7,000,000 Available

Funding Category B

NEW YORK

STATE OF OPPORTUNITY.

- Executive Summary
- Problem Statement and Proposed Solution

NYSERDA

- Business Model Canvas (Attachment B2)
- State of Research and Technology Targets
- TRL/CRL Calculator (Attachment B3)
- Commercialization Potential of Proposed Solution
- Three-Year Financial Projections Worksheet (Attachment B4)
- Demonstration Site and Product (for projects that include pilot or validation testing ONLY)
- Replication Potential of Proposed Demonstration (for projects that include pilot or validation testing ONLY)
- Statement of Work (Attachment B1) and Schedule
- Project Benefits
- Budget
- Proposer Qualifications
- Letters of Commitment
- Attachments

Funding Category C

- Executive Summary
- Problem Statement and Proposed Solution
- Business Model Canvas (Attachment B2)
- State of Research
- TRL/CRL Calculator (Attachment B3)
- Commercialization Potential of Proposed Solution
- Three-Year Financial Projections Worksheet (Attachment B4)
- Demonstration Site and Product
- Replication Potential of Proposed Demonstration
- Statement of Work (Attachment B1) and Schedule
- Project Benefits
- Budget
- Proposer Qualifications
- Letters of Commitment
- Attachments

Proposers must carefully review the Attachment A, Proposal Narrative to ensure that all required sections and attachments are submitted. Failure to do so may result in the proposal being rejected as non-responsive.



Proposers are not required to provide any form of cost-share; however, it is recognized that for projects such as demonstration projects, project team members may wish to provide additional funding or in-kind contribution to maximize the benefit of the project. Proposers are encouraged to provide an indication of any additional funding or in-kind contribution that will be used to support the delivery of a project.

B. Compliance with New York State Finance Law

In compliance with <u>Sections 139-j and 139-k of the New York State Finance Law</u>, proposers will be required to answer questions during proposal submission, which will include disclosing any Prior Findings of Non-Responsibility.

C. Annual Metrics Reports

If awarded, the proposer will be required to submit to NYSERDA on an annual basis, a prepared analysis and summary of metrics addressing the anticipated energy, environmental and economic benefits that are realized by the project. All estimates shall reference credible sources and estimating procedures, and all assumptions shall be documented. Reporting shall commence the first calendar year after the contract is executed. Reports shall be submitted by January 31st for the previous calendar years' activities (i.e. reporting period). The Contractor shall provide metrics in accordance with a web-based form, which will be distributed by NYSERDA. NYSERDA may decline to contract with awardees that are delinquent with respect to metrics reporting for any previous or active NYSERDA agreement.



IV. PROPOSAL EVALUATION CRITERIA

Proposals that meet solicitation requirements will be reviewed by a Scoring Committee using the following evaluation criteria:

A. Project Benefits and Value

All assumptions must be supported and justified using sources and evidence. For additional information see **Project Benefit Quantification**, Section IIC.

- The proposed solution has potential to significantly reduce LCOE. Components of LCOE include capital costs, operating costs and financing cost. Solutions that increase annual energy production without a commensurate increase in cost will also reduce LCOE.
- The proposed solution addresses a core technical barrier that is not being addressed by others and has the potential for wide-scale replicability.
- The proposed solution will bring economic benefits to the U.S. offshore wind industry in the form of manufacturing capability, supply chain development or technical services. U.S. jobs are expected to be created and/or retained as a result of this project.
- The proposed solution quantifiably lowers development risk and/or represents an enabling technology likely to increase offshore wind deployment in the U.S.
- Timeframes for the offshore wind industry to realize the benefits of the proposed solution are realistic and appropriate.
- The implementation strategy is well-conceived, appropriate for the current stage of development, and there is a sound plan for measuring progress and success.
- The proposed project scope is sufficient to deliver significant benefits. Where necessary and appropriate, the proposer has secured a commitment for additional cost share.
- The proposer exhibits strong market demand for this solution and has already identified one or more commercialization partners.

B. Innovation, State of the Art and Technical Merit

- The proposal identifies a problem fully aligned and essential to the advancement of one of the identified Technical Challenge Areas.
- The proposer has demonstrated insightful understanding of the current state-of-the-art relative to the Challenge Area.
- The proposed project is technically sound, feasible, innovative, and superior to alternatives, and will make significant progress toward solving the identified problem.
- The proposed approach and scope of work are aimed at developing and commercializing a technology, as opposed to basic research and discovery.
- Technical assertions, such as assessments of performance relative to the state-of-the-art, are verified by rigorous analysis.
- The proposal demonstrates industry buy-in and validation of the proposed technical concept.

C. Project Plan, Scope, Risks and Challenges

- The proposed project plan is clearly defined, with fully developed tasks, subtasks, milestones and deliverables that will enable effective project management.
- The scope of work is fully appropriate to the selected problem and will be highly valuable towards meeting the goals of the Technical Challenge Area and the Roadmap.
- Technical and programmatic risks are clearly understood and fully disclosed, with wellconsidered mitigation plans that have a high probability of ensuring project success.

National Offshore Wind Research and Development Consortium Program Opportunity Notice (PON) 4124



Up to \$7,000,000 Available

- The cost of the project is strongly justified with respect to the expected benefits and the potential market or deployment opportunity.
- The proposal outlines a detailed plan for pursuing additional funding and development support, if necessary, to bring the proposed solution to full commercialization.
- The proposed work can be accomplished within the amount of time, effort, and resources proposed.
- The selected Funding Category is appropriate for the proposed solution.
- The proposal provides letters of commitment from all outside organizations the proposal team will need to provide data, equipment, support, facilities etc.
- The implementation strategy is well-conceived and appropriate for the current stage of development, with a sound plan for measuring progress and success.
- The proposal offers a compelling explanation of how it will address barriers to market entry and commercialization.
- The proposed plan as efficient as possible with regards to resources and time.

D. Team Experience and Capabilities

- The proposed team has the necessary expertise and resources to carry out the proposed work.
- The project team includes members with industrial and business experience as well as technical skill.
- The proposer has successfully commercialized one or more products or deployed services.
- The proposer has secured strong commitments from all essential team members and partners, including letters and has demonstrated strong support from necessary market actors.
- The proposal clearly demonstrates the team structure and staff responsibilities.
- For demonstration projects relying on entities and jurisdictional authorities such as a maritime agency, leaseholder, equipment manufacturer, etc., the project team has secured or has a plan to secure all the commitments necessary to execute the proposed project scope.

Program Scoring

Each proposal will be scored on a scale of 100 with the following weighting applied to each of the evaluation criteria:

- 1) Project Benefits and Value 40%
- 2) Innovation and State of the Art 30%
- 3) Project Plan, Scope, Risks and Challenges 15%
- 4) Team Experience and Capabilities 15%

Additional data or material to support applications/proposals may be requested. Proposers may also be requested to interview with all or part of the Scoring Committee to address any questions or provide clarification regarding information outlined in the proposals. Proposers will be notified if they are requested to participate in an interview.



Program Policy Evaluation Factors

NYSERDA reserves the right to accept or reject proposals based on the following factor(s):

- 1) Whether the proposed project will accelerate technology advances in areas that industry by itself is not likely to undertake.
- 2) The degree to which the proposed project optimizes the use of available funding to achieve programmatic objectives.
- 3) The degree to which the proposal expands the geographic diversity of the Consortium R&D efforts.
- 4) The degree to which the proposal expands the technical portfolio of the Consortium.
- 5) The degree to which the proposed project has leveraged award funds to expand their project scope and value attained with non-award resources.
- 6) The degree to which there are technical, market, organizational and/or environmental risks associated with the projects that outweigh the potential benefits.
- 7) Past performance of the proposer on other projects with NYSERDA, the US DOE, and Consortium member companies.
- 8) The degree to which project expenses are in line with market rates.

Awardees are expected to be notified within approximately 4-8 weeks from proposal submission if your proposal has been selected to receive an award, contingent upon successful execution of an award contract.



A. Proprietary Information

Careful consideration should be given before confidential information is submitted to NYSERDA as part of your proposal. Review should include whether it is critical for evaluating a proposal, and whether general, non-confidential information, may be adequate for review purposes.

The NYS Freedom of Information Law, Public Officers law, Article 6, provides for public access to information NYSERDA possesses. Public Officers Law, Section 87(2)(d) provides for exceptions to disclosure for records or portions thereof that "are trade secrets or are submitted to an agency by a commercial enterprise or derived from information obtained from a commercial enterprise and which if disclosed would cause substantial injury to the competitive position of the subject enterprise." Information submitted to NYSERDA that the proposer wishes to have treated as proprietary, and confidential trade secret information, should be identified and labeled "Confidential" or "Proprietary" on each page at the time of disclosure. This information should include a written request to except it from disclosure, including a written statement of the reasons why the information should be excepted. See Public Officers Law, Section 89(5) and the procedures set forth in 21 NYCRR Part 501 https://www.nyserda.ny.gov/About/-/media/Files/About/Contact/NYSERDA-Regulations.ashx. However, NYSERDA cannot guarantee the confidentiality of any information submitted.

B. Omnibus Procurement Act of 1992

It is the policy of New York State to maximize opportunities for the participation of New York State business enterprises, including minority- and women-owned business enterprises, as bidders, subcontractors, and suppliers on its procurement Agreements.

Information on the availability of New York subcontractors and suppliers is available from:

Empire State Development Division for Small Business 625 Broadway Albany, NY 12207

A directory of certified minority- and women-owned business enterprises is available from:

Empire State Development Minority and Women's Business Development Division 625 Broadway Albany, NY 12207

C. State Finance Law sections 139-j and 139-k

NYSERDA is required to comply with State Finance Law sections 139-j and 139-k. These provisions contain procurement lobbying requirements which can be found at https://online.ogs.ny.gov/legal/lobbyinglawfaq/default.aspx . Proposers are required to answer questions



during proposal submission, which will include making required certification under the State Finance Law and to disclose any Prior Findings of Non-Responsibility (this includes a disclosure statement regarding whether the proposer has been found non-responsible under section 139-j of the State Finance Law within the previous four years).

D. Tax Law Section 5-a

NYSERDA is required to comply with the provisions of Tax Law Section 5-a, which requires a prospective contractor, prior to entering an agreement with NYSERDA having a value in excess of \$100,000, to certify to the Department of Taxation and Finance (the "Department") whether the contractor, its affiliates, its subcontractors and the affiliates of its subcontractors have registered with the Department to collect New York State and local sales and compensating use taxes. The Department has created a form to allow a prospective contractor to readily make such certification. See, ST-220-TD (available at http://www.tax.ny.gov/pdf/current_forms/st/st220td_fill_in.pdf). Prior to contracting with NYSERDA, the prospective contractor must also certify to NYSERDA whether it has filed such certification with the Department.

The Department has created a second form that must be completed by a prospective contractor prior to contacting and filed with NYSERDA. See, ST-220-CA (available at

http://www.tax.ny.gov/pdf/current_forms/st/st220ca_fill_in.pdf). The Department has developed guidance for contractors which is available at http://www.tax.ny.gov/pdf/publications/sales/pub223.pdf .

E. Contract Award

NYSERDA anticipates making multiple awards under this solicitation. NYSERDA anticipates a contract duration of one to three years, unless NYSERDA management determines a different structure is more efficient based upon proposals received. A contract may be awarded based on initial applications without discussion, or following limited discussion or negotiations pertaining to the Statement of Work. Each application should be submitted using the most favorable cost and technical terms. NYSERDA may request additional data or material to support applications. NYSERDA will use the Attachment D, Sample Agreement to contract successful proposals. NYSERDA may at its discretion elect to extend and/or add funds to any project funded through this solicitation. NYSERDA reserves the right to limit any negotiations to exceptions to standard terms and conditions in the Sample Agreement to those specifically identified in the checklist questions. Proposers should keep in mind that acceptance of all standard terms and conditions will generally result in a more expedited contracting process. NYSERDA expects to notify proposers in approximately four to eight weeks from the receipt of a proposal whether your proposal has been selected to receive an award. NYSERDA may decline to contract with awardees that are delinquent with respect to any obligation under any previous or active NYSERDA agreement.

F. Accessibility Requirements

If awardees from this solicitation will be posting anything on the web, or if the awardee will produce a final report that NYSERDA will post to the web, the following language must be included. NYSERDA requires contractors producing content intended to be posted to the Web to adhere to New York State's Accessibility Policy. This includes, but is not limited to, deliverables such as: documents (PDF, Microsoft Word, Microsoft Excel, etc.), audio (.mp3, .wav, etc.), video (.mp4, .mpg, .avi, etc.), graphics (.jpg, .png, etc.), web pages (.html, .aspx, etc.), and other multimedia and streaming media content. For more information, see NYSERDA's Accessibility Requirements.



G. Limitation

This solicitation does not commit NYSERDA to award a contract, pay any costs incurred in preparing a proposal, or to procure or contract for services or supplies. NYSERDA reserves the right to accept or reject any or all proposals received, to negotiate with all qualified sources, or to cancel in part or in its entirety the solicitation when it is in NYSERDA's best interest. NYSERDA reserves the right to reject proposals based on the nature and number of any exceptions taken to the standard terms and conditions of the Sample Agreement. NYSERDA reserves the right to disqualify proposers based upon the results of a background check into publicly available information and the presence of a material possibility of any reputational or legal risk in making of the award.

H. Disclosure Requirement

The proposer shall disclose any indictment for any alleged felony, or any conviction for a felony within the past five years, under the laws of the United States or any state or territory of the United States and shall describe circumstances for each. When a proposer is an association, partnership, corporation, or other organization, this disclosure requirement includes the organization and its officers, partners, and directors or members of any similarly governing body. If an indictment or conviction should come to the attention of NYSERDA after the award of a contract, NYSERDA may exercise its stop-work right pending further investigation or terminate the agreement; the contractor may be subject to penalties for violation of any law which may apply in the particular circumstances. Proposers must also disclose if they have ever been debarred or suspended by any agency of the U.S. Government or the New York State Department of Labor.

I. Vendor Assurance of No Conflict of Interest or Detrimental Effect

The proposer shall disclose any existing or contemplated relationship with any other person or entity, including any known relationships with any member, shareholders of 5% or more, parent, subsidiary, or affiliated firm, which would constitute an actual or potential conflict of interest or appearance of impropriety, relating to other clients/customers of the proposer or former officers and employees of NYSERDA, in connection with proposer's rendering services as proposed. If a conflict does or might exist, please describe how your company would eliminate or prevent it. Indicate what procedures will be followed to detect, notify NYSERDA of, and resolve any such conflicts.

The proposer must disclose whether it, or any of its members, or, to the best of its knowledge, shareholders of 5% or more, parents, affiliates, or subsidiaries, have been the subject of any investigation or disciplinary action by the New York State Commission on Public Integrity or its predecessor State entities (collectively, "Commission"), and if so, a brief description must be included indicating how any matter before the Commission was resolved or whether it remains unresolved.

J. Public Officers Law

For any resulting awards, the Contractor and its subcontractors shall not engage any person who is, or has been at any time, in the employ of the State to perform services in violation of the provisions of the New York Public Officers Law, other laws applicable to the service of State employees, and the rules, regulations, opinions, guidelines or policies promulgated or issued by the New York State Joint Commission on Public Ethics, or its predecessors (collectively, the "Ethics Requirements"). Proposers are reminded of the following Public Officers Law provision: contractors, consultants, vendors, and subcontractors may hire former NYSERDA employees. However, as a general rule and in accordance

National Offshore Wind Research and Development Consortium



Program Opportunity Notice (PON) 4124 Up to \$7,000,000 Available

with New York Public Officers Law, former employees of NYSERDA may neither appear nor practice before NYSERDA, nor receive compensation for services rendered on a matter before NYSERDA, for a period of two years following their separation from NYSERDA service. In addition, former NYSERDA employees are subject to a "lifetime bar" from appearing before any state agency or authority or receiving compensation for services regarding any transaction in which they personally participated, or which was under their active consideration during their tenure with NYSERDA.

Any awardee will be required to certify that all of its employees, as well as employees of any subcontractor, whose subcontract is valued at \$100,000 or more who are former employees of the State and who are assigned to perform services under the resulting contract, shall be assigned in accordance with all Ethics Requirements. During the term of any agreement, no person who is employed by the contractor or its subcontractors and who is disqualified from providing services under the contract pursuant to any Ethics Requirements may share in any net revenues of the contractor or its subcontractors derived from the contract. NYSERDA may request that contractors provide it with whatever information the State deems appropriate about each such person's engagement, work cooperatively with the State to solicit advice from the New York State Joint Commission on Public Ethics, and, if deemed appropriate by the State, instruct any such person to seek the opinion of the New York State Joint Commission on Public Ethics. NYSERDA shall have the right to withdraw or withhold approval of any subcontractor if utilizing such subcontractor for any work performed would be in conflict with any of the Ethics Requirements. NYSERDA shall have the right to terminate any contract at any time if any work performed is in conflict with any of the Ethics Requirements.

VI. ATTACHMENTS

- Attachment A Form-Fillable Proposal Narrative
- Attachment B1 Statement of Work Sample Format
- Attachment B2 Business Model Canvas Template
- Attachment B3 Technology and Commercialization Readiness Level Calculator
- Attachment B4 Three-Year Financial Projections Worksheet
- Attachment C1 Milestone Payment Schedule
- Attachment C2 DOE Sub-Recipient Budget Justification
- Attachment D Sample Agreement



Electric Power Transmission and Distribution (EPTD) Future Grid Challenge Program Opportunity Notice (PON) 4128 Round 2 of 2 \$15 Million Available in Total with Up to \$3 Million Available per Challenge All, some, or none, of the available funds may be awarded

Round 2 Proposals Due: December 11, 2019 by 3:00 PM EST

The New York State Energy Research and Development Authority (NYSERDA) will issue a series of utility challenges through 2019 that have been defined in collaboration with New York State's Investor Owned Utilities (IOU). Each challenge is aligned with the host utility to improve the performance and validate value propositions in areas of significant potential, including productivity, resiliency, reliability and quality of the electric power delivery system. The host utilities will identify attributes to drive innovation and challenge the marketplace to develop systems that deliver solutions that are pertinent to their operational goals. Those attributes help establish a pathway for products and services to gain market entry.

Each Round of this solicitation will have one or more IOU challenges with available funding up to \$3 million per Challenge. NYSERDA may host a complimentary webinar to describe the host utility's challenge at the open of the round. Program updates can be found on NYSERDA's Smart Grid website:

https://www.nyserda.ny.gov/All-Programs/Programs/Smart-Grid-Program

Submissions must demonstrate significant improvements over the current state addressed by the challenges. The primary objective of the program is to accelerate the host utility's operational goals that promote a high performing smart grid with a diverse supply of clean energy generation resources, enhanced overall electric grid performance and enable customers to reduce their energy costs, energy consumption, and environmental impacts. Additional objectives include the development of smart grid technologies and their commercialization and deployment in New York State.

Round	Utility Challenge	Proposal Due Date ¹	
1	Consolidated Edison	October 9, 2019	
	Orange & Rockland		
2	Central Hudson Gas & Electric	December 11, 2019	
	National Grid		
1 - Dates are subject change. Proposers should check NYSERDA's website for the latest updates			

Proposal Submission – Online submission is preferable. Proposers may submit Word, Excel, or PDF files (file formats include: csv, doc, docx, gif, jpeg, jpg, pdf, png, ppt, pptx, pps, ppsx, tif, txt, xls, xlsx, and zip). Individual files should be 100MB or less in file size. Proposal PDFs should be searchable and should be created by direct conversion from MS Word, or other conversion utility. Files should not be scanned. For ease of identification, all electronic files must be named using the proposer's entity name in the title of

the document. NYSERDA will also accept proposals by mail or hand-delivery if online submission is not possible. For detailed instructions on how to submit a proposal (online or paper submission), click the link "<u>Application Instructions and Portal Training Guide</u> [PDF]" located in the "Current Opportunities" section of NYSERDA's website (<u>https://www.nyserda.ny.gov/Funding-Opportunities/Current-Funding-Opportunities.aspx</u>).

No communication intended to influence this procurement is permitted except by contacting Christopher Cheng (Designated Contact), (518) 862-1090 ext 3436, or Sumit Bose (Designated Contact) (518) 862-1090 ext 3130 or Michael Razanousky (Designated Contact) (518) 862-1090 ext 3245 or by e-mail <u>smartgrid@nyserda.ny.gov</u>. If you have contractual questions concerning this solicitation, contact Venice Forbes, (518) 862-1090 ext 3507 or by email <u>venicesolicitations@nyserda.ny.gov</u>. Contacting anyone other than the Designated Contacts (either directly by the proposer or indirectly through a lobbyist or other person acting on the proposer's behalf) in an attempt to influence the procurement: (1) may result in a proposer being deemed a non-responsible offerer, and (2) may result in the proposer not being awarded a contract.

* All proposals must be received by 3 p.m. Eastern Time on the date noted above. Late, faxed, or emailed proposals will not be accepted. Incomplete proposals may be subject to disqualification. It is the proposer's responsibility to ensure that all pages have been included in the proposal. Please note: for online submission, there are required questions that you will have to answer in addition to uploading attachments and you should allot at least 60 minutes to enter/submit proposals. The online proposal system closes promptly at 3 p.m. Eastern Time, files in process or attempted edits or submission after 3 p.m. Eastern Time on the date above, will not be accepted. If changes are made to this solicitation, notification will be posted on the "Current Opportunities" section of NYSERDA's website (https://www.nyserda.ny.gov/Funding-Opportunities/Current-Funding-Opportunities.aspx.

I. INTRODUCTION

The future transmission and distribution system will be dramatically different from that which is in place today. Systematic improvements to grid investments and operations are possible at all levels of the grid and are an essential element of the transformation of the grid and enable market development envisioned by NY's Reforming the Energy Vision (REV) initiative. In 2016, the Joint Utilities of New York filed their first Distributed System Implementation Plan (DSIP) that describes current capabilities and future goals to support REV. Each utility has since filed DSIP updates in 2018 that include their unique system challenges. This solicitation seeks to make investments that accelerate the realization of an advanced, digitally enhanced and dynamically managed high-performing electric grid for New York State. The focus of this solicitation will enable innovative solutions that directly address those unique challenges faced by each utility.

Projects that promote high performing smart grid technologies, components and/or systems within the New York regulated electric service territories (Consolidated Edison, Orange and Rockland, New York State Electric and Gas (Avangrid), Rochester Gas and Electric (Avangrid), Central Hudson Gas and Electric, and National Grid) and meet the Program Requirements are eligible for funding under this solicitation. Only those projects in Central Hudson Gas & Electric and National Grid service territories will be considered for funding in Round 2. The program strives to coordinate its activities with the Reforming the Energy Vision (REV) initiative being pursued in New York State. All projects must demonstrate broad public benefits to New York State.

Proposals will be evaluated in two distinct project categories listed below in Section III and scored on the evaluation criteria listed in Section VI of this solicitation. All of the submissions will be reviewed by a scoring committee comprised of both internal NYSERDA staff and outside experts including the host utility for the challenge area. All Proposals will be evaluated according to the quality and level of detail provided within page limits. Proposals must include substantive documentation addressing all scoring criteria items. NYSERDA, at its sole discretion, may ask for an in-person presentation of a Proposal before making a funding decision.

II. UTILITY CHALLENGE AREAS

This program will have two rounds. Each round will have a challenge area from one or more utility. Over the course of the solicitation, NYSERDA expects to issue the challenges for five IOU's: Consolidated Edison, Orange & Rockland, National Grid, Central Hudson Gas & Electric and Avangrid. Interested proposers should check each round for the specific Utility Challenge Area. NYSERDA reserves the right to add, delete, or modify any of the challenges over the course of the solicitation. All Proposals must address one of the following Utilities' Challenge Area.

Round 1

- 1. Con Ed Challenge: See Attachment I
- 2. Orange & Rockland Challenge: See Attachment J

Round 2

- 1. Central Hudson Gas & Electric Challenge: See Attachment K.
- 2. National Grid: See Attachment L.

Questions regarding the challenges should be directed to the Designated Contact, Christopher Cheng, 518-862-1090 ext. 3436, <u>smartgrid@nyserda.ny.gov</u>

Do NOT contact the host utility with questions regarding this solicitation or to discuss potential proposals <u>under this solicitation</u>. All contact regarding this solicitation should be directed to the NYSERDA Designated Contact listed above.

III. PROJECT CATEGORIES

This solicitation includes two project categories. **Proposers must indicate under which category they are proposing.** Proposers should give careful consideration under which category to propose, as Proposal requirements differ, so inappropriate choices could negatively affect project selection results. Proposers are encouraged to contact NYSERDA (see cover page for instructions) with technical questions to promote complete understanding of the project categories as described below. One or both project categories may be utilized in a single proposal. The total NYSERDA funding request cannot exceed \$3 million.

Cost Sharing - The proposal should show non-NYSERDA funding of at least 25% of the total cost of the project. Cost sharing can be from the proposer, other team members, and other government or private sources. Contributions of direct labor (for which the laborer is paid as an employee) and purchased materials may be considered "cash" contributions. Unpaid labor, indirect labor, or other general overhead

may be considered "in-kind" contributions. NYSERDA will not pay for efforts which have already been undertaken. The proposer or proposing team cannot claim as cost-share any expenses that have already been incurred. Funding, either direct or in-kind, from the host utility may not be counted towards the 25% cost share requirement.

Category A: Product Development

Includes any work focused on bringing a new or improved product or service to market, including technical feasibility, business case feasibility, market analysis, proof of concept, product design, engineering, scale up, and field testing. Field testing is the stage in which a technology, not yet commercially available with a warranty, is operated in real world conditions with results used for product iteration, market validation, or customer engagement. Projects under this category include the development and commercialization of technologies and products for improving the resiliency, reliability, quality and efficiency of the electrical power delivery system. Note that bench-scale testing and field verification or testing may be included in Category A projects. Product Development projects may lead to a project proposal under Category B: Demonstration Projects to prove out the potential product or technology at a New York State site. Note: Product Development projects are subject to NYSERDA's recoupment terms described in Section VIII.

Category B: Demonstration

• A project intended to increase sales or usage of a commercialized product already in the marketplace, with results used to generate objective performance information for customers or policymakers. At this stage, the product is available for commercial sale and warranteed. While incremental improvements may be incorporated based on the demonstration results, the final product design is essentially complete. Projects in this category **should not** include technology or product development tasks. If technology or product development tasks are necessary, consider proposing in Category A. Projects in Category B should demonstrate innovative new or under-utilized products or technologies in pioneering applications. Proposers must clearly identify whether the demonstration project will support either transmission or local distribution operations.

NYSERDA reserves the right to negotiate the project category, scope of work, budget and funding levels on all awarded projects. Funding requests exceeding \$250,000 from NYSERDA shall be funded in phases separated by Go/No-Go decision points that will be evaluated by NYSERDA staff and the host utility.

Projects using both categories must also incorporate phases with Go/No-Go decision points. For example, a proposer may request consideration of a project that involves a Category A, Phase I Product Development, for product design of a new technology Go/No-Go Decision and then Category B, Demonstration, to validate performance.

- a. Projects with both categories shall briefly describe how it will complete the initial phase(s) and the following phase(s) along with significant milestones and provide an estimate of the total cost and schedule for each phase.
- b. Any contract awarded to fund projects with both categories does not in any way obligate NYSERDA to fund any more than the first phase. NYSERDA reserves the right to negotiate project Categories if it determines the project's efforts are a better fit for a different project Category.
 - i. NYSERDA anticipates issuing a contract with a maximum, "not-to-exceed" amount with subsequent phases only being awarded on a contingent basis as described below.

- ii. NYSERDA reserves the right not to move forward with subsequent phases dependent on project success and availability of funding. Later phases may be funded if, in NYSERDA's sole discretion, milestones from the previous phase have been satisfied, there is still significant potential market impact, and sufficient program funds remain.
- iii. NYSERDA expects it may award more contingent funding, due to project attrition, than is available for this program.
- iv. At the end of each phase, project outcomes will be evaluated to determine if the project will continue to be funded.

Winning proposers will be expected to conduct review meetings for all Go/No-Go Decisions and completion of phases.

NYSERDA encourages teaming arrangements that compliment core competencies to increase probability of success and commercialization of technologies that yield New York State benefits. Teams may include commercial firms, manufacturers, large original equipment manufacturers (OEM), industry associations, research organizations, universities, government agencies, corporate strategic partners, strategic investors, end-users, and other stakeholders. Include letters of commitment from each identified team member in the appendix to the proposal. To the extent possible, the team member responsible for commercializing the technology should be the proposer.

If teaming arrangements cannot be accommodated to fulfill the entire scope of a challenge, NYSERDA will accept proposals that address the area of expertise of the proposer.

PROPOSERS ARE PROHIBITED FROM SEEKING LETTERS OF SUPPORT FROM THE HOST UTILITY

DUE TO THEIR COLLABORATION WITH THE PON. Do not seek letters of support or commitment from the utility hosting the challenge area. The host utility's interest and support for the proposal will be incorporated through their participation in the proposal evaluation process. Proposers are reminded not to contact the host utility with questions regarding this solicitation or to discuss potential proposals under this solicitation with the host utility. Contacting the host utility may result in disqualification from eligibility. All contact regarding this solicitation should be directed to the NYSERDA Designated Contact listed in this solicitation.

IV. PROGRAM REQUIREMENTS

Projects proposed for funding must:

- 1. Address an innovative technology that improves the resiliency, reliability, performance, efficiency and provide new services for the electric power grid while meeting or exceeding the utility's requirement for the challenge area.
- 2. Provide direct and quantifiable energy, environmental, and/or economic benefits to New York State such as emissions reductions (such as greenhouse gases and criteria air pollutants), job creation, product manufacturing and sales, increased resiliency and reliability, higher efficiency, and reduced electric costs.
- 3. Include a project budget using the Attachment E, Budget Form, showing total project cost and proposer cost share. Include a cost-sharing breakdown by project task in the Statement of Work (Sample Statement of Work included as Attachment B).

- 4. Satisfy recoupment obligations to NYSERDA for any new technology or product development effort requesting cumulative NYSERDA funding over \$75,000 upon product commercialization (see terms and conditions in Attachment F, Sample Agreement).
- 5. Demonstrate that the proposer and/or team of proposers are qualified to carry out the submitted project proposal.
- 6. Provide a strong rationale as to how the project will overcome barriers impeding the implementation or adoption of any new or under-utilized technology.
- 7. For projects that develop technologies or products, emphasize development and/or applications of marketable products for near-term commercialization, rather than basic research, and provide an assessment of the addressable market, and discuss an appropriate commercialization path and potential for manufacturing in New York State. Note that even in early-stage projects, initial activities focusing on commercialization (or technology deployment) paths and challenges are essential to assessing benefits, risks, and future resource requirements.
- 8. For demonstration projects, clearly identify how this project will increase sales or usage of a commercialized product already in the marketplace, generate objective performance information for customers or policymakers, and how such demonstration will lead to increased use of the product in New York State. **Demonstration projects must be installed within New York State. See additional requirements for Demonstration Projects below.**
- 9. Provide a letter of commitment from all funding sources and partners.
- 10. Demonstrate that the project and funding request addresses the utility challenge with technology advancements that are not being addressed adequately by current industry practices and/or federal and/or other state research priorities and funding. Include a cost and New York statewide public benefit analysis to justify allocation of funds.
- 11. At the end of the project, perform technology transfer meetings to the stakeholders in the state, industry and other utilities without disclosing utility-specific trade-secrets and/or intellectual property.

Other Considerations

- A proposal may be considered non-responsive if it fails to comply with the requirements of this solicitation.
- Prior to an award being made, potential contractors may be required to demonstrate access to financial resources sufficient to perform the proposed work, technical experience and adequate facilities (or the ability to access them), a good performance record, and the ability to qualify for an award under applicable laws and regulations.
- Preference will be given to proposers that provide higher cash contributions towards project costs.
- External funding partnerships are encouraged to leverage limited New York State resources. Proposers are encouraged to develop projects that leverage funding with external resources partners such as other research and development organizations.
- Proposers may be required to make an in-person presentation, at any time during the open solicitation period, to NYSERDA and host utility prior to a final decision being made.

ADDITIONAL PROGRAM REQUIREMENTS FOR CATEGORY B DEMONSTRATION PROJECTS ONLY

Projects selected for funding must:

1. Have a **New York State demonstration site**.

- 2. Be installed within an appropriate timeframe that aligns with the challenge's schedule, but no longer than 24 months after contract execution.
- 3. Address safety issues, including public safety, that are applicable to the demonstration project.
- 4. Comply with all applicable building, fire, electrical, and interconnection codes, standards, and requirements.
- 5. Provide equipment sensors, instrumentation, and a complete data acquisition system for remote monitoring and reporting as specified below.
- 6. Demonstrate the technology viability and monitor the performance, characteristics, and benefits for a period adequate to meet project goals. If the period is under 18 months, the proposer must discuss why the proposed time is adequate. Unless the proposer demonstrates a compelling reason otherwise, at least 365 operating days of data will be required after commissioning.
- 7. Present an economic analysis of the proposed technology demonstration including an estimated cost/benefit ratio, and a plan to measure the actual cost/benefit ratio during the demonstration. Commercially available proof of technology and its warranty is required.

Data Acquisition Requirements

NYSERDA intends to provide system level operation and performance information, including economic performance information, to all interested stakeholders (ex. New York electric utilities) and the general public on each of the demonstration projects funded under this solicitation. In order to meet this objective, each demonstration project must provide sufficient instrumentation and data transmittal, and analytical capabilities to allow the collection and analysis of technical and economic performance data.

The demonstration project proposal should include system operating data to be used for evaluation and generation of reports on the overall performance of the technology being demonstrated. Data acquisition sampling rates must be adequate to characterize the benefits and the value proposition of the proposed application. For example, sampling rates for applications designed to enhance power quality or system stability would be much higher than sampling rates for peak shaving or arbitrage applications. In the event that the demonstration system performs multiple activities, the system must provide for the collection of data for all activities. All raw and summary data collected at the project sites must be archived and protected from loss on permanent media.

Benefits Data Tracking and Reporting

Data sufficient to demonstrate the energy, environmental, and/or economic benefits defined in the proposal must be measured, collected, analyzed, and recorded. For applications that claim multiple benefits, the proposed data and analysis methods must adequately support the claimed benefit for each of the benefits specified in the proposal.

Reporting Requirements

The proposal must identify the project team member who will be responsible for the preparation and delivery of periodic written project reports. System operational summary information must be generated regularly and be included in progress reports. At a minimum, the system operational summary information must include the following:

- Raw data.
- System performance summary.
- Summary of system reliability and failure rates.
- A written summary of the economic benefit derived for the time period.
- A written summary of all operations and maintenance activities for the time period.

- System dispatch information and use patterns associated with the project, as appropriate.
- Energy consumption breakdown of parasitic loads introduced by the demonstration system, as appropriate.
- System performance under typical utility fault conditions, e.g. lightning strikes, primary phase to ground faults, voltage sags/spikes, electric outages, etc., as appropriate.
- System performance under user fault conditions, e.g. fault in customer plant, as appropriate.

Reports must be generated that consolidate all the information from the reports and summarize demonstration system performance for the preceding year.

Historical Performance Data Reporting

Where appropriate to document project benefits, historical utility system operational data prior to the installation of the demonstration system is required in order to provide credible baseline data on electrical system performance before and after the installation of the demonstration system. Information concerning load profiles, peaks, overloads, faults, power quality events, and any other information required to fully characterize the operation of the electrical utility at the demonstration site prior to installation of the demonstration system must be collected by the proposer for a reasonable period of time. Comparison information must be made part of the progress reports.

V. PROPOSAL REQUIREMENTS

Prior to Submission

Prior to submitting a Proposal to this solicitation, any proposers may communicate with NYSERDA's Designated Contact to discuss a concept and its potential responsiveness to this solicitation. Communication with NYSERDA staff prior to submission is entirely optional and is not required prior to submission.

Submissions and Review

Proposals determined to be compliant with application procedures and responsive to the solicitation will be subject to review by a scoring committee comprising NYSERDA, the host utility and external technical experts in accordance with Section VI, Proposal Scoring Criteria. Only the most technically meritorious Proposals will be awarded an invitation from NYSERDA to enter into a contract. Proposals not meriting an award for contracting may be debriefed.

To submit a Proposal, complete the Proposal Narrative form-fillable document as part of the PON (Attachment A). The Funding Category must be clearly indicated. The Proposal Narrative contains the following sections:

- Executive Summary
- Problem Statement and Proposed Solution
- State of Research and Technology Targets
 - Attachment C: Technology Readiness Level/Commercial Readiness Level Calculator
 - Commercialization Potential of Proposed Product
 - Attachment D: Three-Year Financial Projections Worksheet
- Demonstration Project Information (Category B)
- Statement of Work (Attachment B) and Schedule
- Project Benefits

•

- Budget Form (Attachment E)
- Proposer Qualifications
- Letters of Support
- Attachments

Proposers must carefully review the Proposal Narrative to ensure that all required sections are completed. Failure to do so may result in the proposal being rejected as non-responsive.

Note: The proposer's goal should be to concisely present the information needed to fully address the scoring criteria (see Section VI). Proposals that grossly exceed the word limits or fail to follow the format guidelines may be rejected as non-responsive. Proposals deemed non-responsive will not be eligible for awards. If you believe proprietary information must be submitted to provide an adequate proposal, you must comply with the Section VIII instructions for submitting proprietary material. Unnecessary attachments beyond those sufficient to present a complete, comprehensive, and effective proposal may reduce, rather than increase, a proposal's standing per the scoring criteria. Each page of the proposal should state the name of the proposer, the PON number (PON 4128), and the page number.

VI. PROPOSAL SCORING CRITERIA

Proposals will be reviewed by a Scoring Committee and will be scored and ranked according to the following criteria. After the submissions are reviewed, NYSERDA will issue a letter to each proposer indicating its Proposal evaluation results. Proposers receiving favorable evaluations will be invited to either submit a Proposal or enter into contract negotiations with NYSERDA. After initial review of the Proposal, the Proposer, at NYSERDA's sole discretion, may be asked to address specific questions or provide additional information, either in writing or through an interview, as part of the Proposal scoring process. The Proposer will be required to submit a detailed Statement of Work, Budget, and Schedule, and may also be asked to address specific recommendations of the Scoring Committee before contract award.

PROPOSAL SCORING CRITERIA:

Problem and Proposed Solution (All Categories) -

- Does the proposed project specifically address the problem or opportunity identified in the Challenge Area and does it show potential to make significant progress in support of the host utility's goals?
- Is the proposed work technically feasible, innovative, and superior to alternatives?
- Are the commercialization tasks likely to be effective in advancing the technology to market?
- Are fundamental scientific principles well understood and clearly presented?
- How appropriate are the cost, technical, performance and commercialization goals for the proposed technology or product?
- Does the proposer exhibit an understanding of the state-of-the-art, competing products and alternative designs?
- If the proposed work is a follow-on project to a previously co-funded NYSERDA or utility project, what was the outcome of the earlier phase?
- Does the proposed solution have a high potential for commercialization, addressing demonstrated customer needs and significant markets?

Proposed Work (Category B only) –

- How significant is the demonstration opportunity to New York State?
- How well does the proposed solution address the problem or opportunity?
- Is the proposed demonstration innovative and is it appropriate that the proposed demonstration be funded under this program as opposed to a NYSERDA program that provides incentives to install certified, commercially-ready technologies?
- Is the proposed demonstration well-conceived, technically feasible, and superior to alternatives?
- Does the proposer exhibit an understanding of the state-of-the-art, competing products and alternative designs?
- Is an appropriate performance monitoring and data analysis effort included in the proposal?
- If the proposed work is follow-on to a previously co-funded NYSERDA or utility project, what was the outcome of the earlier phase?
- Will the proposer be able to meet the contractual considerations from the utility as described in Appendices I and J?

New York State Impact and Project Benefits (All Categories) -

- To what extent does the project support the Reforming the Energy Vision (REV) goals, grid modernization in general, the Clean Energy Standard, and the Clean Energy Fund goals in New York State?
- To what extent will there be economic benefits in New York State in the form of subsequent commercial activity and economic growth?
- Are the appropriate letters of support and/or commitments included in the proposal?
- How well are the potential benefits to New York State quantified?
- How likely is it that the projected benefits will be realized?
- Does the proposed project have favorable energy, efficiency, environmental and/or economic impacts in New York State? How significant are these impacts?
- Are the technical risks identified, appropriately addressed, and balanced by project benefits?
- Does the proposal address an innovative technology that improves performance, quality or reliability / resiliency of the electric power system?

Statement of Work and Schedule -

- How appropriate are the technical, performance and commercialization goals for the proposed project?
- Do the proposed technical and performance goals adequately allow for measurement and verification of the success of the proposed project?
- Does the work strategy in the Statement of Work include technical and business development tasks and is likely to achieve the technical, performance and commercialization goals?
- Does the Statement of Work include an economic analysis of the technology based on performance measurements?
- Is the Statement of Work well organized, complete, and appropriate for the technical, performance and commercialization goals identified?
- How realistic is the schedule for achieving the goals of the proposed project?
- Is the proposed level of effort reasonable to complete the proposed project?
- Are the proposed milestones and tasks reasonable and complete in details?
- Are Go/No-Go decision points incorporated at between logical task/phase completion and funding requests.

The following criteria apply to Category B projects only:

- Are the data acquisition, monitoring, and reporting plans reasonable and do they meet the requirements in Section IV, ADDITIONAL PROGRAM REQUIREMENTS FOR CATEGORY B DEMONSTRATION PROJECTS ONLY?
- Is the benefits tracking plan reasonable and does it meet the requirements in Section V, ADDITIONAL PROGRAM REQUIREMENTS FOR CATEGORY B DEMONSTRATION PROJECTS ONLY?
- If monitoring baseline utility system operation is necessary to document system benefits, does the Statement of Work include a provision to adequately gather baseline utility operational data?

Proposer / Team Qualifications -

- Has the proposer provided evidence of being qualified to perform the proposed work based on the qualifications of the organization(s) and the involved individual(s)?
- Were resumes of key individuals included in the proposal?
- To what degree does the proposer and team have the necessary technical and business background and experience?
- Has the proposer provided evidence of good past performance on other relevant projects?
- Is the proposing team appropriately organized?
- Are staff allocations and responsibilities reasonable?

Project Cost and Value (All Categories) -

- Is the overall project cost justified and reasonable based on the level of effort proposed and the expected outcome and benefits?
- How significant is the potential market opportunity relative to the project cost?
- How appropriate are the proposer's co-funding contributions (sources and amounts) with respect to the degree of risk, potential to benefit from the work, and financial status of the organization?
- How firm are the commitments and support from essential participants, co-funders, and related businesses and other organizations?
- Are the overhead rates reasonable and supported with appropriate documentation?
- Are equipment, facility, material, and travel costs based on reasonable estimates?
- Are the labor rates reflective of the industry?

Technology Transfer / Repeatability-

- Does the proposed technology have commercial applications at other New York State sites?
- Does the proposed project demonstrate an effective strategy and strong potential for the project to lead to future use of the technology in New York?
- Does the proposed technology address market needs?

Business/Commercialization Plan -

- Is the proposed product or concept likely to be successful?
- Are there sufficient markets or needs for the concept/technology?
- How significant is the commercial potential of this technology?
- How widely deployed can the technology be, both in New York and globally?
- Are the business and commercialization or replication plans appropriate for the type of project and stage of development?
- How significant are the barriers to market entry?
- Does the proposer demonstrate a clear understanding of the steps required to overcome these barriers?
- Have customers been identified and consulted regarding the value of the technology or solution?

- Is the value proposition of the technology well matched to the expressed needs of the customer segments being targeted?
- Does the proposal identify competing and alternate solutions, and clearly show why this product or concept is superior to, price competitive with, or provides value compared to alternative products or solutions?
- If follow-on financial resources are necessary, are plans to raise necessary financial resources likely to be successful?
- How well are the project tasks directed at identifying and fulfilling customer requirements? How far will execution of the work plan take the product to full commercialization?
- Would achievement of technical and business goals position the company to raise capital or realize revenue from the product before NYSERDA funding is exhausted?

Other Program Policy Factors – In addition to considering how project Proposals satisfy the Scoring Criteria listed above, NYSERDA reserves the right to make funding decisions on the basis of other Program Policy Factors, including but not limited to:

New York State Energy Mission Alignment

- The degree to which the proposed project will advance the goals of the State Energy Plan / Clean Energy Fund / REV.
 - The State Energy Plan / Clean Energy Fund / REV goals include improving resilience and reducing greenhouse gas emissions. <u>https://rev.ny.gov/</u>
 - Project continues to contribute to one or more of NYSERDA's key statutory goals. <u>https://www.nyserda.ny.gov/About</u>

Program Portfolio Value and Optimization

- The degree to which NYSERDA ongoing funding, (incl. cost shares), will make a difference in the technology impact, acceleration of transformational advances and project success.
- The degree of overlap with other state and federal programs.
- The degree to which there are technical, market, organizational and/or environmental risks associated with the projects that outweigh the potential benefits.
- The past performance of the proposer on other technical and business endeavors, including NYSERDA and DOE, ARPA-E, NSF, (if the performance history is available).
- The degree of NYSERDA portfolio balance/optimization. The project(s) balance(s) and enhances the NYSERDA portfolio in one or more of the following areas:
 - Technological diversity
 - Organizational diversity
 - Geographic diversity
 - Technical or commercialization risk
 - Stage of technology development
 - Complimentary efforts to balance risk

Project Diversity, Leverage and Collaboration

- The consideration of the impact on, and benefits to, a diversity of communities/locations, including low-income and rural communities, partnerships with minority serving and/or owned businesses.
- The degree of ongoing leverage; attracting other funding sources: building on the NYS capabilities: linking technologies and/or companies.

- The degree to which the applicant has enabled the resources (human, financial and physical) to be able to complete the project.
- The degree to which the project enables collaboration with nongovernmental and industry entities for demonstration of technologies and research applications to successfully facilitate technology transfer, leading to robust technology development and subsequent scaling and market adoption.
- The degree to which a proposer could attract investor funding as the project progresses, including seed, Series A, high net worth individuals and beyond.

VII. RECOUPMENT AND METRICS

Recoupment - For any new projects exceeding \$75,000 in NYSERDA funding that involve product development, including business development, NYSERDA will require a royalty based on sales and/or licensing of the new product developed (Please see Attachment F, Sample Agreement for specific recoupment obligations). Recoupment is not required for demonstration projects. Please see the definitions below to determine if your project will be subject to recoupment. Please note that NYSERDA will make final determinations as to whether proposals fit within the demonstration or product development categories.

- <u>Product Development:</u> Includes any work focused on bringing a new or improved product or service to market, including technical feasibility, business case feasibility, market analysis, proof of concept, product design, engineering, scale up, and field testing. Field testing is the stage in which a technology, not yet commercially available with a warranty, is operated in real world conditions with results used for product iteration, market validation, or customer engagement. Projects under this category include the development and commercialization of technologies and products for improving the resiliency, reliability, quality and efficiency of the electrical power delivery system. Note that bench-scale testing and field verification or testing may be included in Category B: Demonstration Projects to prove out the potential product or technology at a New York State site. Note: Product Development projects are subject to NYSERDA's recoupment terms described in Section VII.
- <u>Demonstration</u>: a project intended to increase sales or usage of a commercialized product already in the marketplace, with results used to generate objective performance information for customers or policymakers. At this stage, the product is available for commercial sale and warranted. While incremental improvements may be incorporated based on the demonstration results, the final product design is essentially complete. Note: pilot deployments or other field demonstrations that will inform additional product development will be considered as a Product Development project and therefore subject to recoupment.

Projects where NYSERDA's share of funding is \$75,000 or less will generally not require recoupment. Please note: NYSERDA may decline to contract with awardees that are delinquent with respect to recoupment payments or sales reporting for any previous NYSERDA agreement.

Annual Metrics Reports – If awarded, the proposer will be required to submit to NYSERDA's Project Manager on an annual basis, a prepared analysis and summary of metrics addressing the anticipated energy, environmental and economic benefits that are realized by the project. All estimates shall

reference credible sources and estimating procedures, and all assumptions shall be documented. Reporting shall commence the first calendar year after the contract is executed. Reports shall be submitted by January 31st for the previous calendar years' activities (i.e. reporting period). Please see Attachment H1 & H2: Sample Metrics Reporting Guides for the metrics that you will be expected to provide and the reporting duration. NYSERDA may decline to contract with awardees that are delinquent with respect to metrics reporting for any previous or active NYSERDA agreement.

VIII. GENERAL CONDITIONS

Confidential and Proprietary Information - Careful consideration should be given before confidential information is submitted to NYSERDA as part of your proposal. Review should include whether it is critical for evaluating a proposal, and whether general, non-confidential information, may be adequate for review purposes. The NYS Freedom of Information Law, Public Officers law, Article 6, provides for public access to information NYSERDA possesses. Public Officers Law, Section 87(2)(d) provides for exceptions to disclosure for records or portions thereof that "are trade secrets or are submitted to an agency by a commercial enterprise or derived from information obtained from a commercial enterprise and which if disclosed would cause substantial injury to the competitive position of the subject enterprise." Information submitted to NYSERDA that the proposer wishes to have treated as proprietary, and confidential trade secret information, should be identified and labeled "Confidential" or "Proprietary" on each page at the time of disclosure. This information should include a written request to except it from disclosure, including a written statement of the reasons why the information should be excepted. See Public Officers Law, Section 89(5) and the procedures set forth in 21 NYCRR Part 501 https://www.nyserda.ny.gov/About/-/media/Files/About/Contact/NYSERDA-Regulations.ashx.

Omnibus Procurement Act of 1992 - It is the policy of New York State to maximize opportunities for the participation of New York State business enterprises, including minority- and women-owned business enterprises, as bidders, subcontractors, and suppliers on its procurement Agreements.

Information on the availability of New York subcontractors and suppliers is available from:

Empire State Development Division for Small Business 625 Broadway Albany, NY 12207

A directory of certified minority- and women-owned business enterprises is available from:

Empire State Development Minority and Women's Business Development Division 625 Broadway Albany, NY 12207

State Finance Law sections 139-j and 139-k - NYSERDA is required to comply with State Finance Law sections 139-j and 139-k. These provisions contain procurement lobbying requirements which can be found at <u>https://online.ogs.ny.gov/legal/lobbyinglawfaq/default.aspx</u>. Proposers are required to answer questions during proposal submission, which will include making required certification under the State

Finance Law and to disclose any Prior Findings of Non-Responsibility (this includes a disclosure statement regarding whether the proposer has been found non-responsible under section 139-j of the State Finance Law within the previous four years).

Tax Law Section 5-a - NYSERDA is required to comply with the provisions of Tax Law Section 5-a, which requires a prospective contractor, prior to entering an agreement with NYSERDA having a value in excess of \$100,000, to certify to the Department of Taxation and Finance (the "Department") whether the contractor, its affiliates, its subcontractors and the affiliates of its subcontractors have registered with the Department to collect New York State and local sales and compensating use taxes. The Department has created a form to allow a prospective contractor to readily make such certification. See, ST-220-TD (available at http://www.tax.ny.gov/pdf/current_forms/st/st220td_fill_in.pdf). Prior to contracting with NYSERDA, the prospective contractor must also certify to NYSERDA whether it has filed such certification with the Department. The Department has created a second form that must be completed by a prospective contractor prior to contacting and filed with NYSERDA. See, ST-220-CA (available at http://www.tax.ny.gov/pdf/current_forms/st/st220ca_fill_in.pdf). The Department has developed guidance for contractors which is available at http://www.tax.ny.gov/pdf/current_forms/st/st220ca_fill_in.pdf). The Department has developed guidance for contractors which is available at http://www.tax.ny.gov/pdf/current_forms/st/st220ca_fill_in.pdf). The Department has developed guidance for contractors which is available at http://www.tax.ny.gov/pdf/current_forms/st/st220ca_fill_in.pdf). The Department has developed guidance for contractors which is available at http://www.tax.ny.gov/pdf/publi

Contract Award - NYSERDA anticipates making multiple awards under this solicitation. NYSERDA anticipates a contract duration of up to three (3) years, unless NYSERDA management determines a different structure is more efficient based upon proposals received. A contract may be awarded based on initial applications without discussion, or following limited discussion or negotiations pertaining to the Statement of Work. Each proposal should be submitted using the most favorable cost and technical terms. NYSERDA may request additional data or material to support applications. NYSERDA will use the Sample Agreement (Attachment F) to contract successful proposals. NYSERDA may at its discretion elect to extend and/or add funds to any project funded through this solicitation. NYSERDA reserves the right to limit any negotiations to exceptions to standard terms and conditions in the Sample Agreement to those specifically identified in the checklist questions. Proposers should keep in mind that acceptance of all standard terms and conditions will generally result in a more expedited contracting process. NYSERDA expects to notify proposers in approximately six (6) weeks from the proposal due date whether your proposal has been selected to receive an award. NYSERDA may decline to contract with awardees that are delinquent with respect to any obligation under any previous or active NYSERDA agreement.

Recoupment - For any new product research and/or development, NYSERDA will generally require a royalty based on sales of the new product developed. NYSERDA's standard royalty terms are 1% of sales/ten percent (10%) of all license revenue accruing to the Contractor for products produced (for a period of fifteen years or until the Contractor pays NYSERDA an amount equal to the amount of funds paid by NYSERDA to the Contractor, whichever comes first).

Accessibility Requirements - If awardees from this solicitation will be posting anything on the web, or if the awardee will produce a final report that NYSERDA will post to the web, the following language must be included. NYSERDA requires contractors producing content intended to be posted to the Web to adhere to New York State's Accessibility Policy. This includes, but is not limited to, deliverables such as: documents (PDF, Microsoft Word, Microsoft Excel, etc.), audio (.mp3, .wav, etc.), video (.mp4, .mpg, .avi, etc.), graphics (.jpg, .png, etc.), web pages (.html, .aspx, etc.), and other multimedia and streaming media content. For more information, see <u>NYSERDA's Accessibility Requirements</u>.

Limitation - This solicitation does not commit NYSERDA to award a contract, pay any costs incurred in preparing a proposal, or to procure or contract for services or supplies. NYSERDA reserves the right to

accept or reject any or all proposals received, to negotiate with all qualified sources, or to cancel in part or in its entirety the solicitation when it is in NYSERDA's best interest. NYSERDA reserves the right to reject proposals based on the nature and number of any exceptions taken to the standard terms and conditions of the Sample Agreement. NYSERDA reserves the right to disqualify proposers based upon the results of a background check into publicly available information and the presence of a material possibility of any reputational or legal risk in making of the award.

Disclosure Requirement - The proposer shall disclose any indictment for any alleged felony, or any conviction for a felony within the past five years, under the laws of the United States or any state or territory of the United States and shall describe circumstances for each. When a proposer is an association, partnership, corporation, or other organization, this disclosure requirement includes the organization and its officers, partners, and directors or members of any similarly governing body. If an indictment or conviction should come to the attention of NYSERDA after the award of a contract, NYSERDA may exercise its stop-work right pending further investigation or terminate the agreement; the contractor may be subject to penalties for violation of any law which may apply in the particular circumstances. Proposers must also disclose if they have ever been debarred or suspended by any agency of the U.S. Government or the New York State Department of Labor.

Vendor Assurance of No Conflict of Interest or Detrimental Effect - The proposer shall disclose any existing or contemplated relationship with any other person or entity, including any known relationships with any member, shareholders of 5% or more, parent, subsidiary, or affiliated firm, which would constitute an actual or potential conflict of interest or appearance of impropriety, relating to other clients/customers of the proposer or former officers and employees of NYSERDA, in connection with proposer's rendering services as proposed. If a conflict does or might exist, please describe how your company would eliminate or prevent it. Indicate what procedures will be followed to detect, notify NYSERDA of, and resolve any such conflicts.

The proposer must disclose whether it, or any of its members, or, to the best of its knowledge, shareholders of 5% or more, parents, affiliates, or subsidiaries, have been the subject of any investigation or disciplinary action by the New York State Commission on Public Integrity or its predecessor State entities (collectively, "Commission"), and if so, a brief description must be included indicating how any matter before the Commission was resolved or whether it remains unresolved.

Public Officers Law – For any resulting awards, the Contractor and its subcontractors shall not engage any person who is, or has been at any time, in the employ of the State to perform services in violation of the provisions of the New York Public Officers Law, other laws applicable to the service of State employees, and the rules, regulations, opinions, guidelines or policies promulgated or issued by the New York State Joint Commission on Public Ethics, or its predecessors (collectively, the "Ethics Requirements"). Proposers are reminded of the following Public Officers Law provision: contractors, consultants, vendors, and subcontractors may hire former NYSERDA employees. However, as a general rule and in accordance with New York Public Officers Law, former employees of NYSERDA may neither appear nor practice before NYSERDA, nor receive compensation for services rendered on a matter before NYSERDA, for a period of two years following their separation from NYSERDA service. In addition, former NYSERDA employees are subject to a "lifetime bar" from appearing before any state agency or authority or receiving compensation for services regarding any transaction in which they personally participated, or which was under their active consideration during their tenure with NYSERDA.

Any awardee will be required to certify that all of its employees, as well as employees of any subcontractor, whose subcontract is valued at \$100,000 or more who are former employees of the State and who are assigned to perform services under the resulting contract, shall be assigned in accordance with all Ethics Requirements. During the term of any agreement, no person who is employed by the contractor or its subcontractors and who is disqualified from providing services under the contract pursuant to any Ethics Requirements may share in any net revenues of the contractor or its subcontractors derived from the contract. NYSERDA may request that contractors provide it with whatever information the State deems appropriate about each such person's engagement, work cooperatively with the State to solicit advice from the New York State Joint Commission on Public Ethics, and, if deemed appropriate by the State, instruct any such person to seek the opinion of the New York State Joint Commission on Public Ethics. NYSERDA shall have the right to withdraw or withhold approval of any subcontractor if utilizing such subcontractor for any work performed would be in conflict with any of the Ethics Requirements. NYSERDA shall have the right to terminate any contract at any time if any work performed is in conflict with any of the Ethics Requirements.

Due Diligence – NYSERDA, at its discretion, may conduct broad due diligence to validate any or all elements of an application and to assess applicants' prospects of success, including gathering information to assess a proposal relative to any of the topics listed in evaluation criteria, whether or not such topic is explicitly addressed in a proposal. NYSERDA may conduct due diligence on some or all proposals based on NYSERDA's current guidelines at the time of a review. NYSERDA staff may follow up with proposers to request additional information or clarification regarding applicant's proposal, including questions regarding applicant's business prospects and resources, whether or not those questions are specifically related to the elements of the proposal. Additionally, customized due diligence may be conducted by internal or external staff or contractors based on guestions on any proposal raised by NYSERDA staff and/or the Scoring Committee. Due diligence may include (but is not limited to): interviews of independent references and background checks of team members; assessment of prior business experience of any team member associated with a proposal; research on intellectual property claims; customer and partner reference checks; market research on the applicants' target market and any other related or possibly competitive technology or market area; research to validate any assumptions on current or future revenues, costs, capital needs, and financing prospects for proposers' business, including similar (or unrelated) technologies, processes, or competitive solutions; or any other research that could reasonably inform the evaluation of a proposal, or the prospects for commercial success of the proposers' business (whether directly related to, or unrelated to the specific elements in a proposal). Due diligence may include discussions with proposers' former and current business partners, employees, investors, customers, and competitors. Due diligence may be conducted by NYSERDA personnel or contractors including members of the scoring committee, before, during, or after a scoring process, and prior to finalization of a contract award, any information gleaned in diligence may be used to score or re-score a proposal

IX. ATTACHMENTS

- Attachment A Proposal Narrative Format
- Attachment B Statement of Work Template
- Attachment C TRL-CRL Calculator Workbook
- Attachment D 3 Year Financial Projection Worksheet
- Attachment E Budget Form & Instructions
- Attachment F Sample Agreement

Attachment G – Business Model Canvas

Attachment H1 – Product Development Metrics

Attachment H2 – Demonstration Metrics

Attachment I – Consolidated Edison Challenge

Attachment J – Orange & Rockland Challenge

Attachment K – Central Hudson Gas & Electric Challenge

Attachment L – National Grid Challenge



Peoplesoft Support Services

Request for Proposal (RFP) 4091 NYSERDA reserves the right to extend and/or add funding to the Solicitation should other program funding sources become available.

Proposals Due: June 7th by 3:00 p.m. Eastern Time*

The New York State Energy Research and Development Authority (NYSERDA) is soliciting proposals from qualified contractors to propose PeopleSoft Support Services solutions to serve the finance and contracts management needs of NYSERDA. From among the Proposals received, the Authority intends to select a qualified vendor to provide design, implementation, patching and upgrade services related to the Authority's continued support of Peoplesoft Systems. The term of the agreement will be 5 years. The Authority reserves the sole right to terminate the contract early.

NYSERDA is seeking proposals from vendors who are Oracle certified partners that provide PeopleSoft support solutions to provide competitive, descriptive proposals for NYSERDA's consideration. **Proposal Submission:** Online submission is preferable. Proposers may submit Word, Excel, or PDF files (file formats include: csv, doc, docx, gif, jpeg, jpg, pdf, png, ppt, pptx, pps, ppsx, tif, txt, xls, xlsx, and zip). Individual files should be 100MB or less in file size. Proposal PDFs should be searchable and should be created by direct conversion from MS Word, or other conversion utility. Files should not be scanned. For ease of identification, all electronic files must be named using the proposer's entity name in the title of the document. NYSERDA will also accept proposals by mail or hand-delivery if online submission is not possible. For detailed instructions on how to submit a proposal (online or paper submission), click the link "Application Instructions and Portal Training Guide [PDF] " located in the "Current Opportunities" section of NYSERDA's website (<u>https://www.nyserda.ny.gov/Funding-Opportunities/Current-Funding-Opportunities.aspx</u>).

No communication intended to influence this procurement is permitted except by contacting Keith Alber, Software Development Manager at (518) 862-1090, ext.3466_or by e-mail <u>InformationTechnology.RFP@nyserda.ny.gov</u>. All Technical questions concerning this solicitation should also be submitted to Keith Alber with the subject line "RFP 4091 Question". If you have contractual questions concerning this solicitation, contact Assistant Contract Manager Venice Forbes) at (518) 862-1090, ext. 3507or <u>VeniceSolicitations@nyserda.ny.gov</u>. Contacting anyone other than the Designated Contacts (either directly by the proposer or indirectly through a lobbyist or other person acting on the proposer's behalf) in an attempt to influence the procurement: (1) may result in a proposer being deemed a non-responsible offeror, and (2) may result in the proposer not being awarded a contract.

* All proposals must be received by 3 p.m. Eastern Time on the date noted above. Late, faxed, or emailed proposals will not be accepted. Incomplete proposals may be subject to disqualification. It is the proposer's responsibility to ensure that all pages have been included in the proposal. Please note: for online submission, there are required questions that you will have to answer in addition to uploading attachments and you should allot at least 60 minutes to enter/submit proposals. The online proposal system closes promptly at 3 p.m. Eastern Time, files in process or attempted edits or submission after 3 p.m. Eastern Time on the date above, will not be accepted. If changes are made to this solicitation, notification will be posted on the "Current Opportunities" section of NYSERDA's website (https://www.nyserda.ny.gov/Funding-Opportunities/Current-Funding-Opportunities.aspx .

1. Introduction

The New York State Energy Research and Development Authority (NYSERDA) is a public benefit organization committed to identifying opportunities for reducing commercial and residential energy consumption, promoting the use of renewable energy sources, and protecting the environment. NYSERDA provides financial and technical assistance to help consumers, businesses and institutions assess and implement cost-saving energy efficiency measures.

Energy efficiency programs offered at NYSERDA also strive to provide affordable energy and a cleaner environment for all New Yorkers. This is accomplished by increasing public awareness of the multiple benefits of energy efficiency, by providing residential building performance services, and by making energy-efficient products more widely available to consumers.

NYSERDA owns and operates several PeopleSoft servers and environments which run PeopleSoft Financials & Supply Chain Management (FSCM) and Phire Change Management. NYSERDA requires professional services for support that include consultants with the ability to provide PeopleSoft services including, but not limited to: PeopleSoft Administration, PeopleSoft Business Analysis, PeopleSoft Development, PeopleSoft Database Administration, and Project Management. The Contractor must be experienced and qualified in PeopleSoft environments for PeopleTools v8.56+ and PeopleSoft Financials Enterprise v9.2.

The objective of this RFP is to find PeopleSoft support services that will lead and assist with upgrades and patching to ensure all PeopleSoft environments meet NYS cyber security standards and NYS policy. At least one dedicated, full-time Peoplesoft Business Analysts is required for daily production support and developing requirements for enhancements to the existing system. NYSERDA requires a vendor that can also provide optional on-demand resources in support of the following:

- PeopleSoft production support
- Administration
- Business analysis
- Development in support of customizations
- Assisting with the adoption of new features and functionality following best practices.

On-Demand services will be billable to NYSERDA for short term projects on an as needed basis, and shall be employees of the selected vendor. Scheduling of on-demand resources will be coordinated in advance between Contractor's Service Manager and NYSERDA's Project Manager.

1.1 Current PeopleSoft Environment

NYSERDA currently runs 11 FSCM modules including:

- Asset Management
- Billing
- Contracts
- E-Supplier Connection
- General Ledger
- Grants
- Payables
- Project Costing
- Purchasing
- Receivables
- Supplier Contract Management

Technical Environment:

- Currently hosted in a VMware environment offsite at WebAir
- NYSERDA is using Oracle PeopleSoft PeopleTools 8.56 on FSCM 9.2 Image 29

- NYSERDA's PeopleSoft environment resides on Windows Server 2012 R2
- NYSERDA's PeopleSoft Database is on SQL Server 2016.
- Phire version 12.2 is used for NYSERDA's Change Management System.

Peoplesoft Instances for Support			
Database	Use	Notes	
FSCM Demo	PeopleSoft Vanilla	PeopleSoft Demo data	
FSCM Development	Development	Loaded with NYSERDA data, refreshed quarterly	
FSCM Quality Assurance	QA	Loaded with NYSERDA data, refreshed monthly	
FSCM Debug	Production Troubleshooting	Loaded with NYSERDA data, refreshed nightly from production.	
FSCM User Acceptance Testing	UAT	Loaded with NYSERDA data, replicates production architecture, utilized for major upgrades.	
FSCM Training	Training	Loaded with NYSERDA training data, refreshed on demand for training purposes.	
FSCM Production	Production		
Phire Development	Change management Development	Loaded with NYSERDA data, refreshed on demand	
Phire Production	Production		

Current Transaction Data details:

The current NYSERDA PeopleSoft FSCM environment includes approximately 500 active users including program staff, contract staff, finance staff and other administrative users. There are approximately 12,000 active vendors, 150,000 Purchase Orders, 700,000 vouchers, 120,000 supplier contracts and 2,800 Requisitions.

Current Customizations in Use:

NYSERDA is moderately customized, Table 2 below outlines the approximate number of customizations done to its PeopleSoft system. This list does not include objects such as process definitions, queries, permission lists, portal definitions etc. Table 2 should only be used as a rough estimation and does not represent the final list of customizations. "Bolt-On" represents the approximate number of custom objects created. "Customized" represents the approximate number of be objects that have been customized. "Total" represents the total approximate number of objects customized.

Approximate Customization List for FSCM			
Object Type	Bolt-On	Customized	Total
Record	270	42	312
Index Field	13	1	14
Field	204	6	210
Translates	135	35	170
Page	77	33	110
Menu	1	6	7
Component	48	6	54
Record PeopleCode	244	64	308
Tree Structures	1	D	1
Business Processes	1	0	1

Activities	3	D	3
Process Definition	105	26	131
Server Definitions	D	D	0
Job Definitions	9	2	11
Recurrence Definitions	38	8	46
SQL	283	17	300
File Layouts	4	1	5
Component Interfaces	14	2	16
Application Engine	36	3	39
Application Engine Sections	82	D	82
Approval Rule Sets	5	D	5
Application Engine PeopleCode	62	1	63
Page PeopleCode	17	11	28
Component PeopleCode	D	4	4
Component Record PeopleCode	D	2	2
Component Record Field PeopleCode	19	3	22
Images	30	6	36
HTML	1	0	1
Application Package	7	0	7
Application Package PeopleCode	4	12	16
Related Content Definition	11	0	11
Related Content Services	9	0	9
Related Content Configurations	16	0	16
Related Content Layouts	10	0	10

2. Program Requirements

The scope of work to be performed by the Contractor consists of tasks relevant to the PeopleSoft stack of technologies. Any task to be performed will be detailed by NYSERDA's Project Manager after a meeting (by phone or in person) with the Contractor to work out details for the tasks. Following written authorization by the NYSERDA Program Manager, the Contractor shall perform the following tasks:

- 1. Business Analysis: The Contractor will work with NYSERDA to provide at least one qualified PeopleSoft Business Analysts on a dedicated, full-time basis to provide production support, gather and document requirements and develop test scripts in support of customizations and new development for SQR, App Engine, BI Publisher, Integration Broker, PeopleCode, etc. and provide testing, training and training materials in support of NYSERDA'S various PeopleSoft systems.
- 2. PeopleSoft Administration: The Contractor shall work with NYSERDA to provide qualified PeopleSoft Administrator(s) to help with functions including, but not limited to, patches and upgrades to all required technologies in the PeopleSoft stack including PeopleTools, PUM upgrades, Weblogic, Java, Tuxedo, process scheduler and application server configuration, Elastic Search, PeopleSoft Test Framework, role based security, general production support and troubleshooting of performance issues in support of NYSERDA's various PeopleSoft environments.

- **3. Database Administration:** The Contractor shall work with NYSERDA to provide PeopleSoft database-related functions including but not limited to administration, security, tuning, maintenance, SQL scripting, SQL Agent job creation and support, ETL, etc.
- 4. PeopleSoft Development: The Contractor will work with NYSERDA to provide qualified developers on an as-needed basis to accommodate customizations and new development for SQR, App Engine, BI Publisher, Integration Broker, PeopleCode, etc. as detailed in functional specifications provided by NYSERDA or Contractor's PeopleSoft Business Analyst, as well as retrofitting of customizations during upgrades in support of NYSERDA'S various PeopleSoft systems.
- 5. Project Management: The Contractor will work with NYSERDA to provide qualified Project Management as needed. It is expected the Contractor will utilize formal Project Management techniques that will allow staff to better track large projects including, but not limited to, PeopleTools and PUM upgrades. The Contractor shall use formal management tools, such as Microsoft Project, and provide reports based on that information as requested.
- 6. Optional Services: The contractor will provide appropriate on-demand resources in support of the adoption of new PeopleSoft features and functionality, customizations, new development, system reliability, security, etc.

2.1 Deliverables

Deliverables shall include, but are not limited to the following:

PeopleSoft Administration

- Patching and upgrades for all PeopleSoft services falling under the PeopleSoft technology stack in accordance with NYS policy and best practices.
- Tuning and optimization of PeopleSoft technical architecture to ensure a highly available and reliable system.
- Technical environment support and management of PeopleSoft architecture on Windows platform including:
- Planning installation, configuration, tuning, monitoring, troubleshooting, and change management of PeopleSoft's batch, database, application, web servers.
- PeopleTools and PeopleSoft application upgrade experience utilizing delivered PeopleSoft tools including, but not limited to, Change Assistant, compare reports and PeopleSoft Update Manager.
- Analyzing system logs and identifying potential issues.
- Recommending and implementing software, hardware, and configuration changes to improve system performance.
- Applying PeopleSoft application and PeopleTools patches.
- Documenting system configuration and architecture following NYSERDA's existing documentation standards.
- Coordinating with NYSERDA resources to ensure availability, reliability, and scalability of systems to meet business demands.
- Performing file system configuration and management.
- Migration of PeopleSoft objects and data between PeopleSoft environments as requested by developers.
- Performing detailed comparisons between PeopleTools environments using PeopleSoft's compare reporting capability to ensure migrations are successful.
- Impact analysis and comparison of PeopleSoft objects during upgrades and communication with Developers over any impacts. Re-integration of project customizations.
- Maintenance and technical support of PeopleSoft's tools on Windows Server platform and SQL Server Database – PeopleTools, PS/Query, nVision, BI Publisher, Data Mover, App Engine, Change Assistant, SQR, WebLogic, Tuxedo, etc.

• Database Administration

- o Backup, replicate and refresh PeopleSoft database instances as needed.
- Troubleshooting PeopleSoft database connection, performance and security issues.
- Provide technical support, troubleshoot and resolve production/development support issues for database servers.
- Implement various measures to monitors, fine-tune, optimize and administer the databases that make up the PeopleSoft environment.

PeopleSoft Development

- The PeopleSoft developer will be responsible for the technical design, development and testing of custom reports, customization changes (online, batch, inbound and outbound interfaces), work flows, dashboards and pivot grids.
- Issue review, troubleshooting and resolution for all PeopleSoft online and batch components.
- o Impact analysis and comparison of PeopleSoft objects during patches, upgrades
- Re-integration of project customizations during upgrades.
- Development, testing and technical support of PeopleTools, PS/Query, nVision, XML Publisher, Data Mover, Application Engine, Application Packages, and SQR.

Business Analysis

- This PeopleSoft Business Analyst will be responsible for setup, configuration, business process, module functionality and data models.
- Subject area experts in NYSERDA's PeopleSoft modules including:
 - General Ledger, Commitment Control, Accounts Payable, Accounts Receivable, Billing, Customer Contracts, Asset Management, Project Costing, Purchasing, Supplier Contract Management, and eSupplier
- Perform implementation tasks related to configuration and setup, fit-gap analysis, business process changes, functional specifications, and testing.
- o Assist NYSERDA functional users and provide knowledge transfer.
- Create and update system documentation.

Project Management

 The PeopleSoft Project Manager will work with the NYSERDA Project Manager to lead upgrade projects, develop and manage project plans, identify issues, assess risks, control change management, ensure communication, and monitor the progress of project tasks.

Optional Services

 At its sole discretion, NYSERDA may request additional on-demand services for nonpatching and upgrade tasks in support of PeopleSoft. These activities include but are not limited to: administration, business analysis, and development in support of new PeopleSoft enhancements, customizations, new development, and assisting with the adoption of new features and functionality following best practices. These optional services are in addition to the required services to keep the PeopleSoft systems up to date and accessible.

2.2 Proposal Requirements

NYSERDA currently follows an upgrade plan that requires yearly PUM upgrades as well as PeopleTools upgrades occurring approximately every two years. In addition, the evaluation and recommendation of PUM images for selective adoption occurs quarterly. Details of this experience must be provided as part of the Proposer's response.

 Proposers must demonstrate a proven track record of providing PeopleSoft solutions and services for public sector entities.

- Proposers must provide at least one dedicated full-time Peoplesoft Business Analyst resource and be able to expand Peoplesoft resources to meet NYSERDA's project-based work as needed. Resources working on NYSERDA's account shall be employees of the selected vendor.
- NYSERDA prefers a consistent team that will get to know the system and requirements of the
 organization versus a more transient team. NYSERDA requires that contractors working on
 NYSERDA systems partake in required NYS training and on-boarding. If the proposing vendor
 would prefer a more transient team, it may be advisable to host a development environment in
 their own facility. In this case the proposer must provide a US based data center to house
 Peoplesoft environments running on platforms identical to NYSERDA.
- Oracle certified partnership is required.
- Experience in engagements with the Authority's existing network and software or operating environment.
- Proposers must be able to meet a 30% MWBE (minority or woman owned business entity) and 6% SDVOB (service disabled veteran owned business) requirement for this contract. Any MWBE/SDVOB firms responding to this RFP that are seeking MWBE/SDVOB status must submit proof that the firm is certified as an MWBE/SDVOB with the New York State Department of Economic Development. Any firm that currently has an approved contract through the NYS Office of General Services Procurement Services has already met this requirement.
- Upon issuance of a contract from NYSERDA, the selected firm will be required to show evidence of General Liability, Disability and Workers Compensation Insurances. In some instances, Professional Liability insurance may also be required.
- The willingness to work with the Authority to minimize costs.
- NYSERDA retains the right to end an engagement at any time with or without cause.
- All hardware and software must be under support for the duration of the contract.
- All billable hours for a given month will be invoiced by the 21st of the following month.
- Proposers must be Oracle certified partners that provide PeopleSoft support solutions.
 - At a minimum, Proposers must have prior experience assisting clients in PeopleTools and PUM upgrades of PeopleSoft FSCM 9.2.
 - PeopleSoft FSCM v9.2 and PeopleTools v8.56 experience is required by NYSERDA. Typical patch cycles are on a quarterly basis and must meet NYS's remediation policy found here:

https://its.ny.gov/sites/default/files/documents/nys-s15-001 patch management 1.pdf

• Proposers will provide an estimate that entails necessary time and materials for PeopleTools upgrades as well as PUM upgrades that follow NYSERDA's current upgrade path utilizing the following budget template:

Upgrade Budget	Estimated Total Hours	Hourly Rate	Total Cost
PUM Upgrade (yearly)			
Peopletools Upgrade			
(every 2 years)			

Unnecessary attachments beyond the documents required to present a complete, comprehensive, and effective response will not influence the evaluation of the proposal. The proposal must be in the following format:

Section I: Executive Summary

Section II: Technical Proposal

Section III: Cost Proposal

Cost information must **not** be included in the Technical Proposal section.

Section I: Executive Summary

Provide a brief description of the firm's overall qualifications and approach. Please limit to 2 pages maximum.

Section II: Technical Proposal

Following is a listing of the information required to be provided by the proposer. A technical proposal that does not provide all the information requested below may be subject to rejection. Provide the information in the same order in which it is requested. Your technical proposal must contain the information necessary to assure NYSERDA of its accuracy.

Provide a separate numbered section corresponding with each item listed in **Section 2 Program Requirements** documenting the firm's qualifications in the respective area. If you are not seeking consideration for a particular item, include a numbered section and indicate that no response is being provided.

Provide a description of the firm's organization and the resumes of partners, principals, associates and other staff proposed to provide services to NYSERDA. Note any sub-consultants that your firm may be using to fulfill the scope of services.

Provide a description of the firm's experience providing similar services including recent relevant project experience to the public and private sector. Include the names, titles and phone numbers of at least three (3) references excluding NYSERDA employees for whom similar services have been provided and a summary of the services provided.

Provide a description of the firm's approach to providing the scope of services including the monitoring and management of the environment. Indicate any areas in which you believe the firm has special expertise. Provide item-by-item detail on how the proposal meets the requirements as listed in *Section 2 Program Requirements.*

Provide a description of the firm's approach to PUM and PeopleTools upgrades.

The proposer must agree to provide NYSERDA with pre- and post-audit access to documents, personnel and other information necessary to conduct audits on request during the term of the Contract and for six years thereafter.

The proposal submitted must contain a representation that the proposer is willing and ready to provide any services requested or required in a timely manner.

Disclose any potential conflicts of interest.

Note any special certifications relevant to this RFP that your firm or proposed staff may possess, and outline opportunities that consulting staff have to keep skills current.

Section III - Cost Proposal

Following is a listing of the information required to be provided by the proposer. A cost proposal that does not provide all the information requested below may be subject to rejection. Provide the information in the same order in which it is requested. Your cost proposal must contain sufficient information to assure NYSERDA of its accuracy.

- Provide billing rates for ad-hoc/hourly services provided such as patching for PeopleTools, database, Weblogic, Tuxedo, development ,etc.
- List all fixed price services offered and the corresponding pricing.
- Indicate any reductions from normal billing rates charged other issuers or public entities in New York State.

- Indicate any startup/one-time costs.
- Indicate any monthly recurring charges.
- Indicate any reductions due to missed service level agreements (SLAs).
- A plan for meeting the MWBE/SDVOB requirement MUST be submitted with the proposal (if applicable).
- Detailed requirements and charges for additional 3rd party data or voice network services (such as dedicated circuits or other carrier-provided services) needed as part of the proposal.

In compliance with §139-j and §139-k of the State Finance Law (see Section V, General Conditions below for additional information), proposers will be required to answer questions during proposal submission, which will include making required certification under the State Finance Law and to disclose any Prior Findings of Non-Responsibility.

3. Proposal Evaluation

Proposals that meet solicitation requirements will be reviewed by a Scoring Committee using the Evaluation Criteria in the table below. At NYSERDA's discretion, proposers may be requested to interview with all or part of the Scoring Committee to address any potential questions or clarifications outlined in the proposals. Proposers will be notified if they are requested to attend an interview.

Evaluation Item	Title
1	Demonstrated capacity to perform the types of activities that have been described in the Scope of Work and to meet the basic requirements of the solicitation as outlined in Section 2.2 Program Requirements.
2	Demonstrated ability to deliver additional new features delivered by Oracle in support of existing Peoplesoft systems.
3	Experience in engagements with the hardware and software utilized by NYSERDA.
4	 Similar Experience and quality of work product. For those firms who have worked for the Authority before, quality of work on those transactions will be considered. Prior experience on similar implementations will be considered.
5	Cost Proposal rates evaluated on reasonableness in comparison to other respondents.

Program Policy Factors

NYSERDA reserves the right to accept or reject proposals based on the following factor(s):

- 1. The degree to which pricing and hourly rates are in line with the rest of the market.
- 2. Contractor's ability to assist NYSERDA with compliance with local, state, or federal mandates and/or goals.

4. General Conditions

Proprietary Information - Careful consideration should be given before confidential information is submitted to NYSERDA as part of your proposal. Review should include whether it is critical for evaluating a proposal, and whether general, non-confidential information, may be adequate for review purposes. The NYS Freedom of Information Law, Public Officers law, Article 6, provides for public access to information NYSERDA possesses. Public Officers Law, Section 87(2)(d) provides for exceptions to disclosure for records or portions thereof that "are trade secrets or are submitted to an agency by a commercial enterprise or derived from information obtained from a commercial enterprise and which if disclosed would cause substantial injury to the competitive position of the subject enterprise." Information submitted to NYSERDA that the proposer wishes to have treated as proprietary, and confidential trade secret information, should be identified and labeled "Confidential" or "Proprietary" on each page at the time of disclosure. This information should include a written request to except it from disclosure, including a written statement of the reasons why the information should be excepted. See Public Officers Law, Section 89(5) and the procedures set forth in 21 NYCRR Part 501 https://www.nyserda.ny.gov/About/-//media/Files/About/Contact/NYSERDA-Regulations.ashx. However, NYSERDA cannot guarantee the confidentiality of any information submitted.

Omnibus Procurement Act of 1992 - It is the policy of New York State to maximize opportunities for the participation of New York State business enterprises, including minority- and women-owned business enterprises, as bidders, subcontractors, and suppliers on its procurement Agreements.

Information on the availability of New York subcontractors and suppliers is available from:

Empire State Development Division for Small Business 625 Broadway Albany, NY 12207

A directory of certified minority- and women-owned business enterprises is available from:

Empire State Development Minority and Women's Business Development Division 625 Broadway Albany, NY 12207

New York Executive Law Article 15-A - NYSERDA is required under the law to promote opportunities for maximum feasible participation of certified minority-and women-owned business enterprises and the employment of minority group members and women in the performance of NYSERDA contracts. The MWBE participation goals and obligations of the selected Contractor are set forth in the Sample Agreement.

Diversity Practices - NYSERDA has determined, pursuant to New York State Executive Law Article 15-A, that the assessment of the diversity practice of respondents to this procurement is practical, feasible, and appropriate. Accordingly, respondents to this procurement shall be required to include as part of their response, as described in Section III herein, Attachment B, Diversity Practices Questionnaire.

New York State Executive Law Article 17-B, NYSERDA recognizes its obligation under the law to promote opportunities for maximum feasible participation of certified service-disabled veteran-owned business enterprises (SDVOB) in the performance of NYSERDA contracts. Executive Law Article 17-B and its associated regulations require, among other things, that NYSERDA establish goals for maximum feasible participation of New York State Certified SDVOBs in the performance of New York State contracts. The SDVOB participations goals and obligations of the selected Contractor are set forth in the Sample Agreement.

State Finance Law sections 139-j and 139-k - NYSERDA is required to comply with State Finance Law sections 139-j and 139-k. These provisions contain procurement lobbying requirements which can be found at https://online.ogs.ny.gov/legal/lobbyinglawfaq/default.aspx Proposers are required to answer questions during proposal submission, which will include making required certification under the State Finance Law and to disclose any Prior Findings of Non-Responsibility (this includes a disclosure statement regarding whether the proposer has been found non-responsible under section 139-j of the State Finance Law within the previous four years).

Tax Law Section 5-a - NYSERDA is required to comply with the provisions of Tax Law Section 5-a, which requires a prospective contractor, prior to entering an agreement with NYSERDA having a value in excess of \$100,000, to certify to the Department of Taxation and Finance (the "Department") whether the contractor, its affiliates, its subcontractors and the affiliates of its subcontractors have registered with the Department to collect New York State and local sales and compensating use taxes. The Department has created a form to allow a prospective contractor to readily make such certification. See, ST-220-TD (available at http://www.tax.ny.gov/pdf/current_forms/st/st220td_fill_in.pdf). Prior to contracting with NYSERDA, the prospective contractor must also certify to NYSERDA whether it has filed such certification with the Department.

The Department has created a second form that must be completed by a prospective contractor prior to contacting and filed with NYSERDA. See, ST-220-CA (available at <u>http://www.tax.ny.gov/pdf/current_forms/st/st220ca_fill_in.pdf</u>). The Department has developed guidance for contractors which is available at http://www.tax.ny.gov/pdf/publications/sales/pub223.pdf.

Contract Award - NYSERDA anticipates making one award under this solicitation. NYSERDA anticipates a contract duration of 5 years, unless NYSERDA management determines a different structure is more efficient based upon proposals received. A contract may be awarded based on initial applications without discussion, or following limited discussion or negotiations pertaining to the Statement of Work. Each proposal should be submitted using the most favorable cost and technical terms. NYSERDA may request additional data or material to support applications. NYSERDA will use the Sample Agreement to contract successful proposals. NYSERDA may at its discretion elect to extend and/or add funds to any project funded through this solicitation. NYSERDA reserves the right to limit any negotiations to exceptions to standard terms and conditions in the Sample Agreement to those specifically identified in the checklist questions. Proposers should keep in mind that acceptance of all standard terms and conditions will generally result in a more expedited contracting process. NYSERDA expects to notify proposers in approximately 4 weeks from the proposal due date whether your proposal has been selected to receive an award. NYSERDA may decline to contract with awardees that are delinquent with respect to any obligation under any previous or active NYSERDA agreement.

Accessibility Requirements - If awardees from this solicitation will be posting anything on the web, or if the awardee will produce a final report that NYSERDA will post to the web, the following language must be included. NYSERDA requires contractors producing content intended to be posted to the Web to adhere to New York State's Accessibility Policy. This includes, but is not limited to, deliverables such as: documents (PDF, Microsoft Word, Microsoft Excel, etc.), audio (.mp3, .wav, etc.), video (.mp4, .mpg, .avi, etc.), graphics (.jpg, .png, etc.), web pages (.html, .aspx, etc.), and other multimedia and streaming media content. For more information, see <u>NYSERDA's Accessibility Requirements</u>.

Limitation - This solicitation does not commit NYSERDA to award a contract, pay any costs incurred in preparing a proposal, or to procure or contract for services or supplies. NYSERDA reserves the right to accept or reject any or all proposals received, to negotiate with all qualified sources, or to cancel in part or

in its entirety the solicitation when it is in NYSERDA's best interest. NYSERDA reserves the right to reject proposals based on the nature and number of any exceptions taken to the standard terms and conditions of the Sample Agreement. NYSERDA reserves the right to disqualify proposers based upon the results of a background check into publicly available information and the presence of a material possibility of any reputational or legal risk in making of the award.

Disclosure Requirement - The proposer shall disclose any indictment for any alleged felony, or any conviction for a felony within the past five years, under the laws of the United States or any state or territory of the United States and shall describe circumstances for each. When a proposer is an association, partnership, corporation, or other organization, this disclosure requirement includes the organization and its officers, partners, and directors or members of any similarly governing body. If an indictment or conviction should come to the attention of NYSERDA after the award of a contract, NYSERDA may exercise its stop-work right pending further investigation or terminate the agreement; the contractor may be subject to penalties for violation of any law which may apply in the particular circumstances. Proposers must also disclose if they have ever been debarred or suspended by any agency of the U.S. Government or the New York State Department of Labor.

5. Attachments

Attachment A – Budget Attachment B – Sample Agreement including Exhibit A - template statement of work



New York State Flexible Energy Technical Analysis Request for Qualifications (RFQL) 3685 **No Funding is Associated with this Solicitation**

Proposals Due: December 30, 2022 by 3:00 PM Eastern Time*

The New York State Energy Research and Development Authority (NYSERDA) is issuing this solicitation (RFQL 3685) to establish a pool of consulting firms qualified to provide NYSERDA with diverse technical, energy, economic, and environmental analytical capacity, some of which may be requests for services on short notice (with exceptions, short notice is typically considered to be three to six months). NYSERDA's mission includes the provision of research, analytic and modeling support on a range of topics, often with finite time horizons. Access to a pool of consultants with wide-ranging high-quality technical expertise established through this solicitation will augment and enhance NYSERDA's expertise when undertaking individual, discrete projects with firm timelines. These retained resources will be made available to all NYSERDA Programs, providing technical expertise when such services are needed and appropriate.

NYSERDA anticipates entering into zero-dollar Task Work Order Agreements with successful proposers. As needs arise, individual Task Work Orders will emanate from these Agreements and will clearly define the Contractors' required obligations that, if fulfilled, would result in payment. Work issued under this solicitation will vary in scope and budget. The earliest expected start date for any potential work under this effort is January 2018. The expected length of the Task Work Order Agreements is approximately five years with an anticipated end date of December 31, 2023. RFQL 3685 will also allow for an "open enrollment" mechanism whereby potential contractors may submit additional proposals until December 30, 2022. Further information regarding the process for participation in the open enrollment mechanism is provided in this document.

NYSERDA has broadly defined potential needs across the following Support Areas, which are described in greater detail in this solicitation document:

- A. Electric System Analysis
- B. Life-Cycle Assessment
- C. Macroeconomic Analysis and Modeling
- D. Forecasting of Energy Use, Prices, and Greenhouse Gas Emissions
- E. Benefit Cost Analysis
- F. Transportation Systems Analysis
- G. Health and Environmental Impacts
- H. Fossil Fuel Infrastructure
- I. Nuclear Safety
- J. Policy Analysis and Technology Assessment
- K. Facilitation Services

L. Workforce Assessment and Labor Economics

M. Climate Change Impacts and Adaptation Analysis

Proposers may submit a proposal to provide services in one, multiple, or all of the above Support Areas. **Proposers should clearly identify which of the Support Areas the proposal is intended to address.**

Proposal Submission: Electronic submission is preferable. Proposers may submit Word, Excel, or PDF files (file formats include: csv, doc, docx, pdf, xls, xlsx, and zip). Individual files should be 100MB or less in file size. Proposal PDFs should be searchable and should be created by direct conversion from MS Word, or other conversion utility. Files should not be scanned. For ease of identification, all electronic files must be named using the proposer's entity name in the title of the document. NYSERDA will also accept proposals by mail or hand-delivery if electronic submission is not possible. For detailed instructions on how to submit a proposal (electronic or paper submission), click the link "NYSERDA Solicitation User Guide [PDF] " located in the "Current Opportunities" section of NYSERDA's website (https://www.nyserda.ny.gov/Funding-Opportunities/Current-Funding-Opportunities.aspx).

Communication related to this procurement is permitted by contacting Frank Ciampa (Designated Contact) at (518) 862-1090, ext. 3087 or by e-mail <u>frank.ciampa@nyserda.ny.gov</u> or Alyse Peterson (Secondary Contact) at (518) 862-1090, ext. 3274 or by e-mail <u>alyse.peterson@nyserda.ny.gov</u>. If you have contractual questions concerning this solicitation, contact Nancy Marucci (Designated Contact) at (518) 862-1090, ext. 3335 or <u>nancy.marucci@nyserda.ny.gov</u>. Contacting anyone other than the Designated Contacts (either directly by the proposer or indirectly through a lobbyist or other person acting on the proposer's behalf) in an attempt to influence the procurement: (1) may result in a proposer being deemed a non-responsible offerer, and (2) may result in the proposer not being awarded a contract.

* All proposals must be received by 3pm Eastern Standard Time on December 30, 2022, as noted above. Late, faxed, or emailed proposals will not be accepted. Incomplete proposals may be subject to disqualification. It is the proposer's responsibility to ensure that all pages have been included in the proposal. Please note: for electronic submission, there are required questions that you will have to answer in addition to uploading attachments and you should allot at least 60 minutes to enter/submit proposals. The electronic proposal system closes promptly at 3pm, files in process or attempted edits or submission after 3pm Eastern Standard Time on the date above, will not be accepted. If changes are made to this solicitation, notification will be posted on NYSERDA's web site at https://www.nyserda.ny.gov/.

Introduction

NYSERDA Program areas engage in policy and technical analysis support to groups within NYSERDA and to other external State energy policy and decision-makers. NYSERDA also routinely works collaboratively with other State agencies and entities to develop, implement, and evaluate energy policies and programs. Often, NYSERDA is called upon to support these efforts by undertaking research and analytic work to advance deliberations on general or specific energy and environmental proposals. NYSERDA also has the lead in conducting analysis for the *New York State Energy Plan*.

RFQL 3685 establishes a pool of consulting firms qualified to support NYSERDA's program areas, with diverse technical, energy, economic, and environmental analytical capacity, and which can provide some services on short notice. NYSERDA frequently provides research, analytic, and modeling support on a range of topics, often with constrained time horizons. Access to the pool of consultants, with wide-ranging, high-quality technical expertise, established through this RFQL will augment and enhance NYSERDA's ability to undertake individual, time-sensitive projects. These retained resources will also be available to all NYSERDA Programs, providing technical expertise, as needed. The Support Areas described in this solicitation illustrate NYSERDA's current and anticipated mission.

Program Requirements

Services Requested

As a result of RFQL 3685, NYSERDA expects to retain qualified contractors to provide services in each of the specified Support Areas. The number and type of services requested from the selected contractors will depend on the nature and complexity of the project, the contractor's expertise, the volume and frequency of the services requested by NYSERDA, the contractor's past performance and the absence of conflicts of interest. NYSERDA does not guarantee that all types of services will be requested or that all selected contractors will receive work pursuant to executed Task Work Order Agreements.

Upon a successful demonstration within a proposal, NYSERDA may designate contractors that have demonstrated "specialized capabilities" in specific areas. For example, a contractor may be designated as having specialized capabilities for a particular type of service requested if it demonstrates that it possesses exceptionally scarce qualifications or experience; specialized equipment or facilities not readily available from other sources; or proprietary data or methods. Submitted proposals should clearly articulate any proposed specialized capabilities, supported by a justification as to why these attributes may be exceptionally scarce, specialized or proprietary. NYSERDA reserves the right to make all decisions regarding a successful demonstration of a specialized capability.

Proposers are permitted, but not required, to team with partners (subcontractors) they consider would offer complementary expertise in the identified Support Areas.

Support Areas¹

Proposers are invited to submit a proposal, describing their qualifications, skills, expertise with documented references, and personnel rates in any or all the support areas described below.

A. <u>Electric System Analysis:</u> Assistance may be requested for analysis and modeling of the electric power system. Assessments may include the economic and physical impacts of changes and

¹It is important to note that NYSERDA's listing of representative software packages in this solicitation is **not** an endorsement of any of the listed products; does not imply that NYSERDA believes the listed products to be superior to any other similar products (listed or not listed); nor is it a guarantee that NYSERDA intends to use any of the listed software products or to not use additional, unlisted products.

additions to elements of the electricity system such as generation, transmission, and distribution. Analyses may include electricity system optimization, simulation modeling, and thermal, voltage, and stability power flow analyses; and any other similar activities.

For illustration, some of the software packages with which the Proposer is conversant may include, but are not limited to, the following:

Network Reliability

GE Multi-Area Reliability Simulation (MARS), GE Positive Sequence Load Flow (PSLF), Siemens/PTI Power System Simulator for Engineering (PSS/E), PowerGEM TARA, and ASPEN.

<u>Production Cost (Unit Commitment and Dispatch)</u> GE Multi-Area Production Simulation Software program (MAPS), PROMOD, GridView, and PLEXOS.

<u>Capacity Expansion Models</u> National Energy Modeling System (NEMS), Regional Energy Deployment System (ReEDS), Integrated Planning Model (IPM), and PLEXOS.

B. <u>Life-Cycle Assessment:</u> Assistance may be requested to perform life cycle assessments for clean technologies and products as well as life cycle analysis, including total fuel cycle analysis, for all relevant fuel pathways and energy end-uses in New York. Fuels of interest may include, but not be limited to, fossil fuels, nuclear power, renewable fuels, and energy carriers (*e.g.* electricity and hydrogen). Fuel cycle analysis may include, but not be limited to, the following processes: energy feedstock production; feedstock transportation and storage; fuel production; fuel transportation, storage and distribution; provision of energy service involving a conversion process (*e.g.* combustion in an engine or boiler). The primary analytic outputs of interest may include: embodied energy by fuel type, energy required to produce a fuel, energy required to perform a service (*e.g.* miles of travel or space heating), fossil fuel energy requirements, emission levels of the major greenhouse gases, criteria air pollutants, particle characterization (size, number, composition), particle and ozone precursors, and air toxics; and any other similar activities.

For illustration, modeling systems may include, but are not limited to, the following: Argonne National Laboratory's Greenhouse Gases, Regulated Emissions, and Energy Use in Transportation (GREET) Model.

C. <u>Macroeconomic Analysis and Modeling:</u> Assistance may be requested to assess the impacts of energy and environmental policies on New York's employment, income, output, mobility, and other parameters. Analyses may be required to account for changes in investment and incremental costs of new technologies, energy savings from use of new technologies, changes in the price of electricity and other fuels, changes in energy expenditures and revenue to energy providers, opportunity costs, and changes from consumer and business expenditure patterns due to revenue that may be collected to cover the costs of the policies. Analyses may be conducted on a net impact basis; and any other similar activities.

For illustration, software may include, but are not limited to, the following: <u>Macroeconomic Modeling</u> Regional Economic Models, Inc. (REMI) and IMPLAN, Decision Time and SYSTAT 9 software created by SPSS Inc.

- D. <u>Forecasting of Energy Use, Prices, & Greenhouse Gas Emissions:</u> Assistance may be requested to model New York State's energy system on a "bottom-up" or "top-down" basis and produce long-term scenarios and forecasts. Output may include projections of energy demand by sector, subsector, technology, and fuel/energy carrier; projections of energy supply by technology and fuel; and projections of fuel and electricity prices. Outputs may also include emissions associated with these scenarios and forecasts. Fuels may include natural gas; distillate and residual oil with varying sulfur content; various types and grades of coal; renewable resources including wind, biomass, landfill gas, and photovoltaic systems; and nuclear power. Sectors may include electricity, commercial, industrial, residential, and transportation. Prices for each fuel and customer sector may include commodity prices (*e.g.*, the price at Henry Hub for natural gas or the price of crude oil for petroleum products) and transportation prices to various New York delivery points; and any other similar activities.
- E. Benefit Cost Analysis (BCA): Assistance may be requested to develop inputs necessary to conduct BCA of NYSERDA's public benefits programs including programs that target electric energy efficiency, natural gas and fuel oil efficiency, demand response, renewable electricity and fuels, distributed generation, and transportation efficiency. Inputs to BCA include estimation of benefits such as avoided energy and capacity costs, avoided distribution and transmission costs, wholesale price suppression, system reliability benefits, options benefits, macroeconomic impacts, and monetization of non-market goods such as comfort, health, and environmental impacts. In addition, the proposer must have experience with monetizing impacts of innovative building technologies as well as experience with estimating positive and negative impacts on operations and maintenance (O&M), water use, waste, and labor costs associated with the energy efficiency and other programs. Proposers must also have experience in identifying appropriate baselines, development of incremental measure costs, use of appropriate discount rates and time horizons, and life cycle analysis. Specific types of benefit-cost analyses will follow those in the New York State BCA Handbook for Total Resource Cost Test, and may also include Societal Cost Test, Utility Cost Test, Participant Cost Test, and Ratepayer Impact Measure; and any other similar activities.
- F. <u>Transportation Systems Analysis:</u> Assistance may be requested to analyze the effects of transportation programs and policies on energy efficiency and consumption and the effects of energy policies and pricing on transportation demand and use. The proposer should be knowledgeable about alternative fuels and vehicle technologies; transportation demand; advanced transportation technologies, such as intelligent transportation systems; transportation systems management and operations; and travel demand modeling. Examples of possible requests could include: evaluation of the regional or statewide impact of alternative transportation fuel facilities such as liquefied or compressed natural gas and other alternative transportation fuel facilities;

conducting projects related to energy and fuel supply infrastructure; systems modeling and assessment; safety issues; fuel supply adequacy studies; and electric vehicle infrastructure deployment; and any other similar activities.

G. <u>Health and Environmental Impacts:</u> Assistance may be requested to perform environmental and health impact assessments related to energy policy options in support of a multi-pollutant policy analysis framework. This may include but not be limited to emissions measurements, emission inventory estimates, regional or micro-scale air quality modeling, or health impacts analysis. An example could be the use of the U.S. Environmental Protection Agency (U.S. EPA) Benefits Modeling and Analysis Program (BenMAP) or the use of health data for NYS populations. Activities may include compiling and analyzing best practices for energy technology deployment; development of realistic test-methods for technology energy efficiency and emissions performance characterization and developing representative emissions inventories; measuring or modeling air quality with high time resolutions or performing health impact assessments due to emissions from existing and emerging energy technologies. Successful proposers may be requested to conduct analyses of environmental issues associated with energy policy and planning and development including:
Technology operational duty-cycle characterization;

• Emissions estimates (e.g., PM2.5 and precursors, SO₂, CO, NOx, CO₂, CH₄ and other greenhouse gases, NH₃, mercury, particulate number, size, and composition, volatile organic compounds, particulate matter, ozone precursors, and air toxics);

• Air quality monitoring or modeling using various existing and emerging tools for ozone, secondary PM, and the pollutants listed above;

• Estimates of the direct and indirect effects of energy production, use, transport, and storage on:

o local, regional, national, or global air quality including climate

- o human exposure health effects, and public health impacts o wildlife,
- o performance and costs of technologies,
- o water quality,
- o changes in ecosystems, and
- o economic impacts of ecosystem degradation and recovery
- Impacts of climate change;
- Costs and benefits of mitigation of environmental impacts; and
- Costs and benefits of incumbent and emerging energy technologies on health impacts. Activities could also include reviewing and commenting on draft environmental or energy regulations; draft environmental impact assessments and statements, as well as State and federal licensing and permitting actions; providing technical analysis to support the review and development of studies related to such actions; and identifying viable alternatives to proposed activities addressed in the assessments and categorizing and developing responses to public comments; and any other similar activities.
- H. <u>Fossil Fuel Infrastructure</u>: Assistance may be requested to undertake projects analyzing fuel supply and associated infrastructure in New York. These projects may include, but are not limited to, assessments of current and possible future supply and demand of natural gas, petroleum

products, coal, renewable fuels (e.g. gaseous and liquid biofuels as well as solid biomass), and alternative energy sources that may replace existing fossil fuel supply (example: hydrogen). Firms may specialize in different fossil fuel sources (natural gas, petroleum, coal) or technologies in analyzing supply. Additionally, expertise in New York State fossil fuel supply chain and associated infrastructure should be highlighted. Firms should specify the fuel sources, technologies, and/or specialities in which they specialize and are able to provide assistance.

With regard to natural gas projects, assistance may be requested for (1) evaluating changes in domestic gas supply and pipeline projects on the cost, reliability and capabilities of the natural gas infrastructure serving New York and the Northeast, (2) customizing and running hydraulic models to produce simulations of pipeline operating conditions, (3) customizing and running modeling software to analyze regional supply/demand, (4) using the Contractor's database of gas pipelines operating in New York to analyze the effects of increasing demand, new supply sources, and limited transportation capacity, and (5) identifying the potential natural gas system impact from emerging end-use applications such as, but not limited to, compressed natural gas (CNG) and liquefied natural gas (LNG) for transportation related uses.

For illustration, some of the software packages with which the Proposer is conversant may include, but are not limited to, the following: <u>Natural Gas Infrastructure Analysis</u>

Gregg Engineering's WinFlow and Gregg Engineering's WinTran

Assessments of petroleum products may include fuel specific analysis of production costs, characterization of technological change (i.e. extraction or conversion technologies), and market dynamics affecting supply, demand, and prices. Analyses may also include an assessment of the current and future required infrastructure to develop, produce, process, refine, transport, and deliver these fuels to end-users in New York. The contractor may be requested to identify possible energy assurance issues such as supply disruption scenarios and strategies to respond to such events; and any other similar activities.

I. <u>Nuclear Safety:</u> Assistance may be requested related to nuclear power plants that are operating or undergoing decommissioning. Assistance may be requested for: (1) review and evaluation of license amendment, exemption, and relief requests, as they relate to plant safety, design, and engineering issues; (2) review and evaluation of decommissioning reports, submittals, and activities; (3) review and evaluation of reports, initiatives, rulemakings, and guidance from industry and the state and federal government pertaining to nuclear safety, security, or environmental impact of nuclear generating and other nuclear fuel cycle facilities; (4) decommissioning fund evaluation and analysis including sufficiency of funds and appropriate use; and (5) providing technical expertise and advice on nuclear power matters as they may relate to potential health, radiological, economic, and environmental risks and impacts; and any other similar activities.

J. <u>Policy Analysis and Technology Assessment:</u> Assistance may be requested to perform analyses and assessments of energy-related public policy initiatives and novel technologies. Analyses sought may be qualitative or quantitative and include: assessments of best practices regarding regulatory and market-based policies to promote clean energy goals and objectives; analysis of proposed policy initiatives in regards to energy supply and costs, estimated effects on businesses in the State, impacts on consumers (i.e., ratepayers or taxpayers), direct job impacts, and fiscal and tax implications for the State's general fund; technology assessments of energy efficiency and clean energy measures; and penetration studies including analysis of market activity of specific energy technologies, relative to other technologies, and changes over time, including historic information and forecasting of future activity; and any other similar activities.

For illustration, some of the software packages with which the Proposer is conversant may include, but are not limited to, the following: <u>Energy, Economic, and Environmental</u> MARKet Allocation (MARKAL) Model

- K. <u>Facilitation Services:</u> Assistance may be requested to develop strategic engagement plans, create collaborative processes for problem solving, moderate, mediate, or facilitate meetings or workshops. Proposers may be asked to support the identification of appropriate stakeholders to invite to meetings, draft meeting agendas and briefing documents, conduct issue-specific research and interviews, as well as summarize meeting outcomes. Proposers must have experience in strategic facilitation, project management and planning, and encouraging dialogue to advance common understanding and problem solving among diverse groups of stakeholders. These stakeholder groups commonly include, but are not limited to, project developers, economic development organizations, the public, labor and workforce development organizations, non-governmental organizations, and local, state and federal government entities.
- L. Workforce Assessment and Labor Economics: Assistance may be requested to estimate and characterize features of New York State's energy economy and workforce. Estimates might include: numbers of firms and workers engaged in activity directly or indirectly related to the energy sector, both statewide and for smaller geographies within the State; levels of investment and spending by firms, workers, and supply chains; levels of activity by firms and workers on different types of energy-related projects and training in different regions. Characterization might include: the skills, certifications, and educational backgrounds of workers by occupation, technology, and intra-state region; the size of firms and their connections with educational and governmental institutions; workers' levels of compensation and benefits by firm size, occupation, technology, or region; and worker demographics and affiliations, such as veteran status and union membership. Contractors may be asked to assess the effects of policies focused directly or indirectly on workforce outcomes and develop recommendations for programmatic changes or novel interventions in the energy sector and related labor markets. In addition, contractors may be asked to support implementing various workforce strategies and programs across a wide range of areas including but not limited to offshore wind, energy storage, energy efficiency, etc.

M. <u>Climate Change Impacts and Adaptation Analysis</u>: Assistance may be requested to analyze the impacts of climate change in New York State, as well as adaptation and resilience strategies. Requests could be either quantitative (e.g., energy system modeling) or qualitative (e.g., literature review and synthesis). Proposers should be knowledgeable about climate change in New York and demonstrate climate-related experience in one or more of the following sectors: agriculture, buildings, coastal zones, ecosystems, energy, health, telecommunications, transportation, or water resources. Proposers should note if they have experience with climate-related equity issues. Examples of types of requests could include: climate impacts to vulnerable populations; impacts to the physical energy system; financial impacts to the energy market(s), benefit-cost analysis of adaptation or resilience measures; case studies of adaptation implementation; economic impacts on a specific sector; and any other similar activities.

Proposers may submit a proposal to provide services in one, multiple, or all the above Support Areas. Proposers should clearly identify which of the Support Areas the proposal is intended to address.

NYSERDA reserves the right to create new Support Areas to address any needs that arise outside of the defined support areas included in the issuance of this RFQL. In this instance, all existing firms in the Task Work Order Agreement pool, along with any new proposers will be eligible to submit a proposal for the new Support Area(s).

Task Work Order Agreements & Task Work Orders

A pool of qualified proposers will be selected through this RFQL to fulfill the needs of each of the identified Support Areas. NYSERDA will enter into zero-dollar Task Work Order Agreements with the qualified contractor(s) for each Support Area, enabling NYSERDA to retain services as needs arise. A Task Work Order Agreement is used because no estimate can be made in advance as to the type, amount, and complexity of the work each contractor will be requested to perform. A Task Work Agreement is not a guarantee for any specific amount of future work.

There will be no initial cap to the number of proposers in any one subject matter area. However, NYSERDA may subsequently institute a cap for any or all Support Areas as a means of managing the number of resultant contracts. NYSERDA anticipates the Scoring Committee to convene periodically, as frequently as quarterly, to review and evaluate new proposals on a schedule depending on NYSERDA's needs and on the number of new proposals that are received. Upon appropriate notice, NYSERDA may forego or discontinue the rolling open enrollments to manage the number of resultant contracts. In deference to the established end of the contract period of December 31, 2023, the open enrollment mechanism will be active through the end of the fourth year, discontinuing on December 31, 2022 barring an earlier discontinuance upon appropriate notice.

When NYSERDA identifies a specific need under any of the Support Areas, the process options for retaining services include: 1) issuing a mini-bid to all of the qualified firms within the Support Area; 2) selecting any qualified firm in the Support Area for projects with a funding amount of \$50,000 or less; or

3) selecting a qualified firm that has successfully demonstrated specialized capabilities, as determined by NYSERDA.

The amount of work assigned to each contractor will depend on the contractor's particular expertise, the amount of work requested in the contractor's support area, past performance, current workload, actual or perceived conflicts of interest, references, deadline requirements, and the ability of the contractor to fulfill a Support Area, provide high quality, cost-effective, and timely services.

The Task Work Order is representative of a discrete project (typically, a series of tasks) which requires external support and is assigned to a qualified contractor under the terms of the executed Task Work Order Agreement between NYSERDA and that contractor. A direct contract or mini-bid process may be employed, at NYSERDA's discretion, to select the appropriate contractor(s) within a given support area. In response to a Task Work Order Request issued by NYSERDA, respondents provide a detailed response to the request, including staffing, hours, budget, and scope of work. A Task Work Order will not guarantee any specific amount of work but may contain a maximum dollar amount.

Funding & Schedule

Funding will be identified on a project-specific basis, and will be determined, in part, on the scope and subject matter of the Task Work Orders as they are developed according to needs expressed by NYSERDA. NYSERDA cannot anticipate whether the need will arise or if funding will be available for any, or all, of the Support Areas listed above.

The general Task Work Agreements that result from this RFQL will remain in effect until December 31, 2023, and no new Task Work Orders will be issued after this date. Task Work Orders initiated prior to December 31, 2023 are intended to remain in effect until all tasks are completed, final work products are delivered to NYSERDA, and payment is issued.

Contractor Responsibilities & Compensation

NYSERDA expects to issue, to selected Contractors, requests for services, in the form of a Task Work Order Request, in one or more of the Support Areas. For each such Request, the selected contractor shall be required to:

- Prepare a Task Work Order Plan with budget, for each project for review and approval by NYSERDA;
- Negotiate the scope and cost of the technical assistance with NYSERDA;
- Upon agreement by all parties to the Task Work Order Plan, provide the required assistance within the required time frame;
- Submit any deliverables to NYSERDA for review and approval; NYSERDA's review will ensure that the deliverable conforms to the Task Work Order Plan, and;
- Provide required documentation of expenditures by Task, based on the Task Work Order Plan, when seeking reimbursement from NYSERDA.

Compensation will be based on the contractor's direct and indirect personal services costs (included in the proposal) plus allowable expenses. Fees will be based on the contractor's hourly rates for the appropriate level of staff as well as for any subcontractors listed in the proposal. NYSERDA will negotiate each Task Work Order on the basis of demonstrated competence and qualifications, at fair and reasonable fees. Fee schedules shall be included in each proposal that identify rates for each member of the team by title, including subcontractors. Proposers are asked to consider the length of the Task Work Order (five years) in proposing their fee schedules and annual escalation rates. Budgets for all work conducted will be included in the Task Work Order Plan and approved by NYSERDA. The Task Work Order Plan will also place a ceiling, or not-to-exceed amount, for each project.

Contractors who accrue billable hours beyond the ceiling in the Task Work Order Plan, without approval in writing by NYSERDA, will do so at their own risk. <u>Contractors will not be compensated for time spent</u> <u>in the preparation of any Task Work Order Plan</u>. Preparation of the Task Work Order Plan is considered to be covered by the contractor's overhead expense.

Proposal Requirements

Identified Support Areas

Proposers are invited to submit, in the format described in this solicitation, proposals describing their skills, expertise, qualifications, and personnel rates in any or all of the Support Areas listed in this solicitation. Proposers must clearly identify Support Area(s) to which the proposal responds. Proposers are permitted, but not required, to team with partners (subcontractors) they consider would offer complementary expertise in the Support Areas:

- A. Electric System Analysis
- B. Life-Cycle Assessment
- C. Macroeconomic Analysis, Modeling
- D. Forecasting of Energy Use, Prices and Greenhouse Gas Emissions
- E. Benefit Cost Analysis
- F. Transportation Systems Analysis
- G. Health and Environmental Impacts
- H. Fossil Fuel Infrastructure
- I. Nuclear Safety
- J. Policy Analysis and Technology Assessment
- **K.Facilitation Services**
- L. Workforce Assessment and Labor Economics
- M.Climate Change Impacts and Adaptation Analysis

This RFQL allows for new support areas to be created when unforeseen and ongoing needs are desired by NYSERDA. The ability to create new support areas will be restricted to the first two years of the contract, until December 30, 2020. Firms may submit up to two proposals to new and existing support areas over the course of the open enrollment period to accommodate any changes of in-house capabilities. This open-enrollment allows contractors to submit proposals up to a defined due date of December 30, 2022 to reflect the planned end date of the anticipated term of the Task Work Order Agreements of December 31, 2023.

Length & Format

Proposals should not be excessively long or submitted in an elaborate format that includes expensive binders or graphics. Unnecessary attachments beyond those sufficient to present a complete, comprehensive, and effective response will not influence the evaluation of the proposal. Each page of the proposal should state the name of the proposer, RFQL 3685, and the page number.

Outline

Each Support Area proposal shall be uploaded into Salesforce as three separate documents: (1) Proposal and Supporting Documents; (2) Attachment A: Project Personnel and Rates Form; and (3) Attachment B: Sample Agreement. These three documents should contain, at a minimum, the following:

Document 1: Cover Letter and Main Body of Proposal

Cover Letter(s) (1 page suggested)

Proposers shall submit a cover letter on company letterhead that:

- References RFQL 3685
- Specifies the Support Area, by name and letter, where services are being offered
- Summarizes the proposer's ability to perform such services
- Is signed by a person with authority to enter into a contract with NYSERDA

Letters from subcontractors included in the proposal must be included in each Support Area proposal and include the same information included in the proposer's cover letter.

Table of Contents (1 page)

Proposers should present a comprehensive table of contents that outlines the proposal format. For each Support Area offered, the items listed below must be provided, regardless of whether they have been presented in another proposal:

- (a) Overall Experience, Capabilities, and References
- (b) Personnel and Qualifications
- (c) Cost Proposal

Support Area Proposal(s)

Proposals will be evaluated independently for each Support Area. Salesforce requires each proposer to submit a separate proposal for each Support Area with distinct language for each. Salesforce allows proposers to save and restart solicitations to allow for ample time to complete before the deadline.

Each Support Area proposal must include the following subsections:

a) Overall Experience, Capabilities, and References (2-4 pages)

Proposers must describe their expertise and ability as a team/firm to deliver services in the proposed Support Area(s). This should include the aggregate number of years working in this Support Area(s) and a brief summary of at least one, and no more than three, similar projects. The project descriptions should specify the level of involvement of the proposing firm and subcontractors and the results/deliverables of the project. For at least one of the projects mentioned, proposers must include customer contact names and phone numbers. Proposers with specialized capabilities are encouraged to articulate those capabilities in the proposal to assist NYSERDA's understanding of them and the capabilities that may be available to address specific needs identified among broader support areas. Proposers can reference Support Area section of this RFQL for further explanation.

- b) Personnel and Qualifications Summary (2 pages) Proposers must: identify and describe the company or organization that will be the prime contractor under this RFQL and identify all staff members, teams, and subcontractors that are to be involved in providing services in the Support Area(s), with descriptions of qualifications and past working relationships among team members and subcontractors. Proposals should include an organizational chart, if necessary. Proposers must identify the project manager who will serve as the single point of contact under this RFQL. Proposals must describe the accomplishments, experiences, and expertise of the individuals comprising the proposing team relevant to the Support Area and reference one-page résumés (provided as an attachment) that highlight recent experiences of all individuals who would be directly involved in providing services.
- c) **Conflicts** (1 page) The firm, its principals, subcontractors, and any personnel of the firm must be free from any financial or similar interest in any product or service which may conflict with or appear to conflict with the objectivity of the services provided to NYSERDA. Proposers must submit a statement of conflict of interest and on a yearly basis if a TWO is assigned following the previous year's conflict of interest form. If any affiliations exist, a statement must be provided verifying these affiliations do not conflict with or appear to conflict with the objectivity of providing services to NYSERDA and its customers. Non-disclosure of any affiliation can result in the termination of a contract, if awarded.
- d) Résumés Include one-page résumés that highlight recent experiences of all individuals

(proposer and any subcontractors) who would be directly involved in providing services. For ease of reference, organize the résumés in alphabetical order by last name of the individuals providing services, referencing in each résumé header the Support Area(s) they will be directly involved with. Individual résumés shall not exceed one (1) page each.

Document 2: Attachment A: Project Personnel and Rates Form

Proposers must provide a Project Personnel and Rate form (Attachment A) and submit the name, job title, and fully-burdened hourly salary for each individual in the

proposal and all subcontractors who would perform the work under an Agreement with NYSERDA. Note: Any escalation rates must be identified for the full five-year contract term.

Indirect Cost

With the Project Personnel and Rates Form, include supporting documentation to describe indirect cost (overhead) rate(s) included in your proposal as follows:

(a) Describe the basis for the rates proposed (i.e., based on prior period actual results; projections; federal government or other independently approved rates).

(b) If rate(s) is approved by an independent organization, such as the federal government, provide a copy of such approval.

(c) If rate(s) is based on estimated costs or prior period actual results, include calculations to support proposed rate(s). Calculation should provide enough information for NYSERDA to evaluate and confirm that the rate(s) are consistent with generally accepted accounting principles for indirect costs.

NYSERDA reserves the right to audit any indirect rate presented in the proposal and to make adjustment for such difference. Requests for financial statements or other needed financial information may be made if deemed necessary.

NYSERDA is not requiring proposers to estimate travel or other direct costs as part of proposals, but reasonable costs for these may be included as an element of TWOs, as appropriate.

Document 3: Attachment B: Sample Agreement

Self-explanatory.

Proposal Materials & Effort

All material submitted as part of this RFQL process becomes the property of NYSERDA. Proposers will not be reimbursed by NYSERDA for any costs associated with the preparation of their proposals.

Proposal Evaluation

All proposals that meet the submission requirements will be reviewed by a Scoring Committee consisting of NYSERDA staff, whether submitted in accordance with the initial due date as provided in this document or in response to the open enrollment period that allows new prospective contractors to

submit proposals beyond the first RFQL deadline. NYSERDA Staff will evaluate all proposals based on the same pre-established evaluation criteria of the initial RFQL.

Proposals will be evaluated based on the pre-established qualitative criteria that will require a minimum score in order to be accepted as a successful proposer in any one Support Area. Firms may apply to any number of Support Areas. The criterion for firms to successfully demonstrate a specialized capability will be determined by the evaluation criteria, the Scoring Committee recommendation, and NYSERDA's discretion. At NYSERDA's discretion, as part of the evaluation process, proposers may be asked to have appropriate representatives participate in an in-person interview in Albany, New York, through a webinar, or by conference call prior to final selection. Proposers will be notified if they are requested to participate in an interview.

Responses to this RFQL will be reviewed and assigned scores based on the criteria highlighted below, as well as other programmatic and management factors deemed appropriate by NYSERDA.

Overall Experience, Capabilities, and References

- Previous experience in the conduct and delivery of similar or related services.
- Demonstrated ability to complete projects on schedule.
- Quality and relevance of previous work as evidenced by sample projects.
- References substantiating with evidence the contractor's abilities and past performance.
- Responsiveness to NYSERDA's request as specified in this RFQL, including overall clarity and organization of the proposal.

Personnel and Qualifications

- Adequacy/depth of corporate resources to provide requested services.
- Qualifications and expertise of the personnel/team in relevant Support Areas
- Clear identification of staff that will be assigned to various project types.

Other Considerations

- Past experiences with contractor, notable position within the firm's industry, accomplishments on similar projects.
- Combination of contractors needed to deliver all services needed in a timely and professional manner.
- Demonstrated specialized unique capability that is considered a priority to a specific TWO which cannot be predetermined. Therefore, contractors must articulate specialized capabilities (e.g., unique or exceptionally scarce qualifications or experience, specialized equipment, orfacilities).

Fee Schedule

• Reasonableness and relative competitiveness of labor rates, associated fees, escalation rates and overhead.

General Conditions

Proprietary Information - Careful consideration should be given before confidential information is

submitted to NYSERDA as part of your proposal. Review should include whether it is critical for evaluating a proposal, and whether general, non-confidential information, may be adequate for review purposes. The NYS Freedom of Information Law, Public Officers law, Article 6, provides for public access to information NYSERDA possesses. Public Officers Law, Section 87(2)(d) provides for exceptions to disclosure for records or portions thereof that "are trade secrets or are submitted to an agency by a commercial enterprise or derived from information obtained from a commercial enterprise and which if disclosed would cause substantial injury to the competitive position of the subject enterprise." Information submitted to NYSERDA that the proposer wishes to have treated as proprietary, and confidential trade secret information, should be identified and labeled "Confidential" or "Proprietary" on each page at the time of disclosure. This information should include a written request to except it from disclosure, including a written statement of the reasons why the information should be excepted. See Public Officers Law, Section 89(5) and the procedures set forth in 21 NYCRR Part 501 http://www.nyserda.ny.gov/About/-/media/Files/About/Contact/NYSERDA-Regulations.ashx. However, NYSERDA cannot guarantee the confidentiality of any information submitted for this RFQL.

Omnibus Procurement Act of 1992 - It is the policy of New York State to maximize opportunities for the participation of New York State business enterprises, including minority- and women-owned business enterprises, as bidders, subcontractors, and suppliers on its procurement Agreements.

Information on the availability of New York subcontractors and suppliers is available from:

Empire State Development Division for Small Business 625 Broadway Albany, NY 12207

A directory of certified minority- and women-owned business enterprises is available from:

Empire State Development Minority and Women's Business Development Division 625 Broadway Albany, NY 12207

State Finance Law sections 139-j and 139-k - NYSERDA is required to comply with State Finance Law sections 139-j and 139-k. These provisions contain procurement lobbying requirements which can be found at http://www.ogs.ny.gov/aboutogs/regulations/advisoryCouncil/StatutoryReferences.html Proposers are required to answer questions during proposal submission, which will include making required certification under the State Finance Law and to disclose any Prior Findings of Non-Responsibility (this includes a disclosure statement regarding whether the proposer has been found non-responsible under section 139-j of the State Finance Law within the previous four years).

Tax Law Section 5-a - NYSERDA is required to comply with the provisions of Tax Law Section 5-a, which requires a prospective contractor, prior to entering an agreement with NYSERDA having a value in excess of \$100,000, to certify to the Department of Taxation and Finance (the "Department") whether the contractor, its affiliates, its subcontractors and the affiliates of its subcontractors have registered

with the Department to collect New York State and local sales and compensating use taxes. The Department has created a form to allow a prospective contractor to readily make such certification. See ST-220-TD (available at http://www.tax.ny.gov/pdf/current_forms/st/st220td fill intertification. See

Prior to contracting with NYSERDA, the prospective contractor must also certify to NYSERDA whether it has filed such certification with the Department. The Department has created a second form that must be completed by a prospective contractor prior to contacting and filed with NYSERDA. See, ST-220-CA (available at http://www.tax.ny.gov/pdf/current_forms/st/st220ca_fill_in.pdf). The Department has developed guidance for contractors which is available at http://www.tax.ny.gov/pdf/current_forms/st/st220ca_fill_in.pdf). The Department has developed guidance for contractors which is available at http://www.tax.ny.gov/pdf/current_forms/st/st220ca_fill_in.pdf). The Department has developed guidance for contractors which is available at http://www.tax.ny.gov/pdf/publications/sales/pub223.pdf.

Contract Award – NYSERDA anticipates making multiple selections under this RFQL. In addition, this RFQL has an open enrollment mechanism that allows for new contractors to submit proposals on a quarterly basis. The open enrollment period has an ongoing evaluation process up to a defined due date of December 31, 2022. Upon appropriate notice, NYSERDA may forego or discontinue the rolling open enrollments to manage the number of resultant contracts. NYSERDA may award a contract based on initial proposals without discussion, or following limited discussion or negotiations pertaining to the Task Work Order Agreement. Each offer should be submitted using the most favorable cost and technical terms. NYSERDA may request additional data or material to support applications. NYSERDA will use the Sample Agreement to contract successful proposals. NYSERDA reserves the right to limit any negotiations to exceptions to standard terms and conditions in the Attachment B Sample Agreement to those specifically identified during the proposal submission process. Proposers should keep in mind that acceptance of all standard terms and conditions will generally result in a more expedited contracting process. NYSERDA expects to notify proposers in approximately 6-8 weeks from the proposal due date whether their proposals have been selected to receive an award. NYSERDA may decline to contract with awardees that are delinquent with respect to any obligation under any previous or active NYSERDA agreement.

Limitation - This RFQL does not commit NYSERDA to award a contract, pay any costs incurred in preparing a proposal, or to procure or contract for services or supplies. NYSERDA reserves the right to accept or reject any or all proposals received, to negotiate with all qualified sources, or to cancel in part or in its entirety the RFQL when it is in NYSERDA's best interest. NYSERDA reserves the right to reject proposals based on the nature and number of any exceptions taken to the standard terms and conditions of the Sample Agreement. NYSERDA reserves the right to cancel the open RFQL evaluation process prior to December 31, 2022.

Disclosure Requirement - The proposer shall disclose any indictment for any alleged felony, or any conviction for a felony within the past five (5) years, under the laws of the United States or any state or territory of the United States and shall describe circumstances for each. When a proposer is an association, partnership, corporation, or other organization, this disclosure requirement includes the organization and its officers, partners, and directors or members of any similarly governing body. If an indictment or conviction should come to the attention of NYSERDA after the award of a contract, NYSERDA may exercise its stop-work right pending further investigation, or terminate the agreement;

the contractor may be subject to penalties for violation of any law which may apply in the particular circumstances. Proposers must also disclose if they have ever been debarred or suspended by any agency of the U.S. Government or the New York State Department of Labor.

Attachments

Attachment A: Project Personnel and Rates Form Attachment B: Sample Agreement



RICHARD L. KAUFFMAN Chair

ALICIA BARTON President and CEO

Charge Ready NY Equipment and Network Qualification Process Request for Qualifications (RFQL) 3902

Applications accepted through December 31, 2021 by 3:00 PM Eastern Time*

The New York State Energy Research and Development Authority (NYSERDA) is issuing this RFQL solicitation to establish a list of qualified Level 2 electric vehicle (EV) charging equipment and networks that will be eligible for incentives under the upcoming Charge Ready NY Program (Program). Under the Program, interested site owners will be able to receive incentives for the installation of qualified charging equipment. Charging station vendors will submit applications to qualify one or more models of charging equipment. Charging network operators will submit applications to have information about their network, and which charging equipment it is compatible with, listed as part of program materials. Information about approved equipment models and network solutions will be listed on the NYSERDA webpage for prospective charging station owners to view. Qualifying equipment must meet the program requirements described below.

Submissions will be accepted on a rolling basis until December 31, 2021 or until the Program closes. Vendors may submit applications for as many different equipment models or network solutions as they choose.

Application Submission: Online submission is preferable. Proposers may submit Word, Excel, or PDF files (file formats include: csv, doc, docx, gif, jpeg, jpg, pdf, png, ppt, pptx, pps, ppsx, tif, txt, xls, xlsx, and zip). Individual files should be 100MB or less in file size. Proposal PDFs should be searchable and should be created by direct conversion from MS Word, or other conversion utility. Files should not be scanned. For ease of identification, all electronic files must be named using the proposer's entity name in the title of the document. NYSERDA will also accept proposals by mail or hand-delivery if online submission is not possible. For detailed instructions on how to submit a proposal (online or paper submission), click the link "Application Instructions and Portal Training Guide [PDF]" located in the "Current Opportunities" section of NYSERDA's website (https://www.nyserda.ny.gov/Funding-Opportunities.aspx).

No communication intended to influence this procurement is permitted except by contacting David McCabe (Designated Contact) at (518) 862-1090, ext. 3281 or by e-mail <u>cleantrans@nyserda.ny.gov</u> or Adam Ruder (Designated Contact) at (518) 862-1090, ext. 3411 or by e-mail <u>transportation@nyserda.ny.gov</u> (for technical questions). If you have contractual questions concerning this solicitation, contact Nancy Marucci (Designated Contact) at (518) 862-1090, ext. 3335 or <u>nancysolicitations@nyserda.ny.gov</u>. Contacting anyone other than the Designated Contacts (either directly by the proposer or indirectly through a lobbyist or other person acting on the proposer's behalf) in an attempt to influence the procurement: (1) may result in a proposer being deemed a non-responsible offerer, and (2) may result in the proposer not being awarded a contract.

* All applications must be received by 3pm Eastern Time on the date noted above. Late, faxed, or emailed proposals will not be accepted. Incomplete proposals may be subject to disqualification. It is the proposer's responsibility to ensure that all pages have been completed/included in the application. Please note: for online submission, there are required questions that you will have to answer in addition to uploading attachments and you should allot at least 60 minutes to enter/submit applications. The online application system closes promptly at 3pm, files in process or attempted edits or submission after 3pm Eastern Time on the date above, will not be accepted. If changes are made to this solicitation, notification will be posted on the "Current Opportunities" section of NYSERDA's website (https://www.nyserda.ny.gov/Funding-Opportunities/Current-Funding-Opportunities.aspx.

I. Introduction

As part of his Charge NY 2.0 initiative, announced in January 2018, Governor Andrew M. Cuomo set a goal of having 10,000 EV charging stations operational in New York State by 2021, a five-fold increase over the current 2,000 charging stations in operation. NYSERDA seeks to accelerate charging station installations and adoption by offering incentives to entities that purchase and install charging stations at publicly accessible parking facilities, workplaces, and multifamily buildings. This incentive program, the Charge Ready NY Program (Program), will launch in 2018, and will initially focus exclusively on the purchase and installation of AC Level 2 charging stations, which supply power to EVs at 208 to 240 Volts AC, at the above types of locations. It does not cover the purchase and installation of private home-use charging stations. NYSERDA may offer future programs focused on DC fast chargers as well.

To facilitate the operation of this program and to help simplify the purchasing process for prospective station owners, NYSERDA is issuing this solicitation to establish a list of qualified Level 2 EV charging equipment and networks that will be eligible for incentives under the Program. Charging station vendors can submit applications to qualify one or more models of charging equipment. Charging network operators can submit applications to have information about their network, and which charging equipment it is compatible with, listed as part of the program materials. Information about approved equipment models and network solutions will be listed on the NYSERDA webpage for prospective charging station owners to view. Qualifying equipment must meet the program requirements described below.

NYSERDA intends to also offer an opportunity for prospective station owners to submit information about their site and express interest in being contacted by charging station vendors. Qualified vendors will be able to receive information about prospective station owners who choose to share their contact information.

Submissions will be accepted on a rolling basis until December 31, 2021 or until the Program closes. Vendors may submit as many different equipment models or network solutions as they choose.

II. Program Requirements

Eligible charging equipment must meet the following requirements:

All Charging Equipment

- The equipment must be a charging system intended to provide AC power to an electric vehicle equipped with an onboard charger unit. Wireless charging equipment may provide DC power directly to an electric vehicle.
- The equipment must be intended to be supplied by a branch circuit of up to 600 volts.
- The equipment must have a rated power of 7.2kW (30A) or higher
- The equipment must be intended for installation following the National Electric Code (ANSI/NFPA 70) and be indoor/outdoor rated.
- The equipment must be new and designed to pass inspection according to the National Electrical Code, Article 625. The equipment must be certified by a National Recognized Testing Laboratory (for example, UL category FFWA).

- Both single and dual charging stations are eligible. Single charging stations are stations that have a single charging port originating from a single pedestal, pole-mount, or wall-mount; dual charging stations are stations that have two charging ports originating from a single pedestal, pole-mount or wall-mount. For program purposes, single charging stations will be eligible for an incentive payment for one charging port and dual charging stations will be eligible for an incentive payment for two charging ports.
- Publicly accessible stations and workplace charging stations must be networked stations. Stations for multifamily dwellings may be networked or non-networked. Charging equipment providers must list the names of any network operators they have worked with to date. Networked stations must have at least one approved charging network operator in the program to be able to receive a rebate for an installation at a public or workplace location.
- Networked equipment must be capable of collecting data on electricity dispensed and number of charging events from each port and providing this information directly to NYSERDA, either through automated recurring emails or through password-protected access to station management software that allows NYSERDA limited administrative access to energy use reports.
- Equipment must use no more than 10 Watts of power per port when not connected to a vehicle.
- As of October 1, 2019, NYSERDA will begin requiring that all equipment be Energy Star certified or be in the process of receiving Energy Star certification. Applicants will be required to show the Partnership Agreement with Energy Star as proof of application to the Energy Star program before they can have their equipment placed on the list of approved EV charging equipment.
- Equipment to be installed in public-access sites must be able to provide charging to any driver, regardless of whether they are a network member. If payment is required, the equipment must accept payment by credit card, although it may also accept payment through other methods. These requirements do not apply to equipment to be installed in workplaces or multifamily buildings, which may restrict access to employees or residents.
- Charging equipment and all accessories must be backed with a warranty of 24 months or longer. The warranty period should start the day that the equipment is installed and ready for use.
- Applicants must complete a Charging Equipment Qualification Worksheet (**Attachment A**), listing each separate model on its own column of the workbook.

Wired Charging Equipment

- Wired equipment should include only connectors that are SAE-J1772 standard compliant
- Wired equipment should include a cable management system:
 - The charging equipment must include a holster or similar feature for the connector to protect the connector from the elements and help keep it off the ground. If connector holsters or similar features are not integrated as part of the equipment, they must be offered as accessories.
 - Either as an integrated feature of the equipment or as an accessory, charging equipment must include a cable management system that helps keep the cable off the ground, such as a cable retraction system or cable cradle.

Wireless Charging Equipment

• NYSERDA intends to include commercially available wireless power transfer (WPT) systems in the program once there is a valid Underwriters Laboratory (UL) or similar approval for these systems to be installed in public settings and at least one wireless charging equipment has been approved for public installation.

The following elements are recommended, but not currently required. NYSERDA intends to make them a requirement at a future date, as described below.

 It is recommended that networked equipment use an open standard protocol as a basic framework for purposes of network interoperability and communication with back-end network services providers. The most common open protocol is Open Charge Point Protocol (OCPP). Vendors will be asked whether their system uses an open standard protocol. As of program launch, this is not a required element, but may become a required element when NYSERDA is better able to confirm equipment compliance with open standard protocols. Eligible charging network applicants must meet the following requirements:

- Charging networks must be able to operate on one or more models of eligible charging station equipment.
- Charging networks must allow equipment owners to set pricing for their stations, accept payment for use via credit card (accepting multiple forms of payment is encouraged), and provide data to equipment owners on station electricity dispensed and number of charging events.
- Charging networks must be able to provide access to charging station data to NYSERDA directly, with the equipment owner/network customer's permission.
- Charging networks have until December 31, 2019 to provide either an OpenADR 2.0 Virtual End Node (VEN) for utility demand response integration, unless the equipment is not tied to the electric grid (such as some solar PV-powered charging equipment), or have the capability for utilities to provide demand response through the networks' backend.
- Applicants must complete a Charging Network Qualification Worksheet (Attachment B).

Any charging equipment manufacturer or charging network provider is eligible to apply for the appropriate qualification. Charging equipment manufacturers should list authorized New York State distributors and third-party vendors of their equipment for New York State, including contact information, in Attachment A. Applicants should include themselves in this list if they sell their equipment directly to end users. Potential equipment purchasers will be encouraged to contact the vendors and installers listed to obtain complete quotes. NYSERDA will list these entities on its website to help direct potential purchasers to appropriate purchasing channels.

III. Application Requirements

Applicants should submit completed applications according to NYSERDA's proposal submission procedures outlined on the cover page of the RFQL. The following documentation is required to be submitted as part of a complete application:

- Charging Equipment Applications:
 - Charging Equipment Qualification Worksheet (Attachment A)
 - Cut sheet for each model of charging equipment
- Charging Network Applications:
 - Charging Network Qualification Worksheet (Attachment B)
- Charging Equipment and Charging Network Applicants must include **Attachment C**: Equipment and/or Network Service Provider Terms and Conditions form

Vendors may include multiple models or types of equipment/networks in a single worksheet, listing each on its own column of the worksheet. Equipment applicants must also submit a cut sheet for each model of charging equipment they are applying to qualify for the Program. Applicants may also submit lists of distributors in New York State, including contact information and counties served (if applicable) for each.

Applications will be reviewed for compliance with all program requirements listed in Section II. If NYSERDA has questions about whether equipment meets a particular requirement, it will contact the applicant for more information. Equipment and networks that do not meet all requirements will not be eligible for inclusion in the Program.

Applications will be accepted and reviewed on a rolling basis. Applicants will be notified within 30 days whether their equipment or network application has been accepted, if NYSERDA requires further information, or if the application has been denied. If it denies an application, NYSERDA will indicate the requirements that were not satisfactorily met. Applicants whose equipment or network applications are denied may resubmit applications with updated information that demonstrates that the deficient requirements have been met.

Applicants wishing to update the information about qualified equipment that has previously been accepted as qualified by NYSERDA (for instance, if a new model replaces an older version) must submit a new application indicating that it is an update to a prior accepted application and must provide all required documentation for the new equipment. Information about each model may not be updated more than once every three months.

IV. GENERAL CONDITIONS

GENERAL CONDITIONS

Proprietary Information - Careful consideration should be given before confidential information is submitted to NYSERDA as part of your proposal. Review should include whether it is critical for evaluating a proposal, and whether general, non-confidential information, may be adequate for review purposes.

The NYS Freedom of Information Law, Public Officers law, Article 6, provides for public access to information NYSERDA possesses. Public Officers Law, Section 87(2)(d) provides for exceptions to disclosure for records or portions thereof that "are trade secrets or are submitted to an agency by a commercial enterprise or derived from information obtained from a commercial enterprise and which if disclosed would cause substantial injury to the competitive position of the subject enterprise." Information submitted to NYSERDA that the proposer wishes to have treated as proprietary, and confidential trade secret information, should be identified and labeled "Confidential" or "Proprietary" on each page at the time of disclosure. This information should include a written request to except it from disclosure, including a written statement of the reasons why the information should be excepted. See Public Officers Law, Section 89(5) and the procedures set forth in 21 NYCRR Part 501 https://www.nyserda.ny.gov/About/-//media/Files/About/Contact/NYSERDA-Regulations.ashx. However, NYSERDA cannot guarantee the confidentiality of any information submitted.

Omnibus Procurement Act of 1992 - It is the policy of New York State to maximize opportunities for the participation of New York State business enterprises, including minority- and women-owned business enterprises, as bidders, subcontractors, and suppliers on its procurement Agreements.

Information on the availability of New York subcontractors and suppliers is available from:

Empire State Development Division for Small Business 625 Broadway Albany, NY 12207

A directory of certified minority- and women-owned business enterprises is available from:

Empire State Development Minority and Women's Business Development Division 625 Broadway Albany, NY 12207

State Finance Law sections 139-j and 139-k - NYSERDA is required to comply with State Finance Law sections 139-j and 139-k. These provisions contain procurement lobbying requirements which can be found at https://online.ogs.ny.gov/legal/lobbyinglawfaq/default.aspx Proposers are required to answer questions during proposal submission, which will include making required certification under the State Finance Law and to disclose any Prior Findings of Non-Responsibility (this includes a disclosure

statement regarding whether the proposer has been found non-responsible under section 139-j of the State Finance Law within the previous four years).

Accessibility Requirements - If awardees from this solicitation will be posting anything on the web, or if the awardee will produce a final report that NYSERDA will post to the web, the following language must be included. NYSERDA requires contractors producing content intended to be posted to the Web to adhere to New York State's Accessibility Policy. This includes, but is not limited to, deliverables such as: documents (PDF, Microsoft Word, Microsoft Excel, etc.), audio (.mp3, .wav, etc.), video (.mp4, .mpg, .avi, etc.), graphics (.jpg, .png, etc.), web pages (.html, .aspx, etc.), and other multimedia and streaming media content. For more information, see <u>NYSERDA's Accessibility Requirements</u>.

Limitation - This solicitation does not commit NYSERDA to award a contract, pay any costs incurred in preparing a proposal, or to procure or contract for services or supplies. NYSERDA reserves the right to accept or reject any or all proposals received, to negotiate with all qualified sources, or to cancel in part or in its entirety the solicitation when it is in NYSERDA's best interest. NYSERDA reserves the right to reject proposals based on the nature and number of any exceptions taken to the standard terms and conditions of the Sample Agreement. NYSERDA reserves the right to disqualify proposers based upon the results of a background check into publicly available information and the presence of a material possibility of any reputational or legal risk in making of the award.

Disclosure Requirement - The proposer shall disclose any indictment for any alleged felony, or any conviction for a felony within the past five years, under the laws of the United States or any state or territory of the United States, and shall describe circumstances for each. When a proposer is an association, partnership, corporation, or other organization, this disclosure requirement includes the organization and its officers, partners, and directors or members of any similarly governing body. If an indictment or conviction should come to the attention of NYSERDA after the award of a contract, NYSERDA may exercise its stop-work right pending further investigation, or terminate the agreement; the contractor may be subject to penalties for violation of any law which may apply in the particular circumstances. Proposers must also disclose if they have ever been debarred or suspended by any agency of the U.S. Government or the New York State Department of Labor.

VENDOR ASSURANCE OF NO CONFLICT OF INTEREST OR DETRIMENTAL EFFECT

The proposer shall disclose any existing or contemplated relationship with any other person or entity, including any known relationships with any member, shareholders of 5% or more, parent, subsidiary, or affiliated firm, which would constitute an actual or potential conflict of interest or appearance of impropriety, relating to other clients/customers of the proposer or former officers and employees of NYSERDA, in connection with proposer's rendering services as proposed. If a conflict does or might exist, please describe how your company would eliminate or prevent it. Indicate what procedures will be followed to detect, notify NYSERDA of, and resolve any such conflicts.

The proposer must disclose whether it, or any of its members, or, to the best of its knowledge, shareholders of 5% or more, parents, affiliates, or subsidiaries, have been the subject of any investigation or disciplinary action by the New York State Commission on Public Integrity or its predecessor State entities (collectively, "Commission"), and if so, a brief description must be included indicating how any matter before the Commission was resolved or whether it remains unresolved.

PUBLIC OFFICERS LAW

For any resulting awards, the Contractor and its subcontractors shall not engage any person who is, or has been at any time, in the employ of the State to perform services in violation of the provisions of the New York Public Officers Law, other laws applicable to the service of State employees, and the rules, regulations, opinions, guidelines or policies promulgated or issued by the New York State Joint Commission on Public Ethics, or its predecessors (collectively, the "Ethics Requirements"). Proposers are reminded of the following Public Officers Law provision: contractors, consultants, vendors, and subcontractors may hire former NYSERDA employees. However, as a general rule and in accordance with New York Public Officers Law, former employees of NYSERDA may neither appear nor practice before NYSERDA, nor receive compensation for services rendered on a matter before NYSERDA, for a period of two years following their separation from NYSERDA service. In addition, former NYSERDA employees are subject to a "lifetime bar" from appearing before any state agency or authority or receiving compensation for services regarding any transaction in which they personally participated or which was under their active consideration during their tenure with NYSERDA.

V. Attachments:

Attachment A – Charging Equipment Qualification Worksheet Attachment B – Charging Network Qualification Worksheet Attachment C – Equipment and/or Network Service Provider Terms and Conditions

 Butfalo
 Butfalo

 Albany
 Buffalo

 17 Columbia Circle, Albany, NY 12203-6399
 726 Excl

 (P) 1-866-NYSERDA | (F) 518-862-1091
 Suite 82

 nyserda.ny.gov | info@nyserda.ny.gov
 Buffalo,

Buffalo 726 Exchange Street Suite 821 Buffalo, NY 14210-1484 (P) 716-842-1522 (F) 716-842-0156

New York City 1359 Broadway 19th Floor New York, NY 10018-7842 (P) 212-971-5342 (F) 518-862-1091

 West Valley Site

 Management Program

 9030-8 Route 219

 West Valley, NY

 14171-9500

 (P) 716-942-9960

 (F) 716-942-9961



Renewable Heat NY Program Program Opportunity Notice (PON) 3010 \$ 9,627,000 NYSERDA reserves the right to extend and/or add funding to the Solicitation should other program funding sources become available.

Applications accepted through December 31, 2021 by 3:00 PM Eastern Time, or until funds are fully committed, whichever occurs first.

Program Summary: The Renewable Heat NY (RHNY) Program ("the Program") will provide up to \$9,627,000 for the installation of high-efficiency, low-emission biomass heating systems to eligible New York State customers not currently using natural gas. Additional funding may be made available depending on customer demand and program success. The RHNY Program consists of three individual programs, as defined in the table below.

Program	Eligible Customers	Eligible Systems
Small Biomass Boiler	Residential	 Qualified advanced
		cordwood boilers w/
	 Small Commercial 	thermalstorage
		 Qualified high-efficiency
		pellet boilers w/thermal
		storage
Large Biomass Boiler	Large Commercial	Pellet-fired boiler systems
		that meet requirements, as
		determined by a scoring
		committee
Residential Pellet Stove	Residential	Qualified pellet stoves

Incentives are available on a first-come, first-served basis. Funding will be available through December 31, 2021. No single Participating Contractor can receive more than 50% (\$4,813,500) of the funding available through PON 3010. The incentives for each program are summarized below.

Program	System Type	Installation Incentive		Installation Incentive (Income Qualified)	Additional Incentive		
Small Biomass Boiler	Advanced Cordw ood Boiler w ith Thermal Storage	25% installed cost (\$7,000 maximum)		65% installed cost (\$18,000 maximum)	-		-
	Small Pellet Boiler with Thermal Storage	≤120 kBtu/h (35 kW)	45% installed cost (\$16,000 maximum)	65% installed cost (\$23,000 maximum)	Thermal Storage AdderRecycling\$5/gal for each gal above the minimum thermal storage requirement\$5,000/unit for old indoor/outdoor w ood boiler\$5/gal for each gal above the minimum thermal storage requirement\$2,500/unit for old w ood furnace	-	
		≤300 kBtu/h (88 kW)	45% installed cost (\$36,000 maximum)	-		-	
Large Biomass Boiler	Large Pellet Boiler with Thermal Storage	>300 kBtu/h (88 kW)	65% installed cost (\$325,000 maximum)	-		\$2,500/unit for	Emission Control
	Tandem Pellet Boiler w ith Thermal Storage		75% installed cost (\$450,000 maximum)	-		System \$40,000	
Residential Pellet Stove	Pellet Stove	\$1,500		\$2,000	-	Recycling \$500 (income qualified residents only)	-

Application Submission: Project applications must be submitted by a Participating Contractor for the Small Biomass Boiler and Residential Pellet Stove programs; large commercial customers may apply directly to the Large Biomass Boiler program. See Section II: Program Requirements for instructions on participating in the RHNY program.

Contact Information: For all program questions, please contact Sue Dougherty at (518) 862-1090 ext. 3127 or by email at <u>RHNY@nyserda.ny.gov</u>.

All contractual questions should be directed to Nancy Marucci at (518) 862-1090 ext. 3335 or by email at <u>NancySolicitations@nyserda.ny.gov</u>.

NYSERDA reserves the right to make changes in the incentive offering (including but not limited to amount, timing, recipient, structure, incentive caps and total budget available) at any time. NYSERDA will make reasonable effort not to decrease incentive level within the term of this Program. If it becomes necessary to change the incentive offering, NYSERDA will attempt to give reasonable notice to Program Participants. Program changes will be posted on the NYSERDA website and can be found at the following web page: https://www.nyserda.ny.gov/Funding-Opportunities/Current-Funding-Opportunities.

I. Introduction

The RHNY program provides incentives, summarized in the table above, toward the installed costs of highefficiency, low-emission wood heating systems across New York State. Recent biomass technologies, which have higher efficiency and lower emissions, are a cleaner way to use wood for heat than traditional wood stoves and boilers, making them a viable alternative to propane or fuel oil. The high-efficiency systems also provide more automation, use less fuel, and often save customers money.

The goal of the RHNY program is to spur wider market adoption of high-efficiency, low-emission wood heating through education, customer support, and helping the development of New York-based advanced technology heating products. RHNY also aims to reduce wood smoke, fine particles, and carbon monoxide emissions. This program strongly encourages the retirement and proper recycling of old wood heating systems and replacement by advanced technologies.

II. Program Requirements

The detailed requirements, including application requirements, for participation in each of the three programs, are provided in the corresponding program manual:

- Small Biomass Boiler Program Manual
- Large Biomass Boiler Program Manual
- Residential Pellet Stove Program Manual

III. General Conditions

Proprietary Information - Careful consideration should be given before confidential information is submitted to NYSERDA as part of your proposal. Review should include whether it is critical for evaluating a proposal, and whether general, non-confidential information, may be adequate for review purposes.

The NYS Freedom of Information Law, Public Officers law, Article 6, provides for public access to information NYSERDA possesses. Public Officers Law, Section 87(2)(d) provides for exceptions to disclosure for records or portions thereof that "are trade secrets or are submitted to an agency by a commercial enterprise or derived from information obtained from a commercial enterprise and which if disclosed would cause substantial injury to the competitive position of the subject enterprise." Information submitted to NYSERDA that the proposer wishes to have treated as proprietary, and confidential trade secret information, should be identified and labeled "Confidential" or "Proprietary" on each page at the time of disclosure. This information should include a written request to except it from disclosure, including a written statement of the reasons why the information should be excepted. See Public Officers Law, Section 89(5) and the procedures set forth in 21 NYCRR Part 501

<u>https://www.nyserda.ny.gov/About/-/media/Files/About/Contact/NYSERDA-Regulations.ashx</u>. However, NYSERDA cannot guarantee the confidentiality of any information submitted.

Omnibus Procurement Act of 1992 - It is the policy of New York State to maximize opportunities for the participation of New York State business enterprises, including minority- and women-owned business enterprises, as bidders, subcontractors, and suppliers on its procurement Agreements.

Information on the availability of New York subcontractors and suppliers is available from:

Empire State Development Division for Small Business 625 Broadway Albany, NY 12207

A directory of certified minority- and women-owned business enterprises is available from:

Empire State Development Minority and Women's Business Development Division 625 Broadway Albany, NY 12207

State Finance Law sections 139-j and 139-k - NYSERDA is required to comply with State Finance Law sections 139-j and 139-k. These provisions contain procurement lobbying requirements which can be found at https://online.ogs.ny.gov/legal/lobbyinglawfaq/default.aspx Proposers are required to answer questions during proposal submission, which will include making required certification under the State Finance Law and to disclose any Prior Findings of Non-Responsibility (this includes a disclosure statement regarding whether the proposer has been found non-responsible under section 139-j of the State Finance Law within the previous four years).

Tax Law Section 5-a - NYSERDA is required to comply with the provisions of Tax Law Section 5-a, which requires a prospective contractor, prior to entering an agreement with NYSERDA having a value in excess of \$100,000, to certify to the Department of Taxation and Finance (the "Department") whether the contractor, its affiliates, its subcontractors and the affiliates of its subcontractors have registered with the Department to collect New York State and local sales and compensating use taxes. The Department has created a form to allow a prospective contractor to readily make such certification. See, ST-220-TD (available at

http://www.tax.ny.gov/pdf/current forms/st/st220td fill in.pdf). Prior to contracting with NYSERDA, the prospective contractor must also certify to NYSERDA whether it has filed such certification with the Department.

The Department has created a second form that must be completed by a prospective contractor prior to contacting and filed with NYSERDA. See, ST-220-CA (available at

http://www.tax.ny.gov/pdf/current_forms/st/st220ca_fill_in.pdf). The Department has developed guidance for contractors which is available at http://www.tax.ny.gov/pdf/publications/sales/pub223.pdf .

Contract Award - NYSERDA anticipates making multiple award(s) under this solicitation. A contract may be awarded based on initial applications without discussion, or following limited discussion or negotiations pertaining to the Statement of Work. Each application should be submitted using the most favorable cost and technical terms. NYSERDA may request additional data or material to support applications. NYSERDA will use the Sample Agreement to contract successful proposals. NYSERDA may at its discretion elect to extend and/or add funds to any project funded through this solicitation. NYSERDA reserves the right to limit any negotiations to exceptions to standard terms and conditions in the Sample Agreement to those specifically identified in the checklist questions. Proposers should keep in mind that acceptance of all standard terms and conditions will generally result in a more expedited contracting process. NYSERDA may decline to contract with awardees that are delinquent with respect to any obligation under any previous or active NYSERDA agreement.

Accessibility Requirements - If awardees from this solicitation will be posting anything on the web, or if the awardee will produce a final report that NYSERDA will post to the web, the following language must be included. NYSERDA requires contractors producing content intended to be posted to the Web to adhere to New York State's Accessibility Policy. This includes, but is not limited to, deliverables such as: documents (PDF, Microsoft Word, Microsoft Excel, etc.), audio (.mp3, .wav, etc.), video (.mp4, .mpg, .avi, etc.), graphics (.jpg, .png, etc.), web pages (.html, .aspx, etc.), and other multimedia and streaming media content. For more information, see <u>NYSERDA's Accessibility Requirements</u>.

Limitation - This solicitation does not commit NYSERDA to award a contract, pay any costs incurred in preparing a proposal, or to procure or contract for services or supplies. NYSERDA reserves the right to accept or reject any or all proposals received, to negotiate with all qualified sources, or to cancel in part or in its entirety the solicitation when it is in NYSERDA's best interest. NYSERDA reserves the right to reject proposals based on the nature and number of any exceptions taken to the standard terms and conditions of the Sample Agreement. NYSERDA reserves the right to disqualify proposers based upon the results of a background check into publicly available information and the presence of a material possibility of any reputational or legal risk in making of the award.

Disclosure Requirement - The proposer shall disclose any indictment for any alleged felony, or any conviction for a felony within the past five years, under the laws of the United States or any state or territory of the United States and shall describe circumstances for each. When a proposer is an association, partnership, corporation, or other organization, this disclosure requirement includes the organization and its officers, partners, and directors or members of any similarly governing body. If an indictment or conviction should come to the attention of NYSERDA after the award of a contract, NYSERDA may exercise its stop-work right pending further investigation or terminate the agreement; the contractor may be subject to penalties for violation of any law which may apply in the particular circumstances. Proposers must also disclose if they have ever been debarred or suspended by any agency of the U.S. Government or the New York State Department of Labor.

IV. Attachments:

Small Biomass Boiler Program	Large Biomass Boiler Program	Residential Pellet Stove Program			
PON 3010 Summary of Revisions					
Program Manual	Program Manual	Program Manual			
Contractor Participation Agreement		Contractor Participation Agreement			
Contractor Participation Application Form Project Application Form	Site Assessment Application Form	Contractor Participation Application Form [ONLINE] and Contractor Participation Application Form			
		Project Application Form [ONLINE] and Project Application Signature Form			
Payment Request Form	Project Application Form	Project Completion Form [ONLINE] and Project Completion Signature Form			
Proforma Finance Calculator	-	Proforma Finance Calculator			
QA Checklist	-	QA Checklist			



NY Green Bank

Technical & Engineering Support & Market Fundamentals & Analysis Services

Request for Proposals

RFP No. 11

Version 1.0 – June 2019

1. Introduction

1.1 **Opportunity & Overview**

NY Green Bank ("**NYGB**") requests proposals from firms interested in providing Technical and Engineering Support and/or Market Fundamentals and Analysis Services in support of NYGB's financing of clean energy projects and businesses and sustainable infrastructure in New York State ("**NYS**" or the "**State**"). NYGB actively seeks to invest in a wide range of clean energy technologies (e.g., energy efficiency, energy storage, renewable energy, electric vehicle and electric vehicle infrastructure, and biogas/biofuels etc.).

This is a multi-step solicitation process and requires that interested firms first submit a Pre-Qualification Paper. NYGB will evaluate all Pre-Qualification Papers received against the set of criteria set out in <u>Section 3.2</u> and invite qualified firms via email to submit a Full Proposal. Additional information on this process is detailed in <u>Section 2.2</u>.

1.2 Background

NYGB is a division of the New York State Energy Research and Development Authority ("**NYSERDA**"), acting as a \$1.0 billion State-sponsored specialized financial entity focused on mobilizing greater clean energy investment and projects within NYS. NYGB is structured and operated in a manner comparable to private investment funds and financing entities, including with respect to entering into transactions on market terms, being self-sustaining and covering its own costs of operation. NYGB is a key component of New York's Clean Energy Fund ("**CEF**"). The CEF is a \$5.3 billion commitment and is part of Governor Andrew M. Cuomo's Reforming the Energy Vision ("**REV**") strategy to advance clean energy growth and innovation and drive economic development across the State while reducing ratepayer collections. For more information on the CEF and REV strategy, see www.nyserda.ny.gov/About/Funding/Clean-Energy-Fund and www.rev.ny.gov.

The key elements of NYGB's mission are collaborating with private sector participants, implementing structures that overcome market barriers and addressing financing gaps in current clean energy financing markets and transforming those markets by enabling greater scale, new and expanded asset classes and increased liquidity. Consistent with this mission and its investment criteria, NYGB's key goals are to:

- (a) Attract private sector capital into clean energy markets in NYS;
- (b) Be self-sustaining; and
- (c) Reduce greenhouse gas ("GHG") emissions.

NYGB's activities in pursuit of its goals are specifically aimed at motivating faster and more extensive implementation of clean energy investments within NYS, fostering greater energy choices, reducing environmental impacts and delivering more clean energy benefits per public dollar spent for all New Yorkers.

Market barriers vary across different technologies and market participants; although a number of particular financing issues generally constrain growth across the clean energy sector, including lack of transaction standardization, deficient scale and volume, less understood project sponsors and counterparty credits, insufficient data on underlying loan and technology performance and underdeveloped or nonexistent capital markets for clean energy projects. These barriers are a few of many that limit private sector capital investment for both equity and debt into otherwise attractive renewable energy and energy efficiency projects resulting in gaps in the clean energy financing markets.

To address existing barriers, NYGB follows several important operating principles:

(a) NYGB enhances private sector market participation by providing financial products designed to scale markets for renewable energy and energy efficiency projects;

- (b) NYGB collaborates, rather than competes, with market participants that are already making progress in or can demonstrate an ability to engage the market but where that progress is constrained by the lack of available financing;
- (c) NYGB works with its clients and counterparties to leverage their capital and institutional capabilities with a focus on "wholesale" markets (that is, not providing funding directly to consumers/homeowners);
- (d) NYGB generally structures and prices its financial products consistent with commercial approaches to credit quality and risk, earning a return on investment to preserve and grow its capital base; and
- (e) NYGB recycles its capital into new clean energy projects when income is generated and as investments mature or are realized, maximizing the impact of its capital across multiple deployments.

NYGB's long-term objective is to provide a bridge to a vibrant, sustainable, growing and efficient private sector clean energy financing market across all types and sizes of projects. NYGB seeks to operate in areas where there is market interest but limited access to capital.

More information about NYGB can be found at www.greenbank.ny.gov.

2. Eligibility Requirements

This <u>Section 2</u> describes the minimum eligibility requirements that proposals must meet to be considered by NYGB.

To provide NYGB with supplemental expertise for transactional due diligence, project analysis and other transaction issues, RFP 11 seeks proposals from technical, engineering and services firms experienced in a broad variety of renewable energy technologies and other sectors of sustainable infrastructure as well as from those providing transaction support and market fundamentals and analysis. Proposers should be able to provide technical and engineering services and/or market fundamentals and analysis – a single respondent is not required to provide all types of services to be eligible for consideration under this RFP. Proposers will be evaluated on their expertise as well as previous experience aiding financial, investment and asset management institutions. Multiple firms are expected to be selected to become approved advisors capable of providing advice and representation for NYGB in specific potential transactions with respect to which they may be retained in connection with the services listed below, as requested. Tasks will be assigned to the selected and qualified firms on an as-needed basis.

2.1 Scope of Services

2.1.1 Technical/Engineering Advisory Services

Submissions will address the proposer's capabilities and prior experience providing technical and/or engineering advisory support to financial, investment and asset management institutions in one – or ideally multiple – of the following sectors of clean energy and/or sustainable infrastructure at all scales (i.e., residential, community-distributed generation, commercial and industrial and utility):

- Solar power generation
- Wind power generation (onshore and offshore)
- Energy efficiency
- Energy storage
- On-site power generation, including micro grids, combined heat and power, and fuel cells
- Electric vehicles, sustainable transportation and related charging and services infrastructure
- Biogas/biofuels
- Sustainable agriculture, including controlled environment agriculture projects
- Infrastructure related to offshore wind development (i.e., ports, transmission, etc.)

Within the sectors listed above, proposers are expected to be proficient in the following areas:

- (a) Due diligence of commercial technologies where NYGB may provide funding or other financial products;
- (b) Evaluation of third-party technical and engineering materials, including site visits as needed;
- (c) Preparation of independent engineer reviews or other documents necessary to conduct and document potential transaction due diligence, reflecting recommendations consistent with current market practices and prudent operating principles, including but not limited to all aspects of EPC contracts and financial models, construction schedules and budgets, capacity and availability factors, estimated output, major maintenance schedules, reserves and costs, construction monitoring and related issues, testing and commissioning, technology assessments and performance, together with providing input as needed to transaction document terms (including covenants, reporting requirements, financing conditions and monitoring);
- (d) NYGB and counterparty compliance with federal, state (including assisting with environmental impact assessments pursuant to 6 NYCRR Part 617, State Environmental Quality Review (SEQR)) and local regulatory requirements; and
- (e) Participation in program design, monitoring and administration as needed with respect to ongoing documentation compliance, requested modification to transaction terms (including waivers and amendments) in connection with single projects or businesses and potentially in connection with monitoring NYGB portfolio transactions.

2.1.2 Transaction Support

In addition to addressing the services within one or more of the sectors outlined above, NYGB will seek proposers that can demonstrate prior experience in the following areas, providing one or more of the following services to financial, investment and asset management institutions:

- Construction management/construction loan administration;
- Insurance review and advisory;
- Small and medium size business evaluation; and
- Trustee services (e.g., independent transaction management, administrative agent services, investment reporting, etc.).

2.1.3 Market Fundamentals & Analysis Services

For certain transactions, NYGB may require market fundamentals and analysis studies. Such studies enable NYGB to develop a view on markets that could impact the success and value of its investments and influence NYGB's ability to take a lead role in developing nascent clean energy and sustainable infrastructure markets. To support NYGB in this work, NYGB will seek proposers that can demonstrate prior experience and subject matter expertise in the following areas:

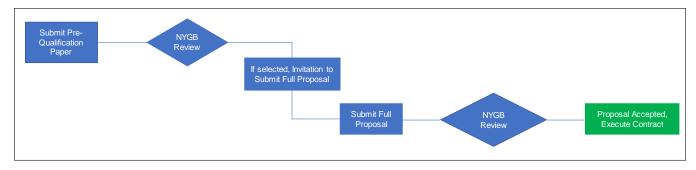
- Power, capacity and energy and renewable energy credit ("REC") markets;
- Ancillary power markets, especially in regard to storage investments;
- Fuel (e.g., natural gas);
- Other feedstocks (e.g., biomass);
- Federal and state programs including those that support Renewable Identification Numbers ("RIN") and Low Carbon Fuel Standards ("LCFS");
- Real estate property evaluation and valuation; and
- Credit assessment, including historical and projected delinquency, default and recovery rates for both unsecured and secured consumer, small commercial and industrial ("C&I"), large C&I, municipal, nonprofit and health-care loans and leases.

2.2 Solicitation Process

A multi-step solicitation process will be used. All proposers must first submit a maximum 4-page Pre-Qualification Paper in accordance with the instructions and template contained in <u>Attachment A</u>. NYGB will evaluate and score Pre-Qualification Papers based on the Scoring Criteria in <u>Section 3.2</u>. The closing date for submission of Pre-Qualification Papers is **Tuesday**, **July 23**, **2019 at 3:00 p.m**. Pre-Qualification Papers should be submitted to NYGB in accordance with the instructions contained in <u>Section 5.2</u>.

Following NYGB review and scoring, certain Pre-Qualification Paper proposers may be invited to submit a Full Proposal. Proposers invited to submit a Full Proposal will receive feedback, questions and other comments related to their Pre-Qualification Paper that should be addressed in the subsequent Full Proposal. This process is depicted in the flow chart below.

Figure 1: Multi-Step Solicitation Process Flow Chart



3. Proposal Evaluation

3.1 Overview

Pre-Qualification Papers and Full Proposals will be reviewed by a Scoring Committee consisting of NYGB and/or NYSERDA staff and will be scored and ranked according to the following criteria listed below. After the submissions are reviewed, NYGB will notify each proposer indicating its Pre-Qualification Paper or Full Proposal evaluation results, as applicable, via email. Proposers receiving favorable evaluations will be invited to either submit a Full Proposal or enter into contract negotiations with NYGB via email (depending on the stage as depicted in the flowchart above). After initial review of the Full Proposal, the proposer, at NYGB's sole discretion, may be asked to address specific questions or provide additional information, either in writing or through an interview, as part of the Full Proposal scoring process.

3.2 **Pre-Qualification Paper Scoring Criteria**

Using the instructions/template provided in <u>Attachment A</u>, Pre-Qualification Papers must concisely describe the firm's qualifications, including detailed examples of applying the Scope of Services outlined in <u>Section 2.1</u> to financial, investment and asset management institutions over the past five years. Each Pre-Qualification Paper will be evaluated against the following evaluation criteria:

- (a) Quality and depth of the proposer's experience in one or more of the areas described in Section 2.1;
- (b) Demonstrated familiarity with NYGB and experience working in NYS clean energy or sustainable infrastructure financing markets; and
- (c) Demonstrated experience working with financial, investment and asset management institutions.

3.3 Full Proposal Scoring Criteria

Should a proposer be invited to submit a Full Proposal, that proposal will be evaluated using the following Evaluation Factors:

- (a) Quality and depth of the firm's expertise and its prior capability in providing services similar to those identified in <u>Section 2.1</u> and in past clean energy and/or sustainable infrastructure financing transactions on behalf of a commercial bank, financial institution, financial intermediary or investment and asset manager;
- (b) Demonstrated experience of working in and knowledge of NYS clean energy and/or sustainable infrastructure financing markets;
- (c) Anticipated cost of services and willingness to work with NYGB to minimize costs;
- (d) Commitment of time and resources to this account, and amenability to, and facility for, working with NYGB staff in various capacities;
- (e) Information provided by client references; and
- (f) Overall organization and quality of proposal, including cohesiveness, conciseness and clarity of response.

3.3.1 Required Qualifications

Proposers selected to submit a Full Proposal should be able to:

- (a) Describe experience in:
 - i. Representing banks and other financial institutions as lender's engineer/technical advisor or in market fundamentals and analysis;
 - ii. Providing technical, engineering or other support services to banks or other financial institutions for transactions similar to NYGB eligible investments, which includes, but is not limited to the technologies or infrastructure sectors described in <u>Section 2.1.1</u>;
- (b) Provide a brief summary of the capabilities of your firm that are relevant to your proposed services. Include the number of similar or analogous assignments your firm has completed in the past five years, and a discussion of their relevance to the services requested in <u>Section 2.1</u>. Highlight any areas where the assignments were substantially different from the services to be provided;
- (c) Describe how you differentiate your firm from your competitors and its relevance to the services you propose to provide to NYGB;
- (d) Be available to accommodate the technical, engineering, market fundamentals analysis and support related due diligence needs of NYGB (as applicable). Proposers must demonstrate that primary and reasonably qualified backup and support staff are available as needed and that the proposer has staffing capabilities to perform the work on a timely basis. Proposers must be supported by sufficient professional and/or support staff to adequately provide the required services;
- (e) Provide resumes/biographical profiles of the key team members who will be dedicated to the NYGB account and will provide services to NYGB, including their number of years both of relevant experience and professional licensing/registration. Include a description of each employee's function within the firm, title, office address, number of years of service with the firm and other relevant experience. Describe the availability of the lead person(s) for consultation with NYGB, including but not limited to, their availability to meet with NYGB staff in New York and additional NYSERDA staff in either New York or Albany and potential project sites throughout the State;

- (f) Disclose if you intend to delegate to subcontractors and, if so, explain how their experience enhances the potential performance of the team;
- (g) Provide the physical address of the office(s) that will provide services to NYGB pursuant to your proposal. List other locations where the firm has offices and describe the capabilities of each if they differ from those of the office that will provide services to NYGB. Provide information on the number of assignments your team works on annually and number of assignments the team leadership works on at a time;
- (h) Discuss fully any conflicts of interest, actual or perceived, that might arise in connection with your firm's involvement with NYGB. If conflicts do or may exist, describe how your firm would resolve them, while continuing to provide the Scope of Services outlined in <u>Section 2.1</u>. Please be aware that the firm(s) selected will be expected to represent NYGB in any transactions falling under this RFP. Representation of any other party to these NYGB transactions would be prohibited without the prior written consent of NYGB;
- (i) Identify any litigation or administrative proceedings to which your firm is a party and which would either materially impair your ability to perform the services enumerated herein and for which this RFP was issued or, if decided in an adverse manner, materially adversely affect the financial condition of your firm;
- (j) Provide an explanation of any changes the Proposers would request to the Sample Agreement, as detailed in <u>Attachment C</u>; and
- (k) Provide two references from previous comparable engagements (within the past five years), including name, title, telephone number and email address.

3.3.2 Cost

All Full Proposals should state the rates at which the services of assigned personnel would be provided to NYGB. This should be provided from the Date of Award to March 31, 2020 and for the following four NYGB fiscal years: 2020 – 2021, 2021 – 2022, 2022 – 2023 and 2023 – 2024 (NYGB fiscal years run from April 1 through March 31). Detail on how services are invoiced is required. Increases, if any, for any of the years must be stated in terms of percentages above the rates provided for the fiscal year ending March 31, 2020. Include a completed Project Personnel and Rate Form with your proposal (Attachment B).

Additionally, please include the following detail on the Project Personnel and Rate Form:

- (a) For each person whose resume is provided in response to <u>Section 3.3.1</u>, the normal hourly rate and the hourly rate you propose to charge NYGB;
- (b) For each applicable category of support staff or other assigned staff, the normal hourly rate and the hourly rate you propose to charge NYGB;
- (c) Any reduced rates or fees charged to other State or local governments in NYS for similar services;
- (d) A statement of the basis on which any other firm expenses related to services provided to NYGB would be billed, if other than cost; and
- (e) A statement of any special considerations with respect to billing or payment of fees and expenses that your firm offers and that you believe would differentiate you from other proposers and make your firm's services more cost effective for NYGB.

4. General Conditions

4.1 Communications

No communication intended to influence this procurement is permitted except by contacting <u>info@greenbank.ny.gov</u> (the "**Designated Contact**"). Please always include "RFP 11" in the subject line of all communications.

Contacting anyone other than this Designated Contact (either directly by the proposer or indirectly through a lobbyist or other person acting on the proposer's behalf) in an attempt to influence the procurement: (a) may result in a proposer being deemed a non-responsible offeror; and (b) may result in the proposer not being awarded a contract.

4.2 Municipal Advisor Rules

NYGB is aware of the amendments to Section 15B of the Securities Exchange Act of 1934 effectuated by Section 975 of Title IX of the Dodd-Frank Act, as well as SEC Release No. 34-70462 (September 20, 2013). In this regard, please note that NYGB considers discussions with potential proposers, and the review of proposals, to be arm's-length negotiations. NYGB recognizes that proposers have financial and other interests that differ from NYGB. As such, NYGB does not consider a fiduciary relationship to arise at the proposal stage.

Accordingly, any responses to this RFP would meet the exemption from the "municipal advisor" definition provided by Rule 15Ba1-1(d)(3)(iv) for responses to requests for proposals or qualifications.

4.3 **Proprietary Information**

New York's Freedom of Information Law, Public Officers Law, Article 6, provides for public access to information NYSERDA and its divisions possess. Public Officers Law, Section 87(2)(d) provides for exceptions to disclosure for records or portions thereof that "are trade secrets or are submitted to an agency by a commercial enterprise or derived from information obtained from a commercial enterprise and which if disclosed would cause substantial injury to the competitive position of the subject enterprise." Information submitted to NYGB that the proposer wishes to have treated as proprietary and confidential trade secret information should be identified and labeled "Confidential" or "Proprietary" on each page at the time of disclosure. This information should include a written request to except it from disclosure, including a written statement of the reasons why the information should be excepted. See Public Officers Law, Section 89(5) and the procedures set out in 21 NYCRR Part 501. The confidentiality of any information submitted cannot be guaranteed.

4.4 Limitation

This RFP does not commit NYGB to agree to participate in any transaction, proceed to negotiate any terms or definitive documentation, pay any costs incurred in preparing a proposal or procure or contract for services. NYGB reserves the right to accept or reject, in whole or in part, any or all proposals received, to negotiate with all qualified parties or to cancel in part or in its entirety this RFP when it is in NYGB's best interest.

4.5 **Disclosure Requirement**

The proposer shall disclose, for any team member, any indictment for alleged felony or any conviction for a felony within the past five years under the laws of the United States or any state or territory of the United States and shall describe the relevant circumstances. When a proposer is an association, partnership, corporation or other organization, this disclosure requirement includes the organization and its officers, partners and directors or members of any similar governing body. If an indictment or conviction comes to the attention of NYGB or NYSERDA after NYGB has indicated its interest to, or has agreed to enter into or participate in, any transaction, NYGB may terminate the agreement and the proposer may be subject to penalties for violation of any law which may apply in the particular circumstances. Proposers must also disclose if any team members have ever been disbarred or suspended by any agency of the United States Government or the NYS Department of Labor.

4.6 Accessibility Requirement

NYGB/NYSERDA requires contractors producing content intended to be posted to the Web to adhere to New York State's Accessibility Policy. This includes, but is not limited to, deliverables such as: documents (PDF, Microsoft Word, Microsoft Excel, etc.), audio (.mp3, .wav, etc.), video (.mp4, .mpg, .avi, etc.), graphics (.jpg, .png, etc.), web pages (.html, .aspx, etc.) and other multimedia and streaming media content. For more information, see NYSERDA's Accessibility Requirements.

4.7 State Finance Law Sections 139-j & 139-k

NYGB/NYSERDA is required to comply with State Finance Law Sections 139-j and 139-k. These provisions contain procurement lobbying requirements available at <u>www.online.ogs.ny.gov/legal/lobbyinglawfaq/default.aspx</u>. Proposers are required to answer questions during proposal submission, which will include making required certification under the State Finance Law and to disclose any Prior Findings of Non-Responsibility (this includes a disclosure statement regarding whether the proposer has been found non-responsible under Section 139-j of the State Finance Law within the previous four years).

4.8 Tax Law Section 5-a

NYGB/NYSERDA is required to comply with the provisions of Tax Law Section 5-a, which requires a prospective contractor, prior to entering an agreement with NYSERDA having a value in excess of \$100,000, to certify to the Department of Taxation and Finance (the "**Department**") whether the contractor, its affiliates, its subcontractors and the affiliates of its subcontractors have registered with the Department to collect New York State and local sales and compensating use taxes. The Department has created a form to allow a prospective contractor to readily make such certification (see ST-220-TD, available at

<u>www.tax.ny.gov/pdf/current_forms/st/st220td_fill_in.pdf</u>). Prior to contracting with NYSERDA, the prospective contractor must also certify to NYSERDA whether it has filed such certification with the Department.

4.9 Service Provider Agreement

NYGB will negotiate the form and substance of the final service provider agreement with the proposer(s) selected under this RFP; however, NYGB will require that certain New York State provisions be attached to the final agreement as exhibits. <u>Attachment C</u> provides NYGB's form of Retainer Agreement, with the expectation that the final agreement substantially conforms to NYGB's standard agreement. The service provider agreement will be subject to the laws of the State of New York and will state that any disputes between the parties shall be fully and finally adjudicated in the state courts of the State of New York in accordance with NY Civil Practice Law & Rules §505.

5. Key Dates & Instructions to Submit Pre-Qualification Papers and Full Proposals

5.1 **Critical Dates, Activities & Deadlines**

Critical dates, related activities and deadlines relating to the RFP are set forth below. NYGB may change these dates at its sole discretion and convenience, without liability.

	Activity	Description	Date(s)
1.	Release RFP	Email, online and NY State	Friday, June 28, 2019
		Contract Reporter	
2.	Pre-Qualification Papers due to NYGB	Website portal	Tuesday, July 23, 2019 at 3:00 p.m.
3.	Notification if selected to submit Full Proposal	Email/Telephone	Expected by end of July, 2019
4.	Deadline to submit Full	Website portal	Wednesday, August 14, 2019 at 3:00
	Proposal		p.m.
5.	Notification if selected for	Email/Telephone	Expected by the end of August, 2019
	contract negotiation		

5.2 **Due Date & Submission Requirements**

Firms wishing to submit a Pre-Qualification Paper for review must do so by **Tuesday**, **July 23**, **2019 at 3:00 p.m. EST**. Proposers must only submit one 4-page paper, utilizing the instructions/template in <u>Attachment A</u>. Additional attachments will not be considered. Pre-Qualification Papers must address the criteria set forth in <u>Section 3.2</u>. Pre-Qualification Papers that are late will not be accepted. Incomplete Pre-Qualification Papers will also not be accepted. It is the proposer's responsibility to ensure that all pages have been included in the submission.

Should your firm be selected to advance and submit a Full Proposal, the complete proposal package, including all mandatory attachments listed below, must be submitted by **Wednesday, August 14, 2019 at 3:00 p.m. EST**. Proposal documents may not exceed 15 pages, plus attachments. Unnecessary attachments beyond those sufficient to present a complete, comprehensive and effective response will not influence the evaluation of the proposal. Each page of the proposal should state the name of the proposer, the RFP number and the page number. Full Proposals that are late will not be accepted. Incomplete Full Proposals will also not be accepted. Full Proposals from firms that did not submit a Pre-Qualification Paper and receive notification from NYGB to proceed with a Full Proposal will not be considered.

Electronic submission is required for both Pre-Qualification Papers and Full Proposals. Proposers must submit in either PDF or MS Word format. PDFs should be searchable and should be created by direct conversion from MS Word or other conversion utility rather than scanning. For ease of identification, all electronic files must be named using the proposer's entity name in the title of the document. For detailed instructions on how to submit a proposal online, follow the instructions on NYGB's website under "Work with Us", "Service Providers".

Please note as part of the online submission process there are required questions that a proposer will have to answer in addition to uploading attachments and NYGB suggests allotting at least 60 minutes to enter/submit proposals. The online proposal system closes promptly at 3:00 p.m. EST. Files in process or attempted edits or submission after this time will not be accepted. If changes are made to this solicitation, notification will be posted on NYGB's website under "Work with Us", "Service Providers". NYGB anticipates notifying firms selected for contract negotiation by the end of August 2019.

6. Attachments

Attachment A – Pre-Qualification Paper Template (Mandatory)

Attachment B – Project Personnel and Rate Form (Mandatory, only if selected for Full Proposal) Attachment C – NYGB Sample Agreement



NY Green Bank

Outside Legal Counsel Services

Request for Proposals

RFP No. 12

Version 1.0 - August 30, 2019

1. Introduction

1.1 **Opportunity & Overview**

NY Green Bank ("**NYGB**"), a division of the New York State Energy Research and Development Authority ("**NYSERDA**") invites proposals from law firms interested in serving as outside legal counsel in connection with the operations and investment activity of NYGB relative to its financing of clean energy projects and businesses and sustainable infrastructure, as well as potentially other NYSERDA financing-related legal work.

Services may include, but will not necessarily be limited to: (1) assisting in the development, implementation, negotiation and closing of NYGB financial products, potentially including credit enhancement, loan loss reserves, loan warehousing, aggregation and securitization, subordinated debt, tax equity structures, direct lending, loan participations, equity investments, term loans and investments, and construction finance; (2) legal and regulatory compliance; (3) business issues involving the structure and operation of NYGB; (4) advice related to NYGB organizational and strategic matters; (5) advice related to specific environmental, siting and permitting matters; (6) advice related to special tax and tax credit matters; (7) advice related to special bankruptcy matters; (8) preparation of standard NYGB documents, contracts and organizational materials and; (9) other NYSERDA-wide financing-related legal work, as necessary.

1.2 Background

NYSERDA is a public benefit corporation of the State of New York created and operating under the provisions of Public Authorities Law, §§1850 *et seq.*, the New York State Energy Research and Development Authority Act.

In his January 2013 State of the State address, Governor Andrew M. Cuomo announced the formation of a \$1.0 billion NY Green Bank as a division of NYSERDA to alleviate financial market barriers that currently impede the flow of private capital to clean energy projects.

NYGB acts as a \$1.0 billion State-sponsored specialized financial entity focused on mobilizing greater clean energy investment and projects within NYS. NYGB is structured and operated in a manner comparable to private investment funds and financing entities, including with respect to entering into transactions on market terms, being self-sustaining and covering its own costs of operation. NYGB is a key component of New York's Clean Energy Fund ("CEF"). The CEF is a \$5.3 billion commitment, and part of Governor Cuomo's Reforming the Energy Vision ("REV") strategy to advance clean energy growth and innovation and drive economic development across the State, while reducing ratepayer collections. For more information on the CEF and REV strategy, see nyserda.ny.gov/About/Clean-Energy-Fund and rev.ny.gov/. NYGB also expects to play a significant role in meeting the targets of the State's recently-passed Climate Leadership and Community Protection Act of 2019 ("CLCPA"), which adopted the most ambitious and comprehensive climate and clean energy legislation in the country. The CLCPA requires the State to achieve a carbon free electricity system by 2040 and reduce greenhouse gas emissions by 85% below 1990 levels by 2050, setting a new standard for states and the nation to expedite the transition to a clean energy economy. The new law will drive investment in clean energy solutions such as wind, solar, energy efficiency and energy storage. Importantly, implementation of the CLCPA will target investments to benefit disadvantaged communities, create tens of thousands of new jobs, improve public health and quality of life and provide all New Yorkers with even more robust clean energy choices.

The key elements of NYGB's mission are collaborating with private sector participants, implementing structures that overcome market barriers and addressing financing gaps in current clean energy financing markets, and transforming those markets by enabling greater scale, new and expanded asset classes and increased liquidity. Consistent with this mission and its investment criteria, NYGB's key goals are to:

- (a) Attract private sector capital into clean energy markets in NYS;
- (b) Be self-sustaining; and

(c) Reduce greenhouse gas ("GHG") emissions.

NYGB's activities in pursuit of its goals are specifically aimed at motivating faster and more extensive implementation of clean energy investments within NYS, fostering greater energy choices, reducing environmental impacts and delivering more clean energy benefits per public dollar spent for all New Yorkers.

Market barriers vary across different technologies and market participants, although a number of particular financing issues generally constrain growth across the clean energy sector, including lack of transaction standardization, deficient scale and volume, less understood project sponsors and counterparty credits, insufficient data on underlying loan and technology performance, and underdeveloped or nonexistent capital markets for clean energy projects. These barriers are a few of many that limit private sector capital investment, for both equity and debt, into otherwise attractive renewable energy and energy efficiency projects, resulting in gaps in the clean energy finance market.

To address existing barriers, NYGB follows several important operating principles:

- (a) NYGB enhances private sector market participation by providing financial products designed to scale markets for renewable energy and energy efficiency projects;
- (b) NYGB collaborates, rather than competes, with market participants that are already making progress in, or can demonstrate an ability to engage, the market but where that progress is constrained by the lack of available financing;
- (c) NYGB works with its clients and counterparties to leverage their capital and institutional capabilities with a focus on "wholesale" markets (that is, not providing funding directly to consumers/homeowners);
- (d) NYGB generally structures and prices its financial products consistent with commercial approaches to credit quality and risk, earning a return on investment to preserve and grow its capital base; and
- (e) NYGB recycles its capital into new clean energy projects when income is generated and as investments mature or are realized, maximizing the impact of its capital across multiple deployments.

NYGB's long-term objective is to provide a bridge to a vibrant, sustainable, growing and efficient private sector clean energy financing market, across all types and sizes of projects. NYGB seeks to operate in areas where there is market interest, but limited access to capital.

NYGB investments involve a wide range of clean energy technologies (e.g., in areas like energy efficiency, energy storage, renewable energy, electric vehicle and electric vehicle infrastructure, etc.).

More information about NYGB can be found at greenbank.ny.gov.

2. Eligibility Requirements

2.1 Scope of Services

NYGB requests proposals from law firms experienced in a broad variety of banking and financing issues, as well as law firms with experience in federal, state and local regulatory requirements. Proposers are encouraged to apply to provide one or more services listed in one or both of the categories below in Sections 2.1.1 and 2.1.2 ("**Category A Services**" and "**Category B Services**," respectively). Category A Services and Category B Services are both subject to the General Conditions set forth in Section 5 below. Category A Services are also subject to the Further General Conditions set forth in Section 6 below. Proposers selected by NYGB pursuant to this RFP will be expected to be available to provide services to NYGB and NYSERDA for a 5-year period. During

this period, NYGB will be able to assign tasks to selected proposers on an as-needed basis for the performance of specific services for NYGB and NYSERDA, as applicable.

2.1.1 Category A Services

- (a) Legal advice and support related to NYGB and NYSERDA compliance with all federal, state and local regulatory requirements;
- (b) Preparation of standard NYGB documents, contracts and organizational materials (for more information regarding expected organizational initiatives, please reference NYGB's 2019 – 20 Annual Business Plan: <u>http://greenbank.ny.gov/-/media/greenbanknew/files/nygb-2019-business-plan.pdf</u>);
- (c) Legal advice and support related to business and organizational issues involving the structure, strategy and operation of NYGB, including as relates to the structure and operation of NYSERDA; and
- (d) Such other legal advice and support relating to banking or financing matters as may be requested by NYSERDA or NYGB.

2.1.2 Category B Services

- (a) Development, implementation, negotiation and closing of NYGB financial products, including credit enhancement, loan loss reserves, loan warehousing, aggregation and securitization, subordinated debt, tax equity structures, direct lending, loan participations, equity investments, term loans and investments, and construction finance;
- (b) Legal advice and support related to special environmental, siting and permitting matters in support of specific transactions;
- (c) Legal advice and support related to special tax and tax credit matters around specific transactions;
- (d) Legal advice and support related to special bankruptcy matters around specific transactions; and
- (e) Such other assistance relating to banking or financing matters as may be requested by NYSERDA or NYGB related to specific transactions or programmatic initiatives.

3. Proposal Submission Requirements

3.1 **Proposal Submission**

Firms wishing to submit a proposal for review must do so by **September 30, 2019 at 3:00 p.m. EST**. Proposals that are late will not be accepted. Substantially incomplete proposals will also not be accepted. It is the proposer's responsibility to ensure that all pages have been included in the submission. Proposal documents should not exceed 15 pages, plus attachments. Unnecessary attachments beyond those sufficient to present a complete, comprehensive and effective response will not positively influence the evaluation of the proposal. Each page of the proposal should state the name of the proposer, the RFP number and the page number.

Electronic submission of proposals is required (no materials should be mailed to NYGB). Proposers must submit in either PDF or MS Word format. PDFs should be searchable and should be created by direct conversion from MS Word or other conversion utility, rather than scanning. For ease of identification, all electronic files must be named using the proposer's entity name in the title of the document. For detailed instructions on how to submit a proposal online, follow the instructions on NYGB's website (<u>www.greenbank.ny.gov</u>) under "Work with Us;" "RFP Resources;" "Instructions to Submit Service Provider Proposals." Please note that, as part of the online submission process, proposers will be required to answer questions in addition to uploading attachments. NYGB suggests allotting at least 60 minutes to enter/submit proposals. The online proposal system closes promptly at 3:00 p.m. EST; files in process or attempted edits or submission after this time will not be accepted. If changes are made to this solicitation, an e-mail will be sent to the proposer's contact as listed in the Proposer Contact Information section of the NY Green Bank portal as part of the online submission process, and any modified documents will be posted on NYGB's website (www.greenbank.ny.gov) under "Work with Us;" "Open Solicitations;" "RFP 12: Outside Legal Counsel Services." NYGB anticipates executing a Final Agreement (as defined below) by the end of December 2019 with proposers who have been selected to enter into contract negotiation.

If you have technical questions concerning this solicitation, contact (i) <u>info@greenbank.ny.gov</u>; or (ii) (212) 379-6260. If you have contractual questions concerning this solicitation, contact Venice Forbes at (518) 862-1090, ext. 3507, or <u>VeniceSolicitations@nyserda.ny.gov</u>. Please include RFP 12 in the subject line of all e-mail communications.

No communication intended to influence this procurement is permitted except by contacting: (i) <u>info@greenbank.ny.gov</u> (Designated Contact 1); (ii) William Mirrer (Designated Contact 2) at (212) 379-4108; (iii) Sven Hodges (Designated Contact 3) at (212) 379-4105; (iv) Peter Costello (Designated Contact 4, and, collectively with Designated Contact 1, Designated Contact 2 and Designated Contact 3, the Designated Contacts) at (518) 862-1090, ext. 3527. Please always include "RFP 12" in the subject line to all communications. Contacting anyone other than these Designated Contacts (either directly by the proposer or indirectly through a lobbyist or other person acting on the proposer's behalf) in an attempt to influence the procurement may result in a proposer: (1) being deemed a non-responsible offerer, and (2) not being awarded a contract.

Late or incomplete proposals will be returned and not accepted. Faxed, mailed or e-mailed proposals will not be accepted. If changes are made to this solicitation, notification will be posted on NYGB's website at <u>www.greenbank.ny.gov</u>.

3.2 Procurement Lobbying Requirements - State Finance Law sections 139-j and 139-k

NYSERDA is required to comply with State Finance Law sections 139-j and 139-k. These provisions contain procurement lobbying requirements which can be found at

https://online.ogs.ny.gov/legal/lobbyinglawfaq/default.aspx . Proposers are required to answer questions during proposal submission, which will include making required certification under the State Finance Law and to disclose any Prior Findings of Non-Responsibility (this includes a disclosure statement regarding whether the proposer has been found non-responsible under section 139-j of the State Finance Law within the previous four years). Failure to include such certification and disclosures and will disqualify your proposal.

3.3 Format

Proposals should contain two parts. Part I must consist of responses to the qualification items (Section 3.4, "Description of Qualifications" below). Part II must consist of complete contract cost and pricing information (Section 3.5, "Cost" below) and the proposed Law Firm Retainer Agreement (as defined below, and for reference see Section 3.6, "Law Firm Retainer Agreement" below). Each part must be complete, so that it can be evaluated independently, but should be submitted as a single Proposal.

3.4 **Description of Qualifications**

Proposers should:

- (a) Describe their experience in:
 - i. Representing banks and other financial institutions, with an emphasis on experience with public sector financial institutions;
 - ii. Developing financial offerings of the types listed in the preamble and Section 2 above and as described in the transaction profiles on NYGB's website (<u>https://greenbank.ny.gov/Investments/Portfolio</u>);

- iii. Structuring and closing clean energy financing transactions;
- iv. Representing various entities, including financing entities and/or New York State governmental entities, regarding organizational and compliance matters;
- (b) Be available to accommodate the legal needs of NYGB and/or NYSERDA. Proposers must demonstrate that primary and reasonably qualified backup and support attorneys are available on an as-needed basis, and that the proposer has staff capabilities to perform the work on a timely basis. Proposers must be supported by a firm with sufficient professional/support staff to adequately provide the required services;
- (c) Provide the names of personnel in the firm who will be assigned to NYGB's and NYSERDA's account and their experience in performing services similar to the services requested by this RFP. Include resumes for all employees proposed to be involved on this account (resumes may be included as an appendix to the proposal). Include a description of each employee's function in the firm, title, office address, and number of years of service with the firm and other relevant past experience. Describe the percentage of the firm's time commitment to this account that each person would be anticipated to provide. Describe the availability of the lead person(s) for consultation with NYGB and/or NYSERDA, including but not limited to his or her ability to meet with NYGB staff in New York, and additional NYSERDA staff in Albany, New York;
- (d) Discuss fully any conflicts of interest, actual or perceived, that might arise in connection with your firm's involvement with NYGB and/or NYSERDA. If conflicts do or might exist, describe how your firm would resolve them. Please be aware that the firm(s) selected will be expected to represent NYGB (as a division of NYSERDA) and/or NYSERDA in all transactions falling under this RFP; representation of any other party to these NYGB and/or NYSERDA transactions would be prohibited without the express written approval of NYGB, which would be unlikely (for more information on NYGB's expected approach with respect to potential conflicts of interest, please see the Sample Agreement's (as defined below) "Conflicts of Interest" language attached hereto in Attachment A);
- (e) Identify any litigation or administrative proceedings to which you are a party and which would either (a) materially impair your ability to perform the services enumerated herein and for which this RFP was issued or (b) if decided in an adverse manner, materially adversely affect the financial condition of your firm;
- (f) Identify the employees discussed in Section 3.4(c) that have been the subject of any investigation or disciplinary action by the New York State Ethics Commission, the Commission on Public Integrity, the Temporary State Commission on Lobbying, or New York State. Describe briefly how any matter was resolved or whether it remains unresolved. Proposers must certify that the attorneys working on this account have never been reprimanded, censured, or suspended by the New York Supreme Court for ethics infractions;
- (g) Indicate the address of the office through which this account will be primarily serviced, and any anticipated travel or other such costs;
- (h) Provide any other information you believe would make your firm's representation superior to other firms' representation;
- Provide in-line edits and an explanation of any changes the proposers would request to the sample agreement ("Sample Agreement") attached hereto as Attachment A. Because NYGB expects to harmonize its standard terms and conditions across all awarded contracts, NYGB may accept or reject such requested changes at its discretion;
- (j) Indicate which services your firm is proposing with respect to, as listed above in Section 2.1.1 (Category A Services (a)-(d)) and Section 2.1.2 (Category B Services (a)-(e)); and
- (k) Provide two relevant client references, including name, address, and telephone number.

3.5 **Cost**

State the rates at which the services of assigned personnel would be provided to NYGB and/or NYSERDA beginning in fiscal year 2019 – 20 (i.e., Date of Award to March 31, 2020, and for NYGB fiscal years (April 1 through March 30) 2020 - 21, 2021 - 22, 2022 - 23, 2023 - 24, and 2024 - 25 and how services would be billed. Increases, if any, for those years may be stated in terms of percentages above the rates for the fiscal year ending March 31, 2020, and are expected to escalate no more than 2% per year for the duration of the engagement (please see the Sample Agreement's "Rates Annual Escalation" section for more information).

Additionally, please include:

- (a) For each person whose resume is provided in response to Section 3.4(c) above, your normal hourly rate and the hourly rate you propose to charge NYGB;
- (b) For each applicable category of support staff or other assigned staff, the normal hourly rate and the hourly rate you propose to charge NYGB, if billed separately;
- (c) Any reduced rates or fees charged other State or local governments in New York for these types of services;
- (d) A statement of the basis on which any other firm expenses related to services provided to NYGB and/or NYSERDA would be billed, if other than cost;
- (e) A statement of any special considerations with respect to billing or payment of fees and expenses that your firm offers and that you believe would differentiate you from other proposers and make your firm's services more cost effective for NYGB; and
- (f) A statement of your views with respect to the potential for alternative fee structures for specific matters or transactions on a case-by-case basis (please see the Sample Agreement, section 2 (Alternative Fee Structures) for reference).

3.6 Law Firm Retainer Agreement

Proposers should provide the retainer agreement (the "**Law Firm Retainer Agreement**") they propose to use if selected by NYGB under this RFP. If selected by NYGB, the Law Firm Retainer Agreement, as modified by the terms of the Sample Agreement (Attachment A hereto), will serve as the basis for negotiating the Final Agreement with NYGB regarding the retention of the proposer as outside legal counsel to NYGB and NYSERDA. (For more information, see Section 5.7, "Final Agreement" below).

4. Proposal Evaluation & Selection Process

4.1 **Proposal Evaluation**

Proposals meeting the RFP requirements will be evaluated using the following evaluation factors:

- (a) Experience in general on relevant commercial-related issues and financing activities similar to those undertaken or contemplated by NYGB (for more information on investments undertaken by NYGB, please reference the transaction profiles on NYGB's website: <u>https://greenbank.ny.gov/Investments/Portfolio</u>);
- (b) Quality and depth of the firm's expertise and its prior capability in providing services similar to those identified in Section 2.1.1 (Category A Services (a)-(d)) and Section 2.1.2 (Category B Services (a)-(e)), as applicable), and in clean energy financing transactions. For those firms who have worked in any capacity with NYGB and/or NYSERDA, the quality of work and value delivered on those transactions will be considered;

- (c) Anticipated cost of services and willingness to work with NYGB and NYSERDA to minimize costs;
- (d) Commitment of time and resources to this account, and amenability to, and facility for, working with NYGB and NYSERDA attorneys and staff in various capacities;
- (e) Overall organization and quality of proposal, including cohesiveness, conciseness, and clarity of response;
- (f) With respect to Category A Services work, diversity practices and ability to meet NYSERDA goals with respect to minority- and women-owned business enterprises (MWBE) and service-disabled veteranowned business enterprises (SDVOB) (see attachments B, C and D hereto); and
- (g) Degree and substance of the changes, if any, requested to the Sample Agreement.

4.2 Selection Process

A scoring committee ("**Scoring Committee**"), comprised of internal NYGB staff, will review and evaluate proposals. Top-ranked firms may also be invited to make oral presentations to the Scoring Committee or other NYGB staff, and may be required to provide client references, as part of the final selection process.

5. General Conditions

5.1 **Proprietary Information**

Careful consideration should be given before confidential information is submitted to NYGB and NYSERDA as part of your proposal. Review should include whether it is critical for evaluating a proposal, and whether general, non-confidential information, may be adequate for review purposes. The NYS Freedom of Information Law, NYS Public Officers Law, Article 6, provides for public access to information NYGB or NYSERDA possesses. NYS Public Officers Law, Section 87(2)(d) provides for exceptions to disclosure for records or portions thereof that "are trade secrets or are submitted to an agency by a commercial enterprise or derived from information obtained from a commercial enterprise." Information submitted to NYSERDA that the proposer wishes to have treated as proprietary, and confidential trade secret information, should be identified and labeled "Confidential" or "Proprietary" on each page at the time of disclosure. This information should include a written request to except it from disclosure, including a written statement of the reasons why the information should be excepted. See Public Officers Law, Section 89(5) and the procedures set forth in 21 NYCRR Part 501

http://nyserda.ny.gov/~/media/Files/About/Contact/NYSERDARegulations.ashx. However, NYGB and NYSERDA cannot guarantee the confidentiality of any information submitted.

5.2 **Omnibus Procurement Act of 1992**

It is the policy of New York State to maximize opportunities for the participation of New York State business enterprises, including minority- and women-owned business enterprises, as bidders, subcontractors, and suppliers on its procurement Agreements.

Information on the availability of New York subcontractors and suppliers is available from:

Empire State Development Division for Small Business 625 Broadway Albany, NY 12207

A directory of certified minority- and women-owned business enterprises is available from:

Empire State Development Minority and Women's Business Development Division 625 Broadway Albany, NY 12207

5.3 Tax Law Section 5-a

NYSERDA is required to comply with the provisions of Tax Law Section 5-a, which requires a prospective contractor, prior to entering an agreement with NYSERDA having a value in excess of \$100,000, to certify to the Department of Taxation and Finance (the "**Department**") whether the contractor, its affiliates, its subcontractors and the affiliates of its subcontractors have registered with the Department to collect New York State and local sales and compensating use taxes. The Department has created a form to allow a prospective contractor to readily make such certification. *See,* ST-220-TD (available at

<u>http://www.tax.ny.gov/pdf/current_forms/st/st220td_fill_in.pdf</u>). Prior to contracting with NYSERDA, the prospective contractor must also certify to NYSERDA whether it has filed such certification with the Department. The Department has created a second form that must be completed by a prospective contractor prior to contracting and filed with NYSERDA. *See,* ST-220-CA (available at

<u>http://www.tax.ny.gov/pdf/current_forms/st/st220ca_fill_in.pdf</u>). The Department has developed guidance for contractors which is available at <u>http://www.tax.ny.gov/pdf/publications/sales/pub223.pdf</u>.

5.4 Contract Award

NYGB anticipates making one or more award(s) under this solicitation. It may award a contract based on initial applications without discussion, or following limited discussion, negotiations, or interviews. Each Proposal should be submitted using the most favorable cost and technical terms. NYGB may request additional data or material to support applications. NYGB will review the Law Firm Retainer Agreement provided by the proposer. NYGB may decline to contract with awardees that are delinquent with respect to any obligation under any previous or active NYGB and/or NYSERDA agreement.

NYGB also reserves the right to correct any arithmetic errors, to accept or reject any of the firm's employees assigned to provide services on this project and to require their replacement at any time, and to reject any proposal containing false or misleading statements or that provides references that do not support an attribute or a condition claimed by the proposer.

5.5 Limitation

This solicitation does not commit NYGB to participate in any transaction, proceed to negotiate any terms or definitive documentation, award a contract, pay any costs incurred in preparing a proposal, or to procure or contract for services or supplies. NYGB reserves the right to accept or reject any or all proposals received, to negotiate with all qualified sources, or to cancel in part or in its entirety the solicitation when it is in NYGB's best interest. NYGB reserves the right to reject proposals based on the nature and number of any exceptions taken to the standard terms and conditions laid forth in Annex C of the Sample Agreement. NYGB reserves the right to disqualify proposers based upon the results of a background check into publicly available information or the presence of a material possibility of any reputational or legal risk in making of the award.

5.6 **Disclosure Requirement**

The proposer shall disclose, for any team member, any indictment for any alleged felony, or any conviction for a felony within the past five years, under the laws of the United States or any state or territory of the United States and shall describe circumstances for each. When a proposer is an association, partnership, corporation, or other organization, this disclosure requirement includes the organization and its officers, partners, and directors or members of any similar governing body. If an indictment or conviction should come to the attention of NYGB after the award of a contract, NYGB may exercise its stop-work right pending further investigation, or terminate the agreement; the contractor may be subject to penalties for violation of any law which may apply in the particular

circumstances. Proposers must also disclose if they have ever been debarred or suspended by any agency of the U.S. Government or the New York State Department of Labor.

5.7 Final Agreement

NYGB will negotiate the final agreement (the "**Final Agreement**") with each proposer(s) selected under this RFP on the basis of the Law Firm Retainer Agreement discussed in Section 3.6 above, with the expectation that relevant sections of the Final Agreement will substantially conform, in form and substance, to the Sample Agreement. The Final Agreement will also include the Law Firm Retainer Agreement as an exhibit thereto. The Final Agreement will be subject to the laws of the State of New York and will state that any disputes between the parties shall be fully and finally adjudicated in the state courts of the State of New York in accordance with NY Civil Practice Law & Rules §505. NYGB will require that certain New York State provisions be attached to the Final Agreement as exhibits. These provisions are attached to the Sample Agreement as Annexes B and C thereto.

5.8 Municipal Advisor Rules

NYGB is aware of the amendments to Section 15B of the Securities Exchange Act of 1934 effectuated by Section 975 of Title IX of the Dodd-Frank Act, as well as SEC Release No. 34-70462 (September 20, 2013). In this regard, please note that NYGB considers discussions with potential proposers, and the review of proposals, to be arm's-length negotiations. NYGB recognizes that proposers have financial and other interests that differ from NYGB. As such, NYGB does not consider a fiduciary relationship to arise at the proposal stage. Accordingly, any responses to this RFP would meet the exemption from the "municipal advisor" definition provided by Rule 15Ba1-1(d)(3)(iv) for responses to requests for proposals or qualifications.

5.9 Accessibility Requirement

NYGB and NYSERDA require contractors producing content intended to be posted to the Web to adhere to New York State's Accessibility Policy. This includes, but is not limited to, deliverables such as: documents (PDF, Microsoft Word, Microsoft Excel, etc.), audio (.mp3, .wav, etc.), video (.mp4, .mpg, .avi, etc.), graphics (.jpg, .png, etc.), web pages (.html, .aspx, etc.), and other multimedia and streaming media content. For more information, see NYSERDA's Accessibility Requirements available to download at https://www.nyserda.ny.gov/Web-Policies/Accessibility.

5.10 Vendor Assurance of No Conflict of Interest or Detrimental Effect

The proposer shall disclose any existing or contemplated relationship with any other person or entity, including any known relationships with any member, shareholders of 5% or more, parent, subsidiary, or affiliated firm, which would constitute an actual or potential conflict of interest or appearance of impropriety, relating to other clients/customers of the proposer or former officers and employees of NYSERDA, in connection with proposer's rendering services as proposed. If a conflict does or might exist, please describe how your firm would eliminate or prevent it. Indicate what procedures will be followed to detect, notify NYSERDA of, and resolve any such conflicts.

The proposer must disclose whether it, or any of its members, or, to the best of its knowledge, shareholders of 5% or more, parents, affiliates, or subsidiaries, have been the subject of any investigation or disciplinary action by the New York State Commission on Public Integrity or its predecessor State entities (collectively, "Commission"), and if so, a brief description must be included indicating how any matter before the Commission was resolved or whether it remains unresolved.

5.11 Public Officers Law

For any resulting awards, the Contractor and its subcontractors shall not engage any person who is, or has been at any time, in the employ of the State to perform services in violation of the provisions of the New York Public Officers Law, other laws applicable to the service of State employees, and the rules, regulations, opinions, guidelines or policies promulgated or issued by the New York State Joint Commission on Public Ethics, or its predecessors (collectively, the "Ethics Requirements"). Proposers are reminded of the following Public Officers Law provision: contractors, consultants, vendors, and subcontractors may hire former NYSERDA employees. However, as a general rule and in accordance with New York Public Officers Law, former employees of NYSERDA may neither appear nor practice before NYSERDA, nor receive compensation for services rendered on a matter before NYSERDA, for a period of two years following their separation from NYSERDA service. In addition, former NYSERDA employees are subject to a "lifetime bar" from appearing before any state agency or authority or receiving compensation for services regarding any transaction in which they personally participated, or which was under their active consideration during their tenure with NYSERDA.

Any awardee will be required to certify that all of its employees, as well as employees of any subcontractor, whose subcontract is valued at \$100,000 or more who are former employees of the State and who are assigned to perform services under the resulting contract, shall be assigned in accordance with all Ethics Requirements. During the term of any agreement, no person who is employed by the contractor or its subcontractors and who is disqualified from providing services under the contract pursuant to any Ethics Requirements may share in any net revenues of the contractor or its subcontractors derived from the contract. NYSERDA may request that contractors provide it with whatever information the State deems appropriate about each such person's engagement, work cooperatively with the State to solicit advice from the New York State Joint Commission on Public Ethics. NYSERDA shall have the right to withdraw or withhold approval of any subcontractor if utilizing such subcontractor for any work performed would be in conflict with any of the Ethics Requirements. NYSERDA shall have the right to terminate any contract at any time if any work performed is in conflict with any of the Ethics.

6. Further General Conditions (Applicable solely to Category A Services work)

6.1 Diversity Practices

NYSERDA has determined, pursuant to New York State Executive Law Article 15-A, that the assessment of the diversity practice of proposers is practical, feasible, and appropriate. Accordingly, proposers shall be required to include as part of their proposal a signed and completed Diversity Practices Questionnaire (Attachment B hereto).

6.2 New York Executive Law Article 15-A

Under this law, NYSERDA is required to promote opportunities for maximum feasible participation of certified minority-and women-owned business enterprises and the employment of minority group members and women in the performance of NYSERDA contracts. The MWBE participation goals and obligations of the selected contractor are set forth in Attachment C hereto. Proposers shall be required to sign and complete Attachment C as part of their proposal.

6.3 New York State Executive Law Article 17-B

NYSERDA recognizes its obligation under the law to promote opportunities for maximum feasible participation of certified service-disabled veteran-owned business enterprises ("**SDVOB**") in the performance of NYSERDA contracts. Executive Law Article 17-B and its associated regulations require, among other things, that NYSERDA establish goals for maximum feasible participation of New York State Certified SDVOBs in the performance of New York State contracts. The SDVOB participations goals and obligations of the selected contractor are set forth in Attachment D hereto. Proposers shall be required to sign and complete Attachment D as part of their proposal.

7. Attachments

Attachment A - Sample Agreement Attachment B – Diversity Practices Questionnaire Attachment C – Article 15-A (MWBE) Attachment D – Article 17-B Service-Disabled Veteran-Owned Business Enterprises (SDVOB)



"Developing and Disseminating Energy-Related Agricultural Best Practices"

Request for Proposal (RFP) 4063

NYSERDA reserves the right to extend and/or add funding to the

Solicitation should other program funding sources become available.

Proposals Due: July 17, 2019 by 3:00 PM Eastern Time*

Program Summary: Energy efficient technologies, processes, and practices represent opportunities to optimize farm energy use and lower operating costs. However, information on these technologies, processes, and practices does not always exist or cannot be easily accessed; or does not address the needs of the agriculture industry. Providing NYS farmers with this information will stimulate demand for and investment in these technologies, practices, and processes.

The objective of RFP 4063 is to select one or more teams to develop and disseminate energyrelated best practices guidance materials for/to NYS farmers to support them with:

- Better understanding farm energy use;
- Evaluating efficient technologies, alternate modes of operations, and practices that optimize energy use;
- Making sound investment decisions based on accessible, up-to-date information; and
- Incorporating efficiency into the daily decision-making process.

The RFP has two Categories:

Category 1 - Developing Technical Information: provide the substance for subsequentlydeveloped guidance materials; and

Category 2 - Disseminating Materials: develop guidance materials in formats most accessible to NYS agriculture stakeholders and perform outreach via information channels that maximize stakeholder understanding.

Proposers may apply to Category 1, Category 2 or both. NYSERDA plans to award contracts to one or more teams under this RFP.

Proposal Submission: Online submission is preferable. Proposers may submit Word, Excel, or PDF files (file formats include: csv, doc, docx, gif, jpeg, jpg, pdf, png, ppt, pptx, pps, ppsx, tif, txt, xls, xlsx, and zip). Individual files should be 100MB or less in file size. Proposal PDFs should be searchable and should be created by direct conversion from MS Word, or other conversion utility. Files should not be scanned. For ease of identification, all electronic files must be named using the proposer's entity name in the title of the document. NYSERDA will also accept proposals by mail or hand-delivery if online submission is not possible. For detailed

instructions on how to submit a proposal (online or paper submission), click the link "<u>Application Instructions and Portal Training Guide</u> [PDF] " located in the "Current Opportunities" section of NYSERDA's website (<u>https://www.nyserda.ny.gov/Funding-Opportunities/Current-Funding-Opportunities.aspx</u>).

No communication intended to influence this procurement is permitted except by contacting the Designated Contacts: Jessica Zweig at (518) 862-1090, ext. 3346 or by e-mail agriculture@nyserda.ny.gov or Kathleen O'Connor at (518) 862-1090, ext. 3422 or by e-mail agriculture@nyserda.ny.gov. If you have contractual questions concerning this solicitation, contact Nancy Marucci at (518) 862-1090, ext. 3335 or by e-mail NancySolicitations@nyserda.ny.gov. Contacting anyone other than the Designated Contacts (either directly by the proposer or indirectly through a lobbyist or other person acting on the proposer's behalf) in an attempt to influence the procurement: (1) may result in a proposer being deemed a non-responsible offerer, and (2) may result in the proposer not being awarded a contract.

* All proposals must be received by 3pm Eastern Time on the date noted above. Late, faxed, or emailed proposals will not be accepted. Incomplete proposals may be subject to disqualification. It is the proposer's responsibility to ensure that all pages have been included in the proposal. Please note: for online submission, there are required questions that you will have to answer in addition to uploading attachments and you should allot at least 60 minutes to enter/submit proposals. The online proposal system closes promptly at 3pm Eastern Time, files in process or attempted edits or submission after 3pm Eastern Time on the date above, will not be accepted. If changes are made to this solicitation, notification will be posted on the "Current Opportunities" section of NYSERDA's website (https://www.nyserda.ny.gov/Funding-Opportunities.aspx.

I. Introduction (Describe Background/Goals/Objectives)

Farmers strive to reduce operating costs, while maintaining safe and productive operations. Efficient technologies, processes, and practices can help farmers lower operating costs and maintain long-term farm viability. However, information on these technologies, processes, and practices does not always exist or cannot be easily accessed; or does not address the needs of the agriculture industry. NYSERDA is seeking one or more teams to develop and disseminate accessible, up-to-date energy-related best practices guidance materials for/to NYS farmers that:

- Identify efficient technologies, processes, and practices most pertinent to the operations of multiple agriculture sub-sectors; and
- Describe potential financial, labor, and other impacts of technologies, processes, and practices.

II. Program Requirements

Definitions:

- <u>Energy-related Best Practices</u>: Energy-related best practices are technologies, processes, and practices that are accepted or prescribed as being correct or most effective to achieve the full potential of energy efficiency. These include installing specific equipment, alternate modes of operations, and other energy saving mechanisms. Energy-related best practices guidance materials can be used by farmers as they go through the process of selecting and implementing technologies, processes, or practices that best serve their modes of operation.
- <u>Energy-related Best Practices Guidance Materials</u>: Case studies, fact sheets, simple tools for estimating on-site energy use, lunch and learn seminars, etc.
- <u>NYSERDA Existing Farm Audit Data Set</u>: The data set contains information about energy-efficient measures identified in audit reports performed under NYSERDA's Agriculture Energy Audit Program. Data points include; measure description, estimated energy savings, estimated installation cost, and simple payback. The data is available in an Excel format and will be available to successful proposers.
- <u>NYS Farms</u>: Animal- or crop-production farms located in New York State, which include, but are not limited to, dairy, orchards, vineyards, greenhouses, crop farms; and pay into the Systems Benefits Charge (SBC).
- <u>Technical Information</u>: Unbiased information including, but not limited to, time and resources required to implement the best practices; potential energy savings associated with the best practices; simple payback or return on investment upon implementing best practices; and compatibility of best practices for various equipment, processes and modes of operation. Information may also include non-energy benefits such as addressing environmental concerns, improving productivity, reducing waste, and realizing non-energy operational and maintenance savings.
- <u>Resource Search:</u> A thorough search of existing resources to identify common as well as less-common existing energy-related agriculture best practices. The resources may include credible literature, internet sites, professional contacts, organizations, etc. or other resources that assist in identifying the best practices.
- <u>Stakeholders:</u> Entities, including but not limited to: customers (farms) of all sizes; local, state, or national entities that support the sector; trade or professional organizations; equipment vendors; project developers or consultants; or academic institutions.

Eligibility:

NYSERDA's anticipates energy-related best practices guidance materials will be developed for and disseminated to multiple farm sub-sectors including, but are not limited to, dairy, orchard, vineyard, greenhouse, crop farm, etc. As such, teaming is strongly encouraged to enhance the likelihood of project success. Eligible program participants include, but are not limited to:

- Consultants;
- Trade or professional organizations;
- Universities and other academic institutions;

• Other entities that support the agriculture sector.

III. Proposer/Proposal Requirements

A. Proposer Requirements:

The initiative has two Categories: Category 1 - Developing Technical Information: to provide the substance for subsequently-developed guidance materials; and Category 2 - Disseminating Materials: to develop guidance materials in formats most accessible to NYS agriculture stakeholders and perform outreach via information channels that maximize stakeholder understanding. The following describes the minimum proposer requirements for contractors selected to perform Category 1 and/or Category 2 tasks.

<u>To be eligible to perform Category 1 tasks</u>, proposers must have the following minimum qualifications:

- Previous experience developing technical data and/or other energy-related best practices information, preferably for the agriculture sector;
- Technical proficiency in equipment and processes relevant to the agriculture sector and sub-sectors;
- Understand the NYS agriculture (farm) landscape including key stakeholders, sector and sub-sector characteristics and priorities, important issues/initiatives affecting NYS farms, business priorities, decision-making processes, and barriers that prevent participation in energy-related projects.

<u>To be eligible to perform Category 2 tasks</u>, proposers must have the following minimum qualifications:

- Ability to use third-party technical resources to develop energy-related best practices guidance materials in formats meeting target market's requirements;
- Previous experience developing and/or implementing strategies to engage stakeholders in the agriculture sector, preferably at the local level;
- Understand the NYS agriculture (farm) landscape including key stakeholders, sector and sub-sector characteristics, important issues/initiatives affecting NYS farms, business priorities, decision-making processes, barriers that prevent participation in energy efficiency; and have an established relationship of trust with key stakeholders;
- Ability to reach stakeholders through multiple information channels;
- Easily accessible to agriculture sector;
- Trusted by the agriculture sector stakeholders;
- Ability to facilitate peer-to-peer and other face-to-face exchanges;
- Ability to "match make" between farmers and private sector energy-efficiency market participants; and
- Ability to track outcome of outreach and dissemination efforts, including number of farms receiving guidance materials.

A proposal may be considered non-responsive, and therefore will not considered in the review process, if it fails to comply with the Proposer Requirements listed above, the Specific Proposal Criteria below, or the General Conditions of Section V.

B. Specific Proposal Criteria:

The overall goal of the project is to develop and disseminate energy-related best practices guidance material to multiple agriculture sub-sectors.

Category 1: Developing Technical Information

- a. **Services Specific to Developing Technical Information**. The <u>minimum</u> required services to be provided by the proposer(s) selected to perform Category 1 tasks include, but are not limited to:
 - Performing resource searches to identify existing energy best practices;
 - Assessing relevance of information identified during resource searches to NYS farms and compiling relevant information as appropriate;
 - Analyzing NYSERDA's existing farm audit data set to glean energy-related best practices information relevant to NYS farms; and
 - Developing energy-related best practices data set.
- b. **Tasks Specific to Developing Technical Information.** To provide the services listed above, the Statement of Work must describe how the following will be achieved:

Identifying farm types for whom energy-related best practices information will be developed

Many agricultural sub-sectors (farm types) operate in New York State. Farm sub-sectors include: dairy, orchard, vineyard, greenhouse, crop farm, vegetable, poultry (egg and meat), maple producer, etc. The proposal must recommend multiple sub-sectors for whom energy-related best practices information would be developed and justify why the sub-sectors would benefit from receiving this information.

Identifying energy-related equipment and processes for each farm type

Each sub-sector uses a specific set of energy consuming equipment and processes. The proposal must identify the most relevant of these for each sub-sector recommended above and describe if and why best practices should (or should not) be developed for the equipment/processes.

Selecting technical information to be developed and engaging experts

Farmers rely on thorough, unbiased information and data to make decisions on installing/implementing unfamiliar equipment/processes. The proposal must identify the pertinent information required to develop best practices guidance materials for the equipment/processes identified above with the goal of guiding farmers in making the best decisions for their operations.

Many industry experts and resources exist throughout New York State that support the

agriculture sector. Strong working relationships with these entities will be essential to developing trusted technical information. The proposal must describe how these experts and resources will be identified and engaged to evaluate and/or propose energy-related best practices and verify the information.

Category 2: Disseminating Materials

- a. Services Specific to Disseminating Materials. The <u>minimum</u> required services to be provided by the proposer(s) selected to perform Category 2 tasks include, but are not limited to:
 - Identifying all relevant stakeholders;
 - Gathering information to identify desired formats for information as well as information channels;
 - Developing energy-related best practices guidance materials in the format(s) identified or from other relevant experience;
 - Disseminating information across information channels identified and other relevant channels (channels may be specific to each sub-sector);
 - Establishing peer-to-peer exchanges between and among end-users, consultants/vendors/manufacturers, and entities trusted by the agricultural community; and
 - Assisting farmers in developing project ideas for implementing energy-related best practices.
- b. **Tasks Specific to Disseminating Materials.** To provide the services listed above, the Statement of Work must describe how the following will be achieved:

Developing an outreach plan to disseminate energy-related best practices guidance materials

The proposal must include an outline of the anticipated outreach plan including, but not limited to:

- Anticipated stakeholders to be engaged (i.e., sub-sectors selected based on maximizing energy savings in a cost-effective manner) and estimated number of farms to be reached within two years of initiating outreach work;
- Anticipated format(s) in which information will be conveyed to stakeholders and anticipated information channels to be used to most effectively reach the stakeholders and why each format is relevant.

Partners

NYSERDA has contracted with a marketing firm that provides expertise for many NYSERDA outreach initiatives. This firm will work with the successful proposer to maintain a consistent NYSERDA message and ensure alignment with state branding guidelines. The proposal must anticipate workflow and a feedback loop for working with the marketing firm.

Reporting program metrics

Measuring program success and tracking program activities is imperative to understanding the effectiveness of the initiative. The proposal must provide a plan for metrics collection, data management, and evaluation of program success; and must include recommended data points for collection and rationale as to why this information is necessary to measure program success.

C. Proposal Format:

Proposals should concisely present the Specific Proposal Criteria, while also making sure the Evaluation Criteria listed in Section IV has been adequately address. The proposal should not exceed 10 pages. Please note: attachments are <u>not</u> counted in the 10-page limitation (e.g., budget supporting information, resumes, letters of commitment, etc.). If you believe proprietary information must be submitted to provide an adequate proposal, you must comply with the Section V instructions for submitting proprietary material.

Proposers may respond to Category 1 only, Category 2 only, or both categories. If responding to both, please clearly distinguish proposal substance for Category 1 and Category 2 separately, including a separate budget for each category.

Proposals that include teaming arrangements must designate one party as the prime contractor.

Introduction and Background

- Summarize the proposed effort
- Identify all entities/team members collaborating in the proposal
- Discuss the rationale for the proposed approach and how it will meet the goals and objectives

Statement of Work

The Statement of Work should be a detailed plan of how the proposer will accomplish the objectives. It should clearly articulate a set of tasks consistent with the *Section III, B. Specific Proposal Criteria* established above and include any additional tasks necessary to meet the objectives. The Statement of Work will also serve as the primary contractual document that identifies the deliverables. It is an action document that specifically delineates tasks required to accomplish the objective. Each task should be clearly identified, indicating who will perform it, how it will be performed, timing, deliverables and anticipated results. Proposals should identify how feedback and interactions between the Category 1 and Category 2 work will be established. Proposals should be realistic, clear and specific.

Outcome and Benefits

Explain how the proposal's approach is thorough in describing the necessary pieces to satisfy Category 1 and/or Category 2 goals. Explain what attributes the proposer possesses to be in the best position to undertake this effort.

Proposer Qualifications

- Provide the information required within *Section III. A. Proposer Requirements*. Describe each area in enough detail to convey your depth of sector and sub-sector knowledge.
- Identify all significant participants, their primary relevant qualifications including years of working with the agriculture sector, and their roles and responsibilities including the party who will assume the ultimate responsibility for success. Attach resumes of key personnel in an appendix. (Resumes do not count towards page limitation.)
- Include a description of the Project Management structure for accomplishing the above work.
- For Category 1: Developing Technical Information:
 - Describe any specific areas of process expertise you or the team has in the identified sub-sectors.
 - Describe any specific areas of equipment/process expertise the proposer or proposer's team has with the equipment/processes identified.
 - Describe any previous experience in developing best practice information or any projects that would demonstrate an understanding of energy-efficiency information.
 - Explain, if any, financial relationships with a technology, vendor or process.
- For Category 2: Disseminating Materials:
 - Describe any past projects where the focus was to provide information outreach to farms and the agriculture sector.

Work Schedule and Staffing Plan

The proposal should include an estimated schedule for completing the project, including milestones for each task and sub-task. The schedule should allow time for approval of tasks by NYSERDA, if necessary. The work schedule should also include a staffing plan which indicates the roles, responsibilities, and anticipated hours allocated to all key personnel. Note that hours allocated in the work schedule must be consistent with those in the budget.

Budget

A task-based budget that details estimated hours, staff level, direct and indirect costs, and subcontractors, if applicable, related to each task. The intent must be to define the cost and emphasis of individual tasks in relation to others. The budget must also include estimates for materials, equipment, and travel. The Rate Schedule (Attachment A) should be completed using fully burdened rates.

Letter(s) of Commitment

Include a Letter of Commitment from all entities whom will perform work on the project. The letter(s) must describe the entity's proposed participation in the project. In compliance with §139-j and §139-k of the State Finance Law (see Section V, General Conditions below for additional information), proposers will be required to answer questions during proposal submission, which will include making required certification under the State Finance Law and to disclose any Prior Findings of Non-Responsibility.

Proposal Submission Instructions: Please include all supporting information and attachments as one document, with the exception of Attachment A: Rate Schedule, when submitting the proposal online.

IV. Proposal Evaluation

Proposals that meet solicitation requirements will be reviewed by a Scoring Committee using the Evaluation Criteria below **listed in order of importance.** At NYSERDA's discretion, proposers may be requested to interview with all or part of the Scoring Committee to address any potential questions or clarifications outlined in the proposals. Proposers will be notified if they are requested to attend an interview.

Evaluation Criteria

- 1) <u>Qualifications of Proposer and Experience</u> General:
 - Does the proposer have the necessary background, experience, and understanding of the NYS farm landscape including stakeholders, sector and sub-sector characteristics; business priorities; and decision-making processes?
 - Are all significant participants identified and do they have relevant experience working with the agriculture sector?
 - Are Letters of Commitment provided from all entities whom will perform work on the project?

Category 1:

- Does the proposer have previous experience developing technical data and/or other energy-related best practices information?
- Does the proposer demonstrate technical proficiency in equipment and processes as they relate to the agriculture sector?
- Does the proposer demonstrate they are technology and vendor agnostic?

Category 2:

- Does the proposer demonstrate the ability to:
 - Develop farm-friendly, energy-related best practice guidance material?
 - Reach stakeholders through multiple channels?
 - Facilitate peer-to-peer exchanges and match make between farms and the energy-efficiency market participants?
 - Track outcome of outreach and dissemination efforts?
- Does the proposer have previous experience in engaging agriculture stakeholders?

2) <u>Statement of Work</u>

General:

- Does the Statement of Work provide a detailed plan of how the proposer will accomplish the objectives?
- Does the Statement of Work clearly identify who will perform tasks, how tasks will be performed, anticipated deliverables and results?
- Is the Statement of Work realistic, concise, and consistent with the proposal requirements?

Category 1:

- Does the Statement of Work adequality describe the specific services and tasks outlined in *Section III B. Specific Proposal Criteria* for Category 1?
- Does the Statement of Work contain additional tasks that will facilitate efficiently and effectively developing best-practice technical information?
- Does the proposal explain how industry experts will be engaged to identify and evaluate energy-related best practices?

Category 2:

- Does the Statement of Work adequality describe the specific services and tasks outlined in *Section III B. Specific Proposal Criteria* for Category 2?
- Does the Statement of Work contain additional tasks that will facilitate efficiently and effectively disseminating best-practice materials?
- Does the proposal provide a plan for metrics collection, data management, and evaluating program success?

3) <u>Schedule and Cost</u>

- Does the Work Schedule align with the Statement of Work and describe the roles, responsibilities and anticipated hours of key personnel?
- Is the overall cost reasonable and effective based on the Statement of Work?
- Does the proposal team describe the ability to use staff appropriately to be cost effective and achieve success?
- Does the proposal include an estimated schedule for completing the project and are milestones included for each task?
- Is all the necessary documentation in support of the indirect cost rates included?

Programmatic Considerations

NYSERDA may consider the following Program Policy Factors in making funding decisions:

- The degree to which the proposal optimizes the use of funding to achieve the programmatic objectives.
- The proximity of the proposer to the stakeholders served under this initiative
- The ability of the proposer to respond to stakeholder needs with "boots on the ground" in one week or less.

v. GENERAL CONDITIONS

Proprietary Information - Careful consideration should be given before confidential information is submitted to NYSERDA as part of your proposal. Review should include whether it is critical for evaluating a proposal, and whether general, non-confidential information, may be adequate for review purposes. The NYS Freedom of Information Law, Public Officers law, Article 6, provides for public access to information NYSERDA possesses. Public Officers Law, Section 87(2)(d) provides for exceptions to disclosure for records or portions thereof that "are trade secrets or are submitted to an agency by a commercial enterprise or derived from information obtained from a commercial enterprise and which if disclosed would cause substantial injury to the competitive position of the subject enterprise." Information submitted to NYSERDA that the proposer wishes to have treated as proprietary, and confidential trade secret information, should be identified and labeled "Confidential" or "Proprietary" on each page at the time of disclosure. This information should include a written request to except it from disclosure, including a written statement of the reasons why the information should be excepted. See Public Officers Law, Section 89(5) and the procedures set forth in 21 NYCRR Part 501 https://www.nyserda.ny.gov/About/-/media/Files/About/Contact/NYSERDA-Regulations.ashx. However, NYSERDA cannot guarantee the confidentiality of any information submitted.

Omnibus Procurement Act of 1992 - It is the policy of New York State to maximize opportunities for the participation of New York State business enterprises, including minorityand women-owned business enterprises, as bidders, subcontractors, and suppliers on its procurement Agreements.

Information on the availability of New York subcontractors and suppliers is available from:

Empire State Development Division for Small Business 625 Broadway Albany, NY 12207

A directory of certified minority- and women-owned business enterprises is available from:

Empire State Development Minority and Women's Business Development Division 625 Broadway Albany, NY 12207

State Finance Law sections 139-j and 139-k - NYSERDA is required to comply with State Finance Law sections 139-j and 139-k. These provisions contain procurement lobbying requirements which can be found at <u>https://online.ogs.ny.gov/legal/lobbyinglawfaq/default.aspx</u>. Proposers are required to answer questions during proposal submission, which will include making required certification under the State Finance Law and to disclose any Prior Findings of Non-Responsibility (this includes a disclosure statement regarding whether the proposer has been found non-responsible under section 139-j of the State Finance Law within the previous four years).

Tax Law Section 5-a - NYSERDA is required to comply with the provisions of Tax Law Section 5-a, which requires a prospective contractor, prior to entering an agreement with

NYSERDA having a value in excess of \$100,000, to certify to the Department of Taxation and Finance (the "Department") whether the contractor, its affiliates, its subcontractors and the affiliates of its subcontractors have registered with the Department to collect New York State and local sales and compensating use taxes. The Department has created a form to allow a prospective contractor to readily make such certification. See, ST-220-TD (available at http://www.tax.ny.gov/pdf/current_forms/st/st220td_fill_in.pdf). Prior to contracting with NYSERDA, the prospective contractor must also certify to NYSERDA whether it has filed such certification with the Department.

The Department has created a second form that must be completed by a prospective contractor prior to contacting and filed with NYSERDA. See, ST-220-CA (available at <u>http://www.tax.ny.gov/pdf/current_forms/st/st220ca_fill_in.pdf</u>). The Department has developed guidance for contractors which is available at <u>http://www.tax.ny.gov/pdf/publications/sales/pub223.pdf</u>.

Contract Award - NYSERDA anticipates making one or more award(s) under this solicitation. NYSERDA anticipates contract durations of two years with two, two-year optional renewal extensions, unless NYSERDA management determines a different structure is more efficient based upon proposals received. A contract may be awarded based on initial applications without discussion, or following limited discussion or negotiations pertaining to the Statement of Work. Each proposal should be submitted using the most favorable cost and technical terms. NYSERDA may request additional data or material to support applications. NYSERDA will use the Sample Agreement to contract successful proposals. NYSERDA may at its discretion elect to extend and/or add funds to any project funded through this solicitation. NYSERDA reserves the right to limit any negotiations to exceptions to standard terms and conditions in the Sample Agreement to those specifically identified in the checklist questions. Proposers should keep in mind that acceptance of all standard terms and conditions will generally result in a more expedited contracting process. NYSERDA expects to notify proposers in approximately eight(8) weeks from the proposal due date whether your proposal has been selected to receive an award. NYSERDA may decline to contract with awardees that are delinquent with respect to any obligation under any previous or active NYSERDA agreement.

Accessibility Requirements - If awardees from this solicitation will be posting anything on the web, or if the awardee will produce a final report that NYSERDA will post to the web, the following language must be included. NYSERDA requires contractors producing content intended to be posted to the Web to adhere to New York State's Accessibility Policy. This includes, but is not limited to, deliverables such as: documents (PDF, Microsoft Word, Microsoft Excel, etc.), audio (.mp3, .wav, etc.), video (.mp4, .mpg, .avi, etc.), graphics (.jpg, .png, etc.), web pages (.html, .aspx, etc.), and other multimedia and streaming media content. For more information, see <u>NYSERDA's Accessibility Requirements</u>.

Limitation - This solicitation does not commit NYSERDA to award a contract, pay any costs incurred in preparing a proposal, or to procure or contract for services or supplies. NYSERDA reserves the right to accept or reject any or all proposals received, to negotiate with all qualified sources, or to cancel in part or in its entirety the solicitation when it is in NYSERDA's best interest. NYSERDA reserves the right to reject proposals based on the nature and number of any

exceptions taken to the standard terms and conditions of the Sample Agreement. NYSERDA reserves the right to disqualify proposers based upon the results of a background check into publicly available information and the presence of a material possibility of any reputational or legal risk in making of the award.

Disclosure Requirement - The proposer shall disclose any indictment for any alleged felony, or any conviction for a felony within the past five years, under the laws of the United States or any state or territory of the United States, and shall describe circumstances for each. When a proposer is an association, partnership, corporation, or other organization, this disclosure requirement includes the organization and its officers, partners, and directors or members of any similarly governing body. If an indictment or conviction should come to the attention of NYSERDA after the award of a contract, NYSERDA may exercise its stop-work right pending further investigation, or terminate the agreement; the contractor may be subject to penalties for violation of any law which may apply in the particular circumstances. Proposers must also disclose if they have ever been debarred or suspended by any agency of the U.S. Government or the New York State Department of Labor.

VI. Attachments:

Attachment A - Rate Schedule

Attachment B - Sample Agreement including Exhibit A - template statement of work



Peoplesoft Support Services

Request for Proposal (RFP) 4091 NYSERDA reserves the right to extend and/or add funding to the Solicitation should other program funding sources become available.

Proposals Due: May 21st by 3:00 p.m. Eastern Time*

The New York State Energy Research and Development Authority (NYSERDA) is soliciting proposals from qualified contractors to propose PeopleSoft Support Services solutions to serve the finance and contracts management needs of NYSERDA. From among the Proposals received, the Authority intends to select a qualified vendor to provide design, implementation, patching and upgrade services related to the Authority's continued support of Peoplesoft Systems. The term of the agreement will be 5 years. The Authority reserves the sole right to terminate the contract early.

NYSERDA is seeking proposals from vendors who are Oracle certified partners that provide PeopleSoft support solutions to provide competitive, descriptive proposals for NYSERDA's consideration. **Proposal Submission:** Online submission is preferable. Proposers may submit Word, Excel, or PDF files (file formats include: csv, doc, docx, gif, jpeg, jpg, pdf, png, ppt, pptx, pps, ppsx, tif, txt, xls, xlsx, and zip). Individual files should be 100MB or less in file size. Proposal PDFs should be searchable and should be created by direct conversion from MS Word, or other conversion utility. Files should not be scanned. For ease of identification, all electronic files must be named using the proposer's entity name in the title of the document. NYSERDA will also accept proposals by mail or hand-delivery if online submission is not possible. For detailed instructions on how to submit a proposal (online or paper submission), click the link "Application Instructions and Portal Training Guide [PDF] " located in the "Current Opportunities" section of NYSERDA's website (https://www.nyserda.ny.gov/Funding-Opportunities/Current-Funding-Opportunities.aspx).

No communication intended to influence this procurement is permitted except by contacting Keith Alber, Software Development Manager at (518) 862-1090, ext.3466_or by e-mail <u>InformationTechnology.RFP@nyserda.ny.gov</u>. All Technical questions concerning this solicitation should also be submitted to Keith Alber with the subject line "RFP 4091 Question". If you have contractual questions concerning this solicitation, contact Assistant Contract Manager Venice Forbes) at (518) 862-1090, ext. 3507or <u>VeniceSolicitations@nyserda.ny.gov</u>. Contacting anyone other than the Designated Contacts (either directly by the proposer or indirectly through a lobbyist or other person acting on the proposer's behalf) in an attempt to influence the procurement: (1) may result in a proposer being deemed a non-responsible offeror, and (2) may result in the proposer not being awarded a contract.

* All proposals must be received by 3 p.m. Eastern Time on the date noted above. Late, faxed, or emailed proposals will not be accepted. Incomplete proposals may be subject to disqualification. It is the proposer's responsibility to ensure that all pages have been included in the proposal. Please note: for online submission, there are required questions that you will have to answer in addition to uploading attachments and you should allot at least 60 minutes to enter/submit proposals. The online proposal system closes promptly at 3 p.m. Eastern Time, files in process or attempted edits or submission after 3 p.m. Eastern Time on the date above, will not be accepted. If changes are made to this solicitation, notification will be posted on the "Current Opportunities" section of NYSERDA's website (https://www.nyserda.ny.gov/Funding-Opportunities/Current-Funding-Opportunities.aspx .

1. Introduction

The New York State Energy Research and Development Authority (NYSERDA) is a public benefit organization committed to identifying opportunities for reducing commercial and residential energy consumption, promoting the use of renewable energy sources, and protecting the environment. NYSERDA provides financial and technical assistance to help consumers, businesses and institutions assess and implement cost-saving energy efficiency measures.

Energy efficiency programs offered at NYSERDA also strive to provide affordable energy and a cleaner environment for all New Yorkers. This is accomplished by increasing public awareness of the multiple benefits of energy efficiency, by providing residential building performance services, and by making energy-efficient products more widely available to consumers.

NYSERDA owns and operates several PeopleSoft servers and environments which run PeopleSoft Financials & Supply Chain Management (FSCM) and Phire Change Management. NYSERDA requires professional services for support that include consultants with the ability to provide PeopleSoft services including, but not limited to: PeopleSoft Administration, PeopleSoft Business Analysis, PeopleSoft Development, PeopleSoft Database Administration, and Project Management. The Contractor must be experienced and qualified in PeopleSoft environments for PeopleTools v8.56+ and PeopleSoft Financials Enterprise v9.2.

The objective of this RFP is to find PeopleSoft support services that will lead and assist with upgrades and patching to ensure all PeopleSoft environments meet NYS cyber security standards and NYS policy. Additionally, NYSERDA requires optional on-demand services in support of the following:

- PeopleSoft production support
- Administration
- Business analysis
- Development in support of customizations
- Assisting with the adoption of new features and functionality following best practices.

On-Demand services will be billable to NYSERDA for short term projects on an as needed basis. Scheduling of on-demand resources will be coordinated in advance between Contractor's Service Manager and NYSERDA's Project Manager.

1.1 Current PeopleSoft Environment

NYSERDA currently runs 11 FSCM modules including:

- Asset Management
- Billing
- Contracts
- E-Supplier Connection
- General Ledger
- Grants
- Payables
- Project Costing
- Purchasing
- Receivables
- Supplier Contract Management

Technical Environment:

- Currently hosted in a VMware environment offsite at WebAir
- NYSERDA is using Oracle PeopleSoft PeopleTools 8.56 on FSCM 9.2 Image 29
- NYSERDA's PeopleSoft environment resides on Windows Server 2012 R2
- NYSERDA's PeopleSoft Database is on SQL Server 2016.

• Phire version 12.2 is used for NYSERDA's Change Management System.

Peoplesoft Instances for Support			
Database	Use	Notes	
FSCM Demo	PeopleSoft Vanilla	PeopleSoft Demo data	
FSCM Development	Development	Loaded with NYSERDA data, refreshed quarterly	
FSCM Quality Assurance	QA	Loaded with NYSERDA data, refreshed monthly	
FSCM Debug	Production Troubleshooting	Loaded with NYSERDA data, refreshed nightly from production.	
FSCM User Acceptance Testing	UAT	Loaded with NYSERDA data, replicates production architecture, utilized for major upgrades.	
FSCM Training	Training	Loaded with NYSERDA training data, refreshed on demand for training purposes.	
FSCM Production	Production		
Phire Development	Change management Development	Loaded with NYSERDA data, refreshed on demand	
Phire Production	Production		

Current Transaction Data details:

The current NYSERDA PeopleSoft FSCM environment includes approximately 500 active users including program staff, contract staff, finance staff and other administrative users. There are approximately 12,000 active vendors, 150,000 Purchase Orders, 700,000 vouchers, 120,000 supplier contracts and 2,800 Requisitions.

Current Customizations in Use:

NYSERDA is moderately customized, Table 2 below outlines the approximate number of customizations done to its PeopleSoft system. This list does not include objects such as process definitions, queries, permission lists, portal definitions etc. Table 2 should only be used as a rough estimation and does not represent the final list of customizations. "Bolt-On" represents the approximate number of custom objects created. "Customized" represents the approximate number of peopleSoft delivered objects that have been customized. "Total" represents the total approximate number of objects customized.

Approximate Customization List for FSCM			
Object Type	Bolt-On	Customized	Total
Record	270	42	312
Index Field	13	1	14
Field	204	6	210
Translates	135	35	170
Page	77	33	110
Menu	1	6	7
Component	48	6	54
Record PeopleCode	244	64	308
Tree Structures	1	0	1
Business Processes	1	0	1
Activities	3	0	3
Process Definition	105	26	131

Server Definitions	D	D	0
Job Definitions	9	2	11
Recurrence Definitions	38	В	46
SQL	283	17	300
File Layouts	4	1	5
Component Interfaces	14	2	16
Application Engine	36	3	39
Application Engine Sections	82	D	82
Approval Rule Sets	5	0	5
Application Engine PeopleCode	62	1	63
Page PeopleCode	17	11	28
Component PeopleCode	D	4	4
Component Record PeopleCode	D	2	2
Component Record Field PeopleCode	19	3	22
Images	30	6	36
HTML	1	0	1
Application Package	7	0	7
Application Package PeopleCode	4	12	16
Related Content Definition	11	0	11
Related Content Services	9	D	9
Related Content Configurations	16	0	16
Related Content Layouts	10	0	10

2. Program Requirements

The scope of work to be performed by the Contractor consists of tasks relevant to the PeopleSoft stack of technologies. Any task to be performed will be detailed by NYSERDA's Project Manager after a meeting (by phone or in person) with the Contractor to work out details for the tasks. Following written authorization by the NYSERDA Program Manager, the Contractor shall perform the following tasks:

- PeopleSoft Administration: The Contractor shall work with NYSERDA to provide qualified PeopleSoft Administrator(s) to help with functions including, but not limited to, patches and upgrades to all required technologies in the PeopleSoft stack including PeopleTools, PUM upgrades, Weblogic, Java, Tuxedo, process scheduler and application server configuration, Elastic Search, PeopleSoft Test Framework, role based security, general production support and troubleshooting of performance issues in support of NYSERDA's various PeopleSoft environments.
- 2. Database Administration: The Contractor shall work with NYSERDA to provide PeopleSoft database-related functions including but not limited to administration, security, tuning, maintenance, SQL scripting, SQL Agent job creation and support, ETL, etc.
- 3. PeopleSoft Development: The Contractor will work with NYSERDA to provide qualified developers on an as-needed basis to accommodate customizations and new development for SQR, App Engine, BI Publisher, Integration Broker, PeopleCode, etc. as detailed in functional specifications provided by NYSERDA or Contractor's PeopleSoft Business Analyst, as well as retrofitting of customizations during upgrades in support of NYSERDA'S various PeopleSoft systems.

- 4. Business Analysis: The Contractor will work with NYSERDA to provide qualified PeopleSoft Business Analysts on an as-needed basis to provide production support, gather and document requirements and develop test scripts in support of customizations and new development for SQR, App Engine, BI Publisher, Integration Broker, PeopleCode, etc. and provide testing, training and training materials in support of NYSERDA'S various PeopleSoft systems.
- 5. Project Management: The Contractor will work with NYSERDA to provide qualified Project Management as needed. It is expected the Contractor will utilize formal Project Management techniques that will allow staff to better track large projects including, but not limited to, PeopleTools and PUM upgrades. The Contractor shall use formal management tools, such as Microsoft Project, and provide reports based on that information as requested.
- 6. Optional Services: The contractor will provide appropriate on-demand resources in support of the adoption of new PeopleSoft features and functionality, customizations, new development, system reliability, security, etc.

2.1 Deliverables

Deliverables shall include, but are not limited to the following:

PeopleSoft Administration

- Patching and upgrades for all PeopleSoft services falling under the PeopleSoft technology stack in accordance with NYS policy and best practices.
- Tuning and optimization of PeopleSoft technical architecture to ensure a highly available and reliable system.
- Technical environment support and management of PeopleSoft architecture on Windows platform including:
- Planning installation, configuration, tuning, monitoring, troubleshooting, and change management of PeopleSoft's batch, database, application, web servers.
- PeopleTools and PeopleSoft application upgrade experience utilizing delivered PeopleSoft tools including, but not limited to, Change Assistant, compare reports and PeopleSoft Update Manager.
- Analyzing system logs and identifying potential issues.
- Recommending and implementing software, hardware, and configuration changes to improve system performance.
- Applying PeopleSoft application and PeopleTools patches.
- Documenting system configuration and architecture following NYSERDA's existing documentation standards.
- Coordinating with NYSERDA resources to ensure availability, reliability, and scalability of systems to meet business demands.
- Performing file system configuration and management.
- Migration of PeopleSoft objects and data between PeopleSoft environments as requested by developers.
- Performing detailed comparisons between PeopleTools environments using PeopleSoft's compare reporting capability to ensure migrations are successful.
- Impact analysis and comparison of PeopleSoft objects during upgrades and communication with Developers over any impacts. Re-integration of project customizations.
- Maintenance and technical support of PeopleSoft's tools on Windows Server platform and SQL Server Database – PeopleTools, PS/Query, nVision, BI Publisher, Data Mover, App Engine, Change Assistant, SQR, WebLogic, Tuxedo, etc.
- Database Administration
 - o Backup, replicate and refresh PeopleSoft database instances as needed.
 - o Troubleshooting PeopleSoft database connection, performance and security issues.

- Provide technical support, troubleshoot and resolve production/development support issues for database servers.
- Implement various measures to monitors, fine-tune, optimize and administer the databases that make up the PeopleSoft environment.

PeopleSoft Development

- The PeopleSoft developer will be responsible for the technical design, development and testing of custom reports, customization changes (online, batch, inbound and outbound interfaces), work flows, dashboards and pivot grids.
- Issue review, troubleshooting and resolution for all PeopleSoft online and batch components.
- o Impact analysis and comparison of PeopleSoft objects during patches, upgrades
- Re-integration of project customizations during upgrades.
- Development, testing and technical support of PeopleTools, PS/Query, nVision, XML Publisher, Data Mover, Application Engine, Application Packages, and SQR.

Business Analysis

- This PeopleSoft Business Analyst will be responsible for setup, configuration, business process, module functionality and data models.
- o Subject area experts in NYSERDA's PeopleSoft modules including:
 - General Ledger, Commitment Control, Accounts Payable, Accounts Receivable, Billing, Customer Contracts, Asset Management, Project Costing, Purchasing, Supplier Contract Management, and eSupplier
- Perform implementation tasks related to configuration and setup, fit-gap analysis, business process changes, functional specifications, and testing.
- o Assist NYSERDA functional users and provide knowledge transfer.
- Create and update system documentation.

Project Management

 The PeopleSoft Project Manager will work with the NYSERDA Project Manager to lead upgrade projects, develop and manage project plans, identify issues, assess risks, control change management, ensure communication, and monitor the progress of project tasks.

Optional Services

 At its sole discretion, NYSERDA may request additional on-demand services for nonpatching and upgrade tasks in support of PeopleSoft. These activities include but are not limited to: administration, business analysis, and development in support of new PeopleSoft enhancements, customizations, new development, and assisting with the adoption of new features and functionality following best practices. These optional services are in addition to the required services to keep the PeopleSoft systems up to date and accessible.

2.2 Proposal Requirements

NYSERDA currently follows an upgrade plan that requires yearly PUM upgrades as well as PeopleTools upgrades occurring approximately every two years. In addition, the evaluation and recommendation of PUM images for selective adoption occurs quarterly. Details of this experience must be provided as part of the Proposer's response.

- Proposers must demonstrate a proven track record of providing PeopleSoft solutions and services for public sector entities.
- Proposers must provide a US based data center to house PeopleSoft environments running on platforms identical to NYSERDA. NYSERDA will provide PeopleTools configuration data for providers data center for test and development purposes. Service level agreements for a highly

available production environment will be negotiated. Oracle certified partnership is required.

- Experience in engagements with the Authority's existing network and software or operating environment.
- Proposers must be able to meet a 30% MWBE (minority or woman owned business entity) or 6% SDVOB (service disabled veteran owned business) requirement for this contract. Any MWBE/SDVOB firms responding to this RFP that are seeking MWBE/SDVOB status must submit proof that the firm is certified as an MWBE/SDVOB with the New York State Department of Economic Development. Any firm that currently has an approved contract through the NYS Office of General Services Procurement Services has already met this requirement.
- Upon issuance of a contract from NYSERDA, the selected firm will be required to show evidence of General Liability, Disability and Workers Compensation Insurances. In some instances, Professional Liability insurance may also be required.
- The willingness to work with the Authority to minimize costs.
- NYSERDA retains the right to end an engagement at any time with or without cause.
- All hardware and software must be under support for the duration of the contract.
- All billable hours for a given month will be invoiced by the 21st of the following month.
- Proposers must be Oracle certified partners that provide PeopleSoft support solutions.
 - At a minimum, Proposers must have prior experience assisting clients in PeopleTools and PUM upgrades of PeopleSoft FSCM 9.2.
 - PeopleSoft FSCM v9.2 and PeopleTools v8.56 experience is required by NYSERDA. Typical patch cycles are on a quarterly basis and must meet NYS's remediation policy found here:

https://its.ny.gov/sites/default/files/documents/nys-s15-001 patch management 1.pdf

• Proposers will provide an estimate that entails necessary time and materials for PeopleTools upgrades as well as PUM upgrades that follow NYSERDA's current upgrade path utilizing the following budget template:

Upgrade Budget	Estimated Total Hours	Hourly Rate	Total Cost
PUM Upgrade (yearly)			
Peopletools Upgrade			
(every 2 years)			

Unnecessary attachments beyond the documents required to present a complete, comprehensive, and effective response will not influence the evaluation of the proposal. The proposal must be in the following format:

Section I: Executive Summary

Section II: Technical Proposal

Section III: Cost Proposal

Cost information must **<u>not</u>** be included in the Technical Proposal section.

Section I: Executive Summary

Provide a brief description of the firm's overall qualifications and approach. Please limit to 2 pages maximum.

Section II: Technical Proposal

Following is a listing of the information required to be provided by the proposer. A technical proposal that does not provide all the information requested below may be subject to rejection. Provide the information in the same order in which it is requested. Your technical proposal must contain the information necessary to assure NYSERDA of its accuracy.

Provide a separate numbered section corresponding with each item listed in **Section 2 Program Requirements** documenting the firm's qualifications in the respective area. If you are not seeking consideration for a particular item, include a numbered section and indicate that no response is being provided.

Provide a description of the firm's organization and the resumes of partners, principals, associates and other staff proposed to provide services to NYSERDA. Note any sub-consultants that your firm may be using to fulfill the scope of services.

Provide a description of the firm's experience providing similar services including recent relevant project experience to the public and private sector. Include the names, titles and phone numbers of at least three (3) references excluding NYSERDA employees for whom similar services have been provided and a summary of the services provided.

Provide a description of the firm's approach to providing the scope of services including the monitoring and management of the environment. Indicate any areas in which you believe the firm has special expertise. Provide item-by-item detail on how the proposal meets the requirements as listed in **Section 2 Program Requirements.**

Provide a description of the firm's approach to PUM and PeopleTools upgrades.

The proposer must agree to provide NYSERDA with pre- and post-audit access to documents, personnel and other information necessary to conduct audits on request during the term of the Contract and for six years thereafter.

The proposal submitted must contain a representation that the proposer is willing and ready to provide any services requested or required in a timely manner.

Disclose any potential conflicts of interest.

Note any special certifications relevant to this RFP that your firm or proposed staff may possess, and outline opportunities that consulting staff have to keep skills current.

Section III - Cost Proposal

Following is a listing of the information required to be provided by the proposer. A cost proposal that does not provide all the information requested below may be subject to rejection. Provide the information in the same order in which it is requested. Your cost proposal must contain sufficient information to assure NYSERDA of its accuracy.

- Provide billing rates for ad-hoc/hourly services provided such as patching for PeopleTools, database, Weblogic, Tuxedo, development ,etc.
- List all fixed price services offered and the corresponding pricing.
- Indicate any reductions from normal billing rates charged other issuers or public entities in New York State.

- Indicate any startup/one-time costs.
- Indicate any monthly recurring charges.
- Indicate any reductions due to missed service level agreements (SLAs).
- A plan for meeting the MWBE/SDVOB requirement MUST be submitted with the proposal (if applicable).
- Detailed requirements and charges for additional 3rd party data or voice network services (such as dedicated circuits or other carrier-provided services) needed as part of the proposal.

In compliance with §139-j and §139-k of the State Finance Law (see Section V, General Conditions below for additional information), proposers will be required to answer questions during proposal submission, which will include making required certification under the State Finance Law and to disclose any Prior Findings of Non-Responsibility.

3. Proposal Evaluation

Proposals that meet solicitation requirements will be reviewed by a Scoring Committee using the Evaluation Criteria in the table below. At NYSERDA's discretion, proposers may be requested to interview with all or part of the Scoring Committee to address any potential questions or clarifications outlined in the proposals. Proposers will be notified if they are requested to attend an interview.

Evaluation Item	Title
1	Demonstrated capacity to perform the types of activities that have been described in the Scope of Work and to meet the basic requirements of the solicitation as outlined in Section 2.2 Program Requirements.
2	Demonstrated ability to deliver additional new features delivered by Oracle in support of existing Peoplesoft systems.
3	Experience in engagements with the hardware and software utilized by NYSERDA.
4	 Similar Experience and quality of work product. For those firms who have worked for the Authority before, quality of work on those transactions will be considered. Prior experience on similar implementations will be considered.
5	Cost Proposal rates evaluated on reasonableness in comparison to other respondents.

Program Policy Factors

NYSERDA reserves the right to accept or reject proposals based on the following factor(s):

- 1. The degree to which pricing and hourly rates are in line with the rest of the market.
- 2. Contractor's ability to assist NYSERDA with compliance with local, state, or federal mandates and/or goals.

4. General Conditions

Proprietary Information - Careful consideration should be given before confidential information is submitted to NYSERDA as part of your proposal. Review should include whether it is critical for evaluating a proposal, and whether general, non-confidential information, may be adequate for review purposes. The NYS Freedom of Information Law, Public Officers law, Article 6, provides for public access to information NYSERDA possesses. Public Officers Law, Section 87(2)(d) provides for exceptions to disclosure for records or portions thereof that "are trade secrets or are submitted to an agency by a commercial enterprise or derived from information obtained from a commercial enterprise." Information submitted to NYSERDA that the proposer wishes to have treated as proprietary, and confidential trade secret information, should be identified and labeled "Confidential" or "Proprietary" on each page at the time of disclosure. This information should include a written request to except it from disclosure, including a written statement of the reasons why the information should be excepted. See Public Officers Law, Section 89(5) and the procedures set forth in 21 NYCRR Part 501 https://www.nyserda.ny.gov/About/-/media/Files/About/Contact/NYSERDA-Regulations.ashx. However, NYSERDA cannot guarantee the confidentiality of any information submitted.

Omnibus Procurement Act of 1992 - It is the policy of New York State to maximize opportunities for the participation of New York State business enterprises, including minority- and women-owned business enterprises, as bidders, subcontractors, and suppliers on its procurement Agreements.

Information on the availability of New York subcontractors and suppliers is available from:

Empire State Development Division for Small Business 625 Broadway Albany, NY 12207

A directory of certified minority- and women-owned business enterprises is available from:

Empire State Development Minority and Women's Business Development Division 625 Broadway Albany, NY 12207

New York Executive Law Article 15-A - NYSERDA is required under the law to promote opportunities for maximum feasible participation of certified minority-and women-owned business enterprises and the employment of minority group members and women in the performance of NYSERDA contracts. The MWBE participation goals and obligations of the selected Contractor are set forth in the Sample Agreement.

Diversity Practices - NYSERDA has determined, pursuant to New York State Executive Law Article 15-A, that the assessment of the diversity practice of respondents to this procurement is practical, feasible, and appropriate. Accordingly, respondents to this procurement shall be required to include as part of their response, as described in Section III herein, Attachment B, Diversity Practices Questionnaire.

New York State Executive Law Article 17-B, NYSERDA recognizes its obligation under the law to promote opportunities for maximum feasible participation of certified service-disabled veteran-owned business enterprises (SDVOB) in the performance of NYSERDA contracts. Executive Law Article 17-B and its associated regulations require, among other things, that NYSERDA establish goals for maximum feasible participation of New York State Certified SDVOBs in the performance of New York State contracts. The SDVOB participations goals and obligations of the selected Contractor are set forth in the Sample Agreement.

State Finance Law sections 139-j and 139-k - NYSERDA is required to comply with State Finance Law sections 139-j and 139-k. These provisions contain procurement lobbying requirements which can be found at https://online.ogs.ny.gov/legal/lobbyinglawfaq/default.aspx Proposers are required to answer questions during proposal submission, which will include making required certification under the State Finance Law and to disclose any Prior Findings of Non-Responsibility (this includes a disclosure statement regarding whether the proposer has been found non-responsible under section 139-j of the State Finance Law within the previous four years).

Tax Law Section 5-a - NYSERDA is required to comply with the provisions of Tax Law Section 5-a, which requires a prospective contractor, prior to entering an agreement with NYSERDA having a value in excess of \$100,000, to certify to the Department of Taxation and Finance (the "Department") whether the contractor, its affiliates, its subcontractors and the affiliates of its subcontractors have registered with the Department to collect New York State and local sales and compensating use taxes. The Department has created a form to allow a prospective contractor to readily make such certification. See, ST-220-TD (available at http://www.tax.ny.gov/pdf/current_forms/st/st220td_fill_in.pdf). Prior to contracting with NYSERDA, the prospective contractor must also certify to NYSERDA whether it has filed such certification with the Department.

The Department has created a second form that must be completed by a prospective contractor prior to contacting and filed with NYSERDA. See, ST-220-CA (available at http://www.tax.ny.gov/pdf/current_forms/st/st220-CA (available at http://www.tax.ny.gov/pdf/current_forms/st/st220-CA (available at http://www.tax.ny.gov/pdf/current_forms/st/st220-CA (available at http://www.tax.ny.gov/pdf/current_forms/st/st220ca_fill_in.pdf). The Department has developed guidance for contractors which is available at http://www.tax.ny.gov/pdf/publications/sales/pub223.pdf .

Contract Award - NYSERDA anticipates making one award under this solicitation. NYSERDA anticipates a contract duration of 5 years, unless NYSERDA management determines a different structure is more efficient based upon proposals received. A contract may be awarded based on initial applications without discussion, or following limited discussion or negotiations pertaining to the Statement of Work. Each proposal should be submitted using the most favorable cost and technical terms. NYSERDA may request additional data or material to support applications. NYSERDA will use the Sample Agreement to contract successful proposals. NYSERDA may at its discretion elect to extend and/or add funds to any project funded through this solicitation. NYSERDA reserves the right to limit any negotiations to exceptions to standard terms and conditions in the Sample Agreement to those specifically identified in the checklist questions. Proposers should keep in mind that acceptance of all standard terms and conditions will generally result in a more expedited contracting process. NYSERDA expects to notify proposers in approximately 4 weeks from the proposal due date whether your proposal has been selected to receive an award. NYSERDA may decline to contract with awardees that are delinquent with respect to any obligation under any previous or active NYSERDA agreement.

Accessibility Requirements - If awardees from this solicitation will be posting anything on the web, or if the awardee will produce a final report that NYSERDA will post to the web, the following language must be included. NYSERDA requires contractors producing content intended to be posted to the Web to adhere to New York State's Accessibility Policy. This includes, but is not limited to, deliverables such as: documents (PDF, Microsoft Word, Microsoft Excel, etc.), audio (.mp3, .wav, etc.), video (.mp4, .mpg, .avi, etc.), graphics (.jpg, .png, etc.), web pages (.html, .aspx, etc.), and other multimedia and streaming media content. For more information, see <u>NYSERDA's Accessibility Requirements</u>.

Limitation - This solicitation does not commit NYSERDA to award a contract, pay any costs incurred in preparing a proposal, or to procure or contract for services or supplies. NYSERDA reserves the right to accept or reject any or all proposals received, to negotiate with all qualified sources, or to cancel in part or

in its entirety the solicitation when it is in NYSERDA's best interest. NYSERDA reserves the right to reject proposals based on the nature and number of any exceptions taken to the standard terms and conditions of the Sample Agreement. NYSERDA reserves the right to disqualify proposers based upon the results of a background check into publicly available information and the presence of a material possibility of any reputational or legal risk in making of the award.

Disclosure Requirement - The proposer shall disclose any indictment for any alleged felony, or any conviction for a felony within the past five years, under the laws of the United States or any state or territory of the United States and shall describe circumstances for each. When a proposer is an association, partnership, corporation, or other organization, this disclosure requirement includes the organization and its officers, partners, and directors or members of any similarly governing body. If an indictment or conviction should come to the attention of NYSERDA after the award of a contract, NYSERDA may exercise its stop-work right pending further investigation or terminate the agreement; the contractor may be subject to penalties for violation of any law which may apply in the particular circumstances. Proposers must also disclose if they have ever been debarred or suspended by any agency of the U.S. Government or the New York State Department of Labor.

5. Attachments

Attachment A – Budget Attachment B – Sample Agreement including Exhibit A - template statement of work



Investment Banking and Underwriting Services Request for Proposal (RFP) 4152

Proposals Due: September 4, 2019 by 3:00 p.m. Eastern Time*

The New York State Energy Research and Development Authority (NYSERDA) requests proposals from firms interested in providing investment banking and underwriting services related to the competitive or negotiated sale or private placement of bonds by NYSERDA, or the sale or financing of loans issued by NYSERDA, in connection with NYSERDA's Green Jobs – Green York (GJGNY) Loan Program, or for other clean energy financing program activities through its Clean Energy Fund. NYSERDA expects to award a contract to a single firm or a single contract to a teaming arrangement of firms. The contract term is anticipated to be five years. NYSERDA will consider firms with an underwriting practice whose scope is either national and/or focused on the Northeast region. Firms must either be New York State (NYS)-certified minority-and women-owned business enterprises as a Co-Senior Manager.

Proposal Submission: Online submission is preferable. Proposers may submit Word, Excel, or PDF files (file formats include: csv, doc, docx, gif, jpeg, jpg, pdf, png, ppt, pptx, pps, ppsx, tif, txt, xls, xlsx, and zip). Individual files should be 100MB or less in file size. Proposal PDFs should be searchable and should be created by direct conversion from MS Word, or other conversion utility. Files should not be scanned. For ease of identification, all electronic files must be named using the proposer's entity name in the title of the document. NYSERDA will also accept proposals by mail or hand-delivery if online submission is not possible. For detailed instructions on how to submit a proposal (online or paper submission), click the link "<u>Application Instructions and Portal Training Guide</u> [PDF] " located in the "Current Opportunities" section of NYSERDA's website (https://www.nyserda.ny.gov/Funding-Opportunities/Current-Funding-Opportunities.aspx).

No communication intended to influence this procurement is permitted except by contacting Heather J. Clark at (518) 862-1090, ext. 3253_or by e-mail <u>heathersolicitations@nyserda.ny.gov</u>. If you have contractual questions concerning this solicitation, contact Venice Forbes at (518) 862-1090, ext. 3507 or <u>venicesolicitations@nyserda.ny.gov</u>. Contacting anyone other than the Designated Contacts (either directly by the proposer or indirectly through a lobbyist or other person acting on the proposer's behalf) in an attempt to influence the procurement: (1) may result in a proposer being deemed a non-responsible offerer, and (2) may result in the proposer not being awarded a contract.

* All proposals must be received by 3 p.m. Eastern Time on the date noted above. Late, faxed, or emailed proposals will not be accepted. Incomplete proposals may be subject to disqualification. It is the proposer's responsibility to ensure that all pages have been included in the proposal. Please note: for online submission, there are required questions that you will have to answer in addition to uploading attachments and you should allot at least 60 minutes to enter/submit proposals. The online proposal system closes promptly at 3 p.m. Eastern Time, files in process or attempted edits or submission after 3 p.m. Eastern Time on the date above, will not be accepted. If changes are made to this solicitation, notification will be posted on the "Current Opportunities" section of NYSERDA's website (https://www.nyserda.ny.gov/Funding-Opportunities/Current-Funding-Opportunities.aspx).

I. Introduction

NYSERDA is a public benefit corporation created in 1975 under Article 8, Title 9 of the State Public Authorities Law through the reconstitution of the New York State Atomic and Space Development Authority.

NYSERDA is responsible for administering the GJGNY Loan Program which was authorized by Title 9-A of Article 8 of the Public Authorities Law of the State of New York, as amended (known as the Green Jobs-Green New York Act of 2009 and hereinafter referred to as the GJGNY Act) to establish a program to provide funding to support sustainable community development, create opportunities for green jobs, and establish a revolving loan fund to finance energy audits and energy efficiency retrofits or improvements, including solar energy and other renewable installations, for the owners of residential 1-4 family buildings, and owners, tenants or managers of buildings occupied by small businesses (100 employees or less) and not-for-profit corporations, or multifamily (5+ unit) buildings. To date, the GJGNY Loan Program Revolving Fund has been funded with approximately \$123 million from funding acquired by auctioning carbon emission credits through the Regional Greenhouse Gas Initiative ("RGGI"). The legislation limits the amount of energy efficiency loans to not more than \$13,000 for residential homes or \$26,000 for small businesses/not-for-profits (these limits are increased to \$25,000 and \$50,000, respectively, for projects with a payback of 15 years of less), and NYSERDA program standards limit the loan amount for multifamily buildings at not more than \$500,000 per building.

Residential unsecured consumer loans were launched in November 2010. Loans are issued by a not-for-profit program lender, Slipstream Group Incorporated, using loan underwriting standards established by NYSERDA. The loans are then serviced by a third-party loan servicer, Concord Servicing Corporation.

In August 2011, the Power NY Act of 2011 was enacted authorizing NYSERDA loans issued through the GJGNY Loan Program to use an on-bill recovery mechanism to allow loans to be repaid through a charge on the customer's electric or gas utility bill. In March of 2012, NYSERDA began to issue on-bill recovery loans for residential loans.

GJGNY Loan Financing - Residential

Following is a comparison of the terms and conditions for residential loan financing to be offered through the GJGNY Loan Program:

	LOAN TERMS			
Loan Type	Smart Energy Loan	On-b	ill recovery financing loan	
Borrower Eligibility	An applicant who owns a 1-4-unit residential building, or who leases or manages such building and who has the authority to contract for energy efficiency improvements in the structure.	and v follov Ediso (upst	oplicant who owns a 1-4-unit residential building who is named on the utility account of one of the ving participating utilities: Central Hudson, Con on, Long Island Power Authority, National Grid ate), New York State Electric and Gas Corporation, ge & Rockland, Rochester Gas and Electric	
Repayment Terms	 Repaid directly to NYSERDA's loan servicer through monthly statement billing or monthly electronic (ACH) payment If you sell or transfer your property, 	 Repaid through NYSERDA Loan Installment charge on utility bill Nonpayment subject to termination of utility service Remaining monthly installments transferred to new utility account holder upon sale or transfer unless 		
	you remain responsible for the outstanding balance of the loan and the loan may not be assigned		satisfied; requires notice to be provided to purchaser; the initial borrower is responsible for any amounts billed on the utility account up to the date of transfer - Requires a declaration to be executed by the property owner and filed with the County Clerk in the county in which the installation property is located.	
Improvements Eligible for Financing	accredited Home Performance with ENE	ERGY	-4-unit residential building by a participating BPI- STAR contractor. The cost of the financed d energy savings over the anticipated life of the	
Loan Term	5, 10, or 15 years; term may not exceed expected useful life of measures		Same as Smart Energy Loan. In addition, monthly loan installment payment amount may not exceed 1/12 th of estimated annual energy savings	
Interest Rate *	Borrowers with household income less than or equal to 120% of county median income = 3.49% Borrowers with household income greater than 120% of county median income = 6.99%			
Fees	Lender processing fee (\$150), may be included in amount financed \$10 late payment fee; \$20 fee for returned payments		Lender processing fee (\$150), may be included in amount financed Utility late payment charge of 1.5%; utility reconnection charge	

* Subject to change, based on Area Median Income (AMI). On-Bill Recovery Loans and Smart Energy Loans repaid by Automatic Clearing House (ACH) payment receive a .5% interest rate reduction; if paid by check/statement billing, the interest rates are 3.99% and 7.49%.

Following are residential loan underwriting standards used in the program:

	LOAN UNDERWRITING STANDARDS				
Standard	"Tier 1" Loans	"Tier 2" Loans			
Minimum FICO or alternate	640 5	40			
Max Debt- to-Income ratio	No limit for credit score 780+ Up to 50% for credit score 640-7	 - Up to 80% for credit score 680-779 - Up to 75% for credit score 600-679 - Up to 70% for credit score 540-599 Regardless of credit score: - Up to 100% for energy efficiency project where the borrower is income-eligible for Assisted Home Performance with ENERGY STAR® ("AHPwES") incentives (up to \$4000/50% of project cost). 			
Mortgage payment history	None	If 640+ credit score and no other violation causes loan to be Tier2, no mortgage payment history is needed. Otherwise, current on all mortgage payments, if any (as reported on the credit report), for the past 12 months. No mortgage payments more than 60 days late during the past 24 months.			
Bankruptcy	No bankruptcy within last 7 yrs	No bankruptcy within last 2 yrs			
Judgments	No outstanding collections, judgments or tax liens > \$2,500				

As of 3/31/2019, NYSERDA has issued 24,873 residential unsecured consumer loans totaling approximately \$291.3 million in capital and with a current loan balance of \$203.9 million. Following are summary statistics of the current loan portfolio:

Weighted average FICO score	742
Weighted average term	174.2 months
Weighted average interest rate	3.81%
Average loan amount	\$11,711
Average loan balance	\$8,196

Summarized information and anonymized loan-level details on the attributes and payment performance history on the residential program loan portfolio is available on NYSERDA's website and the OpenNY platform at: https://www.nyserda.ny.gov/Researchers-and-Policymakers/Green-Jobs-Green-New-York/Data-and-Trends.

GJGNY Loan Financing - Small Commercial, Not-for-Profit and Multifamily Buildings

In June 2011, NYSERDA began offering loans through the GJGNY Loan Program for energy efficiency improvements in buildings for small businesses, not-for-profits, and multifamily buildings. These loans are made by participating lenders, who originate, fund, and service the loans. NYSERDA enters into a participation agreement through which NYSERDA provides a portion of the lender's loan amount (up to 50% of the loan, up to \$26,000/\$50,000 for small businesses and not-for-profits, and up to \$500,000 for multifamily buildings) at no interest, with the lender and NYSERDA sharing on a pro-rata basis on any loan defaults. NYSERDA's share of these loans are funded from the GJGNY revolving loan fund. NYSERDA began offering loans for these borrowers through an on-bill repayment mechanism in July of 2013. As of 3/31/2019, NYSERDA has issued 108 loans for small businesses, not-for-profits, and multifamily buildings totaling approximately \$6.2 million in capital and with a current loan balance of \$2.0 million.

As a means of leveraging the GJGNY Loan Program's initial revolving loan funding capital, particularly for the residential loans, NYSERDA has issued six series of bonds in an aggregate amount of \$176.4 million, consisting of three series of Residential Energy Efficiency Revenue Bonds, two series of Residential Solar Loan Revenue Bonds, and the most recent issue consisting of both Residential Energy Efficiency and Solar Loan Revenue Bonds. NYSERDA will continue to access the secondary markets for best execution, using various execution approaches, including but not limited to securitization, back-levered, whole-loan sales, and participation certificates and syndication (Secondary Market Execution) to leverage the GJGNY Loan Program funding capital for the residential loans and possibly for loans issued by NYSERDA for small business, not-for-profits and multifamily buildings repaid through utility installment charges. Each series of program bonds is issued under a separate bond resolution and is security for that series of program bonds, as well as funds and accounts held under the resolution as security for all program bonds.

NYSERDA may also issue additional bonds, notes and other obligations, the proceeds of which are used to promote activities in the Clean Energy Fund.

For a more detailed description of the GJGNY Loan Program, please visit NYSERDA's website at https://www.nyserda.ny.gov/All-Programs/Programs/Residential-Financing-Options or https://www.nyserda.ny.gov/All-Programs/Programs/Residential-Financing-Options or https://www.nyserda.ny.gov/All-Programs/Programs/Programs/Residential-Financing-Options or https://www.nyserda.ny.gov/Researchers-and-Policymakers/Green-Jobs-Green-New-York.

For the final ratings report for NYSERDA's Residential Solar and Energy Efficiency Financing Green Revenue Bonds, Series 2019A please visit <u>https://www.krollbondratings.com/show_report/16539</u>. For the official statement for Series 2019A please visit <u>https://emma.msrb.org/lssueView/Details/ER389369</u>.

<u>Senior and Co-Senior Manager</u> will be expected to provide comprehensive "book-running" services related to the structuring, marketing, selling, and underwriting of NYSERDA's GJGNY Secondary Market Execution. This shall include, but may not be limited to, the services listed below. Note that if the bonds are sold through a private placement, or through some other form of sale or financing of the loans issued, this Scope of Services would be modified accordingly.

- Identify opportunities in the market for NYSERDA;
- Develop and analyze potential financing structures and advising, in consultation with NYSERDA's financial advisor and bond counsel, on the development of the overall financing plan;
- Run "Best Execution" analysis for market execution using industry standards analytics, approaches and modeling assumptions – possibly using Intex, T-REX, or other analytical tools for arbitrage pricing and bond sizing to maximize proceeds and reduce cost of capital / funding, marketing and underwriting;
- Creating an overall marketing plan and pricing strategy for each bond sale;

- Provide relevant market and economic data, pricing views, comparable prices, and pricing proposals prior to pricing;
- Preparation of strategy for presentations to rating agencies, credit enhancers, and investors, as necessary and assist the Authority and its financial advisors in obtaining ratings;
- Follow Authority policies, either oral or written, for liability, designation and retention, pricing procedures and the process of selling debt obligations;
- Underwrite the bonds; and
- Post-pricing support; including:
 - Fulfillment of orders and allotments, upon approval of Authority;
 - Market support for underwritten bonds; and
 - Provide all relevant pricing information to Authority, including orders (retail, member, priority), debt service schedule, rates, yields, true interest cost, information related to comparable transactions.
- Provide support and service in selling existing loan portfolios.

II. Proposal Requirements

Both Senior Manager and, if applicable, Co-Senior Manager shall complete the proposal requirements.

Proposals should not be excessively long or submitted in an elaborate format that includes expensive binders or graphics. Unnecessary attachments beyond those sufficient to present a complete, comprehensive, and effective response will not influence the evaluation of the proposal. To be considered, the proposals must respond to the questions and requests listed below. Failure to respond to the questions or provide information as requested may be deemed unresponsive. Proposals should not exceed twenty (20) pages, excluding required attachments and signed cover letter. NYSERDA will not be responsible for any costs or expenses incurred by respondents responding to this RFP, including the cost of preparing the initial response, providing any additional information and traveling for an oral presentation. Proposals and attachments should be uploaded as individual documents.

Each page of the proposal should state the name of the proposer, the RFP number, and the page number. The proposal must be in the following format:

Section 1. Background Information

- 1. **Cover Letter**. Cover letter shall be signed by a person authorized to commit the firm to the terms of the response and to be held primarily responsible for the veracity of statements made in the response.
- 2. **Description of Firm**. Provide a brief description of your firm, its capabilities and organizational structure. Please describe how your firm's selection would benefit NYSERDA and why your firm should be appointed as a senior manager, including a description of the firm's strengths and any other factors that should be considered in the selection process.
- 3. **Approach to Services Requested**. Present your firm's approach to complete the services requested in Section I above. Describe your firm's in-house technical and analytical abilities.

- 4. Key Personnel. Identify and describe the qualifications of key personnel and team members that will be involved in underwriting NYSERDA's debt, including their role and the extent of their participation, their capabilities and relevant experience. Please limit this list to those who will actively work on NYSERDA's account. The respondent should include resumes and all NYSE/NASD registration information for all key personnel in an appendix (appendix will not be counted against page limit). The respondent should also include information relating the position and importance of the public finance department within the firm as well as current staffing levels and any known or proposed changes to those staffing levels. Please be specific for the following duties (if applicable), providing telephone and fax numbers, mailing address and e-mail address for each individual:
 - (a) primary contact/day-to-day responsibilities,
 - (b) financial analysis,
 - (c) new products,
 - (d) marketing and sales,
 - (e) underwriting.
- 5. Capital/Liquidity. Attach your firm's most recent quarterly financial statements. Please discuss your firm's capital structure including its total capital, equity capital, and excess net capital for each of the last three (3) years, and in accordance with SEC Rule 15c3-1. The bidder should demonstrate its capacity to successfully underwrite NYSERDA's tax-exempt or taxable debt, including the firm's ability to distribute bonds nationally. Discuss your firm's capital structure including total capital, equity capital, and uncommitted excess capital. Indicate how much of your firm's uncommitted excess capital is allocated to municipal finance and provide recent examples of how the firm has used that capital to support the sale and market distribution of tax-exempt or taxable municipal bonds. Provide the minimum and maximum bond par amounts that your firm would be comfortable with as a senior manager. The respondent should identify any commitments or other restrictions which may limit its ability to underwrite NYSERDA's debt. Please include the name, address, email address, phone number, and fax number of the contact person who is authorized to answer questions and negotiate final terms and conditions on behalf of your firm.
- 6. Relevant Experience and Past Performance: Describe recent underwriting work which best illustrates the firm's most relevant experience, ability, and expertise, including your firm's experience underwriting Asset Backed Securities and your strategy for issuing these bonds in conjunction with a pooled loan program. Provide a brief history and a general description of underwriting practices, highlighting particular experience with New York based clients, asset-backed issuers and pooled financings. Please summarize your firm's negotiated underwriting experience with leveraged pooled transactions from 2016 to date. For each issue please list your firm's role (Senior Manager, Co-Senior Manager, or Co-Manager), the issuer, the overall size of the issue, the related pricing date, the orders placed by your firm and the amount of bonds allotted to your firm.
- 7. **Credit Ratings**. Please discuss your approach to assisting NYSERDA rate a transaction similar to Residential Solar Loan Revenue Bonds or Residential Energy Efficiency and Solar Loan Revenue Bonds comparable to NYSERDA's last two bond issues sold in 2018 and 2019. Include a discussion of which rating agencies should be used between Moody's, Standard and Poor's, Fitch, and Kroll.
- 8. Marketing. Please provide your firm's distribution capabilities. What would your firm propose as an investor outreach plan? How would you suggest NYSERDA market Residential Solar Loan Revenue Bonds or Residential Energy Efficiency and Solar Loan Revenue Bonds comparable to NYSERDA's last two bond issues sold in 2018 and 2019? How would you maximize investor participation? How do you suggest NYSERDA structure the bonds to focus sales to sophisticated investors? Discuss any potential limitations on suggested approaches and the impact that this may have on investor participation. Discuss whether the bonds should be structured/designated as municipal bonds or corporate bonds and how this is expected to impact investor interest and orders.
- 9. Bond Structuring and Sale. What is your underwriting desk's approach to structuring and pricing a transaction similar to Residential Solar Loan Revenue Bonds or Residential Energy Efficiency and Solar

Loan Revenue Bonds comparable to NYSERDA's last two bond issues sold in 2018 and 2019? Include the following in your discussion:

- What software or structuring application does your firm use? What type of access is given to NYSERDA and its financial advisor?
- How your firm would structure the bonds to minimize NYSERDA's required equity contribution and maximize the advance rate (In its most recent Series 2019A bonds, based on the characteristics of the pledged loan portfolio and Kroll's CPR and stress case loss assumptions, the structure resulted in bond principal equal to about 73% of pledged loan principal, requiring an equity contribution equal to about 27% of pledged loan principal; NYSERDA seeks to minimize its equity funding contribution while still allowing a financing product with attractive terms to encourage consumer access, particularly to support broadening access to financing to lower income and lower credit consumers).;
- What call and redemption provisions would provide for an optimal structure and result in the best pricing for NYSERDA;
 - If the suggested structure includes a supersinker term bond, how can NYSERDA achieve the lowest rate and spread on this bond at pricing?
- What would be your firm's major contribution to the structuring, marketing, pricing and distribution of NYSERDA's debt?
- Would you recommend an approach for financing the portfolio through a structure other than bond issuance? (e.g. whole loan sales) If so, provide a summary of the structure that you would propose including advantages and disadvantages of the approach.
- What is your firm's experience in arranging "Whole-loan" sales, including Reps & Warranties, Backleveraged financing, participation, private rating or syndication structures?
- Has your firm developed a stochastic model for Solar loan / Lease Prepayments Projection (understanding the universe of solar loan performance) and a Default Projection model?
- Has your firm done any work on Solar Plant Performance modeling Irradiance modeling, degradation modeling, and cell performance?
- 10. **Technical and Innovative Capabilities**. Please describe (no more than 3) transactions that your firm has senior managed for leveraged pooled transactions, demonstrating the technical and innovative capabilities of your firm. Describe how your firm assisted the issuer(s) in optimizing the benefits of the transaction. For each transaction listed, please provide the issuers name, issue date, amount involved, issuer contact and telephone number. Also, please discuss the benefits of using a privately placed sale instead of a public offering, and whether there would be any limitations with using this method.

Section 2. NYSERDA Financial Strategy

- 1. Programmatic/Structuring Changes. Describe any significant innovations your firm has made in the area of pooled or structured finance bond issues. What approach would you recommend for the GJGNY program?
- Compensation. The proposal must include the underwriter's proposed fees on a per-bond basis. All
 proposers should submit fees that would be charged if the proposer were to serve as lead underwriter
 on NYSERDA's financing transaction. NYSERDA anticipates an annual financing transaction of
 approximately \$15 million.

In compliance with §139-j and §139-k of the State Finance Law (see Section V, General Conditions below for additional information), proposers will be required to answer questions during proposal submission, which will include making required certification under the State Finance Law and to disclose any Prior Findings of Non-Responsibility.

III. Proposal Evaluation

Proposals that meet Proposal requirements will be reviewed by a Scoring Committee based on the following areas of consideration, with the percentage weight of each category shown in parentheses. Oral presentations may be required of the top ranked Proposers. Presentations will be held at NYSERDA's offices located in Albany, New York at a date and time to be determined by NYSERDA.

- 1. <u>Demonstrated Experience (25)</u>. Demonstrated experience as underwriter to complex, multiple participant revolving loan financings, in particular, programs similar in nature to the GJGNY Loan Program. Demonstration of the firm's commitment to providing a high level of responsive client service, including positive references for such experience.
- 2. <u>Understanding of and Ability to Perform Scope of Services (20)</u>. Demonstrated understanding of the structure of GJGNY Loan Program, the ongoing work required by the scope of services and any additional services necessary for the success of the bond issuance.
- 3. <u>Personnel</u> (15). Demonstrated assignment of sufficient, qualified, and experienced professional personnel, with preference given to personnel experienced in providing services such as those contemplated by this RFP.
- 4. <u>Underwriting Ability (15)</u>. Demonstrated ability of firm to underwrite and commit capital toward the underwriting of bond issuances.
- 5. <u>Fees (25)</u>. The basis for the cost proposal evaluation rankings will be the fee compensation, on a per bond basis assuming a bond issue of \$15 million, received from each proposer. The total price offers will be ranked with the low bid awarded the maximum of 25 points. The remaining proposals will be assigned scores based on the following formula:

<u>Total Fees for Lowest Bidder</u> X 25 Total Fees Proposed by Bidder

If partnering with a NYS certified minority-and women-owned business enterprises firm as Co-Senior Manager, fee structure should include proposed compensation split between Senior and Co-Senior Manager, with a minimum of thirty (30) percent allocated to the NYS certified minority-and women-owned business enterprises Co-Senior Manager

NYSERDA reserves the right to accept or reject proposals based on the following factor(s):

• The degree to which pricing and hourly rates are in line with the rest of the market.

IV. GENERAL CONDITIONS

Proprietary Information - Careful consideration should be given before confidential information is submitted to NYSERDA as part of your proposal. Review should include whether it is critical for evaluating a proposal, and whether general, non-confidential information, may be adequate for review purposes. The NYS Freedom of Information Law, Public Officers law, Article 6, provides for public access to information NYSERDA possesses. Public Officers Law, Section 87(2)(d) provides for exceptions to disclosure for records or portions thereof that "are trade secrets or are submitted to an agency by a commercial enterprise or derived from information obtained from a commercial enterprise." Information submitted to NYSERDA that the proposer wishes to have treated as proprietary, and confidential trade secret information, should be identified and labeled "Confidential" or "Proprietary" on each page at the time of disclosure. This information should include a written request to except it from disclosure, including a written statement of the reasons why the information should be excepted. See Public Officers Law, Section 89(5) and the procedures set forth in 21 NYCRR Part 501 https://www.nyserda.ny.gov/About/-//media/Files/About/Contact/NYSERDA-Regulations.ashx. However, NYSERDA cannot guarantee the confidentiality of any information submitted.

Omnibus Procurement Act of 1992 - It is the policy of New York State to maximize opportunities for the participation of New York State business enterprises, including minority- and women-owned business enterprises, as bidders, subcontractors, and suppliers on its procurement Agreements.

Information on the availability of New York subcontractors and suppliers is available from:

Empire State Development Division for Small Business 625 Broadway Albany, NY 12207

A directory of certified minority- and women-owned business enterprises is available from:

Empire State Development Minority and Women's Business Development Division 625 Broadway Albany, NY 12207

New York Executive Law Article 15-A - NYSERDA is required under the law to promote opportunities for maximum feasible participation of certified minority-and women-owned business enterprises and the employment of minority group members and women in the performance of NYSERDA contracts. The MWBE participation goals and obligations of the selected Contractor are set forth in Attachment A.

Diversity Practices - NYSERDA has determined, pursuant to New York State Executive Law Article 15-A, that the assessment of the diversity practice of respondents to this procurement is practical, feasible, and appropriate. Accordingly, respondents to this procurement shall be required to include as part of their response, as described in Section III herein, Attachment B , Diversity Practices Questionnaire.

New York State Executive Law Article 17-B, NYSERDA recognizes its obligation under the law to promote opportunities for maximum feasible participation of certified service-disabled veteran-owned business enterprises (SDVOB) in the performance of NYSERDA contracts. Executive Law Article 17-B and its associated regulations require, among other things, that NYSERDA establish goals for maximum feasible participation of New York State Certified SDVOBs in the performance of New York State contracts. The SDVOB participations goals and obligations of the selected Contractor are set forth in Attachment C.

State Finance Law sections 139-j and 139-k - NYSERDA is required to comply with State Finance Law sections 139-j and 139-k. These provisions contain procurement lobbying requirements which can be found at https://online.ogs.ny.gov/legal/lobbyinglawfaq/default.aspx. Proposers are required to answer questions during proposal submission, which will include making required certification under the State Finance Law and to disclose any Prior Findings of Non-Responsibility (this includes a disclosure statement regarding whether the proposer has been found non-responsible under section 139-j of the State Finance Law within the previous four years).

Tax Law Section 5-a - NYSERDA is required to comply with the provisions of Tax Law Section 5-a, which requires a prospective contractor, prior to entering an agreement with NYSERDA having a value in excess of \$100,000, to certify to the Department of Taxation and Finance (the "Department") whether the contractor, its affiliates, its subcontractors and the affiliates of its subcontractors have registered with the Department to collect New York State and local sales and compensating use taxes. The Department has created a form to allow a prospective contractor to readily make such certification. See, ST-220-TD (available at http://www.tax.ny.gov/pdf/current_forms/st/st220td_fill_in.pdf). Prior to contracting with NYSERDA, the prospective contractor must also certify to NYSERDA whether it has filed such certification with the Department.

The Department has created a second form that must be completed by a prospective contractor prior to contacting and filed with NYSERDA. See, ST-220-CA (available at

<u>http://www.tax.ny.gov/pdf/current_forms/st/st220ca_fill_in.pdf</u>). The Department has developed guidance for contractors which is available at <u>http://www.tax.ny.gov/pdf/publications/sales/pub223.pdf</u>.

Contract Award - NYSERDA anticipates making multiple, awards under this solicitation. NYSERDA anticipates a contract duration of five (5) years, unless NYSERDA management determines a different structure is more efficient based upon proposals received. A contract may be awarded based on initial applications without discussion, or following limited discussion or negotiations pertaining to the Statement of Work. Each proposal should be submitted using the most favorable cost and technical terms. NYSERDA may request additional data or material to support applications. NYSERDA may at its discretion elect to extend and/or add funds to any project funded through this solicitation. NYSERDA expects to notify proposers by October 10, 2019 whether your proposal has been selected to receive an award. NYSERDA may decline to contract with awardees that are delinquent with respect to any obligation under any previous or active NYSERDA agreement.

Accessibility Requirements - If awardees from this solicitation will be posting anything on the web, or if the awardee will produce a final report that NYSERDA will post to the web, the following language must be included. NYSERDA requires contractors producing content intended to be posted to the Web to adhere to New York State's Accessibility Policy. This includes, but is not limited to, deliverables such as: documents (PDF, Microsoft Word, Microsoft Excel, etc.), audio (.mp3, .wav, etc.), video (.mp4, .mpg, .avi, etc.), graphics (.jpg, .png, etc.), web pages (.html, .aspx, etc.), and other multimedia and streaming media content. For more information, see <u>NYSERDA's Accessibility Requirements</u>.

Limitation - This solicitation does not commit NYSERDA to award a contract, pay any costs incurred in preparing a proposal, or to procure or contract for services or supplies. NYSERDA reserves the right to accept or reject any or all proposals received, to negotiate with all qualified sources, or to cancel in part or in its entirety the solicitation when it is in NYSERDA's best interest. NYSERDA reserves the right to disqualify proposers based upon the results of a background check into publicly available information and the presence of a material possibility of any reputational or legal risk in making of the award.

Disclosure Requirement - The proposer shall disclose any indictment for any alleged felony, or any conviction for a felony within the past five years, under the laws of the United States or any state or territory of the United States and shall describe circumstances for each. When a proposer is an association, partnership, corporation, or other organization, this disclosure requirement includes the organization and its officers, partners, and directors or members of any similarly governing body. If an indictment or conviction should come to the attention of NYSERDA after the award of a contract, NYSERDA may exercise its stop-work right pending further investigation or terminate the agreement; the contractor may be subject to penalties for violation of any law which may apply in the particular circumstances. Proposers must also disclose if they have ever been debarred or suspended by any agency of the U.S. Government or the New York State Department of Labor.

Vendor Assurance of No Conflict of Interest or Detrimental Effect - The proposer shall disclose any existing or contemplated relationship with any other person or entity, including any known relationships with any member, shareholders of 5% or more, parent, subsidiary, or affiliated firm, which would constitute an actual or potential conflict of interest or appearance of impropriety, relating to other clients/customers of the proposer or former officers and employees of NYSERDA, in connection with proposer's rendering services as proposed. If a conflict does or might exist, please describe how your company would eliminate or prevent it. Indicate what procedures will be followed to detect, notify NYSERDA of, and resolve any such conflicts.

The proposer must disclose whether it, or any of its members, or, to the best of its knowledge, shareholders of 5% or more, parents, affiliates, or subsidiaries, have been the subject of any investigation or disciplinary action by the New York State Commission on Public Integrity or its predecessor State entities (collectively, "Commission"), and if so, a brief description must be included indicating how any matter before the Commission was resolved or whether it remains unresolved.

Public Officers Law – For any resulting awards, the Contractor and its subcontractors shall not engage any person who is, or has been at any time, in the employ of the State to perform services in violation of the provisions of the New York Public Officers Law, other laws applicable to the service of State employees, and the rules, regulations, opinions, guidelines or policies promulgated or issued by the New York State Joint Commission on Public Ethics, or its predecessors (collectively, the "Ethics Requirements"). Proposers are reminded of the following Public Officers Law provision: contractors, consultants, vendors, and subcontractors may hire former NYSERDA employees. However, as a general rule and in accordance with New York Public Officers Law, former employees of NYSERDA may neither appear nor practice before NYSERDA, nor receive compensation for services rendered on a matter before NYSERDA, for a period of two years following their separation from NYSERDA service. In addition, former NYSERDA employees are subject to a "lifetime bar" from appearing before any state agency or authority or receiving compensation for services regarding any transaction in which they personally participated, or which was under their active consideration during their tenure with NYSERDA.

Any awardee will be required to certify that all of its employees, as well as employees of any subcontractor, whose subcontract is valued at \$100,000 or more who are former employees of the State and who are assigned to perform services under the resulting contract, shall be assigned in accordance with all Ethics Requirements. During the term of any agreement, no person who is employed by the contractor or its subcontractors and who is disqualified from providing services under the contract pursuant to any Ethics Requirements may share in any net revenues of the contractor or its subcontractors derived from the contract. NYSERDA may request that contractors provide it with whatever information the State deems appropriate about each such person's engagement, work cooperatively with the State to solicit advice from the New York State Joint Commission on Public Ethics, and, if deemed appropriate by the State, instruct any such person to seek the opinion of the New York State Joint Commission on Public Ethics. NYSERDA shall have the right to withdraw or withhold approval of any subcontractor if utilizing such subcontractor for any work performed would be in conflict with any of the Ethics Requirements. NYSERDA shall have the right to terminate any contract at any time if any work performed is in conflict with any of the Ethics Requirements.

V. Attachments:

Attachment A- Article 15-A (MWBE) Solicitation Provisions (non-construction) Attachment B - Diversity Practices Questionnaire Attachment C - Article 17-B (SDVOB) Solicitation Provisions (non-construction)



RICHARD L. KAUFFMAN Chair ALICIA BARTON President and CEO

New York State Offshore Wind Fisheries Liaison

Request for Proposals (RFP) 4153 \$900,000 Available NYSERDA reserves the right to extend and/or add funding to the Solicitation should other program funding sources become available.

Proposals Due: August 19, 2019 by 3:00 PM Eastern Time*

Through this Request for Proposals (RFP), NYSERDA is seeking an individual to undertake the role of a New York State (the "State") offshore wind fisheries liaison. The liaison will assist the State in outreach to, and engagement with, commercial and recreational fishing communities using the waters of the New York Bight and the greater Mid-Atlantic and New England regions. The liaison will also report to the State on fishing practices, equipment and other factors to be considered in the siting, planning and development of wind farms in support of the State's offshore wind development goals and the New York State Offshore Wind Master Plan.¹ The fisheries liaison will be a key point of contact for the State with commercial and recreational fishing industry representatives. The role will be to facilitate an open line of communication with the industry, providing the fishing community with a clearer understanding of the State's activities and an opportunity to be included in the decision-making and a better coexistence of offshore wind and fishing. This position is also anticipated to increase transparency in the planning process and in project development by providing fishermen with greater access to information and a direct contact for feedback.

Proposal Submission: Online submission is preferable. Proposers may submit Word, Excel, or PDF files (file formats include: csv, doc, docx, gif, jpeg, jpg, pdf, png, ppt, pptx, pps, ppsx, tif, txt, xls, xlsx, and zip). Individual files should be 100MB or less in file size. Proposal PDFs should be searchable and should be created by direct conversion from MS Word, or other conversion utility. Files should not be scanned. For ease of identification, all electronic files must be named using the proposer's entity name in the title of the document. NYSERDA will also accept proposals by mail or hand-delivery if online submission is not possible. For detailed instructions on how to submit a proposal (online or paper submission), click the link "Application Instructions and Portal Training Guide [PDF] " located in the "Current Opportunities" section of NYSERDA's website (https://www.nyserda.ny.gov/Funding-Opportunities/Current-Funding-Opportunities.aspx).

¹ <u>https://www.nyserda.ny.gov/All%20Programs/Programs/Offshore%20Wind</u>

No communication intended to influence this procurement is permitted except by contacting Kate McClellan Press (Designated Contact) at (518) 862-1090 ext. 3110 or Gregory Lampman (Designated Contact) at (518) 862-1090 ext. 3372, or by e-mail <u>fisheriesandoffshorewind@nyserda.ny.gov</u>. If you have contractual questions concerning this solicitation, contact Nancy Marucci (Designated Contact) at (518) 862-1090, ext. 3335 or <u>NancySolicitations@nyserda.ny.gov</u>. Contacting anyone other than the Designated Contacts (either directly by the proposer or indirectly through a lobbyist or other person acting on the proposer's behalf) in an attempt to influence the procurement: (1) may result in a proposer being deemed a non-responsible offerer, and (2) may result in the proposer not being awarded a contract.

* All proposals must be received by 3:00 PM Eastern Time on the date noted above. Late, faxed, or emailed proposals will not be accepted. Incomplete proposals may be subject to disqualification. It is the proposer's responsibility to ensure that all pages have been included in the proposal for online submission. There are required questions that you will have to answer in addition to uploading attachments and you should allot at least 60 minutes to enter/submit proposals. The online proposal system closes promptly at 3:00 PM Eastern Time, and files in process or attempted edits or submission after 3:00 PM Eastern Time on the date above, will not be accepted. If changes are made to this solicitation, notification will be posted on the "Current Opportunities" section of NYSERDA's website (https://www.nyserda.ny.gov/Funding-Opportunities/Current-Funding-Opportunities.aspx.

I. Introduction

Central to the implementation of the New York State Offshore Wind Master Plan is ensuring that the views of key stakeholders, such as commercial and recreational fishermen, are actively solicited and fully considered. To assist in this process, a fisheries liaison will support New York State in achieving its goal of advancing offshore wind in a responsible manner. In a fisheries liaison, the State is preferentially seeking an individual, rather than a consulting firm, to gather feedback from fishermen across the region (Mid-Atlantic and New England) to inform the State, and to convey the State's views, often on an individual basis, to the fishing community in a way that advances the State's policies and goals. The liaison could be employed by another organization, but in this capacity, they will represent and be directly responsible to New York State.

A fisheries liaison will assist the State in outreach to, and engagement with, commercial and recreational fishing communities using the waters of the New York Bight and the greater Mid-Atlantic and New England regions. The fishing liaison will engage in group or one-on-one stakeholder discussions, in-person and by telephone or webinar, and report to the State on views, opinions, fishing practices, equipment, and other factors to be taken into consideration in the siting, planning, and development of wind farms.

The fisheries liaison will be a member of the State's offshore wind team and a key point of contact for the State with commercial and recreational fishing industry representatives, as well as fisheries liaisons representing offshore wind developers in the region. The fisheries liaison will facilitate an open line of communication with the industry, seeking opportunities to provide the fishing community with clear and timely understanding of the State's activities, inform the community of efforts to include them in the decision-making process, gather feedback from fishermen, and develop strategies that support coexistence of offshore wind and fishing. In some instances, where appropriate, reporting could be developed such that the fisheries

representative is afforded anonymity. The fisheries liaison will also participate in the planning and activities of the State's Fisheries Technical Working Group (F-TWG).²

The fisheries liaison will be required to attend relevant meetings in the region (*e.g.* Fisheries Management Council's, offshore wind conferences, developer meetings, public meetings) to represent the State's position, and report back to the State on the discussions. This could include simple attendance, networking, participation or giving formal presentations.

Given these tasks, it is imperative that the individual engaging in this role be well-versed in commercial fishing methods, gear, and regulatory and industry challenges. They must be perceived by the fishing community as being knowledgeable and objective in conveying information, and impartial with respect to the fishing and offshore wind industries. Finally, they must be articulate, organized, motivated, and have strong written and oral communication skills, being able to efficiently translate between the terminology used by regulators, developers, and fishing community representatives.

II. PROGRAM REQUIREMENTS

Eligibility and Proposer Requirements

The fisheries liaison will play a critical role in outreach and engagement of the commercial and recreational fishing communities using the waters of the New York Bight and the greater Mid-Atlantic and New England regions. The Fisheries liaison will be a key point of contact with fishing industry representatives to facilitate an open line of communication, increase transparency in the planning process, and advise NYSERDA on engagement strategies and best management practices through the implementation of the New York State Offshore Wind Master Plan.

The fisheries liaison must have the following qualifications:

- Demonstrated experience in issues related to commercial (preferred) and/or recreational fisheries.
- Demonstrated ability to develop relationships with key stakeholder groups.
- Be able to communicate effectively with industry representatives and fishing groups this includes strong writing, presentation, and interpersonal skills that resonate with audiences of different backgrounds; the ability to communicate persuasively, concisely, and unambiguously in speech and in writing.
- Strong project management skills and the ability to successfully multi-task, set priorities, and meet deadlines in a dynamic environment.
- Knowledge and experience with state and federal rules and regulations, particularly about marine resources preferred.
- Some knowledge and/or experience with the development of large-scale renewables preferred.
- Relevant formal training or college degree may be considered in place of some direct experience.

NYSERDA reserves the right to independently verify any qualifications, experience, or other relevant information provided in the proposal.

² <u>https://nyfisheriestwg.ene.com/</u>

Available Funding and Cost Sharing

Up to approximately \$900,000 of NYSERDA funding is available through this RFP to support the position, including travel, for a minimum of three (3) - years. Contracts may, at NYSERDA's discretion, be extended for two-years, up to two-times for a total contract term not-to-exceed nine (9) years. Awarded contracts may be extended at NYSERDA's sole discretion if it is deemed that significant value is provided. Contracts will be structured as time-and-materials, with direct reimbursement of travel costs per federal guidelines.³ NYSERDA anticipates making one award under this solicitation. All, some, or none, of the available funds may be awarded through this RFP. NYSERDA reserves the right to add or reduce time or funding to awarded contract(s). No cost sharing is required.

Range/Scope of Services

An applicant to this RFP will provide advisory services on a full-time basis as an independent contractor. Work may include, but is not limited to, the following:

- Advise and assist NYSERDA in communication strategies with industry representative and fishing groups such as initiating stakeholder contacts, dissemination of meeting information, and gathering sensitive industry data.
- Assist in the organization of meetings to solicit input and comments on topics of interest, available and recommended datasets, and future research needs.
- Assist in the identification and collection of available fisheries data to inform project planning and offshore wind facility siting decisions.
- Regional travel to meet with industry representatives, fishing groups, and attend/participate in workshops and conferences.
- Advise NYSERDA in strategies to mitigate potential adverse project construction and operation impacts given stakeholder input and knowledge of local fisheries.
- Support research and analysis addressing issues relating to fisheries/fishing and offshore wind energy.
- Assist in the ongoing development and maintenance of a stakeholder list, including relevant fishery community individuals, officials, and organizations.
- Ensure bilateral communication between NYSERDA and industry representatives and fishing groups and timely distribution of information between groups.
- Be proactive in facilitating and improving communication between NYSERDA and fisheries stakeholders.
- Provide routine written and verbal reports to the State on activities planned and undertaken, and a synthesis of the discussions and outcomes.

The day-to-day work schedule is expected to vary, but the overall workload is anticipated to average approximately 40 hours per week. Meetings and travel will require a flexible schedule and some non-traditional hours.

Following the initial due date, submissions will be accepted and assessed by a Scoring Committee based on the best overall value. The Scoring Committee will consider the qualifications and potential of the proposer to fulfill identified needs and scope of services. NYSERDA reserves the right to re-release this solicitation if a

³ <u>https://www.fdic.gov/buying/goods/acquisition/contractortravelguidelines.pdf</u>

viable fisheries liaison is not selected from the submitted proposals. More information on the proposal evaluation criteria is provided in Section IV.

III. SUMBISSION REQUIREMENTS

Applicants are encouraged to proactively identify advisory topics (to the best extent possible) that the State would benefit from coordination with. Additionally, NYSERDA will identify specific assignments based on discussions with the selected fisheries liaison and current organizational needs.

Submissions should concisely and clearly demonstrate the applicant's expertise and accomplishments and how they relate to the requirements of this RFP and how they are applicable to serving as a fisheries liaison. Submissions should not be excessively long or submitted in an elaborate format that includes expensive binders or graphics. Unnecessary attachments beyond those sufficient to present a complete, comprehensive, and effective proposal may reduce, rather than increase, the standing of a submission per the evaluation criteria. The applicant should provide the following:

Section 1. Narrative Statement of Qualifications (~1-3 pages; 3-page limit)

The narrative statement serves as the "cover letter" of the submission and will describe the applicant's professional history, qualifications, accomplishments, and other relevant background information. Applications should consider NYSERDA's and New York State's ongoing activities to engage with fishermen and fisheries related research and describe how their expertise could be leveraged in pursuit of its goals. In general, the Narrative Statement of Qualifications should describe:

- a. Professional history and accomplishments to date;
- b. Motivation and rationale for seeking to serve as NYSERDA's Fisheries Liaison;
- c. How past professional experience or areas of expertise could be leveraged to benefit NYSERDA's strategy and operations;
- d. General description of the proposer's availability and ability to work flexible hours, proposed primary location of service and how that location will affect access to key stakeholders, and;
- e. Other relevant information the applicant wishes NYERDA to consider.

Section 2. Resume/Curricula Vitae

a. The resume or curriculum vitae should include, at a minimum, the proposer's name, contact information, itemized work experience, educational background, special skills, and relevant experience. Additionally, as appropriate, any relevant research experience, publications, grants and fellowships, professional associations and licenses, awards, volunteer positions and other information relevant to the goals of this solicitation.

Section 3. Cost Proposal (1-page)

- a. Provide a fully burdened hourly billing rate. Proposers may be required to provide justification for proposed hourly billing rates during the contract negotiation period (post-award notification).
- Liaisons will be expected to travel to, including, but not limited to, locations from Virginia to Massachusetts. Provide a general narrative explaining how you would anticipate traveling to daylong (9:00am – 4:00pm) meetings in New Bedford, MA; Southampton, NY; Port Judith and Cape May, NJ; and Washington D.C., including necessary transportation and accommodation.

Section 4. References and Conflict(s) of Interest (~1-page)

- a. Provide three (3) professional references, with contact information (address, phone number, email) and a brief description of the relationship, from current or past colleagues, customers, clients, or others who support the proposer's submission and have direct experience working with the proposer over a sustained period of time. NYSERDA reserves the right to reach out to none or all the references during or following the proposal review process.
- b. For potential or perceived conflicts of interest, to the best of the proposer's knowledge, identify any involvement the proposer has or has had with offshore wind energy developers or commercial and recreational fishing industry representatives that could be perceived as potential conflicts of interest in fulfilling their duties as a State fisheries liaison for offshore wind. Briefly explain how any identified conflicts of interest can be mitigated.

Proposals must be submitted as a single file, inclusive of all supporting documents. Items required for a complete submission – Section 1. Narrative Statement of Qualifications; Section 2. Resume/Curricula Vitae; Section 3. Cost Proposal, and; Section 4. References and Conflict(s) of Interest, and clearly identify each of the documents.

Applications may be submitted electronically by following the link for electronic submissions found on this PON's webpage, which is located in the "Current Opportunities" section of NYSERDA's website (<u>http://www.nyserda.ny.gov/Funding-Opportunities/Current-Funding-Opportunities.aspx</u>). Proposers may contact Kate McClellan Press at 518-862-1090 ext. 3110 before preparing a proposal to discuss proposal requirements.

In compliance with §139-j and §139-k of the State Finance Law (see Section V below, "General Conditions" for additional information), proposers will be required to answer questions during proposal submission which will include making required certification under the State Finance Law and to disclose any Prior Findings of Non-Responsibility.

IV. PROPOSAL EVALUATION

Proposals that meet the solicitation requirements will be reviewed by a Scoring Committee and will be scored and ranked according to the following criteria, listed in order of importance. At NYSERDA's discretion, proposers may be requested to interview with all or part of the Scoring Committee to address any potential questions or provide clarifications to information outlined in the proposals. Proposers will be notified if they are requested to attend an interview. After the proposals are reviewed, NYSERDA will issue a letter to each proposer indicating the proposal evaluation results. The selected proposer will be invited to enter into contract negotiations with NYSERDA.

Evaluation Criteria

Experience and Qualifications

• Does the proposer's experience, qualifications or training meet the requirements of the fisheries liaison position, as specified in this RFP?

- Has the proposer provided appropriate documentation showing required experience, qualifications and training?
- How relevant are the proposer's experience, qualifications and training to the goals of this solicitation?
- Is the proposer well-positioned professionally to execute the requested services?
- Does the proposer have the necessary organizational and project management skills to be successful?

Cost Proposal

- Is the availability and billing rate reasonable given the proposer's qualifications and current engagements?
- Is the proposer's availability sufficient to accomplish the stated goals of the engagement?
- Is the proposer's physical location a benefit or hindrance to regional travel?

References

- Are the references from experienced, well-established individuals who understand and are deeply familiar with relevant fisheries?
- Are the references able to provide clear and compelling examples of the applicant's ability to be an effective fisheries liaison?
- Do the references endorse the personality, temperament and overall ability of the applicant to work with stakeholders in complex and challenging situations?
- If asked, did the references provide a positive endorsement of the proposer in all respects?

General Criteria

- Does the submission include all required elements?
- Overall, is the submission professionally prepared, reasonable, and likely to positively impact NYSERDA's strategy and operations?

Other Considerations

NYSERDA reserves the right to accept or reject proposals – or adjust award amounts – based on the following factor(s):

- The degree to which the proposed project directly addresses NYSERDA's mission and strategic goals.
- The degree to which the applicant has the resources (human and financial) to be able to complete the project.
- The degree to which pricing and hourly rates for services are in line with the rest of the market.
- Track record and previous performance of proposer(s).
- The degree to which the proposer's skills and background align with NYSERDA's needs.

V. GENERAL CONDITIONS

Proprietary Information

Careful consideration should be given before confidential information is submitted to NYSERDA as part of your proposal. Review should include whether it is critical for evaluating a proposal, and whether general, non-confidential information may be adequate for review purposes. The NYS Freedom of Information Law, Public Officers law, Article 6, provides for public access to information NYSERDA possesses. Public Officers Law, Section 87(2)(d) provides for exceptions to disclosure for records or portions thereof that "are trade secrets or

are submitted to an agency by a commercial enterprise or derived from information obtained from a commercial enterprise and which if disclosed would cause substantial injury to the competitive position of the subject enterprise." Information submitted to NYSERDA that the proposer wishes to have treated as proprietary, and confidential trade secret information, should be identified and labeled "Confidential" or "Proprietary" on each page at the time of disclosure. This information should include a written request to except it from disclosure, including a written statement of the reasons why the information should be excepted. See Public Officers Law, Section 89(5) and the procedures set forth in 21 NYCRR Part 501 https://www.nyserda.ny.gov/About/-/media/Files/About/Contact/NYSERDA-Regulations.ashx. However, NYSERDA cannot guarantee the confidentiality of any information submitted.

Omnibus Procurement Act of 1992

It is the policy of New York State to maximize opportunities for the participation of New York State business enterprises, including minority- and women-owned business enterprises, as bidders, subcontractors, and suppliers on its procurement Agreements.

Information on the availability of New York subcontractors and suppliers is available from:

Empire State Development Division for Small Business 625 Broadway Albany, NY 12207

A directory of certified minority- and women-owned business enterprises is available from:

Empire State Development Minority and Women's Business Development Division 625 Broadway Albany, NY 12207

State Finance Law sections 139-j and 139-k

NYSERDA is required to comply with State Finance Law sections 139-j and 139-k. These provisions contain procurement lobbying requirements which can be found at

<u>https://online.ogs.ny.gov/legal/lobbyinglawfaq/default.aspx</u>. Proposers are required to answer questions during proposal submission, which will include making required certification under the State Finance Law and to disclose any Prior Findings of Non-Responsibility (this includes a disclosure statement regarding whether the proposer has been found non-responsible under section 139-j of the State Finance Law within the previous four years).

Tax Law Section 5-a

NYSERDA is required to comply with the provisions of Tax Law Section 5-a, which requires a prospective contractor, prior to entering an agreement with NYSERDA having a value in excess of \$100,000, to certify to the Department of Taxation and Finance (the "Department") whether the contractor, its affiliates, its subcontractors and the affiliates of its subcontractors have registered with the Department to collect New York State and local sales and compensating use taxes. The Department has created a form to allow a prospective contractor to readily make such certification. See, ST-220-TD (available at http://www.tax.ny.gov/pdf/current_forms/st/st220td_fill_in.pdf). Prior to contracting with NYSERDA, the prospective contractor must also certify to NYSERDA whether it has filed such certification with the Department.

The Department has created a second form that must be completed by a prospective contractor prior to contacting and filed with NYSERDA. See, ST-220-CA (available at

<u>http://www.tax.ny.gov/pdf/current_forms/st/st220ca_fill_in.pdf</u>). The Department has developed guidance for contractors which is available at http://www.tax.ny.gov/pdf/publications/sales/pub223.pdf.

Contract Award

Approximately \$900,000 of NYSERDA funding is available through this RFP. NYSERDA anticipates making one award under this solicitation. All, some, or none, of the available funds may be awarded through this solicitation. Contracts will be structured as time-and-materials. Proposals should be developed to provide a minimum contract duration of three (3)-years. At NYSERDA's discretion, the selected liaison may be offered the option to add two (2) additional three (3)-year extensions with commensurate funding for a total contract duration of up to nine (9)-years. NYSERDA may elect to re-release this solicitation with or without modification if a liaison is not selected and successfully contracted from the eligible proposals.

A contract may be awarded based on initial applications without discussion, or following limited discussion or negotiations, pertaining to the Statement of Work. Each proposal should be submitted using the most favorable cost and technical terms. NYSERDA may request additional data or material to support applications. NYSERDA may, at its discretion, elect to extend and/or add funds to any contract funded through this solicitation. NYSERDA reserves the right to limit any negotiations to exceptions to standard terms and conditions in the Sample Agreement. Proposers should keep in mind that acceptance of all standard terms and conditions will generally result in a more expedited contracting process. NYSERDA expects to notify proposers in approximately eight weeks from the proposal due date whether their proposal has been selected to receive an award. NYSERDA may decline to contract with awardees that are delinquent with respect to any obligation under any previous or active NYSERDA agreement.

Limitation

This solicitation does not commit NYSERDA to award a contract, pay any costs incurred in preparing a proposal, or to procure or contract for services or supplies. NYSERDA reserves the right to accept or reject any or all proposals received, to negotiate with all qualified sources, or to cancel in part or in its entirety the solicitation when it is in NYSERDA's best interest. NYSERDA reserves the right to reject proposals based on the nature and number of any exceptions taken to the standard terms and conditions of the Sample Agreement. NYSERDA reserves the right to disqualify proposers based upon the results of a background check into publicly available information and the presence of a material possibility of any reputational or legal risk in making of the award.

Disclosure Requirement

The proposer shall disclose any indictment for any alleged felony, or any conviction for a felony within the past five years, under the laws of the United States or any state or territory of the United States and shall describe circumstances for each. When a proposer is an association, partnership, corporation, or other organization, this disclosure requirement includes the organization and its officers, partners, and directors or members of any similarly governing body. If an indictment or conviction should come to the attention of NYSERDA after the award of a contract, NYSERDA may exercise its stop-work right pending further investigation, or terminate the agreement; the contractor may be subject to penalties for violation of any law which may apply in the particular circumstances. Proposers must also disclose if they have ever been debarred or suspended by any agency of the U.S. Government or the New York State Department of Labor.

VI. ATTACHMENTS

The following attachment is provided as a reference document for applicants:

• Attachment A - Sample Agreement



BOND COUNSEL SERVICES Request for Proposal (RFP) 4189 NYSERDA reserves the right to extend and/or add funding to the Solicitation should other program funding sources become available.

Proposals Due: August 26, 2019 by 3:00 p.m. Eastern Time*

The New York State Energy Research and Development Authority ("NYSERDA") invites proposals from law firms interested in providing bond counsel and other trust and financial related services to NYSERDA in connection with its past and future issuance of bonds, notes, and other obligations ("bonds").

Proposal Submission: Online submission is preferable. Proposers may submit Word, Excel, or PDF files (file formats include csv, doc, docx, gif, jpeg, jpg, pdf, png, ppt, pptx, pps, ppsx, tif, txt, xls, xlsx, and zip). Individual files should be 100MB or less in file size. Proposal PDFs should be searchable and should be created by direct conversion from MS Word, or other conversion utility. Files should not be scanned. For ease of identification, all electronic files must be named using the proposer's entity name in the title of the document. NYSERDA will also accept proposals by mail or hand-delivery if online submission is not possible. For detailed instructions on how to submit a proposal (online or paper submission), click the link "<u>Application Instructions and Portal Training Guide</u> [PDF] " located in the "Current Opportunities" section of NYSERDA's website (<u>https://www.nyserda.ny.gov/Funding-Opportunities/Current-Funding-Opportunities.aspx</u>).

No communication intended to influence this procurement is permitted except by contacting (Sara LeCain) (Designated Contact) at (518) 862-1090, ext. 3423 or by e-mail BondFinance@nyserda.ny.gov (for technical questions). If you have contractual questions concerning this solicitation, contact (Venice Forbes) (Designated Contact) at (518) 862-1090, ext. 3507 or VeniceSolicitations@nyserda.ny.gov. Contacting anyone other than the Designated Contacts (either directly by the proposer or indirectly through a lobbyist or other person acting on the proposer's behalf) in an attempt to influence the procurement: (1) may result in a proposer being deemed a non-responsible offerer, and (2) may result in the proposer not being awarded a contract.

* All proposals must be received by 3 p.m. Eastern Time on the date noted above. Late, faxed, or emailed proposals will not be accepted. Incomplete proposals may be subject to disqualification. It is the proposer's responsibility to ensure that all pages have been included in the proposal. Please note: for online submission, there are required questions that you will have to answer in addition to uploading attachments and you should allot at least 60 minutes to enter/submit proposals. The online proposal system closes promptly at 3 p.m. Eastern Time, files in process or attempted edits or submission after 3 p.m. Eastern Time on the date above, will not be accepted. If changes are made to this solicitation, notification will be posted on the "Current Opportunities" section of NYSERDA's website (https://www.nyserda.ny.gov/Funding-Opportunities/Current-Funding-Opportunities.aspx .

I. Introduction

NYSERDA is a public benefit corporation of the State of New York created and operating under the provisions of Public Authorities Law, §1850 *et. seq.* (the "New York State Energy Research and Development Authority Act" or "Act"). NYSERDA offers objective information and analysis; innovative programs, including energy efficiency, renewable energy, and energy research and development; technical expertise; and funding to help New Yorkers increase energy efficiency, save money, use renewable energy, and reduce reliance on fossil fuels. In addition, it is responsible for managing radioactive wastes and facilities at the Western New York Nuclear Service Center in West Valley, New York; managing certain premises and facilities in Malta, New York, known as the Saratoga Technology + Energy Park; and reducing costs of public utility and other energy facilities through tax-exempt or taxable non-recourse revenue bond financing.

Currently, NYSERDA has outstanding approximately \$1.6 billion in tax-exempt bonds issued on behalf of New York State investor-owned utilities.

II. Issues

During the last five fiscal years, NYSERDA's financing program has consisted of the following transactions:

Fiscal Year	Туре	Mode	Amount (\$000s)
2015-2016	NYSERDA Issuance	Fixed	\$46,358
	NYSERDA Issuance	Fixed and Variable	\$24,878
	Utility Refunding	Fixed	\$75,000
2016-2017	NYSERDA Issuance	Fixed and Variable	\$23,180
	Utility Conversion	Weekly	\$29,350
2017-2018	NYSERDA Issuance	Weighted Average	\$18,500
2018-2019	NYSERDA Issuance	Fixed	\$15,510
	Utility Conversion	Weekly	\$74,000
	Utility Conversion	Weekly	\$100,000
	Utility Conversion	Weekly	\$34,000
	Utility Conversion	Weekly	\$34,000
	Utility Conversion	Weekly	\$29,350
	Utility Conversion	Weekly	\$10,500

Utility Conversion	Weekly	\$50,000

During these periods, NYSERDA periodically participated in, and also engaged the services of bond counsel for, transactions related to letter of credit substitutions, replacements of remarketing agents, the addition of credit facilities, obtaining rulings from the Internal Revenue Service, and other activities.

Additional background information on NYSERDA, including by-laws, is available on the NYSERDA website at <u>www.nyserda.ny.gov</u>. Official statements for recent NYSERDA financings are available from NYSERDA upon request. Please contact Sara LeCain at (518) 862-1090, ext. 3423, or <u>sara.lecain@nyserda.ny.gov</u> for more information.

III. Scope of Services

NYSERDA requests proposals from law firms interested in being selected to be one or more law firms that are used to provide bond counsel and other trust and financial related services to NYSERDA. The firm or firms selected will be expected to act as bond counsel for NYSERDA on all aspects of bond issues, as assigned, for a period of up to five years beginning on or about January 1, 2020 and ending on or about December 31, 2024. Such services would be expected to include, but need not be limited to:

- (a) Negotiating, preparing, reviewing, and delivering any documents related to financings, including but not limited to project financing agreements, participation agreements, trust indentures, bond purchase agreements, and tax regulatory agreements, and advising on appropriate covenants for inclusion in agreements between NYSERDA and the other involved parties.
- (b) Preparing and reviewing preliminary official statements, official statements, remarketing circulars, and other disclosure documents necessary or appropriate to the authorization, issuance, sale, or delivery of bonds.
- (c) Rendering an objective opinion with respect to any authorization and issuance of or conversion of the interest rate on bonds; the delivery of new or revised letters of credit and other liquidity and credit facilities; refinancings; appointment or substitution of remarketing agents, market agents, trustees, auction agents, and other parties to a bond issue; and amendment of related documents, including required bond counsel opinions on the exclusion of interest paid on the bonds from gross income for federal income tax purposes and for state and local income tax purposes, as appropriate.
- (d) Advising on federal and state tax and securities law matters and changes thereto, the investment and expenditure of bond proceeds, and the collection, investment, and application of monies used to pay debt service on bonds.
- (e) Preparing, reviewing, or advising NYSERDA with regard to resolutions, notices, and other documents or procedures required in connection with financings.
- (f) Drafting, analyzing, advising, or commenting on federal and state legislation, regulations and rules, NYSERDA guidelines, and other matters which may have an impact on the financing program.

- (g) Participating in meetings with utilities and other potential borrowers, rating agencies, underwriters, NYSERDA's Members (board of directors) and Audit and Finance Committee, and other parties, as necessary or appropriate.
- (h) Assisting with preparation of schedules for the issuance of bonds and assignment of responsibilities of involved parties.
- (i) Providing any other legal services, advice, or opinions relating to NYSERDA's financing program, other trust-related services, and other financial matters, as requested.

The firm or firms selected as bond counsel would also be expected to provide its services on bond issues closed up to December 31, 2024.

IV. Proposal Requirements

Proposals should not be excessively long or submitted in an elaborate format that includes expensive binders or graphics. Unnecessary attachments beyond those sufficient to present a complete, comprehensive, and effective response will not influence the evaluation of the proposal. Each page of the proposal should state the name of the proposer, the RFP number, and the page number.

In compliance with §139-j and §139-k of the State Finance Law (see Section V, General Conditions below for additional information), proposers will be required to answer questions during proposal submission, which will include making required certification under the State Finance Law and to disclose any Prior Findings of Non-Responsibility.

The proposal must be in the following format:

Proposals must be submitted in two parts. Part I must consist of responses to the management and qualifications items [IV(A) below]. Part II must consist of complete contract cost and pricing information [IV(B) below]. Each part must be complete, so that it can be evaluated independently.

A. **Management and Qualifications.** In setting forth its qualifications, each interested firm should provide, in concise but adequate detail, the information sought below.

- 1. For the years 2017, 2018, and 2019 state:
- (a) the number and dollar volume of revenue bond issuances by New York State, local governments in New York State, or State or local public authorities or public benefit corporations in New York State for which your firm acted as bond counsel, co-bond counsel, underwriters co-counsel, tax counsel, or special counsel;
- (b) the number and dollar volume of public utility or special energy project revenue bond issuances and electric power and related facilities revenue bond issuances for which your firm acted as bond counsel, co-bond counsel, underwriters counsel, underwriters co-counsel, tax counsel, or special counsel; and
- (c) the interest rate modes allowable, security, and the basis for the firm's fees (for example, hourly rate or a percentage) for each of the issues included in the answers for A (1)(a) and (b) above.

The issues should be separately categorized by the legal function performed, *i.e.*, bond counsel, co-bond counsel, underwriters counsel, underwriters co-counsel, tax counsel, or special counsel; public utility, special energy project, and appropriation-backed service contract revenue bond issuances should be separately grouped. The dollar volume of each category should be stated, with issues totaling \$100 million or more separately identified, and the nature of any special counsel function should be described. The method by which your firm was selected to provide such services (for example, sole source, request for proposals, etc.) should also be listed.

- 2. State the names of the partners and associates in the public finance group in the firm and in the tax subgroup therein.
- 3. State the names of the partners, associates, and paralegals who would be assigned to NYSERDA's account, provide their resumes, the location of their primary office, and describe their anticipated commitments to other clients during the next 12 months.
- 4. Describe the experience of the firm in obtaining rulings from the Internal Revenue Service on bond related matters.
- 5. Describe the experience and familiarity of the firm with Internal Revenue Code provisions specific to New York State utilities.
- 6. Describe any subjects related to bond counsel services in which you feel your law firm has special expertise and the nature of that special expertise.
- 7. Provide a brief description of services you expect to provide to NYSERDA. Indicate whether your firm is prepared to render the services enumerated in this RFP using its own resources. (NYSERDA will not permit any bond counsel services to be subcontracted or assigned to third parties.) The description should emphasize particular services to be provided with respect to public finance and tax work as it relates to the issuance of federal, State, and local, or State and local, tax-exempt obligations by NYSERDA as a governmental issuer.
- 8. Describe your firm's experience and expertise with general representation of public entities, including particularly New York State public benefit corporations or public authorities.
- 9. Provide three client references, including names of contacts and telephone numbers.
- 10. Identify the nature of any potential conflict of interest your firm might have in providing bond counsel services to NYSERDA:
 - (a) State whether your firm represents any New York State energy public utility, public authority, or any independent power producer. If so, state the name of each such client and the nature of your representation.
 - (b) Discuss fully any conflicts of interest, actual or perceived, which might arise in connection with your firm's involvement with NYSERDA. If conflicts do or might exist, describe how your firm would resolve them. Please be aware that the firm selected will be expected to represent NYSERDA in all transactions within its financing program; representation of any other party to a transaction involving NYSERDA would be prohibited without the express written approval of

NYSERDA, which would be unlikely.

- 11. Identify any litigation or administrative proceedings to which you are a party, and which would either materially impair your ability to perform the services enumerated herein and for which this RFP was issued or, if decided in an adverse manner, materially adversely affect the financial condition of your firm.
- 12. Furnish information on the number and percentages of minorities and women among the partners and other attorneys of the firm, as well as para-professional and support staff; a copy of the firm's affirmative action or equal opportunity plan or other commitment to affirmative action and equal employment opportunity or its status as a minority or women-owned business; and an explanation of how your firm, if selected, would help NYSERDA further its policy of promoting participation of minorities and women in the provision of services to it, including services in support of its financing program.
- 13. Provide the address of the office through which NYSERDA's account will be primarily serviced, and any anticipated travel or other such costs.
- 14. Provide any other information you believe would make your law firm's representation of NYSERDA superior to other firms' representation.

B. Cost.

- 1. State the rates at which the services of partners, associates, and non-attorney law clerks, paralegals, or other paraprofessionals would be provided to NYSERDA during the periods January 1, 2020 to March 31, 2020, NYSERDA fiscal years (April 1st through March 31st) 2020-2021, 2021-2022, 2022-2023, and 2023-2024, and the period April 1, 2024 December 31, 2024, which partners and associates are expected to perform which services, to the extent reasonably projectable, and how these services would be billed. (Indicate whether the firm will commit now to rates for fiscal years 2020-2021, or 2021-2022, or 2022-2023, or 2023-2024. Increases, if any, for those years may be stated in terms of percentages above the rates for January 1 through March 31, 2020.) Include:
- (a) For each attorney whose resume is provided in response to IV(A)(3) above, your normal hourly rate and the hourly rate you propose to charge NYSERDA.
- (b) Projected services to be provided by each attorney whose resume is provided in response to IV(A)(3) above, to the extent available.
- (c) For each applicable category of non-attorney law clerk, paralegal, or other paraprofessional, your normal hourly rate and the hourly rate you propose to charge NYSERDA.
 - (d) Costs of any anticipated clerical support, if billed separately.
- (e) A schedule of all disbursements which you anticipate will result in a charge to NYSERDA and the rate for each.
- (f) Any reduced rates or fees charged other State or local public finance issuers in New York.
- (g) A statement whether you would be willing to agree to caps on fees on an issue by issue

basis.

In responding to this item IV(B)(1), provide one or more of the following, in respondent's order of preference: (I) a <u>single</u> hourly rate for all partners and a separate <u>single</u> hourly rate for all associates; (ii) a <u>blended</u> hourly rate for all partners and associates; and (iii) the <u>individual</u> hourly rates for each partner and each associate.

- 2. State the bases on which any other firm expenses related to services provided to NYSERDA would be billed, if other than cost.
- 3. State the specific maximum overall dollar limit which the firm would accept on fees and expenses for each of two hypothetical individual bond issues: one a new money issue and the other a refunding issue, each in the principal amount of \$100 million. Indicate the projected number of hours of involvement by partners, associates, etc. Indicate if either dollar limit would differ if the principal amount of the bond issue were to be higher or lower and, if so, how. For purposes of developing these dollar limits, assume: (a) each bond issue would be sold at a fixed interest rate, with no variable rate or derivative features, (b) normal arbitrage and rebate matters would be addressed, and (c) the bond issue would not involve any unusual or complex matters. Each dollar limit must include all costs of operations the proposer would expect to recover, including secretarial, office equipment, fringe benefits, indirect cost rates, etc.
- 4. State any special considerations with respect to billing or payment of fees and expenses that your firm offers and that you believe would differentiate it from other proposers and make your firm's services as bond counsel or co-bond counsel more cost effective for NYSERDA.

V. Proposal Evaluation

Proposals that meet solicitation requirements will be reviewed by a Scoring Committee using the Evaluation Criteria below **listed in order of importance.** At NYSERDA's discretion, proposers may be requested to interview with all or part of the Scoring Committee to address any potential questions or clarifications outlined in the proposals. Proposers will be notified if they are requested to attend an interview.

A. Evaluation Factors. In evaluating proposals submitted in response to this RFP, NYSERDA will consider the following factors.

- 1. Anticipated cost of services and willingness to work with NYSERDA to minimize costs. (Although proposed fees will be taken into account in the selection process, NYSERDA reserves the right to negotiate with any firm selected lower fees or different fee structures than proposed). (25 points)
- 2. Quality and depth of the firm's expertise and its prior capability in providing similar services, including, but not limited to, past performances on projects and programs in New York of magnitude or complexity comparable to or greater than NYSERDA's or specific to New York utilities. For those firms who have worked as counsel in any capacity with NYSERDA, the quality of work on those transactions will be considered. (20 points)
- 3. Experience in general and, in particular, as bond counsel on behalf of issuers like NYSERDA, especially in transactions similar to the types NYSERDA has entered into

and obligations of the types NYSERDA has issued. The firm selected for bond counsel must be nationally recognized bond counsel experienced in the subject areas of public finance and tax laws and regulations. (20 points)

- 4. Commitment of time, resources, and ideas to NYSERDA and availability to and facility for working with NYSERDA attorneys and financing program staff. (15 points)
- 5. Information provided by client references. (5 points)
- 6. Involvement of the proposing firm in financings with innovative legal issues, which demonstrates any unique qualifications as bond counsel. (5 points)
- 7. Overall organization and quality of proposal, including cohesiveness, conciseness, and clarity of response. (5 points)
- 8. The proposer is a NYS-certified minority-owned or women-owned business. (5 points)

B. Selection Process. A selection committee consisting of NYSERDA staff will review and evaluate proposals and develop a short list for further consideration. Firms so selected may be requested to submit sample financing documents that they have prepared. Firms so selected may also be invited to make oral presentations to NYSERDA staff and any members of the Audit and Finance Committee of NYSERDA who wish to participate. The staff will then make a recommendation to the Audit and Finance Committee, which will make a recommendation to the Members of NYSERDA.

The Members will make the final selection, subject to the provisions of Section 1853 of the Public Authorities Law. It is anticipated that proposers will be notified by September 30, 2014 of the results of the RFP process. Winning proposers will be assigned to work on proposed transactions by NYSERDA on a case-by-case basis.

IV.GENERAL CONDITIONS

Proprietary Information - Careful consideration should be given before confidential information is submitted to NYSERDA as part of your proposal. Review should include whether it is critical for evaluating a proposal, and whether general, non-confidential information, may be adequate for review purposes. The NYS Freedom of Information Law, Public Officers law, Article 6, provides for public access to information NYSERDA possesses. Public Officers Law, Section 87(2)(d) provides for exceptions to disclosure for records or portions thereof that "are trade secrets or are submitted to an agency by a commercial enterprise or derived from information obtained from a commercial enterprise and which if disclosed would cause substantial injury to the competitive position of the subject enterprise." Information submitted to NYSERDA that the proposer wishes to have treated as proprietary, and confidential trade secret information, should be identified and labeled "Confidential" or "Proprietary" on each page at the time of disclosure. This information should include a written request to except it from disclosure, including a written statement of the reasons why the information should be excepted. See Public Officers Law, Section 89(5) and the procedures set forth in 21 NYCRR Part 501 https://www.nyserda.ny.gov/About/-/media/Files/About/Contact/NYSERDA-Regulations.ashx. However, NYSERDA cannot guarantee the confidentiality of any information submitted.

Omnibus Procurement Act of 1992 - It is the policy of New York State to maximize opportunities for the participation of New York State business enterprises, including minority- and women-owned business enterprises, as bidders, subcontractors, and suppliers on its procurement Agreements.

Information on the availability of New York subcontractors and suppliers is available from:

Empire State Development Division for Small Business 625 Broadway Albany, NY 12207

A directory of certified minority- and women-owned business enterprises is available from:

Empire State Development Minority and Women's Business Development Division 625 Broadway Albany, NY 12207

State Finance Law sections 139-j and 139-k - NYSERDA is required to comply with State Finance Law sections 139-j and 139-k. These provisions contain procurement lobbying requirements which can be found at <u>https://online.ogs.ny.gov/legal/lobbyinglawfaq/default.aspx</u>. Proposers are required to answer questions during proposal submission, which will include making required certification under the State Finance Law and to disclose any Prior Findings of Non-Responsibility (this includes a disclosure statement regarding whether the proposer has been found non-responsible under section 139-j of the State Finance Law within the previous four years).

Tax Law Section 5-a - NYSERDA is required to comply with the provisions of Tax Law Section 5-a, which requires a prospective contractor, prior to entering an agreement with NYSERDA having a value in excess of \$100,000, to certify to the Department of Taxation and Finance (the "Department") whether the contractor, its affiliates, its subcontractors and the affiliates of its subcontractors have registered with the Department to collect New York State and local sales and compensating use taxes. The Department has created a form to allow a prospective contractor to readily make such certification. See, ST-220-TD (available at http://www.tax.ny.gov/pdf/current_forms/st/st220td_fill_in.pdf). Prior to contracting with NYSERDA, the prospective contractor must also certify to NYSERDA whether it has filed such certification with the Department.

The Department has created a second form that must be completed by a prospective contractor prior to contacting and filed with NYSERDA. See, ST-220-CA (available at <u>http://www.tax.ny.gov/pdf/current_forms/st/st220ca_fill_in.pdf</u>). The Department has developed guidance for contractors which is available at <u>http://www.tax.ny.gov/pdf/publications/sales/pub223.pdf</u>.

Contract Award - NYSERDA anticipates making one or more awards under this solicitation. NYSERDA anticipates a contract duration of five (5) years, unless NYSERDA management determines a different structure is more efficient based upon proposals received. A contract may be awarded based on initial applications without discussion, or following limited discussion or negotiations pertaining to the Statement of Work. Each proposal should be submitted using the most favorable cost and technical terms. NYSERDA may request additional data or material to support applications. NYSERDA will use the Sample Agreement to contract successful proposals. NYSERDA may at its discretion elect to extend and/or add funds to any project funded through this solicitation. NYSERDA reserves the right to limit any negotiations to exceptions to standard terms and conditions in the Sample Agreement to those specifically identified in the checklist questions. Proposers should keep in mind that acceptance of all standard terms and conditions will generally result in a more expedited contracting process. NYSERDA expects to notify proposers after October 10, 2019 whether your proposal has been selected to receive an award. NYSERDA may decline to contract with awardees that are delinquent with respect to any obligation under any previous or active NYSERDA agreement. Accessibility Requirements - If awardees from this solicitation will be posting anything on the web, or if the awardee will produce a final report that NYSERDA will post to the web, the following language must be included. NYSERDA requires contractors producing content intended to be posted to the Web to adhere to New York State's Accessibility Policy. This includes, but is not limited to, deliverables such as: documents (PDF, Microsoft Word, Microsoft Excel, etc.), audio (.mp3, .wav, etc.), video (.mp4, .mpg, .avi, etc.), graphics (.jpg, .png, etc.), web pages (.html, .aspx, etc.), and other multimedia and streaming media content. For more information, see <u>NYSERDA's Accessibility Requirements</u>.

Limitation - This solicitation does not commit NYSERDA to award a contract, pay any costs incurred in preparing a proposal, or to procure or contract for services or supplies. NYSERDA reserves the right to accept or reject any or all proposals received, to negotiate with all qualified sources, or to cancel in part or in its entirety the solicitation when it is in NYSERDA's best interest. NYSERDA reserves the right to reject proposals based on the nature and number of any exceptions taken to the standard terms and conditions of the Sample Agreement. NYSERDA reserves the right to disqualify proposers based upon the results of a background check into publicly available information and the presence of a material possibility of any reputational or legal risk in making of the award.

Disclosure Requirement - The proposer shall disclose any indictment for any alleged felony, or any conviction for a felony within the past five years, under the laws of the United States or any state or territory of the United States and shall describe circumstances for each. When a proposer is an association, partnership, corporation, or other organization, this disclosure requirement includes the organization and its officers, partners, and directors or members of any similarly governing body. If an indictment or conviction should come to the attention of NYSERDA after the award of a contract, NYSERDA may exercise its stop-work right pending further investigation or terminate the agreement; the contractor may be subject to penalties for violation of any law which may apply in the particular circumstances. Proposers must also disclose if they have ever been debarred or suspended by any agency of the U.S. Government or the New York State Department of Labor.

Vendor Assurance of No Conflict of Interest or Detrimental Effect - The proposer shall disclose any existing or contemplated relationship with any other person or entity, including any known relationships with any member, shareholders of 5% or more, parent, subsidiary, or affiliated firm, which would constitute an actual or potential conflict of interest or appearance of impropriety, relating to other clients/customers of the proposer or former officers and employees of NYSERDA, in connection with proposer's rendering services as proposed. If a conflict does or might exist, please describe how your company would eliminate or prevent it. Indicate what procedures will be followed to detect, notify NYSERDA of, and resolve any such conflicts.

The proposer must disclose whether it, or any of its members, or, to the best of its knowledge, shareholders of 5% or more, parents, affiliates, or subsidiaries, have been the subject of any investigation or disciplinary action by the New York State Commission on Public Integrity or its predecessor State entities (collectively, "Commission"), and if so, a brief description must be included indicating how any matter before the Commission was resolved or whether it remains unresolved.

Public Officers Law – For any resulting awards, the Contractor and its subcontractors shall not engage any person who is, or has been at any time, in the employ of the State to perform services in violation of the provisions of the New York Public Officers Law, other laws applicable to the service of State employees, and the rules, regulations, opinions, guidelines or policies promulgated or issued by the New York State Joint Commission on Public Ethics, or its predecessors (collectively, the "Ethics Requirements"). Proposers are reminded of the following Public Officers Law provision: contractors, consultants, vendors, and subcontractors may hire former NYSERDA employees. However, as a general rule and in accordance with New York Public Officers Law, former employees of NYSERDA may neither appear nor practice before NYSERDA, nor receive compensation for services rendered on a matter before NYSERDA, for a period of two years following their separation from NYSERDA service. In addition, former NYSERDA employees are subject to a "lifetime bar" from appearing before any state agency or authority or receiving compensation for services regarding any transaction in which they personally participated, or which was under their active consideration during their tenure with NYSERDA.

Any awardee will be required to certify that all of its employees, as well as employees of any subcontractor, whose subcontract is valued at \$100,000 or more who are former employees of the State and who are assigned to perform services under the resulting contract, shall be assigned in accordance with all Ethics Requirements. During the term of any agreement, no person who is employed by the contractor or its subcontractors and who is disqualified from providing services under the contract pursuant to any Ethics Requirements may share in any net revenues of the contractor or its subcontractors derived from the contract. NYSERDA may request that contractors provide it with whatever information the State deems appropriate about each such person's engagement, work cooperatively with the State to solicit advice from the New York State Joint Commission on Public Ethics. NYSERDA shall have the right to withdraw or withhold approval of any subcontractor if utilizing such subcontractor for any work performed would be in conflict with any of the Ethics Requirements. NYSERDA shall have the right to terminate any contract at any time if any work performed is in conflict with any of the Ethics Requirements.

IV. Attachments:

Attachment A – Sample Letter Agreement Attachment B – Article 15-A (MWBE) Provisions Attachment C - Article 17-B (SDVOB) Solicitation Provisions (non-construction)



Governor

RICHARD L. KAUFFMAN Chair ALICIA BARTON President and CEO

Clean Energy Training Services Request for Qualifications (RFQL) 4145

Round 1 Proposals Due: September 11, 2019 by 3:00 p.m. Eastern Time.

Round 2 Proposal Due: Open enrollment whereby proposals can be submitted until December 31, 2024 and are evaluated on an as-needed basis.

Workforce development and training are essential components to a bustling 21st century economy and a cleaner, healthier New York. But today's workforce is not yet set up to meet the requirements and achieve the possibilities of the clean energy economy. With a commitment of nearly \$70 million through 2025, the New York State Energy Research and Development Authority (NYSERDA) will work to change the landscape of New York's workforce through clean energy workforce development and training. Our funding will provide opportunities for activities as diverse as:

- Training building and operations staff to properly operate and maintain building systems
- Providing on-the-job training for new clean energy workers
- Supporting internships for students looking to gain hands-on skills at a clean energy company
- Enhancing curricula to meet the demands of clean energy employers
- Establishing a talent pipeline that can reduce the business cost of hiring new workers

NYSERDA is issuing this Request for Qualifications (RFQL) to establish a pool of contractors qualified to deliver training, develop curriculum and/or training tools, and provide market expertise and/or other services related to clean energy workforce development and training. Contractors secured under this request will offer program support (some of which may be requests for services on short notice) to help ensure that New York businesses have an adequate supply of new and existing energy efficiency and clean technology workers with the necessary occupational skills, credentials, and experience to participate in the clean energy economy.

NYSERDA seeks qualified training providers, curriculum developers, and/or market and technical workforce experts in the categories below. These categories include, but are not limited to, the examples provided.

<u>Category A:</u> Energy Efficiency – includes lighting and controls, heating, ventilation and air conditioning (HVAC), air and ground source heat pumps, water heating, advanced building materials, building automation and controls, insulation and air sealing, and other high efficiency products and services.

<u>Category B:</u> Renewable Electric Power Generation – includes solar, land-based and offshore wind, low-impact hydropower, and other renewable generation technologies.

<u>Category C:</u> Grid Modernization and Energy Storage – includes combined heat and power, smart grid, microgrid, demand response management, and grid storage and other related areas.

<u>Category D:</u> Alternative Transportation – includes related infrastructure; electric, hybrid, plug-in hybrid and fuel cell/hydrogen vehicles; battery storage; and natural gas and other alternative fuel buses.

<u>Category E</u>: Renewable Fuels – includes biofuels such as wood pellets and ethanol.

<u>Category F:</u> Priority Populations – includes experience reaching underserved populations who encounter barriers to accessing training and jobs in the clean energy sector; such as but not limited to veterans, low-income individuals at or below 60% of State median income, individuals with disabilities, Native Americans, unemployed powerplant workers, previously incarcerated individuals, and 18- to 24-year-olds participating in work preparedness training programs. Experience should include providing basic employability/professional skills and technical skills necessary for clean energy jobs.

<u>Category G:</u> Certifications and Other Training Credentials – includes work related to developing clean energy certifications, micro-credentials, function task analyses, job task analyses, continuing education unit-bearing professional development, etc.

<u>Category H:</u> Other – includes marketing and outreach, and other related workforce training areas aligned with NYSERDA's Clean Energy Fund and Governor Cuomo's Reforming the Energy Vision commitment to drive economic development and accelerate the use of clean energy and energy innovation.

NYSERDA anticipates: (1) making multiple awards under this RFQL; and (2) retaining contractors through 2025 for each of the categories listed above as appropriate. Qualified firms, companies, or organizations (including teaming arrangements) will be evaluated and scored against each other within each category (A-H). **Proposers may submit to one or more categories and may be selected for one, some or all they propose in**.

Note: If proposing to more than one category please do so in one proposal with all supporting attachments and upload to Salesforce as ONE single file.

NYSERDA anticipates entering into three-year Umbrella Agreements, with the option to renew, with the approved proposers in each category. Task Work Orders will be issued through a mini-bid process to the firms that qualify in their respective category, chosen from both the due date round and the open enrollment round. Mini-bid requests will likely include the outline of the scope and deliverables, regional considerations, and other pertinent information needed to develop a sound proposal. NYSERDA will review each mini-bid response and select a provider to implement the services requested. This solicitation will also allow for an "open enrollment" mechanism whereby potential contractors may submit additional proposals until December 31, 2024. Further information regarding the process for participation in the open enrollment mechanism is provided in this document.

Informational Webinar

NYSERDA will conduct an **Informational Webinar** on **Thursday**, **July 25**, **2019 at 10:00am** Eastern Time during which NYSERDA will review the requirements of this solicitation and answer questions. Proposers interested in attending can send an email to Darina Mayfield at

Darina.Mayfield@nyserda.ny.gov with the subject line "RFQL 4145 Webinar" to request information on how to participate. Questions may be submitted via the same email address prior to the Webinar, or during the Webinar using the web platform. Following the conclusion of the Webinar, NYSERDA will post questions and responses on the NYSERDA website. All questions will be posted anonymously, and NYSERDA's written responses will supersede any responses given during the Webinar.

Proposal Submission: Online submission is preferable. If proposing to more than one category please do so in one proposal with all supporting attachments (e.g., resumes, Letters of Commitment, references, and Project Personnel and Rate Forms) and upload to Salesforce as ONE single file. There is only one slot for upload, if you upload files individually, you will overwrite each file. Proposers may submit Word, Excel, or PDF files (file formats include: csv, doc, docx, gif, jpeg, jpg, pdf, png, ppt, pptx, pps, ppsx, tif, txt, xls, xlsx, and zip). Individual files should be 100MB or less in file size. Proposal PDFs should be searchable and should be created by direct conversion from MS Word, or other conversion utility. Files should not be scanned. For ease of identification, all electronic files must be named using the proposer's entity name in the title of the document. NYSERDA will also accept proposals by mail or hand-delivery if online submission), click the link "Application Instructions and Portal Training Guide [PDF]" located in the "Current Opportunities" section of NYSERDA's website (https://www.nyserda.ny.gov/Funding-Opportunities/Current-Funding-Opportunities.aspx).

No communication intended to influence this procurement is permitted except by contacting Darina Mayfield at (518) 862-1090, ext. 3672 or by email WFinfo@nyserda.ny.gov. If you have contractual questions concerning this solicitation, contact Nancy Marucci at (518) 862-1090, ext. or by email NancySolicitations@nyserda.ny.gov. Contacting anyone other than the Designated Contacts (either directly by the proposer or indirectly through a lobbyist or other person acting on the proposer's behalf) in an attempt to influence the procurement: (1) may result in a proposer being deemed a non-responsible offerer, and (2) may result in the proposer not being awarded a contract.

* All proposals must be received by 3 p.m. Eastern Time on the date noted above. Late, faxed, or emailed proposals will not be accepted. Incomplete proposals may be subject to disqualification. It is the proposer's responsibility to ensure that all pages have been included in the proposal. Please note: for online submission, there are required questions that you will have to answer in addition to uploading attachments, and you should allot at least 60 minutes to enter/submit proposals. The online proposal system closes promptly at 3 p.m. Eastern Time, files in process or attempted edits or submission after 3 p.m. Eastern Time on the date above, will not be accepted. If changes are made to this solicitation, notification will be posted on the "Current Opportunities" section of NYSERDA's website (https://www.nyserda.ny.gov/Funding-Opportunities/Current-Funding-Opportunities.aspx.

I. Introduction

Clean energy businesses across the state have reported a shortage of qualified candidates to fill entry level and advanced positions and have cited skills gaps in trained workers as hiring requirements (credentials and experience) have changed and become more rigorous. These businesses include start-up companies looking for executives to help lead, small heating and cooling contractors looking for new technicians, and consulting firms seeking architects and engineers to design new buildings or state-of-the-art energy systems for existing buildings. Training curriculum is not keeping pace with changing business needs, and gaps are seen in both technical training and hands-on experience.

NYSERDA has been conducting research in the market to assess what actions are necessary to build a larger, better-qualified pool of workers for the growing clean energy economy. In discussions with energy businesses, several common issues were cited such as: lack of qualified candidates for open positions; skills gaps, as hiring requirements have changed and increased; and, a shortage of updated curriculum to keep pace with current business needs.

Creating a talent pipeline, a proactive approach to defining, attracting and developing the right mix of critical talent in a pool of internal and external candidates, can help support and grow businesses of all shapes and sizes throughout the supply chain. Through this funding opportunity, NYSERDA, working with training providers across the State, will create a talent pipeline to ensure that New York State energy efficiency and clean technology businesses have an adequate supply of new and existing workers with the necessary occupational skills, credentials and experience to participate in the clean energy economy. NYSERDA also has program initiatives to support businesses hiring new workers and interns to support building a talent pipeline of energy efficiency and clean technology workers.

II. Program Requirements

A. Services Requested

As a result of this RFQL, NYSERDA expects to retain multiple qualified contractors to provide a variety of services in the categories (A-H) outlined above, including but not limited to delivering training, developing curriculum and/or training tools, and providing market expertise, outreach and/or other services as it relates to workforce development and training in the respective category. The number and type of services requested from the selected contractors will depend on the nature and complexity of the project, the contractor's expertise, NYSERDA's need for services, and performance.

Services requested include:

• Training

Including delivering instructor-led classroom, hands-on, interactive, hybrid/blended, computer-based/e-learning, or video training; providing coaching and mentoring; conducting workshops, etc.

Training activities can include providing training in languages other than English; technical training as part of a degree, certificate, continuing education, career pathway, apprenticeship/pre-apprenticeship, or job preparedness program; training on professional skills in combination with technical skills training to meet specific employer needs; etc. Proposers are expected to include opportunities for hands-on application of skills on the part of learners. Proposers will also be expected to utilize existing training and training facilities available in the state as much as possible to leverage funds and applicable work that has already been done.

• Curriculum development

Including developing new instructor-led classroom, online or hybrid/blended curriculum; modifying existing curricula; developing tools and/or materials for training; etc. Proposers will be expected to leverage existing curriculum, where possible.

• Development of training tools

Such as career pathway maps, general career information including training and certification opportunities, etc.

• Other Services

Including, but not limited to, developing credentials and micro-credentials, helping to identify worker skills needed; assessing gaps in current curricula; informing investments in skills and talent development; supporting or conducting outreach to market partners; etc.

Intended Audience

NYSERDA seeks to support a variety of strategies to expand New York State's talent pipeline for energy efficiency and clean technology workers. In general, services requested under this RFQL will support: (1) enhancing the skills of existing workers consistent with business needs; and (2) training and providing job preparedness and placement services to new workers for new jobs identified by businesses.

For the purposes of this solicitation, "workers" are expected to include a variety of job titles, including but not limited to those individuals who design, manufacture, specify, sell, distribute, install, operate, maintain, repair, audit, and inspect energy efficiency and clean energy technologies and systems specific to the category (A-H).

Teaming Arrangements

NYSERDA encourages all firms that can demonstrate the qualifications and skill sets described within this solicitation to propose. Proposers are permitted, but not required, to team with partners (subcontractors) they consider would offer complementary expertise in the proposing category or categories (A-H).

B. Program Eligibility

This program is supported with System Benefits Charge (SBC)/Clean Energy Fund (CEF) funding. SBC/CEF service territory consists of areas with electric service provided by Central Hudson Gas and Electric Corp., Consolidated Edison Company of NY, Inc., NYS Electric and Gas Corporation, National Grid, Orange and Rockland Utilities, Inc., and Rochester Gas and Electric.

All training opportunities (with the exception of offshore wind) funded under this solicitation will be expected to occur in SBC/CEF service territories. All training must be designed to meet the needs of energy efficiency and clean energy companies within, or providing services to, the SBC/CEF territories.

Eligible contractors must demonstrate no limitation in their ability to provide services to eligible New York State residents and clean energy businesses depending on the training initiative.

C. Proposer Qualifications

All eligible contractors, regardless of the category or categories being proposed, must possess the following minimum basic qualifications:

- Credentialed and knowledgeable staff or team with documented and relevant experience in one or more of the categories (A-H)
- Experience with or a strategy for engaging business and industry partners and professional organizations in training initiatives
- Ability to deliver services requested in one or more of the categories (A-H) throughout New York State. If the proposer does not have offices and/or training sites within NYS, the proposal must include a description of the proposer's ability to economically perform work throughout the State
- Capacity to bring on additional resources as necessary to meet programmatic needs, including but not limited to geographic coverage
- Capability to quickly respond to program needs and other related services specified by NYSERDA
- Flexibility to respond to services requested

Training Provider Requirements

Training providers submitting proposals must provide evidence of applicable qualifications including, but not limited to:

- Experience in integrating new material into existing curricula and/or developing new standalone curricula approved by the New York State Department of Education for use at postsecondary education levels
- Accreditation by the NYS Education Department and/or training program accreditation by the Interstate Renewable Energy Council (IREC), or other similar national, third-party entities
- Staff with documented experience in curricula development, delivery and maintenance, and evidence-based learning techniques
- Experience with designing and/or implementing training that leads to additional training as part of a career path, certification, degree, continuing education credits, job experience or job placement
- Ability to reach underserved populations or geographies

Training providers that meet more than one of the qualifications above (or demonstrate other qualifications) are preferred.

D. Umbrella Agreements

NYSERDA will enter into zero-dollar value Umbrella Agreements with the approved contractors in each category, enabling NYSERDA to retain their services. This Umbrella Agreement will not guarantee any specific amount of work. The amount of work assigned to each contractor will depend on NYSERDA's needs, the particular expertise of the contractor, the amount of work requested in the contractor's technical area, past performance, current workload, deadline requirements, and the ability of the contractor to provide high quality, cost-effective, and timely services. If multiple contractors are selected with overlapping areas of expertise, NYSERDA may also ask selected contractors for proposals and bids on specific assignments through mini-bid requests.

E. Task Work Order Requests & Plans

Projects will be assigned through a written Task Work Order Request and initiated through a Task Work Order Plan, which will become a binding agreement for all parties. NYSERDA Project Managers

will issue a mini-bid request to all approved and relevant contractors. The respondents shall provide a detailed response to the request, including staffing, hours, budget, and scope of work.

Once a contractor has been selected for a project as per the above process, a Task Work Order Plan will be prepared by the contractor in cooperation with NYSERDA. Task Work Order Plans shall include:

- The goals and objectives of the project
- The strategy and approach outlined by tasks
- Any relevant background information
- Defined deliverables
- The project time frame
- The names and titles of individuals to work on the project
- The total not-to-exceed cost of the project, including a breakout by task and by title, hourly rate, hours, and non-labor costs
- The identification of measures to assess project success

The details of any Task Work Order Plan will be consistent with the level of complexity of the proposed project or activity. Hourly rates shall be those established in the general Umbrella Agreement. NYSERDA must review and approve all Task Work Order Plans and incorporate as a Task Work Order under the Umbrella Agreement before projects are implemented.

Depending on the nature of the work product that is developed or results from any particular Task Work Order with NYSERDA, contractors may be required to execute a non-disclosure agreement prior to engaging in the specified work effort.

F. Open Enrollment

There will be no initial cap to the number of proposers in any one of the categories (A-H). However, NYSERDA may subsequently institute a cap for any or all categories (A-H) as a means of managing the number of resultant contracts. NYSERDA anticipates the Scoring Committee to convene periodically, as frequently as monthly, but no less frequently than quarterly, to review and evaluate new proposals on a schedule depending on NYSERDA's needs and on the number of new proposals that are received. Upon appropriate notice, NYSERDA may forego or discontinue the rolling open enrollments to manage the number of resultant contracts. In deference to the established end of the contract period of December 31, 2025, the open enrollment mechanism will be active until December 31, 2024 barring an earlier discontinuance upon appropriate notice.

G. Contractor's Responsibility

When selected for a project, the selected contractor shall be required to:

- Prepare a Task Work Order Plan, with budget, for each project for review and approval by NYSERDA
- Negotiate the scope and cost of work with NYSERDA
- Provide the requested assistance within the required time frame
- Submit any deliverables to NYSERDA for review and approval as necessary
- Provide required documentation of expenditures by task, based on the Task Work Order, when seeking reimbursement from NYSERDA

H. NYSERDA's Responsibility

Project Managers will be responsible for overseeing and managing services undertaken by qualified proposers, including but not limited to reviewing, commenting and approving tasks and subsequent deliverables; coordinating with program staff and interested external stakeholders; promoting coordination among service providers qualified for each category, as appropriate; assisting in the presentation and dissemination of findings; reviewing and approving invoices promptly.

I. Compensation

Compensation will be based on the contractor's – and subcontractors, as applicable – fully-burdened hourly rates included in the proposal, plus allowable expenses. NYSERDA will negotiate each Umbrella Agreement on the basis of demonstrated competence and qualification, at fair and reasonable fees. Fees schedules shall be included in each proposal that identify rates for each member of the team by title. Please note, proposers cannot charge more than two percent overhead for work done by a subcontractor. **Annual escalation rates, if applicable, must be identified through 2025.**

Budgets for all work conducted will be included in the Task Work Order and approved by NYSERDA. The Task Work Order will also place a ceiling or not-to-exceed amount for each project. Contractors who accrue billable hours beyond the ceiling in the Task Work Order, without approval in writing by NYSERDA, will do so at their own risk. **Contractors will not be compensated for time spent in the preparation of any Task Work Order Plan.** Preparation of the Task Work Order Plan is considered to be covered by the contractor's overhead expense.

III. Proposal Requirements

To be eligible for selections under this RFQL, proposers must submit a complete bid package and agree to the requirements of this RFQL. Proposers may submit to any or all categories (A-H), and each category will be evaluated and judged independently from the others. Each category is intended to create a separate pool of contractors that can meet the specified needs of the category.

If proposing to more than one category please do so in one proposal with all supporting attachments (e.g., resumes, Letters of Commitment, references, and Project Personnel and Rate Forms) and upload to Salesforce as ONE single file. There is only one slot for upload, if you upload files individually, you will overwrite each file.

Each proposal shall contain, at minimum, the components listed below. Proposals should not be excessively long or submitted in an elaborate format that includes expensive binders or graphics. Unnecessary attachments beyond those sufficient to present a complete, comprehensive, and effective response will not influence the evaluation of the proposal. Each page of the proposal should state the name of the proposer, RFQL 4145, and the page number. Proposals may be either single-or double-sided, but a page is considered one side of an 8-1/2" x 11" piece of paper. The font size shall not be smaller than 11 point.

The proposal shall be in the following format:

1. Executive Summary (1 to 2 pages)

Proposers shall submit an executive summary on company letterhead that:

- Includes the firm name, address, telephone/fax, email address, contact person, year the firm was established, and the type of firm (e.g., partnership, corporation, not-for-profit)
- Specifies the category or categories by name and identifying letter (i.e. A-H), where services are being offered
- Exhibits a thorough understanding of this RFQL and directly addresses NYSERDA's mission and goals
- Summarizes proposer's ability to fulfill and support the services requested in the category or categories proposed
- Identifies all collaborating entities participating in the proposal, including a brief summary of the subcontractors and the services they provide, as well as past working relationships among team members and subcontractors if applicable
- Discusses the mechanism which will guarantee the proposer's ability to deliver services in New York State in a cost-effective manner
- Is signed by a person with authority to enter into a contract with NYSERDA

2. Table of Contents (1 page)

Proposers should present a comprehensive table of contents that outlines the section and page number for each category proposed. Proposals will be evaluated and scored separately for each category, therefore they must be organized with a separate section for each category. Each section must include responses to the items below, regardless of whether they have been presented in another section:

- Experience performing services in the category
- Market insights in the category
- Capabilities to meet requested services in the category
- Personnel qualifications
- Cost proposal
- **3. Experience performing services in the category** (2 to 3 pages per category being proposed; references shall be included as attachments within the proposal and are not included in this page limit)

For each proposed category, proposers shall describe the breadth and depth of their experience delivering high quality services as it relates to the needs of the category, including:

- The proposer's experience as a team/firm in service delivery, including the aggregate number of years working in the category
- The proposer's access or ownership of existing information resources (e.g., curriculum, research tools)
- The proposer's ability to accommodate various learning styles and provide services in languages other than English
- The proposer's ability to grant or facilitate Continuing Education Units (CEUs) and/or Professional Development Hours (PDHs)
- A brief summary of at least two and no more than three, of the proposer's projects, including the identification of efforts that made a difference and the extent of impact and influence achieved
 - Project descriptions should specify the level of involvement of the proposing firm and subcontractors and the results/deliverables of the project

- For at least one of the projects mentioned proposers shall include an example of a recent solution or success related to the category with references (provide as attachment within the proposal), including customer contact name, email, and phone number. Success detailed could include proof of job placements or career advancements as a result of previous training programs
- If applicable and regardless of the category/categories being offered services, the proposer's experience reaching priority populations as described in Category F

4. Market insights in the category (1 to 2 pages per category being proposed)

For each proposed category, proposers shall describe key challenges and opportunities, both technical and market-based, facing the category in the short, medium, and long term, including:

- Similarities and differences between New York State and the market at large
- Potential solutions that could be deployed by NYSERDA through the CEF, either through individual programs or across NYSERDA's portfolio of programs
- If applicable, references to recently published abstracts from articles, white papers, or presentations from the proposer (or subcontractor) specifically addressing issues related to the category

5. Capabilities to meet requested services in the category (1 to 2 pages per category being proposed; if applicable, Letters of Commitment shall be included as attachments within the proposal and are not included in this page limit)

For each proposed category, proposers shall describe the specific capabilities and resources available to their firm in addressing the needs of the category, including:

- The proposer's or proposing teams' New York State offices and/or training site locations, and plans for utilizing existing training facilities and equipment for hands-on experience for trainees if applicable
- The proposer's geographic areas of coverage
- The proposer's capability to incorporate innovative methods to solve problems including unique market differentiators that the proposer can provide working in this space. For example, specialized technical and information solutions available for support, such as identification of thought leaders, critical research findings, and industry trends, and how these shall be used to inform and support the objectives of the category
- If applicable, reference to Letters of Commitment (provide as attachment within the proposal) from subcontractors
- **6. Personnel qualifications** (2 to 3 pages per category being proposed; resumes shall be included as attachments within the proposal and are not included in this page limit; if proposing across multiple categories, only provide resumes of key personnel once)

For each proposed category, proposers shall identify and describe the qualifications of key staff members, teams, and subcontractors that are to be involved in providing services in the category, including:

• Key personnel's education, experience, and accreditation(s) relevant to the category as evidenced by resumes (provide as attachment within the proposal. If applicable, resumes from subcontractors should be provided)

- Potential roles (e.g., technical, operations, outreach, administrative) and responsibilities of key individuals comprising the proposing team relevant to the category, including the identification of the project manager who will serve as the single point of contact under this RFQL
- 7. Cost proposal (1 page per category being proposed)

For each proposed category, proposers must complete and provide a Project Personnel and Rate Form (Attachment A) and submit the name, job, title, and fully burdened hourly salary range for each individual in the proposal and all subcontractors who will perform the work under an Agreement with NYSERDA.

Proposers shall demonstrate that their pricing and hourly rates are in line with the rest of the market and consistent when compared to expertise, qualifications, etc. **Proposers shall identify annual escalation rates through 2025.**

NYSERDA is not requiring proposers to estimate travel or other direct costs as part of the proposals, but reasonable costs for these may be part of the Task Work Orders on an as needed basis. NYSERDA will not reimburse the purchase or rental of tools and equipment. NYSERDA envisions contracting with both individual firms and teaming or subcontracting arrangements as appropriate; however, proposers cannot charge more than two percent overhead for work done by a subcontractor.

IV. Proposal Evaluation

Proposals that meet solicitation requirements will be reviewed by a Scoring Committee and scored for each category (A-H) they propose in using the Evaluation Criteria below. **The minimum threshold is 68 points out of 100 possible points per proposed category. No proposed category with a score of less than 68 will be considered for contract negotiations.** At NYSERDA's discretion, proposers may be requested to interview with all or part of the Scoring Committee to address any potential questions or clarifications outlined in the proposals. Proposers will be notified if they are requested to attend an interview. Responses to the RFQL will be reviewed and assigned scores based on the criteria highlighted below:

Total Points	Evaluation Component		
15 Points	1. Responsiveness to the RFQL and capabilities to deliver services		
	 Organization of the proposal 		
	 Does it follow the proposal format outlined? Is it well- written? Is it complete and address all requested information? 		
	The degree in which:		
	 the proposal demonstrates a clear understanding of the goals and objectives of this RFQL and directly addresses NYSERDA's mission and strategic goals 		
	 a complete, comprehensive, and effective response to the category needs is provided 		
	Ability to serve New York State		
	 Does the proposer have offices and/or training sites in New 		

	Varia Ctata and staff able to support various regions
	 York State and staff able to support various regions throughout the state, or a clear plan to ensure qualified staff or services by commencement of an award? Does the proposer detail their geographic area of coverage? Adequacy/depth of organization resources to provide services requested Does the proposer: demonstrate the ability to complete projects on schedule? demonstrate the capability and resources (e.g., human, financial) needed to conduct the services requested? If applicable, did the proposer identify collaborating entities and demonstrate their ability to work together effectively? If applicable, did the proposer provide Letters of Commitment from subcontractors?
25 Points	2. Overall relevant experience and impact
	 Proposer's experience in conducting and delivering similar or
	related services in the category
	 Does the proposer: domonstrate the ability to deliver high quality
	 demonstrate the ability to deliver high quality, objective, energy related services?
	 demonstrate successful implementation of similar
	services?
	 The degree in which the proposer:
	 has access or ownership of existing information
	resources (e.g., curriculum, research tools)
	 has the ability to accommodate various learning
	styles and provide services in languages other than
	English
	has the ability to grant or facilitate Continuing
	Education Units (CEUs) and/or Professional
	Development Hours (PDHs)
	The extent of impact and influence achieved through previous
	initiatives and activities
	 Does the proposer:
	 include sample projects that illustrate the quality
	and relevance of their services, including examples
	of recent solutions and/or successes as it relates to
1	
	the category?
	 provide references that can attest to the proposer's
10 Points	 provide references that can attest to the proposer's ability to deliver high quality services?
10 Points	 provide references that can attest to the proposer's ability to deliver high quality services? 3. Market awareness/insights
10 Points	 provide references that can attest to the proposer's ability to deliver high quality services?

	 similarities and differences between New York State and the market at large opportunities or value propositions that can help NYSERDA achieve success in the category and advance the goals of the State Energy Plan/Clean Energy Fund/REV, such as reducing greenhouse gas emissions
25 Points	 4. Qualifications and expertise of the personnel/team Proposer's credentials to deliver services requested in the category Did proposer provide resumes of all key personnel, including subcontractors, if applicable? Do key personnel have education, experience, and accreditation(s) relevant to the services requested, as evidenced by their resume? Identification of roles Are the roles of the proposer's staff clearly identified, including the roles of any subcontractors if applicable? Does the proposer show a balance of technical, operations, outreach, administrative or other expertise
20 Points	 necessary to accomplish the objectives? 5. Cost The degree to which pricing and hourly rates are in line with the rest of the market Is there consistency of rates compared to expertise, qualifications, etc.? Are proposed escalation rates (if any) reasonable and justified? Does the proposer provide a completed Project Personnel and Rate Form?
5 Points	 6. Other considerations Prior experience as a NYSERDA contractor, distinguished notable position in industry, or notable accomplishments on projects Demonstration of specialized or unique capabilities Proposer's ability to secure strong commitments from essential team members and partners, including letters of commitment (if applicable), and has demonstrated strong support from necessary stakeholders

NYSERDA reserves the right to eliminate from further consideration any proposal deemed to be substantially or materially non-responsive to the requests for information or program requirements contained herein including the degree to which:

- pricing and hourly rates are in line with the rest of the market
- the qualifications and expertise of the proposers will advance the goals of the State Energy Plan/Clean Energy Fund/REV and accelerate transformational technology advances in areas that industry by itself is not likely to undertake because of technical and financial uncertainty

- the proposers directly address NYSERDA's mission and strategic goals
- the proposers have the resources (e.g., human, financial) to be able to complete the services requested
- the services offered by the proposers are likely to lead to increased employment and manufacturing in New York State
- there are technical, market, organizational and/or environmental risks associated with the proposers

Conflicts: The firm and any personnel of the firm must be free from any financial or similar interest in any product or service which may conflict with or appear to conflict with the objectivity of the services provided to NYSERDA. Please describe all your product, manufacturer or service-related affiliations. If any affiliations exist, you must provide a statement verifying that these affiliations do not conflict with disclosure of any affiliation can result in the termination of a contract, if awarded.

Qualified proposers shall not be precluded from bidding on the other categories described within this RFQL or on future solicitations. However, proposers should describe within their proposals how conflicts of interest, both actual and perceived, will be resolved should the proposer choose to bid on other NYSERDA solicitations.

v. General Conditions

Proprietary Information - Careful consideration should be given before confidential information is submitted to NYSERDA as part of your proposal. Review should include whether it is critical for evaluating a proposal, and whether general, non-confidential information, may be adequate for review purposes. The NYS Freedom of Information Law, Public Officers law, Article 6, provides for public access to information NYSERDA possesses. Public Officers Law, Section 87(2)(d) provides for exceptions to disclosure for records or portions thereof that "are trade secrets or are submitted to an agency by a commercial enterprise or derived from information obtained from a commercial enterprise and which if disclosed would cause substantial injury to the competitive position of the subject enterprise." Information submitted to NYSERDA that the proposer wishes to have treated as proprietary, and confidential trade secret information, should be identified and labeled "Confidential" or "Proprietary" on each page at the time of disclosure. This information should include a written request to except it from disclosure, including a written statement of the reasons why the information should be excepted. See Public Officers Law, Section 89(5) and the procedures set forth in 21 NYCRR Part 501 https://www.nyserda.ny.gov/About/-/media/Files/About/Contact/NYSERDA-Regulations.ashx. However, NYSERDA cannot guarantee the confidentiality of any information submitted.

Omnibus Procurement Act of 1992 - It is the policy of New York State to maximize opportunities for the participation of New York State business enterprises, including minority- and women-owned business enterprises, as bidders, subcontractors, and suppliers on its procurement Agreements.

Information on the availability of New York subcontractors and suppliers is available from:

Empire State Development Division for Small Business 625 Broadway Albany, NY 12207

A directory of certified minority- and women-owned business enterprises is available from:

Empire State Development Minority and Women's Business Development Division 625 Broadway Albany, NY 12207

State Finance Law sections 139-j and 139-k - NYSERDA is required to comply with State Finance Law sections 139-j and 139-k. These provisions contain procurement lobbying requirements which can be found at https://online.ogs.ny.gov/legal/lobbyinglawfaq/default.aspx Proposers are required to answer questions during proposal submission, which will include making required certification under the State Finance Law and to disclose any Prior Findings of Non-Responsibility (this includes a disclosure statement regarding whether the proposer has been found non-responsible under section 139-j of the State Finance Law within the previous four years).

Tax Law Section 5-a - NYSERDA is required to comply with the provisions of Tax Law Section 5-a, which requires a prospective contractor, prior to entering an agreement with NYSERDA having a value in excess of \$100,000, to certify to the Department of Taxation and Finance (the "Department") whether the contractor, its affiliates, its subcontractors and the affiliates of its subcontractors have registered with the Department to collect New York State and local sales and compensating use taxes. The Department has created a form to allow a prospective contractor to readily make such certification. See, ST-220-TD (available at

<u>http://www.tax.ny.gov/pdf/current_forms/st/st220td_fill_in.pdf</u>). Prior to contracting with NYSERDA, the prospective contractor must also certify to NYSERDA whether it has filed such certification with the Department.

The Department has created a second form that must be completed by a prospective contractor prior to contacting and filed with NYSERDA. See, ST-220-CA (available at <u>http://www.tax.ny.gov/pdf/current_forms/st/st220ca_fill_in.pdf</u>). The Department has developed guidance for contractors which is available at <u>http://www.tax.ny.gov/pdf/publications/sales/pub223.pdf</u>.

Contract Award – NYSERDA anticipates qualifying multiple contractors under this solicitation. NYSERDA anticipates a contract duration of three years with the option to renew, unless NYSERDA management determines a different structure is more efficient based upon proposals received. A contract may be awarded based on initial applications without discussion, or following limited discussion or negotiations pertaining to the proposal. Each proposal should be submitted using the most favorable cost and technical terms. NYSERDA may request additional data or material to support applications. NYSERDA will use the Sample Agreement to contract successful proposals. NYSERDA may at its discretion elect to extend and/or add funds to any project funded through this solicitation. NYSERDA reserves the right to limit any negotiations to exceptions to standard terms and conditions in the Sample Agreement to those specifically identified in the checklist questions. Proposers should keep in mind that acceptance of all standard terms and conditions will generally result in a more expedited contracting process. NYSERDA expects to notify proposers in approximately 10 to 12 weeks from the proposal due date whether your proposal has been qualified. NYSERDA may decline to contract with awardees that are delinquent with respect to any obligation under any previous or active NYSERDA agreement.

Accessibility Requirements – If awardees from this solicitation will be posting anything on the web, or if the awardee will produce a final report that NYSERDA will post to the web, the following language must be included. NYSERDA requires contractors producing content intended to be

posted to the Web to adhere to New York State's Accessibility Policy. This includes, but is not limited to, deliverables such as: documents (PDF, Microsoft Word, Microsoft Excel, etc.), audio (.mp3, .wav, etc.), video (.mp4, .mpg, .avi, etc.), graphics (.jpg, .png, etc.), web pages (.html, .aspx, etc.), and other multimedia and streaming media content. For more information, see <u>NYSERDA's Accessibility</u> <u>Requirements</u>.

Limitation – This solicitation does not commit NYSERDA to award a contract, pay any costs incurred in preparing a proposal, or to procure or contract for services or supplies. NYSERDA reserves the right to accept or reject any or all proposals received, to negotiate with all qualified sources, or to cancel in part or in its entirety the solicitation when it is in NYSERDA's best interest. NYSERDA reserves the right to reject proposals based on the nature and number of any exceptions taken to the standard terms and conditions of the Sample Agreement. NYSERDA reserves the right to disqualify proposers based upon the results of a background check into publicly available information and the presence of a material possibility of any reputational or legal risk in making of the award.

Disclosure Requirement – The proposer shall disclose any indictment for any alleged felony, or any conviction for a felony within the past five years, under the laws of the United States or any state or territory of the United States and shall describe circumstances for each. When a proposer is an association, partnership, corporation, or other organization, this disclosure requirement includes the organization and its officers, partners, and directors or members of any similarly governing body. If an indictment or conviction should come to the attention of NYSERDA after the award of a contract, NYSERDA may exercise its stop-work right pending further investigation or terminate the agreement; the contractor may be subject to penalties for violation of any law which may apply in the particular circumstances. Proposers must also disclose if they have ever been debarred or suspended by any agency of the U.S. Government or the New York State Department of Labor.

Vendor Assurance of No Conflict of Interest or Detrimental Effect – The proposer shall disclose any existing or contemplated relationship with any other person or entity, including any known relationships with any member, shareholders of 5% or more, parent, subsidiary, or affiliated firm, which would constitute an actual or potential conflict of interest or appearance of impropriety, relating to other clients/customers of the proposer or former officers and employees of NYSERDA, in connection with proposer's rendering services as proposed. If a conflict does or might exist, please describe how your company would eliminate or prevent it. Indicate what procedures will be followed to detect, notify NYSERDA of, and resolve any such conflicts.

The proposer must disclose whether it, or any of its members, or, to the best of its knowledge, shareholders of 5% or more, parents, affiliates, or subsidiaries, have been the subject of any investigation or disciplinary action by the New York State Commission on Public Integrity or its predecessor State entities (collectively, "Commission"), and if so, a brief description must be included indicating how any matter before the Commission was resolved or whether it remains unresolved.

Public Officers Law – For any resulting awards, the Contractor and its subcontractors shall not engage any person who is, or has been at any time, in the employ of the State to perform services in violation of the provisions of the New York Public Officers Law, other laws applicable to the service of State employees, and the rules, regulations, opinions, guidelines or policies promulgated or issued by the New York State Joint Commission on Public Ethics, or its predecessors (collectively, the "Ethics Requirements"). Proposers are reminded of the following Public Officers Law provision: contractors, consultants, vendors, and subcontractors may hire former NYSERDA employees. However, as a general rule and in accordance with New York Public Officers Law, former employees of NYSERDA may neither appear nor practice before NYSERDA, nor receive compensation for services rendered

on a matter before NYSERDA, for a period of two years following their separation from NYSERDA service. In addition, former NYSERDA employees are subject to a "lifetime bar" from appearing before any state agency or authority or receiving compensation for services regarding any transaction in which they personally participated, or which was under their active consideration during their tenure with NYSERDA.

Any awardee will be required to certify that all of its employees, as well as employees of any subcontractor, whose subcontract is valued at \$100,000 or more who are former employees of the State and who are assigned to perform services under the resulting contract, shall be assigned in accordance with all Ethics Requirements. During the term of any agreement, no person who is employed by the contractor or its subcontractors and who is disqualified from providing services under the contract pursuant to any Ethics Requirements may share in any net revenues of the contractor or its subcontractors derived from the contract. NYSERDA may request that contractors provide it with whatever information the State deems appropriate about each such person's engagement, work cooperatively with the State to solicit advice from the New York State Joint Commission on Public Ethics, and, if deemed appropriate by the State, instruct any such person to seek the opinion of the New York State Joint Commission on Public Ethics. NYSERDA shall have the right to withdraw or withhold approval of any subcontractor if utilizing such subcontractor for any work performed would be in conflict with any of the Ethics Requirements. NYSERDA shall have the right to terminate any contract at any time if any work performed is in conflict with any of the Ethics Requirements.

VI. Attachments:

Attachment A – Project Personnel and Rates Form Attachment B – Sample Agreement



Co-Investment Fund Investor Qualification

Request for Qualifications (RFQL) 4150

Responses accepted through June 30, 2021 by 3:00 PM Eastern Time*

Program Summary: This New York State Energy Research and Development Authority (NYSERDA) Request for Qualifications (RFQL) 4150 Co-Investment Fund Investor Qualification, requests information from investors that wish to qualify as a co-investor for companies seeking funds through NYSERDA Program Opportunity Notice (PON) 4150 Co-Investment Fund, which will be released by September 1, 2019. The accompanying PON 4150 Co-Investment Fund will offer \$6 million initially, to make matching investments directly in companies with investors which are qualified through this RFQL. NYSERDA's goal is to mobilize more early-stage capital in the clean energy space by providing matching investments in promising clean energy companies alongside experienced and successful investors.

Application Submission: Online submission is preferable. Applicants may submit Word, Excel, or PDF files (file formats include: csv, doc, docx, gif, jpeg, jpg, pdf, png, ppt, pptx, pps, ppsx, tif, txt, xls, xlsx, and zip). Individual files should be 100MB or less in file size. Application PDFs should be searchable and should be created by direct conversion from MS Word, or other conversion utility. Files should not be scanned. For ease of identification, all electronic files must be named using the applicant's entity name in the title of the document. NYSERDA will also accept submissions by mail or hand-delivery if online submission is not possible. For detailed instructions on how to submit an application (online or paper submission), click the link "Application Instructions and Portal Training Guide [PDF] " located in the "Current Opportunities" section of NYSERDA's website (https://www.nyserda.ny.gov/Funding-Opportunities/Current-Funding-Opportunities.aspx).

No communication intended to influence this RFQL is permitted except by contacting Nicholas Querques (Designated Contact) at (518) 862-1090, ext. 3086 or by e-mail <u>rfql4150@nyserda.ny.gov</u>. If you have contractual questions concerning this solicitation, contact Venice Forbes (Designated Contact) at (518) 862-1090, ext. 3507 or <u>venicesolicitations@nyserda.ny.gov</u>. Contacting anyone other than the Designated Contacts (either directly by the applicant or indirectly through a lobbyist or other person acting on the applicant's behalf) in an attempt to influence the RFQL: (1) may result in an applicant being deemed a non-responsible offerer; and (2) may result in the applicant not being a "qualified investor" for PON 4150 Co-Investment Fund.

* All submissions must be received by 3 PM Eastern Time on the date noted above. Late, faxed, or emailed submissions will not be accepted. Incomplete submissions may be subject to disqualification. It is the applicant's responsibility to ensure that all pages have been included in the submission. Please note: for online submission, there are required questions that you will have to answer in addition to uploading attachments and you should allot at least 60 minutes to enter/submit submissions. The online submission system closes promptly at 3 PM Eastern Time, files in process or attempted edits or submission after 3 PM Eastern Time on the date above, will not be accepted. If changes are made to this solicitation, notification will be posted on the "Current Opportunities" section of NYSERDA's website (https://www.nyserda.ny.gov/Funding-Opportunities/Current-Funding-Opportunities.aspx).

I. INTRODUCTION

NYSERDA is deploying \$800 million over 10 years as direct investments and wrap-around commercialization support for early-stage companies in the clean energy space. The goal is to invest primarily in pre-Series B companies to de-risk technology, define customers and validate markets, and build initial teams. NYSERDA's four primary areas of investment focus are: advanced buildings, clean

transportation, renewable optimization and energy storage, and smart grid systems and distributed energy integration.

In recent years, NYSERDA's Technology and Business Innovation (TBI) unit has focused more holistically on the market and team when evaluating investments, in addition to deploying an active portfolio management approach to making investments, which is a best practice of sophisticated investors. By balancing technology, market, and team in making investment decisions, developing contracts, and managing projects, NYSERDA is looking to have a larger impact with its non-dilutive funding. Given that most investments made by TBI are in pre-Series B technologies and companies, it is imperative that NYSERDA curates and manages strong relationships with the full spectrum of the investment community, as these investors are a likely source of follow-on funding for most NYSERDA portfolio companies.

Through this RFQL and the accompanying PON 4150 Co-Investment Fund, NYSERDA's goal is to mobilize more early-stage capital in the clean energy space by providing matching investments in promising clean energy companies alongside experienced and successful investors.

PON 4150 Co-Investment Fund

The companion solicitation to RFQL 4150 is PON 4150 Co-Investment Fund, where NYSERDA will make \$6 million available for matching investments directly in companies alongside investors which are successfully qualified through this RFQL. NYSERDA will release PON 4150 Co-Investment Fund by September 1, 2019.

PON 4150 Co-Investment Fund will make non-dilutive matching investments directly in companies ranging from \$150,000 to up to \$500,000 based on a minimum 2:1 ratio of qualifying private capital investment to NYSERDA dollars. NYSERDA's Co-Investment Fund will be open to eligible companies defined as any clean energy company based in New York State, or a non-New York State clean energy company with a demonstrated benefit to New York State, that has raised less than \$20 million in private capital from investors prior to close of the subject investment. NYSERDA's investment will be structured as a non-dilutive grant with a recoupment provision, it will not follow the investment terms agreed to by the "qualified investor" and/or other co-investor(s) in the round. Eligible companies must apply for PON 4150 Co-Investment Fund within six months of closing a qualifying investment, defined as an investment round which includes participation from an investor which has been previously qualified by NYSERDA under this RFQL.

Potential applicants are encouraged to review Attachment B - Sample Participation Agreement for more information on the terms and conditions that they will need to agree to if they are selected to be qualified under this RFQL. The terms and conditions provided by NYSERDA in Attachment B - Sample Participation Agreement are non-negotiable.

Please note, only investors are eligible to respond to RFQL 4150, while PON 4150 is open only to eligible companies that have closed a qualifying investment from investors qualified through this RFQL. PON 4150 Co-Investment Fund will be released by September 1, 2019 in order to allow initial investors that wish to qualify through this RFQL sufficient time to respond to the solicitation. The list of investors that are successfully qualified through the RFQL will be updated continually in the solicitation for PON 4150.

II. SUBMISSION REQUIREMENTS

Applicant Eligibility Requirements

Any firms or organizations that actively invest in early-stage clean energy companies are eligible to apply. Individuals, including individual angel investors, and companies primarily focused on non-investment activities are not eligible to apply. Firms or organizations that have never invested before are also not eligible to apply.

Applicants may be located anywhere in the world as long as they actively invest in early-stage clean energy companies.

Applicant Best Practices

The applicant's goal should be to concisely present the information needed to fully address the Submission Evaluation criteria (see Section III). If you believe proprietary information must be submitted to provide an adequate application, you must comply with the General Conditions of Section IV instructions for submitting proprietary material.

Investor Qualification Template / Due Diligence Questionnaire

Applicants must complete the Investor Qualification Template provided by NYSERDA as Attachment A or use their standard Due Diligence Questionnaire as their submission to this RFQL. If the applicant is utilizing an existing Due Diligence Questionnaire it must include all of the information covered in the Investor Qualification Template. In this scenario, applicants should upload their Due Diligence Questionnaire as Attachment A in their submission for the RFQL. Applicants should only submit one document as Attachment A for their submission to RFQL 4150. The submission must include either: (1) the applicant's completed Investor Qualification Template; or (2) the applicant's standard Due Diligence Questionnaire, as long as it includes all required information.

Applicants must carefully review the Investor Qualification Template they complete or their Due Diligence Questionnaire they provide to ensure that either document includes all required information. Failure to do so may result in the submission being rejected as non-responsive.

Clean Energy Definition

"Clean energy" is defined as hardware technologies, software technologies, services, or processes that broadly reduce energy consumption and greenhouse gas emissions and/or enable the transition to a sustainable and clean energy economy by increasing the supply of renewable energy and distributed energy resources, improving the efficiency of energy utilization at the consumer and industrial scale, improving the processes and systems that use energy, or more effectively enabling energy solutions to permeate the marketplace.

Geographic and Benefit Definitions - PON 4150

For the purposes of the companion solicitation, PON 4150 Co-Investment Fund, the following definitions will be used to determine a company's location and benefit relative to New York State:

- "Companies that are based in New York State" are defined as entities whose principal location of business is in New York State.
- "Non-New York State companies" are defined as entities whose principal location of business is not in New York State.
- "Demonstrated benefit in New York State" is defined as business or related activity that non-New York State companies are involved with in New York State. Examples of activities that represent a "demonstrated benefit in New York State" could include: (1) working with NYSERDA-supported resources, such as Clean Energy Incubators, 76West, Manufacturing Corps, etc.; (2) contributing to some aspect of clean energy projects in New York State, such as financing, installation, monitoring, servicing, etc.; (3) having some portion of a company's workforce, such as research and development, manufacturing, and/or sales, based in New York State; and (4) sourcing supply chain partners, vendors, and/or service providers in New York State. This list is non-exhaustive. NYSERDA reserves the right to make final determination on whether a non-New York State company meets this requirement or not.

Available Funding - PON 4150

Up to \$6,000,000 of NYSERDA funding will be available initially through the companion solicitation to this RFQL, PON 4150 Co-Investment Fund. NYSERDA anticipates making at least twelve awards as a result of the PON 4150. All, some, or none, of the available funds may be awarded through PON 4150. NYSERDA will reserve the right to add or reduce time and/or funding to awarded contracts under PON 4150.

III. SUBMISSION EVALUATION

Submissions that meet the solicitation requirements will be reviewed by a Scoring Committee and will be scored according to the criteria in this section. At NYSERDA's discretion, applicants may be requested to interview with all or part of the Scoring Committee, or other NYSERDA staff or contractors, to address any potential questions or issues which arise based on the submissions. Applicants will be notified if they are requested to attend an interview. NYSERDA may also conduct additional due diligence assessments on any submissions to inform its selection process or confirm any information submitted by the applicant. After the submissions are reviewed, NYSERDA will issue a letter to each applicant indicating the submission evaluation results. An applicant receiving a favorable evaluation will be required to enter into a Participation Agreement (see Attachment B) with NYSERDA and then they will be added to the list of "qualified investors" for PON 4150 Co-Investment Fund.

Evaluation Criteria

Clean Energy Domain Expertise

- Does the applicant demonstrate an active and focused clean energy investment effort in early-stage companies?
- What is the applicant's current portfolio of investments in terms of dollars and number of deals?
- What is the applicant's relative priority of clean energy versus other investment areas?
- Is the applicant regarded as a leading investor in the clean energy space?

Management Team and Track Record

- What are the professional qualifications of the applicant's team?
- How long has the applicant's team been working together and making investments?
- Has the applicant been successful in raising funding from outside investors?
- Has the applicant been successful in increasing the valuation of portfolio companies and exiting their investments in the clean energy space?
- In addition, how many early-stage clean energy companies did the applicant meet, conduct diligence on, and close investments with over the last several years?
- Does the applicant have a strong reputation and relationships with limited partner investors, coinvestors, and portfolio companies?

Due Diligence Process

- What is the applicant's depth of technical and business capabilities to evaluate early-stage clean energy opportunities in terms of their in-house staff, advisory board, external consultants, network, etc.?
- Does the applicant conduct rigorous due diligence on prospective investments on technical, business, energy/climate impact, and team merit?
- Is the applicant willing to share its due diligence process and findings with other investors, including NYSERDA?

Deal Sourcing Ability

- Is the applicant currently and actively sourcing deals for investments in the clean energy space?
- What is the applicant's history of co-investing with and attracting follow-on funding from other leading investors?

IV. GENERAL CONDITIONS

Proprietary Information

Careful consideration should be given before confidential information is submitted to NYSERDA as part of your submission. Review should include whether it is critical for evaluating a submission, and whether

general, non-confidential information, may be adequate for review purposes. The NYS Freedom of Information Law, Public Officers Iaw, Article 6, provides for public access to information NYSERDA possesses. Public Officers Law, Section 87(2)(d) provides for exceptions to disclosure for records or portions thereof that "are trade secrets or are submitted to an agency by a commercial enterprise or derived from information obtained from a commercial enterprise and which if disclosed would cause substantial injury to the competitive position of the subject enterprise." Information submitted to NYSERDA that the proposer wishes to have treated as proprietary, and confidential trade secret information, should be identified and labeled "Confidential" or "Proprietary" on each page at the time of disclosure. This information should include a written request to except it from disclosure, including a written statement of the reasons why the information should be excepted. See Public Officers Law, Section 89(5) and the procedures set forth in 21 NYCRR Part 501 https://www.nyserda.ny.gov/About/-/media/Files/About/Contact/NYSERDA-Regulations.ashx. However, NYSERDA cannot guarantee the confidentiality of any information submitted.

Omnibus Procurement Act of 1992

It is the policy of New York State to maximize opportunities for the participation of New York State business enterprises, including minority- and women-owned business enterprises, as bidders, subcontractors, and suppliers on its procurement Agreements.

Information on the availability of New York subcontractors and suppliers is available from:

Empire State Development Division for Small Business 625 Broadway Albany, NY 12207

A directory of certified minority- and women-owned business enterprises is available from:

Empire State Development Minority and Women's Business Development Division 625 Broadway Albany, NY 12207

State Finance Law Sections 139-j and 139-k

NYSERDA is required to comply with State Finance Law sections 139-j and 139-k. These provisions contain procurement lobbying requirements which can be found at

<u>https://online.ogs.ny.gov/legal/lobbyinglawfaq/default.aspx</u>. Applicants are required to answer questions during application submission, which will include making required certification under the State Finance Law and to disclose any Prior Findings of Non-Responsibility (this includes a disclosure statement regarding whether the proposer has been found non-responsible under section 139-j of the State Finance Law within the previous four years).

Tax Law Section 5-a

NYSERDA is required to comply with the provisions of Tax Law Section 5-a, which requires a prospective contractor, prior to entering an agreement with NYSERDA having a value in excess of \$100,000, to certify to the Department of Taxation and Finance (the "Department") whether the contractor, its affiliates, its subcontractors and the affiliates of its subcontractors have registered with the Department to collect New York State and local sales and compensating use taxes. The Department has created a form to allow a prospective contractor to readily make such certification. See, ST-220-TD (available at http://www.tax.ny.gov/pdf/current_forms/st/st220td_fill_in.pdf). Prior to contracting with NYSERDA, the prospective contractor must also certify to NYSERDA whether it has filed such certification with the Department.

The Department has created a second form that must be completed by a prospective contractor prior to contacting and filed with NYSERDA. See, ST-220-CA (available at http://www.tax.ny.gov/pdf/current_forms/st/st220-CA (available at http://www.tax.ny.gov/pdf/current_forms/st/st220-CA (available at http://www.tax.ny.gov/pdf/current_forms/st/st220-CA (available at http://www.tax.ny.gov/pdf/current_forms/st/st220ca_fill_in.pdf). The Department has developed guidance for contractors which is available at http://www.tax.ny.gov/pdf/publications/sales/pub223.pdf.

Limitation

This solicitation does not commit NYSERDA to award a contract, pay any costs incurred in preparing an application, or to procure or contract for services or supplies. NYSERDA reserves the right to accept or reject any or all submissions received, to negotiate with all qualified sources, or to cancel in part or in its entirety the solicitation when it is in NYSERDA's best interest. NYSERDA reserves the right to reject submissions based on the nature and number of any exceptions taken to the standard terms and conditions of the Sample Agreement. NYSERDA reserves the right to disqualify applicants based upon the results of a background check into publicly available information and the presence of a material possibility of any reputational or legal risk in making of the award.

Disclosure Requirement

The applicant shall disclose any indictment for any alleged felony, or any conviction for a felony within the past five years, under the laws of the United States or any state or territory of the United States, and shall describe circumstances for each. When an applicant is an association, partnership, corporation, or other organization, this disclosure requirement includes the organization and its officers, partners, and directors or members of any similarly governing body. If an indictment or conviction should come to the attention of NYSERDA after an investor is qualified under this RFQL, NYSERDA may remove the firm/organization from the list of "qualified investors" on PON 4150 Co-Investment Fund.

V. ATTACHMENTS

The following attachments are provided for applicants seeking to respond to RFQL 4150:

- Attachment A Investor Qualification Template or Due Diligence Questionnaire (REQUIRED)
- Attachment B Sample Participation Agreement (FOR REFERENCE ONLY)



Market Research and Evaluation Support Services Request for Qualifications (RFQL 4162) \$52 Million Available NYSERDA reserves the right to extend and/or add funding to the Solicitation should other program funding sources become available.

Proposals Due: October 23, 2019 by 3:00 p.m. Eastern Time* Information regarding upcoming Bidders' Conference can be found below

The New York State Energy Research and Development Authority (NYSERDA) is issuing this solicitation to establish pools of qualified consultants in the areas of Market Research, Impact Evaluation/Field Verification, and Survey Data Collection to support the NYSERDA Performance Management and Market Insights teams with a variety of objective market and evaluative research. This research will be used to inform existing and new program strategies and assess the effectiveness of program efforts. NYSERDA's evaluation and market research needs require increasingly nimble and flexible consultants to meet short turnaround requests and provide actionable insights while supporting NYSERDA's accountability goals. The results of this work will assist NYSERDA in improving impact and innovation in deploying clean energy projects and strategies. In order to achieve these objectives cost-effectively and efficiently, evaluation tasks will be assigned for individual, discrete activities with firm timelines and deliverables.

NYSERDA's approach to program design involves working from the market back to initiate, measure, test and evolve offerings that accelerate the cost-effective deployment of clean energy and to stimulate technology and business innovation in clean energy. New program approaches are intended to assist NYSERDA in achieving the high-level State policy goals identified in the Climate Leadership and Community Protection Act (CLCPA)¹ that outlines plans to address and mitigate the effects of climate change by drastically cutting greenhouse gases, diverting the state's energy reliance to renewable sources, and creating green jobs to promote environmental justice across New York State.

Interested parties may submit a proposal to provide services in one or more of the following Market Research and Evaluation Support Areas:

- Market Research
- Impact Evaluation/Field Verification
- Survey Data Collection

Please note that a separate proposal must be prepared and submitted for each Market Research and Evaluation Support Area that a contractor would like to be considered for, however, where team members overlap across areas, the same rates should apply regardless of the Market Research and Evaluation Support Area.

NYSERDA anticipates qualifying multiple consultants within each of the areas listed above and establishing zerodollar umbrella agreements with each. NYSERDA will assign specific tasks, timelines and budgets to qualified consultants through individual task work orders (TWOs) subsequently. This RFQL is a modification to NYSERDA's current framework to improve flexibility and lessen administrative burden. Specifically, this RFQL removes the prior specific skill set qualifications for each Market Research and Evaluation Support Area and, instead, seeks to qualify multiple proposers in the overarching areas of Market Research, Impact Evaluation/Field Verification, and Survey Data Collection. Only individual contractor firms will be qualified through this RFQL.

NYSERDA will a hold Bidders' Conference to provide an overview of the solicitation and answer questions. All questions must be submitted in advance by September 23, 2019 at 3pm Eastern time to

¹ <u>https://www.nysenate.gov/legislation/bills/2019/s6599</u>

<u>evaluation.questions@nyserda.ny.gov</u>. The slide deck for this conference will be posted on the NYSERDA solicitation webpage for RFQL 4162 prior to the conference.

Date: September 25, 2019 Time: 3:00 – 4:00pm Eastern time Location: Conference call only

Toll-free dial-in number (U.S. and Canada): (866) 394-2346 Conference code: 1692328714

Pre-registration for the conference is not necessary

Proposal Submission: Online submission is preferable. Proposers may submit Word, Excel, or PDF files (file formats include: csv, doc, docx, gif, jpeg, jpg, pdf, png, ppt, pptx, pps, ppsx, tif, txt, xls, xlsx, and zip). Individual files should be 100MB or less in file size. Proposal PDFs should be searchable and should be created by direct conversion from MS Word, or other conversion utility. Files should not be scanned. For ease of identification, all electronic files must be named using the proposer's entity name in the title of the document. NYSERDA will also accept proposals by mail or hand-delivery if online submission is not possible. For detailed instructions on how to submit a proposal (online or paper submission), click the link "<u>Application Instructions and Portal Training Guide</u> [PDF] " located in the "Current Opportunities" section of NYSERDA's website (https://www.nyserda.ny.gov/Funding-Opportunities/Current-Funding-Opportunities.aspx).

No communication intended to influence this procurement is permitted except by contacting Patricia Gonzales (Designated Contact and Survey Data Collection Contact) at (518) 862-1090, ext. 3338 or by e-mail <u>evaluation.questions@nyserda.ny.gov</u>; Carley Murray (Designated Contact and Market Research Contact) at (518) 862-1090, ext. 3277_or by e-mail <u>evaluation.questions@nyserda.ny.gov</u> or Dana Nilsson (Designated Contact and Impact Evaluation/Field Verification Contact) at (518) 862-1090, ext. 3262 or by e-mail <u>evaluation.questions@nyserda.ny.gov</u>. If you have contractual questions concerning this solicitation, contact Venice Forbes(Designated Contact) at (518) 862-1090, ext. 3507or <u>VeniceSolicitations@nyserda.ny.gov</u>. Contacting anyone other than the Designated Contacts (either directly by the proposer or indirectly through a lobbyist or other person acting on the proposer's behalf) in an attempt to influence the procurement: (1) may result in a proposer being deemed a non-responsible offerer, and (2) may result in the proposer not being awarded a contract.

* All proposals must be received by 3 p.m. Eastern Time on the date noted above. Late, faxed, or emailed proposals will not be accepted. Incomplete proposals may be subject to disqualification. It is the proposer's responsibility to ensure that all pages have been included in the proposal. Please note: for online submission, there are required questions that you will have to answer in addition to uploading attachments and you should allot at least 60 minutes to enter/submit proposals. The online proposal system closes promptly at 3 p.m. Eastern Time. Files in process or attempted edits or submission after 3 p.m. Eastern Time on the date above, will not be accepted. If changes are made to this solicitation, notification will be posted on the "Current Opportunities" section of NYSERDA's website (https://www.nyserda.ny.gov/Funding-Opportunities/Current-Funding-Opportunities.aspx .

I. Introduction

In July 2019, Governor Cuomo signed the Climate Leadership and Community Protection Act (CLCPA) which adopts the most ambitious and comprehensive climate and clean energy legislation in the country. The CLCPA mandates several ambitious Green New Deal clean energy goals and requires the State to achieve a carbon free electricity system by 2040 and reduce greenhouse gas emissions 85% below 1990 levels by 2050, setting a new standard for states and the nation to expedite the transition to a clean energy economy.

The new law will drive investment in clean energy solutions such as wind, solar, energy efficiency and energy storage. Importantly, implementation of the CLCPA will target investments to benefit disadvantaged communities,

create tens of thousands of new jobs, improve public health and quality of life and provide all New Yorkers with more robust clean energy choices.

The Green New Deal builds on Governor Andrew M. Cuomo's landmark Reforming the Energy Vision strategy to lead on climate change and grow New York's economy. In 2014, the Reforming Energy Vision (REV) strategy was launched to build a cleaner, more resilient and affordable energy system. The Clean Energy Fund (CEF)² and NYSERDA's subsequent filings³ supporting the CEF are critical pillars to support the mission of REV and are designed to complement the related initiatives championed by New York State, including the New York State Public Service Commission's REV regulatory proceeding⁴ and its Clean Energy Standard proceeding.⁵

Through the CEF, NYSERDA plans to build on the success of its programs and momentum to meet evolving market and customer needs. NYSERDA has designed the CEF to pursue three long-term outcomes: thriving and self-sustaining clean energy industries able to operate without subsidies; greater levels of capital invested in clean energy and jobs in New York; and significant reductions in greenhouse gas (GHG) emissions from the state's energy sector.

As market transformation and GHG emissions reductions goals are both long-term outcomes, NYSERDA was granted a 10-year program authorization of approximately \$5 billion in new strategic investment through 2025. CEF investments will be made across four program portfolios, all of which will be addressed by consultants qualified under the RFQL⁶:

- Market Development, which aligns with the REV Regulatory Proceeding and evolving utility strategies to reduce barriers, increase consumer demand for clean energy, and enable markets to provide the new products and services sought by an engaged consumer market;
- Innovation and Research, which catalyzes the development of innovative clean energy solutions, while growing New York's cleantech sector and accelerating the development and introduction of the new technologies that will be needed to foster increased levels of GHG reductions;
- NY Green Bank, which pursues market transformation in the financial sector, leveraging public investments with capital in a self-sustaining manner while reaching new markets for clean energy services; and
- NY-Sun, which is creating a robust and self-sustaining solar market in New York State for solar electric technologies and builds a program approach for other clean technologies to follow.

Additionally, in April 2018, the New York State Department of Public Service (DPS) and NYSERDA published the *New Efficiency: New York Report*⁷ outlining plans to increase the state's energy efficiency goal by 40%. The Report calls for 185 trillion British thermal units (TBtu) of cumulative annual site energy savings relative to forecasted 2025 consumption. This target is based on savings in buildings and the industrial sector across all fuel

² Case 14-M-0094 - Proceeding on Motion of the Commission to Consider a Clean Energy Fund; Case 10-M-0457 – In the Matter of the System Benefits Charge IV; Case 07-M-0548 – Proceeding on Motion of the Commission Regarding an Energy Efficiency Portfolio Standard; Case 03-E-0188 – Proceeding on Motion of the Commission Regarding a Retail Renewable Portfolio Standard; Case 13-M-0412 – Petition of the New York State Energy Research and Development Authority to Provide Initial Capitalization for the New York Green Bank. *Order Authorizing the Clean Energy Fund Framework*, issued and effective January 21, 2016.

³ As of February 22, 2016, NYSERDA had filed revised versions of its <u>Resource Acquisition Transition Chapter</u> and <u>Budget Accounting and Benefits Chapter</u> of its Clean Energy Fund Investment Plan; additional chapters describing interventions will follow during 2016.

⁴ Case 14-M-0101 – Proceeding on Motion of the Commission in Regard to Reforming the Energy Vision. *Order Adopting Regulatory Policy Framework and Implementation Plan*, issued and effective February 25, 2015.

⁵ Case 15-E-0302, Proceeding on Motion of the Commission to Implement a Large-Scale Renewable Program and a Clean Energy Standard.

⁶ In addition to the four CEF program portfolios, consultants qualified under this RFQL may also assist NYSERDA in conducting ongoing evaluation work for the Regional Greenhouse Gas Initiative portfolio as well as other funding sources as appropriate.

⁷ https://www.nyserda.ny.gov/-/media/Files/Publications/New-Efficiency-New-York.pdf

sources (electricity, natural gas, heating oil and propane). To encourage more energy efficient buildings, crosscutting barriers and opportunities that are not specific to one market sector bare investigation.

NYSERDA's market research and evaluation strategy continues to be rooted in a clear understanding of the markets within which it operates and will support the following principles:

- <u>Accountability for use of public funds to achieve credible and sizeable outcomes</u>: Reporting
 metrics and supporting evaluation analysis will focus on market change and progress toward the
 State's policy goals related to environmental, energy and economic benefits.⁸ Key high-level
 metrics include, but are not limited to: energy savings, energy cost savings, GHG emission
 reductions, dollars invested in clean energy and market penetration of clean energy technologies.
- <u>Market insights and data analytics that support concept development and design</u>: Actionable insight into economics and decision-making of customers, partners, and the markets within which NYSERDA operates is foundational to its work to inform and develop strategies to overcome market barriers, animate the market, encourage capital and investment, and increase the scale and escalate adoption of clean energy technology, training, and behaviors, including building-level modeling/analysis to understand the potential economic and environmental benefits of various energy efficiency measures (e.g., deep retrofits/advanced building energy solutions).
- <u>Actionable insights that evolve strategy and portfolio optimization</u>: Timely feedback cycles on the
 performance of NYSERDA's strategies and the impacts on the market will help to determine which
 programs are working best. NYSERDA will deploy pilots and collect data to: test hypotheses
 about the marketplace and barriers to investment in energy efficiency; measure impacts of these
 initiatives in real-time; and adjust strategies at the pace of the market to account for new
 understandings of market barriers and existing conditions.
- <u>Transparency in terms of methods and results</u>: NYSERDA will regularly publish reports on investments, outputs and outcomes. Evaluation studies and methods will be made publicly available. Data sets gathered through evaluation activities will also be shared with the market.

This RFQL aligns NYSERDA's Market Research and Evaluation Support effort with the above CEF principles, in particular ensuring effective and timely feedback cycles to provide information on market conditions and needs that can enrich strategies going to market, to assess program and strategy performance and market impact, and to support active management and cost-effective, value-added strategic adjustments in the future.

Evaluation elements supported through this RFQL include Market Research, Impact Evaluation/Field Verification and Survey Data Collection. Additionally, information that can support process evaluation and statewide building stock characterizations may be embedded within these areas, as applicable. More information describing each of these areas is provided in **Section II, Services Requested and Qualifications**.

At this time, NYSERDA has allocated approximately \$52 million of evaluation funds through at least 2025 to the Market Research and Evaluation Support Areas described in this solicitation. NYSERDA envisions that approximately 60% of its evaluation activity will support Market Research, 30% will support Impact Evaluation/Field Verification, and 10% will support Survey Data Collection. The overall dollar value and area allocations are subject to change but are provided here as a reference for potential workload and emphasis. Funding will only be allocated to qualified consultants as specific tasks/projects/studies are defined by NYSERDA through individual Task Work Orders (TWOs). NYSERDA cannot anticipate when, or at what frequency, funding opportunities will arise for each qualified proposer under the Market Research and Evaluation Support Areas described in this solicitation. However, NYSERDA will provide qualified consultants with estimated schedules for upcoming work to assist in planning. This schedule will be subject to change at the discretion of NYSERDA.

⁸ New York State Energy Plan.

Consultants qualified under this solicitation will not be NYSERDA's sole resource for conducting evaluation and market insights research. NYSERDA may issue additional solicitations in the future to invite proposers to offer innovative ideas and solutions.

II.Services Requested and Qualifications

NYSERDA expects to qualify multiple contractors to provide services in each of the specified Market Research and Evaluation Support Areas outlined in this RFQL (Areas 1-3 described below). The level and type of services requested from each qualified contractor will depend on NYSERDA's project needs, the contractor's expertise and contractor performance. Generally, research and evaluation activity will align with test-measure-adjust principles to ensure real-time feedback to NYSERDA.

Proposers are invited to submit, in the format described in **Section IV, Proposal Requirements**, a proposal demonstrating their skills, expertise, qualifications and personnel rates in any, or all, of the three areas described below.

Overarching Minimum Contractor Qualifications

All contractors, regardless of the area(s) being proposed, must possess the following minimum, basic qualifications:

- Ability to quickly develop tactical and cost-effective approaches to evaluation and market research
- Ability to quickly implement evaluation and market research to assist in planning future activities, as specified by NYSERDA
- Ability to work with data provided by others (e.g., survey contractor, industry data sources open and commercially available)
- For any data collected on behalf of NYSERDA, ability to provide clean, coded data in a manner satisfactory to NYSERDA and in a manner consistent with the <u>Open NY Handbook</u> and <u>Open NY</u> <u>Submission Guidelines</u>.
- Ability to apply expert technical report writing and editing skills to all project deliverables
- Demonstrated expertise in appropriate statistical sampling, analyses and interpretation of various statistical tests associated with survey or other data
- Statistical software and data visualization expertise with SAS and Tableau are strongly preferred and are currently in use by NYSERDA; other tools for analysis may be considered on an as needed basis where appropriate.
- Web-enabled primary data collection experience with Qualtrics is strongly preferred and is currently in use by NYSERDA.
- Solid understanding and ability to engage in advisement or development of evaluation approaches to meet NYSERDA's evolving needs, as evidenced by current and cited protocols and standards
- Computer software proficiency in the suite of Microsoft products (Excel, Access, PowerPoint, Word, Teams) and SharePoint is required

For purposes of this RFQL and NYSERDA's research, direct impacts - which are the responsibility of the Impact Evaluation contractor to measure and verify – are defined as those impacts expected from pilots or projects directly funded by NYSERDA, either immediate or lagged. Indirect impacts – which are the responsibility of the Market Evaluation contractor to quantify with input on quantification of the unit energy benefits from the Impact Evaluation contractor - are defined as market effects that are expected to accrue over the longer term from follow-on market activity that results from NYSERDA's investments. Indirect impacts do not include the assessment of net to gross analyses (see Attachment C, Indirect Benefits Evaluation Framework⁹). Indirect impacts across NYSERDA initiatives may not be additive due to multiple initiatives operating within the same market sectors.

Area 1: Market Research

⁹ The Indirect Benefits Evaluation Framework is an evolving document that may change over time given program learnings and developing evaluation needs.

Market Characterization and Market Progress/Impact Studies

Market characterization and market progress/impact studies (herein referred to as "market studies") will be designed to identify and assess the theory of change (i.e., how early and intermediate accomplishments lead to long-range results) and market progress associated with specific NYSERDA interventions, either individually or collectively in a given market. These studies will monitor indicators over time including those associated with awareness, knowledge, behavior, soft costs, and adoption (e.g., market penetration, market share, and investment) of clean energy technologies and practices. This work will also include quantification of naturally occurring market adoption and indirect impacts. While clean energy investment and market share are the paramount longer-term indicators for NYSERDA, market studies may focus on awareness, knowledge and behavior in more nascent markets, as early and intermediate indicators leading to longer-term adoption. Market studies may also include developing technology commercialization projections or technology adoption curves to project and later measure the market penetration of specific clean energy technologies and practices over time, providing a solid baseline and indication of future expectations that will aid in the later evaluation of indirect benefits that are due to the initiative. Importantly and significantly, the information provided by market studies will inform initiative design and operation, provide credible quantification of outcomes and market impacts – including indirect impacts – due to the initiative, and support initiative evolution and exit decisions.

Investment plans,¹⁰ grounded through development of logic models, will be developed early in the planning phase to identify the theory of change, indicators of progress, and approaches to market tracking.¹¹ Although market change occurs over time, and longitudinal market tracking will typically have a longer time horizon, wherever possible, market tracking will be integrated into NYSERDA's test-measure-adjust approach. For example, where appropriate, annual surveys of market actors may be conducted to assess early and intermediate indicators of clean energy technology adoption, or commercially available data sets on market share could be assessed annually to identify the level of market share increase occurring throughout the targeted market.

When applicable, process evaluation shall be conducted as part of a market study on a given program or intervention based on the theory of change outlined in the logic model constructed by NYSERDA as part of its investment planning process. Process evaluation provides actionable recommendations to improve programs and will be designed and implemented for quick-cycle feedback and in support of continued program refinement. When appropriate, issues addressed may include program efficiency and effectiveness, participant satisfaction and barriers to participation. In comparison to prior program funding cycles and in line with test-measure-adjust principles, NYSERDA envisions conducting significantly more focused, targeted or phased process evaluations, when warranted, to provide better and timelier information to aid in program development, refinement and optimization.

Market Insights

In close coordination with market characterization and market progress activities, market insights activity will leverage a wide range of traditional and new market research techniques to identify and apply actionable market and customer insights and trends to shape market strategies and pilot/program design so that they are most likely to be successful. Research activities will largely focus on market discovery methods designed to understand customer and partner attitudes and perceptions; customer decision-making drivers and barriers affecting market growth; and techniques that will provide a clear understanding of partner and service provider and end-user economics, values, and business models to ensure the design of interventions and approaches will be compelling. Concept testing will also be a focus to confirm that strategies and approaches resonate with the market. Activities may also include continuous monitoring of social, economic, demographic and financial conditions which impact NYSERDA's efforts. This research will inform future programmatic decisions.

Another goal of the Market Insights Area, generally, is assessing the future state of market activity. While market characterization and market progress/impact activity as well as market insights activity will work to describe the current state of the market, there is strong interest in identifying key indicators to track <u>anticipatory insights</u> within the market as well (e.g., future technology innovation, market trends). Proposals that demonstrate a capability in effectively measuring and assessing anticipatory insights are encouraged.

¹⁰ For the New York Green Bank, transaction profiles contain information similar to investment plans.

¹¹ Logic models are typically developed by internal NYSERDA staff.

Market Research Approaches/Tools

Market Research encompasses a variety of methods such as those described below. The Market Research Area may also include assistance with logic modeling and process evaluation, as needed. In all cases, deliverables shall be prepared and presented to NYSERDA in a highly useful and accessible format that aids in decision making.

- Longitudinal market actor and customer surveys involve interviews with key market actors designed to
 assess changes in the market over time by tracking, on a regular basis, key indicators. Indicators that can
 be tracked through such surveys include changes in awareness, knowledge, market share and business
 practices. Longitudinal surveys may include baseline studies, market characterization activities,
 development of market adoption curves, and retrospective and prospective modeling.
- Analysis of secondary data sources involves review of existing studies and data (e.g., sales data, market share data) to identify trends in key market indicators that can support primary data collection activities (e.g., increased market share of energy-efficient products through review of national product shipment data). This activity may also include development of evaluative case studies, bibliometric analyses (to demonstrate knowledge dissemination through counts and analysis of publications and patents), and historical tracing (to show the path by which a project funded by NYSERDA led to useful downstream products and processes).
- Targeted real-time surveys include brief surveys conducted at the time of participant engagement in an intervention and are designed to collect information on participant decision making and the factors that influenced participation. This type of real-time data collection effort will also be used to collect and analyze data to support and inform NYSERDA's pilot activities as these interventions get underway.
- Other focused methods are those targeting specific research questions or knowledge gaps and may include, but are not limited to, data collection efforts such as Delphi panels, in-depth interviews, segmentation research, concept testing and voice of customer research (to glean customer wants and needs, attitudes and perceptions, drivers and barriers, familiarity and other variables related to making clean energy decisions).
- Non-traditional research methods include ethnography, social media and community platforms to offer real-time and continuous feedback on concepts and strategies.

Collaboration between the Market and Impact Evaluation teams will be necessary in the development of the indirect impact methodology and data needs for a specific initiative or set of initiatives. As noted earlier, indirect impacts do not include the assessment of net to gross analyses (see Attachment C, Indirect Benefits Evaluation Framework).

Market Research Contractor Qualifications

In addition to the overarching contractor qualifications listed above, the market research work will require the qualified contractors to become familiar with and fully understand the breadth and depth of the CEF and NYSERDA's interventions including interacting with key stakeholders and ensuring methods address appropriate audiences. Specifically, one or more of the following requirements must also be fulfilled by the qualified contractors:

- Expertise or capability to evaluate theory of change and market progress for a large variety of projects and interventions
- Ability to use innovative approaches and solutions to monitor indicators over time and assess efficiency and effectiveness of interventions
- Expertise in quantifying market effects, including the significant indirect impacts associated with the CEF

- Ability to leverage a wide range of traditional and new market research techniques (including ethnography, social media and community platforms and behavioral approaches) to effectively glean relevant market and customer insights particularly in the areas of customer decision making and drivers/barriers affecting market growth
- Past projects relevant to supporting knowledge and experience in market effects/transformation (including theory of change evaluation) and process evaluation experience
- Experience and training in applying guiding principles, ethics, and industry standards to market research

As the Market Research Area is tied closely with data collection, Market Research proposers with existing data collection resources **within their firms** are asked to identify and **briefly** describe the qualifications of those resources within their Market Research proposals. Refer to the qualifications listed in **Area 3: Survey Data Collection** when describing qualifications associated with these resources.

Area 2: Impact Evaluation/Field Verification

Impact evaluation/field verification assesses technology performance and use in order to verify program energy impacts. This serves mainly as an accountability mechanism to ensure accurate and credible energy and GHG emission impacts, but it will be implemented in as "real-time" a manner as possible. In doing so, impact evaluation/field verification will be designed to identify ways to improve current project-level impacts, and to gain knowledge to improve future initiative impact projections. Data from impact evaluation/field verification studies will also be publicized to support market confidence in clean energy technology performance.

Impact Evaluation/Field Verification Approaches and Tools

Impact evaluation/field verification broadly encompasses methods such as utility billing analysis, engineering reviews, deemed savings analysis, and site visits for verification and monitoring, as outlined below. The results from impact evaluation/field verification analyses will provide performance data to measure program energy impacts and realization rates, inclusive of energy efficiency, renewable energy and on-site generation activities. Data collected by these approaches will also support valuation of callable load and impact on energy reliability. Analyzing and researching in-service rates (i.e., percentage of measures in service), persistence, and snap-back will also be necessary in some cases. Ancillary benefits, including non-energy impacts, may be addressed inside of certain impact evaluation/field verification analyses. As applicable, impact evaluation/field verification methods will adhere to standards such as the International Performance Measurement and Verification Protocol (IPMVP)¹² standards and Uniform Methods Project (UMP)¹³.

- Utility billing analysis to provide site specific changes in energy usage over time through the use of regression models and the use of historical billing data (kWh and MMBtu)
- Engineering reviews to assess reasonableness of baselines, engineering calculations and protocols used by programs to estimate energy impacts
- Developing and maintaining data on measure-level incremental energy savings and measure life in an existing database of deemed savings values, such as the NYS Technical Resource Manual
- Measurement and verification activities to validate energy efficiency measure installation, baseline conditions, operations, and energy impacts (kW, kWh and MMBtu) through activities such as site visits, metering and monitoring, modeling or other means as appropriate
- Surveys or interviews of site personnel or other parties for purposes of understanding operational and behavioral aspects that impact energy use/savings

¹² <u>https://evo-world.org/en/products-services-mainmenu-en/protocols/ipmvp</u>

¹³ https://www.nrel.gov/docs/fy18osti/70472.pdf

• Accessing and analyzing data acquired from remote data acquisition equipment and software (e.g., inverters, building management systems, NY Distributed Energy Resource website, etc.)

Collaboration between the Market and Impact Evaluation teams will be necessary in the development of the indirect impact methodology and data needs for a specific initiative or set of initiatives. As noted earlier, indirect impacts do not include the assessment of net to gross analyses (see Attachment C, Indirect Benefit Framework).

As appropriate, elements of process evaluation and real-time surveys on decision making considerations may be incorporated into impact evaluation/field verification activities.

Impact Evaluation/Field Verification Contractor Qualifications

In addition to the overarching contractor qualifications listed above, the impact evaluation/field verification work will require the qualified contractors to become familiar with and fully understand the breadth and depth of the Clean Energy Fund and NYSERDA's interventions including interacting with key stakeholders. Specifically, one or more of the following requirements must also be fulfilled by the qualified contractors:

- Demonstrated expertise or capability to measure and verify the direct impacts of various types of energy programs including electric, natural gas, fuel oil and propane energy efficiency projects, electric demand reduction and demand response projects, as well as renewable energy and other on-site generation technologies, as well as energy storage and other smart grid devices.
 - Particular importance on employing an incremental sampling and real-time impact evaluation approach to provide useful, timely feedback on initiative performance to inform future initiative strategy. NYSERDA is working to develop such an approach for use by consultants. Implementation of this incremental analysis approach will be critical to supporting initiative development and strategy.
- Experience or capability to work with, and conduct analysis for, a wide-variety of energy users including, but not limited to: residential customers (homeowners, renters, low-income households, etc.), commercial buildings (building owners, property managers, occupants, etc.), decision makers for municipal buildings and facilities, industrial buildings and facilities, etc.
- Ability to use innovative approaches and solutions to achieving credible energy savings and generation values.
- Past projects relevant to supporting knowledge and experience in impact evaluation/field verification, which shall be included and summarized in the proposal.

Area 3: Survey Data Collection

NYSERDA will retain qualified survey data collection contractors to meet various discreet tasks or to work collaboratively with other qualified consultants to meet data collection needs of specific Market Research or Impact Evaluation/Field Verification projects. Survey data collection and design assistance will support NYSERDA in measuring markets addressed by its programs and interventions. For purposes of this solicitation, a survey is defined as a systematic data collection effort conducted either in person, by telephone, by mail, or using the internet, including large-scale mail surveys, panel surveys, unstructured interviews, and focus groups.

Qualified contractors may be tasked by NYSERDA to:

- Design and develop surveys, questionnaires, interview guides, and other forms of data collection
- Develop and implement strategies to select appropriate samples
- Pre-test data collection instruments to ensure maximum effectiveness
- Administer data collection instruments

• Provide cleaned, coded and analysis-ready data to NYSERDA and its evaluation contractors

Prepare a methodology and survey disposition report for each survey

Perform other ad hoc survey-related work as assigned by NYSERDA

Survey Data Collection Approaches/Tools

Specific survey methods to be used include, but are not limited to:

- Telephone: A method of surveying where telephone is the means used to contact potential respondents. Qualified contractors must possess centralized telephone interviewing facilities with Computer-Assisted Telephone Interviewing (CATI) capabilities. Qualified contractors must also have cell phone calling capabilities, where applicable/permitted.
- Mail: A data collection method in which respondents complete questionnaires on paper form and return them via the mail. Qualified ccontractors must possess mail survey processing capabilities.
- Internet/Web: A questionnaire that the target audience can complete surveys over the Internet, including mobile devices. Qualified contractors must be able to host in-house web surveys.

Survey Data Collection Contractor Qualifications

In addition to the overarching contractor qualifications listed above, the survey data collection activity will require qualified contractors to become familiar with and fully understand the breadth and depth of the CEF and NYSERDA's interventions including interacting with key stakeholders. Specifically, the following requirements must also be fulfilled by the qualified contractors:

- Expertise and experience in collecting data from a wide variety of respondent audiences and populations, including multi-generational, multi-lingual, professional, etc.
- Overall technical expertise in survey and interview guide design and development
- Demonstrated ability to successfully implement a variety of survey data collection approaches (e.g., simple random-digit dialing telephone surveys of consumers, to high level interviews with decision makers)
- Demonstrated ability to serve real-time needs with quick turn-around time frames
- Ability to administer, track, and distribute financial incentives, if incentives are approved by NYSERDA for a given research project
- Past projects relevant to supporting knowledge and experience in survey design and development, which shall be included and summarized in the proposal
- Experience and training in applying guiding principles, ethics, and industry standards to survey research
- In-house CATI capabilities for conducting larger scale telephone surveys
- Experience and expertise using Qualtrics to design, administer, and collect survey responses

Evaluation Topics

NYSERDA expects to address in part, or in whole, 1) the end-use sectors, 2) technology areas and 3) interventions listed below in the future. This is not an exhaustive list, nor is it a list of requirements to assess experience. As applicable, proposers should demonstrate their understanding and experience in these areas within evaluation area-specific proposals. Proposers without energy industry-specific experience who have developed skills and qualifications in other industries (e.g., health, finance) are also invited to propose given NYSERDA's strong interest in expanding the types of approaches, tools and methods that could be effectively used in the energy field to assess the impact of its initiatives.

End-Use Sectors

- New and existing structures: Commercial, Industrial (including data centers and agriculture), Multifamily (including low and moderate income) and Residential (including low and moderate income)
- Transportation

Technology Areas

- Energy efficiency retrofit or replacement measures
- On-site energy management practices (e.g., real time energy management, strategic energy management)
- Renewable energy generation and renewable thermal
- Other on-site generation (e.g., combined heat and power)
- Demand management/reduction
- Emerging technologies (e.g., OLEDs)
- Zero Net Energy building systems
- Transportation (e.g., demand management, smart mobility, electric vehicles, transit and freight)
- Smart grid (e.g., distribution and transmission systems, microgrids and community grids)
- Energy storage (e.g., standardized products, enabling storage technologies, battery technologies)
- Air Source Heat Pumps
- Ground Source Heat Pumps
- Variable Refrigerant Flow (VRF)

Intervention Types

- 1. Enabling solutions for other market actors
 - Training and education
 - Enabling adoption of tools and software
 - Identifying and connecting qualified service providers with interested customers
 - Financing (e.g., reducing risks, supporting aggregation, supporting standardization, enhancing market confidence)
 - Demonstrating and developing real-time energy management approaches
 - Enabling customer confidence
 - Working with and enabling supply chain
 - Fostering stakeholder collaboration and integration
 - Providing technical support for communities with outreach and service (e.g., modular system design, community solar)
 - Market-facing energy data analysis and deployment
 - Pay for Performance initiatives as a market-based approach to delivering and paying for energy efficiency solutions
- 2. Providing direct financial incentives
- Motivating service providers and product suppliers to capture latent opportunities and, where needed, to develop and support emerging markets that offer high carbon reduction potential

- Providing direct financial subsidies to fill gaps in the market (e.g., low to moderate income and renewables)
- Providing direct financial incentives via risk sharing
- 3. Serving as a policy advocate to improve codes, standards, and mandates
 - Supporting credible and reliable verification protocols and services
 - Exploring best practices
 - Reducing soft costs by creating tools for simplified and standardized auditing, modeling, and training
 - Quantifying and characterizing the value proposition of zero net energy
- 4. Working with stakeholders in New York to advance technical innovation
 - Supporting technology development and demonstration projects
 - Validating emerging technologies
 - Promoting the transfer of technology through networks
 - Publicizing top performers (e.g., case studies)
 - Disseminating information
 - Providing direct support for cleantech business
 - Supporting technology-to-market pathways to stimulate entrepreneurial activity
 - Engaging mid-market suppliers and forming strategic industrial partnerships

Contractual Arrangement and Responsibility

Umbrella Agreement

All proposers qualified through this RFQL will enter into zero-dollar value Umbrella Agreements enabling NYSERDA to retain their services for each Market Research and Evaluation Support Area in which they have been qualified. This Umbrella Agreement will not guarantee any specific amount of work. The amount of work and funding subsequently assigned to each contractor via separate Task Work Orders will depend on expertise, the amount of work required in the Market Research and Evaluation Support Area, past performance, current workload and deadline requirements.

The term of retention for each qualified consultant is up to five years. However, NYSERDA reserves the right to re-evaluate each qualified contractor and the qualified contractor pools, as well as add new firms to the pools at any time, as needed, due to shifts in NYSERDA emphasis, consultant performance, expertise and other similar indicators. At a minimum, NYSERDA will re-evaluate and potentially reissue this RFQL to expand its qualified contractor pools on an annual basis.

Qualified contractors who, at any time, cease to provide value to NYSERDA due to poor performance and timeliness, inferior deliverable quality, lack of engagement with NYSERDA and its partners, or in any way fail to meet the objectives of NYSERDA's evaluation effort shall be issued a written warning. Should there be no improvement following this written warning, the contractor will be removed from the qualified contractor list.

Task Work Orders

Projects will be assigned through separate written Task Work Orders (TWOs), which will become binding, contractual agreements between NYSERDA and the contractor qualified to perform the work. TWOs will either be assigned or competitively bid within the qualified pools of contractors. Formal teaming arrangements (i.e., as part of contracted TWO) will be permitted with other RFQL 4162-qualified consultants, as necessary and as indicated by NYSERDA. Informal collaboration (i.e., not resulting in a contractual arrangement) among firms may also be required or a given initiative or set of initiatives to discuss aspects including, but not limited to, the timing and schedule of evaluation tasks, sample design and data collection, information sharing, and agreement on the unit of measure to support direct and indirect impact assessments. TWO requests issued by NYSERDA may be fully developed by NYSERDA or may require the qualified contractor(s) to propose a work scope and other key

components of the TWO based on research questions provided by NYSERDA. Given these differing levels of time and effort needed to successfully respond to a TWO request, NYSERDA will specify the components of the TWO that are considered fixed versus those areas where NYSERDA is seeking innovative ideas, input, and/or modifications to the proposed approach.

Fully developed TWO requests issued by NYSERDA may include components such as a detailed work scope, a description of the deliverables required, schedule and budget. Typically, these TWOs will be implemented according to these components as described in the TWO requests.

In other cases, TWO requests shall include a description of NYSERDA's research needs or questions but will require a response from the qualified contractor(s) on the specific methods, deliverables, schedule and budget to implement the work. Contractor responses to these types of TWO requests may include, but not be limited to:

- Goals and objectives of the project
- Approach that will be taken outlined by tasks
- Identification of measures and ability to track project success
- Any relevant background information
- Defined deliverables
- Communication plan to facilitate information sharing with NYSERDA (e.g., weekly meetings, status reports, etc.).
- Project schedule
- Names and titles of individuals to work on the project
- A detailed inventory of the measurement tools and equipment to be deployed*
- Total not-to-exceed cost of the project, including a breakout by task and by title, hourly rate, hours, and non-labor costs

*Note: NYSERDA will not reimburse the purchase or rental of measurement tools and equipment.

The details of these TWO responses will be consistent with the level of complexity of the proposed project or activity and determined in consultation with NYSERDA. As noted above, NYSERDA will specify the components of a TWO that require detailed contractor input and ideas as opposed to those components that are more prescriptive. When needed, consultants will be permitted to partner with other qualified consultants when preparing proposals in response to a TWO. The names of qualified firms comprising each Market Research and Evaluation Support area pool will be shared to facilitate teaming arrangements. Note Task Work Orders may include planning, data collection, analysis and reporting tasks. NYSERDA will not reimburse consultants for the cost of preparing TWO proposals.

In all cases, hourly rates to implement any TWO shall be consistent with those in the general Umbrella Agreement. NYSERDA must review and approve all Task Work Orders before project implementation.

Any work that is estimated to cost \$50,000 or greater will require a mini-bid. Mini-bid requests will be issued to all qualified contractors in a specified Market Research and Evaluation Support Area. These requests will likely include a description of research questions/needs and require a detailed response on the approach by the qualified contractors. Mini-bids will be reviewed by NYSERDA and a contractor will be selected to implement the TWO. If, following proposal review, but before implementing the project, the selected contractor is unable to implement the work due to workload, expertise or other similar factor, NYSERDA may select the next-ranked consultant to implement the work or may resolicit the work.

Upon the conclusion of each TWO, NYSERDA will provide feedback to the contractor on performance related to the following metrics:

- Timeliness, adherence to schedule and final project deadlines
- Deliverable quality
- Budget adherence, or advance notification by contractor to NYSERDA of potential budget variances including reasons and proposed alternatives
- Engagement/responsiveness by the contractor to NYSERDA and its partners
- Meeting goals and objectives of the TWO

Contractor Responsibility

Upon selection through this RFQL and upon agreement and approval of any Task Work Orders, qualified contractors shall be responsible for the following:

- Demonstrating value-added, timely completion of TWOs that align with the requirements and qualifications described in the **Services Requested and Qualifications** section of this RFQL
- Providing titles and rates according to the Umbrella Agreement for each mini-bid submission
- Keeping NYSERDA informed regularly on the progress of the evaluation effort, including meeting with NYSERDA staff on a periodic basis, as needed
- Submitting deliverables to NYSERDA for review and approval in accordance with the timeline outlined in the TWO
- Providing required documentation of expenditures by task when seeking reimbursement from NYSERDA and ensuring NYSERDA is fully aware of any budget implications not anticipated at the onset of the work
- Ensuring the evaluation effort is based on the following principles:
 - Objectivity, fairness, and balance in terms of the types of data collected; only those data deemed necessary for evaluation purposes shall be collected and summarized in reports
 - Sound methodology, credible data and analysis, and adherence to the highest professional standards

Depending on the scope and nature of the work included in any one Task Work Order, background checks may be required to be performed by Contractors on members of a selected Contractor team prior to undertaking the work, particularly regarding access to certain utility customer data,

NYSERDA's Responsibility

Designated NYSERDA project managers will be responsible for overseeing and managing TWOs undertaken by qualified contractors, including but not limited to reviewing, commenting and approving tasks and subsequent deliverables; coordinating with program staff and interested external stakeholders; promoting coordination among contractors qualified for each evaluation area, as appropriate; assisting in the presentation and dissemination of findings; reviewing and approving invoices promptly; and providing timely feedback to contractor on performance following the conclusion of each TWO.

III.Proposal Requirements

Proposal Format

Please note that a **separate proposal** must be prepared and submitted for each Market Research and Evaluation Support Area that a contractor would like to be considered for, however, where team members overlap across areas, the same rates should apply regardless of Market Research and Evaluation Support Area. Thus, the documents noted below must be submitted as separate proposals for each proposed Market Research and Evaluation Support Area.

Proposals should not be excessively long or submitted in an elaborate format that includes expensive binders or graphics. Unnecessary attachments beyond those sufficient to present a complete, comprehensive, and effective response will not influence the evaluation of the proposal. Each page of the proposal should state the name of the proposer, RFQL 4162, and the page number. Proposals may be either single- or double-sided, but a page is considered one side of an 8-1/2" x 11" piece of paper. The font size shall not be smaller than 11 point. Each proposal shall contain, at a minimum, the components listed below.

1. Cover Letter (1 page)

Proposers shall submit a cover letter on company letterhead that:

- References RFQL 4162
- Specifies the specific Market Research and Evaluation Support Area where services are being offered
- Summarizes the proposer's ability to perform such services
- Is signed by a person with authority to enter into a contract with NYSERDA

2. Table of Contents (1 page)

Proposers should present a comprehensive table of contents that outlines the page number and section where the Market Research and Evaluation Support Area proposal components can be found. Proposals will be evaluated independently for each Market Research and Evaluation Support Area where services are being offered.

Proposals for each Market Research and Evaluation Support Area must include the items listed below, **regardless** of whether they have been presented in another proposal:

- Overall experience and capabilities
- Cost Proposal Project Personnel and Rates Form
- Relevant Attachments

3. Overall Experience and Capabilities (2-4 pages)

For each proposed Market Research and Evaluation Support Area, proposers must describe their expertise and ability to deliver services across the various skill sets applicable to each Market Research and Evaluation Support Area. This should include the aggregate number of years working in this area and a summary of at least one and no more than three relevant projects. Selected projects should refer to the specific qualifications described for each Market Research and Evaluation Support Area as described above and demonstrate and the firm's capability to incorporate innovative methods to solve problems; identify challenges in data collection and methods used to mitigate those challenges while maintaining the integrity and credibility of the data; describe how the firm was a key contributor to the study; and describe how the firm was able to triangulate and analyze data to inform decision making.

These summaries must also include the cost of the study and description of the deliverables, along with access to the final study (weblink preferred). These summaries should be no more than one page in length for each selected project. Proposers must include references for each of the projects. Firms with NYSERDA experience must identify a NYSERDA staff reference for those projects.

Energy industry experience is not a requirement of this solicitation, and methodologies developed in other industries (e.g., health, finance) may be included within proposals. Furthermore, proposers do not necessarily need to be experienced in every skill set identified in each research area.

Proposers should ensure the summaries prepared in this section represent the widest range of services the firm is offering for each of the proposed Evaluation Services and Support Areas.

4. Personnel Qualifications (1-3 pages; résumés may be placed in an appendix and are not included in this page limit)

For each proposed Market Research and Evaluation Support Area, proposers must identify key project personnel and relevant qualifications. Proposers must describe the accomplishments, experiences, and expertise of the individuals comprising the proposal. Proposers must identify the project manager within their firm who will serve as the single point of contact as well as all personnel that may be involved with providing services under this RFQL and their roles.

Proposers must include one-page résumés that highlight recent experiences of all individuals who will be directly involved in providing services. These may be compiled in an appendix to the proposal.

Information described within proposals should align and support the skills indicated in the Overall Experience and Capabilities section.

5. Cost Proposal – Project Personnel and Rate Form (1 page)

For each proposed Market Research and Evaluation Support Area, proposers must provide a Project Personnel and Rates form (Attachment A) and submit the name, title, and fully-burdened hourly salary range for each individual in the proposal who will perform the work in the **Services Requested and Qualifications** section under an agreement with NYSERDA. **Note: Any escalation rates must be identified for the full five-year contract term.**

NYSERDA is not requiring proposers to estimate travel or other direct costs as part of proposals, but reasonable costs for these may be part of TWOs on an as needed basis. NYSERDA will not reimburse the purchase or rental of measurement tools and equipment nor costs to respond to TWO requests.

6. Required Attachments

Proposals must include the following:

• Attachment A – Project Personnel and Rates form

7. Submittal

In compliance with §139-j and §139-k of the State Finance Law (see Section V, General Conditions below for additional information), proposers will be required to answer questions during proposal submission, which will include making required certification under the State Finance Law and to disclose any Prior Findings of Non-Responsibility.

IV.Proposal Evaluation

Proposals that meet solicitation requirements will be reviewed by a Scoring Committee using the Evaluation Criteria below **listed in order of importance.** At NYSERDA's discretion, proposers may be requested to interview with all or part of the Scoring Committee to address any potential questions or clarifications outlined in the proposals. Proposers will be notified if they are requested to attend an interview.

1. Responsiveness to the RFQL

- Overall responsiveness to NYSERDA's request as specified in this RFQL
- Ability to satisfactorily accommodate quick cycle assignments to advance NYSERDA's testmeasure-adjust approach

2. Relevant Experience and Qualifications

- a. Qualifications, experience and expertise of key personnel in relevant Market Research and Evaluation Support Area
- b. Clear description of selected project summaries
- c. Clear indication of key proposer qualifications as they relate to each Market Research and Evaluation Support Area

3. Cost

a. Reasonableness and relative competitiveness of fully-burdened labor rates and escalation rates

4. References and Other Items

- a. Information provided by references
- **b.** Other personnel, programmatic and management factors deemed appropriate by NYSERDA
- c. Is the proposal well-organized, well-written, and complete?

A separate Scoring Committee meeting will be held for each Market Research and Evaluation Support Area. At NYSERDA's discretion, proposers may be requested to interview with all or part of the Scoring Committee to

address any potential questions or clarifications outlined in the proposals. Proposers will be notified if they are requested to attend an interview.

NYSERDA anticipates qualifying multiple proposers for each Market Research and Evaluation Support Area. The number of qualified contractors cannot be determined until all proposals are received and reviewed.

<u>Conflicts</u>: The firm and any personnel of the firm must be free from any financial or similar interest in any product or service which may conflict with or appear to conflict with the objectivity of the services provided to NYSERDA. Please describe all of your product, manufacturer or service-related affiliations. If any affiliations exist, you must provide a statement verifying that these affiliations do not conflict with or appear to conflict with the objectivity of a statement verifying that these affiliations. Non-disclosure of any affiliation can result in the termination of a contract, if awarded.

Qualified contractors shall not be precluded from bidding on the other evaluation areas described within this RFQL or on future evaluation solicitations. However, qualified contractors should describe within their proposals how conflicts of interest, both actual and perceived, will be resolved should qualified contractors choose to bid on other evaluation areas or on future evaluation solicitations.

V.GENERAL CONDITIONS

Proprietary Information - Careful consideration should be given before confidential information is submitted to NYSERDA as part of your proposal. Review should include whether it is critical for evaluating a proposal, and whether general, non-confidential information, may be adequate for review purposes. The NYS Freedom of Information Law, Public Officers law, Article 6, provides for public access to information NYSERDA possesses. Public Officers Law, Section 87(2)(d) provides for exceptions to disclosure for records or portions thereof that "are trade secrets or are submitted to an agency by a commercial enterprise or derived from information obtained from a commercial enterprise." Information submitted to NYSERDA that the proposer wishes to have treated as proprietary, and confidential trade secret information, should be identified and labeled "Confidential" or "Proprietary" on each page at the time of disclosure. This information should include a written request to except it from disclosure, including a written statement of the reasons why the information should be excepted. See Public Officers Law, Section 89(5) and the procedures set forth in 21 NYCRR Part 501 https://www.nyserda.ny.gov/About/-//media/Files/About/Contact/NYSERDA-Regulations.ashx. However, NYSERDA cannot guarantee the confidentiality of any information submitted.

Omnibus Procurement Act of 1992 - It is the policy of New York State to maximize opportunities for the participation of New York State business enterprises, including minority- and women-owned business enterprises, as bidders, subcontractors, and suppliers on its procurement Agreements.

Information on the availability of New York subcontractors and suppliers is available from:

Empire State Development Division for Small Business 625 Broadway Albany, NY 12207

A directory of certified minority- and women-owned business enterprises is available from:

Empire State Development Minority and Women's Business Development Division 625 Broadway Albany, NY 12207

State Finance Law sections 139-j and 139-k - NYSERDA is required to comply with State Finance Law sections 139-j and 139-k. These provisions contain procurement lobbying requirements which can be found at

<u>https://online.ogs.ny.gov/legal/lobbyinglawfaq/default.aspx</u>. Proposers are required to answer questions during proposal submission, which will include making required certification under the State Finance Law and to disclose any Prior Findings of Non-Responsibility (this includes a disclosure statement regarding whether the proposer has been found non-responsible under section 139-j of the State Finance Law within the previous four years).

Tax Law Section 5-a - NYSERDA is required to comply with the provisions of Tax Law Section 5-a, which requires a prospective contractor, prior to entering an agreement with NYSERDA having a value in excess of \$100,000, to certify to the Department of Taxation and Finance (the "Department") whether the contractor, its affiliates, its subcontractors and the affiliates of its subcontractors have registered with the Department to collect New York State and local sales and compensating use taxes. The Department has created a form to allow a prospective contractor to readily make such certification. See, ST-220-TD (available at http://www.tax.ny.gov/pdf/current_forms/st/st220td_fill_in.pdf). Prior to contracting with NYSERDA, the prospective contractor must also certify to NYSERDA whether it has filed such certification with the Department. The Department has created a second form that must be completed by a prospective contractor prior to contacting and filed with NYSERDA. See, ST-220-CA (available at http://www.tax.ny.gov/pdf/current_forms/st/st220td_fill_in.pdf). The Department has created a second form that must be completed by a prospective contractor prior to contacting and filed with NYSERDA. See, ST-220-CA (available at http://www.tax.ny.gov/pdf/current_forms/st/st220ca_fill_in.pdf). The Department has developed guidance for

<u>http://www.tax.ny.gov/pdf/current_forms/st/st220ca_fill_in.pdf</u>). The Department has developed guidance for contractors which is available at <u>http://www.tax.ny.gov/pdf/publications/sales/pub223.pdf</u>.

Contract Award - NYSERDA anticipates making multiple awards under this solicitation. NYSERDA anticipates a contract duration of up to five years, unless NYSERDA management determines a different structure is more efficient based upon proposals received. A contract may be awarded based on initial applications without discussion, or following limited discussion or negotiations pertaining to the Statement of Work. Each proposal should be submitted using the most favorable cost and technical terms. NYSERDA may request additional data or material to support applications. NYSERDA will use the Sample Agreement to contract successful proposals. NYSERDA may at its discretion elect to extend and/or add funds to any project funded through this solicitation. NYSERDA reserves the right to limit any negotiations to exceptions to standard terms and conditions in the Sample Agreement to those specifically identified in the checklist questions. Proposers should keep in mind that acceptance of all standard terms and conditions will generally result in a more expedited contracting process. NYSERDA expects to notify proposers in approximately 8 weeks from the proposal due date whether your proposal has been selected to receive an award. NYSERDA may decline to contract with awardees that are delinquent with respect to any obligation under any previous or active NYSERDA agreement.

Accessibility Requirements - If awardees from this solicitation will be posting anything on the web, or if the awardee will produce a final report that NYSERDA will post to the web, the following language must be included. NYSERDA requires contractors producing content intended to be posted to the Web to adhere to New York State's Accessibility Policy. This includes, but is not limited to, deliverables such as: documents (PDF, Microsoft Word, Microsoft Excel, etc.), audio (.mp3, .wav, etc.), video (.mp4, .mpg, .avi, etc.), graphics (.jpg, .png, etc.), web pages (.html, .aspx, etc.), and other multimedia and streaming media content. For more information, see <u>NYSERDA's Accessibility Requirements</u>.

Limitation - This solicitation does not commit NYSERDA to award a contract, pay any costs incurred in preparing a proposal, or to procure or contract for services or supplies. NYSERDA reserves the right to accept or reject any or all proposals received, to negotiate with all qualified sources, or to cancel in part or in its entirety the solicitation when it is in NYSERDA's best interest. NYSERDA reserves the right to reject proposals based on the nature and number of any exceptions taken to the standard terms and conditions of the Sample Agreement. NYSERDA reserves the right to disqualify proposers based upon the results of a background check into publicly available information and the presence of a material possibility of any reputational or legal risk in making of the award.

Disclosure Requirement - The proposer shall disclose any indictment for any alleged felony, or any conviction for a felony within the past five years, under the laws of the United States or any state or territory of the United States and shall describe circumstances for each. When a proposer is an association, partnership, corporation, or other organization, this disclosure requirement includes the organization and its officers, partners, and directors or members of any similarly governing body. If an indictment or conviction should come to the attention of NYSERDA after the award of a contract, NYSERDA may exercise its stop-work right pending further investigation or terminate the agreement; the contractor may be subject to penalties for violation of any law which may apply in the particular circumstances. Proposers must also disclose if they have ever been debarred or suspended by any agency of the U.S. Government or the New York State Department of Labor.

Vendor Assurance of No Conflict of Interest or Detrimental Effect - The proposer shall disclose any existing or contemplated relationship with any other person or entity, including any known relationships with any member, shareholders of 5% or more, parent, subsidiary, or affiliated firm, which would constitute an actual or potential conflict of interest or appearance of impropriety, relating to other clients/customers of the proposer or former officers and employees of NYSERDA, in connection with proposer's rendering services as proposed. If a conflict does or might exist, please describe how your company would eliminate or prevent it. Indicate what procedures will be followed to detect, notify NYSERDA of, and resolve any such conflicts.

The proposer must disclose whether it, or any of its members, or, to the best of its knowledge, shareholders of 5% or more, parents, affiliates, or subsidiaries, have been the subject of any investigation or disciplinary action by the New York State Commission on Public Integrity or its predecessor State entities (collectively, "Commission"), and if so, a brief description must be included indicating how any matter before the Commission was resolved or whether it remains unresolved.

Public Officers Law – For any resulting awards, the Contractor and its subcontractors shall not engage any person who is, or has been at any time, in the employ of the State to perform services in violation of the provisions of the New York Public Officers Law, other laws applicable to the service of State employees, and the rules, regulations, opinions, guidelines or policies promulgated or issued by the New York State Joint Commission on Public Ethics, or its predecessors (collectively, the "Ethics Requirements"). Proposers are reminded of the following Public Officers Law provision: contractors, consultants, vendors, and subcontractors may hire former NYSERDA employees. However, as a general rule and in accordance with New York Public Officers Law, former employees of NYSERDA may neither appear nor practice before NYSERDA, nor receive compensation for services rendered on a matter before NYSERDA, for a period of two years following their separation from NYSERDA service. In addition, former NYSERDA employees are subject to a "lifetime bar" from appearing before any state agency or authority or receiving compensation for services regarding any transaction in which they personally participated, or which was under their active consideration during their tenure with NYSERDA.

Any awardee will be required to certify that all of its employees, as well as employees of any subcontractor, whose subcontract is valued at \$100,000 or more who are former employees of the State and who are assigned to perform services under the resulting contract, shall be assigned in accordance with all Ethics Requirements. During the term of any agreement, no person who is employed by the contractor or its subcontractors and who is disqualified from providing services under the contract pursuant to any Ethics Requirements may share in any net revenues of the contractor or its subcontractors derived from the contract. NYSERDA may request that contractors provide it with whatever information the State deems appropriate about each such person's engagement, work cooperatively with the State to solicit advice from the New York State Joint Commission on Public Ethics, and, if deemed appropriate by the State, instruct any such person to seek the opinion of the New York State Joint Commission on Public Ethics. NYSERDA shall have the right to withdraw or withhold approval of any subcontractor if utilizing such subcontractor for any work performed would be in conflict with any of the Ethics Requirements. NYSERDA shall have the right to terminate any contract at any time if any work performed is in conflict with any of the Ethics Requirements.

VI.Attachments:

Attachment A – Project Personnel and Rates form Attachment B – Sample Agreement including Exhibit A - template statement of work Attachment C – Indirect Benefits Evaluation Framework

19

NYSERDA

Public Authority Law Report

April 1, 2019 to September 30, 2019

Section Break

Projects Selected for Funding by Region Period 4/1/2019 through 9/30/2019

REDC Region	County	Electric Utility	Total Funded Amount
Capital Region	Albany	Central Hudson Gas and Electric	35,736
		National Grid	11,371,669
	Columbia	Central Hudson Gas and Electric	6,480
		National Grid	2,858,206
		NYS Electric and Gas	334,824
	Greene	Central Hudson Gas and Electric	752,347
	Rensselaer	National Grid	1,904,203
		NYS Electric and Gas	8,750
	Saratoga	National Grid	3,860,817
		NYS Electric and Gas	2,540,733
	Schenectady	National Grid	4,955,142
	Warren	National Grid	142,559
	Washington	National Grid	30,344
	Total		28,801,811
Central New York	Cayuga	NYS Electric and Gas	375,174
		Rochester Gas and Electric	12,259
	Cortland	National Grid	58,716
		NYS Electric and Gas	4,502,500
	Madison	National Grid	17,913,187
		NYS Electric and Gas	173,122
	Onondaga	National Grid	820,707
		NYS Electric and Gas	23,632
	Oswego	National Grid	3,910,334
	Total		27,789,632
Finger Lakes	Genesee	National Grid	1,944,148
	Livingston	National Grid	2,497,73
		NYS Electric and Gas	8,538
	Monroe	Municipal Utilities	50,000
		National Grid	2,830,249
		Rochester Gas and Electric	3,651,804
	Ontario	National Grid	5,313
		NYS Electric and Gas	1,204,447
		Rochester Gas and Electric	527,442
	Orleans	National Grid	165,778
	Seneca	NYS Electric and Gas	522,166
	Wayne	NYS Electric and Gas	27,491
		Rochester Gas and Electric	986,440
	Wyoming	National Grid	6,748
		NYS Electric and Gas	90,519
	Yates	NYS Electric and Gas	25,097
	Total		14,543,914
Long Island	Nassau	Long Island Power Authority	267,228
	Suffolk	Long Island Power Authority	1,411,049
	Total	, , , , , , , , , , , , , , , , , , ,	1,678,277

Projects Selected for Funding by Region Period 4/1/2019 through 9/30/2019

REDC Region	County	Electric Utility	Total Funded Amount
Mid-Hudson	Dutchess	Central Hudson Gas and Electric	3,825,136
		NYS Electric and Gas	1,348,628
	Orange	Central Hudson Gas and Electric	22,487
		Orange and Rockland Utilities	10,170,531
	Putnam	Central Hudson Gas and Electric	28,678
		NYS Electric and Gas	184,461
	Rockland	Orange and Rockland Utilities	536,610
	Sullivan	NYS Electric and Gas	6,496,411
		Orange and Rockland Utilities	23,224
	Ulster	Central Hudson Gas and Electric	2,371,763
		NYS Electric and Gas	8,750
	Westchester	Consolidated Edison	12,827,300
		NYS Electric and Gas	423,735
	Total		38,267,713
Mohawk Valley	Fulton	National Grid	5,258,403
	Herkimer	National Grid	653,689
		NYS Electric and Gas	56,048
	Montgomery	National Grid	1,007,265
	Oneida	National Grid	360,227
		NYS Electric and Gas	12,042
	Otsego	National Grid	5,317
		NYS Electric and Gas	302,627
	Schoharie	National Grid	7,616
		NYS Electric and Gas	5,040
	Total		7,668,274
New York City	Bronx	Consolidated Edison	5,498,791
	Kings	Consolidated Edison	8,954,966
	New York	Null	124,462
		Consolidated Edison	31,160,399
	Queens	Consolidated Edison	6,701,281
	Richmond	Consolidated Edison	7,390,323
	Total		59,830,221
North Country	Clinton	Municipal Utilities	50,044
		National Grid	55,120
		NYS Electric and Gas	2,403,953
	Essex	National Grid	212,916
		NYS Electric and Gas	13,444
	Franklin	National Grid	355,910
	Jefferson	National Grid	15,594,333
	Lewis	National Grid	3,865,242
	St. Lawrence	Municipal Utilities	510,000
		National Grid	403,460
	Total		23,464,422
Southern Tier	Broome	NYS Electric and Gas	89,171

Projects Selected for Funding by Region Period 4/1/2019 through 9/30/2019

REDC Region	County	Electric Utility	Total Funded Amount
Southern Tier	Chemung	NYS Electric and Gas	1,714,570
	Chenango	NYS Electric and Gas	3,679,227
	Delaware	NYS Electric and Gas	174,502
	Schuyler	NYS Electric and Gas	71,779
	Steuben	NYS Electric and Gas	214,548
	Tioga	NYS Electric and Gas	7,191,077
	Tompkins	NYS Electric and Gas	9,012,451
	Total		22,147,325
Statewide	STATEWIDE	Statewide	368,054,027
	Total		368,054,027
Western New York	Allegany	Rochester Gas and Electric	172,735
	Cattaraugus	Municipal Utilities	100,000
		National Grid	16,822,454
	Chautauqua	National Grid	71,874
		NYS Electric and Gas	12,000
	Erie	National Grid	3,032,512
		NYS Electric and Gas	231,212
	Niagara	National Grid	5,210,437
	Total		25,653,225
Grand Total			617,898,839

NYSERDA

Public Authority Law Report

April 1, 2019 to September 30, 2019

Section Break

REDC Regi	on Contractor	County	Electric Utility	Contract Description	Total Funded Amount
Capital	22nd Century Technologies, I	Albany	National Grid	NYSERDA ADMINISTRATION, Staff Augmentati	191,100
Region	ABH Capital Management, LLC	Albany	National Grid	VDI Server	7,607
				Virtual Server 2	7,327
	Adam C. Boese	Warren	National Grid	Technical Services, RFP3628FlexTechConsultU	2,520
	Albany Housing Authority	Albany	National Grid	Multifam New Construction, New Construction	56,800
	Albany Solar Solutions L.L.C.	Albany	Central Hudson Gas a.	. <200KW PV, PON 2112 NY SUN	8,750
		Saratoga	National Grid	<200KW PV, PON 2112 NY SUN	5,688
		Warren	National Grid	<200KW PV, PON 2112 NY SUN	8,680
	AlienVault, Inc.	Albany	National Grid	NYSERDA ADMINISTRATION, Alien Vault Licen	12,209
	Allegis Group Holdings Inc	Albany	National Grid	Campus/Technical Assistance, Staff Augmentatio.	. 24,444
				Community RH&C, Staff Augmentation Services	73,333
				Consumer Ed and Market Support, SA.054_TWO.	. 129,925
				ENERGY ANALYSIS, Staff Augmentation Servic	86,466
				NEW YORK GREEN BANK, Staff Augmentation	27,446
				Pay for Performance, SA.055_TWO #10 - P4P PM	352,972
				Real Time Enrgy Management, SA.043a - RTEM	256,080
				Renewable Heat NY, Staff Augmentation Services	65,185
				SA.050_TWO #8 - DER Coordinato	186,643
	Allen Power, Inc.	Albany	National Grid	<200KW PV, PON 2112 NY SUN	84,026
	American Energy Care, Inc.	Columbia	National Grid	<200KW PV, PON 2112 NY SUN	5,751
	Anonoun Enorgy ouro, mo.	Warren	National Grid	<200KW PV, NY-Sun	5,808
		Washington	National Grid	<200KW PV, NY-Sun	6,102
	Apex Solar Power LLC	Rensselaer	National Grid	<200KW PV, PON 2112 NY SUN	6,480
	Apex Solar Power LLC	Schenectady	National Grid	<200KW PV, PON 2112 NY SUN	5,250
		Warren	National Grid		14,040
				<200KW PV, PON 2112 NY SUN	
		Washington	National Grid	<200KW PV, PON 2112 NY SUN	5,040
	APPEXTREMES, LLC	Albany	National Grid	NYSERDA ADMINISTRATION, Conga Compose	
	Arcadia Chair Company	Albany	National Grid	Office Furniture	5,281
	Arcadis of New York, Inc.	Rensselaer	National Grid	Technical Services, AEAP	5,978
	Ballston Spa Central School	Saratoga	National Grid	Technical Services, OSEM27-C - Ballston Spa C	
	Barbera Homes and Develop	Saratoga	National Grid	Low Rise New Construction, 2019 LRNCP	20,900
	Belmonte Builders	Saratoga	National Grid	Low Rise New Construction, 2019 LRNCP	5,700
			NYS Electric and Gas	Low Rise New Construction, 2019 LRNCP	9,500
	Bishop House Consulting, Inc.	Albany	National Grid	NYSERDA ADMINISTRATION, Human Resourc	32,000
	Bond, Schoeneck & King, PLLC	Albany	National Grid	NYSERDA ADMINISTRATION, RFP 3300 Outsid.	. 203
	FLLC			OTHER PROGRAM AREA, RFP 3300 Outside C	5,073
	Borrego Solar Systems, Inc.	Rensselaer	National Grid	>200KW PV, NY Sun	925,043
		Saratoga	National Grid	>200KW PV, NY Sun	1,446,432
	Buzzard's Ridge Group LLC	Rensselaer	NYS Electric and Gas	<200KW PV, PON 2112 NY SUN	8,750
	C.T. Male Associates Enginee	Saratoga	National Grid	SARATOGA TECHNOLOGY & ENERGY PARK, .	. 13,500
	Carahsoft Technology Corpor	Albany	National Grid	NYSERDA ADMINISTRATION, Salesforce Journ	30,896
	Carter Ledyard & Milburn LLP	Albany	National Grid	NYSERDA ADMINISTRATION, Counsel's Office	10,000
	Center for Internet Security Inc	Albany	National Grid	NYSERDA ADMINISTRATION, CIS Albert SM M	7,440
	CHA Consulting Inc.	Albany	National Grid	Commercial Real Estate Ten, SA.051_TWO #6	61,343
				EXISTING FACILITIES, SA.051_TWO #6_EP&E .	. 106,281
				K-12 SCHOOLS, SA.051_TWO #6_EP&E APM	77,033
				REV Campus Challenge, SA.051_TWO #6_EP&	61,615
				Technical Services, SA.051_TWO #6_EP&E APM	
		Schenectady	National Grid	Flexible Tech Assistance, FT12261 - Union Coll	222,450
	CLEAResult Consulting, Inc.	Albany	National Grid	EXISTING FACILITIES, Centralized Services & S.	
	Concur Technologies, Inc.	Albany	National Grid	NYSERDA ADMINISTRATION, 2018-2020 Conc	
	Crown Castle Fiber LLC		National Grid		35,280
	Grown Gastle I IDEI LLG	Albany		NYSERDA ADMINISTRATION, Dark Fiber 15 C	55,280

oital	Crown Castle Fiber LLC	County Albany	Electric Utility National Grid	Contract Description NYSERDA ADMINISTRATION, Primary Internet	Total Funded Amount 146,952
jion	Darling Advertising Agency Inc.		National Grid	NYSERDA ADMINISTRATION, Marketing Suppo.	
	Datto Inc	Rensselaer	National Grid	Industrial Process Effic, Industrial Process Efficie	
	Dell, Inc.	Albany	National Grid	NYSERDA ADMINISTRATION, Dell Desktops - 1.	
	Bon, mo.	, abouty		NYSERDA ADMINISTRATION, DELL-Laptops a	9,288
				NYSERDA ADMINISTRATION, Laptops and Doc.	
	Direct Packet Inc.	Albany	National Grid	NYSERDA ADMINISTRATION, Video Endpoint f	
	Direct r doket inc.	/ liberry		NYSERDA ADMINISTRATION, Video Service R.	26,769
	Eiger 3970 Consultants Inc.	Columbia	Central Hudson Gas a	. <200KW PV, NY-Sun	6,480
	Eiger 6676 Consultants inc.	Greene	Central Hudson Gas	<200KW PV, NY-Sun	337,329
		Oreene	and Electric	NY-SUN, NY-Sun	224,886
	ELP Greenport Solar LLC	Columbia	National Grid	>200KW PV, NY Sun	1,336,000
	ELP Kinderhook Solar LLC	Columbia	National Grid	>200KW PV, NY Sun	1,497,600
			National Grid		
	EME Consulting Engineering Group, LLC	Albany	National Gliu	Commercial Real Estate Ten, SA.052_TWO#9_E.	
				EXISTING FACILITIES, SA.052_TWO#9_EP&E	
				K-12 SCHOOLS, SA.052_TWO#9_EP&E PM	90,088
				REV Campus Challenge, SA.036c_TWO#8_EP&	
				REV Campus Challenge, SA.052_TWO#9_EP&E.	
				Technical Services, SA.036c_TWO#8_EP&E PM	198,425
				Technical Services, SA.052_TWO#9_EP&E PM	58,465
	Employee Leasing of Greater NY	Albany	National Grid	NYSERDA ADMINISTRATION, Temp Employee	
	141			NYSERDA ADMINISTRATION, Temp TWO	33,000
				NYSERDA ADMINISTRATION, TS.006 - Facilitie	49,335
	Energy & Resource Solutions,	Rensselaer	National Grid	Industrial Process Effic, IPE16226	5,000
	Enlighten Solar Inc	Rensselaer	National Grid	>200KW PV, NY-Sun C&I	10,438
	Environment & Energy Publis	Albany	National Grid	NYSERDA ADMINISTRATION, Counsel's Office	13,195
	ESRI, Incorporated	Albany	National Grid	NYSERDA ADMINISTRATION, ArcGIS Desktop	22,200
	First Columbia Property	Albany	National Grid	NYSERDA ADMINISTRATION, Property Manage.	. 265,372
	Services, LLC			Property Management	25,000
	Fusco Personnel, Inc.	Albany	National Grid	NYSERDA ADMINISTRATION, Temp Services	189,810
				NYSERDA ADMINISTRATION, Temporary Servi	9,461
				NYSERDA ADMINISTRATION, TS.002_Multifam.	31,325
				REC:CES REC System Dev Costs, TS.007 - LS	107,671
	GCOM Software LLC	Albany	National Grid	NYSERDA ADMINISTRATION, Salesforce	1,200,000
	General Electric Co. Gobal Re	Schenectady	National Grid	On-Site Energy Manager, OsEM23- GE Global R	214,000
	General Electric International	Schenectady	National Grid	>200KW PV, NY Sun	919,360
	Inc			Solar Plus Energy Storage, NY Sun	3,500,000
	Habitat for Humanity (Capital	Albany	National Grid	Low Rise New Construction, 2019 LRNCP	6,800
	Harris Beach PLLC	Albany	National Grid	GJGNY REVOLVING LOAN FUND, RFP 3300 O	10,000
	Harris Wiltshire & Grannis LLP	Albany	National Grid	NYSERDA ADMINISTRATION, Green Economy	75,000
	Heritage Village Apartments,	Albany	National Grid	Multifam Performance Pgm, Multifamily	313,600
	Hewlett-Packard Enterprise C	Albany	National Grid	NYSERDA ADMINISTRATION, HP Server Maint	5,319
	High Peaks Solar	Albany	National Grid	<200KW PV, PON 2112 NY SUN	8,750
		Saratoga	National Grid	<200KW PV, PON 2112 NY SUN	11,592
	Hodgson Russ LLP	Albany	National Grid	Home Perf w Energy Star, RFP 3300 & RFP 377	20,000
	Holland & Knight LLP	Albany	National Grid	NYSERDA ADMINISTRATION, Nuclear Facility	272
	Hudson River Renewables	Saratoga	National Grid	<200KW PV, PON 2112 NY SUN	5,040
	Hudson Valley Clean Energy	Rensselaer	National Grid	<200KW PV, PON 2112 NY SUN	5,272
	Inc.	Warren	National Grid	<200KW PV, PON 2112 NY SUN	22,680
	Hudson Valley Wind Energy,	Columbia	National Grid	<200KW PV, PON 2112 NY SUN	5,733
	IHS Global Inc.	Albany	National Grid	ENERGY ANALYSIS, PointLogic Gas Service Su.	
		, abdiry		LITE OF ANAL FOR, FOR LOUGO CAS DEFNICE OU.	. 5,000

REDC Region		County	Electric Utility	Contract Description	Total Funded Amount
Capital Region	Incorporated village of Philmont	Columbia	NYS Electric and Gas	Clean Energy Communities, CEC400097 - Villag	5,000
Region	Industrial Economics, Incorpor	Albany	National Grid	NYSERDA ADMINISTRATION, Research of Indi	26,400
	Interface Performance Material	Rensselaer	National Grid	Industrial Process Effic, Industrial Process Efficie	26,836
	Ithaca Neighborhood Housing	Saratoga	NYS Electric and Gas	Low Rise New Construction, 2019 LRNCP	165,200
	Kasselman Solar LLC	Albany	Central Hudson Gas a	<200KW PV, PON 2112 NY SUN	26,986
			National Grid	<200KW PV, NY-Sun	5,511
				<200KW PV, PON 2112 NY SUN	51,667
		Greene	Central Hudson Gas	<200KW PV, NY-Sun	6,060
		and Electric <20	<200KW PV, PON 2112 NY SUN	10,192	
		Rensselaer	National Grid	<200KW PV, PON 2112 NY SUN	11,254
		Saratoga	National Grid	<200KW PV, NY-Sun	5,360
				<200KW PV, PON 2112 NY SUN	28,384
		Schenectady	National Grid	<200KW PV, PON 2112 NY SUN	88,292
	KPMG LLP	Albany	National Grid	NEW YORK GREEN BANK, Audit Services	14,960
	L&S Energy Services, Inc.	Rensselaer	National Grid	Commercial New Construc, RFP3771 Umbrella	46,455
				Industrial Process Effic, Industrial Process Efficie	9,742
		Saratoga	National Grid	Technical Services, AGG1003 - L&S Energy Ser	50,000
				Technical Services, AGG1004 - L&S Energy Ser	50,000
		Warren	National Grid	REV Campus Challenge, Tech Assistance for Ro	88,831
	LaRocque Business Manage	Rensselaer	National Grid	Electric Vehicles - Innovation, EV outreach @ ho	11,000
	Level 3 Communications, LLC	Albany	National Grid	NYSERDA ADMINISTRATION, Information Tech	215,001
	Lotus Energy, Inc.	Rensselaer	National Grid	<200KW PV, PON 2112 NY SUN	6,300
	Malta Development Company	Saratoga	NYS Electric and Gas	Low Rise New Construction, 2019 LRNCP	20,900
	Marshall & Sterling, Inc.	Albany	National Grid	NYSERDA ADMINISTRATION, Property Liability	275,000
	Messer LLC	Albany	National Grid	Industrial Process Effic, Industrial Process Effeci	206,793
	Michaels Group Homes, LLC	Albany	National Grid	Low Rise New Construction, 2019 LRNCP	18,050
	Milliman, Inc.	Albany	National Grid	NYSERDA ADMINISTRATION, GASB74 Liab G	5,000
	Monolith Solar Associates, LLC	Rensselaer	National Grid	>200KW PV, NY Sun	780,000
	MyPower Corp	Saratoga	NYS Electric and Gas	>200KW PV, NY Sun C&I	1,014,112
				>200KW PV, NY-Sun	1,331,022
١	NASEO	Albany	National Grid	Prof & Expert Engagement, Office of the Preside	15,354
	Network Craze Technologies	Albany	National Grid	Redundant Network Gear - NYC	19,740
	Network Experts of New York,	Albany	National Grid	NYSERDA ADMINISTRATION, WAN Redundan	15,720
	New York State Forum for IRM	Albany	National Grid	NYSERDA ADMINISTRATION, NYS Forum Age	5,500
	NYS Office for Technology	Albany	National Grid	NYSERDA ADMINISTRATION, O365 Data Circui.	11,232
	NYS School Facilities Associa	Albany	National Grid	K-12 SCHOOLS, P-12 Schools Initiative – Out	144,180
	Penda Aiken Inc.	Albany	National Grid	NYSERDA ADMINISTRATION, Temporary Rece	22,562
	PlugPV, LLC	Albany	National Grid	<200KW PV, NY-Sun	6,552
		Columbia	National Grid	<200KW PV, PON 2112 NY SUN	5,954
		Rensselaer	National Grid	<200KW PV, PON 2112 NY SUN	6,048
		Saratoga	National Grid	<200KW PV, PON 2112 NY SUN	6,064
		Washington	National Grid	<200KW PV, PON 2112 NY SUN	8,789
	Power Guru, LLC	Rensselaer	National Grid	<200KW PV, PON 2112 NY SUN	5,184
	Randstad North America Inc	Albany	National Grid	Cleantech ICC Engage, TS.003_TBI Coordinator	22,288
				Energy Storage Tech/Prod Dev, TS.003_TBI Coo.	22,288
				High Performing Grid, TS.003_TBI Coordinator	22,288
				NextGen HVAC, TS.003_TBI Coordinator	22,288
				NYSERDA ADMINISTRATION, TS.004 - Marketi	112,275
				Pub Transit & Elect Rail, TS.003_TBI Coordinator	22,288
	Randstad North America, Inc.	Albany	National Grid	Consumer Ed and Market Support, Payroll Servic.	3,935
				ENERGY ANALYSIS, Payroll Services	16,694
				Environmental Research, Payroll Services	13,941

-	Contractor	Albany	Electric Utility	Contract Description	Total Funded Amoun
Capital Region	Randstad North America, Inc.	Albany	National Grid	Home Perf w Energy Star, Payroll Services	10,92
Region				Multifam Performance Pgm, Payroll Services	10,92
				NYSERDA ADMINISTRATION, Payroll Services	219,89
				NYSERDA ADMINISTRATION, TS.009 - Temp	106,88
				REC:CES REC System Dev Costs, Payroll Servi	
	Ravena Coeymans Selkirk Ce	Albany	National Grid	OTHER PROGRAM AREA, RCSCSD-Lafarge se.	
	Rosenblum Property Services, LLC	Albany	National Grid	SARATOGA TECHNOLOGY & ENERGY PARK, .	,
		Saratoga	National Grid	SARATOGA TECHNOLOGY & ENERGY PARK, .	,
	Saratoga Solar LLC	Saratoga	National Grid	>200KW PV, NY Sun	1,273,688
	Seed Renewables Inc.	Albany	National Grid	<200KW PV, PON 2112 NY SUN	106
	SHI, Inc.	Albany	National Grid	NYSERDA ADMINISTRATION, Adobe Enterpris	44,512
	Sitecore USA, Inc.	Albany	National Grid	NYSERDA ADMINISTRATION, Sitecore License .	. 25,300
	Sive Paget & Riesel PC	Albany	National Grid	NYSERDA ADMINISTRATION, Counsel's Office	5,000
				NYSERDA ADMINISTRATION, FOIL related Ser	2,500
	Solar Liberty Energy Systems,	Columbia	National Grid	<200KW PV, PON 2112 NY SUN	7,168
	Inc		NYS Electric and Gas	>200KW PV, NY Sun	256,074
		Schenectady	National Grid	<200KW PV, NY-Sun	5,790
	Sun Source Technologies	Columbia	NYS Electric and Gas	<200KW PV, PON 2112 NY SUN	8,750
	Systems Management	Albany	National Grid	NYSERDA ADMINISTRATION, ManageEngine	10,419
	Planning, Inc.			NYSERDA ADMINISTRATION, NET App Flash	24,205
				NYSERDA ADMINISTRATION, NetApp Flash St	14,806
	Tech Valley Talent, LLC	Albany	National Grid	NYSERDA ADMINISTRATION, RFP3143 Umbre	665,925
				NYSERDA ADMINISTRATION, TWO Salesforce .	. 94,640
	Tecogen	Saratoga	National Grid	Combined Heat and Power, CHPA-Ballston Spa	803,086
	The Radiant Store	Saratoga	National Grid	Renewable Heat NY, Radiant Store - Eberhardt	12,000
	ThunderCat Technology LLC	Albany	National Grid	NYSERDA ADMINISTRATION, Atlassian (Jira)	
		5		NYSERDA ADMINISTRATION, Atlassian Licens	77,142
				NYSERDA ADMINISTRATION, NYC - Circuit 3 y	
	Towerstream 1 Incorporated	Albany	National Grid	NYSERDA ADMINISTRATION, Circuit for NYC	
	Town of Chatham	Columbia	NYS Electric and Gas	CEC400013 T of Chatham	30.000
		oolallista		Clean Energy Communities, CEC400013 T of Ch	,
	Town of Guilderland	Albany	National Grid	CEC400038 Town of Guilderlan	5,000
	Town of Guildenand	Abarry	National Ond	Clean Energy Communities, CEC400038 Town o	
	TRC Energy Services	Albany	National Grid	ENERGY ANALYSIS, Staff Augmentation Servic	237,003
	The Energy Services	Albally	National Gru	-	
				K-12 SCHOOLS, Staff Augmentation Services	18,977
				Multifam Performance Pgm, Staff Augmentation	789,780
	T'al Tabada a Data a U.O.	Alls a second	Notice of Octo	Real Time Enrgy Management, Staff Augmentati	
	Triad Technology Partners LLC	,	National Grid	NYSERDA ADMINISTRATION, Tableau Mainten	
	True Building Performance LLC	,	National Grid	Talent Pipeline:CE and OJT, OJT HIRE	16,640
	TVC Albany Inc.	Albany	National Grid	NYSERDA ADMINISTRATION, FirstLight - Redu.	
	Unique Comp Inc.	Albany	National Grid	NYSERDA ADMINISTRATION, RFP3143 Umbre	,
				NYSERDA ADMINISTRATION, TWO Salesforce .	,
	Vermont Energy Investment C	,	National Grid	Industrial Process Effic, IPE16233	14,972
	Vidaris, Inc.	Albany	National Grid	Commercial New Construc, Commercial New Co	
	Vil of Coxsackie Muni Solar Pr		Central Hudson Gas a		173,880
	Wagner Farms	Rensselaer	National Grid	Anaerobic Digesters, PON 3739 CAT C	15,000
	Wendel Energy Services, LLC	Washington	National Grid	Flexible Tech Assistance, FT12217-Washington	10,413
	Willdan Energy Solutions	Albany	National Grid	Multifam Performance Pgm, Staff Augmentation	164,409
	Zones LLC	Albany	National Grid	NYSERDA ADMINISTRATION, Cisco VoIP Servi	22,127
	Total				28,801,81
Central New	Adam C. Boese	Onondaga	National Grid	Agriculture Energy Eff Pgm, RFP3628FlexTechC	2,700
York	AHA Development Corporation	Cayuga	NYS Electric and Gas	Low Rise New Construction, 2019 LRNCP	57,200

REDC Region	Contractor	County	Electric Utility	Contract Description	Total Funded Amount
Central New York	Alternative Power Solutions of	Onondaga	National Grid	<200KW PV, PON 2112 NY SUN	24,493
TOIR	NY, LLC		NYS Electric and Gas	<200KW PV, PON 2112 NY SUN	17,500
	Apex Solar Power LLC	Onondaga	National Grid	<200KW PV, PON 2112 NY SUN	8,750
	Aurora Ridge Dairy LLC	Cayuga	NYS Electric and Gas	Anaerobic Digesters, PON 3739 CAT C	15,000
	Bergmann Associates	Onondaga	National Grid	Commercial Real Estate Ten, Berg-125EJefferso.	5,000
				Commercial Real Estate Ten, Bergman-125EJeff.	5,000
				Commercial Real Estate Ten, Bergmann Associa.	5,000
				Commercial Real Estate Ten, Bergmann-125EJe.	5,000
				Commercial Real Estate Ten, Bergmann-224 Har.	. 5,000
				Commercial Real Estate Ten, Bergmann-224 Har.	. 5,000
				Commercial Real Estate Ten, Bergmann-224 Har.	. 5,000
				Commercial Real Estate Ten, Bergmann-5000 C	5,000
				Commercial Real Estate Ten, Bergmann-5000 C	5,000
	Byrne Dairy, Inc.	Onondaga	National Grid	On-Site Energy Manager, OsEM31-I - Byrne Dairy	155,821
	C.J. Brown Energy, P.C.	Cayuga	NYS Electric and Gas	Flexible Tech Assistance, FT12200 - Moravia CS.	12,700
	Cayuga / Onondaga BOCES	Cayuga	NYS Electric and Gas	WORKFORCE DEVELOPMENT, FT12254 - Cay	21,400
	Cayuga Community College	Cayuga	NYS Electric and Gas	Technical Services, OsEM24-C-Cayuga Commu	83,705
	CHA Consulting Inc.	Onondaga	National Grid	Flexible Tech Assistance, FT12226-UltraDairy-67.	. 106,000
	CNY Solar, Inc.	Madison	National Grid	<200KW PV, PON 2112 NY SUN	13,584
		Onondaga	National Grid	<200KW PV, PON 2112 NY SUN	67,299
	Extraterrestrial Materials Inc.	Onondaga	National Grid	<200KW PV, PON 2112 NY SUN	16,412
	Helios Lenox 1 LLC	Madison	National Grid	Solar Plus Energy Storage, NY Sun	7,000,000
	High Peaks Solar	Madison	National Grid	>200KW PV, NY Sun	1,254,528
	L&S Energy Services, Inc.	Onondaga	National Grid	Industrial Process Effic, Umbrella Contract	6,900
	Lapeer-Cortland Solar, LLC	Cortland	NYS Electric and Gas	>200KW PV, NY Sun	4,500,000
	Morse Manufacturing Compan.	Onondaga	National Grid	Industrial Process Effic, Industrial Process Efficie	6,800
	Nickels Energy Solutions LLC	Onondaga	National Grid	<200KW PV, PON 2112 NY SUN	5,980
	Owlville Creek Solar 2, LLC	Madison	National Grid	>200KW PV, NY-Sun C&I	1,294,704
				Solar Plus Energy Storage, NY-Sun C&I	3,500,000
	Owlville Creek Solar, LLC	Madison	National Grid	>200KW PV, NY-Sun C&I	1,344,653
				Solar Plus Energy Storage, NY-Sun C&I	3,500,001
	Paradise Energy Solutions,	Madison	National Grid	<200KW PV, PON 2112 NY SUN	5,717
	LLC	Oswego	National Grid	<200KW PV, PON 2112 NY SUN	9,626
	Pathfinder Engineers &	Cortland	National Grid	Commercial New Construc, New Construction	52,762
	Architects, LLP	Onondaga	National Grid	Commercial New Construc, RFP3771 Umbrella	114,711
	Patterson Farms, Inc.	Cayuga	NYS Electric and Gas	Anaerobic Digesters, PON 3739 CAT C	15,000
	Phoenix Geothermal Services	Cayuga	NYS Electric and Gas	Talent Pipeline:CE and OJT, OJT HIRE	5,440
	PlugPV, LLC	Cortland	National Grid	<200KW PV, PON 2112 NY SUN	5,954
	Rapid Response Monitoring S		National Grid	Industrial Process Effic, Industrial Process Efficie	
	Renovus Energy, Inc.	Cayuga	NYS Electric and Gas	<200KW PV, PON 2112 NY SUN	8,750
	0,7	Onondaga	National Grid	<200KW PV, PON 2112 NY SUN	6,521
		Oswego	National Grid	<200KW PV, NY-Sun	6,072
				<200KW PV, PON 2112 NY SUN	111,780
	Richland Solar I, LLC	Oswego	National Grid	>200KW PV, NY-Sun C&I	603,451
		conogo		Solar Plus Energy Storage, NY-Sun C&I	2,788,799
	Siemens Industry, Inc.	Onondaga	National Grid	Real Time Enrgy Management, Siemens-Multisit	27,014
		Oswego	National Grid	Real Time Enrgy Management, Siemens-Multisit	358,903
	Skyline Solar Inc.	Cayuga		<200KW PV, PON 2112 NY SUN	6,825
	Engine Columno.	Onondaga	NYS Electric and Gas	<200KW PV, PON 2112 NY SUN	6,132
		Oswego	National Grid	<200KW PV, PON 2112 NY SUN	31,703
	Solar Liberty Energy Systems,	0	National Grid	<200KW PV, PON 2112 NY SUN	6,669
	coldi Liberty Litergy Systems,	. Onondaga	National Grid	Multifam Performance Pgm, Multifamily	16,100

REDC Region		County	Electric Utility	Contract Description	Total Funded Amount
Central New York	Sunnyside Farms, Inc.	Cayuga	NYS Electric and Gas	Anaerobic Digesters, PON 3739 CAT C	15,000
	SUNY Morrisville	Madison	NYS Electric and Gas	Technical Services, OsEM30-C - SUNY Morrisville	
	Syracuse, City	Onondaga	National Grid	Clean Energy Communities, CEC210174 - City of.	
	Taitem Engineering, P.C.	Cortland	NYS Electric and Gas	Technical Services, RFP3628FlexTechConsultU	2,500
		Onondaga	National Grid	Commercial New Construc, Commercial New Co	38,247
	Trane	Cayuga	NYS Electric and Gas	Real Time Enrgy Management, Trane-17 Lansin	140,980
	Upstate Alternative Energy	Cayuga		<200KW PV, PON 2112 NY SUN	5,434
	Wiltshire Renewable Energy S	Onondaga	National Grid	<200KW PV, NY-Sun	6,400
	Total				27,789,632
inger Lakes	Adam C. Boese	Ontario		Technical Services, RFP3628FlexTechConsultU	1,015
	Baldwin Real Estate Develop	Ontario	Rochester Gas and El	Low Rise New Construction, 2019 LRNCP	317,600
	Bartram Solar, LLC	Livingston	National Grid	>200KW PV, NY Sun	1,198,125
	Bergmann Associates	Seneca	NYS Electric and Gas	Industrial Process Effic, IPE16237	19,875
	Borrego Solar Systems, Inc.	Genesee	National Grid	>200KW PV, NY Sun	1,916,838
	Buffalo Renewables, Inc.	Monroe	National Grid	Small Wind, WWind Turbine Incentive	143,250
	Buffalo Solar Solutions Inc	Genesee	National Grid	<200KW PV, PON 2112 NY SUN	7,152
		Ontario	Rochester Gas and El	<200KW PV, PON 2112 NY SUN	5,313
		Orleans	National Grid	<200KW PV, PON 2112 NY SUN	7,486
		Wyoming	NYS Electric and Gas	<200KW PV, PON 2112 NY SUN	17,766
	BuildingIQ, Inc.	Monroe	Rochester Gas and El.	Real Time Enrgy Management, BuildingIQ - Multi	28,225
	C.J. Brown Energy, P.C.	Livingston	NYS Electric and Gas	Technical Services, RFP3628FlexTechConsultU	2,500
(Monroe	Rochester Gas and El	Flexible Tech Assistance, FT12102- Gates Chili	6,632
		Seneca	NYS Electric and Gas	Commercial New Construc, Commercial New Co	24,345
	CDG Sodus Solar 1 LLC	Wayne	Rochester Gas and El.	<200KW PV, NY-Sun	303,345
	Cedarwood Community Partn	Monroe	Rochester Gas and El	Multifam Performance Pgm, Multifamily	144,200
	CH4 Generate Cayuga, LLC	Monroe	Rochester Gas and El.	Anaerobic Digesters, PON 3739 CAT C	15,000
	CHA Consulting Inc.	Monroe	Rochester Gas and	CI Carbon Challenge, CICC RED Roch. Tech Re	205,750
			Electric	Industrial Process Effic, IPE16223	5,715
	CIR ELECTRICAL CONSTRU	Wyoming	NYS Electric and Gas	<200KW PV, PON 2112 NY SUN	57,753
	City of Rochester	Monroe	Rochester Gas and El.	Technical Services, OsEM32-C - City of Rochester	207,714
	Cypress Creek Renewables L	Monroe	National Grid	>200KW PV, NY Sun	2,249,940
	DJ Acquisition Management	Wayne	Rochester Gas and El	Industrial Process Effic, Industrial Process Efficie	11,637
	EMCOR Services Betlem	Monroe	Rochester Gas and	Flexible Tech Assistance, FT12084 - Gleason W	6,608
			Electric	Flexible Tech Assistance, FT12207-AmericanPac.	10,331
	Erdman Anthony & Associates,	Monroe	Rochester Gas and El.	INDUSTRIAL PROCESS EFFICIENCY, Technic	1,954
	Inc.	Ontario	Rochester Gas and El.	Industrial Process Effic, IPE16209	5,615
		Wayne	Rochester Gas and El.	Industrial Process Effic, Technical Review and Pr	6,336
	Fairport Municipal Commission	Monroe	Municipal Utilities	CLEANER GREENER COMMUNITIES, CEC300	50,000
	Forteq North America Inc.	Monroe	Rochester Gas and El.	Industrial Process Effic, Industrial Process Efficie	9,860
	Frontier Energy, Inc.	Wayne	Rochester Gas and El.	Industrial Process Effic, IPE16229	5,460
	Fusion Energy Services LLC	Ontario	Rochester Gas and El.	<200KW PV, PON 2112 NY SUN	5,891
	George E Denmark II	Seneca	NYS Electric and Gas	<200KW PV, PON 2112 NY SUN	8,715
	Geotherm Inc.	Ontario	Rochester Gas and El.	<200KW PV, PON 2112 NY SUN	13,860
		Wyoming	National Grid	<200KW PV, PON 2112 NY SUN	6,748
	Halcyon, Inc.	Ontario	NYS Electric and Gas	Talent Pipeline:CE and OJT, OJT HIRE	17,936
			Rochester Gas and El.	<200KW PV, PON 2112 NY SUN	6,762
	Hawn Heating & Energy Servi	Monroe	Rochester Gas and El	Talent Pipeline:CE and OJT, OJT HIRE	11,520
	Johnson Controls, Inc. (Syrac		Rochester Gas and El	Flexible Tech Assistance, FT12085 - Gananda C	35,258
	LaBella Associates, P.C.	Monroe	Rochester Gas and El	Flexible Tech Assistance, FT12205 - Xerox Buildi.	6,708
	Lifetime Housing Developmen	Monroe	National Grid	Low Rise New Construction, 2019 LRNCP	48,000
	Livingston 4 Solar, LLC	Livingston	National Grid	>200KW PV, NY Sun C&I	919,860
	Mizkan Americas, Inc.	Wayne		Industrial Process Effic, Industrial Process Efficie	12,826

ger Lakes	Contractor	County	Electric Utility	Contract Description	Total Funded Amount
jei Lakes	MyPower Corp	Ontario	NYS Electric and Gas	>200KW PV, NY Sun C&I	1,109,185
	Noblehurst Green Energy, LLC	•	National Grid	Anaerobic Digesters, PON 3739 CAT C	15,000
	, ,	Ontario	NYS Electric and Gas	Low Rise New Construction, 2019 LRNCP	52,000
	NYS Office of Parks, Recreati		National Grid	<200KW PV, PON 2112 NY SUN	12,420
	Pactiv Corp.	Ontario		Industrial Process Effic, Industrial Process Efficie	12,930
	Paradise Energy Solutions, LLC	Ontario	Rochester Gas and El.	<200KW PV, PON 2112 NY SUN	45,045
		Seneca	NYS Electric and Gas	<200KW PV, PON 2112 NY SUN	19,231
		Yates	NYS Electric and Gas	<200KW PV, PON 2112 NY SUN	25,097
	Powerhouse Dynamics, Inc	Monroe	Rochester Gas and El.	Real Time Enrgy Management, Powerhouse - M	1,062
	QwikSolar, LLC	Ontario	NYS Electric and Gas	<200KW PV, PON 2112 NY SUN	6,762
			Rochester Gas and El.	<200KW PV, PON 2112 NY SUN	11,865
		Wayne	NYS Electric and Gas	<200KW PV, PON 2112 NY SUN	13,971
			Rochester Gas and El	<200KW PV, PON 2112 NY SUN	5,208
	RED Rochester	Monroe	Rochester Gas and	Flexible Tech Assistance, FT12253-RED-1200Ri	7,371
			Electric	Industrial Process Effic, Industrial Process Efficie	1,000,000
	Renovus Energy, Inc.	Livingston	NYS Electric and Gas	<200KW PV, PON 2112 NY SUN	6,038
	Rochester General Hospital	Monroe	Rochester Gas and El.	NEW CONSTRUCTION PROGRAM, NCP14069	130,120
	Ruffalo Appliance	Wayne	NYS Electric and Gas	Talent Pipeline:CE and OJT, OJT HIRE	6,080
	Ryan Homes (Virginia)	Ontario	Rochester Gas and El.	Low Rise New Construction, 2019 LRNCP	96,900
	Scepter New York, Inc	Seneca	NYS Electric and Gas	Industrial Process Effic, Industrial Process Efficie.	450,000
	Seneca Towers, Inc.	Monroe		Multifam Performance Pgm, Multifamily	343,700
	Siemens Industry, Inc.	Monroe		Real Time Enrgy Management, Siemens-1425 P	88,151
	Snyder Manufacturing, Inc	Livingston	National Grid	Geothermal Incentive Program, Large-Scale GS.	140,796
	Solar Liberty Energy Systems,	Livingston	National Grid	<200KW PV, PON 2112 NY SUN	11,844
	Inc	Monroe	Rochester Gas and	<200KW PV, NY Sun	13,365
		Monroe	Electric	<200KW PV, PON 2112 NY SUN	5,544
		Orleans	National Grid	<200KW PV, PON 2112 NY SUN	144,342
		Wayne		<200KW PV, PON 2112 NY SUN	5,723
	Solar Villago Compony LLC				
	Solar Village Company LLC	Ontario	NYS Electric and Gas	Talent Pipeline:CE and OJT, OJT HIRE	12,022
	Stantec Consulting Services, Inc.	Monroe	National Grid	Industrial Process Effic, Technical Review and Pr	
	0 1/ 1/ 5	Orleans	National Grid	Industrial Process Effic, IPE16231	8,035
	Sunny Knoll Farms	Wyoming	NYS Electric and Gas	Anaerobic Digesters, PON 3739 CAT C	15,000
	Sustainable Energy Developments Inc.	Monroe	National Grid	<200KW PV, PON 2112 NY SUN	16,281
				<200KW PV, PON 2112 NY SUN	89,344
		Ontario		<200KW PV, PON 2112 NY SUN	5,661
		Orleans	National Grid	<200KW PV, PON 2112 NY SUN	5,915
		Wayne	Rochester Gas and El.	<200KW PV, PON 2112 NY SUN	15,411
	Total Comfort Heating and Air	Monroe	Rochester Gas and El.	Talent Pipeline:CE and OJT, OJT HIRE	15,040
	Town of Greece	Monroe	Rochester Gas and El	Clean Energy Communities, CEC310376-Town o	150,000
	True Energy Solutions	Monroe	Rochester Gas and	Talent Pipeline:CE and OJT, OJT HIRE	5,760
			Electric	Talent Pipeline:CE and OJT, OJT HIRE	20,000
	University of Rochester	Monroe	Rochester Gas and	EXISTING FACILITIES, Efficiency Planning & En	58,038
			Electric	REV Campus Challenge, RFP 3675 REV Campu	1,000,000
	Van Hee Mechanical	Wayne	Rochester Gas and El.	Talent Pipeline:CE and OJT, OJT HIRE	24,000
	Village of Brockport Solar 1, L	Monroe	National Grid	<200KW PV, NY-Sun	355,212
	Village of Lima Solar 1, LLC	Livingston	National Grid	<200KW PV, NY-Sun	201,204
	Village of Sodus	Wayne	Rochester Gas and El.	Clean Energy Communities, CEC300347 - Villag	50,000
	Viola Homes Inc.	Genesee	National Grid	<200KW PV, PON 2112 NY SUN	7,738
		Livingston	National Grid	<200KW PV, PON 2112 NY SUN	10,906
		Monroe	National Grid	<200KW PV, PON 2112 NY SUN	14,007
				<200KW PV, PON 2112 NY SUN	54,954
		Ontario	National Grid	<200KW PV, PON 2112 NY SUN	5,313

	Contractor	County	Electric Utility	Contract Description	Total Funded Amount
Finger Lakes	Viola Homes Inc.	Ontario	NYS Electric and Gas	<200KW PV, PON 2112 NY SUN	5,527
		Wayne		<200KW PV, PON 2112 NY SUN	35,172
	Wayne County Action Program	Wayne	NYS Electric and Gas	Talent Pipeline:CE and OJT, OJT HIRE	7,440
	Wise Home Energy, LLC Xerox Corp	Monroe	Rochester Gas and El	Talent Pipeline:CE and OJT, OJT HIRE	5,120
		Monroe	Rochester Gas and El	INDUSTRIAL PROCESS EFFICIENCY, Industria.	4,016
	Xzerta Energy Group LLC	Wayne	Rochester Gas and El.	>200KW PV, NY Sun	476,064
	Total				14,543,914
ong Island	Empower CES, LLC	Nassau	Long Island Power Au	ENERGY STORAGE, PON 2112 NY SUN	12,500
		Suffolk	Long Island Power Au	ENERGY STORAGE, PON 2112 NY SUN	6,250
	Green Team USA, LLC	Suffolk	Long Island Power	Talent Pipeline:CE and OJT, OJT HIRE	5,760
			Authority	WORKFORCE DEVELOPMENT, OJT HIRE	44,480
	Solar Liberty Energy Systems,	Suffolk	Long Island Power Au	<200KW PV, NY-Sun	203,340
	Steven Winter Associates, Inc.	Nassau	Long Island Power Au	NEW CONSTRUCTION PROGRAM, Technical	5,192
	Suffolk County Community	Suffolk	Long Island Power	REV CAMPUS CHALLENGE, RFP 3675 REV Ca.	. 495,297
	College		Authority	RFP 3675 REV Campus Challenge	500,000
	SuNation Solar Systems, Inc.	Suffolk	Long Island Power	<200KW PV, PON 2112 NY SUN	65,865
			Authority	ENERGY STORAGE, PON 2112 NY SUN	6,250
	SUNRISE ELECTRICAL	Nassau	Long Island Power Au	<200KW PV, PON 2112 NY SUN	99,536
	SERVICES	Suffolk	Long Island Power Au	<200KW PV, NY Sun	83,807
	Town of Hempstead, Departm	Nassau	Long Island Power Au	CLEANER GREENER COMMUNITIES, CEC910	150,000
	Total				1,678,277
/lid-Hudson	2018 ESA Project Company,	Westchester	Consolidated Edison	Fuel Cells, Fuel Cell Incentive - FC-025	948,750
	Ace Natural	Westchester	Consolidated Edison	Industrial Process Effic, Industrial Process Efficie	57,702
	Adam C. Boese	Rockland	Orange and Rockland		
		Westchester	Consolidated Edison	Commercial Real Estate Ten, Daylight-225 West.	5,000
	Advanced Radiant Design, Inc.			Talent Pipeline:CE and OJT, OJT HIRE	17,280
		Rockland		Combined Heat and Power, CHPA-North Rockla	84,375
	, logio Energy controlo inter	Westchester	Consolidated Edison	Combined Heat and Power, CHPA - 42 Broad Str.	
	AKF-engineers	Sullivan	NYS Electric and Gas	Commercial New Construc, Commercial New Co	
	Albany Solar Solutions L.L.C.	Dutchess		<200KW PV, PON 2112 NY SUN	6,160
	All-State Air Control Sales & S		Consolidated Edison	Talent Pipeline:CE and OJT, OJT HIRE	7,680
	alpha-En Corporation	Westchester	Consolidated Edison		
	Altanova LLC			Energy Storage Tech/Prod Dev, PON3585 R4 En. Commercial Real Estate Ten, Altanova-100 Man	
		Westchester	Consolidated Edison	,	14,000
	Apex Roofing, LLC	Dutchess		<200KW PV, NY Sun	10,982
	Apex Solar Power LLC	Dutchess		<200KW PV, PON 2112 NY SUN	5,460
		Putnam	NYS Electric and Gas	<200KW PV, PON 2112 NY SUN	6,195
		Sullivan	NYS Electric and Gas	<200KW PV, NY-Sun	5,850
	Arcadis of New York, Inc.	Ulster		Flexible Tech Assistance, FT12203-TownofUlster.	
	Best Energy Power	Westchester	Consolidated Edison	PON 2112 NY SUN	90,168
	BJ's Wholesale Club	Westchester	Consolidated Edison	NY-Sun	376,326
			NYS Electric and Gas	NY-Sun	372,186
	Bloom Energy Corporation	Westchester	Consolidated Edison	Fuel Cells, Fuel Cell - AT&T - 400 Hamilto	1,000,000
				Fuel Cells, Fuel Cell Incentive - FC-015	231,000
				Fuel Cells, Fuel Cell Incentive FC-014	288,750
	Borrego Solar Systems, Inc.	Orange	Orange and Rockland	>200KW PV, NY-Sun C&I	979,208
			Utilities	ESTOR:Retail Storage Incentive, NY-Sun C&I	1,500,001
				Solar Plus Energy Storage, NY Sun	2,184,000
	Bridge Metals Industries	Westchester	Consolidated Edison	Industrial Process Effic, Industrial Process Efficie	15,362
	Buffalo Geothermal Heating	Ulster	Central Hudson Gas a	Geothermal Incentive Program, Clean Heating &	107,688
	Chappaqua Station, LLC	Westchester	Consolidated Edison	Low Rise New Construction, 2019 LRNCP	28,000
	City of White Plains	Westchester	Consolidated Edison	CLEANER GREENER COMMUNITIES, City of	250,000
	CVE North America, Inc.	Westchester	Consolidated Edison	PON 2112 NY SUN	808,320

id-Hudson	Contractor	County	Electric Utility	Contract Description	Total Funded Amount
10-11005011	Cypress Creek Renewables L	0	0	Solar Plus Energy Storage, NY Sun	1,424,500
	CyrusOne	Dutchess		Industrial Process Effic, Industrial Process Efficie	,
	Dual Fuel Corp	Westchester	Consolidated Edison	Real Time Enrgy Management, Dual Fuel-60 W	49,092
				Real Time Enrgy Management, Dual Fuel-370 W	
	F '			Real Time Enrgy Management, Dual Fuel-905-90.	
	Eiger 3970 Consultants Inc.	Ulster	Central Hudson Gas and Electric	<200KW PV, NY-Sun	337,329
				<200KW PV, PON 2112 NY SUN	10,801
				NY-SUN, NY-Sun	224,886
	Empire Solar Solutions LLC	Orange	ç	<200KW PV, PON 2112 NY SUN	5,460
		Putnam	NYS Electric and Gas	<200KW PV, PON 2112 NY SUN	5,618
		Ulster	Central Hudson Gas a	<200KW PV, PON 2112 NY SUN	6,370
	Empower CES, LLC	Westchester	Consolidated Edison	<200KW PV, PON 2112 NY SUN	5,984
	Energy & Resource Solutions,	Dutchess	Central Hudson Gas	Industrial Process Effic, IPE16232	7,297
	Inc.		and Electric	Industrial Process Effic, IPE16239	6,935
				$Technical \ Services, \ RFP3628 Flex Tech Consult U$	2,080
		Westchester	Consolidated Edison	Industrial Process Effic, Technical Review and Pr.	. 620
				INDUSTRIAL PROCESS EFFICIENCY, Technic	6,105
	Florenton River LLC	Rockland	Orange and Rockland	<200KW PV, PON 2112 NY SUN	8,750
		Westchester	Consolidated Edison	<200KW PV, PON 2112 NY SUN	5,625
	Four Points Group, Inc.	Westchester	Consolidated Edison	OTHER PROGRAM AREA, RFQL 3685 R2	48,888
	Glenmere Lake Solar LLC	Orange	Orange and Rockland	Solar Plus Energy Storage, NY Sun	2,000,000
	Global Dwelling, LLC	Ulster	Central Hudson Gas a	Talent Pipeline:CE and OJT, OJT HIRE	14,400
	Goldman Copeland Associate	Westchester	Consolidated Edison	Commercial Real Estate Ten, Goldman-2000 We.	
	GPSDC New York Inc	Dutchess		Industrial Process Effic, Industrial Process Efficie	
	Green Hybrid Energy Solutions			<200KW PV, PON 2112 NY SUN	6,143
	Inc.	Putnam	NYS Electric and Gas	<200KW PV, PON 2112 NY SUN	167,040
		Westchester	Consolidated Edison	<200KW PV, NY-Sun	8,424
	Westerlester		PON 2112 NY SUN	144,378	
	Group-S LLC	Westchester	Consolidated Edison	Flexible Tech Assistance, FT12243-TempleIsrael.	
		Dutchess	Central Hudson Gas		35,814
	Hudson Valley Clean Energy Inc.	Dutchess	and Electric	<200KW PV, PON 2112 NY SUN	,
			NIVO Flashis and Oss	>200KW PV, NY Sun	488,852
		0	NYS Electric and Gas	<200KW PV, PON 2112 NY SUN	5,863
		Orange	-	<200KW PV, PON 2112 NY SUN	13,419
		Putnam		<200KW PV, PON 2112 NY SUN	14,882
		Ulster	Central Hudson Gas and Electric	<200KW PV, PON 2112 NY SUN	8,750
				NY-SUN, NY-Sun	194,040
	Infinity Solar Systems, LLC	Rockland		<200KW PV, PON 2112 NY SUN	5,042
		Westchester	Consolidated Edison	<200KW PV, PON 2112 NY SUN	5,184
	Isomedix Operations Inc	Orange	Orange and Rockland	<200KW PV, NY-Sun	178,200
	Jones Lang LaSalle Americas,	Westchester	Consolidated Edison	On-Site Energy Manager, OsEM25-I - IBM North .	205,448
	Inc.			On-Site Energy Manager, OsEM29-I - IBM Poug	214,000
				Real Time Enrgy Management, JLL - Multisite - R.	. 102,180
	Kasselman Solar LLC	Dutchess	Central Hudson Gas	<200KW PV, NY Sun	1,811
			and Electric	<200KW PV, PON 2112 NY SUN	10,318
		Rockland	Orange and Rockland	<200KW PV, PON 2112 NY SUN	7,269
		Ulster	Central Hudson Gas a	<200KW PV, PON 2112 NY SUN	5,040
	Key Bank	Westchester	Consolidated Edison	ESTOR:Retail Storage Incentive, Energy Storage	464,000
				NY-Sun	346,500
	Kilowatt Engineering, Inc.	Westchester	Consolidated Edison	Industrial Process Effic, 2621 Umbrella Contract	8,763
	Kisco River Solar, LLC	Westchester	Consolidated Edison	NY-Sun	513,975
	L&S Energy Services, Inc.	Westchester	Consolidated Edison	Industrial Process Effic, IPE16235	10,000
	LaBella Associates, P.C.	Dutchess		Geothermal Incentive Program, Large-Scale GS.	126,996

REDC Region		County	Electric Utility	Contract Description	Total Funded Amount
Mid-Hudson	Libolt & Sons, Inc.	Rockland		Low Rise New Construction, 2019 LRNCP	75,800
	Lotus Energy, Inc.	Ulster		<200KW PV, PON 2112 NY SUN	7,776
	MacQuesten Construction Ma		Consolidated Edison	Multifam New Construction, New Construction	33,400
	Malcarne Contracting, Inc.	Dutchess		Talent Pipeline:CE and OJT, OJT HIRE	20,640
	Mastercard International	Westchester	Consolidated Edison	NY-Sun	298,080
	Monroe Cable Company	Orange		INDUSTRIAL PROCESS EFFICIENCY, Industria	314,532
	MyPower Corp	Dutchess		>200KW PV, NY Sun C&I	1,331,022
	New York State Solar Farm Inc.			<200KW PV, PON 2112 NY SUN	5,150
		Putnam	NYS Electric and Gas	<200KW PV, PON 2112 NY SUN	5,608
		Sullivan	0	<200KW PV, PON 2112 NY SUN	12,636
	Nexant, Incorporated	Ulster		<200KW PV, PON 2112 NY SUN	6,174
		Orange		Industrial Process Effic, Industrial Process Efficie	6,184
	Northwell Health, Inc.	Westchester	Consolidated Edison	Flexible Tech Assistance, FT12013 - Northwell H	26,280
		_		Flexible Tech Assistance, FT12208 -N Westchest.	
	Novel Approaches Solar Applications, LLC	Orange		<200KW PV, PON 2112 NY SUN	15,050
		Sullivan	NYS Electric and Gas	<200KW PV, PON 2112 NY SUN	5,670
	NY Delaware III, LLC	Sullivan	NYS Electric and Gas	>200KW PV, NY Sun C&I	1,281,677
	NY Delaware IV, LLC	Sullivan	NYS Electric and Gas	>200KW PV, NY-Sun C&I	1,281,677
	NY Delaware V, LLC	Sullivan	NYS Electric and Gas	>200KW PV, NY-Sun C&I	1,281,677
	NY Delaware VI, LLC	Sullivan	NYS Electric and Gas	>200KW PV, NY-Sun C&I	1,281,677
	NY Thompson II, LLC	Sullivan	NYS Electric and Gas	>200KW PV, Ny Sun C&I	822,961
	OnForce Solar	Westchester	Consolidated Edison	PON 2112 NY SUN	547,938
	Pelham Private Property Corp.	Westchester	Consolidated Edison	Net Zero Energy for Eco Dev, NZEED 2018	1,092,000
	Pepsico, Inc.	Westchester	Consolidated Edison	NY-Sun	601,176
	Plant Manor LLC	Westchester	Consolidated Edison	Geothermal Incentive Program, FT12236 - Alder	33,750
	PlugPV, LLC	Dutchess		<200KW PV, PON 2112 NY SUN	14,542
		Orange		<200KW PV, PON 2112 NY SUN	11,025
		0.11		<200KW PV, PON 2112 NY SUN	19,289
		Sullivan		<200KW PV, PON 2112 NY SUN	5,513
		Ulster		<200KW PV, PON 2112 NY SUN	13,855
		Westchester	Consolidated Edison	<200KW PV, PON 2112 NY SUN	5,182
				PON 2112 NY SUN	492
	Powerhouse Dynamics, Inc	Westchester	Consolidated Edison	Real Time Enrgy Management, Powerhouse-Mult.	
	Premier Solar Solutions LLC	Orange		<200KW PV, PON 2112 NY SUN	5,698
	Pro Custom Solar LLC	Dutchess	NYS Electric and Gas		5,348
		Orange		<200KW PV, PON 2112 NY SUN	5,513
	Quest Home Improvement Inc	Westchester	Consolidated Edison	PON 2112 NY SUN	26,508
	Red Hook CSA, LLC	Dutchess		>200KW PV, NY-Sun C&I	488,852
	Renew Solar CS4 Fund LLC	Ulster		>200KW PV, NY-Sun C&I	1,204,258
	Rhinebeck Village Place, LLC	Dutchess		NEW CONSTRUCTION PROGRAM, NCP14036	
	Safari Energy LLC	Rockland		<200KW PV, PON 2112 NY SUN	69,120
	Salt Point Solar, LLC	Dutchess		Solar Plus Energy Storage, NY Sun	1,424,500
	Siemens Industry, Inc.	Sullivan	NYS Electric and Gas	Real Time Enrgy Management, Siemens - 15 Old	
				Real Time Enrgy Management, Siemens - 115 Br	
	Skae Power Solutions	Westchester	Consolidated Edison	Industrial Process Effic, Industrial Process Efficie	62,551
	Solar Liberty Energy Systems, Inc	Dutchess	Central Hudson Gas a		420,810
		Westchester	Consolidated Edison	PON 2112 NY SUN	41,610
	Solar One, Inc.	Westchester	Consolidated Edison	PON 2112 NY SUN	209,592
	Steele Sleepy Hollow LLC	Sullivan	NYS Electric and Gas	Multifam Performance Pgm, Multifamily	183,200
	Sun Source Technologies	Dutchess		<200KW PV, PON 2112 NY SUN	24,638
		Orange		<200KW PV, PON 2112 NY SUN	6,174
		Putnam	Central Hudson Gas a	<200KW PV, PON 2112 NY SUN	5,119

REDC Regior Mid-Hudson		County	Electric Utility	Contract Description	Total Funded Amount
MIC-HUCSON	Sun Source Technologies	Rockland	Orange and Rockland		46,800
		Ulster	Central Hudson Gas and Electric	<200KW PV, NY-Sun	160,080
				<200KW PV, PON 2112 NY SUN	19,836
			NYS Electric and Gas	<200KW PV, PON 2112 NY SUN	8,750
	Sunnova Energy Corp	Dutchess	NYS Electric and Gas	<200KW PV, PON 2112 NY SUN	6,395
	SunPower Capital, LLC	Orange	Orange and Rockland	<200KW PV, PON 2112 NY SUN	20,726
		Rockland	Orange and Rockland	<200KW PV, PON 2112 NY SUN	19,638
		Ulster	Central Hudson Gas a.	<200KW PV, PON 2112 NY SUN	14,238
		Westchester	Consolidated Edison	<200KW PV, PON 2112 NY SUN	5,355
	Sunrise Solar Solutions, LLC	Westchester	Consolidated Edison	<200KW PV, PON 2112 NY SUN	7,500
				NY-Sun	840,840
				PON 2112 NY SUN	12,949
				Solar Plus Energy Storage, Energy Storage	1,026,000
			NYS Electric and Gas	<200KW PV, NY Sun	3,949
	SunRun, Inc	Dutchess	Central Hudson Gas a.	<200KW PV, PON 2112 NY SUN	12,004
		Orange	Central Hudson Gas a.	<200KW PV, PON 2112 NY SUN	5,278
			Orange and Rockland	<200KW PV, PON 2112 NY SUN	30,537
		Rockland	Orange and Rockland	<200KW PV, PON 2112 NY SUN	5,551
		Sullivan	Orange and Rockland	<200KW PV, PON 2112 NY SUN	5,075
	Susten Corp	Westchester	Consolidated Edison	PON 2112 NY SUN	41,424
	Svenski Solar, LLC	Orange		ESTOR:Retail Storage Incentive, NY Sun	1,017,500
	Taitem Engineering, P.C.	Sullivan	NYS Electric and Gas	Geothermal Incentive Program, FT12227-256Su	9,336
	Tecogen	Westchester	Consolidated Edison	Combined Heat and Power, CHPA-22 South We	178,750
	Tern Construction & Develop.	Sullivan	NYS Electric and Gas	Low Rise New Construction, 2019 LRNCP	63,800
	Tesla Energy Operations Inc	Orange		<200KW PV, PON 2112 NY SUN	5,733
	Town of Mamaroneck	Westchester	Consolidated Edison	Clean Energy Communities, PON 3298 CEC	50,000
	Trinity Heating & Air, Inc.	Orange		<200KW PV, PON 2112 NY SUN	6,619
	Thinky Heating & Air, Inc.	Rockland	-	<200KW PV, PON 2112 NY SUN	5,843
		Ulster		<200KW PV, PON 2112 NY SUN	5,072
		Westchester	Consolidated Edison	<200KW PV, PON 2112 NY SUN	7,182
	Urban Electric Power, LLC	Rockland	•	Talent Pipeline:CE and OJT, OJT HIRE	19,840
	US Energy Concierge Inc	Putnam		<200KW PV, PON 2112 NY SUN	8,677
		Sullivan		<200KW PV, PON 2112 NY SUN	7,886
	Utilities Program & Metering, I			Real Time Enrgy Management, UPM - 401 N Mid.	
	Village of Goshen	Orange	•	Clean Energy Communities, Village of Goshen	50,000
	Vivint Solar	Dutchess		<200KW PV, PON 2112 NY SUN	6,284
		Orange		. <200KW PV, PON 2112 NY SUN	5,600
		Westchester	NYS Electric and Gas	<200KW PV, PON 2112 NY SUN	5,600
	Warwick Renewables, LLC	Orange	Orange and Rockland	>200KW PV, NY Sun	377,622
	Wheelabrator Westchester	Westchester	Consolidated Edison	Industrial Process Effic, Industrial Process Efficie.	79,893
	Wilder Balter Partners, Inc.	Westchester	NYS Electric and Gas	Low Rise New Construction, 2019 LRNCP	42,000
	Willdan Energy Solutions	Westchester	Consolidated Edison	Rmve Barriers Dist Enrgy Storg, FT12242-Phelps.	. 25,000
	Total				38,267,713
Mohawk	Albany Solar Solutions L.L.C.	Otsego	National Grid	<200KW PV, PON 2112 NY SUN	5,317
Valley	Arcadis of New York, Inc.	Herkimer	National Grid	Technical Services, AEAP	5,978
	City of Utica	Oneida	National Grid	NY-SUN, Affordable Solar in Utica	130,000
	CNY Solar, Inc.	Herkimer	National Grid	<200KW PV, PON 2112 NY SUN	5,801
		Oneida	National Grid	<200KW PV, NY-Sun	7,880
				<200KW PV, PON 2112 NY SUN	5,119
	COA Solar 2, LLC	Montgomery	National Grid	>200KW PV, NY-Sun C&I Payee Assignment	792,291
	Earth Sensitive Solutions, LLC	Otsego	NYS Electric and Gas	Geothermal Incentive Program, Large-Scale GS.	47,004
	Erdman Anthony & Associates.	Oneida	National Grid	Commercial New Construc, Commercial New Co	38,619

ollis & Sons, Inc. Is Solar, LLC In 2 Solar, LLC Inergy and Food Ente In Solar LLC In Center Inc In Center Inc In Center Inc In Center Inc In Center Inc In Center Inc Inc Inc Solar Associates, LLC Informental LLC Informe	Fulton Schoharie Oneida Oneida Herkimer Montgomery Oneida Fulton Otsego	National Grid NYS Electric and Gas National Grid National Grid National Grid NYS Electric and Gas National Grid NYS Electric and Gas National Grid NYS Electric and Gas	Talent Pipeline:CE and OJT, OJT HIRESolar Plus Energy Storage, NY Sun>200KW PV, NY Sun C&I<200KW PV, PON 2112 NY SUN<200KW PV, PON 2112 NY SUNLow Rise New Construction, 2019 LRNCPLow Rise New Construction, 2019 LRNCP>200KW PV, PON 2112 NY SUN<200KW PV, PON 2112 NY SUNTalent Pipeline:CE and OJT, OJT HIREPV System @ SunyPolyCLEANER GREENER COMMUNITIES, CEC610<200KW PV, PON 2112 NY SUN	39,360 3,500,000 919,860 42,858 8,252 23,450 7,616 5,040 56,000 5589,410 214,974 12,042 700,777 250,000
n 2 Solar, LLC hergy and Food Ente In Solar LLC n Center Inc stom Homes, Inc. s Solar, LLC Solar Associates, LLC onmental LLC im Solar South, LLC ounty Energy Solutions, LL LLC Management Group olar Inc.	Fulton Oneida Fulton Schoharie Oneida Oneida Herkimer Montgomery Oneida Fulton Otsego Herkimer Fulton Otsego Oneida	National Grid National Grid National Grid National Grid NYS Electric and Gas National Grid NYS Electric and Gas National Grid NYS Electric and Gas NAtional Grid NYS Electric and Gas NYS Electric and Gas	 >200KW PV, NY Sun C&I >200KW PV, PON 2112 NY SUN <200KW PV, NY-Sun <200KW PV, PON 2112 NY SUN Low Rise New Construction, 2019 LRNCP Low Rise New Construction, 2019 LRNCP Low Rise New Construction, 2019 LRNCP >200KW PV, NY Sun <200KW PV, PON 2112 NY SUN Talent Pipeline:CE and OJT, OJT HIRE PV System @ SunyPoly CLEANER GREENER COMMUNITIES, CEC610 	919,860 42,858 8,252 23,450 7,616 5,040 56,000 589,410 214,974 12,042 700,777
n Center Inc stom Homes, Inc. s Solar, LLC Solar Associates, LLC Solar Associates, LLC im Solar South, LLC ounty Energy Solutions, LL LLC Management Group olar Inc.	Oneida Fulton Schoharie Oneida Oneida Herkimer Montgomery Oneida Fulton Otsego Herkimer Fulton Otsego Oneida	National Grid National Grid National Grid NYS Electric and Gas National Grid National Grid National Grid National Grid NYS Electric and Gas NYS Electric and Gas NYS Electric and Gas	<200KW PV, PON 2112 NY SUN <200KW PV, NY-Sun <200KW PV, PON 2112 NY SUN Low Rise New Construction, 2019 LRNCP Low Rise New Construction, 2019 LRNCP >200KW PV, NY Sun <200KW PV, PON 2112 NY SUN Talent Pipeline:CE and OJT, OJT HIRE PV System @ SunyPoly CLEANER GREENER COMMUNITIES, CEC610	42,858 8,252 23,450 7,616 5,040 56,000 550,000 589,410 214,974 12,042 700,777
n Center Inc stom Homes, Inc. s Solar, LLC Solar Associates, LLC Solar Associates, LLC im Solar South, LLC ounty Energy Solutions, LL LC Management Group olar Inc.	Fulton Schoharie Oneida Oneida Herkimer Montgomery Oneida Fulton Otsego Herkimer Fulton Oneida	National Grid National Grid NYS Electric and Gas National Grid National Grid National Grid National Grid NAtional Grid NYS Electric and Gas National Grid NYS Electric and Gas NAtional Grid NYS Electric and Gas NYS Electric and Gas	<200KW PV, NY-Sun <200KW PV, PON 2112 NY SUN Low Rise New Construction, 2019 LRNCP Low Rise New Construction, 2019 LRNCP >200KW PV, NY Sun <200KW PV, NY Sun <200KW PV, PON 2112 NY SUN Talent Pipeline:CE and OJT, OJT HIRE PV System @ SunyPoly CLEANER GREENER COMMUNITIES, CEC610	8,252 23,450 7,616 5,040 56,000 589,410 214,974 12,042 700,777
n Center Inc stom Homes, Inc. s Solar, LLC Solar Associates, LLC onmental LLC im Solar South, LLC ounty Energy Solutions, LL LLC Management Group olar Inc.	Schoharie Oneida Oneida Herkimer Montgomery Oneida Fulton Otsego Herkimer Fulton Oneida	National Grid NYS Electric and Gas National Grid National Grid National Grid National Grid NYS Electric and Gas National Grid NYS Electric and Gas National Grid NYS Electric and Gas NYS Electric and Gas NYS Electric and Gas	<200KW PV, PON 2112 NY SUN <200KW PV, PON 2112 NY SUN <200KW PV, PON 2112 NY SUN Low Rise New Construction, 2019 LRNCP Low Rise New Construction, 2019 LRNCP >200KW PV, NY Sun <200KW PV, PON 2112 NY SUN Talent Pipeline:CE and OJT, OJT HIRE PV System @ SunyPoly CLEANER GREENER COMMUNITIES, CEC610	23,450 7,616 5,040 56,000 589,410 214,974 12,042 700,777
stom Homes, Inc. s Solar, LLC Solar Associates, LLC onmental LLC im Solar South, LLC ounty Energy Solutions, LL LLC Management Group olar Inc.	Oneida Oneida Herkimer Montgomery Oneida Fulton Otsego Herkimer Fulton Oneida	NYS Electric and Gas National Grid National Grid National Grid National Grid NYS Electric and Gas National Grid NYS Electric and Gas NYS Electric and Gas NYS Electric and Gas	<200KW PV, PON 2112 NY SUN <200KW PV, PON 2112 NY SUN Low Rise New Construction, 2019 LRNCP Low Rise New Construction, 2019 LRNCP >200KW PV, NY Sun <200KW PV, PON 2112 NY SUN Talent Pipeline:CE and OJT, OJT HIRE PV System @ SunyPoly CLEANER GREENER COMMUNITIES, CEC610	7,616 5,040 56,000 5,000 589,410 214,974 12,042 700,777
stom Homes, Inc. s Solar, LLC Solar Associates, LLC onmental LLC im Solar South, LLC ounty Energy Solutions, LL LLC Management Group olar Inc.	Oneida Oneida Herkimer Montgomery Oneida Fulton Otsego Herkimer Fulton Oneida	NYS Electric and Gas National Grid National Grid National Grid National Grid NYS Electric and Gas National Grid NYS Electric and Gas NYS Electric and Gas NYS Electric and Gas	<200KW PV, PON 2112 NY SUN Low Rise New Construction, 2019 LRNCP Low Rise New Construction, 2019 LRNCP >200KW PV, NY Sun <200KW PV, PON 2112 NY SUN Talent Pipeline:CE and OJT, OJT HIRE PV System @ SunyPoly CLEANER GREENER COMMUNITIES, CEC610	5,040 56,000 589,410 214,974 12,042 700,777
stom Homes, Inc. s Solar, LLC Solar Associates, LLC onmental LLC im Solar South, LLC ounty Energy Solutions, LL LLC Management Group olar Inc.	Oneida Herkimer Montgomery Oneida Fulton Otsego Herkimer Fulton Oneida	National Grid National Grid National Grid National Grid NYS Electric and Gas National Grid NYS Electric and Gas NYS Electric and Gas	Low Rise New Construction, 2019 LRNCP Low Rise New Construction, 2019 LRNCP >200KW PV, NY Sun <200KW PV, PON 2112 NY SUN Talent Pipeline:CE and OJT, OJT HIRE PV System @ SunyPoly CLEANER GREENER COMMUNITIES, CEC610	56,000 5,000 589,410 214,974 12,042 700,777
stom Homes, Inc. s Solar, LLC Solar Associates, LLC onmental LLC im Solar South, LLC ounty Energy Solutions, LL LLC Management Group olar Inc.	Oneida Herkimer Montgomery Oneida Fulton Otsego Herkimer Fulton Oneida	National Grid National Grid National Grid NYS Electric and Gas National Grid NYS Electric and Gas NYS Electric and Gas NYS Electric and Gas	Low Rise New Construction, 2019 LRNCP >200KW PV, NY Sun <200KW PV, PON 2112 NY SUN Talent Pipeline:CE and OJT, OJT HIRE PV System @ SunyPoly CLEANER GREENER COMMUNITIES, CEC610	5,000 589,410 214,974 12,042 700,777
s Solar, LLC Solar Associates, LLC onmental LLC im Solar South, LLC ounty Energy Solutions, LL LLC Management Group olar Inc.	Herkimer Montgomery Oneida Fulton Otsego Herkimer Fulton Oneida	National Grid National Grid NYS Electric and Gas National Grid NYS Electric and Gas NYS Electric and Gas	 >200KW PV, NY Sun <200KW PV, PON 2112 NY SUN Talent Pipeline:CE and OJT, OJT HIRE PV System @ SunyPoly CLEANER GREENER COMMUNITIES, CEC610 	589,410 214,974 12,042 700,777
Solar Associates, LLC onmental LLC im Solar South, LLC ounty Energy Solutions, LL LLC Management Group olar Inc.	Montgomery Oneida Fulton Otsego Herkimer Fulton Oneida	National Grid NYS Electric and Gas National Grid NYS Electric and Gas NYS Electric and Gas	<200KW PV, PON 2112 NY SUN Talent Pipeline:CE and OJT, OJT HIRE PV System @ SunyPoly CLEANER GREENER COMMUNITIES, CEC610	214,974 12,042 700,777
onmental LLC im Solar South, LLC ounty Energy Solutions, LL LLC Management Group olar Inc.	Oneida Fulton Otsego . Herkimer Fulton Oneida	NYS Electric and Gas National Grid NYS Electric and Gas NYS Electric and Gas	Talent Pipeline:CE and OJT, OJT HIRE PV System @ SunyPoly CLEANER GREENER COMMUNITIES, CEC610	12,042 700,777
im Solar South, LLC ounty Energy Solutions, LL .LC Management Group olar Inc.	Fulton Otsego Herkimer Fulton Oneida	National Grid NYS Electric and Gas NYS Electric and Gas	PV System @ SunyPoly CLEANER GREENER COMMUNITIES, CEC610	700,777
ounty Energy Solutions, LL LC Management Group olar Inc.	Otsego . Herkimer Fulton Oneida	NYS Electric and Gas NYS Electric and Gas	CLEANER GREENER COMMUNITIES, CEC610	
Energy Solutions, LL LLC Management Group olar Inc.	E Herkimer Fulton Oneida	NYS Electric and Gas	CLEANER GREENER COMMUNITIES, CEC610	250.000
Energy Solutions, LL LLC Management Group olar Inc.	E Herkimer Fulton Oneida	NYS Electric and Gas		
LC Management Group	Fulton Oneida			6,048
Vanagement Group olar Inc.	Oneida		<200KW PV, PON 2112 NY SUN	6,064
olar Inc.		National Grid	<200KW PV, PON 2112 NY SUN	5,623
olar Inc.		NYS Electric and Gas	<200KW PV, PON 2112 NY SUN	5,623
olar Inc.	-	National Grid	Talent Pipeline:CE and OJT, OJT HIRE	17,478
	Oneida	National Grid	<200KW PV, PON 2112 NY SUN	5,460
vortinampton	Fulton	National Grid		
Viofield			Clean Energy Communities, CEC600922 Town o	50,000
Vinfield	Herkimer	NYS Electric and Gas	Clean Energy Communities, CEC600907 - Town	50,000
rgy Services	Herkimer	National Grid	Technical Services, RFP3628FlexTechConsultU.	2,500
Herkimer	Herkimer	National Grid	Clean Energy Communities, CEC600882-Vill of	50,000
Northville	Fulton	National Grid	Clean Energy Communities, CEC600919 Village	50,000
Renewable Energy S.	. Oneida	National Grid	<200KW PV, NY-Sun	6,830
				7,668,274
Energy, Inc.	Queens	Consolidated Edison	PON 2112 NY SUN	58,320
y Inc.	New York	Consolidated Edison	Combined Heat and Power, CHPA - 2070-2080	714,043
			Combined Heat and Power, CHPA - 2100 1st Av	981,527
			Combined Heat and Power, CHPA - Building D	714,043
Associates, LP	Bronx	Consolidated Edison	Multifam Performance Pgm, Multifamily	147,000
Foam Properties LLC	Kings	Consolidated Edison	Multifam New Construction, MFNCP PHI T3-211	31,500
ric Corp.	Kings	Consolidated Edison	<200KW PV, NY-Sun	25,628
			NY-Sun	50,778
ower, Inc.	Queens	Consolidated Edison	<200KW PV, NY-Sun	7,020
			NY Sun	1,005
			PON 2112 NY SUN	23,400
ergy Services Inc.	Bronx	Consolidated Edison	Combined Heat and Power, CHPA-Centers - Bet	308,000
			Combined Heat and Power, CHPA-Centers-Beth	308,000
			Combined Heat and Power, CHPA-Centers-Tribo	580,800
	Kinas	Consolidated Edison		288,750
				308,000
	New York	Consolidated Edison		158,400
				153,000
				42,000
				148,500
				219,296
		a		280,000
	Queens	Consolidated Edison		205,590 69,300
	wer, Inc.	wer, Inc. Queens	wer, Inc. Queens Consolidated Edison ergy Services Inc. Bronx Consolidated Edison Kings Consolidated Edison New York Consolidated Edison	wer, Inc. Queens Consolidated Edison NY-Sun NY Sun NY Sun

REDC Region	Aegis Energy Services Inc.	County Queens	Electric Utility Consolidated Edison	Contract Description	Total Funded Amount
lew fork City				Combined Heat and Power, CHPA-LeFrak City-C.	
	AKF-engineers	New York	Consolidated Edison	Flexible Tech Assistance, FT12239-Metropolitan	29,600
				Workforce Industry Partnership, PON 3715 Workf.	
	Albireo Energy, LLC	New York	Consolidated Edison	Real Time Enrgy Management, AE LLC - 60 Cha	
				Real Time Enrgy Management, Albireo Energy-1	
	Altanova LLC	New York	Consolidated Edison	Commercial New Construc, Commercial New Co	
				Commercial Real Estate Ten, Altanova, LLC - 62	14,979
				Flexible Tech Assistance, FT12220-Cush&Wake	,
		Richmond	Consolidated Edison	Commercial New Construc, Commercial New Co	202,768
				Flexible Tech Assistance, FT12223-MealsWheel	39,240
	AltPOWER, Inc.	Queens	Consolidated Edison	<200KW PV, NY-Sun	332,442
	Amalgamated Housing Corpor	Bronx	Consolidated Edison	Multifam Performance Pgm, Multifamily	1,040,900
	American Solar Partners, LLC	Bronx	Consolidated Edison	PON 2112 NY SUN	123,139
	Amsterdam Nursing Home	New York	Consolidated Edison	Flexible Tech Assistance, FT12209 - AmsNursin	15,309
	Corporation			Flexible Tech Assistance, FT12215-AmsterdamN.	. 11,913
	Analemma Solar Corp.	Kings	Consolidated Edison	PON 2112 NY SUN	21,600
	Antares Group, Inc.	Queens	Consolidated Edison	Campus/Technical Assistance, FT12091-St. Joh	12,760
	Apex Roofing, LLC	Richmond	Consolidated Edison	PON 2112 NY SUN	61,650
	Arcadis U.S., Inc.	Kings	Consolidated Edison	EXISTING FACILITIES, Tech Review & Program	4,279
	Association for Energy	Bronx	Consolidated Edison	Talent Pipeline:CE and OJT, OJT HIRE	7,920
	Affordability, In	Diolik		Talent Pipeline:CE and OJT, OJT HIRE	44,640
	Barnard College	New York	Consolidated Edison	REV Campus Challenge, Efficiency Planning & E	
		Bronx	Consolidated Edison	<200KW PV, NY-Sun	18,760
	Best Energy Power	BIOIIX	Consolidated Edison	NY-Sun	28,140
		Oueene	Consolidated Edison	<200KW PV, NY-Sun	
		Queens	Consolidated Edison		20,000
	D lla Whalasala Chik	Kinana	Concolidated Edicor	NY-Sun	88,536
	BJ's Wholesale Club	Kings	Consolidated Edison	NY-Sun	767,556
		Queens	Consolidated Edison	NY-Sun	432,216
	BlocPower Community Corpor	0	Consolidated Edison	Community RH&C, PON 3922 CH&C Communiti	
	Bright Power, Inc.	Bronx	Consolidated Edison	<200KW PV, NY-Sun	124,480
				NY-Sun	299,457
				PON 2112 NY SUN	549,915
				Real Time Enrgy Management, Bright Power-Mul.	
		Kings	Consolidated Edison	PON 2112 NY SUN	21,450
				Real Time Enrgy Management, Bright Power-Mul	560,894
				Real Time Enrgy Management, Bright Power, Inc	560,320
				Real Time Enrgy Management, BrightPower-333 .	42,437
		New York	Consolidated Edison	Flexible Tech Assistance, FT12093 - 205 W 39th .	. 5,400
				Flexible Tech Assistance, FT12212 - 370 Lexingt	25,000
				NY Sun	3,726
				Real Time Enrgy Management, Bright Power-Mul.	119,889
		Queens	Consolidated Edison	Geothermal Incentive Program, FT12238-LeFrak	39,800
				Real Time Enrgy Management, Brght Pwr-9745	98,238
	Brooklyn SolarWorks LLC	Kings	Consolidated Edison	PON 2112 NY SUN	32,729
	,	Queens	Consolidated Edison	PON 2112 NY SUN	14,904
	Buffalo Ave Realty LLC	Kings	Consolidated Edison	Commercial New Construc, SF106872 - 170 Buff.	
	Carbon Lighthouse	Kings	Consolidated Edison	Real Time Enrgy Management, CarbonLghthous	166,689
	Carbon Lighthouse	Queens	Consolidated Edison	Real Time Enrgy Management, CL - College Poi	77,782
	CBS Broadcasting Inc.	New York			
	CBS Broadcasting Inc.		Consolidated Edison	Industrial Process Effic, Industrial Process Efficie	
	CertainSolar, Inc.	Richmond	Consolidated Edison Consolidated Edison	Fuel Cells, Fuel Cell Incentive - FC-027 PON 2112 NY SUN	1,000,000
	CES Danbury Solar, LLC				

EDC Region		County	Electric Utility	Contract Description	Total Funded Amount
Iew YORK City	Citistaffing, LLC	New York	Consolidated Edison	NEW YORK GREEN BANK, TS.008 - NYGB Offi	6,555
	Climate Change & Environmental	New York	Consolidated Edison	Commercial Real Estate Ten, CCES-Multisite	8,190
		Queens	Consolidated Edison	Commercial Real Estate Ten, CCES - 209-35 No	,
				Commercial Real Estate Ten, Climate Chng Env	
	Code Green Solutions, Inc.	New York	Consolidated Edison	Flexible Tech Assistance, FT12063- ABS 270 Ma.	
				Flexible Tech Assistance, FT12082-Glenhill Asso.	
				Flexible Tech Assistance, FT12083-Met Tower Di.	
				Flexible Tech Assistance, FT12201 - Super Nova.	
				Flexible Tech Assistance, FT12202 - 3Columbus	22,950
				Flexible Tech Assistance, FT12230-CBRE-123	24,000
				Flexible Tech Assistance, FT12235-OneCity-111.	
				Flexible Tech Assistance, FT12240-RXR Realty	19,750
				Flexible Tech Assistance, FT12251 - Macklowe	. 19,750
	Cogeneration Contractors, Inc.	Queens	Consolidated Edison	Combined Heat and Power, CHPA - Fresh Mead	697,500
	Columbia University	New York	Consolidated Edison	Industrial Process Effic, Industrial Process Efficie.	100,974
	Concern for Independent Livin	Kings	Consolidated Edison	MULTIFAMILY PERFORMANCE PROGRAM, M	9,900
	Control Solutions Group, Inc.	New York	Consolidated Edison	NYSERDA ADMINISTRATION, HVAC Maintena	13,484
	Convoy Solutions	Bronx	Consolidated Edison	Energy Storage Tech/Prod Dev, Renewable Opti	192,000
	Cortex Building Intelligence,	New York	Consolidated Edison	Real Time Enrgy Management, CBI-3 Bryant Par.	83,764
	Inc.			Real Time Enrgy Management, CBI-1285 Ave of	139,354
				Real Time Enrgy Management, CBI-1700 Broad	48,828
	Culture Shed	Kings	Consolidated Edison	NEW CONSTRUCTION PROGRAM, NCP11418 .	132,759
	Cutone & Company	New York	Consolidated Edison	Commercial Real Estate Ten, LC Assoc-575 Lex .	10,568
	Consultants, LLC			EXISTING FACILITIES, EFP2639 - Cutone; 200	12,086
	Davidson Equities LLC	Queens	Consolidated Edison	NEW CONSTRUCTION PROGRAM, NCP11857.	. 204,707
	Do-It-With Inc.	Kings	Consolidated Edison	NY-Sun	50,976
				PON 2112 NY SUN	97,380
		New York	Consolidated Edison	PON 2112 NY SUN	100,680
	Dual Fuel Corp	Bronx	Consolidated Edison	Real Time Enrgy Management, Dual Fuel-1898 B.	. 27,283
				Real Time Enrgy Management, Dual Fuel-1900 B.	33,366
				Real Time Enrgy Management, Dual Fuel-1908 B.	33,366
		Kings	Consolidated Edison	Real Time Enrgy Management, Dual Fuel – 70 Pr.	29,250
		New York	Consolidated Edison	Real Time Enrgy Management, DF - 105 East 29	32,813
				Real Time Enrgy Management, DF - 718 Broadw	7,395
				Real Time Enrgy Management, DF - 815 West 1	23,200
				Real Time Enrgy Management, Dual Fuel-611 Ac.	. 29,247
				Real Time Enrgy Management, Dual Fuel-1871 S.	. 37,500
		Queens	Consolidated Edison	Real Time Enrgy Management, DF – 4526 44th	30,809
	Ecosave, Inc.	Bronx	Consolidated Edison	Real Time Enrgy Management, Ecosave-5901 P	145,000
	Edison Energy Group Inc	New York	Consolidated Edison	Real Time Enrgy Management, EnerActive-300 E.	45,360
	EME Consulting Engineering	Kings	Consolidated Edison	Flexible Tech Assistance, FT12080-NYU Langon.	
	Group, LLC	New York	Consolidated Edison	Real Time Enrgy Management, SA.056_TWO #1	
				Retrofit NY, SA.057 TWO #11 - Multifam APM	297,788
	Empower CES, LLC	Kings	Consolidated Edison	NY-Sun	19,712
	,,	Queens	Consolidated Edison	<200KW PV, PON 2112 NY SUN	5,003
				PON 2112 NY SUN	176,802
	ENER-G Rudox, LLC	New York	Consolidated Edison	Combined Heat and Power, CHPA - 250 South S.	
		New Fork	Consolidated Edison	Combined Heat and Power, CHPA - MSK 415 Ea.	
				Combined Heat and Power, CHPA - MSK 445 Ea.	
				Combined Heat and Power, CHPA - Misk 444 La.	. 1,183,890 341,353
		Queens	Consolidated Edison	Combined Heat and Power, CHPA - The Rector Combined Heat and Power, CHPA - St. Mary's H	

REDC Region		County	Electric Utility	Contract Description	Total Funded Amount
vew YORK City	Energy Technology Savings, I		Consolidated Edison	Real Time Enrgy Management, ETS - 90 Washin	2,438
	EnterSolar LLC	Bronx	Consolidated Edison	PON 2112 NY SUN	577,530
	Ery Tenant LLC	Kings	Consolidated Edison	NEW CONSTRUCTION PROGRAM, NCP11551	
	Etsy, Inc.	Kings	Consolidated Edison	Flexible Tech Assistance, FT12103-Etsy BK HQ	
	Fifth Avenue Committee, Inc.	Kings	Consolidated Edison	NY-SUN, FAC Solar	131,899
	First Quality Maintenance II, LLC	New York	Consolidated Edison	NYSERDA ADMINISTRATION, Admin-NYC (Acc	31,250
	LLO			NYSERDA ADMINISTRATION, NYC Office Clea	122,137
				NYSERDA ADMINISTRATION, NYC Office Clea	19,292
	Forest Hills MHA Housing Dev	Queens	Consolidated Edison	Multifam Performance Pgm, Multifamily	301,000
	Geatain Engineering PLLC	New York	Consolidated Edison	Commercial Real Estate Ten, Geatain Engineer	5,000
	Generate Capital Inc.	Queens	Consolidated Edison	<200KW PV, NY-Sun	356,040
				NY-Sun	732,780
	Goldman Copeland Associates,	New York	Consolidated Edison	Commercial Real Estate Ten, Goldman&Copelan	10,997
	P.C.			Commercial Real Estate Ten, Goldman&Copelan	10,997
				Commercial Real Estate Ten, Goldman&Copelan	18,962
				Commercial Real Estate Ten, Goldman&Copelan	11,965
				Flexible Tech Assistance, FT12070-Vornado655	13,991
				Flexible Tech Assistance, FT12086-RFR Realty	18,997
				Flexible Tech Assistance, FT12101 - ERT 250 W	14,993
		Queens	Consolidated Edison	Commercial Real Estate Ten, Goldman&Copelan	9,980
		Richmond	Consolidated Edison	Commercial Real Estate Ten, GoldmanCopelane	10,997
	Green Street Power Partners	Kings	Consolidated Edison	<200KW PV, NY-Sun	20,000
	LLC	rango	Consolidated Edison	NY-Sun	30,150
				PON 2112 NY SUN	528,408
		Queens	Consolidated Edison	PON 2112 NY SUN	77,760
		Richmond	Consolidated Edison	PON 2112 NY SUN	1,417,824
	Grid City Electric Corp				6,132
		Kings	Consolidated Edison	PON 2112 NY SUN	
		New York	Consolidated Edison	<200KW PV, NY-Sun	39,152
		0	Case alidated Edison	NY-Sun	66,312
		Queens	Consolidated Edison	PON 2112 NY SUN	45,507
	Group-S LLC	New York	Consolidated Edison	Flexible Tech Assistance, FT12211 - 90 Broad	29,000
				Flexible Tech Assistance, FT12224-2 CharltonHo	30,750
	GSPP SP 1 55-30 58th St., LL		Consolidated Edison	>200KW PV, NY-Sun C&I	559,705
	GSPP SP 2 Sing Po, LLC	Queens	Consolidated Edison	>200KW PV, NY-Sun C&I	231,602
	GTT Communications, Inc.	New York	Consolidated Edison	Industrial Process Effic, Industrial Process Efficie	34,437
	Habitat Net Zero LLC	Queens	Consolidated Edison	Low Rise New Construction, 2019 LRNCP	54,600
	Habitat New Lots LLC	Kings	Consolidated Edison	Low Rise New Construction, 2019 LRNCP	12,000
	Harvest Power, LLC	Bronx	Consolidated Edison	<200KW PV, NY-Sun	13,334
				NY-Sun	20,001
		Queens	Consolidated Edison	PON 2112 NY SUN	16,320
	Housing Works	Kings	Consolidated Edison	Workforce Industry Partnership, PON 3715 Workf	6,555
	IESI NY Corporation	New York	Consolidated Edison	NYSERDA ADMINISTRATION, Trash Removal fr	5,060
	IKEA US Retail LLC	Kings	Consolidated Edison	Fuel Cells, Fuel Cell Incentive - FC-022	288,750
				Fuel Cells, Fuel Cell Incentive - IKEA 1 B	165,000
	In Time of Need, Inc.	Bronx	Consolidated Edison	NY-SUN, New Gospel Temple Bronx	89,000
	INF Associates LLC	New York	Consolidated Edison	Commercial Real Estate Ten, INF - 1350 Ave Of	5,000
				Commercial Real Estate Ten, INF Associates LL.	125,000
				Commercial Real Estate Ten, INF Associates-25.	5,000
				Commercial Real Estate Ten, INF-19 E57th Stre	15,469
	InTech Energy, Inc.	New York	Consolidated Edison	Real Time Enrgy Management, InTech Energy-M	
	птесп спетуу, шс.				
		Queens	Consolidated Edison	Real Time Enrgy Management, InTech-6111 Que	28,328

New York City	Jaros, Baum & Bolles	New York	Consolidated Edison	Flexible Tech Assistance, FT12094_125 Broad-C	40,780
	Johnson Controls Inc.	Queens	Consolidated Edison	Real Time Enrgy Management, JohnsonCntrls-E.	209,813
	Jones Lang LaSalle Americas,	Kings	Consolidated Edison	Commercial Real Estate Ten, JLL Americas, Inc	5,000
	Inc.	New York	Consolidated Edison	Commercial Real Estate Ten, JJL Americas-Multi	77,600
				Commercial Real Estate Ten, JLL - Multisite	40,000
				Commercial Real Estate Ten, JLL Americas, Inc	50,000
				Commercial Real Estate Ten, JLL Americas, Inc	35,000
	JR Language Translation Serv	New York	Consolidated Edison	OREC: Technical Support, OSW Translation Ser	50,000
	Kamtech Restoration Corp	Richmond	Consolidated Edison	<200KW PV, PON 2112 NY SUN	5,508
	Kawi Energy Group Corp.	Queens	Consolidated Edison	Commercial Real Estate Ten, Kawi Energy Grou	66,992
	Kilowatt Engineering, Inc.	New York	Null	Industrial Process Effic, IPE16230	12,164
			Consolidated Edison	Industrial Process Effic, 2621 Umbrella Contract	6,146
				Industrial Process Effic, IPE16236	8,228
				Industrial Process Effic, IPE16242	16,782
				Industrial Process Effic, IPE16243	32,069
	L&S Energy Services, Inc.	New York	Consolidated Edison	NEW CONSTRUCTION PROGRAM, Umbrella C	5,000
	Legacy Yards Tenant LLC	New York	Consolidated Edison	EXISTING FACILITIES, DMP Bonus - 10 Hudsdo	124,526
	Lemor Development Group,	Bronx	Consolidated Edison	Multifam Performance Pgm, Multifamily	150,500
	LLC	New York	Consolidated Edison	Multifam New Construction, MFNCP - Balton Co	129,500
	Loring Consulting Engineers, I	Kings	Consolidated Edison	Flexible Tech Assistance, FT12099 – 25-30 Colu.	45,712
	Martin Energy Group Services.	Bronx	Consolidated Edison	Combined Heat and Power, CHPA-Amalgamated	202,236
	Maspeth Contracting Corp.	New York	Consolidated Edison	<200KW PV, NY-Sun	12,118
	Momentum NA, Inc.	New York	Null	Commercial Real Estate Ten, RDA-300 Vesey St	10,750
	Mount Sinai Medical Center	Kings	Consolidated Edison	Flexible Tech Assistance, FT12248-Mt Sinai-Bro	17,850
	Nagle House, Inc.	New York	Consolidated Edison	Multifam Performance Pgm, Multifamily	126,000
	NCM USA Bronx LLC	Bronx	Consolidated Edison	Flexible Tech Assistance, FT12206 - NCM-USA	16,806
	New 56th and Park NY Owner	New York	Consolidated Edison	EXISTING FACILITIES, DMP Bonus - 56th & Par	94,321
	New Destiny Housing Corpora	Bronx	Consolidated Edison	Multifam New Construction, New Construction	54,000
	New York University	New York	Consolidated Edison	Combined Heat and Power, CHPA - NYU 181 M.	1,390,331
	Noresco LLC	New York	Consolidated Edison	Flexible Tech Assistance, FT12231 - NYPH - Mul	178,840
				Flexible Tech Assistance, FT12245-Cogswell-21	21,765
		Richmond	Consolidated Edison	Commercial New Construc, New Construction	89,360
	One Vanderbilt Owner LLC	New York	Consolidated Edison	NEW CONSTRUCTION PROGRAM, NCP11626	259,560
	Pennrose LLC	Kings	Consolidated Edison	New Construction- Housing, 2019 MFCNP	150,800
	Powergen Development Grou		Consolidated Edison	Combined Heat and Power, CHPA - One Carnegi	202,236
	Powerhouse Dynamics, Inc	Kings	Consolidated Edison	Real Time Enrgy Management, Powerhouse-Mult	5,607
		Queens	Consolidated Edison	Real Time Enrgy Management, Powerhouse-Mult	6,005
	Premier Solar Solutions LLC	Bronx	Consolidated Edison	PON 2112 NY SUN	21,978
		Queens	Consolidated Edison	PON 2112 NY SUN	343,842
	Project Hospitality	Richmond	Consolidated Edison	New Construction- Housing, 2019 MFCNP	48,000
	Quest Energy Group	New York	Consolidated Edison	Commercial Real Estate Ten, Quest Energy Gro	7,500
				Commercial Real Estate Ten, Quest Energy Grp	8,750
				Commercial Real Estate Ten, QuestEnergyGrp-1	7,500
		Queens	Consolidated Edison	Commercial Real Estate Ten, Quest Energy Gro	7,500
	Quixotic Systems, Inc.	Kings	Consolidated Edison	RENEWABLE THERMAL, Solar Thermal Incentive	6,000
		New York	Consolidated Edison	PON 2112 NY SUN	12,118
	R3 Energy Management Audit	New York	Consolidated Edison	Real Time Enrgy Management, R3 Energy-575	26,640
	Randstad North America, Inc.	New York	Consolidated Edison	Cl Engy Siting & Soft Cost Red, TS.001 - CES C.	160,542
	, -			NEW YORK GREEN BANK, Payroll Services	63,375
	RBC Capital Markets LLC	New York	Null	Industrial Process Effic, Industrial Process Efficie	92,848
	RCPI Landmark Properties, L		Consolidated Edison	Real Time Enrgy Management, RCPI - Multisite	7,600,000
	Research Foundation of CUNY		Consolidated Edison	Talent Pipeline:CE and OJT, PON3981 Round 3	186,548

REDC Region		County	Electric Utility	Contract Description	Total Funded Amount
New York City	Ridgewood Bushwick Harman		Consolidated Edison	Multifam Performance Pgm, Multifamily	12,600
	Riseboro Community Partners	Kings	Consolidated Edison	Retrofit NY, PON 4062	1,840,000
	Robert Derector Associates	New York	Null	Commercial Real Estate Ten, Robert Derector-30.	. 8,700
			Consolidated Edison	Commercial Real Estate Ten, RDA-55 Fifth Ave,	12,900
				Commercial Real Estate Ten, RDA-1221 Avenue	11,650
				Commercial Real Estate Ten, Robert Derector	15,000
				Commercial Real Estate Ten, Robert Derector-60.	. 25,000
				Commercial Real Estate Ten, RobertDerector-53	16,050
	Safari Energy LLC	Kings	Consolidated Edison	PON 2112 NY SUN	21,600
	SCCQ Rock Hotel	New York	Consolidated Edison	Flexible Tech Assistance, FT12088-Club Qtrs-Ro.	7,775
	Schneider Electric Buildings A	New York	Consolidated Edison	Real Time Enrgy Management, Schneider-100 E	. 300,000
	School of Visual Arts	New York	Consolidated Edison	Industrial Process Effic, Industrial Process Efficie	28,715
	Siemens Industry, Inc.	New York	Consolidated Edison	Real Time Enrgy Management, Siemens - 57 E 5.	300,000
				Real Time Enrgy Management, Siemens-1585 Br.	. 300,000
	SL Green Management	Kings	Consolidated Edison	Flexible Tech Assistance, FT12233 - 420 Lexingt.	29,900
	Smarter Grid Solutions, Inc.	New York	Consolidated Edison	Talent Pipeline:CE and OJT, OJT HIRE	30,720
	Smith Engineering PLLC	Kings	Consolidated Edison	Flexible Tech Assistance, FT12092 - RXR 1330	61,350
		New York	Consolidated Edison	Workforce Industry Partnership, PON 3715 Workf.	. 1,076,725
	Sol Alliance Solar Development	New York	Consolidated Edison	PON 2112 NY SUN	53,724
		Queens	Consolidated Edison	PON 2112 NY SUN	200,244
	Solar Energy Systems, LLC	Bronx	Consolidated Edison	PON 2112 NY SUN	29,484
		Queens	Consolidated Edison	PON 2112 NY SUN	232,158
	Solar Liberty Energy Systems, Inc	Bronx	Consolidated Edison	<200KW PV, NY-Sun	14,112
				NY-Sun	21,168
		Queens	Consolidated Edison	PON 2112 NY SUN	47,898
	Solar Star Prime 2, LLC	Richmond	Consolidated Edison	NY-Sun	4,254,624
	SourceOne Power Technologi		Consolidated Edison	Real Time Enrgy Management, SourceOne-733	76,950
	Steven Winter Associates, Inc.	Bronx	Consolidated Edison	Workforce Industry Partnership, PON 3715 Workf.	
		New York	Consolidated Edison	New Construction- Housing, SF 107588 - 511 Ea.	
				Real Time Enrgy Management, Steven Winter-15.	
				Real Time Enrgy Management, SWA - 255 Huds	
		2		Workforce Industry Partnership, PON 3715 Workf.	
	<u> </u>	Queens	Consolidated Edison	Commercial New Construct, New Construction	62,992
	Sunnova Energy Corp	Richmond	Consolidated Edison	<200KW PV, PON 2112 NY SUN	5,602
	SunPower Capital, LLC	Kings	Consolidated Edison	<200KW PV, PON 2112 NY SUN	11,619
		Richmond	Consolidated Edison	<200KW PV, NY-Sun	10,328
		0		<200KW PV, PON 2112 NY SUN	5,040
	SunRun, Inc	Queens	Consolidated Edison	<200KW PV, PON 2112 NY SUN	6,432
	Tecogen	Kings	Consolidated Edison	Combined Heat and Power, CHPA-Bedford Unio	1,003,078
		N		Combined Heat and Power, CHPA-Domino - Buil.	,
		New York	Consolidated Edison	Combined Heat and Power, CHPA-125 Broad Str.	
				Combined Heat and Power, CHPA-485 First Ave	
				Combined Heat and Power, CHPA-Dorchester T	467,578
				Combined Heat and Power, CHPA-Esplanade G.	323,438
				Combined Heat and Power, CHPA-Esplanade G.	323,438
				Combined Heat and Power, CHPA-Esplanade G.	323,438
				Combined Heat and Power, CHPA-Esplanade G.	323,438
				Combined Heat and Power, CHPA-Esplanade G.	323,438
				Combined Heat and Power, CHPA-Esplanade G.	323,438
				Combined Heat and Power, CHPA-Normandie C	323,438
				Combined Heat and Power, CHPA-The Lucida	178,750
				Combined Heat and Power, CHPA-Windsor Court	323,438

REDC Region	-	County	Electric Utility	Contract Description	Total Funded Amount
New York City	The Center for Urban Commu		Consolidated Edison	MULTIFAMILY PERFORMANCE PROGRAM, M	1,800
	The Cooper Union for the Adv	New York	Consolidated Edison	Workforce Industry Partnership, PON 3715 Workf.	232,325
	The Hartz Group, Inc.	New York	Consolidated Edison	Flexible Tech Assistance, FT12076 - 667 Madiso	39,200
	The Woodlawn Cemetery	Bronx	Consolidated Edison	Industrial Process Effic, Industrial Process Efficie	15,096
	Tower Enterprises of NY & NJ	New York	Consolidated Edison	Talent Pipeline:CE and OJT, OJT HIRE	8,000
	Trane	New York	Consolidated Edison	Real Time Enrgy Management, Hilton - 237 W 54	822
				Real Time Enrgy Management, Trane Us Inc-117.	
	TRC Energy Services	New York	Consolidated Edison	Commercial Real Estate Ten, TRC EnergyServic	5,000
				Industrial Process Effic, Technical Review and Pr	1,758
	Urban Electric Power, LLC	New York	Consolidated Edison	SMART GRID SYSTEMS, 1MWh Peak-Shaving	500,000
	USE ACQUISITION LLC	Kings	Consolidated Edison	Real Time Enrgy Management, US Energy Grp-3	17,886
				Real Time Enrgy Management, US Energy-161	28,206
	Utilities Program & Metering, I	New York	Consolidated Edison	Real Time Enrgy Management, Utility Prog-1 NY	122,694
	Venture Home Solar LLC	Queens	Consolidated Edison	<200KW PV, PON 2112 NY SUN	5,226
	Verizon Communications Inc	New York	Consolidated Edison	Industrial Process Effic, Industrial Process Efficie	817,744
	Vidaris, Inc.	New York	Consolidated Edison	Commercial New Construc, Commercial New Co	83,815
				Commercial New Construc, New Construction	200,000
	WB Engineering & Consulting	New York	Consolidated Edison	Commercial Real Estate Ten, WB Engineers-345	102,023
	Weill Medical College at Corn	New York	Consolidated Edison	Flexible Tech Assistance, FT12229-WeillGreenb	9,363
	Willdan Energy Solutions	New York	Consolidated Edison	Commercial Real Estate Ten, Wildan-1345 AoA	7,875
				Industrial Process Effic, IPE16195	25,607
				Industrial Process Effic, IPE16222	8,091
				Industrial Process Effic, Technical Review and Pr	16,397
	Willrab Realty Corp	Bronx	Consolidated Edison	Multifam Performance Pgm, Multifamily	37,800
	WSP USA Corp.	New York	Consolidated Edison	Flexible Tech Assistance, FT12038 - Transweste	30,000
	You Save Green Incorporated	Queens	Consolidated Edison	<200KW PV, NY-Sun	8,168
	Total				59,830,221
North Country	Accelerate Solar LLC	Clinton	NYS Electric and Gas	<200KW PV, PON 2112 NY SUN	5,670
	Apex Solar Power LLC	Clinton	NYS Electric and Gas	<200KW PV, PON 2112 NY SUN	5,544
		Essex	National Grid	<200KW PV, PON 2112 NY SUN	6,750
	Arcadis of New York, Inc.	Essex	NYS Electric and Gas	Technical Services, AEAP	5,978
	Banks II Quan Associates, Inc.	Essex	National Grid	CI Carbon Challenge, CICC Intl. Paper Tech Rev	140,806
	Bergmann Associates	St. Lawrence	National Grid	Industrial Process Effic, Tech Review_Support_U	5,390
	CON EDISON SOLUTIONS, I	Franklin	National Grid	>200KW PV, NY Sun	249,480
	Cornerstone Energy Services	St. Lawrence	National Grid	Talent Pipeline:CE and OJT, OJT HIRE	5,600
	Fourth Coast, Inc.	Franklin	National Grid	<200KW PV, PON 2112 NY SUN	56,430
		Jefferson	National Grid	<200KW PV, PON 2112 NY SUN	49,742
	Frederick A Proven	Jefferson	National Grid	<200KW PV, PON 2112 NY SUN	15,561
		St. Lawrence	National Grid	<200KW PV, PON 2112 NY SUN	5,670
	Heat Keepers, Inc.	Essex	National Grid	Talent Pipeline:CE and OJT, OJT HIRE	15,360
	Kasselman Solar LLC	Clinton	National Grid	<200KW PV, NY-Sun	5,120
	Maple Housing Development	Jefferson	National Grid	Multifam Performance Pgm, Multifamily	80,500
	New York Power Authority,	St. Lawrence	Municipal Utilities	High Performing Grid, PON 3770	510,000
	NY Mooers I, LLC	Clinton	NYS Electric and Gas	>200KW PV, NY-Sun	1,194,826
	NYS Office of Parks, Recreati	Clinton	Municipal Utilities	<200KW PV, PON 2112 NY SUN	10,044
	Omniafiltra	Lewis	National Grid	Industrial Process Effic, Industrial Process Efficie	214,842
	OYA BLANCHARD ROAD 2 L	Jefferson	National Grid	ESTOR:Retail Storage Incentive, NY Sun	3,750,000
	OYA BLANCHARD ROAD LLC	Jefferson	National Grid	ESTOR:Retail Storage Incentive, NY-Sun	3,750,000
	OYA GREAT LAKES SEAWA	Jefferson	National Grid	ESTOR:Retail Storage Incentive, NY Sun	3,750,000
	OYA NYS RTE 12 LLC	Jefferson	National Grid	ESTOR:Retail Storage Incentive, NY Sun	3,750,000
			National Grid	<200KW PV, PON 2112 NY SUN	18,630
	Paradise Energy Solutions, LL.	JEIIEI 3011	National Onu		10,000

REDC Region		County	Electric Utility	Contract Description	Total Funded Amount
North Country		Essex	NYS Electric and Gas	<200KW PV, PON 2112 NY SUN	7,466
	RHM Inc.	St. Lawrence	National Grid	Renewable Heat NY, Aeon - Robert	21,000
	Sheland Farms LLC	Jefferson	National Grid	Anaerobic Digesters, PON 3739 CAT C	15,000
	Smart Phases Inc.	Clinton	NYS Electric and Gas	Combined Heat and Power, CHPA - Plattsburgh	1,188,388
	Solitude Solar LLC	Lewis	National Grid	>200KW PV, NY Sun	3,650,400
	St. Lawrence County	St. Lawrence	National Grid	Clean Energy Communities, CEC711051 St. Law.	250,000
	Sterling and Wilson Cogen So	Jefferson	National Grid	Combined Heat and Power, CHPA-Agbotic Proje	414,900
	Town of Black Brook	Clinton	National Grid	Clean Energy Communities, CEC701091 - Town	50,000
	Town of Colton	St. Lawrence	National Grid	Clean Energy Communities, CEC701140 - Town	50,000
	Town of Malone	Franklin	National Grid	Clean Energy Communities, CEC701017 Town o	50,000
	Town of Westport	Essex	National Grid	Clean Energy Communities, CEC701035 - Town	50,000
	Triangle Electrical Systems, In	Clinton	NYS Electric and Gas	<200KW PV, NY-Sun	9,525
	Village of Canton Housing Aut	St. Lawrence	National Grid	Multifam Performance Pgm, Multifamily	65,800
	Total				23,464,422
Southern Tier	Adam C. Boese	Tioga	NYS Electric and Gas	Technical Services, RFP3628FlexTechConsultU	2,500
	Bashing Panels LLC	Tompkins	NYS Electric and Gas	<200KW PV, PON 2112 NY SUN	18,300
	Bergmann Associates	Broome	NYS Electric and Gas	INDUSTRIAL PROCESS EFFICIENCY, Tech Re	20,995
	Borg Warner	Tompkins	NYS Electric and Gas	Industrial Process Effic, Industrial Process Efficie	719,436
	Catlin Solar 1 LLC	Chemung	NYS Electric and Gas	>200KW PV, NY-Sun C&I	1,024,137
	CHA Consulting Inc.	Steuben	NYS Electric and Gas	INDUSTRIAL PROCESS EFFICIENCY, Technic	10,200
	County of Chenango	Chenango	NYS Electric and Gas	Clean Energy Communities, CEC011260-Chen C.	150,000
	Delaware River Solar, LLC	Tioga	NYS Electric and Gas	>200KW PV, NY Sun C&I	1,594,080
	Doherty Electric, LLC	Delaware	NYS Electric and Gas	<200KW PV, PON 2112 NY SUN	7,313
	DRYDEN-TOMPKINS SOLAR		NYS Electric and Gas	>200KW PV, NY-Sun C&I	1,233,298
	Erin Renewables, LLC	Chemung	NYS Electric and Gas	>200KW PV, NY Sun	587,412
	Ex Libris, LLC	Tompkins	NYS Electric and Gas	Multifam New Construction, 2019 MFCNP	102,400
	Extraterrestrial Materials Inc.	Chenango	NYS Electric and Gas	<200KW PV, PON 2112 NY SUN	6,006
	George E Denmark II	Chemung	NYS Electric and Gas	<200KW PV, PON 2112 NY SUN	7,686
	GreenStar Cooperative Market	•	NYS Electric and Gas	Commercial New Construc, Commercial New Co	36,778
	•	Tompkins	NYS Electric and Gas	Industrial Process Effic, IPE16220	5,000
	L&S Energy Services, Inc.	•			
	LaBella Associates, P.C.	Chemung	NYS Electric and Gas	New Construction- Commercial, RFP3771 Umbre.	
	Lamphear Court Townhomes		NYS Electric and Gas	Low Rise New Construction, New Construction	86,100
	Lansing Renewables, LLC	Tompkins	NYS Electric and Gas	>200KW PV, NY-Sun C&I	1,354,645
				Solar Plus Energy Storage, NY-Sun C&I	3,499,999
	Lodestar Energy	Tioga	NYS Electric and Gas	>200KW PV, NY Sun	1,472,120
	M/E Engineering, P.C.	Tompkins	NYS Electric and Gas	REV Campus Challenge, RM30-Cornell Universit	
	NORWICH - CHENANGO SO		NYS Electric and Gas	>200KW PV, NY-Sun C&I	2,531,848
	NY ENFIELD I LLC	Tompkins	NYS Electric and Gas	>200KW PV, NY-Sun C&I	1,142,113
	O'Connell Electric Company	Chenango	NYS Electric and Gas	<200KW PV, NY-Sun	88,493
	Paradise Energy Solutions, LL	Delaware	NYS Electric and Gas	<200KW PV, PON 2112 NY SUN	70,200
	Pathfinder Engineers & Archit	Delaware	NYS Electric and Gas	Commercial New Construc, RFP3771 Umbrella	77,867
	Providence Housing Develop	Chemung	NYS Electric and Gas	Low Rise New Construction, 2019 LRNCP	37,000
	Renovus Energy, Inc.	Broome	NYS Electric and Gas	<200KW PV, PON 2112 NY SUN	18,176
		Chemung	NYS Electric and Gas	<200KW PV, PON 2112 NY SUN	19,395
		Delaware	NYS Electric and Gas	<200KW PV, NY-Sun	6,760
		Schuyler	NYS Electric and Gas	<200KW PV, NY-Sun	6,624
				<200KW PV, PON 2112 NY SUN	15,155
		Steuben	NYS Electric and Gas	<200KW PV, PON 2112 NY SUN	7,486
		Tioga	NYS Electric and Gas	<200KW PV, NY-Sun	5,598
				<200KW PV, PON 2112 NY SUN	18,596
		Tompkins	NYS Electric and Gas	<200KW PV, PON 2112 NY SUN	32,946
	Siemens Industry, Inc.	Steuben	NYS Electric and Gas	Real Time Enrgy Management, Siemens-1 Acad	24,662

REDC Region		County	Electric Utility	Contract Description	Total Funded Amount
Southern Tier	Ski Plattekill, Inc.	Delaware	NYS Electric and Gas	Industrial Process Effic, Industrial Process Efficie	6,834
	Smith Engineering PLLC	Tompkins	NYS Electric and Gas	Flexible Tech Assistance, FT12237-Cornell-961E.	49,530
	Snug Planet, LLC	Tompkins	NYS Electric and Gas	Talent Pipeline:CE and OJT, OJT HIRE	25,920
	Solar Liberty Energy Systems,	Delaware	NYS Electric and Gas	<200KW PV, PON 2112 NY SUN	5,528
	Spencer-Tioga Solar, LLC	Tioga	NYS Electric and Gas	>200KW PV, NY-Sun C&I	2,719,239
	Steuben Churchpeople Against	Chemung	NYS Electric and Gas	Low Rise New Construction, 2019 LRNCP	28,000
	Poverty Inc	Steuben	NYS Electric and Gas	Low Rise New Construction, New Construction	86,100
	Taitem Engineering, P.C.	Tompkins	NYS Electric and Gas	Commercial New Construc, Commercial New Co	17,148
				Commercial New Construc, New Construction	22,948
				Commercial Real Estate Ten, Taitem-110 S Alba	13,600
				Multifam Performance Pgm, RFQL 3434 - Standa.	464,250
	Town of Dickinson	Broome	NYS Electric and Gas	Clean Energy Communities, CEC001263 - Town	50,000
	Town of Enfield	Tompkins	NYS Electric and Gas	Clean Energy Communities, CEC001221 - Town	50,000
	Village of Montour Falls	Schuyler	NYS Electric and Gas	Clean Energy Communities, CEC001316 V Mont	
	Xzerta Energy Group LLC	Chenango	NYS Electric and Gas	>200KW PV, NY Sun	902,880
		Tioga	NYS Electric and Gas	>200KW PV, NY Sun	1,378,944
	Total				22,147,325
Statewide	455 Hospitality LLC	STATEWIDE	Statewide	Multifam Performance Pgm, 2019 Multifamily Su	40,000
otatemac		OWNEWIDE	Oldiewide	New Construction- Housing, 2019 Multifamily Su.	10,000
	ABB, Incorporated	STATEWIDE	Statewide	High Performing Grid, PON 3770 Smart Grid	864,400
	Abb, incorporated Abt Associates Inc.	STATEWIDE	Statewide	ENVIRONMENTAL RESEARCH, TWO#1 Pathw	200,000
	Accion Group, LLC	STATEWIDE	Statewide	REC:CES REC System Dev Costs, Large-Scale	
	Adirondack Area Network	STATEWIDE	Statewide	NYSERDA ADMINISTRATION, 2019 AA NET Re.	
	Adirondack Center for Loon	STATEWIDE	Statewide	Environmental Research, Climate impacts on AD	
	Agbotic Project #1 LLC	STATEWIDE	Statewide	NY Green Bank, Agbotic	6,000,000
	AIA - New York Chapter	STATEWIDE	Statewide	New Construction- Commercial, AIA-Strategic pa	
				New Construction- Housing, AIA-Strategic partne	
	Akimeka, LLC	STATEWIDE	Statewide	CLEAN TRANSPORTATION, Oneida County ITS.	
				CLEANER GREENER COMMUNITIES, Animatin	
				Electric Vehicles - Innovation, Planning Board EV.	
				EVALUATION, RFQL3685 Round 1	14,972
				OTHER PROGRAM AREA, RFQL3685 Round 1	150,000
	Alberto Aceves Cornejo	STATEWIDE	Statewide	Agbotic - Tech. Due Diligence	1,271
	Alliance for Sustainable Energy, LLC	STATEWIDE	Statewide	Nat'l OffShWind R&D Consortium, NREL for OS	56,434
	Lifergy, LLC			NREL for OSW Consortium	28,566
	Allied Microbiota LLC	STATEWIDE	Statewide	Cleantech Ignition, PON 3871 Ignition Grants	100,000
	American Council for an	STATEWIDE	Statewide	Intervention Effectiv Training, 2020 ACEEE Finan.	45,000
	Energy Efficient			Subscription/Data Access, Market Insights	12,000
	American Society of	STATEWIDE	Statewide	New Construction- Commercial, New Construction	4,020
	Heating,Refrigeratin			New Construction- Housing, New Construction	16,080
	Antares Group, Inc.	STATEWIDE	Statewide	ANAEROBIC DIGESTER, ADG - Antares - TWO	49,500
				Combined Heat and Power, ADG - Antares - TWO	49,500
	Arcadis U.S., Inc.	STATEWIDE	Statewide	ANAEROBIC DIGESTER, ADG - Arcadis - TWO	66,000
				Combined Heat and Power, ADG - Arcadis - TWO	66,000
				K-12 SCHOOLS, P-12 Gap Pre-Qual Incentive	224,500
	Arch Street Communications,	STATEWIDE	Statewide	CI Engy Siting & Soft Cost Red, TWO 3: LSR RF	49,500
	Atelier Ten	STATEWIDE	Statewide	Commercial New Construc, SUNY - Mini Bid (20	250,000
	Atlas Public Policy	STATEWIDE	Statewide	Electric Vehicles - Innovation, Clean Transportati	167
	Autronic Plastics, Inc.	STATEWIDE	Statewide	Pub Transit & Elect Rail, Wireless Transit Lighting	244,000
	Awards By Walsh's & Creative		Statewide	New Construction- Housing, Buildings of Excelle.	7,575
	B & W Sound Services, Inc.	STATEWIDE	Statewide	OTHER PROGRAM AREA, 76West Awards Audi	
	Battelle Memorial Institute	STATEWIDE	Statewide	Code to Zero, BMI TWO #1-NYStretch Support	171,000

	Contractor	County	Electric Utility	· · · · · · · · · · · · · · · · · · ·	Total Funded Amount
Statewide	BDO USA LLP	STATEWIDE	Statewide	Background Investigation Servi	18,700
	Benchemark Printing, Inc.	STATEWIDE	Statewide	OTHER PROGRAM AREA, Printing Services - E	15,000
	Bettergy Corporation	STATEWIDE	Statewide	Energy Storage Tech/Prod Dev, NH3 Cracking M	359,968
	BLIX Consultancy BV	STATEWIDE	Statewide	Environmental Research, Procurement support	50,000
	Bloomberg Finance LP	STATEWIDE	Statewide	NEW YORK GREEN BANK, Bloomberg Datafee	54,000
	BME Yellowjacket LLC	STATEWIDE	Statewide	Anaerobic Digesters, PON 3739 CAT C	70,000
	Bond, Schoeneck & King, PLL	STATEWIDE	Statewide	OTHER PROGRAM AREA, RFP 3300 Outside C	32,927
	Boundless Impact Investing	STATEWIDE	Statewide	Cleantech ICC Engage, Climate Impact Profile Pi	48,000
	BPCA NYS Inc.	STATEWIDE	Statewide	Home Perf w Energy Star, Res Stakeholder Enga	49,000
	Bright Power, Inc.	STATEWIDE	Statewide	Novel Bus Models & Offers, 3932 Novel Busines	500,000
	BTMI Engineering, PC	STATEWIDE	Statewide	OREC: Technical Support, Large-Scale Renewa	35,000
	BVG Associates LLC	STATEWIDE	Statewide	REC:CES REC System Dev Costs, TWO-1-IE-20	38,500
	BW Research Partnership	STATEWIDE	Statewide	ENERGY ANALYSIS, New York Clean Energy J	121,686
	Bynder LLC	STATEWIDE	Statewide	NYSERDA ADMINISTRATION, WebDAM Photo	8,975
	Calpine Corporation	STATEWIDE	Statewide	REC:CES REC Contracts, Large-Scale Renewab	137,079,080
	Capital District Regional Plann.	STATEWIDE	Statewide	Community RH&C, Cap Dist Heat & Cool Smart	200,000
	Carbon Trust Advisory Limited	STATEWIDE	Statewide	Carbon Trust OSW Consortium	25,541
				Nat'l OffShWind R&D Consortium, Carbon Trust	50,459
	CEC Stuyvesant Cove, Inc.	STATEWIDE	Statewide	Retrofit NY, RetrofitNY Solar Business Case	35,000
				Talent Pipeline:CE and OJT, PON3981 WFD Ca	100,066
	Center for Sustainable Energy	STATEWIDE	Statewide	CLEAN TRANSPORTATION, Centralized Servic	520,732
				OTHER PROGRAM AREA, Centralized Services	10,000
	CH4 Biogas, LLC	STATEWIDE	Statewide	Anaerobic Digesters, PON 3739 CAT C	15,000
	City of New York, Dept. of City		Statewide	EXISTING FACILITIES, EFP2525-DCAS;ACE Pr	183,166
	City of Utica	STATEWIDE	Statewide	Community RH&C, Heat & Cool for Utica NYTBD	150,000
	Clean Energy States Alliance	STATEWIDE	Statewide	Prof & Expert Engagement, FY 2020 CESA Mem.	68,500
	CLEAResult Consulting, Inc.	STATEWIDE	Statewide	ESTOR: Implementation Support, Centralized Se.	46,012
		0	otatomao	Technical Support SFR	588,035
	Cohen Ventures Inc	STATEWIDE	Statewide	Air Source Heat Pumps, Product and Appliance	50,000
	Continental Automated Buildin.		Statewide	Subscription/Data Access, Market Insights	5,000
	Conventures, Inc.	STATEWIDE	Statewide	EXISTING FACILITIES, 2019 Energy Solutions S.	6,250
				INDUSTRIAL PROCESS EFFICIENCY, 2019 En	12,500
		0747514//05	01.1.1	Real Time Enrgy Management, 2019 Energy Sol	6,250
	Corey Harrington	STATEWIDE	Statewide	OTHER PROGRAM AREA, National offshore We	5,988
	Cornell Cooperative Extension - Tompkins	STATEWIDE	Statewide	Community Energy Engagement, CEEP North C	122,331
	·			OTHER PROGRAM AREA, CEEP North Country	52,669
	Cornell University	STATEWIDE	Statewide	Environmental Research, AQHE PON 3921	300,000
				OTHER PROGRAM AREA, 76West TWO 27	199,573
				OTHER PROGRAM AREA, 76West TWO 28	116,440
				OTHER PROGRAM AREA, 76West TWO 29	182,690
				OTHER PROGRAM AREA, 70333 TWO 30	18,751
				OTHER PROGRAM AREA, Entr @ Cornell Spon	30,000
	CoStar Realty Information, Inc.	STATEWIDE	Statewide	MARKET PATHWAYS, Codes, Products and Sta	4,940
				Subscription/Data Access, Market Insights	14,908
	CrystalCreek Organics Inc.	STATEWIDE	Statewide	OTHER PROGRAM AREA, Trial to enhance ana	598,000
	D & R International Ltd	STATEWIDE	Statewide	Eval MCDC Cross Cutting, Heating & Cooling Re	115,500
				EVALUATION, Heating & Cooling Reports	23,100
	Dandelion Energy Inc	STATEWIDE	Statewide	Novel Bus Models & Offers, 3932 Novel Busines	500,000
	Davis Polk & Wardwell LLP	STATEWIDE	Statewide	NEW YORK GREEN BANK, Green Bank Outside	289,492
	Dayton T. Brown, Inc.	STATEWIDE	Statewide	Pub Transit & Elect Rail, Subway energy use ana	198,195
	DealCloud Inc.	STATEWIDE	Statewide	NEW YORK GREEN BANK, DealCloud Licensing	44,250
	Dewberry Engineers Inc	STATEWIDE	Statewide	Environmental Research, Transportation Climate	7,500

REDC Region		County	Electric Utility	Contract Description	Total Funded Amount
Statewide	Dick Kornbluth	STATEWIDE	Statewide	Home Perf w Energy Star, Single Family Residen	50,000
	DNV GL Energy Insights USA Inc.	STATEWIDE	Statewide	Commercial Real Estate Ten, TWO 1 - CRE Ten	163,589
				EVALUATION, TWO 7 - T&MD 2014-18 Impact Ev	
	Dragon Innovation, Inc.	STATEWIDE	Statewide	M-Corps, Product Design Spec.Template	48,500
	Dual Fuel Corp	STATEWIDE	Statewide	Real Time Enrgy Management, RTEM Gas Mini	750,000
	DWM International Inc.	STATEWIDE	Statewide	OTHER PROGRAM AREA, 2019 76West Trophy	8,645
	E&S Environmental Chemistry	STATEWIDE	Statewide	ENVIRONMENTAL RESEARCH, 127159 TWO#1	219,797
	Ecolectro Inc	STATEWIDE	Statewide	Cleantech Ignition, PON 3871 Ignition Grants	98,832
				Energy Storage Tech/Prod Dev, Modular Ultra-St	190,000
				OTHER PROGRAM AREA, PON3249 ACE-Expl	205,092
	Ecosave Contract Assets LLC	STATEWIDE	Statewide	NY Green Bank, Ecosave	15,000,000
	Edison Energy Group Inc	STATEWIDE	Statewide	K-12 SCHOOLS, FlexTech Consultant Selection	544,110
	Electric Power Research	STATEWIDE	Statewide	High Performing Grid, "Learning" Smart Inverters	350,000
	Institute			High Performing Grid, PON 3770	799,797
				High Performing Grid, PON3770 Effective Groun	330,012
				High Performing Grid, Smart Inverter Setting Gui	400,000
	ELP Stillwater Solar LLC	STATEWIDE	Statewide	REC:CES REC Contracts, Large-Scale Renewab	16,708,475
	EME Consulting Engineering	STATEWIDE	Statewide	Technical Services, Westchester Tech Services	1,000,000
	Empower Equity Inc	STATEWIDE	Statewide	Novel Bus Models & Offers, EMPEQ - Scaling a	500,000
	Energy & Resource Solutions,	STATEWIDE	Statewide	Commercial Real Estate Ten, Efficiency Planning.	100,000
	Inc.			EVALUATION, TWO 2 - EEPS2 Closeout	2,088,363
				EVALUATION, TWO 3 - GJGNY Audit Only Study	117,427
				Pay for Performance, TWO 4 - P4P Event Evalua.	
				Technical Services, Westchester Tech Services	1,000,000
	Energy and Environmental	STATEWIDE	Statewide	Community RH&C, TWO for Phase 2 Analysis	163,720
	Economics Inc.	STATEWIDE	Statewide	Electric Vehicles - Innovation, TWO#19 - EVSE/	47,750
					110,000
				Mkt Char: Tech Assist, TWO #17 Heat Pump An	
	Energy Improvement Cornerat		Ctotowido	Rmve Barriers Dist Enrgy Storg, TWO #16 Clean	225,000
	Energy Improvement Corporat.		Statewide	GJGNY REVOLVING LOAN FUND, EIC PACE fi	500,000
	Energy Infrastructure Partners.		Statewide	Retrofit NY, Demand Pipeline Consultant	200,000
	Energy Week Holdings, LLC	STATEWIDE	Statewide	NYSERDA ADMINISTRATION, 2019 New York	5,000
	First Colonie Company	STATEWIDE	Statewide	Strategic Energy Manager, 2019 SEM Workshops	6,500
	First Republic Corp of America		Statewide	Home Perf w Energy Star, 2019 NY Res Home R	4,000
	Frontier Energy, Inc.	STATEWIDE	Statewide	Air Source Heat Pumps, Develop ASHP Pro For	39,000
				ANAEROBIC DIGESTER, ADG - Frontier - TWO	86,500
				Combined Heat and Power, ADG - Frontier - TWO	86,500
				Community RH&C, Technical Review_Prgm Sup	12,000
				Geothermal Incentive Program, Technical Revie	45,000
	Gladstein, Neandross & Asso	STATEWIDE	Statewide	Electric Vehicles - Innovation, DCFC Permitting S	99,564
	Green City Force	STATEWIDE	Statewide	Talent Pipeline:CE and OJT, PON3981 WFD Ca	180,993
	Green Light New York, Inc.	STATEWIDE	Statewide	Prof & Expert Engagement, 2019 BEEx Watt Me	50,000
				Real Time Enrgy Management, Green Seeds spo	15,000
	Halcyon Inc.	STATEWIDE	Statewide	Novel Bus Models & Offers, Clean Energy as a S	490,399
	Hannacroix Solar Facility LLC	STATEWIDE	Statewide	REC:CES REC Contracts, Large-Scale Renewab	5,460,400
	Harris Wiltshire & Grannis LLP	STATEWIDE	Statewide	ENERGY ANALYSIS, RFP3776 Outside Counsel	25,000
	Heartshare Human Services o	STATEWIDE	Statewide	LMI Community Solar, SfA Outreach Assistance	50,000
	Hecate Energy New York LLC	STATEWIDE	Statewide	REC:CES REC Contracts, Large-Scale Renewab	46,123,202
	Hilton Albany	STATEWIDE	Statewide	Off-Shore Wind Pre-Dev Act, 2019 Offshore Win	16,540
	Holland & Knight LLP	STATEWIDE	Statewide	Green Bank Outside Legal Serv.	31,001
	-			NEW YORK GREEN BANK, Green Bank Outside	
	Honeywell International Inc.	STATEWIDE	Statewide	3695 TWO Umbrella Agreement	25,000
	.,			Air Source Heat Pumps, 3695 TWO Umbrella Ag.	95,000

-	Contractor	County	Electric Utility	Contract Description	Total Funded Amount
tatewide	Honeywell International Inc.	STATEWIDE	Statewide	ASSISTED HOME PERFORMANCE WITH ENE	17,832
				EMPOWER NY, 3695 TWO Umbrella Agreement	30,634
				Home Perf w Energy Star, 3695 TWO Umbrella	757,740
				Home Perf w Energy Star, SQA HPwES/EmPow	25,000
				HOME PERFORMANCE WITH ENERGY STAR,	8,793
	HUB Controls USA Inc	STATEWIDE	Statewide	76 West, 76West Energy Bus Competition	500,000
	Hyatt Corporation as agent for	STATEWIDE	Statewide	Off-Shore Wind Pre-Dev Act, Reception at IPF C	14,430
	ICF Incorporated LLC	STATEWIDE	Statewide	EVALUATION, TWO 1 -GJGNY Audit Only Impact	49,346
	ICF Resources, LLC	STATEWIDE	Statewide	Air Source Heat Pumps, P12 Clean Energy Scre	59,681
				Campus/Technical Assistance, P12 Clean Energ	234,810
				Combined Heat and Power, TWO 3 Hybrid Prog	9,961
				ENERGY ANALYSIS, TWO #4 - Statewide NG S	748,361
				K-12 SCHOOLS, P12 Clean Energy Screening T	58,703
	Industrial Economics,	STATEWIDE	Statewide	EVALUATION, TWO 1 Grid Moderniz Case Study	18,525
	Incorporated			High Performing Grid, TWO 1 Grid Moderniz Cas	18,525
				Large Scale Renewables, RFQ3183 Umbrella Ag	6,727
				OTHER PROGRAM AREA, TWO 2 New York St.	400,000
	International Electronic Machi	STATEWIDE	Statewide	CLEAN TRANSPORTATION, Noncontact Elect	249,784
	International Energy Program	STATEWIDE	Statewide	EVALUATION, Performance Management	5,000
	Intralinks, Inc.	STATEWIDE	Statewide	NEW YORK GREEN BANK, 3PC VDR Services	4,500
	JEM ENGINEERING SERVIC		Statewide	High Performing Grid, PN3770 Model Fault overv	
	JFK Hotel Owner LLC	STATEWIDE	Statewide	Home Perf w Energy Star, 2019 NY Res. Reg. Tr	
	Kearns & West, Inc.	STATEWIDE	Statewide		24,403
				REC:CES REC System Dev Costs, Large-Scale	
	Kelliher Samets Volk	STATEWIDE	Statewide	Air Source Heat Pumps, Marketing Support for N	300,000
				Community RH&C, Marketing Support for NYSE.	750,000
				ENERGY ANALYSIS, TWO 27: 2019 SEP Marke	
				Geothermal Incentive Program, Marketing Suppo	
				Intervention Effectiv Training, TWO 22 Building L	262,820
				New Construction- Commercial, TWO 28 Carbon	200,000
				New Construction- Housing, TWO 28 Carbon Ne	400,000
				NYSERDA ADMINISTRATION, TWO 29 Global	12,000
				Renewable Heat NY, Marketing Support for NYS	100,000
	Key Capture Energy, LLC	STATEWIDE	Statewide	ESTOR:Bulk Storage Incentive, Bulk Storage Inc	1,361,250
	Levitan & Associates, Inc.	STATEWIDE	Statewide	REC:CES REC System Dev Costs, RESRFP19	48,960
				REC:CES REC System Dev Costs, Support for I	50,000
	Lincoln Park DG LLC	STATEWIDE	Statewide	ESTOR:Bulk Storage Incentive, Bulk Storage Inc	8,800,000
	Local 32BJ Thomas Shortman	STATEWIDE	Statewide	Talent Pipeline:CE and OJT, PON3981 WFD Ca	130,650
	Loeb & Loeb LLP	STATEWIDE	Statewide	NEW YORK GREEN BANK, Green Bank Outside.	15,762
	Long Island Power Authority	STATEWIDE	Statewide	NY-SUN, LIPA MOU RGGI Compliance Progr	25,000,000
	LTM Ventures LLC	STATEWIDE	Statewide	Cleantech ICC Engage, Customer Assessment	48,500
	Luminate, LLC	STATEWIDE	Statewide	Outside Technical and Eng. Srv	30,000
	Luminosity Events, Inc	STATEWIDE	Statewide	OTHER PROGRAM AREA, 2019 Climate Leader	16,068
	M.J. Beck Consulting LLC	STATEWIDE	Statewide	REC:CES REC System Dev Costs, TWO-2-IE_2	35,000
	M/E Engineering, P.C.	STATEWIDE	Statewide	Technical Services, Westchester Tech Services	1,000,000
	Maguire Cars LLC	STATEWIDE	Statewide	NYSERDA Administration	28,887
	Marriott Hotel Services	STATEWIDE	Statewide	Combined Heat and Power, Onsite Resilient Pow	
	Mayer Brown LLP	STATEWIDE	Statewide	Green Bank	20,487
	Mechanical Solutions, Inc.	STATEWIDE	Statewide	NextGen HVAC, Two Stage Centrifugal Compress	
	Meister Consultants Group, Inc.		Statewide	Commercial Real Estate Ten, RFP3631 - CTP S	49,250
	MIMiC Systems Inc	STATEWIDE	Statewide	NextGen HVAC, NextGen HVAC Innovation	330,945
	WINNIG Systems Inc				
	Moelis & Company Group LP	STATEWIDE	Statewide	NEW YORK GREEN BANK, 3PC raise advisory	100,000

REDC Region	Contractor	County	Electric Utility	Contract Description	Total Funded Amount
Statewide	National Wind Technology	STATEWIDE	Statewide	Nat'l OffShWind R&D Consortium, National OSW	3,416,675
	Consortium, Inc			National OSW R&D Concortium.	1,729,428
	Navigant Consulting Inc.	STATEWIDE	Statewide	ENVIRONMENTAL RESEARCH, TWO 1 - Asses	250,000
	NECEC Institute	STATEWIDE	Statewide	Cleantech ICC Engage, 2019 Webinar Series	40,000
				Cleantech ICC Engage, NECEC 2019 Sponsorsh.	160,000
	NESCAUM	STATEWIDE	Statewide	Prof & Expert Engagement, 2019 ZEV MOU Tas	50,000
	NESEA	STATEWIDE	Statewide	Commercial Real Estate Ten, 2019 NESEA BEN	4,750
				Geothermal Incentive Program, 2019 NESEA BE	6,750
				Multifam Performance Pgm, 2019 NESEA BENY	3,250
				New Construction- Housing, 2019 NESEA BENY	7,000
				Prof & Expert Engagement, 2019 NESEA BENY	1,000
				Retrofit NY, 2019 NESEA BENYC Conf	3,250
	New Buildings Institute, Inc.	STATEWIDE	Statewide	Code to Zero, Task Wok Order #2	100,000
				Prof & Expert Engagement, Codes, Products and	25,000
	New York City Energy Efficien	STATEWIDE	Statewide	Intervention Effectiv Training, Marketing support I	50,000
	New York Marriott Marquis	STATEWIDE	Statewide	Off-Shore Wind Pre-Dev Act, 2019 OSW Supplie	89,766
	New York Passive House Inc.	STATEWIDE	Statewide	New Construction- Housing, 2019 NAPHN Annua.	7,500
				Retrofit NY, 2019 NAPHN Annual Forum	7,500
	New York Power Authority,	STATEWIDE	Statewide	High Performing Grid, PON 3770	1,500,000
				OTHER PROGRAM AREA, Clean Transportation	380,000
	New York Solar Energy Indust	STATEWIDE	Statewide	>200KW PV, 2019 Policy Forum	10,000
	New York State Ag & Markets	STATEWIDE	Statewide	NYSERDA ADMINISTRATION, 2019 New York	8,956
				POLICY DEVELOPMENT, 2019 DPS NYS Fair E.	11,933
	NIC Holding Corp	STATEWIDE	Statewide	FUEL NY, NYS Strategic Gasoline Reserve	496,000
	Nixon Peabody LLP	STATEWIDE	Statewide	Green Bank Outside Legal Serv.	59,635
				NEW YORK GREEN BANK, Green Bank Outside.	9,750
	North American Passive House	e STATEWIDE	Statewide	New Construction- Housing, 2019 NAPHN Annua.	7,500
	Network, In			Retrofit NY, 2019 NAPHN Annual Forum	7,500
	Northeast Energy Efficiency	STATEWIDE	Statewide	Air Source Heat Pumps, 2019 NEEP Electrificatio.	10,000
	Partnerships			Air Source Heat Pumps, 2019 NEEP Sponsorship	50,000
				Consumer Ed and Market Support, 2019 NEEP S.	25,000
				Product Standards, 2019 NEEP Sponsorship	21,400
				Prof & Expert Engagement, 2019 NEEP Sponsor	25,000
	Northern Plains Power	STATEWIDE	Statewide	High Performing Grid, PON3770 DER Screening	98,111
	Technologies			High Performing Grid, PON3770: Detection of 1p	162,240
	NYC Department of Environm	STATEWIDE	Statewide	Industrial Process Effic, Industrial Process Efficie	152,143
	NYS Department of Agricultur	STATEWIDE	Statewide	OTHER PROGRAM AREA, EVSE Test System	11,850
	NYS Office of General Services	STATEWIDE	Statewide	POLICY DEVELOPMENT, 2019 NYS DPS Printi	25,000
	NYS Office of Parks, Recreati	STATEWIDE	Statewide	MOU	3,000,000
	O'Brien & Gere Engineers, Inc.	STATEWIDE	Statewide	Industrial Process Effic, SEM_WRRF_O'Brien&G	50,000
	Office of the Brooklyn Boroug	STATEWIDE	Statewide	Community RH&C, Cap Dist Heat & Cool Smart	500,000
	OLA Consulting Engineers, P	STATEWIDE	Statewide	Technical Services, Westchester Tech Services	1,000,000
	OnRout Co.	STATEWIDE	Statewide	OTHER PROGRAM AREA, Dynamic Pricing for	250,000
	Opinion Dynamics Corporation	STATEWIDE	Statewide	ADVANCED BUILDINGS, Pilot Evaluation Servic	43,148
				Clean Energy Communities, RFQ3183 Umbrella	111,524
				Cleantech Startup Growth, RFQ3183 Umbrella A	70,088
				EVALUATION, RFQ3183 Umbrella Agreement	131,896
				LMI Single Family /2525, TWO 11 BPI Survey	14,228
				Single Family Mt Rt Trans/2515, TWO 11 BPI Su	14,228
				Workforce Industry Partnership, RFQ3183 Umbr	56
	Optimal Energy Inc.	STATEWIDE	Statewide	EVALUATION, TWO #1 Downstate NG Peer Rev.	49,928
	OPTIMAL SOLUTIONS, INC.	STATEWIDE	Statewide	High Performing Grid, PON 3770 Smart Grid	100,000

Statewide	n Contractor	STATEWIDE	Electric Utility	Contract Description	Total Funded Amount
Statewide	PA Consulting Group	STATEWIDE	Statewide	ENERGY ANALYSIS, Con Ed NG Moratorium St.	960,208
	Pace University School of Law		Statewide	CLEANER GREENER COMMUNITIES, CGC319	
	Pathstone Corporation	STATEWIDE	Statewide	Community RH&C, Sustainable Home Roch Part	
	Paul A Bradbury	STATEWIDE	Statewide	POLICY DEVELOPMENT, DPS NYS Fair giveaw.	
	People United for Sustainable		Statewide	Community RH&C, Community CH&C Dev in W	500,000
	Performance Systems Develo		Statewide	Consumer Ed and Market Support, TWO 2 - Heat.	
	PGR Group LLC	STATEWIDE	Statewide	Rmve Barriers Dist Enrgy Storg, BESS Tech Sup	200,000
	Proenergy Consulting LLC	STATEWIDE	Statewide	NEW YORK GREEN BANK, Green Bank	50,000
	ProjectEconomics, Inc.	STATEWIDE	Statewide	Cleantech Ignition, PON 3871 Ignition Grants	100,000
	Pterra, LLC	STATEWIDE	Statewide	High Performing Grid, PON3770 Overvoltage Pro	349,885
				High Performing Grid, PTerra work for ITWG	250,000
	Pyramid Energy Engineering	STATEWIDE	Statewide	ENVIRONMENTAL RESEARCH, FlexTech Cons	9,950
	R.W. Beck Group, Inc.	STATEWIDE	Statewide	Commercial Real Estate Ten, StakeholderEngag	80,972
				K-12 SCHOOLS, StakeholderEngagement_Outre.	80,972
				Technical Services, StakeholderEngagement_Ou	80,972
				Technical Services, Targeted Healthcare Engage	913,097
	RD & Associates Consulting L	STATEWIDE	Statewide	NextGen HVAC, Innovation Advisor	35,475
	Recurve Analytics, Inc.	STATEWIDE	Statewide	Pay for Performance, RFP 3901 P4P-AMV Platfo	1,848,836
	RED Rochester	STATEWIDE	Statewide	CI Carbon Challenge, RED C&I Carbon Challenge	5,000,000
	Remix Software, Inc.	STATEWIDE	Statewide	Pub Transit & Elect Rail, Bus route planning soft	228,925
	Rensselaer Polytechnic Institu	STATEWIDE	Statewide	OTHER PROGRAM AREA, PON 3249	350,043
	Rensselaer Polytechnic Institu	STATEWIDE	Statewide	Talent Pipeline:CE and OJT, PON3981 WFD Ca	247,850
	Research Foundation of CUNY	STATEWIDE	Statewide	Environmental Research, AQHE PON 3921	249,940
	Resource Refocus LLC	STATEWIDE	Statewide	Code to Zero, TWO 2 NYStretch Res CE	27,949
	Resources for the Future Inc	STATEWIDE	Statewide	ENERGY ANALYSIS, Modeling and Analytics	50,000
	Rochester Institute of Technol	STATEWIDE	Statewide	REV Campus Challenge, REV CC ETL_Rd. 2	999,664
	Rocky Mountain Institute	STATEWIDE	Statewide	Smart Buildings, Market Insights	82,000
	Ruskin Moscou Faltischek, P		Statewide	OTHER PROGRAM AREA, OSW legal incorpora	1,226
	Saranac Lake Resort Owner L		Statewide	NY Green Bank, Saranac Lake Resort	5,000,000
	Scotto Brothers Woodbury Re		Statewide	Low-Income Forum on Energy, LIFE meeting Lon.	
	Second Nature Inc	STATEWIDE	Statewide	Cleantech ICC Engage, Overcoming University B	
	Sentient Science Corporation	STATEWIDE	Statewide	Pub Transit & Elect Rail, DigitalClone for rail	610,460
	Siemens Industry, Inc.	STATEWIDE	Statewide	ENERGY ANALYSIS, TWO #1: 100x40 Study	300,000
	olemens industry, inc.	STATEWIDE	Oldlewide	REC:CES REC System Dev Costs, TWO #1: 100	
	Cimple Energy Inc	STATEWIDE	Ctotowido		
	Simple Energy, Inc.		Statewide	Electric Vehicles - Innovation, PON 3578 R1 CAT4	,
	Sive Paget & Riesel PC	STATEWIDE	Statewide	WEST VALLEY DEVELOPMENT PROGRAM, R	100,000
	Smiley Brothers, Inc.	STATEWIDE	Statewide	Cleantech ICC Engage, 2019 Investors Portfolio	50,000
	Snug Planet, LLC	STATEWIDE	Statewide	Novel Bus Models & Offers, 3932 Novel Busines	100,000
	Solar Tompkins Inc.	STATEWIDE	Statewide	Community RH&C, PON3723 RH&C Campaigns	200,000
	Spruce NYGB Borrower LLC	STATEWIDE	Statewide	NY Green Bank, Spruce Finance	27,100,000
	Stance Renewable Risk Partn	STATEWIDE	Statewide	Green Bank	18,000
	Steven Winter Associates, Inc.	STATEWIDE	Statewide	NextGen HVAC, Cold Climate PTHP	108,650
				Retrofit NY, RetrofitNY project cost analys	47,366
				Retrofit NY, Solution Optimization Consulta	50,000
				Talent Pipeline:CE and OJT, PON3981 WFD Ca	249,163
	Stone Environmental, Inc.	STATEWIDE	Statewide	Community RH&C, Westchester Ground Source	194,188
				Informat. Products & Brokering, Data Asset Matc	112,958
				Informat. Products & Brokering, RTEM Gas Cust	101,000
	SUN8 PDC LLC	STATEWIDE	Statewide	NY Green Bank, Distributed Sun - CDG Solar Bri	1,000,000
	SUNY at Albany	STATEWIDE	Statewide	REV Campus Challenge, RM28 - University at Al	19,697
	Sustainable CUNY CUNY/RF	STATEWIDE	Statewide	NY-SUN, 2019 Solar Storage Summit	10,000
	Sustainable Energy Advantage,	STATEWIDE	Statewide	REC:CES REC System Dev Costs, Supply Curve.	279,728

EDC Region	Contractor	County STATEWIDE	Electric Utility	Contract Description	Total Funded Amount
Statewide	LLC	STATEWIDE	Statewide	REC:CES REC System Dev Costs, TWO16 IE 2	42,653
	Sustainable Hudson Valley, In		Statewide	Electric Vehicles - Innovation, EV media and stkh	,
	Sustainable Tompkins	STATEWIDE	Statewide	Community RH&C, Tompkins County CH&C	250,000
	Sustainable Westchester	STATEWIDE	Statewide	Community RH&C, PON3723 RH&C Campaigns	150,000
	Switched Source LLC	STATEWIDE	Statewide	Cleantech Ignition, PON 3871 Ignition Grants	62,213
	Syracuse University	STATEWIDE	Statewide	NextGen HVAC, NextGen HVAC Innovation	350,000
	Tagup Inc.	STATEWIDE	Statewide	High Performing Grid, PON 3770	732,785
	Taitem Engineering, P.C.	STATEWIDE	Statewide	Air Source Heat Pumps, 3695 TWO Umbrella Ag	45,000
				Air Source Heat Pumps, ASHP Technical Assista	24,989
				Geothermal Incentive Program, Technical Revie	60,000
				Multifam Performance Pgm, 3695 TWO Umbrella	180,000
				Real Time Enrgy Management, RTEM Gas Mini	374,975
				Retrofit NY, Deep Energy Retrofits	3,371
	Talisen Technologies, Inc	STATEWIDE	Statewide	Real Time Enrgy Management, Energy Mangt Da.	2,146,000
	Taylor Group LTD	STATEWIDE	Statewide	NYSERDA ADMINISTRATION, NYS Fair 2019 D	7,280
	Tendril Networks, Inc.	STATEWIDE	Statewide	ASSISTED HOME PERFORMANCE WITH ENE	1,271
				EMPOWER NY, Residential Program MgtRFP35	1,271
				Home Perf w Energy Star, Residential Program	186,958
				HOME PERFORMANCE WITH ENERGY STAR,	1,271
	The Brookings Institution	STATEWIDE	Statewide	OTHER PROGRAM AREA, Carbon Management.	50,000
	The Business Council of NYS,	STATEWIDE	Statewide	Prof & Expert Engagement, Membership Busines	6,385
	The Cadmus Group, LLC	STATEWIDE	Statewide	Consumer Ed and Market Support, Deemed Savi	34,500
				Electric Vehicles - Innovation, TWO #3 DCFC de	75,000
				Environmental Research, TWO 3 - RegionalFund	18,523
				EVALUATION, RFP3916 Res Bldg Stock Assess	
				EVALUATION, TWO#4 Soft Cost study	40,000
				Financing Solutions, Market research for SMBE	49,770
	The Radiant Store	STATEWIDE	Statewide	Campus/Technical Assistance, Direct contract w/	
	The Renewables Consulting	STATEWIDE	Statewide	Nat'l OffShWind R&D Consortium, RCG work for	
	Group, LLC	0	otatomao	RCG work for OSW Consortium	125,318
	The Trustees of Columbia Uni	STATEWIDE	Statewide	ENERGY ANALYSIS, Sabin Center Monthly Rep	,
	Therm Controls Incorporated	STATEWIDE	Statewide	NextGen HVAC, NextGen HVAC Innovation	73,750
	Tompkins Consolidated Area		Statewide	Pub Transit & Elect Rail, First/Last Mile in Tompk	
	TRC Energy Services	STATEWIDE	Statewide	Campus/Technical Assistance, Four-year contrac.	
	The Energy Services	STATEWIDE	Statewide		
				ESTOR:Retail Storage Incentive, 3695 Energy St.	
				Renewable Heat NY, Ray Brook TWO	113,425
				Talent Pipeline:CE and OJT, Technical Review a	
	The Devilation Date Original		Olata ida	Workforce Industry Partnership, Technical Revie	100,000
	Trove Predictive Data Science.		Statewide	Informat. Products & Brokering, DER Data Platfor.	,
	Tully Rinckey PLLC	STATEWIDE	Statewide	Rmve Barriers Dist Enrgy Storg, outside counsel	
	U.S. Green Building Council, NY Chapter	STATEWIDE	Statewide	New Construction- Commercial, Partner Engage	10,000
				New Construction- Housing, Partner Engagement	40,000
	U&S Services, Inc.	STATEWIDE	Statewide	Remote Energy Management, RFP3683 REM Pr	583,000
	Underground Systems, Inc.	STATEWIDE	Statewide	High Performing Grid, PON 3770	592,712
	Unique Comp Inc.	STATEWIDE	Statewide	Pay for Performance, RFP3143 Umbrella Agree	221,491
	Unique Electric Solutions of N	STATEWIDE	Statewide	M-Corps, Upgrading UES Supply Chain	49,000
	University at Albany	STATEWIDE	Statewide	Environmental Research, AQHE PON 3921	496,458
				High Performing Grid, PON 3770	84,500
	University of Rochester	STATEWIDE	Statewide	Environmental Research, AQHE PON 3921	490,228
				High Performing Grid, PON 3770	225,000
				OTHER PROGRAM AREA, Annual Support for L	825,000
	University System of New Ha	STATEWIDE	Statewide	U.S. DOE SEP Grant for oTherm	142,502

REDC Region	Contractor	County	Electric Utility	Contract Description	Total Funded Amount
Statewide	Upstate Capital Association of	STATEWIDE	Statewide	Cleantech ICC Engage, UCANY 2019 Sponsorsh.	. 30,000
	Urban Electric Power, Inc.	STATEWIDE	Statewide	Energy Storage Tech/Prod Dev, PON 3585 R2	245,000
	Vidaris, Inc.	STATEWIDE	Statewide	Code to Zero, TWO#1-DOS Rulemaking Support	20,000
				Code to Zero, TWO#3 NYStretch Cost Eff	136,380
	Vincents Heating and Fuel	STATEWIDE	Statewide	Renewable Heat NY, Vincents Heating - Avery	21,000
	Service, LLC			Renewable Heat NY, Vincents Heating - Barry	28,260
				Renewable Heat NY, Vincents Heating - Baxter	19,895
				Renewable Heat NY, Vincents Heating - Filer	20,750
	Virginia Tech Applied Researc	STATEWIDE	Statewide	Energy Storage Tech/Prod Dev, PON 3585 R2	199,820
	Vistex Composites, LLC	STATEWIDE	Statewide	Cleantech Ignition, PON 3871 Ignition Grants	100,000
	Wadsworth Energy LLC	STATEWIDE	Statewide	Rmve Barriers Dist Enrgy Storg, TWO #1 MDIW	50,000
	Walter Snyder Printer, Inc.	STATEWIDE	Statewide	>200KW PV, Printing Services	6,223
	Wendel Energy Services, LLC	STATEWIDE	Statewide	ANAEROBIC DIGESTER, ADG - Wendel - TWO	55,000
				Combined Heat and Power, ADG - Wendel - TWO	55,000
				Industrial Process Effic, SEM_WRRF_Wendel_T	50,000
	Westchester Chamber	STATEWIDE	Statewide	New Construction- Commercial, Sponsor West. B.	2,500
	Educational			New Construction- Housing, Sponsor West. Busi	5,000
				Real Time Enrgy Management, Sponsor West. B	
	Westchester Community Opp	STATEWIDE	Statewide	Community RH&C, Putnam County CH&C Com	200,000
	Zero Energy Solutions LTD	STATEWIDE	Statewide	Novel Bus Models & Offers, ZES Novel Business	
	Total	0			368,054,027
Nestern New	295 Maryland, LLC	Erie	National Grid	NEW YORK ENERGY STAR HOMES, New Con	4,000
York	1067 Grant St LLC	Erie	National Grid	Multifam Performance Pgm, Multifamily	18,900
	AECOM Technical Services In		National Grid	WEST VALLEY DEVELOPMENT PROGRAM, E	253,747
	Bakerstand Solar LLC	Cattaraugus	National Grid	REC:CES REC Contracts, Bakerstand Solar	14,394,219
			National Grid	Low Rise New Construction, 2019 LRNCP	46,000
	Belmont Housing Resources f Benchmark Lancaster Towers		NYS Electric and Gas	Multifam Performance Pgm, Multifamily	15,700
	Bergmann Associates	Niagara	National Grid	Technical Services, FlexTech Umbrella Agreeme	
	BJ's Wholesale Club	Erie	National Grid	<200KW PV, NY-Sun	337,212
	Borrego Solar Systems, Inc.	Niagara	National Grid	>200KW PV, NY Sun	1,229,904
	Buffalo Energy, Inc.	Erie	NYS Electric and Gas	Talent Pipeline:CE and OJT, OJT HIRE	7,200
	Buffalo Geothermal Heating	Niagara	National Grid	Geothermal Incentive Program, Large-Scale GS	18,504
	Buffalo Solar Solutions Inc	Cattaraugus	National Grid	<200KW PV, PON 2112 NY SUN	45,274
		Erie	National Grid	<200KW PV, PON 2112 NY SUN	12,388
			NYS Electric and Gas	<200KW PV, PON 2112 NY SUN	5,219
		Niagara	National Grid	<200KW PV, PON 2112 NY SUN	6,279
	C.J. Brown Energy, P.C.	Erie	National Grid	Flexible Tech Assistance, FT12228-ErieCo-92Fr.	76,749
		Niagara	National Grid	Technical Services, AEAP	5,997
	Cascades Containerboard Pa	Niagara	National Grid	Flexible Tech Assistance, FT12204-CCP-Niagara.	. 12,332
	CIR ELECTRICAL CONSTRU	Erie	NYS Electric and Gas	<200KW PV, PON 2112 NY SUN	12,111
	City of Salamanca	Cattaraugus	Municipal Utilities	CLEANER GREENER COMMUNITIES, City of S	100,000
	Dimien Inc.	Erie	National Grid	Energy Storage Tech/Prod Dev, zVO pouch cell	200,000
	EMCOR Services Betlem	Erie	National Grid	Flexible Tech Assistance, FT12222-IsleChem-28	10,176
	Enercon Services Inc	Cattaraugus	National Grid	WEST VALLEY DEVELOPMENT PROGRAM, T	49,985
	Erdman Anthony & Associates	Erie	National Grid	Industrial Process Effic, Technical Review and Pr.	1,057
	Erie Community College	Erie	National Grid	Workforce Industry Partnership, PON 3715 Workf.	65,720
	Forbes-Capretto Homes	Erie	NYS Electric and Gas	Low Rise New Construction, 2019 LRNCP	5,700
	Forestville Central School Dist	Chautauqua	NYS Electric and Gas	Flexible Tech Assistance, FT12079 - Forestville	12,000
	Frewsburg Central School	Chautauqua	National Grid	Flexible Tech Assistance, FT12218 - Frewsburg	22,900
	Frontier Energy, Inc.	Erie	National Grid	INDUSTRIAL PROCESS EFFICIENCY, Technic	2,880
	Greenpac Mill, LLC	Niagara	National Grid	Industrial Process Effic, Industrial Process Efficie	
	GSPP Grand Island B, LLC	Erie	National Grid	>200KW PV, NY-Sun C&I	325,615

REDC Region	Contractor	County	Electric Utility	Contract Description	Total Funded Amount
Western New York	GZA GeoEnvironmental of Ne	Cattaraugus	National Grid	WEST VALLEY DEVELOPMENT PROGRAM, Tr	58,252
TOIK	Homeridae LLC	Cattaraugus	National Grid	>200KW PV, NY-Sun C&I	1,147,666
	Houghton College	Allegany	Rochester Gas and El	Technical Services, OSEM28-C - Houghton Colle.	. 172,735
	HSBC Bank USA, N.A.	Erie	NYS Electric and Gas	Industrial Process Effic, Industrial Process Efficie	19,173
	Key Bank	Erie	National Grid	<200KW PV, NY-Sun	996,489
	LaBella Associates, P.C.	Erie	National Grid	Technical Services, RFP3628FlexTechConsultU	2,500
	Leonard Carl Neckers Jr	Chautauqua	National Grid	Anaerobic Digesters, PON 3739 CAT C	15,000
	M/E Engineering, P.C.	Erie	National Grid	Industrial Process Effic, Technical Review and Pr	6,000
	McMahon and Mann	Cattaraugus	National Grid	WEST VALLEY DEVELOPMENT PROGRAM, 20.	10,000
	Consulting Engineers			WEST VALLEY DEVELOPMENT PROGRAM, T	75,000
				WEST VALLEY DEVELOPMENT PROGRAM, T	55,000
	MJW Technical Services, Inc.	Cattaraugus	National Grid	WEST VALLEY DEVELOPMENT PROGRAM, R	440,758
	NanoHydroChem	Erie	National Grid	Energy Storage Tech/Prod Dev, Renewable Opti	200,000
	Next Generation Solar, LLC	Cattaraugus	National Grid	<200KW PV, NY-Sun	8,160
	North Park Innovations Group,	Cattaraugus	National Grid	Talent Pipeline:CE and OJT, PON3981 Round 3	250,000
	Oakwood Senior Apartments	Erie	National Grid	Low Rise New Construction, 2019 LRNCP	33,000
	OYA 2643 Moore Road LLC	Niagara	National Grid	ESTOR:Retail Storage Incentive, NY Sun	650,000
				Solar Plus Energy Storage, NY Sun	3,100,000
	Paradise Energy Solutions, LL.	Erie	NYS Electric and Gas	<200KW PV, PON 2112 NY SUN	13,167
	Pathfinder Engineers & Archit	Erie	National Grid	Commercial New Construc, Commercial New Co	125,737
	Rural Generation & Wind (Ro	Chautauqua	National Grid	<200KW PV, PON 2112 NY SUN	8,750
	Ryan Homes (Virginia)	Erie	NYS Electric and Gas	Low Rise New Construction, 2019 LRNCP	18,050
	SAAKC Buffalo Forge	Erie	National Grid	Low Rise New Construction, 2019 LRNCP	114,800
	Siemens Industry, Inc.	Erie	National Grid	Real Time Enrgy Management, Siemens-Multisit	235,140
	Snyder Manufacturing, Inc	Cattaraugus	National Grid	Geothermal Incentive Program, Large-Scale GS	34,392
	Solar Liberty Energy Systems,	Chautauqua	National Grid	<200KW PV, NY-Sun	9,698
	Inc	Erie	National Grid	<200KW PV, NY-Sun	11,282
				<200KW PV, PON 2112 NY SUN	6,867
			NYS Electric and Gas	<200KW PV, PON 2112 NY SUN	24,481
		Niagara	National Grid	<200KW PV, NY-Sun	8,972
				<200KW PV, PON 2112 NY SUN	6,825
	SunPower Capital, LLC	Chautauqua	National Grid	<200KW PV, PON 2112 NY SUN	7,056
	The Research Foundation for	Erie	National Grid	Energy Storage Tech/Prod Dev, Renewable Opti	200,000
	TM Montante Solar Developm	Erie	NYS Electric and Gas	<200KW PV, PON 2112 NY SUN	50,868
	Village of Fredonia	Chautauqua	National Grid	INDUSTRIAL PROCESS EFFICIENCY, Industria	8,470
	Viola Homes Inc.	Erie	NYS Electric and Gas	<200KW PV, PON 2112 NY SUN	29,543
		Niagara	National Grid	<200KW PV, PON 2112 NY SUN	15,624
	Wendel Energy Services, LLC	Erie	NYS Electric and Gas	Flexible Tech Assistance, FT12219 -Town of Ha	30,000
	Total				25,653,225
Grand Total					617,898,839

NYSERDA

Public Authority Law Report

April 1, 2019 to September 30, 2019

Section Break

5		
Contractor	Contract Description	Total Expended Amount
22nd Century Technologies, Inc.	NYSERDA ADMINISTRATION, Staff Augmentation	114,709
28th and 10th Associates LLC	NEW CONSTRUCTION PROGRAM, NCP11469 - 28th Street	25,000
30-30 Equities LLC	NEW CONSTRUCTION PROGRAM, NCP11345 - The Apple Building	60,363
34-10 Development, LLC	NEW CONSTRUCTION PROGRAM, NCP11565 - 3410 Development LL	133,174
59 West 35th Street Operator, LLC	Flexible Tech Assistance, FT11681 - Hampton Inn-ESB-PON	6,150
60 East 8th St Condo	COMBINED HEAT AND POWER, Distributed Generation as Comb	6,863
77 Sands Owner LLC	NEW CONSTRUCTION PROGRAM, NCP11962 - 77 Sands Street Bro	160,244
145 West Street, LLC	NEW CONSTRUCTION PROGRAM, NCP7242 - Affordable Housing T	91,672
158th St. & Riverside Drive Housing C	MULTIFAMILY PERFORMANCE PROGRAM, Multifamily	96,075
175 Pearl Owner LLC	NEW CONSTRUCTION PROGRAM, NCP11972 - 175 Pearl Street Br	0
295 Maryland, LLC	NEW YORK ENERGY STAR HOMES, New Construction	93,000
	NEW YORK ENERGY STAR HOMES, RES-NewConst(no longer in use)	7,000
300 Schemerhorn Realty LLC	NEW CONSTRUCTION PROGRAM, NCP11974 - Holiday Inn Brookly	6,124
425 Lexington Realty Company LLC	EXISTING FACILITIES, EFP2358 - Hines - 425 Lexingto	290,679
510 West 22nd Street Owner LLC	NEW CONSTRUCTION PROGRAM, NCP11107 - 510 West 22nd Stree	45,630
590 Madison Avenue LLC	EXISTING FACILITIES, EFP2325 - 590 Madison - 590 Ma	197,484
770 Electric Corp.	<200KW PV, NY-Sun	8,640
	NY-Sun	12,960
950 Summit Avenue LLC	MULTIFAMILY PERFORMANCE PROGRAM, Multifamily	34,800
1406RB PV LLC	>200KW PV, C/I MW Block Assignment	123,247
	Olean Gateway PV Project 1	431,980
	Olean Gateway PV Project 2	432,512
2015 ESA Project Company, LLC	FUEL CELLS, RPS FC - Home Depot #1215	105,000
,,	FUEL CELLS, RPS FC - Home Depot #1249	105,000
	FUEL CELLS, RPS FC - Home Depot #1251	92,591
	FUEL CELLS, RPS FC - Home Depot #1256	210,000
	FUEL CELLS, RPS FC - Home Depot #1281	105,000
	FUEL CELLS, RPS FC - Home Depot #6152	93,676
Abakama LLC	OTHER PROGRAM AREA, Innovation Advisory Services	40,724
ABB, Incorporated	OREC: Technical Support, RFQL3685 Round 1	126,543
Abt Associates Inc.	Combined Heat and Power, Flex Energy Tech Analysis 2	32,391
Abt Associates inc.	ENVIRONMENTAL RESEARCH, Community Flood Risk	16,819
	ENVIRONMENTAL RESEARCH, Environmental Res. Outreach	1,529
		91,776
	Environmental Research, Flex Energy Tech Analysis 2	
Access Summerite for Living Inc.	ENVIRONMENTAL RESEARCH, TWO#1 Pathways Health	21,373
Access Supports for Living Inc.	Low Rise New Construction, New Construction	94,600
Accord Power, Inc.	<200KW PV, NY Sun	18,515
Ace Natural	Industrial Process Effic, Industrial Process Efficiency	57,702
Active Solar Development, LLC	<200KW PV, NY Sun	15,617
Adam C. Boese	Agriculture Energy Eff Pgm, RFP3628FlexTechConsultUmbrella	20,200
	Flexible Tech Assistance, RFP3628FlexTechConsultUmbrella	13,176
	Technical Services, RFP3628FlexTechConsultUmbrella	59,535
Adelphi University	COMBINED HEAT AND POWER, CHPPerformance Program-PON2701	700,000
Adirondack Beverages Corp.	Industrial Process Effic, Industrial Process Efficiency	27,217
Adirondack Lakes Survey Corporation	Environmental Research, RFP 3702 Stream Sampling	58,268
Adirondack North Country Association	CLEANER GREENER COMMUNITIES, CGC54038 - ANCA	101,985
	Community Energy Engagement, CEEP North Country Region-ANCA	4,021
	OTHER PROGRAM AREA, CEEP North Country Region-ANCA	1,731

Contractor	Contract Description	Total Expended Amount
Advanced Radiant Design, Inc.	Talent Pipeline:CE and OJT, OJT HIRE	2,075
AECOM Technical Services Inc.	WEST VALLEY DEVELOPMENT PROGRAM, Environmental Monitoring S	270,728
Aegis Energy Services Inc.	Combined Heat and Power, CHPA - 2501 Nostrand Ave.	13,860
	Combined Heat and Power, CHPA - DO & CO Catering	161,239
	Combined Heat and Power, CHPA-Alexandria	44,550
	Combined Heat and Power, CHPA-Bluestone Group - Norman	20,790
	Combined Heat and Power, CHPA-Centers-Triboro/DOJ	191,664
Aeonsolar	NY Sun	22,032
AEP Onsite Partners, LLC	PV System @ Camden Central Sch	295,175
	PV System @ Madison County	323,741
AES Greece Solar, LLC	>200KW PV, NY-Sun C&I	29,248
AES Monroe Solar A, LLC	>200KW PV, NY Sun C/I	195,188
AES Monroe Solar B, LLC	>200KW PV, NY-Sun C/I	196,128
AES Monroe Solar C, LLC	>200KW PV, NY-Sun C/I	198,361
AES Monroe Solar D, LLC	>200KW PV, NY-Sun C/I	234,303
AES Monroe Solar E, LLC	>200KW PV, NY-Sun C/I	208,671
AES Rochester Solar, LLC	>200KW PV, NY-Sun C&I	196,180
AES Wawarsing Solar, LLC	>200KW PV, NY-Sun C/I	76,014
Affordable Housing Partnership	Community Energy Engagement, CEEP Capital Region (AHP)	123,003
AHA Development Corporation	Low Rise New Construction, New Construction	65,200
Akimeka, LLC	CLEANER GREENER COMMUNITIES, Animating the EV market in NYS	49,238
	Electric Vehicles - Innovation, Planning Board EVSE Promotion	14,250
	OTHER PROGRAM AREA, RFQL3685 Round 1	49,477
Akoustis, Inc.	INDUSTRIAL PROCESS EFFICIENCY, Industrial Process Efficiency	22,485
Akwesasne Housing Authority	NY-SUN, Affordable Solar Akwesasne	20,000
• •	Clean Energy Communities, Albany County	183,750
Albany Energy, LLC	LARGE SCALE RENEWABLES, Albany 2	80,356
	LARGE SCALE RENEWABLES, Albany Energy LLC	10,928
Albany Engineering Corp.	LARGE SCALE RENEWABLES, Mechanicville Hydro	236,163
·	LARGE SCALE RENEWABLES, Stuyvesant Falls Hydroelectric	165,204
Albany Housing Authority	Low Rise New Construction, New Construction	23,000
Albany Medical Center	Technical Services, OsEM3-C Albany Medical Center	50,000
	Flexible Tech Assistance, FlexTech Program - PON 1746	33,523
All-Temperature Systems of Syracuse.		4,416
	•	
	NEW CONSTRUCTION PROGRAM, NCP12291 - Allegany County SPC	10,817
Allegis Group Holdings Inc	Campus/Technical Assistance, Staff Augmentation Services	9,295
	Community RH&C, Staff Augmentation Services	27,886
	ENERGY ANALYSIS, Staff Augmentation Services	23,819
	NEW YORK GREEN BANK, Staff Augmentation Services	19,537
	NY-SUN, Staff Augmentation Services	29,633
	Real Time Enrgy Management, SA.043a - RTEM_PM	43,480
	Real Time Enrgy Management, Staff Augmentation Services	106,928
	Renewable Heat NY, Staff Augmentation Services	18,841
	SA.050_TWO #8 - DER Coordinato	24,589
	Solar Thermal, Staff Augmentation Services	5,946
Allen Power, Inc.	SMART GRID SYSTEMS, RFP 3044 R2	99,819
Alliance for Housing Inc.	Multifam New Construction, PPES T2 Fountain Sea A1	29,300
	MULTIFAMILY PERFORMANCE PROGRAM, Multifamily	27,600

Contractor _	Contract Description	Total Expended Amount
Alliance for Sustainable Energy, LLC	Nat'l OffShWind R&D Consortium, NREL for OSW Consortium	53,115
	NREL for OSW Consortium	26,885
	OTHER PROGRAM AREA, NREL for OSW Consortium	0
alpha-En Corporation	Energy Storage Tech/Prod Dev, PON3585 R4 Energy Storage Tech	22,500
Altanova LLC	Commercial New Construc, Commercial New Construction	14,099
	Commercial Real Estate Ten, Altanova - Multisite	8,963
	Commercial Real Estate Ten, Altanova-100 Manhattanville Rd	9,648
	Flexible Tech Assistance, FT12220-Cush&Wake-MC-CHP-FTC	37,335
	Flexible Tech Assistance, FT12223-MealsWheels-SI.CHP-FTC	20,994
Alternative Power Solutions of NY, LLC	<200KW PV, PON 2112 NY SUN	41,993
American Energy Care, Inc.	<200KW PV, NY-Sun	11,910
	<200KW PV, PON 2112 NY SUN	5,750
American Packaging Corp.	Commercial New Construc, NCP15059 - American Packaging	11,842
American Society of	New Construction- Commercial, New Construction	4,020
Heating,Refrigeratin	New Construction- Housing, New Construction	16,080
American Solar Partners, LLC	<200KW PV, NY-Sun	6,606
	NY-SUN, Solar for Electchester Housing	80,000
Ampersand Tannery Island Hydro, LLC	REC:CES REC Contracts, 11th Main Tier Solicitation	3,430
Antares Group, Inc.	Campus/Technical Assistance, FT12091-St. John's U - FTC	5,133
	COMBINED HEAT AND POWER, Technical Review and Program S	9,490
	Flexible Tech Assistance, RFP3628FlexTechConsultUmbrella	2,402
	Geothermal Incentive Program, Technical Review and Program S	1,766
	Industrial Process Effic, Technical Review and Program S	11,396
	INDUSTRIAL PROCESS EFFICIENCY, Technical Review and Program S	8,423
Apex Roofing, LLC	<200KW PV, NY Sun	10,982
	NY Sun	15,705
Apex Solar Power LLC	<200KW PV, PON 2112 NY SUN	43,524
Applied Energy Group, Inc.	EMERGING TECHNOLOGY / ACCELERATED COMMERCIALIZATION, P	91,334
Apprise, Incorporated	Advancing Ag Enrgy Technologie, RFQ3183 Umbrella Agreement	23,824
	Greenhouse Light & Systems Eng, RFQ3183 Umbrella Agreement	23,824
	On-Site Energy Manager, RFQ3183 Umbrella Agreement	22,948
	Strategic Energy Manager, RFQ3183 Umbrella Agreement	22,948
	Technical Services, RFQ3183 Umbrella Agreement	23,824
APX Inc.	LARGE SCALE RENEWABLES, NYGATS	199,718
	REC:CES REC System Dev Costs, NYGATS	87,129
	ZEC:CES ZEC System Dev Costs, NYGATS	40,621
Arcadis of New York, Inc.	Agriculture Energy Eff Pgm, RFP3628FlexTechConsultUmbrella	3,576
	ANAEROBIC DIGESTER, RPS-CST Quality Assurance/Qual	12,875
	Cl Engy Siting & Soft Cost Red, Large Scales Renewables Techni	148,969
	Commercial New Construc, Staff Augmentation Services	8,780
	Commercial Real Estate Ten, SA.046_TWO #4 - EPE	11,739
	EXISTING FACILITIES, Staff Augmentation Services	12,575
	Flexible Tech Assistance, FlexTech Consultant Selection	1,445
	Flexible Tech Assistance, FT12203-TownofUlster WWTP-FTC	10,664
	Flexible Tech Assistance, RFP3628FlexTechConsultUmbrella	3,093
	Industrial Process Effic, RFP3628FlexTechConsultUmbrella	68,612
	Large Scale Renewables, Large Scales Renewables Techni	73,804
	Low Rise New Construction, Staff Augmentation Services	10,536

Contractor Arcadis of New York, Inc.	Contract Description	Total Expended Amount
Arcadis of New York, Inc.	Multifam New Construction, Staff Augmentation Services	9,951
	New Construction- Commercial, Staff Augmentation Services	8,780
	New Construction- Housing, Staff Augmentation Services	20,486
	OREC: Technical Support, Large Scales Renewables Techni	32,245
	Real Time Enrgy Management, Staff Augmentation Services	3,579
	REV Campus Challenge, SA.046_TWO #4 - EPE	11,739
	Technical Services, AEAP	3,144
	Technical Services, RFP3628FlexTechConsultUmbrella	4,977
	Technical Services, SA.046_TWO #4 - EPE	11,739
Arcadis U.S., Inc.	COMBINED HEAT AND POWER, Tech Review & Program Staff	6,105
	EXISTING FACILITIES, Tech Review & Program Staff	27,166
	FUEL NY, Tech Review & Program Staff	268,175
	Industrial Process Effic, Tech Review & Program Staff	7,755
	OTHER PROGRAM AREA, Tech Review & Program Staff	41,176
Arch Street Communications, Inc.	CI Engy Siting & Soft Cost Red, TWO 3: LSR RFP Outreach	45,924
	Clean Energy Communities, Marketing Support for NYSERDA	295,788
Arnold & Porter Kaye Scholer LLP	WEST VALLEY DEVELOPMENT PROGRAM, RFP 3300 Outside Counsel	3,339
Artis Energy Intelligence, LLC	Real Time Enrgy Management, Artis Energy- 2 Powers- RTEM	9,470
Ashlee Kleinhammer	AGRICULTURE ENERGY EFFICIENCY, Agriculture Energy Efficiency	8,707
Association for Energy Affordability, In	Workforce Industry Partnership, PON 3715 Workforce Training	203,150
Astrum Solar, Inc.	<200KW PV, NY Sun	111,371
Atelier Ten	Commercial New Construc, ATEN - EMP	867
	NEW CONSTRUCTION PROGRAM, Technical Assistance Services	0
Autronic Plastics, Inc.	ADVANCED BUILDINGS, LED Lighting	11,500
	ADVANCED BUILDINGS, Low Voltage Lighting System	84,000
	Pub Transit & Elect Rail, Wireless Transit Lighting	210,000
Avalon Willoughby West, LLC	NEW CONSTRUCTION PROGRAM, NCP11404 - Avalon Willoughby	21,862
Avangrid Renewables, LLC	LARGE SCALE RENEWABLES, Hardscrabble Wind Energy	701,889
	LARGE SCALE RENEWABLES, Hardscrabble Wind Power LLC	829,328
Aztech Geothermal, LLC	Talent Pipeline:CE and OJT, OJT Hire	1,458
	Talent Pipeline:CE and OJT, OJT PON 3982	836
BAE Systems Controls, Inc.	INNOVATION CAPACITY & BUSINESS DEVELOPMENT, Li-Ion Life Expe	290,000
•	Low Rise New Construction, New Construction	78,600
Ballston Spa Central School	Technical Services, OSEM27-C - Ballston Spa CSD	13,398
Barbera Homes and Development, Inc.	Low Rise New Construction, New Construction	4,750
Bard College	REV CAMPUS CHALLENGE, RFP 3214 REV Campus Challenge	71,428
	REV Campus Challenge, RM11 - Bard College	34,000
Barnard College	NEW CONSTRUCTION PROGRAM, NCP12987 - New Building aka Te	128,836
Zumara conogo	Technical Services, OsEM26-C Barnard College Mult	52,013
Bashing Panels LLC	<200KW PV, PON 2112 NY SUN	13,176
BDO USA LLP	Background Investigation Servi	15,400
Bennett & Moskowitz Etal Ptrs	MULTIFAMILY PERFORMANCE PROGRAM, Multifamily	48,300
	-	48,300
Bergmann Associates	Agriculture Energy Eff Pgm, FlexTech Umbrella Agreement	
	Commercial Imp Assist, Tech Review_Support_Umbrella	1,053
	Commercial Real Estate Ten, Bergmann 1 Clinton Ave S TBG	5,000
	Commercial Real Estate Ten, Bergmann - 900 Jefferson Rd	5,000
	Commercial Real Estate Ten, Bergmann - Eaton Center Bldg 5	5,000
	Commercial Real Estate Ten, Bergmann - Eaton Center Blg 28	5,000

Contractor	Contract Description	Total Expended Amoun
Bergmann Associates	Commercial Real Estate Ten, Bergmann - One East Avenue TBG	5,000
	Commercial Real Estate Ten, Bergmann - The Eaton Center	5,000
	Commercial Real Estate Ten, Bergmann Associates-1 E Ave-CT	5,000
	Commercial Real Estate Ten, Bergmann- Eaton Center Blg 2	5,000
	Commercial Real Estate Ten, Bergmann- Eaton Center Blg 27	5,000
	Commercial Real Estate Ten, Bergmann- Eaton Center Blg 30	5,000
	Commercial Real Estate Ten, Bergmann-1 Clinton Ave Sout-CT	5,000
	Commercial Real Estate Ten, Bergmann-1343 Long Pond Rd-CT	4,960
	Commercial Real Estate Ten, BergmannAssociates-One EastAve	5,000
	EXISTING FACILITIES, Tech Review_Support_Umbrella	1,479
	EXISTING FACILITIES, TWO_EFP/DMP_QA/QC	8,174
	Flexible Tech Assistance, FlexTech Umbrella Agreement	43,258
	Flexible Tech Assistance, Tech Review_Support_Umbrella	4,748
	FLEXIBLE TECHNICAL ASSISTANCE, Tech Review_Support_Umbrella	34,068
	Industrial Process Effic, IPE16237	3,946
	Industrial Process Effic, Tech Review_Support_Umbrella	15,610
	INDUSTRIAL PROCESS EFFICIENCY, Tech Review_Support_Umbrella	32,901
	Renewable Heat NY, Tech Review_Support_Umbrella	2,360
	REV Campus Challenge, Tech Review_Support_Umbrella	2,035
	Technical Services, FlexTech Umbrella Agreement	2,500
	Technical Services, Tech Review_Program Support	2,05
Bergmann Associates, P.C.	CLEAN TRANSPORTATION, Mkt Trn (no longer in use)	524
Best Energy Power	<200KW PV, NY Sun	407,475
	<200KW PV, NY-Sun	47,124
	NY-Sun	70,686
Better Cities & Towns, Inc.	CLEANER GREENER COMMUNITIES, CGC31774 - Better Cities Towns	3,000
BHP Energy LLC	Combined Heat and Power, CHPA - Bouck Pool Building - S	65,63
Binghamton Regional	Community RH&C, PON3723 RH&C Campaigns	54,250
	REVitalize, RFP 3584 Revitialize	19,500
Binghamton State University	NEW CONSTRUCTION PROGRAM, NCP98603 - Center of Excellenc	56,789
Binghamton University	NEW CONSTRUCTION PROGRAM, NCP11870 - Energy Rd Building	12,92
BioDiversity Research Institute	Off-Shore Wind Pre-Dev Act, BRI: TWO umbrella agreement	132,793
BioEnergySP, Inc.	OTHER PROGRAM AREA, Technology to Market	115,000
Black River Hydroelectric, LLC	REC:CES REC Contracts, 11th Main Tier Solicitation	268,950
BlocPower Community Corporation	Community RH&C, PON 3922 CH&C Communities	28,500
Bloom Energy Corporation	FUEL CELLS, HD #1235-Cicero, NY	78,152
	FUEL CELLS, HD #1236-Dewitt, NY	628,87
	FUEL CELLS, HD #1257-Camillus, NY	769,919
	FUEL CELLS, HD #1269-Clifton Park, NY	94,85
	FUEL CELLS, HD #1289-Amsterdam, NY	93,01
	FUEL CELLS, HD #1209-Ansterdam, NT FUEL CELLS, HD #6153-Clay, NY	715,466
	REC:CES REC Contracts, 11th Main Tier Solicitation	26,29
Blue Heron Trail II, LLC	Low Rise New Construction, New Construction	57,000
Bond, Schoeneck & King, PLLC	NYSERDA ADMINISTRATION, Outside Legal Services	6,814
	NYSERDA ADMINISTRATION, RFP 3300 Outside Counsel Servi	187
	OREC: Technical Support, RFP 3300 Outside Counsel Servi	1,98
	OTHER PROGRAM AREA, RFP 3300 Outside Counsel Servi	50,403

Contractor	Contract Description	Total Expended Amount
Booz Allen Hamilton, Inc.	OTHER PROGRAM AREA, RFP 3044 R2	249,977
Borg Warner	Industrial Process Effic, Industrial Process Efficiency	7,713
BP/CGCENTER AQUISITION CO., LLC	NEW CONSTRUCTION PROGRAM, NCP14055 - 601 Lexington	95,555
BQ Energy, LLC	NY-SUN, Town of Esopus Landfill	175,160
Bridge Land Vestry LLC	NEW CONSTRUCTION PROGRAM, NCP12093 - 268 West Street	123,503
Bright Power, Inc.	<200KW PV, NY Sun	166,773
	<200KW PV, NY-Sun	17,938
	ADVANCED BUILDINGS, PV Battery backup system demo	20,000
	Flexible Tech Assistance, FT12093 - 205 W 39th St FTC	2,633
	Flexible Tech Assistance, FT12212 - 370 Lexington - FTC	25,000
	Flexible Tech Assistance, RFP3628FlexTechConsultUmbrella	27,900
	Novel Bus Models & Offers, 3932 Novel Business Models	100,000
	NY Sun	40,626
	NY-Sun	297,729
	NY-SUN, NYCHA Baychester Houses	10,650
	Real Time Enrgy Management, Bright Power - 221 E 71st-RTEM	17,700
	Real Time Enrgy Management, Bright Power-3000 Bronx - RTEM	12,561
	Retrofit NY, Multifamily	18,750
Bristol Mountain	Industrial Process Effic, Industrial Process Efficiency	300,000
Brooklyn SolarWorks LLC	NY-Sun	9,720
	PON 2112 NY SUN	54,436
Broome Community College	REV CAMPUS CHALLENGE, RFP 3214 REV Campus Challenge	344,000
BSREP UA Heritage LLC	MULTIFAMILY PERFORMANCE PROGRAM, Multifamily	390,000
BTMI Engineering, PC	Off-Shore Wind Pre-Dev Act, RFP3462 Umbrella Agreement	419,565
Buckeye Terminals, LLC	FUEL NY, Upstate NY Strategic Fuels Res	671,275
Buffalo Bills	NEW CONSTRUCTION PROGRAM, NCP11662 - Stadium Lease Impro	6,618
Buffalo Geothermal Heating	Geothermal Incentive Program, Clean Heating & Cooling	43,075
	Geothermal Incentive Program, Large-Scale GSHP Rebate	16,654
Buffalo Neighborhood Stabilization Co	Low Rise New Construction, New Construction	31,000
Buffalo Niagara Medical Campus, Inc.	CLEAN TRANSPORTATION, Buffalo Smart Corridor Plan	36,215
	SMART GRID SYSTEMS, RFP 3044 R2	90,000
Buffalo Renewables, Inc.	Small Wind, Wind Turbine Incentive	128,735
Buffalo Solar Solutions Inc	<200KW PV, NY Sun	89,424
	<200KW PV, PON 2112 NY SUN	98,027
Build Edison LLC	OTHER PROGRAM AREA, Innovation Advisors	56,267
BUILDING 36 LLC	>200KW PV, NY-Sun Assignment	90,730
Building Media, Inc.	ADVANCED ENERGY CODES, Energy Code Training and Suppo	85,179
Built Well Solar Corp	<200KW PV, NY Sun	2,850
BW Research Partnership	ENERGY ANALYSIS, New York Clean Energy Jobs Stu	21,491
	OTHER PROGRAM AREA, New York Clean Energy Jobs Stu	9,322
	Workforce Industry Partnership, New York Clean Energy Jobs Stu	59,320
Byrne Dairy, Inc.	On-Site Energy Manager, OsEM2-I - Byrne Dairy-Ultra	74,458
C.J. Brown Energy, P.C.	Commercial New Construct, Commercial New Construction	3,704
- 697	Commercial New Construc, RFP3771 Umbrella contract	1,648
	Flexible Tech Assistance, FT12102- Gates Chili CSD - FTC	370
	Flexible Tech Assistance, FT12200 - Moravia CSD - FTC	9,282
	Flexible Tech Assistance, FT12228-ErieCo-92Franklin-FTC	16,626
	Flexible Tech Assistance, RFP3628FlexTechConsultUmbrella	4,490

Contractor	Contract Description	Total Expended Amount
C.J. Brown Energy, P.C.	Technical Services, AEAP	5,997
C.T. Male Associates Engineering,	Flexible Tech Assistance, FlexTech Consultant Selection	19,478
C&R Housing Inc.	Talent Pipeline:CE and OJT, OJT HIRE	10,469
C&S Engineers, Inc.	Flexible Tech Assistance, RFP3628FlexTechConsultUmbrella	17,006
Cadenza Innovation, Inc.	Energy Storage Tech/Prod Dev, PON3249 ACE	90,000
Callanan Industries	Industrial Process Effic, Industrial Process Efficiency	110,828
Calstart	CLEANER GREENER COMMUNITIES, CGC54612 - CALSTART	103,125
CannonDesign	REV Campus Challenge, RFP3628FlexTechConsultUmbrella	20,796
Capital Construction Services of NY, I	NEW YORK ENERGY STAR HOMES, New Construction	180,000
Capital District Regional Planning	CGC53356 - CDRPC	19,301
Comm.	CLEANER GREENER COMMUNITIES, CGC53356 - CDRPC	463,236
Carbon Trust Advisory Limited	Carbon Trust OSW Consortium	10,082
	Nat'l OffShWind R&D Consortium, Carbon Trust OSW Consortium	19,918
	OTHER PROGRAM AREA, Carbon Trust OSW Consortium	0
Carrera RS, LLC	Multifam New Construction, MFNCP PHI T3-505 East 86th St	18,350
Carter Ledyard & Milburn LLP	NYSERDA ADMINISTRATION, Counsel's Office	6,904
Cascades Containerboard Packaging	Flexible Tech Assistance, FlexTech Program - PON 1746	11,257
	Flexible Tech Assistance, FT12204-CCP-Niagara Falls-PON	6,166
Catskill Mountainkeeper, Inc	Community RH&C, PON3723 RH&C Campaigns	45,417
CEC Stuyvesant Cove, Inc.	CLEANER GREENER COMMUNITIES, CGC55294 - Solar One	300,800
	NY-SUN, Affordable Solar Predevelopmen	22,347
	NY-SUN, Solar for Co-op City	22,698
Center for Sustainable Energy	CLEAN TRANSPORTATION, Centralized Services & Support	0
	Consumer Ed and Market Support, RFP3945 Home Energy Rating Pil	94,535
	Electric Vehicles - Rebate, TWO #3 - Drive Clean Program	200,077
	OTHER PROGRAM AREA, Centralized Services & Support	32,148
Centerstate Corporation for	Cleantech Incubator, PON3413 Clean Energy Incubator	152,500
Central New York Regional Planning	CLEANER GREENER COMMUNITIES, CGC42070 - CNY Mitigation Bank	-12,750
and	CLEANER GREENER COMMUNITIES, CGC57053 - CNY RPDB	295,191
	Community RH&C, PON3723 RH&C Campaigns	74,500
	SMART GRID SYSTEMS, RFP 3044 R2	345,000
CH4 Generate Cayuga, LLC	Anaerobic Digesters, ADG-to-Electricity Project	402,696
CHA Consulting Inc.	CI Carbon Challenge, CICC RED Roch. Tech Review	2,625
	Commercial Real Estate Ten, SA.051 TWO #6 EP&E APM	_,0_0
	EXISTING FACILITIES, SA.051_TWO #6_EP&E APM	16,371
	EXISTING FACILITIES, Technical Review and Program S	81,132
	Flexible Tech Assistance, FlexTech Consultant CHA	8,868
	Flexible Tech Assistance, RFP3628FlexTechConsultUmbrella	19,238
	Flexible Tech Assistance, Staff Augmentation Services	6,727
	Flexible Tech Assistance, Technical Review and Program S	0,727
		22,500
	FLEXIBLE TECHNICAL ASSISTANCE, Staff Augmentation Services	
	Industrial Process Effic, Outreach Support	177,978
	Industrial Process Effic, Staff Augmentation Services	0
	Industrial Process Effic, Technical Review and Program S	101,475
	INDUSTRIAL PROCESS EFFICIENCY, Staff Augmentation Services	168,823
	INDUSTRIAL PROCESS EFFICIENCY, Technical Review and Program S	16,899
	K-12 SCHOOLS, SA.051_TWO #6_EP&E APM	0
	On-Site Energy Manager, Outreach Support	19,802

Contractor	Contract Description	Total Expended Amount
CHA Consulting Inc.	OTHER PROGRAM AREA, FlexTech Consultant CHA	1,818
	REV Campus Challenge, SA.051_TWO #6_EP&E APM	0
	Strategic Energy Manager, Outreach Support	17,680
	Strategic Energy Manager, Staff Augmentation Services	0
	Technical Services, SA.051_TWO #6_EP&E APM	0
Channel Capital LLC	OTHER PROGRAM AREA, Innovation Advisor	31,729
Charles Mras	AGRICULTURE ENERGY EFFICIENCY, Agriculture Energy Efficiency	50,890
Charles Settlement House, Inc.	Low Rise New Construction, New Construction	53,000
Chautauqua County	LARGE SCALE RENEWABLES, Chautauqua LFGE	147,775
Chris Benedict	Retrofit NY, Multifamily	18,750
CIR ELECTRICAL CONSTRUCTION C	<200KW PV, PON 2112 NY SUN	79,031
Citistaffing, LLC	NEW YORK GREEN BANK, TS.008 - NYGB Office Admin	532
Citizens Enterprises Corporation	>200KW PV, Commercial/Industrial PV	147,988
City of Amsterdam	Clean Energy Communities, CEC600876 City of Amsterdam	750
City of Auburn	Clean Energy Communities, City of Auburn	12,500
	LARGE SCALE RENEWABLES, Mill Street Dam Hydro	8,060
	REC:CES REC Contracts, 11th Main Tier Solicitation	6,953
City of Binghamton	Clean Energy Communities, City of Binghamton	62,500
City of Glens Falls	Clean Energy Communities, CEC400008 - City of Glens Fall	12,500
City Of New York	CLEANER GREENER COMMUNITIES, CGC43226 - New York City	519,306
	NEW CONSTRUCTION PROGRAM, CGC43226 - New York City	29,345
	OTHER PROGRAM AREA, Newtown Creek WWTP food waste	38,391
City of New York, Dept. of Citywide	>200KW PV, PV System @ NYC School K224	12,329
	>200KW PV, PV System @ NYC School K278	20,409
	>200KW PV, PV System @ NYC School K302	21,261
	>200KW PV, PV System @ NYC School K324	22,409
	>200KW PV, PV System @ NYC School K380	21,541
	>200KW PV, PV System @ NYC School K455	102,555
	>200KW PV, PV System @ NYC School K505	66,585
	>200KW PV, PV System @ NYC School K515	1,899
	>200KW PV, PV System @ NYC School M070	29,785
	>200KW PV, PV System @ NYC School Q072	34,021
	>200KW PV, PV System @ NYC School Q204	26,880
	>200KW PV, PV System @ NYC School Q226	26,241
	>200KW PV, PV System @ NYC School Q237	31,496
	>200KW PV, PV System @ NYC School Q445	34,660
	>200KW PV, PV System @ NYC School Q505	56,083
	>200KW PV, PV System @ NYC School R069	27,599
	>200KW PV, PV System @ NYC School R075	20,599
	>200KW PV, PV System @ NYC School R445	25,028
	>200KW PV, PV System @ NYC School R455	40,977
	>200KW PV, PV System @ NYC School X131	27,853
	>200KW PV, PV System @ NYC School X144	33,274
	>200KW PV, PV System @ NYC School X184	32,470
	>200KW PV, PV System @ NYC School X192	21,186
	>200KW PV, PV System @ NYC School X425	20,720
	EXISTING FACILITIES, EFP2525-DCAS;ACE Projects	183,166
City of Rochester	Community RH&C, PON3723 RH&C Campaigns	14,000

Contractor	Contract Description	Total Expended Amoun
City of Rome	Clean Energy Communities, CEC600853 - City of Rome	100,00
City of Schenectady	CLEANER GREENER COMMUNITIES, CGC61854 - City of Schenectady	93,96
City of Troy	CEC410003 - City of Troy	27,50
	Clean Energy Communities, CEC410003 - City of Troy	137,50
City of Watervliet	Clean Energy Communities, CEC400002 - City of Watervliet	20,00
City of White Plains	CLEANER GREENER COMMUNITIES, City of White Plains	62,50
City Parks Foundation	GREENING THE BRONX, Greening The Bronx	5,44
CJ Plaza One LLC	MULTIFAMILY PERFORMANCE PROGRAM, Multifamily	67,50
CJ Plaza Two LLC	MULTIFAMILY PERFORMANCE PROGRAM, Multifamily	19,50
Claire Weisz Architects	CLEAN TRANSPORTATION, Optimizing the Curb	13,50
Clarkson Univ., Research Div.	ENVIRONMENTAL RESEARCH, Energy Related Air Quality	(
Clean Technologies A LLC	LARGE SCALE RENEWABLES, 8th RPS Main Tier Solicitation	19,25
CLEAResult Consulting, Inc.	>200KW PV, Centralized Services & Support	41,53
	Air Source Heat Pumps, Centralized Services & Support	53,16
	ASSISTED HOME PERFORMANCE WITH ENERGY STAR, Centralized S	2,35
	ASSISTED HOME PERFORMANCE WITH ENERGY STAR, Technical Sup	13,79
	Centralized Services & Support	380,18
	Commercial New Construc, Centralized Services & Support	29,76
	EMPOWER NY, Centralized Services & Support	89,69
	EMPOWER NY, Technical Support SFR	117,63
	ESTOR: Implementation Support, Centralized Services & Support	18,28
	EXISTING FACILITIES, Centralized Services & Support	31,52
	Geothermal Incentive Program, Centralized Services & Support	50,81
	Home Perf w Energy Star, Centralized Services & Support	384,60
	Home Perf w Energy Star, Technical Support SFR	668,71
	HOME PERFORMANCE WITH ENERGY STAR, Centralized Services & Su	2,35
	HOME PERFORMANCE WITH ENERGY STAR, Technical Support SFR	20,79
	Industrial Process Effic, Centralized Services & Support	18,40
	K-12 SCHOOLS, Centralized Services & Support	25,16
	LMI Community Solar, Centralized Services & Support	103,91
	Low Rise New Construction, Centralized Services & Support	40,68
	Multifam New Construction, Centralized Services & Support	32,28
	Multifam Performance Pgm, Centralized Services & Support	35,25
	New Construction- Commercial, Centralized Services & Support	,
	New Construction- Housing, Centralized Services & Support	
	NEW YORK ENERGY STAR HOMES, Centralized Services & Support	16,31
	NYSERDA ADMINISTRATION, Phone Email & Web Support	71,15
	Renewable Heat NY, Centralized Services & Support	15,91
	Rmve Barriers Dist Enrgy Storg, Centralized Services & Support	-2,16
	Technical Services, Centralized Services & Support	26,18
	Technical Support SFR	588,03
Climate Change & Environmental		
Climate Change & Environmental	Commercial Real Estate Ten, CCES - 209-35 Northern Blvd	9,96
	Commercial Real Estate Ten, CCES-Multisite	8,19
CNV Solar Inc	Commercial Real Estate Ten, Climate Chng Env-13030 31st Av	7,99
CNY Solar, Inc.	<200KW PV, NY Sun	4,56
004 Seler 2 11 0	<200KW PV, PON 2112 NY SUN	29,05
COA Solar 2, LLC	>200KW PV, NY-Sun C&I Payee Assignment	396,14

Code Green Solutions, Inc.	Contract Description Commercial Real Estate Ten, CodeGreen_Madam Tussauds	Total Expended Amount 9,000
·	Flexible Tech Assistance, FT12063- ABS 270 Madison - FTC	3,000
	Flexible Tech Assistance, FT12064-ABS-915 Broadway-FTC	5,925
	Flexible Tech Assistance, FT12065 - Fraglow-8W 38th-FTC	6,964
	Flexible Tech Assistance, FT12066-Silk&HalpernRealty-FTC	8,161
	Flexible Tech Assistance, FT12082-Glenhill Assoc307W-FTC	10,756
	Flexible Tech Assistance, FT12083-Met Tower Diamond-FTC	2,438
	Flexible Tech Assistance, FT12201 - Super Nova 330 - FTC	8,515
	Flexible Tech Assistance, FT12202 - 3ColumbusCircle - FT	5,738
	Flexible Tech Assistance, RFP3628FlexTechConsultUmbrella	84,802
	FLEXIBLE TECHNICAL ASSISTANCE, FlexTech Consultant Selection	20,445
Cogeneration Contractors, Inc.	Combined Heat and Power, CHPA - 66-36 Yellowstone	78,897
	COMBINED HEAT AND POWER, CHPA - 133 Greenwich Marriot	78,897
	COMBINED HEAT AND POWER, CHPA - Hudson Yards Tower C	510,000
	COMBINED HEAT AND POWER, CHPA - Kings County Hospital C	495,000
	COMBINED HEAT AND POWER, CHPA - Kings County Hospital C	495,000 38,610
	Combined Heat and Power, CHPA - Morris Apartments II	36,680
	COMBINED HEAT AND POWER, CHPA - NYU 370 Jay Street	445,500
	Combined Heat and Power, CHPA - NTO 370 bay Street	150,365
Cohen Ventures Inc	Air Source Heat Pumps, FlexTech Consultant Selection	0
Conen ventures inc		
	EMERGING TECHNOLOGY / ACCELERATED COMMERCIALIZATION, C	24,340
Collegiate School Inc	Product Standards, FlexTech Consultant Selection	9,686
Collegiate School Inc	NEW CONSTRUCTION PROGRAM, NCP11512 - Collegiate School r	54,852
Colliers International Holdings USA, I		5,675
Columbia University	INNOVATION CAPACITY & BUSINESS DEVELOPMENT, Proof-of-Concep	140,000
	NEW CONSTRUCTION PROGRAM, NCP11569 - ColumbiaBowtieBldg	78,770
Combined Energies LLC	NEW CONSTRUCTION PROGRAM, NCP11572 - Lenfest Center for	143,703
Combined Energies LLC	Energy Storage Tech/Prod Dev, PON 3585 Energy Storage Cat B	10,000
Common Energy LLC	LMI Community Solar, RFP3802 Low Income Comm Solar	259,045
Common Ground Community II HDFC	MULTIFAMILY PERFORMANCE PROGRAM, Multifamily	96,600
Comunilife, Inc	MULTIFAMILY PERFORMANCE PROGRAM, Multifamily	99,200
CON EDISON SOLUTIONS, INC.	<200KW PV, NY Sun	140,301
	>200KW PV, NY Sun	12,436
Concern for Independent Living, Inc.	MULTIFAMILY PERFORMANCE PROGRAM, Multifamily	32,400
Concord Servicing Corporation	GJGNY REVOLVING LOAN FUND, Codes, Products and Standards	935
	GJGNY REVOLVING LOAN FUND, Multifamily	180
Continental Buchanan, LLC	Industrial Process Effic, Industrial Process Efficiency	23,769
Cooper Friedman Electric Supply Co. I.	NY-SUN, NY-Sun Comp. Monroe Cable	193,143
Cooper Union	REV Campus Challenge, RM7 - Cooper Union University	79,000
COR Rensselaer Company III Inc	CLEANER GREENER COMMUNITIES, CGC31256 - COR Inner Harbor	61,500
•	Community Energy Engagement, CEEP Mid-Hudson Region (CCEDC)	230,742
Cornell Cooperative Extension -	Community Energy Engagement, CEEP North Country	7,715
Tompkins	Community Energy Engagement, CEEP Southern Tier Region (CCE	67,526
	OTHER PROGRAM AREA, CEEP North Country	3,322
Cornell University	ENVIRONMENTAL RESEARCH, Energy Related Air Quality	18,874
	NEW CONSTRUCTION PROGRAM, NCP12380 - Gannett Health Cent	54,817
	NEW CONSTRUCTION PROGRAM, NCP12381 - Upson Hall	97,117
	NEW CONSTRUCTION PROGRAM, NCP12382 - College of Veterina	28,530

Contractor	Contract Description	Total Expended Amount
Cornell University	OTHER PROGRAM AREA, 76West Building a Clean Energy	328,866
	OTHER PROGRAM AREA, 76West TWO 27	2,610
	OTHER PROGRAM AREA, 76West TWO 28	2,035
	OTHER PROGRAM AREA, 76West TWO 29	3,570
Cornell University-Office of Sponsored	ENERGY ANALYSIS, Accelerated Recovery	0
	ENVIRONMENTAL RESEARCH, Building Downwash Effect	21,292
	ENVIRONMENTAL RESEARCH, virtual greenhouse tool	0
	RENEWABLE HEAT NY, Biomass-Fired Emission Sources	25,086
	SMART GRID SYSTEMS, Anaerobic Digestion Assistance	123,157
Cornerstone Energy Services	Renewable Heat NY, Cornerstone - Haney	15,975
	RENEWABLE HEAT NY, Cornerstone - North Country Sc	22,963
	Talent Pipeline:CE and OJT, OJT HIRE	5,320
Corning Inc.	Industrial Process Effic, Industrial Process Efficiency	654,856
	INDUSTRIAL PROCESS EFFICIENCY, Industrial Process Efficiency	189,062
	INDUSTRIAL PROCESS EFFICIENCY, PON1219IP4	44,530
County of Chenango	Clean Energy Communities, CEC011260-Chen Cnty	37,500
County of Erie Comptrollers Office	NEW CONSTRUCTION PROGRAM, NCP12832-ECCNorthCampusSTEM	29,765
County of Oneida	ANAEROBIC DIGESTER, RPS ADG - Oneida County Sewer	82,398
Courtney-Strong Inc.	CLEANER GREENER COMMUNITIES, CGC53012 - Courtney Strong	73,729
CRE Spruce Haven LLC	ANAEROBIC DIGESTER, RPS CST ADG-to-Electricity Dai	29,774
	NEW CONSTRUCTION PROGRAM, RPS CST ADG-to-Electricity Dai	29,774
Credit Suisse USA	Industrial Process Effic, Industrial Process Efficiency	8,926
Croton Energy Group, Inc.	<200KW PV, PON 2112 NY SUN	25,623
Sister Energy Group, me.	NY Sun	24,966
Crotona Terrace Building A LLC	MULTIFAMILY PERFORMANCE PROGRAM, Multifamily	48,000
CrystalCreek Organics Inc.	OTHER PROGRAM AREA, Trial to enhance anaerobic dig	136,500
Cutone & Company Consultants, LLC		11,425
Successfully consultants, LEC	Commercial Real Estate Ten, LCA - 28 Liberty Street - CT	4,330
	Commercial Real Estate Ten, LCA - 79 Walker Street - CT	
	Commercial Real Estate Ten, LCA - 120 Bloomingdale Rd - CT	4,639
	Commercial Real Estate Ten, LCA-JPMC#3 Multisite-CT	7,582
	Commercial Real Estate Ten, LCA-JPMC#4-Multisite-CT	9,353
	EXISTING FACILITIES, EFP2639 - Cutone; 200 Lexingto	12,086
	NEW CONSTRUCTION PROGRAM, NCP12395 - 219 East 44th Stree	2,765
Cypress Hills Local Development Cor	MULTIFAMILY PERFORMANCE PROGRAM, Multifamily	33,321
D. F. Brandt, Inc.	Industrial Process Effic, Industrial Process Efficiency	30,767
D'Youville College	REV Campus Challenge, RM14 - D'Youville College	29,741
Dagmy Motors Inc.	Energy Storage Tech/Prod Dev, PON 3585 R2	32,500
Dandelion Energy Inc	Novel Bus Models & Offers, 3932 Novel Business Models	193,750
Darling Advertising Agency Inc.	New Construction- Housing, Marketing Support for NYSERDA	40,033
	NYSERDA ADMINISTRATION, Marketing Support for NYSERDA	73,959
	Off-Shore Wind Master Plan, Marketing Support for NYSERDA	35,859
David Homes, Inc.	Low Rise New Construction, New Construction	29,450
David P Bruns	NEW YORK ENERGY STAR HOMES, New Construction	288,000
Davis Polk & Wardwell LLP	NEW YORK GREEN BANK, Green Bank Outside Legal Couns	289,492
DealCloud Inc.	NEW YORK GREEN BANK, DealCloud Licensing	81,330
Denton Hill Family & Ski Resort, Inc.	Industrial Process Effic, Industrial Process Efficiency	124,200
Dewberry Consultants LLC	ENVIRONMENTAL RESEARCH, East Hampton resiliency	46,024
Dewberry Engineers Inc	ENVIRONMENTAL RESEARCH, Transportation Climate ADP	12,582

Contractor	Contract Description	Total Expended Amount
Digital Realty Trust	Industrial Process Effic, Industrial Process Efficiency	268,691
Dimien Inc.	Cleantech Ignition, PON 3871 Ignition Grants	75,000
	Energy Storage Tech/Prod Dev, zVO pouch cell proof concept	57,000
Dimien LLC	ADVANCED BUILDINGS, Chromatic Window Coating	5,000
Diversified Control Inc.	Industrial Process Effic, Industrial Process Efficiency	37,499
DNV GL Energy Insights USA Inc.	ADVANCED BUILDINGS, Evaluation Oversight Services	31,596
	Campus/Technical Assistance, RFQ 3183 KEMA, Inc	2,982
	Community RH&C, RFQ 3183 KEMA, Inc	2,278
	EVALUATION, RFQ 3183 KEMA, Inc	65,650
	Flexible Tech Assistance, RFQ 3183 KEMA, Inc	512
	Geothermal Incentive Program, RFQ 3183 KEMA, Inc	16,815
	NEW YORK GREEN BANK, RFQ 3183 KEMA, Inc	103,581
	Off-Shore Wind Pre-Dev Act, RFP3855 Cat2 DMAC Float. LiDar	109,200
	Renewable Heat NY, RFQ 3183 KEMA, Inc	56,960
Do-It-With Inc.	NY-Sun	50,976
Doherty Electric, LLC	<200KW PV, NY Sun	7,161
Dolomite Products Group, Inc.	Industrial Process Effic, Industrial Process Efficiency	44,897
Downtown Ithaca Alliance	CLEAN TRANSPORTATION, Ithaca TDM/TMA Demonstration	33,958
Dual Fuel Corp	Real Time Enrgy Management, Dual Fuel Corp-237 W 100-RTEM	378
	Real Time Enrgy Management, Dual Fuel-36 E 22nd St-RTEM	30,000
	Real Time Enrgy Management, Dual Fuel-151 E 43rd St-RTEM	33,450
	Real Time Enrgy Management, Dual Fuel-304 St Johns PI-RTEM	22,500
	Real Time Enrgy Management, Dual Fuel-370 Westchester-RTEM	7,110
	Real Time Enrgy Management, Dual Fuel-409 E 84th St-RTEM	22,500
	Real Time Enrgy Management, Dual Fuel-1871 Seventh-RTEM	36,000
	Real Time Enrgy Management, Dual Fuel-1898 Belmont-RTEM	26,083
	Real Time Enrgy Management, Dual Fuel-1900 Belmont-RTEM	32,166
	Real Time Enrgy Management, Dual Fuel-1908 Belmont-RTEM	32,166
	Real Time Enrgy Management, Dual Fuel-3400 Ft Ind St-RTEM	148,500
E&S Environmental Chemistry Inc.	ENVIRONMENTAL RESEARCH, 127159 TWO#1	165,001
Eagle Creek Hydro Power LLC	LARGE SCALE RENEWABLES, 8th RPS Main Tier Solicitation	80,875
Earth Environmental Group, LLC	RENEWABLE THERMAL, Clean Heating & Cooling	26,481
	RENEWABLE THERMAL, Solar Thermal Incentives	26,481
Earth Sensitive Solutions, LLC	Geothermal Incentive Program, Large-Scale GSHP Rebate	367,333
Eastern Research Group, Inc.	ENVIRONMENTAL RESEARCH, Environmental Outreach	34,714
Ecolectro Inc	OTHER PROGRAM AREA, PON3249 ACE-Exploratory resear	160,000
Ecology and Environment Engineering	CLEANER GREENER COMMUNITIES, CGC Implementation Contractor	351,223
	Commercial Imp Assist, Commercial Market Engagement	44,814
		17,451
	Flexible Tech Assistance, Commercial Market Engagement	
	Off-Shore Wind Pre-Dev Act, RFP3462 Umbrella Agreement	172,580
	Off-Shore Wind Pre-Dev Act, TWO#17 Fishing Lanes	78,770
	REV Campus Challenge, Commercial Market Engagement	79,906
EcoMarkets LLC	LARGE SCALE RENEWABLES, 8th RPS Main Tier Solicitation	25,710
Ecosave, Inc.	Real Time Enrgy Management, Ecosave-5901 Palisade Ave-RTEM	277,040
Ecovis, Inc.	<200KW PV, NY-Sun	5,357
Edgemere Owners, LLC	MULTIFAMILY PERFORMANCE PROGRAM, Multifamily	162
	K 40 DOLLOOL O. Flau Taab Oanaultant Oalaatian	6 6 4 4
Edison Energy Group Inc	K-12 SCHOOLS, FlexTech Consultant Selection Real Time Enrgy Management, EnerActive-300 E 66th St-RTEM	6,644 16,200

Contractor	Contract Description	Total Expended Amount
Eiger 3970 Consultants Inc.	<200KW PV, NY Sun	22,545
	<200KW PV, NY-Sun	6,480
	<200KW PV, PON 2112 NY SUN	5,642
Ekostinger, Inc.	76 West, 76 West Energy Bus Competition	200,000
	OTHER PROGRAM AREA, 76 West Energy Bus Competition	0
El Mira Colony Park LLC	MULTIFAMILY PERFORMANCE PROGRAM, Multifamily	8,600
Eldor Contracting Corporation	<200KW PV, NY Sun	403,068
Electric Power Research Institute	ADVANCED BUILDINGS, Modular DR-ready HVAC	13,000
	DER Integration(Intrcnect), PON 3404 DER Integration	140,000
	ENVIRONMENTAL RESEARCH, Climate & future electric syst	88,434
	Environmental Research, Energy Related Air Quality	47,687
	High Performing Grid, PON 3397 CAT B	55,000
	High Performing Grid, PON 3397 Round 2 - Category D	50,000
	SMART GRID SYSTEMS, EPTD Smart Grid Program	113,000
Electrical Distribution Design, Inc.	DER Integration(Intrcnect), PON 3404 DER Integration	111,343
Elisa Miller-Out	OTHER PROGRAM AREA, RFP 3859	75,218
EME Consulting Engineering Group,	Agriculture Energy Eff Pgm, FlexTech Consultant Selection	5,000
LLC	Agriculture Energy Eff Pgm, RFP3628FlexTechConsultUmbrella	2,500
	Commercial Real Estate Ten, FlexTech Consultant Selection	18,691
	Commercial Real Estate Ten, SA.052_TWO#9_EP&E PM	0
	Commercial Real Estate Ten, Staff Augmentation Services	80,156
	EXISTING FACILITIES, RFP3628FlexTechConsultUmbrella	25,269
	EXISTING FACILITIES, SA.052_TWO#9_EP&E PM	26,057
	EXISTING FACILITIES, Staff Augmentation Services	105,245
	Flexible Tech Assistance, RFP3628FlexTechConsultUmbrella	5,112
	Flexible Tech Assistance, Staff Augmentation Services	20,961
	FLEXIBLE TECHNICAL ASSISTANCE, FlexTech Consultant Selection	17,040
	FLEXIBLE TECHNICAL ASSISTANCE, RFP3628FlexTechConsultUmbrella	18,952
	Geothermal Incentive Program, Tech Review and Program Staff	61,656
	Home Perf w Energy Star, Staff Augmentation Services	45,946
	Industrial Process Effic, Staff Augmentation Services	0
	INDUSTRIAL PROCESS EFFICIENCY, Staff Augmentation Services	90,370
	K-12 SCHOOLS, SA.052_TWO#9_EP&E PM	0
	MARKET PATHWAYS, FlexTech Consultant Selection	5,124
	New Construction- Commercial, SA.038A_TWO #7 - New Con	35,917
	New Construction- Housing, SA.038A_TWO #7 - New Con	71,834
	NY-SUN, Staff Augmentation Services	-109,936
	NYSERDA ADMINISTRATION, Staff Augmentation Services	0
	NYSERDA ADMINISTRATION, Tech Review and Program Staff	-88,081
	Real Time Enrgy Management, SA.056_TWO #10_RTEM MF PM	2,679
	Renewable Heat NY, Staff Augmentation Services	11,486
	REV Campus Challenge, SA.036c_TWO#8_EP&E PM	33,173
	REV Campus Challenge, SA.052_TWO#9_EP&E PM	0
	REV Campus Challenge, Staff Augmentation Services	20,961
	Solar Thermal, Tech Review and Program Staff	26,424
	Staff Augmentation Services	167,368
	Strategic Energy Manager, Staff Augmentation Services	0
	Technical Services, SA.036c_TWO#8_EP&E PM	33,173

Contractor	Contract Description	Total Expended Amount
EME Consulting Engineering Group, LLC	Technical Services, SA.052_TWO#9_EP&E PM	0
	Technical Services, Westchester Tech Services	7,272
Empire Solar Solutions LLC	<200KW PV, PON 2112 NY SUN	17,448
Empower CES, LLC	<200KW PV, NY Sun	5,400
Empower Equity Inc	Cleantech Ignition, PON 3871 Ignition Grants	15,000
	Novel Bus Models & Offers, EMPEQ - Scaling a Novel Busine	135,000
ENER-G Rudox, LLC	Combined Heat and Power, CHPA - 685 1st Avenue	142,686
Enercon Services Inc	WEST VALLEY DEVELOPMENT PROGRAM, RFP 3305 Licence Consultat	28,184
Energetics, Incorporated	CLEAN TRANSPORTATION, Truck Platooning Workshops	6,471
	CLEANER GREENER COMMUNITIES, Animating the EV market in NYS	23,942
	EVALUATION, RFQL3685 Round 1	234
Energy & Resource Solutions, Inc.	Agriculture Energy Eff Pgm, RFP3628FlexTechConsultUmbrella	4,496
	Combined Heat and Power, RFP 3643 Tech To Market	518,355
	Commercial New Construct, New Construction	0
	Commercial Real Estate Ten, Efficiency Planning & Engineer	102,973
	EMERGING TECHNOLOGY / ACCELERATED COMMERCIALIZATION, T	9,735
	EVALUATION, TWO 2 - EEPS2 Closeout	85,973
	EXISTING FACILITIES, Technical Review and Program S	24,773
	Flexible Tech Assistance, Efficiency Planning & Engineer	2,866
	Industrial Process Effic, Industrial & Agriculture	102,349
	Industrial Process Effic, Technical Review and Program S	6,360
	INDUSTRIAL PROCESS EFFICIENCY, Technical Review and Program S	59,724
	K-12 SCHOOLS, Efficiency Planning & Engineer	(
	NEW CONSTRUCTION PROGRAM, Technical Review and Program S	9,735
	On-Site Energy Manager, Industrial & Agriculture	14,878
	Real Time Enrgy Management, Efficiency Planning & Engineer	C
	REV Campus Challenge, Efficiency Planning & Engineer	97,452
	Rmve Barriers Dist Enrgy Storg, RFP 3407 Categories 2 & 3A	406,557
	Strategic Energy Manager, Industrial & Agriculture	13,284
	Technical Services, Efficiency Planning & Engineer	C
	Technical Services, RFP3628FlexTechConsultUmbrella	6,500
Energy and Environmental Economics	>200KW PV, Tech Assist, REV Pool.	385
Inc.	Community RH&C, TWO for Phase 2 Analysis	27,993
	Electric Vehicles - Innovation, BCA of EV grid impacts	15,266
	Electric Vehicles - Innovation, TWO#19 - EVSE/Util. Investment	37,224
	ENERGY ANALYSIS, 101127 TWO#14	749,757
	ENERGY ANALYSIS, Tech Assist, REV Pool.	192
	ENERGY ANALYSIS, TWO#15 Solar PV Adoption Forec	25,883
	Mkt Char: Tech Assist, Tech Assist, REV Pool.	53,694
	Mkt Char: Tech Assist, TWO 13 - VDER Phase 2	180,680
	Mkt Char: Tech Assist, TWO #17 Heat Pump Analysis	108,340
	Mkt Char: Tech Assist, TWO# 14 - Grid Value Model	50,468
	OTHER PROGRAM AREA, Tech Assist, REV Pool.	192
	Rmve Barriers Dist Enrgy Storg, Tech Assist, REV Pool.	27,623
Enorgy Euturos Group Jos	Rmve Barriers Dist Enrgy Storg, TWO #16 Clean Peaks Study	184,056
Energy Futures Group, Inc.	EMERGING TECHNOLOGY / ACCELERATED COMMERCIALIZATION, P	31,174
Energy Improvement Corporation	Community RH&C, PON3723 RH&C Campaigns	37,750

Contractor	Contract Description	Total Expended Amount
	LARGE SCALE RENEWABLES, Large-Scale Renewables	459,556
Energy Technology Savings, Inc.	Real Time Enrgy Management, Energy Tech-60 W 23rd St-RTEM	2,825
	Real Time Enrgy Management, Energy Tech-245 E 44th St-RTEM	2,825
	Real Time Enrgy Management, Energy Tech-330 E 39th St-RTEM	2,825
	Real Time Enrgy Management, Energy Tech-552 Main St-RTEM	1,800
	Real Time Enrgy Management, ETS - 90 Washington St - RTEM	6,337
	Real Time Enrgy Management, ETS - Moinian Sky - RTEM	7,029
EnergyPro Insulation, LLC	<200KW PV, NY-Sun	6,003
EnergySavvy Inc	ASSISTED HOME PERFORMANCE WITH ENERGY STAR, Residential Pr	2,609
	EMPOWER NY, Residential Program MgtRFP3545	2,609
	Home Perf w Energy Star, Residential Program MgtRFP3545	383,742
	HOME PERFORMANCE WITH ENERGY STAR, Residential Program Mgt	2,609
Enermat Technologies, Inc.	Energy Storage Tech/Prod Dev, PON 3585 Energy Storage Cat A	7,600
Enertiv Inc.	Real Time Enrgy Management, Enertiv-146 E 56th Street-RTEM	3,863
Enlighten Solar Inc	>200KW PV, NY-Sun C&I	5,219
Ensave, Inc.	AGRICULTURE ENERGY EFFICIENCY, AEEP Implementation Contractor	7,608
	Technical Services, AEEP Implementation Contractor	179,940
EnterSolar LLC	>200KW PV, NY Sun	113,791
	PON 2112 NY SUN	577,530
Entic, Inc.	Real Time Enrgy Management, Conrad NY-102 N End Ave-RTEM	12,947
	Real Time Enrgy Management, EquityOffice-1065 6th Ave-RTEM	14,580
	Real Time Enrgy Management, ShopsAtSkyVi-4024College-RTEM	10,800
Environmental Defense Fund	Commercial Real Estate Ten, Support_NYC Carbon Challenge	17,865
Eonix LLC	Energy Storage Tech/Prod Dev, PON 3585 R2	1,500
EQR-Fresca 2009 Limited Partnership	MULTIFAMILY PERFORMANCE PROGRAM, Multifamily	8,880
Erdman Anthony & Associates, Inc.	Commercial New Construc, RFP3771 Umbrella Contract	5,847
	Flexible Tech Assistance, RFP3628FlexTechConsultUmbrella	994
	Industrial Process Effic, Technical Review and Program S	18,047
	INDUSTRIAL PROCESS EFFICIENCY, Technical Review and Program S	2,420
	Technical Services, RFP3628FlexTechConsultUmbrella	5,000
Erie Boulevard Hydropower LP	LARGE SCALE RENEWABLES, RPS Program Purchase of Renewa	7,398
	LARGE SCALE RENEWABLES, School Street Hydro Project	152,296
	LARGE SCALE RENEWABLES, Stewarts Bridge Hydro Project	251,790
	REC:CES REC Contracts, 10th RPS Main Tier Solicitatio	25,943
	REC:CES REC Contracts, 11th Main Tier Solicitation	69,713
Ery Tenant LLC	NEW CONSTRUCTION PROGRAM, NCP10565 - Retail Hudson Yards	169,722
ESNY-303, LLC	NY-SUN, PV System @ Kinder Morgan Term	576,454
ESS Group, Inc.	Off-Shore Wind Pre-Dev Act, RFP3462 Umbrella Agreement	4,368
Essense Partners Inc.	Cleantech ICC Engage, Marketing Support for NYSERDA	217,917
	OTHER PROGRAM AREA, Marketing Support for NYSERDA	109,604
	REV Connect, Marketing Support for NYSERDA	2,800
Essex County Government Center	CLEANER GREENER COMMUNITIES, CGC31777 - Essex County	129,874
EthosGen, LLC	NextGen HVAC, PON3519 Round 1	129,074
•		
EV Connect Inc.	CLEANER GREENER COMMUNITIES, CGC55811 - EV Connect	65,100
Extraterrestrial Materials Inc.	<200KW PV, NY Sun	25,803
	<200KW PV, PON 2112 NY SUN	14,777
FAC Sunset Park, LP	MULTIFAMILY PERFORMANCE PROGRAM, Multifamily	8,500

Contractor	Contract Description	Total Expended Amount
Faraday, Inc.	Air Source Heat Pumps, RFP3761 Customer Targeting Too	19,000
	Community RH&C, RFP3761 Customer Targeting Too	38,000
Farmington Gardens II Associates, LLC	Low Rise New Construction, New Construction	83,400
FBD Realty	EXISTING FACILITIES, EFP2389 - FBD Realty LLC - mul	41,635
Felix Schoeller Paper	Industrial Process Effic, Industrial Process Efficiency	15,350
Fifth @ 42nd LLC	Flexible Tech Assistance, FT11673 - 5th@42-505 5th - PON	13,420
Finch Paper, LLC	Industrial Process Effic, Industrial Process Efficiency	206,373
	INDUSTRIAL PROCESS EFFICIENCY, Industrial Process Efficiency	0
Finger Lakes Extrusion	>200KW PV, NY Sun	22,433
First Columbia Property Services, LLC	NYSERDA ADMINISTRATION, Property Management	132,868
	Property Management	25,000
First North American Holdings II Inc.	EXISTING FACILITIES, EFPCHP - PON1219	202,073
First Ward Action Council, Inc.	Low Rise New Construction, New Construction	37,000
Florenton River LLC	<200KW PV, NY Sun	33,400
	<200KW PV, PON 2112 NY SUN	5,625
	NY Sun	3,400
	PON 2112 NY SUN	8,190
Forbes-Capretto Homes	Low Rise New Construction, 2019 LRNCP	5,700
	Low Rise New Construction, LR NCP New Construction	23,750
	Low Rise New Construction, New Construction	38,950
Ford Motor Company	Industrial Process Effic, Industrial Process Efficiency	26,322
ForeFront Power, LLC	>200KW PV, NY Sun	22,551
Forteq North America Inc.	Industrial Process Effic, Industrial Process Efficiency	48,408
Four Points Group, Inc.	ENERGY ANALYSIS, TWO #2 - NPP 60+	74,242
Fourth Coast, Inc.	<200KW PV, NY-Sun	7,705
Fred F. Collis & Sons, Inc.	Talent Pipeline:CE and OJT, OJT HIRE	803
Frederick A Proven	<200KW PV, PON 2112 NY SUN	5,670
Friends Seminary	NEW CONSTRUCTION PROGRAM, NCP13054-TownhousesRenovation	83,389
Frontier Energy, Inc.	ANAEROBIC DIGESTER, RPS CST QA/QC Support	10,059
	COMBINED HEAT AND POWER, CHP System Inspection and ReCo	94,704
	Combined Heat and Power, DG Integrated Data System	350,805
	COMBINED HEAT AND POWER, Technical Advisors to CHP	1,425
	COMBINED HEAT AND POWER, Technical Review_Prgm Support	33,541
	Community RH&C, Technical Review_Prgm Support	8,907
	EMERGING TECHNOLOGY / ACCELERATED COMMERCIALIZATION, T	2,251
	EVALUATION, Technical Review_Prgm Support	59,721
	EXISTING FACILITIES, EFP Task Work Order	4,216
	Geothermal Incentive Program, 3695 TWO Umbrella Agreement	192,307
	Geothermal Incentive Program, Technical Review Prom Support	41,305
	Industrial Process Effic, Technical Review_Prgm Support	8,254
	INDUSTRIAL PROCESS EFFICIENCY, Technical Review Prgm Support	2,280
FS Energy, LLC	Workforce Industry Partnership, PON 3442 Workforce Training	21,480
Fugro USA Marine, Inc.	Off-Shore Wind Pre-Dev Act, TWO 1 Agreement 111941	27,860
Fulton County	Clean Energy Communities, CEC610872 - Fulton County	39,000
Fusco Personnel, Inc.	NYSERDA ADMINISTRATION, Temp Services - Marketing PM	11,013
	NYSERDA ADMINISTRATION, TS.002_Multifamily Coordinator	8,090
	REC:CES REC System Dev Costs, TS.007 - LSR Office Administra	5,494
	TS.007 - LSR Office Administra	0,434

Contractor	Contract Description	Total Expended Amount
Fusion Energy Services LLC	<200KW PV, NY Sun	5,555
Gallagher Bus Service Corp.	Commercial/Industrial -	22,107
Garner Environmental Services, Inc.	FUEL NY, Fuel NY Portable Emergency Gen	19,136
Gas Technology Institute	ADVANCED BUILDINGS, Advanced Buildings Technology	92,111
	NextGen HVAC, PON3519 Round 1.	31,304
GCOM Software LLC	NYSERDA ADMINISTRATION, Salesforce	602,235
	NYSERDA ADMINISTRATION, Staff Aug Umbrella Agreement	104,595
GenE Solar I LLC	>200KW PV, NY Sun C/I	145,167
	>200KW PV, NY-Sun C/I	408,051
	>200KW PV, NYSun C/I	135,945
General Electric International, Inc.	ENERGY ANALYSIS, RFQL3685 Round 1	15,000
General Motors	Industrial Process Effic, Industrial Process Efficiency	76,333
General Motors of NY Inc.	>200KW PV, Assignee/Vendor # 37085	50,546
George E Denmark II	<200KW PV, PON 2112 NY SUN	8,715
Geotherm Inc.	<200KW PV, PON 2112 NY SUN	8,680
Gladstein, Neandross & Associates, L	Electric Vehicles - Innovation, DCFC Permitting Study	9,510
Gleason Works	Industrial Process Effic, Industrial Process Efficiency	51,209
Global Common, LLC	SMART GRID SYSTEMS, RFP 3044 R2	255,000
Global Dwelling, LLC	Talent Pipeline:CE and OJT, OJT HIRE	645
Global Thermostat Operations LLC	OTHER PROGRAM AREA, RFQL3101 76W Clean Energy Comp	50,000
Goldman Copeland Associates, P.C.	Commercial Real Estate Ten, Goldman & Copeland - 55 E 52nd	10,997
	Commercial Real Estate Ten, Goldman Copelan-640 5th Ave-CT	10,997
	Commercial Real Estate Ten, Goldman Copeland - 401 9th Ave	14,498
	Commercial Real Estate Ten, Goldman Copeland - 909 3rd Ave	10,997
	Commercial Real Estate Ten, Goldman Copeland-1 Park Ave-CT	8,892
	Commercial Real Estate Ten, Goldman Copeland-2 Penn Pla-CT	8,685
	Commercial Real Estate Ten, Goldman Copeland-90 Park Av-CT	10,997
	Commercial Real Estate Ten, Goldman Copeland-100 W 33rd-CT	10,997
	Commercial Real Estate Ten, Goldman Copeland-150 E 58th-CT	10,997
	Commercial Real Estate Ten, Goldman Copeland-330MadisonAve	10,997
	Commercial Real Estate Ten, Goldman Copeland-510 5th Av-CT	8,302
	Commercial Real Estate Ten, Goldman Copeland 876 darrer of	10,997
	Commercial Real Estate Ten, Goldman Copeland-000 7th AC-OT	10,997
	Commercial Real Estate Ten, Goldman-280 Park Ave-CT	10,997
	Commercial Real Estate Ten, Goldman-2000 Westchester Av-CT	12,101
	Commercial Real Estate Ten, Goldman&Copeland-505 Park Ave	10,997
	Commercial Real Estate Ten, Goldman&Copeland-595 Madison	8,749
	Commercial Real Estate Ten, Goldman&Copeland-885 Second	10,903
	Commercial Real Estate Ten, GoldmanCopeland-33-00 N Blv-CT	8,914
	Commercial Real Estate Ten, GoldmanCopelane - 230 Park Ave	10,997
	Flexible Tech Assistance, FT12070-Vornado655-663 5th-FTC	12,298
	Flexible Tech Assistance, FT12101 - ERT 250 W 57th - FTC	13,314
	Flexible Tech Assistance, RFP3628FlexTechConsultUmbrella	11,466
	Technical Services, RFP3628FlexTechConsultUmbrella	45,000
Goldman Sachs	Industrial Process Effic, Industrial Process Efficiency	77,165
GRE Fund II Holdco LLC	NY-Sun	218,292
GRE Fund III Holdco LLC	>200KW PV, NY Sun C/I	82,705
Greek Peak Holdings Inc	NEW CONSTRUCTION PROGRAM, NCP2376 - Hope Lake Lodge	40,000

Contractor	Contract Description	Total Expended Amount
Green City Force	Talent Pipeline:CE and OJT, PON3981 WFD Capacity Building	31,287
Green Eagle Solar IV, LLC Series I	>200KW PV, NY-Sun	481,205
	>200KW PV, NY-Sun C&I Assignment	481,205
	LMI Community Solar, RFP3802 Low Income Comm Solar	106,532
Green Hybrid Energy Solutions Inc.	<200KW PV, PON 2112 NY SUN	6,142
	PON 2112 NY SUN	132,444
Green Power Developers, LLC	<200KW PV, NY-Sun	9,193
Green Street Power Partners LLC	<200KW PV, NY Sun	249,680
	<200KW PV, NY-Sun	0
	NY-Sun	30,150
	PON 2112 NY SUN	38,455
Green Sulfcrete LLC	INNOVATION CAPACITY & BUSINESS DEVELOPMENT, Sulfcrete Pilot-S	40,000
Green Team USA, LLC	Talent Pipeline:CE and OJT, OJT HIRE	4,926
Greenpac Mill, LLC	Industrial Process Effic, Industrial Process Efficiency	98,500
	On-Site Energy Manager, OsEM15 - Greenpac Mill	46,150
Greenskies Renewable Energy LLC	>200KW PV, NY Sun	21,818
Grenadier Realty Corp.	COMBINED HEAT AND POWER, On-Site Power	4,612
GRID Alternatives Tri-State, Inc.	<200KW PV, NY-Sun	12,883
	NY-Sun	19,325
Grid City Electric Corp	PON 2112 NY SUN	32,928
GridPoint, Inc	Real Time Enrgy Management, Chipotle - Multi Sites - RTEM	86,111
Group-S LLC	Flexible Tech Assistance, FlexTech Consultant Selection	6,000
Guth Deconzo Consulting Engineers	REV Campus Challenge, RFP3628FlexTechConsultUmbrella	63,531
H.E.L.P Development Corp.	MULTIFAMILY PERFORMANCE PROGRAM, Multifamily	23,500
Habitat for Humanity - New York City	MULTIFAMILY PERFORMANCE PROGRAM, Multifamily	17,100
Habitat for Humanity (Capital District)	Low Rise New Construction, 2019 LRNCP	5,100
Habitat for Humanity Dean Street Hou	MULTIFAMILY PERFORMANCE PROGRAM, Multifamily	9,000
Halcyon, Inc.	<200KW PV, NY Sun	5,145
	Talent Pipeline:CE and OJT, OJT HIRE	55,941
Harolds Holding LLC	Multifam New Construction, New Construction	11,920
Harris Beach PLLC	Code to Zero, Codes, Products and Standards	19,957
	GJGNY REVOLVING LOAN FUND, RFP 3300 Outside Counsel Servi	748
	SARATOGA TECHNOLOGY & ENERGY PARK, RFP 3300 Outside Couns	8,457
Harris Wiltshire & Grannis LLP	ENERGY ANALYSIS, RFP3776 Outside Counsel Servic	10,838
	OREC: Technical Support, RFP3776 Outside Counsel Servic	107,051
Harvest Power, LLC	<200KW PV, NY Sun	15,432
	<200KW PV, NY-Sun	11,050
	NY-Sun	16,575
Hawn Heating & Energy Services LLC	Talent Pipeline:CE and OJT, OJT HIRE	3,698
Hazen & Sawyer, P.C.	ENVIRONMENTAL RESEARCH, Climate & algal blooms	4,247
Health Research, Inc.	RENEWABLE HEAT NY, Ultrafine Particle Emissions	16,164
Heartland Homes Construction Inc.	Low Rise New Construction, New Construction	1,250
HESP Solar, LLC	>200KW PV, NY-Sun C&I	63,438
HEVO Inc.	CLEAN TRANSPORTATION, PON 3198 HEVO	180,000
HFZ 344 West 72nd Street Owner LLC	MULTIFAMILY PERFORMANCE PROGRAM, Multifamily	119,000
HH 310 Rainbow LLC	NEW CONSTRUCTION PROGRAM, NCP12990-NiagaraFallHotel-OFLT	23,230
High Falls Operating Co, LLC	INDUSTRIAL PROCESS EFFICIENCY, Industrial Process Efficiency	233,880
5	<200KW PV, PON 2112 NY SUN	14,294

Contractor	Contract Description	Total Expended Amount
Hodgson Russ LLP	>200KW PV, RFP 3300 & RFP 3776 Outside Co	379
	Home Perf w Energy Star, RFP 3300 & RFP 3776 Outside Co	26,748
Holland & Knight LLP	Green Bank Outside Legal Serv.	31,001
	NEW YORK GREEN BANK, Green Bank Outside Legal Serv.	48,668
Hollygrove Solar, LLC	>200KW PV, NY-Sun C&I	522,901
HOLT Architects PC	NEW CONSTRUCTION PROGRAM, NCP14017 - HOLT Building	1,503
Home HeadQuarters, Inc.	Community Energy Engagement, CEEP Central New York Region	51,058
Homeridae LLC	>200KW PV, NY-Sun C&I	573,833
Honeywell International Inc.	3695 TWO Umbrella Agreement	39,790
	Air Source Heat Pumps, 3695 TWO Umbrella Agreement	6,741
	ASSISTED HOME PERFORMANCE WITH ENERGY STAR, 3695 TWO U	0
	EMPOWER NY, 3695 TWO Umbrella Agreement	60,322
	Home Perf w Energy Star, 3695 TWO Umbrella Agreement	276,013
	HOME PERFORMANCE WITH ENERGY STAR, 3695 TWO Umbrella Agre	0
	RENEWABLE HEAT NY, RHNY Pellet Stove QA Services	2,177
Houghton College	Technical Services, OSEM28-C - Houghton College	17,571
Howard Wind LLC	LARGE SCALE RENEWABLES, 8th RPS Main Tier Solicitation	96,977
	LARGE SCALE RENEWABLES, Howard Wind Farm	830,795
	LARGE SCALE RENEWABLES, Howard Wind Farm - Expansion	115,653
HSBC Bank USA, N.A.	Industrial Process Effic, Industrial Process Efficiency	64,346
HUB Controls USA Inc	76 West, 76West Energy Bus Competition	200,000
Hudson Metropolitan LLC	MULTIFAMILY PERFORMANCE PROGRAM, Multifamily	45,000
Hudson River Renewables	<200KW PV, PON 2112 NY SUN	5,040
Hudson Solar	>200KW PV, NY Sun	42,444
Hudson Valley Clean Energy Inc.	<200KW PV, NY Sun	6,867
	<200KW PV, PON 2112 NY SUN	45,450
	NY-SUN, NY-Sun	194,040
Hudson Valley Community College	REV Campus Challenge, RM26 - Hudson Valley CC	10,000
Hudson Valley Hospital	NEW CONSTRUCTION PROGRAM, NCP13047 - NYP Hudson Valley H	49,559
Hudson Valley Wind Energy, LLC	<200KW PV, NY Sun	14,580
Huron Real Estate Associates, LLC	INDUSTRIAL PROCESS EFFICIENCY, Industrial Process Efficiency	48,905
	On-Site Energy Manager, OsEM5-I Huron Campus	20,541
Hydronic Specialty Supply	RENEWABLE HEAT NY, Smart Thermal Storage System	30,000
Hyland Facility Associates	LARGE SCALE RENEWABLES, RFP 2226-RPS Purchase of RE At	175,476
ICAST	Retrofit NY, Multifamily	37,500
ICF Jones & Stokes	ENVIRONMENTAL RESEARCH, NYS Energy Research and Develo	25,799
ICF Resources, LLC	ADVANCED ENERGY CODES, ECode Microsite	4,300
	CLEAN TRANSPORTATION, BCA of EV grid impacts	66,553
	Combined Heat and Power, TWO 3 Hybrid Prog. Support	53,622
	ENERGY ANALYSIS, RFQL 3685 - Flexergy 3.0	210,013
	ENERGY ANALYSIS, Tech Assist, REV Pool	105,821
	EXISTING FACILITIES, Technical Review and Program S	3,389
	OTHER PROGRAM AREA, Tech Assist, REV Pool	0
iCone Products, LLC	CLEAN TRANSPORTATION, Connecting WNY Work Zones	34,800
In Time of Need, Inc.	NY-SUN, New Gospel Temple Bronx	26,700
·	CLEANER GREENER COMMUNITIES, Oyster Bay Cove	18,750
Incorporated Village of Roslyn Harbor	CLEANER GREENER COMMUNITIES, Roslyn Harbor	7,500
		,

Contractor	Contract Description	Total Expended Amount
Industrial Economics, Incorporated	ENERGY ANALYSIS, TWO 1 EE Supply Curve Analysis	108,609
	Large Scale Renewables, RFQ3183 Umbrella Agreement	73,652
	Mkt Char: Tech Assist, TWO 1 EE Supply Curve Analysis	61,093
	SMART GRID SYSTEMS, Flex Energy Tech Analysis 2	17,838
INF Associates LLC	Commercial Real Estate Ten, INF Associates LLC - Multisite	50,000
Infinity Solar Systems, LLC	<200KW PV, PON 2112 NY SUN	5,042
Infosys International Inc	NYSERDA ADMINISTRATION, RFP3365 Private Cloud Hosting	162,809
Innovative Energy Systems, LLC	LARGE SCALE RENEWABLES, DANC LFGE	244,088
Institute for Building Technology and	<200KW PV, RFQL 3434 IBTS Standards & QA	16,710
Sa	ADVANCED ENERGY CODES, Energy Code Training: EPros	35,659
	Air Source Heat Pumps, 3695 TWO Umbrella Agreement	11,269
	ASSISTED HOME PERFORMANCE WITH ENERGY STAR, 3695 TWO U	0
	COMMUNITY SOLAR, RFQL 3434 IBTS Standards & QA	4,186
	EMPOWER NY, 3695 TWO Umbrella Agreement	0
	Home Perf w Energy Star, 3695 TWO Umbrella Agreement	80,233
	HOME PERFORMANCE WITH ENERGY STAR, 3695 TWO Umbrella Agre	0
	NY-SUN, RFQL 3434 IBTS Standards & QA	127,706
IntelliGen Power Systems, LLC	Combined Heat and Power, CHPA - 402 East 102nd Street	142,771
	COMBINED HEAT AND POWER, CHPA - New York Towers	418,189
Interface Solutions, Inc.	On-Site Energy Manager, OsEM9-I-Interface Preformance	94,088
Interstate Renewable Energy Council,	Workforce Industry Partnership, PON 3715 Workforce Training	68,218
Intrepid Museum Foundation	COMBINED HEAT AND POWER, Distributed Generation as CHP	20,000
IRE Solar 1, LLC	PV System @ City of Utica 2	64,876
Ithaca Carshare, Inc.	CLEAN TRANSPORTATION, Ithaca Bikeshare Demonstration	109,625
Ithaca College	Flexible Tech Assistance, FT12024 - Ithaca College - PON	14,428
U U	REV Campus Challenge, RM12 - Ithaca College	50,273
Jaros, Baum & Bolles	Technical Services, AGG1002-Jaros, Baum & Bolles	5,000
Jason Salfi	OTHER PROGRAM AREA, Innovation Advisory Services	56,258
Jasper Van den Munckhof	Retrofit NY, Multifamily	12,300
Jefferson Community College	REV Campus Challenge, RM4 - SUNY Jefferson Community	52,528
	Technical Services, OsEM17-C Jefferson Community	12,103
Jefferson Solar, LLC	>200KW PV, NY-Sun C&I	190,295
JEM ENGINEERING SERVICES	High Performing Grid, PON 3397 Round 2 - Category A	46,683
Jericho Rise Wind Farm, LLC	REC:CES REC Contracts, 9th RPS Main Tier Solicitation	3,087,490
John Siegenthaler	Renewable Heat NY, RFP 3165 Hydronic System Desig	4,270
	WORKFORCE DEVELOPMENT, RFP 3165 Hydronic System Desig	12,918
Johnson Controls, Inc. (Syracuse)	Flexible Tech Assistance, RFP3628FlexTechConsultUmbrella	26,264
Jones Lang LaSalle Americas, Inc.	Real Time Enroy Management, JLL - 800 Phillips Rd - RTEM	25,560
Joule Assets Inc	CLEANER GREENER COMMUNITIES, CGC57954 - Joule Assets	59,000
	EXISTING FACILITIES, EFP2380 - JPMorgan Chase - Mul	15,334
Kamtech Restoration Corp	<200KW PV, PON 2112 NY SUN	5,508
	NY Sun	39,744
Kasselman Solar LLC	<200KW PV, NY Sun	20,565
	<200KW PV, NY-Sun	11,571
Kawi Enorgy Group Corp	<200KW PV, PON 2112 NY SUN	94,455
Kawi Energy Group Corp.	Commercial Real Estate Ten, Kawi Energy Group-Multisite	10,545
Kearsarge Johnstown 1 LLC	>200KW PV, NY-Sun C/I	488,206
Kearsarge Johnstown 2 LLC	>200KW PV, NY-Sun C/I	488,206

Contractor	Contract Description	Total Expended Amount
Kelliher Samets Volk	Air Source Heat Pumps, Marketing Support for NYSERDA	57,489
	Code to Zero, TWO 26 Codes Marketing	23,205
	Commercial Real Estate Ten, Marketing Support for NYSERDA	16,794
	Commercial Real Estate Ten, TWO 24: CI Awareness Pilot MKT	29,072
	Community RH&C, Marketing Support for NYSERDA	39,549
	Consumer Ed and Market Support, Marketing Support for NYSERDA	935,979
	ENERGY ANALYSIS, TWO 27: 2019 SEP Marketing	1,275
	Flexible Tech Assistance, Marketing Support for NYSERDA	17,412
	Flexible Tech Assistance, TWO 24: CI Awareness Pilot MKT	116,288
	Geothermal Incentive Program, Marketing Support for NYSERDA	36,076
	Home Perf w Energy Star, Marketing Support for NYSERDA	42,022
	Industrial Process Effic, TWO 23: Industrial Mktg	15,521
	Industrial Process Effic, TWO 24: CI Awareness Pilot MKT	203,505
	Intervention Effectiv Training, TWO 22 Building Labeling Mkt	43,782
	LMI Community Solar, Marketing Support for NYSERDA	11,933
	Multifam Performance Pgm, Marketing Support for NYSERDA	228,143
	New Construction- Housing, Marketing Support for NYSERDA	36,580
	NY-SUN, Marketing Support for NYSERDA	324,576
	NYSERDA ADMINISTRATION, TWO 29 Global Paid Search	6,843
	On-Site Energy Manager, TWO 23: Industrial Mktg	31,042
	On-Site Energy Manager, TWO 24: CI Awareness Pilot MKT	58,144
	Real Time Enrgy Management, Marketing Support for NYSERDA	17,277
	Real Time Enrgy Management, TWO 23: Industrial Mktg	10,348
	Real Time Enrgy Management, TWO 24: CI Awareness Pilot MKT	174,433
	Renewable Heat NY, Marketing Support for NYSERDA	6,850
	Retrofit NY, Marketing Support for NYSERDA	18,125
	Strategic Energy Manager, TWO 23: Industrial Mktg	41,390
	Workforce Industry Partnership, Marketing Support for NYSERDA	124,114
Key Bank	<200KW PV, NY-Sun	546,669
Kiit Renewable Energy LLC	>200KW PV, Commercial/Industrial PV	73,459
Kilfrost, Inc.	NextGen HVAC, PON3519 Round 1	11,619
Kilowatt Engineering, Inc.	Commercial Real Estate Ten, FlexTech Consultant Selection	14,670
3 1 3	EXISTING FACILITIES, 2621 Umbrella Contract	8,644
	Industrial Process Effic, 2621 Umbrella Contract	46,583
	Industrial Process Effic, IPE16230	2,342
	Industrial Process Effic, IPE16236	3,493
	INDUSTRIAL PROCESS EFFICIENCY, 2621 Umbrella Contract	5,020
	Remote Energy Management, RFP 3683 REM Program	23,477
King & King Architects, LLP	Retrofit NY, Multifamily	18,750
Kingston City School District	NEW CONSTRUCTION PROGRAM, NCP12313 - Salzmann Building	152,307
Kingston, City of	Clean Energy Communities, City of Kingston	4,500
KLD Engineering, P.C.	CLEAN TRANSPORTATION, ICM Framework Suffolk County	15,260
Engineering, r.e.	CLEAN TRANSPORTATION, Tem Pranework Suiloik County CLEAN TRANSPORTATION, Transportation Resiliency	15,862
KPMG LLP	NEW YORK GREEN BANK, Audit Services	
		28,938
	NYSERDA ADMINISTRATION, Audit Services Agriculture Energy Eff Pgm, RFP3628FlexTechConsultUmbrella	86,813
199 Enoral Complete Las		(500)
L&S Energy Services, Inc.	ANAEROBIC DIGESTER, RPS-CST Quality Assurance/Qual	6,450

Contractor L&S Energy Services, Inc.	Contract Description Combined Heat and Power, Umbrella Contract	Total Expended Amount 2,912
	Commercial Real Estate Ten, FlexTech Consultant Selection	27,261
	Flexible Tech Assistance, FlexTech Consultant Selection	5,120
	Flexible Tech Assistance, L&S Year 1 GJGNY Energy Audits	142,808
	Flexible Tech Assistance, RFP3628FlexTechConsultUmbrella	25,223
	Flexible Tech Assistance, Umbrella Contract	0
	FLEXIBLE TECHNICAL ASSISTANCE, Umbrella Contract	66,491
	Geothermal Incentive Program, 3695 TWO Umbrella Agreement	3,399
	Geothermal Incentive Program, Umbrella Contract	17,275
	GJGNY REVOLVING LOAN FUND, L&S Year 1 GJGNY Energy Audits	14,024
	GREENING THE BRONX, Greening the Bronx	27,409
	Industrial Process Effic, Industrial Process Efficiency	7,832
	Industrial Process Effic, IPE16220	2,133
	Industrial Process Effic, IPE16235	8,215
	Industrial Process Effic, Umbrella Contract	39,287
	INDUSTRIAL PROCESS EFFICIENCY, Umbrella Contract	33,995
	NEW CONSTRUCTION PROGRAM, Umbrella Contract	2,857
	On-Site Energy Manager, Umbrella Contract	11,731
	REV Campus Challenge, Tech Assistance for Roadmaps	17,092
	Technical Services, AGG1003 - L&S Energy Services	5,000
	Technical Services, RFP3628FlexTechConsultUmbrella	21,000
	Technical Services, Tech Review - OsEM	5,042
LaBella Associates, P.C.	Agriculture Energy Eff Pgm, FlexTech Consultant Selection	2,500
,	EMERGING TECHNOLOGY / ACCELERATED COMMERCIALIZATION, T	72,671
	EXISTING FACILITIES, Technical Review and Program S	4,140
	Flexible Tech Assistance, RFP3628FlexTechConsultUmbrella	17,771
	NEW CONSTRUCTION PROGRAM, New Construction	7,616
	New Construction- Commercial, RFP3771 Umbrella Contract	3,625
	Technical Services, RFP3628FlexTechConsultUmbrella	2,448
Lafayette Development Partners LLC	NEW CONSTRUCTION PROGRAM, NCP12734 - Lafayette Developme	64,175
Lake Breeze Fruit Farms Inc	>200KW PV, NY Sun	64,618
Lamb Farms Inc.	ANAEROBIC DIGESTER, RPS ADG - Lamb Lakeshore Dairy	159,255
Launch New York, Inc.	Cleantech ICC Engage, Launch NY ECO Incubator	374,000
,	Cleantech Incubator, Launch NY ECO Incubator	0
LC DRives	OTHER PROGRAM AREA, PON 3249 Advanced Clean Energy	53,403
Legacy Yards Tenant LLC	NEW CONSTRUCTION PROGRAM, NCP10564-10 Hudson Yards-OFLT	1,209,686
Leidos Engineering of New York, P.C.	CLEANER GREENER COMMUNITIES, RFP3628FlexTechConsultUmbrella	17,086
Levitan & Associates, Inc.	OREC: Technical Support, RFP3462 Umbrella Agreement	149,454
Libolt & Sons, Inc.	NEW YORK ENERGY STAR HOMES, New Construction	100,000
·	Technical Services, OsEM10-Lincoln Center Perform	39,259
Local 32BJ Thomas Shortman Training	Workforce Industry Partnership, PON 3715 Workforce Training	20,459
Lockheed Martin NE & SS	INDUSTRIAL PROCESS EFFICIENCY, Industrial Process Efficiency	6,133
Loeb & Loeb LLP	NEW YORK GREEN BANK, Green Bank Outside Legal Couns	15,762
Long Island High Technology Incubat	Cleantech Incubator, PON3413 Clean Energy Incubator	102,863
Long Island Power Authority	NY-SUN, LIPA MOU RGGI Compliance Progr	6,250,000
Long Island Power Solutions	<200KW PV, NY Sun	8,630
Loring Consulting Engineers, Inc.	Flexible Tech Assistance, FT12099 – 25-30 Columbia – FTC	13,720
Lotus Energy, Inc.	<200KW PV, PON 2112 NY SUN	14,076
		11,010

Contractor	Contract Description	Total Expended Amount
Luminate, LLC	Outside Technical and Eng. Srv	29,847
M.J. Beck Consulting LLC	OREC: Technical Support, RFQL3926 Umbrella Contract	65,000
M.J. Bradley & Associates	CLEAN TRANSPORTATION, BCA of EV grid impacts	409
	Electric Vehicles - Innovation, BCA of EV grid impacts	7,540
M/E Engineering, P.C.	Commercial New Construc, RFP3771 Umbrella Contract	14,500
	Flexible Tech Assistance, RFP3628FlexTechConsultUmbrella	58,653
	Industrial Process Effic, Technical Review and Program S	22,500
	Technical Services, Westchester Tech Services	6,375
Maalka Inc	Cleantech Ignition, PON 3871 Ignition Grants	25,000
MacQuesten Construction Manageme	NEW YORK ENERGY STAR HOMES, New Construction	102,500
Malcarne Contracting, Inc.	Talent Pipeline:CE and OJT, OJT HIRE	10,910
Malcolm Pirnie, Inc.	COMBINED HEAT AND POWER, EFP Task Work Orders	1,782
Malta Development Company Inc	NEW YORK ENERGY STAR HOMES, New Construction	6,000
Maple Housing Development Fund Co	Multifam Performance Pgm, Multifamily	69,000
Marble River Wind Farm LLC	LARGE SCALE RENEWABLES, Marble River Wind Farm	5,780,432
Marsh Hill Energy, LLC	LARGE SCALE RENEWABLES, 8th RPS Main Tier Solicitation	833,998
Marshall & Sterling, Inc.	NYSERDA ADMINISTRATION, Property Liability and Other	256,291
Mastercard International	>200KW PV, NY Sun	59,547
	Commercial New Construc, NCP15000 - MasterCard HQ-OFLT	26,277
	NY-Sun	298,080
Mayer Brown LLP	Green Bank	20,487
•	WEST VALLEY DEVELOPMENT PROGRAM, Engineering Services WV	41,357
Meadows Senior Living L.P.	NEW YORK ENERGY STAR HOMES, New Construction	87,500
	RENEWABLE THERMAL, Solar Thermal Incentive	54,110
Mecklenburg Solar LLC	>200KW PV, NY-Sun C/I	110,252
Meister Consultants Group, Inc.	Commercial Market Mapping, NYSERDA-Utility Collaboration	52,223
melater consultants croup, me.	Commercial Real Estate Ten, Efficiency Planning & Engineer	11,493
	Commercial Real Estate Ten, RFP3631 - CTP Support - Cadmus	2,506
	Real Time Enrgy Management, Efficiency Planning & Engineer	38,599
Managerial II. and the Constant of Alliand	REV Campus Challenge, Efficiency Planning & Engineer	60,787
Memorial Hospital for Cancer & Allied Di	NEW CONSTRUCTION PROGRAM, NCP11393 - 74th Street Ambulat	825,237
	NEW CONSTRUCTION PROGRAM, NCP11556 - 327 E 64th Street C	53,864
Merrimack Energy Group, Inc.	OREC: Technical Support, RFQL3926 Umbrella Contract	65,000
Mesa Bioenergy Supply, LLC	CLEANER GREENER COMMUNITIES, CGC32404 Reassignment to MESA	92,554
Metropolitan Transportation Authority	High Performing Grid, PON 3397 CAT D	155,000
Metropolitan Washington Council	OTHER PROGRAM AREA, DOE UER - MWCOG	2,348
MHANY 2004 HDFC	Multifam Performance Pgm, Multifamily	38,850
Micatu, Inc.	High Performing Grid, PON 3397 CAT D	283,083
Michaels Energy, Inc.	Industrial Process Effic, RFQ 3183 Michaels Energy	15,141
Micro Nano Technologies	NextGen HVAC, PON3519 Round 1	185,000
Minaville North Solar 1, LLC	>200KW PV, Commerical/Industrial PV	291,119
Minaville South Solar 1, LLC	>200KW PV, NY-Sun C&I	291,119
Minaville West Solar 1, LLC	>200KW PV, NY-Sun C&I	294,713
mindSHIFT Technologies, Inc.	NYSERDA ADMINISTRATION, RFP 3919-Sitecore CMS Admin	194,188
Mizkan Americas, Inc.	Industrial Process Effic, Industrial Process Efficiency	62,361
MJW Technical Services, Inc.	WEST VALLEY DEVELOPMENT PROGRAM, Radiation Protection Support	27,786
Moelis & Company Group LP	NEW YORK GREEN BANK, 3PC raise advisory Services	252,851
Mohawk Innovative Technology, Inc.	OTHER PROGRAM AREA, PON 3249 ACE	60,000

Contractor	Contract Description	Total Expended Amount
Mohawk Valley Community College	REV Campus Challenge, RM20 - Mohawk Valley Comm. Col	7,000
Mohawk Valley Economic Developme	Community Energy Engagement, CEEP Mohawk Valley Region (MVE	67,128
Moise Safra Community Center Inc	NEW CONSTRUCTION PROGRAM, NCP12117 - Moise Safra Communi	4,003
Molecular Glasses, Inc.	OTHER PROGRAM AREA, Technology to Market	45,000
Molloy College	CLEANER GREENER COMMUNITIES, CGC42044 - Molloy College	90,722
Momentum NA, Inc.	Commercial Real Estate Ten, RDA-300 Vesey St	10,750
Monolith Solar Associates, LLC	<200KW PV, NY Sun	130,000
	<200KW PV, PON 2112 NY SUN	12,726
Montreign Operating Company LLC	NEW CONSTRUCTION PROGRAM, NCP13163 - Montreign Resort Ca	540,402
Morgan Stanley Services Holding, LLC	REC:CES REC Contracts, 10th RPS Main Tier Solicitatio	30,860
Mount Sinai Medical Center	Technical Services, OsEM - Mount Sinai Hospital	50,000
	Technical Services, OsEM-Icahn School of Medicine	50,000
MPL Incorporated	INDUSTRIAL PROCESS EFFICIENCY, Industrial Process Efficiency	6,734
Municipal Housing Authority of the	MULTIFAMILY PERFORMANCE PROGRAM, Multifamily	74,400
NanoHydroChem	Energy Storage Tech/Prod Dev, Renewable Optimz Energy Storge	48,556
National Economic Research	Mkt Char: Tech Assist, Tech Assist, REV Pool	900
	Nat'l OffShWind R&D Consortium, National OSW R&D Concortium.	1,000,000
nc	National OSW R&D Concortium.	0
Natural History Museum of the	ADVANCED BUILDINGS, Retrofit Hi-Eff Wood Heat Sys	C
Adirondack	Environmental Research, Wild Ctr Clim Change Outreach	16,500
lavigant Consulting Inc.	Advancing Ag Enrgy Technologie, RFQ3183 Umbrella Agreement	41,439
	Energy Storage Tech/Prod Dev, RFQ3183 Umbrella Agreement	42,371
	ENVIRONMENTAL RESEARCH, TWO 1 - Assessment of Carbon C	191,852
	Greenhouse Light & Systems Eng, RFQ3183 Umbrella Agreement	41,439
	Mkt Char: Tech Assist, Tech Assist, REV Pool	77,209
	NEW YORK GREEN BANK, Outside Technical and Eng. Srv	103,373
	REV Connect, REV Connect	326,899
	Rmve Barriers Dist Enrgy Storg, RFQ3183 Umbrella Agreement	40,839
	Technical Services, RFQ3183 Umbrella Agreement	41,439
NBC Universal LLC	Industrial Process Effic, Industrial Process Efficiency	32,912
Neighborhood Innovations, Inc	Low Rise New Construction, New Construction	58,300
NESCAUM	ENVIRONMENTAL RESEARCH, 123059 TWO#5	43,479
	ENVIRONMENTAL RESEARCH, Performance of Biomass-fired	2,280
	ENVIRONMENTAL RESEARCH, RFQL3685 Round 1	305,861
	ENVIRONMENTAL RESEARCH, Tech Assist, REV Pool	236,615
	OTHER PROGRAM AREA, Tech Assist, REV Pool	0
	Renewable Heat NY, 123059 TWO#5	26,465
	RENEWABLE HEAT NY, Mobile Woodsmoke PM Monitoring	12,871
	RENEWABLE HEAT NY, Next Gen Test Methods Research	84,839
	Renewable Heat NY, RFQL3685 Round 1	74,550
	RENEWABLE HEAT NY, Tech Assist, REV Pool	11,262
	RENEWABLE HEAT NY, Wood Pellet Standard	3,603
New 56th and Park NY Owner LLC	EXISTING FACILITIES, DMP Bonus - 56th & Park NY	94,321
	NEW CONSTRUCTION PROGRAM, NCP10655 - 432 Park Avenue	193,416
New Buildings Institute, Inc.	Code to Zero, Codes	971
ten Sunange mattute, me.	Code to Zero, TWO#1 Roadmap Zero Carbon Blds	64,427
	New Construction- Commercial, New Construction	28,207
	New Construction- Commercial, New Construction	20,207

Contractor	Contract Description	Total Expended Amount
New Destiny Housing Corp	MULTIFAMILY PERFORMANCE PROGRAM, Multifamily	9,450
New Energy Equity LLC	>200KW PV, commerical industrial PV	103,692
	Commercial/Industrial	126,017
	Commercial/Industrial -	182,901
New England Waste Services of NY Inc.	LARGE SCALE RENEWABLES, Clinton Co. Landfill	84,141
New York Academy of Sciences	EVALUATION, Innovation and Business Develo	9,960
	OTHER PROGRAM AREA, Innovation and Business Develo	16,468
New York Battery and Energy Storage	Rmve Barriers Dist Enrgy Storg, Task Work Order No. 3	162,786
New York City Energy Efficiency Corp	CLEANER GREENER COMMUNITIES, CGC32252 - NYCEEC	139,703
New York City Housing Authority	CLEANER GREENER COMMUNITIES, CGC56950 - NYC DEP	106,236
New York Power Authority	EXISTING FACILITIES, EFP2213 - NYPA - NYS OMH	474,560
	Flexible Tech Assistance, FlexTech MOU NYSERDA-NYPA	109,080
	FLEXIBLE TECHNICAL ASSISTANCE, FlexTech MOU NYSERDA-NYPA	153,039
New York Power Authority,	EXISTING FACILITIES, EFP2592 - New York Power Autho	812,965
New York Presbyterian Hospital	NEW CONSTRUCTION PROGRAM, NCP12441 - NYP Adult ED	8,603
New York State Marine	CLEAN TRANSPORTATION, NYS Canal Marine Freight	564
New York State Solar Farm Inc.	<200KW PV, PON 2112 NY SUN	37,579
New York University	Cleantech Incubator, PON3413 Clean Energy Incubator	192,500
	FLEXIBLE TECHNICAL ASSISTANCE, FlexTech Program - PON 1746	9,538
	INNOVATION CAPACITY & BUSINESS DEVELOPMENT, Clean Tech Tra	5,000
Newport Ventures, Inc.	Code to Zero, Energy Code Training	97,800
Nexant, Incorporated	EXISTING FACILITIES, Technical Review and Program S	2,535
· ·	Industrial Process Effic, Technical Review and Program S	5,590
Next Generation Solar, LLC	<200KW PV, NY-Sun	8,160
NextCorps Inc	M-Corps, ACT Prototypes to Mass Prod NY	687,500
	NEW CONSTRUCTION PROGRAM, NCP12988 - SibleyBuilding 6 FI	3,425
Nextera Energy Capital Holdings Inc	NY-SUN, NY Sun	1,109,298
Niagara Frontier Transportation	CLEAN TRANSPORTATION, Buffalo Niagara TMA	0
Authorit	CLEAN TRANSPORTATION, Integrated Corridor Management	896
NIC Holding Corp	FUEL NY, NYS Strategic Gasoline Reserve	257,306
Nickels Energy Solutions LLC	<200KW PV, NY Sun	6,174
	<200KW PV, PON 2112 NY SUN	13,487
Nixon Peabody LLP	Green Bank Outside Legal Serv.	59,635
	NEW YORK GREEN BANK, Green Bank Outside Legal Serv.	9,750
NMR Group, Inc.	EVALUATION, RFQ 3183 NMR Group, Inc.	61,941
Nink Group, ne.	Home Energy Ratings, RFQ 3183 NMR Group, Inc.	15,414
	Home Perf w Energy Star, RFQ 3183 NMR Group, Inc.	5,382
Noblehurst Farms, Inc.	ANAEROBIC DIGESTER, RPS CST ADG-to-Electricity Dai	72,270
	Energy Storage Tech/Prod Dev, PON 3585 Round 3 Cat B	
NOHMs Technologies, Inc.		233,799
Normandeau Associates, Inc.	ENVIRONMENTAL RESEARCH, Digital Aerial Baseline Survey	460,729
Northeast States for Coordinated Air	Environmental Research, NY climate clearinghouse	18,988
Northeast Wind Partners II LLC	LARGE SCALE RENEWABLES, Steel Winds II	148,820
Northwell Health, Inc.	Technical Services, OsEM21-C Northwell Health	40,170
Novel Approaches Solar Applications,		20,182
NP Environmental LLC	Talent Pipeline:CE and OJT, OJT HIRE	10,000
Nutrition Bar Confectioners	Industrial Process Effic, Industrial Process Efficiency	4,971
NY RNM Project1, LLC	>200KW PV, NY-Sun C&I (Assignment)	193,743
	NY-Sun	246,958

Contractor	Contract Description	Total Expended Amount
NY RNM Project1, LLC	NY-SUN C&I	211,696
NY RNM Project2, LLC	>200KW PV, NY Sun C&I	6,071
	>200KW PV, NY-SUN C&I	210,002
NY RNM Project3, LLC	>200KW PV, NY-Sun C/I	6,808
NY RNM Project4, LLC	>200KW PV, NY-SUN C&I	164,783
NY Thompson II, LLC	>200KW PV, Ny Sun C&I	411,480
NYC Climate Action Alliance Inc.	Commercial Real Estate Ten, NYC Climate Alliance - CT	10,000
NYS Department of Correctional Svc	EXISTING FACILITIES, EFP2550 - DOCCS - 1220 Washing	41,095
NYS Department of Health	>200KW PV, NY Sun	44,918
NYS Office of Mental Health	NEW CONSTRUCTION PROGRAM, NCP9236 - Central Services Bui	11,926
	NEW CONSTRUCTION PROGRAM, NCP12785 - OMH Hutchings Ph3	29,329
NYS Office of Parks, Recreation and	<200KW PV, NY Sun	43,772
	<200KW PV, PON 2112 NY SUN	40,986
NYS Olympic Regional Development	Industrial Process Effic, Industrial Process Efficiency	328,265
NYS School Facilities Association, Inc.	Workforce Industry Partnership, PON 3442 Workforce Training	123,972
NYU Langone Hospitals	NEW CONSTRUCTION PROGRAM, NCP9243 - The Kimmel Pavilion	1,510,000
	NEW CONSTRUCTION PROGRAM, NCP10551 - NYU School of Medic	643,193
	NEW CONSTRUCTION PROGRAM, NCP12113 - NYULMC ACLS Vivariu	157,268
	Technical Services, OsEM13-C - NYU Langone Health	60,724
O'Brien & Gere Engineers, Inc.	Commercial New Construc, RFP3771 Umbrella Contract	12,955
	Flexible Tech Assistance, RFP3628FlexTechConsultUmbrella	15,678
	FLEXIBLE TECHNICAL ASSISTANCE, FlexTech Consultant Selection	2,825
	Industrial Process Effic, RFP3628FlexTechConsultUmbrella	83,598
Oakvale Construction Co. Ltd.	LARGE SCALE RENEWABLES, Black Brook Hydro	36,050
Ocean Tech Services LLC	Off-Shore Wind Pre-Dev Act, RFP 3855 Metocean Cat. 1: FLSS	549,690
OFD Foods	Industrial Process Effic, Industrial Process Efficiency	48,405
Ogden Cap Properties, LLC	Flexible Tech Assistance, FT11664 - Dorchester Towers	8,758
	Flexible Tech Assistance, FT11665 - Normandie Ct.	8,750
Ogdensburg Solar Partners, LLC	PV System @ Ogdensburg Bridge	153,119
OLA Consulting Engineers, P.C.	Flexible Tech Assistance, RFP3628FlexTechConsultUmbrella	610
	Technical Services, Westchester Tech Services	121
Olin Corporation	INDUSTRIAL PROCESS EFFICIENCY, Industrial Process Efficiency	1,296,439
OnRout Co.	OTHER PROGRAM AREA, Dynamic Pricing for Parcels	81,489
Open Energy Efficiency Inc.	Pay for Performance, RFP 3901 P4P-AMV Platform	57,590
Opinion Dynamics Corporation	Clean Energy Communities, RFQ3183 Umbrella Agreement	4,329
	EVALUATION, Commercial Statewide Baseline	568,799
	EVALUATION, RFQ3183 Umbrella Agreement	43,383
	LMI Single Family /2525, TWO 11 BPI Survey	13,602
	Real Time Enroy Management, RFQ3183 Umbrella Agreement	17,923
	Remote Energy Management, RFQ3183 Umbrella Agreement	0
	Single Family Mt Rt Trans/2515, TWO 11 BPI Survey	13,602
Oppenheim Solar South, LLC	PV System @ SunyPoly	440,218
Opus One Solutions USA Corp	Cleantech Ignition, PON 3871 Ignition Grants	70,000
Orange and Rockland Utilities, Inc.	SMART GRID SYSTEMS, Smart Distribution Automation	187,652
Otsego County	CLEANER GREENER COMMUNITIES, CEC610873 - Otsego County	62,500
	Community RH&C, PON3723 RH&C Campaigns	26,500
· ·		
Owego Apalachin CSD	NEW CONSTRUCTION PROGRAM, NCP11320 - Owego School	44,335

Contractor	Contract Description	Total Expended Amount
Ozz Solar Development Inc.	>200KW PV, NY Sun C&I	53,748
PA Consulting Group	ENERGY ANALYSIS, Con Ed NG Moratorium Study	960,207
Pace University School of Law	>200KW PV, CGC31911 - Pace Law School	0
	CLEANER GREENER COMMUNITIES, CGC31911 - Pace Law School	11,133
Pactiv Corp.	Industrial Process Effic, Industrial Process Efficiency	151,317
Palmetto Hospitality of Manhattan III, L	NEW CONSTRUCTION PROGRAM, NCP12708 - 260 W 40th Street	53,286
Pamal Broadcasting Ltd	>200KW PV, NY-Sun C/I	209,439
Paradise Energy Solutions, LLC	<200KW PV, NY Sun	72,351
	<200KW PV, PON 2112 NY SUN	175,941
Park South Tenants Corp.	MULTIFAMILY PERFORMANCE PROGRAM, Multifamily	77,250
Pathfinder Engineers & Architects, LLP	Commercial New Construc, Commercial New Construction	14,908
	Commercial New Construct, New Construction	25,243
	Commercial New Construc, RFP3771 Umbrella Contract	106,524
Pathstone Corporation	Community Energy Engagement, CEEP Finger Lakes Region (PATH	88,250
	Community RH&C, Sustainable Home Roch Part C	23,500
Pavion Holdings, LLC	NEW YORK ENERGY STAR HOMES, New Construction	86,000
PDJ Inc	INDUSTRIAL PROCESS EFFICIENCY, DG CHP at Buyea Road Kiln	3,950
Pearl Solar, LLC	>200KW PV, NY-Sun C&I	422,546
People United for Sustainable Housing	Community Energy Engagement, CEEP Western New York Region	92,264
In	REVitalize, RFP 3584 Revitialize	26,000
Performance Systems Development	Pay for Performance, Task #1 contract 113650	5,964
Peter Tavino PE PC	Geothermal Incentive Program, Large-Scale GSHP Rebate	32,054
Phase Innovations LLC	NextGen HVAC, Modular Membrane Dehumidifying	120,706
Plaza Apartments Owner LLC	Multifam Performance Pgm, Multifamily	3,500
PlugPV, LLC	<200KW PV, NY Sun	5,263
	<200KW PV, PON 2112 NY SUN	57,939
	PON 2112 NY SUN	19,680
Polytechnic University of NYU	INNOVATION CAPACITY & BUSINESS DEVELOPMENT, Proof-of-Concep	350,000
Poseidon Systems, LLC	CLEAN TRANSPORTATION, Renewable, Clean Energy and En	18,493
	INNOVATION CAPACITY & BUSINESS DEVELOPMENT, Advanced Clean	17,119
Potters Industries	Industrial Process Effic, Industrial Process Efficiency	66,516
Power Advisory LLC	OREC: Technical Support, RFQL3926 Umbrella Contract	65,000
Powerhouse Dynamics, Inc	Real Time Enrgy Management, Powerhouse - Multisite - RTEM	10,044
Premier Solar Solutions LLC	NY Sun	136,341
	PON 2112 NY SUN	20,952
President Container Croup II 11 C		
President Container Group II, LLC	Industrial Process Effic, Industrial Process Efficiency	1,249
Pro Custom Solar LLC	<200KW PV, PON 2112 NY SUN	14,567
Pterra, LLC	DER Integration(Intrcnect), FlexTech Consultant Selection	28,960
	DER Integration(Intrcnect), PON 3404 DER Integration	46,050
	High Performing Grid, PTerra work for ITWG	16,200
Pyramid Energy Engineering Services PLLC	ENVIRONMENTAL RESEARCH, FlexTech Consultant Selection	9,950
	NextGen HVAC, FlexTech Consultant Selection	17,370
	Renewable Heat NY, FlexTech Consultant Selection	71,389
Quanta Technology LLC	High Performing Grid, PON 3397 Round 2 - Category A	274,410
	Off-Shore Wind Pre-Dev Act, RFP3462 Umbrella Agreement	1,050
Queens Center REIT, LLC	FUEL CELLS, RPS FC - Macerich Mall meter #	630,000
Quest Energy Group	Commercial Real Estate Ten, Quest - 111 West 33rd Street	7,500
Quixotic Systems, Inc.	RENEWABLE THERMAL, Solar Thermal Incentive	6,000

Contractor	Contract Description	Total Expended Amount
QwikSolar, LLC	<200KW PV, PON 2112 NY SUN	33,795
R3 Energy Management Audit &	Real Time Enrgy Management, CardinalHS-650 Grand Conc-RTEM	7,560
Review, LLC	Real Time Enrgy Management, Jack Resnick-8 W 40th St-RTEM	2,160
	Real Time Enrgy Management, R3 - 880 3rd Avenue - RTEM	2,160
	Real Time Enrgy Management, R3 Energy-575 Madison-RTEM	14,400
	Real Time Enrgy Management, SteinbergPokoik-1430Brdwy-RTEM	3,600
R. Edge Contracting LLC	NY Sun	161,568
R.W. Beck Group, Inc.	Commercial Real Estate Ten, StakeholderEngagement_Outreach	16,112
	K-12 SCHOOLS, StakeholderEngagement_Outreach	0
	Technical Services, StakeholderEngagement_Outreach	16,112
Randstad North America Inc	Cleantech ICC Engage, TS.003_TBI Coordinator	3,317
	Energy Storage Tech/Prod Dev, TS.003_TBI Coordinator	3,317
	High Performing Grid, TS.003_TBI Coordinator	3,317
	NextGen HVAC, TS.003_TBI Coordinator	3,317
	NYSERDA ADMINISTRATION, TS.004 - Marketing_Coordinator	4,000
	Pub Transit & Elect Rail, TS.003_TBI Coordinator	3,317
Randstad North America, Inc.	CI Engy Siting & Soft Cost Red, TS.001 - CES Coordinator	12,270
	Consumer Ed and Market Support, Payroll Services	3,935
	ENERGY ANALYSIS, Payroll Services	7,630
	Environmental Research, Payroll Services	12,095
	Home Perf w Energy Star, Payroll Services	6,616
	Multifam Performance Pgm, Payroll Services	6,616
	NEW YORK GREEN BANK, Payroll Services	21,938
	NYSERDA ADMINISTRATION, Payroll Services	103,712
	REC:CES REC System Dev Costs, Payroll Services	4,125
Rapid Response Monitoring Services	Industrial Process Effic, Industrial Process Efficiency	8,891
RE-Nuble, Inc.	Cleantech Ignition, PON 3871 Ignition Grants	18,000
re: Charge-e, Inc.	CLEAN TRANSPORTATION, Inductive charging for e-bikes	49,500
Recurve Analytics, Inc.	Pay for Performance, RFP 3901 P4P-AMV Platform	45,453
Red Hook Solar Corp	<200KW PV, NY Sun	91,476
RED Rochester	CI Carbon Challenge, RED C&I Carbon Challenge	88,000
	Industrial Process Effic, Industrial Process Efficiency	1,400,000
Redocs Inc	Commercial Real Estate Ten, REDOCS - 384 E 149 St - CT	6,660
	Commercial Real Estate Ten, REDOCS-18 Bridge St-CT	2,991
ReEnergy Black River LLC	LARGE SCALE RENEWABLES, Black River Facility	4,477,110
Regeneron Pharmaceuticals Inc.	>200KW PV, NY Sun	113,151
Related Management Company LP	Workforce Industry Partnership, PON 3442 BOM Training Program	41,531
RENEW Energy Partners, LLC	EMERGING TECHNOLOGY / ACCELERATED COMMERCIALIZATION, E	65,400
	<200KW PV, NY Sun	
Renovus Energy, Inc.		295,025 11,670
	<200KW PV, NY-Sun	
	<200KW PV, PON 2112 NY SUN	270,048
Panavua Paak 110	>200KW PV, NY Sun	15,579
Renovus Rock, LLC	>200KW PV, NY-Sun C&I	68,194
Rensselaer Polytechnic Institute	CLEAN TRANSPORTATION, Off Hour Delivery Trusted Vend	6,760
	CLEAN TRANSPORTATION, RPI - PON 3198	43,848
	High Performing Grid, PON 3397 CAT A	96,000
	INNOVATION CAPACITY & BUSINESS DEVELOPMENT, Advanced Clean	18,339
	Workforce Industry Partnership, PON 3442 Workforce Training	7,451

Contractor	Contract Description	Total Expended Amount
Rensselaer Polytechnic Institute-LRC	ADVANCED BUILDINGS, EE LED Lighting Controls	4,988
	CLEAN TRANSPORTATION, LED Roadway Lighting Demo	32,149
	Talent Pipeline:CE and OJT, PON3981 WFD Capacity Building	53,534
Research Foundation of CUNY	CLEAN TRANSPORTATION, CAVs Impacts Study	21,746
	CLEAN TRANSPORTATION, Virtual TMA Demo	9,290
	ENVIRONMENTAL RESEARCH, Integrated Air Quality Monitor	101,361
	Rmve Barriers Dist Enrgy Storg, RFP 3407 Category 1	338,792
Research Foundation of SUNY	COMBINED HEAT AND POWER, SUNY ESF Gateway CHP Demo	9,640
	ENERGY ANALYSIS, Accelerated Recovery	1,454
	ENVIRONMENTAL RESEARCH, Accelerated Recovery	15,144
	ENVIRONMENTAL RESEARCH, Combining Measurements and Mod	50,377
	ENVIRONMENTAL RESEARCH, IDEA-NYS air quality forecast	36,470
	RENEWABLE HEAT NY, College woodstove design team	4,852
Research Foundation of SUNY (Buffal	RENEWABLE HEAT NY, College Woodstove design team	0
Research Foundation of The City	COMBINED HEAT AND POWER, Technology to Market	46,000
	ENVIRONMENTAL RESEARCH, Coastal monitoring framework	18,041
Resource Refocus LLC	Code to Zero, TWO 2 NYStretch Res CE	94,464
	Code to Zero, TWO#1 Res Rulemaking Support	38,232
Resource Systems Group, Inc.	CLEAN TRANSPORTATION, PON 3345	31,779
Rich & Gardner Construction Co., Inc.	Low Rise New Construction, New Construction	56,000
Riseboro Community Partnership, Inc.	Multifam New Construction, PHIUS T3 Atlantic	22,550
2	Workforce Industry Partnership, PON 3442 Workforce Training	17,745
River Architects, PLLC	Commercial New Construc, RFP3771 Umbrella Contract	9,510
Riverdale Country School	NEW CONSTRUCTION PROGRAM, NCP13244 - Riverdale Country	3,543
	NEW CONSTRUCTION PROGRAM, NCP11157 - Riverside Center	25,000
Robert Derector Associates	Commercial Real Estate Ten, Robert Derector - 33 W 44th St	5,000
	Commercial Real Estate Ten, Robert Derector - 1271 AOA	11,13
	Commercial Real Estate Ten, Robert Derector Blackstone	6,077
	Commercial Real Estate Ten, Robert Derector-300 Vesey	6,715
	Commercial Real Estate Ten, Robert Derector-315HudsonSt-CT	5,601
	Commercial Real Estate Ten, Robert Derector-560 Lexingt-CT	5,000
	Commercial Real Estate Ten, Robert Derector-645 5th Ave-CT	6,668
Peoplector District Heating Cooperative	Commercial Real Estate Ten, Robert Derector-1271 AoA-CT	10,115
•	On-Site Energy Manager, OsEM20-I-Rochester District	36,581
Rochester Institute of Technology	Cleantech Incubator, PON3413 Clean Energy Incubator	370,000
	NEW CONSTRUCTION PROGRAM, NCP14065 - The Magic Center	12,960
Roedel Partners Saranac Lake LLC	NEW CONSTRUCTION PROGRAM, NCP12013 - Hotel Saranac	15,641
Rohan Development LLC	Multifam New Construction, MFNC-577 West 161st	3,800
Rosenblum Property Services, LLC	SARATOGA TECHNOLOGY & ENERGY PARK, STEP	57,031
	SARATOGA TECHNOLOGY & ENERGY PARK, STEP Property Mgmt Ser	60,844
Ross Solar Group, LLC	>200KW PV, NY-Sun C&I	110,933
	>200KW PV, NY-Sun Cl	165,421
RSV, LLC	NEW CONSTRUCTION PROGRAM, NCP10585 - Rudin West Village	68,085
Rush Around Acres	AGRICULTURE ENERGY EFFICIENCY, Agriculture Energy Efficiency	67,282
Rutland Road Associates	MULTIFAMILY PERFORMANCE PROGRAM, Multifamily	61,134
Ryan Homes (Virginia)	Low Rise New Construction, 2019 LRNCP	59,850
S & L Electric, Inc.	NY-Sun	49,525
Safari Energy LLC	NY Sun	79,440

Multifam Performance Pgm, Multifamily INNOVATION CAPACITY & BUSINESS DEVELOPMENT, Self-Aligning Ve NEW CONSTRUCTION PROGRAM, NCP13108 - Mt. Pleasant Middle Real Time Enrgy Management, Schneider Electric_30 West End M-Corps, Technology to Market <200KW PV, PON 2112 NY SUN LARGE SCALE RENEWABLES, Ontario LFGE LARGE SCALE RENEWABLES, Seneca Energy CLEANER GREENER COMMUNITIES, CGC43425 -Ithaca 2030 District AGRICULTURE ENERGY EFFICIENCY, Agriculture Energy Efficiency WEST VALLEY DEVELOPMENT PROGRAM, Operations and Maintenanc CLEAN TRANSPORTATION, Shared Mobility Network	44,889 21,925 55,820 10,089 440,500 6,284 227,760 211,926 5,000 6,874
NEW CONSTRUCTION PROGRAM, NCP13108 - Mt. Pleasant Middle Real Time Enrgy Management, Schneider Electric_30 West End M-Corps, Technology to Market <200KW PV, PON 2112 NY SUN LARGE SCALE RENEWABLES, Ontario LFGE LARGE SCALE RENEWABLES, Seneca Energy CLEANER GREENER COMMUNITIES, CGC43425 -Ithaca 2030 District AGRICULTURE ENERGY EFFICIENCY, Agriculture Energy Efficiency WEST VALLEY DEVELOPMENT PROGRAM, Operations and Maintenanc	55,820 10,089 440,500 6,284 227,760 211,926 5,000 6,874
Real Time Enrgy Management, Schneider Electric_30 West End M-Corps, Technology to Market <200KW PV, PON 2112 NY SUN LARGE SCALE RENEWABLES, Ontario LFGE LARGE SCALE RENEWABLES, Seneca Energy CLEANER GREENER COMMUNITIES, CGC43425 -Ithaca 2030 District AGRICULTURE ENERGY EFFICIENCY, Agriculture Energy Efficiency WEST VALLEY DEVELOPMENT PROGRAM, Operations and Maintenanc	10,089 440,500 6,284 227,760 211,926 5,000 6,874
M-Corps, Technology to Market <200KW PV, PON 2112 NY SUN LARGE SCALE RENEWABLES, Ontario LFGE LARGE SCALE RENEWABLES, Seneca Energy CLEANER GREENER COMMUNITIES, CGC43425 -Ithaca 2030 District AGRICULTURE ENERGY EFFICIENCY, Agriculture Energy Efficiency WEST VALLEY DEVELOPMENT PROGRAM, Operations and Maintenanc	440,500 6,284 227,760 211,926 5,000 6,874
<200KW PV, PON 2112 NY SUN LARGE SCALE RENEWABLES, Ontario LFGE LARGE SCALE RENEWABLES, Seneca Energy CLEANER GREENER COMMUNITIES, CGC43425 -Ithaca 2030 District AGRICULTURE ENERGY EFFICIENCY, Agriculture Energy Efficiency WEST VALLEY DEVELOPMENT PROGRAM, Operations and Maintenanc	6,284 227,760 211,926 5,000 6,874
LARGE SCALE RENEWABLES, Ontario LFGE LARGE SCALE RENEWABLES, Seneca Energy CLEANER GREENER COMMUNITIES, CGC43425 -Ithaca 2030 District AGRICULTURE ENERGY EFFICIENCY, Agriculture Energy Efficiency WEST VALLEY DEVELOPMENT PROGRAM, Operations and Maintenanc	227,760 211,926 5,000 6,874
LARGE SCALE RENEWABLES, Seneca Energy CLEANER GREENER COMMUNITIES, CGC43425 -Ithaca 2030 District AGRICULTURE ENERGY EFFICIENCY, Agriculture Energy Efficiency WEST VALLEY DEVELOPMENT PROGRAM, Operations and Maintenanc	211,926 5,000 6,874
CLEANER GREENER COMMUNITIES, CGC43425 -Ithaca 2030 District AGRICULTURE ENERGY EFFICIENCY, Agriculture Energy Efficiency WEST VALLEY DEVELOPMENT PROGRAM, Operations and Maintenanc	5,000 6,874
AGRICULTURE ENERGY EFFICIENCY, Agriculture Energy Efficiency WEST VALLEY DEVELOPMENT PROGRAM, Operations and Maintenanc	6,874
WEST VALLEY DEVELOPMENT PROGRAM, Operations and Maintenanc	
CLEAN TRANSPORTATION, Shared Mobility Network	171,904
	0
LARGE SCALE RENEWABLES, High Sheldon Wind Farm	2,219,945
NYSERDA ADMINISTRATION, Counsel's Office	4,049
NYSERDA ADMINISTRATION, FOIL related Services	231
OREC: Technical Support, RFP 3300 & RFP 3776 Outside Co	29,306
WEST VALLEY DEVELOPMENT PROGRAM, RFP 3300 & RFP 3776 Outs	87,364
Industrial Process Effic, Industrial Process Efficiency	229,102
<200KW PV, PON 2112 NY SUN	32,907
OTHER PROGRAM AREA, Technology to Market	100,000
High Performing Grid, PON 3397 Round 2 - Category B	238,000
Flexible Tech Assistance, FT12092 - RXR 1330 AOA - FTC	61,350
Flexible Tech Assistance, RFP3628FlexTechConsultUmbrella	2,144
Workforce Industry Partnership, PON 3715 Workforce Training	33,073
NEW CONSTRUCTION PROGRAM, NCP11149 - 250 East 57th St	152,665
Talent Pipeline:CE and OJT, OJT HIRE	6,813
•	6,154
NY Sun	41,400
<200KW PV, NY Sun	199,350
<200KW PV, NY-Sun	8,972
<200KW PV, PON 2112 NY SUN	149,222
	-63,945
-	8,321
	209,592
	22,140
	55,700
	12,000
	7,400
,	25,000
	5,278
	5,124
	41,802
	217,206
	146,059
	62,500
	2,839
	1,876 5,847
<pre> () () () () () () () () () () () () ()</pre>	DREC: Technical Support, RFP 3300 & RFP 3776 Outside Co WEST VALLEY DEVELOPMENT PROGRAM, RFP 3300 & RFP 3776 Outs Industrial Process Effic, Industrial Process Efficiency 200KW PV, PON 2112 NY SUN OTHER PROGRAM AREA, Technology to Market High Performing Grid, PON 3397 Round 2 - Category B Flexible Tech Assistance, FT12092 - RXR 1330 AOA - FTC Flexible Tech Assistance, RFP3628FlexTechConsultUmbrella Norkforce Industry Partnership, PON 3715 Workforce Training NEW CONSTRUCTION PROGRAM, NCP11149 - 250 East 57th St Falent Pipeline:CE and OJT, OJT HIRE 200KW PV, PON 2112 NY SUN

-	Total Expended Amount
NEW CONSTRUCTION PROGRAM, NCP12157-RedJacketDining-OFLT	14,632
CLEANER GREENER COMMUNITIES, RFP3628FlexTechConsultUmbrella	2,790
Commercial New Construct, New Construction	14,031
EXISTING FACILITIES, Technical Review and Program S	638
Flexible Tech Assistance, RFP3628FlexTechConsultUmbrella	34,623
Low Rise New Construction, SWA TWO #1 - RESNET	16,408
Multifam New Construction, SWA TWO #1 - RESNET	16,408
NEW CONSTRUCTION PROGRAM, Technical Assistance Services	21,803
NEW CONSTRUCTION PROGRAM, Technical Review and Program S	4,995
NextGen HVAC, BAS for small & medium bldgs	11,951
NextGen HVAC, PON3519 Round 1	32,173
Real Time Enrgy Management, Steven Winter-150 E34thSt-RTEM	82,587
Real Time Enrgy Management, SWA-351 East 84th St-RTEM	150,000
Workforce Industry Partnership, PON 3715 Workforce Training	23,776
Informat. Products & Brokering, RTEM Gas Customer Targeting	15,525
OTHER PROGRAM AREA, RFP3267 Innovation Advis Pilot	71,737
LARGE SCALE RENEWABLES, Stony Creek Wind Farm	2,538,991
Small Wind, Wind Turbine Incentive	54,600
NEW CONSTRUCTION PROGRAM, NCP14042 - Sullivan County Jai	51,943
<200KW PV, NY-Sun	5,983
<200KW PV, PON 2112 NY SUN	49,905
<200KW PV, NY Sun	232,000
>200KW PV, NY-Sun C/I	102,601
<200KW PV, PON 2112 NY SUN	11,970
<200KW PV, NY Sun	21,312
<200KW PV, PON 2112 NY SUN	91,471
<200KW PV, NY Sun	116,000
	10,238
<200KW PV, NY Sun	11,771
>200KW PV, NY-Sun C&I	72,090
	16,104
	12,949
	22,997
	24,569
	30,881
	153,083
-	1,215
	6,219
	4,210
	88,651
-	839,734
	50,227
	62,300
	231,442
	24,929
NEW CONSTRUCTION PROGRAM, NCP12946 - Milne Library Phase	25,605
NEW CONSTRUCTION PROGRAM, NCP12908 - Scales Residence Ha	19,610
	CLEANER GREENER COMMUNITIES, RFP3628FlexTechConsultUmbrella Commercial New Construc, New Construction EXISTING FACILITIES, Technical Review and Program S Flexible Tech Assistance, RFP3628FlexTechConsultUmbrella Low Rise New Construction, SWA TWO #1 - RESNET Multifam New Construction, SWA TWO #1 - RESNET NEW CONSTRUCTION PROGRAM, Technical Assistance Services NEW CONSTRUCTION PROGRAM, Technical Review and Program S NextGen HVAC, BAS for small & medium bldgs NextGen HVAC, PON3519 Round 1 Real Time Enrgy Management, Steven Winter-150 E34thSt-RTEM Real Time Enrgy Management, Steven Winter-150 E34thSt-RTEM Real Time Enrgy Management, SWA-351 East 84th St-RTEM Workforce Industry Partnership, PON 3715 Workforce Training Informat. Products & Brokering, RTEM Gas Customer Targeting OTHER PROGRAM AREA, RFP3267 Innovation Advis Pilot LARGE SCALE RENEWABLES, Stony Creek Wind Farm Small Wind, Wind Turbine Incentive NEW CONSTRUCTION PROGRAM, NCP14042 - Sullivan County Jai <200KW PV, NY-Sun <200KW PV, NY-Sun <200KW PV, NY Sun >200KW PV, NY Sun <200KW PV, NY Sun <200KW PV, NY Sun <200KW PV, PON 2112 NY SUN <200KW PV, NY Sun

Contractor	Contract Description	Total Expended Amount
SUNY Upstate Medical University	NEW CONSTRUCTION PROGRAM, NCP11083 - New Academic Buildi	4,680
Sustainable Energy Advantage, LLC	LARGE SCALE RENEWABLES, Large Scales Renewables Techni	6,503
	NYSERDA ADMINISTRATION, Large Scales Renewables Techni	9,879
	REC:CES REC System Dev Costs, Large Scales Renewables Techni	12,582
	REC:CES REC System Dev Costs, Supply Curve Update 101124-15	48,442
	ZEC:CES ZEC System Dev Costs, Large Scales Renewables Techni	5,125
Sustainable Energy Developments Inc.	<200KW PV, NY Sun	11,186
	<200KW PV, NY-Sun	5,413
	<200KW PV, PON 2112 NY SUN	62,966
Sustainable Tompkins	Community RH&C, Tompkins County CH&C	6,000
Sustainable Westchester	Community RH&C, PON3723 RH&C Campaigns	89,750
	Rmve Barriers Dist Enrgy Storg, Feasibility of storage w PV	2,000
SWBR Architecture, Engineering & La	Retrofit NY, Multifamily	18,750
Sweetwater Energy, Inc.	INNOVATION CAPACITY & BUSINESS DEVELOPMENT, Cellulosic Sugar	15,000
Switched Source LLC	Cleantech Ignition, PON 3871 Ignition Grants	15,486
Switched Source PB LLC	High Performing Grid, PON 3770 CATB - Phase Balance	312,136
Syracuse University	ADVANCED BUILDINGS, Micro Environ Control System	397,638
	CLEAN TRANSPORTATION, Syracuse Transp Alternatives	7,370
Syracuse, City	Clean Energy Communities, CEC210174 - City of Syracuse	38,250
Syska Hennessy Group	Commercial Real Estate Ten, Syska Hennessy-55 E 52nd St-CT	17,000
	Flexible Tech Assistance, FlexTech Consultant Selection	27,500
Tagup Inc.	High Performing Grid, PON 3397 CAT C	121,142
	High Performing Grid, PON 3770	29,306
Taitem Engineering, P.C.	<200KW PV, NY Sun	12,460
	Air Source Heat Pumps, 3695 TWO Umbrella Agreement	10,597
	Commercial New Construct, New Construction	9,098
	Commercial New Construc, RFP3771 Umbrella Contract	18,111
	Community RH&C, Technical Review and Program S	9,454
	EMERGING TECHNOLOGY / ACCELERATED COMMERCIALIZATION, P	5,201
	EVALUATION, Technical Review and Program S	3,301
	Flexible Tech Assistance, RFP3628FlexTechConsultUmbrella	3,546
	Geothermal Incentive Program, Technical Review and Program S	52,365
	Multifam Performance Pgm, 3695 TWO Umbrella Agreement	35,934
	Multifam Performance Pgm, RFQL3434 Cat1 Biomass Boilers	93,278
	NEW YORK ENERGY STAR HOMES, Technical Review and Program S	11,546
	NextGen HVAC, RFP3628FlexTechConsultUmbrella	888
	Retrofit NY, Deep Energy Retrofits	3,371
	Technical Services, RFP3628FlexTechConsultUmbrella	2,500
Talen Energy Marketing, LLC	LARGE SCALE RENEWABLES, Locust Ridge Wind Farm	345,102
Talisen Technologies, Inc	Real Time Enrgy Management, Energy Mangt Data_Tech Supp	76,640
Target Corporation	<200KW PV, NY-Sun	71,260
Tech Valley Talent, LLC	EVALUATION, RFP3143 Umbrella Agreement	187,518
	NYSERDA ADMINISTRATION, RFP3143 Umbrella Agreement	271,170
	NYSERDA ADMINISTRATION, TWO26 Server Ops	89,918
	REC:CES REC System Dev Costs, RFP3143 Umbrella Agreement	163,027
Tecogen	COMBINED HEAT AND POWER, CHP Acceleration Program	199,485
-	COMBINED HEAT AND POWER, CHPA - 205 West End Ave (West)	132,660
	COMBINED HEAT AND POWER, CHPA - 205 West End Ave East	138,600

Contractor	Contract Description	Total Expended Amount
Tecogen	COMBINED HEAT AND POWER, CHPA - 261 Hudson	59,400
	Combined Heat and Power, CHPA - 1249 Park Ave	56,430
	COMBINED HEAT AND POWER, CHPA - 3333 Broadway	250,800
	COMBINED HEAT AND POWER, CHPA - Fairview	168,300
	Combined Heat and Power, CHPA - Metropolitan Detention	107,100
	COMBINED HEAT AND POWER, CHPA - Plymouth Towers	115,500
	Combined Heat and Power, CHPA - Taxi 302-02 39th St	115,500
	COMBINED HEAT AND POWER, CHPA - Village View 3	73,735
	COMBINED HEAT AND POWER, CHPA - Village View 4	73,735
	COMBINED HEAT AND POWER, CHPA - Village View 5	73,735
	COMBINED HEAT AND POWER, CHPA - Village View 6	73,735
	COMBINED HEAT AND POWER, CHPA - Village View 7	73,735
	Combined Heat and Power, CHPA-485 First Ave-Phipps Hous	37,868
	Combined Heat and Power, CHPA-Dorchester Towers	154,301
	Combined Heat and Power, CHPA-Normandie Court	106,735
	Combined Heat and Power, CHPA-Windsor Court	106,735
Tendril Networks, Inc.	ASSISTED HOME PERFORMANCE WITH ENERGY STAR, Residential Pr	21
	EMPOWER NY, Residential Program MgtRFP3545	21
	Home Perf w Energy Star, Residential Program MgtRFP3545	3,136
	HOME PERFORMANCE WITH ENERGY STAR, Residential Program Mgt	21
TEP Charter School Assistance	NEW CONSTRUCTION PROGRAM, NCP12404 - The Equity Project	42,000
Tern Construction & Development, LLC	Low Rise New Construction, New Construction	90,000
	NEW YORK ENERGY STAR HOMES, New Construction	97,500
TerraForm Solar XVIII, LLC	>200KW PV, Blue Mountain Middle School	32,398
	>200KW PV, Buchanan Verplanck School	38,340
	>200KW PV, Furnace Woods Middle School	39,979
	>200KW PV, Henrick Hudson High School	24,250
Tesla Energy Operations Inc	>200KW PV, Commercial/Industrial	39,061
	>200KW PV, Commercial/Industrial PV	232,340
	>200KW PV, Commercial/IndustrialPV	275,619
	>200KW PV, NY Sun	25,011
	>200KW PV, NY-Sun C/I	82,436
	Commercial/Industrial PV	161,216
	MARKET PATHWAYS, PV System @ Oswego County - Fu	48,432
	NY-Sun	6,312
	NY-SUN, PV System @ Orange County DPW	465,309
	NY-SUN, PV System at Oneida County	248,196
	NY-SUN, PV System at Onondaga County	371,508
	NY-SUN, PV System at Onondaga County -	166,783
	PV System @ Halfmoon Water Tre	130,997
	PV System @ Oneida Herkimer So	329,916
	PV System @ Onondaga County Cl	289,758
	PV System @ Onondaga County Ja	213,450
	PV System @ Onondaga County Ja PV System @ Oswego County - Fu	1,568
		66,569
	PV System @ Otsego County Grav	
	PV System @ Sullivan County Ad	165,082
The Cadmus Group, LLC	>200KW PV, RFQL3434 Cat1 NYSUN C/I	29,728

Contractor	Contract Description	Total Expended Amount
The Cadmus Group, LLC	Community RH&C, RFP3751 Clean Heating & Coolin	65,325
	COMMUNITY SOLAR, RFP 3764Solarize TA Provider	53,358
	Electric Vehicles - Innovation, TWO #3 DCFC design	29,354
	ENERGY ANALYSIS, RFQL 3685 R2 Umbrella	21,368
	ENERGY ANALYSIS, TWO#3 -Supply Curve Analysis	10,967
	Environmental Research, TWO 3 - RegionalFundingEntity	81,312
	Eval MCDC Cross Cutting, RFQ3183 Umbrella Agreement	6,814
	Eval MCDC Cross Cutting, TWO#2-Top_Down_Analysis	11,550
	Eval MCDC EE Master Soft Cost, TWO#4 Soft Cost study	58,105
	EVALUATION, RFP3916 Res Bldg Stock Assessm	362,873
	EVALUATION, TWO#2-Top_Down_Analysis	110,596
	EVALUATION, TWO#4 Soft Cost study	49,497
	LMI On Bill Tariff Study, Analysis of On-Bill Financing	23,627
	Mkt Char: Tech Assist, RFQL 3685 R2 Umbrella	7,096
	NY-SUN, RFQL3434 Cat1 NYSUN C/I	10,183
	Off-Shore Wind Pre-Dev Act, RFP 3462 Umbrella Agreement	35,419
	On-Site Energy Manager, RFQ3183 Umbrella Agreement	17,671
	On-Site Energy Manager, Task Order #3 from 104542	78,496
	OREC: Technical Support, RFP 3462 Umbrella Agreement	48,657
	Real Time Enrgy Management, RFQ3183 Umbrella Agreement	0
	Rmve Barriers Dist Enrgy Storg, TWO # 3	39,284
	Strategic Energy Manager, RFQ3183 Umbrella Agreement	17,671
The Center for New York City	Community Energy Engagement, CEEP New York City Region (CNY	160,724
The Center for Urban Community Serv	MULTIFAMILY PERFORMANCE PROGRAM, Multifamily	61,200
The Garrick Co., LLC	WEST VALLEY DEVELOPMENT PROGRAM, Probabilistic Evaluation	2,985
The Jericho Project	MULTIFAMILY PERFORMANCE PROGRAM, Multifamily	54,000
The Levy Partnership, Inc.	EMERGING TECHNOLOGY / ACCELERATED COMMERCIALIZATION, D	38,194
	EMERGING TECHNOLOGY / ACCELERATED COMMERCIALIZATION, P	55,203
	NextGen HVAC, Downstate gas fired heat pump	9,910
	Retrofit NY, Multifamily	18,750
The Logue Group	WEST VALLEY DEVELOPMENT PROGRAM, WV- Demonstration Project	18,089
The Radiant Store	Campus/Technical Assistance, Direct contract w/Radiant Stor	23,500
	Renewable Heat NY, Radiant Store - Chatham Hwy	4,200
	Renewable Heat NY, Radiant Store - Eberhardt	4,800
	Renewable Heat NY, Radiant Store - Yelich Part 2	12,600
	Talent Pipeline:CE and OJT, OJT HIRE	6,000
The Renewables Consulting Group,	Nat'l OffShWind R&D Consortium, RCG work for OSW Consortium	121,833
LLC	Off-Shore Wind Pre-Dev Act, RFP 3462	38,961
		0
	OTHER PROGRAM AREA, RCG work for OSW Consortium	
The Dessenth Foundation for SUNV	RCG work for OSW Consortium	61,669
The Research Foundation for SUNY	CLEAN TRANSPORTATION, Autonomous EV Campus Demo	78,481
The Research Foundation for the State	RENEWABLE HEAT NY, Lignocellulosic pellets	1,531
•	REV CAMPUS CHALLENGE, RFP 3214 REV Campus Challenge	34,200
The Research Foundation of SUNY at Bing	Cleantech Geo Coverage, PON3413 Clean Energy Incubator	0
	Cleantech Incubator, PON3413 Clean Energy Incubator	136,600
The RF of SUNY Binghamton University	Energy Storage Tech/Prod Dev, PON 3585 R2	50,000
-	High Performing Grid, PON 3397 Round 2 - Category A	80,000
The Trustees of Columbia University	Cleantech EIR, PON 3819	409,700

Contractor	Contract Description	Total Expended Amount
The Trustees of Columbia University	ENVIRONMENTAL RESEARCH, GIS flood mapping tool	0
	ENVIRONMENTAL RESEARCH, Tropical Cyclone Risk Model	14,655
	OTHER PROGRAM AREA, PON 3249 ACE Electrofuels	198,458
Therm Controls Incorporated	NextGen HVAC, NextGen HVAC Innovation	72,500
Thermold Corporation	Industrial Process Effic, Industrial Process Efficiency	57,961
Thomas Paino	Low Rise New Construction, New Construction	5,500
Tishman Speyer	NEW CONSTRUCTION PROGRAM, NCP14019 - Gotham Center Site	155,568
TM Montante Solar Developments, LLC	<200KW PV, NY Sun	88,209
	<200KW PV, PON 2112 NY SUN	90,882
Town of Amherst	CLEANER GREENER COMMUNITIES, CGC42761 - Town of Amherst	68,130
Town of Black Brook	Clean Energy Communities, CEC701091 - Town of Black Broo	12,500
Town of East Hampton	CLEANER GREENER COMMUNITIES, Town of East Hampton	20,000
Town of Enfield	Clean Energy Communities, CEC001221 - Town of Enfield	12,500
Town of Franklin	Clean Energy Communities, CEC Town of Franklin	37,500
Town of Ghent	CEC400048 - Town of Ghent	1,250
	Clean Energy Communities, CEC400048 - Town of Ghent	7,500
Town of Greece	Clean Energy Communities, CEC310376-Town of Greece	37,500
Town of Hamden	Clean Energy Communities, CEC001382 - Town of Hamden	19,250
Town of Humphrey	Clean Energy Communities, CEC101529 - Town of Humphrey	13,250
Town of Huntington	OTHER PROGRAM AREA, RFP 3044 R2	160,000
Town of Keene	Clean Energy Communities, CEC701169 - Town of Keene	33,750
Town of Kiantone	Clean Energy Communities, Town of Kiantone	12,500
Town of Middletown	Clean Energy Communities, CEC001299 - Town of Middletown	12,500
Town of Northampton	Clean Energy Communities, CEC600922 Town of Northampto	12,500
Town of Persia	Clean Energy Communities, PON 3298 CEC	12,500
Town of Richland	Clean Energy Communities, Town of Richland	12,500
Town of Smithtown	CLEANER GREENER COMMUNITIES, CGC39727 - Town of Smithtown	10,124
	CLEANER GREENER COMMUNITIES, Town of Smithtown	48,000
Town of Somers	Clean Energy Communities, CEC500636 - Town of Somers	12,500
Town of Winfield	Clean Energy Communities, CEC600907 - Town of Winfield	12,500
Trane	Real Time Enrgy Management, Americas Soc-680 Park Ave-RTEM	3,198
Traffe	Real Time Enrgy Management, Commonwealth-787 7th Ave-RTEM	6,824
	Real Time Enrgy Management, Fountain House-425 W 47th-RTEM	7,467
	Real Time Enrgy Management, Hilton - 237 W 54th St - RTEM	6,726
		5,918
	Real Time Enrgy Management, KingsTheater-1027Flatbush-RTEM	
	Real Time Enrgy Management, Mosholu-3450 Dekalb Ave-RTEM	8,824
	Real Time Enrgy Management, St Ann'sWarehou-45WaterSt-RTEM	5,619
	Real Time Enrgy Management, Trane Us Inc-1177 6th Ave-RTEM	190,835
	Real Time Enrgy Management, Trane Us Inc-Multisite-RTEM	27,424
	Real Time Enrgy Management, Trane-550 Food Center Dr-RTEM	25,417
	Real Time Enrgy Management, Trane-2130 McDonald Ave-RTEM	34,305
	Remote Energy Management, RFP 3683 REM Program	27,000
TransCore ITS LLC	CLEAN TRANSPORTATION, Green Traffic Control Cabinet	12,292
TRC Energy Services	>200KW PV, Staff Augmentation Services	156,275
	CI Engy Siting & Soft Cost Red, Staff Augmentation Services	9,011
	Commercial New Construc, Staff Augmentation Services	43,593
	Commercial Real Estate Ten, SA.047_TWO #19 - EPE	19,378
	Commercial Real Estate Ten, TRC Energy Soluti-Multisite-CT	19,628

Contractor TRC Energy Services	Contract Description	Total Expended Amount
The Energy Services	ENERGY ANALYSIS, Staff Augmentation Services	50,074
	Flexible Tech Assistance, Staff Augmentation Services	8,603
	FLEXIBLE TECHNICAL ASSISTANCE, Staff Augmentation Services	98,881
	Industrial Process Effic, Technical Review and Program S	10,808
	K-12 SCHOOLS, RFP3628FlexTechConsultUmbrella	41,225
	K-12 SCHOOLS, Staff Augmentation Services	212,396
	Low Rise New Construction, Staff Augmentation Services	52,312
	Low-Income Forum on Energy, LIFE Implementation Services	36,265
	Multifam New Construction, MF Energy Perf Portfolio Imple	58,716
	Multifam New Construction, Staff Augmentation Services	49,406
	Multifam Performance Pgm, MF Energy Perf Portfolio Imple	0
	Multifam Performance Pgm, Staff Augmentation Services	261,155
	MULTIFAMILY PERFORMANCE PROGRAM, MF Energy Perf Portfolio Im	0
	New Construction- Commercial, Staff Augmentation Services	43,593
	New Construction- Housing, Staff Augmentation Services	101,718
	Real Time Enrgy Management, Staff Augmentation Services	118,452
	REC:CES REC System Dev Costs, Staff Augmentation Services	28,827
	Renewable Heat NY, Ray Brook TWO	24,528
	Renewable Heat NY, Technical Review and Program S	60,405
	REV Campus Challenge, SA.047_TWO #19 - EPE	19,378
	Rmve Barriers Dist Enrgy Storg, Staff Augmentation Services	9,011
	Talent Pipeline:CE and OJT, Technical Review and Program S	0
	Technical Services, SA.047_TWO #19 - EPE	19,378
	Workforce Industry Partnership, Technical Review and Program S	86,300
TRC Engineers, Inc.	Informat. Products & Brokering, TWO #1	27,252
	NextGen HVAC, PON3519 Round 1.	24,770
Trees New York	GREENING THE BRONX, Efficiency Planning & Engineer	209,301
Triangle Electrical Systems, Inc.	<200KW PV, NY-Sun	9,525
Trinity Heating & Air, Inc.	<200KW PV, PON 2112 NY SUN	11,691
	NY Sun	20,700
Trove Predictive Data Science, Inc.	Informat. Products & Brokering, DER Data Platform Pilot	60,320
True Energy Solutions	Talent Pipeline:CE and OJT, OJJT HIRE	4,174
	Talent Pipeline:CE and OJT, OJT HIRE	4,320
	Talent Pipeline:CE and OJT, OJT HIRE	12,860
TTcogen, LLC	Combined Heat and Power, CHPA - LeFrak - London Leasing	13,860
TurnKey Internet, Inc.	Industrial Process Effic, Industrial Process Efficiency	196,464
TW NY Properties LLC	NEW CONSTRUCTION PROGRAM, NCP14049-TWI Hudson Yard-OFLT	293,850
Twin Lantern Solar Partners, LLC	PV System @ City of Oneida	248,938
U.S. Geological Survey (Troy).	ENERGY ANALYSIS, Accelerated Recovery	-17,016
	ENVIRONMENTAL RESEARCH, Accelerated Recovery	-17,839
U.S. Green Building Council, NY	ADVANCED BUILDINGS, Improving Steam Distribution	12,500
Chapter	ADVANCED ENERGY CODES, Energy Code Training: A/Es	30,263
	Workforce Industry Partnership, PON 3715 Workforce Training	125,004
U&S Services, Inc.	Remote Energy Management, RFP3683 REM Program	33,726
UGE USA Inc.	<200KW PV, NY Sun	13,453
Unique Comp Inc.	NYSERDA ADMINISTRATION, RFP3143 Umbrella Agreement	696,312
omque comp mc.		75,815
	NYSERDA ADMINISTRATION, TWO 1 Server Op's Support	10,010

Contractor	Contract Description	Total Expended Amount
Unique Comp Inc.	NYSERDA ADMINISTRATION, TWO SQL ETL Dev.	77,393
	NYSERDA ADMINISTRATION, TWO Sr. Systems Admin Bhanu	85,680
	Pay for Performance, RFP3143 Umbrella Agreement	103,949
Unique Technical Services, LLC	CLEAN TRANSPORTATION, Advanced Transportation Tech	59,427
	Pub Transit & Elect Rail, Advanced Transportation Tech	7,615
United Health Services Hospitals Inc	EXISTING FACILITIES, Efficiency Planning & Engineer	342,144
	EXISTING FACILITIES, EFP3011 - United Health Servic	23,383
United Way of Long Island	OTHER PROGRAM AREA, CEEP Long Island (UWLI)	57,611
United Wind Project I, LLC	Small Wind, Wind Turbine Incentive	140,815
University at Albany	NEW CONSTRUCTION PROGRAM, NCP11221 - Campus Center Expan	5,870
University of Rochester	ADVANCED BUILDINGS, SuperWicking Materials for A/C	20,849
	ENVIRONMENTAL RESEARCH, Impact of environmental polici	0
	EXISTING FACILITIES, Efficiency Planning & Engineer	58,038
	EXISTING FACILITIES, EFP2450-University of Rocheste	207,875
University of Wisconsin System	Environmental Research, NADP LTM Ecosystems in NYS	38,983
Upstate Alternative Energy	<200KW PV, PON 2112 NY SUN	5,434
Urban Electric Power, LLC	CLEAN TRANSPORTATION, Zinc MO2 battery scale up	19,000
	SMART GRID SYSTEMS, 1MWh Peak-Shaving Battery	483,843
	Talent Pipeline:CE and OJT, OJT HIRE	2,885
Urban Homesteading Assistance Inc	NY-SUN, Affordable Solar Predev UHAB	14,393
US Ceiling CORP	Talent Pipeline:CE and OJT, OJT HIRE	1,563
USGS National Center MS270	ENVIRONMENTAL RESEARCH, Environmental Research	3,851
	ENVIRONMENTAL RESEARCH, Honnedage Lake Hg	37,627
	ENVIRONMENTAL RESEARCH, Monitoring Fish Assemblage/Hg	78,464
Utilities Program & Metering, Inc.	Real Time Enrgy Management, Utilivisor-1000 10th Ave-RTEM	15,300
Van Blarcom Closures, Inc.	INDUSTRIAL PROCESS EFFICIENCY, Industrial Process Efficiency	186,389
Van Hee Mechanical	Talent Pipeline:CE and OJT, OJT HIRE	12,542
Van Slyke Sustainable Dairy Digester .	ANAEROBIC DIGESTER, ADG-to-Electricity Project	159,854
Venture Home Solar LLC	<200KW PV, PON 2112 NY SUN	5,175
	PON 2112 NY SUN	16,481
Verizon Communications Inc	Industrial Process Effic, Industrial Process Efficiency	17,468
Verizon NY Inc.	Industrial Process Effic, Industrial Process Efficiency	163,687
Vermont Energy Investment	CLEAN TRANSPORTATION, EV Dealer Incentive Program	26,482
Corporation	Industrial Process Effic, Umbrella Contract	77,029
	Pay for Performance, Umbrella Contract	65,470
	Strategic Energy Manager, RFP 3352	495,207
Vidaris, Inc.	Code to Zero, TWO#1-DOS Rulemaking Support	27,236
	Code to Zero, TWO#3 NYStretch Cost Eff	88,868
	Commercial New Construct, Commercial New Construction	27,224
	Commercial New Construct, Vidaris - EMP	1,393
	Flexible Tech Assistance, RFP3628FlexTechConsultUmbrella	6,407
	FLEXIBLE TECHNICAL ASSISTANCE, FlexTech Consultant Selection	13,512
	NEW CONSTRUCTION PROGRAM, Technical Assistant Services.	74,120
	NEW CONSTRUCTION PROGRAM, Technical Assistant Services	4,734
Villago of Borgon		
Village of Bergen	Clean Energy Communities, PON 3298 CEC	50,000
Village of Canastota	Clean Energy Communities, PON 3298 CEC	25,000
Village of Champlain	Clean Energy Communities, CEC701104 - Village of Champla	12,500

	-	
Contractor	Contract Description	Total Expended Amount
Village of Cold Spring	CLEANER GREENER COMMUNITIES, CGC30400 - Village of Cold Sp	3,930
Village of Fair Haven	Clean Energy Communities, CEC200265 - Village of Fair Ha	10,500
Village of Falconer	CLEANER GREENER COMMUNITIES, Village of Falconer	27,500
Village of Fredonia	INDUSTRIAL PROCESS EFFICIENCY, Industrial Process Efficiency	69,250
Village of Herkimer	Clean Energy Communities, CEC600882-Vill of Herkimer	12,500
Village of Marcellus	Clean Energy Communities, PON 3298 CEC	75,000
Village of Minoa	Clean Energy Communities, CEC200170-Village of Minoa	22,500
Village of Pulaski	Clean Energy Communities, Village of Pulaski	28,200
Village of Rockville Centre	SMART GRID SYSTEMS, RFP 3044 R2	200,000
Village of Spencerport	CLEANER GREENER COMMUNITIES, Village of Spencerport	6,750
Village of Tupper Lake	OTHER PROGRAM AREA, Tupper Lake District Heat	15,000
Village of Voorheesville	Clean Energy Communities, Village of Voorheesville	12,500
	Village of Voorheesville	7,500
Village of Waterville	Clean Energy Communities, CEC600897 Village of Watervill	12,500
Village of Westfield	CLEANER GREENER COMMUNITIES, Village of Westfield	12,500
Vincents Heating and Fuel Service,	Renewable Heat NY, Vincents Heating - Avery	21,000
LLC	Renewable Heat NY, Vincents Heating - Barry	28,260
	Renewable Heat NY, Vincents Heating - Baxter	19,895
	Renewable Heat NY, Vincents Heating - Filer	20,750
Viola Homes Inc.	<200KW PV, PON 2112 NY SUN	101,947
Vital Vio, Inc.	ADVANCED BUILDINGS, Advanced Buildings Technology	20,000
Vivint Solar	<200KW PV, NY Sun	8,157
	<200KW PV, PON 2112 NY SUN	5,714
W2005 / Hines West Fifty-Third Realty	NEW CONSTRUCTION PROGRAM, NCP11483 -53 West 53rd St-OFLT	177,904
Wadsworth Energy LLC	Rmve Barriers Dist Enrgy Storg, TWO #1 MDIWG Support	13,818
Wappingers Falls Hydroelectric, LLC	LARGE SCALE RENEWABLES, RPS Program Purchase of Renewa	5,440
Wartburg Home of the Evangelical Lut	Technical Services, OsEM12-C - Wartburg	44,700
Water Environment & Reuse Foundati	ENVIRONMENTAL RESEARCH, Cofunding energy R&D projects.	25,000
Watertown, City of	OTHER PROGRAM AREA, Sludge permitting and design	12,579
Wayne County Action Program	Talent Pipeline:CE and OJT, OJT HIRE	3,850
WB Engineering & Consulting PLLC	Commercial Real Estate Ten, WB Engineers-345 Hudson St	42,583
WC 28 Realty LLC	NEW CONSTRUCTION PROGRAM, NCP12148 - 530 West 28 Street	39,529
Weaver Wind Energy, LLC	INNOVATION CAPACITY & BUSINESS DEVELOPMENT, Weaver Wind 1	9,339
Wendel Energy Services, LLC	Flexible Tech Assistance, FT12078OrleansCounty Water-FTC	4,139
	Flexible Tech Assistance, FT12217-WashingtonCo Sewer-FTC	5,135
	Flexible Tech Assistance, FT12219 -Town of Hamburg - FTC	22,498
	Flexible Tech Assistance, RFP3628FlexTechConsultUmbrella	2,504
	Industrial Process Effic, RFP3628FlexTechConsultUmbrella	38,623
	K-12 SCHOOLS, RFP3628FlexTechConsultUmbrella	28,589
Wendel WD Architecture, Engineering,	ANAEROBIC DIGESTER, RPS-CST Quality Assurance/Qual	5,100
West 30th HL LLC	NEW CONSTRUCTION PROGRAM, NCP11468 - West 30th HL LLC	43,575
West 60th Realty LLC	NEW CONSTRUCTION PROGRAM, NCP10656 - West 60th Realty	57,751
West Harlem Environmental Action, In		19,500
West Hill Energy & Computing, Inc.	EVALUATION, RFQ3183 Umbrella Agreement	58,461
Westchester Chamber Educational	CLEANER GREENER COMMUNITIES, CGC26702 - WGBC	2,057
WexEnergy LLC	Cleantech Ignition, PON 3871 Ignition Grants	55,000
WGL Energy Systems, Inc.	FUEL CELLS, CST FC Marcus Garvey	150,000
	NY-Sun	150,978
		100,010

Contractor	Contract Description	Total Expended Amount
WGS Arsenal Housing Associates, LLC	Multifam Performance Pgm, MPPTargeted-TruscottTerrace	5,292
Whole Foods Market Group, Inc.	NEW CONSTRUCTION PROGRAM, NCP14011 - Whole Foods Chappaq	77,278
Willdan Energy Solutions	Campus/Technical Assistance, Staff Augmentation Services	13,539
	Commercial Real Estate Ten, Efficiency Planning & Engineer	108,248
	Commercial Real Estate Ten, Willdan-Citi Bank Multisite-CT	16,108
	Community RH&C, Staff Augmentation Services	13,539
	Flexible Tech Assistance, RFP3628FlexTechConsultUmbrella	29,575
	Geothermal Incentive Program, Staff Augmentation Services	13,539
	Industrial Process Effic, Industrial & Agriculture	93,839
	Industrial Process Effic, IPE16195	3,788
	Industrial Process Effic, Technical Review and Program S	38,734
	INDUSTRIAL PROCESS EFFICIENCY, Technical Review and Program S	6,234
	K-12 SCHOOLS, RFP 3788 P-12 Benchmarking	42,604
	Multifam Performance Pgm, Staff Augmentation Services	70,776
	Real Time Enrgy Management, Technical Review and Program S	282,316
	Renewable Heat NY, Staff Augmentation Services	23,087
	Rmve Barriers Dist Enrgy Storg, RFP3628FlexTechConsultUmbrella	18,687
	Solar Thermal, Staff Augmentation Services	3,992
Wiltshire Renewable Energy Systems,	<200KW PV, NY Sun	7,650
Wise Home Energy, LLC	Talent Pipeline:CE and OJT, OJT HIRE	4,506
Woodcrest Dairy, LLC	ANAEROBIC DIGESTER, PON 2828 - Woodcrest	75,705
WSP USA Corp.	Commercial New Construc, RFP3771 Umbrella Contract	43,542
	Commercial New Construc, WSP-Energy Modeling Partner	23,420
	Flexible Tech Assistance, FT12038 - Transwestern - FTC	23,587
Xerox Corp	INDUSTRIAL PROCESS EFFICIENCY, Industrial Process Efficiency	49,724
Yale University	Campus/Technical Assistance, Clean Heating & Cooling	67,120
YMCA of Greater Rochester	Commercial Imp Assist, CIAP016 - YMCA of Greater Roch	12,525
You Save Green Incorporated	<200KW PV, NY-Sun	8,168
Zones LLC	RFP 3670 VOIP	164,940
Zotos International, Inc.	LARGE SCALE RENEWABLES, 8th RPS Main Tier Solicitation	12,504
Grand Total		163,751,201

Contractor	Contract Description	Total Expended Amount
1 Stop Electronics Center, Inc.	Home Perf w Energy Star, Single Family Residential	228,818
	Single Family Residential	55,518
144StateHospitality, LLC	CLEAN TRANSPORTATION, Clean Transportation	8,000
201 East 62nd Apartment Corporation	CLEAN TRANSPORTATION, Clean Transportation	8,000
440 Jericho Turnpike Auto Sales, LLC	Clean Transportation	35,200
	Electric Vehicles - Rebate, Clean Transportation	4,400
1590 Hylan Blvd Auto LLC	Electric Vehicles - Rebate, Clean Transportation	9,100
2277 NFB, LLC	Electric Vehicles - Rebate, Clean Transportation	5,100
2679bhwl llc	Electric Vehicles - Rebate, Clean Transportation	8,800
3955 WH Road, LLC	Electric Vehicles - Rebate, Clean Transportation	24,000
Absolutely Specialized LLC	Air Source Heat Pumps, Codes, Products and Standards	24,500
AC & APPLIANCES OUTLET CORP	Air Source Heat Pumps, Codes, Products and Standards	27,500
AC & Appliances Supermarket Corp.	Air Source Heat Pumps, Codes, Products and Standards	750,500
AC & Appliances Wholesaler Corp	Air Source Heat Pumps, Codes, Products and Standards	35,500
Adams Heating & Cooling	Air Source Heat Pumps, Codes, Products and Standards	67,500
Adirondack Community Action	Home Perf w Energy Star, Single Family Residential	5,334
Adirondack Pub & Brewery Inc	CLEAN TRANSPORTATION, Clean Transportation	16,000
ADR Home Energy Solutions LLC.	Home Perf w Energy Star, Single Family Residential	282,418
	Single Family Residential	17,768
ADVANCE MECHANICAL INC.	Air Source Heat Pumps, Codes, Products and Standards	70,000
Advanced Comfort Systems NY Inc.	Air Source Heat Pumps, Codes, Products and Standards	33,500
Advanced Heating & Air Conditioning Serv	Air Source Heat Pumps, Codes, Products and Standards	5,000
Advanced Radiant Design, Inc.	Geothermal Incentive Program, Clean Heating & Cooling	8,040
Advantage Suzuki LLC	Electric Vehicles - Rebate, Clean Transportation	15,000
Advantage Title Agency, Inc.	GJGNY REVOLVING LOAN FUND, Efficiency Planning & Engineer	480
	GJGNY REVOLVING LOAN FUND, Single Family Residential	248,201
Air Source, LLC	Air Source Heat Pumps, Codes, Products and Standards	38,000
Airquip	Air Source Heat Pumps, Codes, Products and Standards	21,509
Airtight Services, Inc.	Home Perf w Energy Star, Single Family Residential	64,551
Antight Gervices, me.	Single Family Residential	69,169
Albany Auto Managment	Electric Vehicles - Rebate, Clean Transportation	18,700
Albany Solar Solutions L.L.C.	Air Source Heat Pumps, Codes, Products and Standards	15,000
All Season Experts Heating and Cooling I	Air Source Heat Pumps, Codes, Products and Standards	11,050
All Star Energy, Inc.	ASSISTED HOME PERFORMANCE WITH ENERGY STAR, Single Family	528
All Star Energy, Inc.	EMPOWER NY, Single Family Residential	112,242
	Home Perf w Energy Star, Single Family Residential	
		396,533
	HOME PERFORMANCE WITH ENERGY STAR, Single Family Residential	2,750
	Single Family Residential	66,354
Alarian Ain Hasting 8 A/C 11 C	WORKFORCE DEVELOPMENT, Single Family Residential	2,000
Alpine Air Heating & A/C, LLC	Air Source Heat Pumps, Codes, Products and Standards	19,000
	Geothermal Incentive Program, Clean Heating & Cooling	10,590
Alternative Carbon Energy Systems Inc	Campus/Technical Assistance, Clean Heating & Cooling	1,000
	Geothermal Incentive Program, Clean Heating & Cooling	36,930
	Talent Pipeline:Internship Pgm, Workforce Dev & Train	5,659
Altren Energy, LLC	Geothermal Incentive Program, Clean Heating & Cooling	39,990
American AWS Corp.	Single Family Residential	130,158
Analytic Energy, LLC	Single Family Residential	48,713
Andrew Paris Heating & Cooling, Inc.	Air Source Heat Pumps, Codes, Products and Standards	6,000
Antares Group, Inc.	Talent Pipeline:Internship Pgm, Workforce Dev & Train	1,232
Apex Solar Power LLC	CLEAN TRANSPORTATION, Clean Transportation	40,000
Appliance Recycling, Inc.	Home Perf w Energy Star, Single Family Residential	60,810

Contractor	Contract Description	Total Expended Amount
Appliance Recycling, Inc.	Single Family Residential	17,303
Aragosa Family Inc	CLEAN TRANSPORTATION, Clean Transportation	8,000
Arnica Heating & Air Conditioning Inc.	Air Source Heat Pumps, Codes, Products and Standards	7,000
Association for Energy Affordability, In	Home Perf w Energy Star, Single Family Residential	20,523
	Single Family Residential	2,480
Auto Mall Hyundai, Inc.	Clean Transportation	8,000
Automall Imports LLC	Clean Transportation	11,700
Autosaver Ford	Electric Vehicles - Rebate, Clean Transportation	7,700
Aztech Geothermal, LLC	Air Source Heat Pumps, Codes, Products and Standards	4,000
	Campus/Technical Assistance, Clean Heating & Cooling	6,150
	Geothermal Incentive Program, Clean Heating & Cooling	84,900
	Talent Pipeline:Internship Pgm, Workforce Dev & Train	1,166
B&D Stoves Inc.	Renewable Heat NY, Clean Heating & Cooling	12,216
Baron Brothers Auto Group Inc	Clean Transportation	6,800
Beach Point Club	CLEAN TRANSPORTATION, Clean Transportation	8,000
BELL HEATING AND AIR CONDITIONING	Geothermal Incentive Program, Clean Heating & Cooling	141,671
Bensol Tech LLC	Home Perf w Energy Star, Single Family Residential	190,905
	Single Family Residential	10,381
Best Fire	Renewable Heat NY, Clean Heating & Cooling	6,000
Betlem Service Corporation	Air Source Heat Pumps, Codes, Products and Standards	17,847
	Home Perf w Energy Star, Single Family Residential	36,190
	HOME PERFORMANCE WITH ENERGY STAR, Single Family Residential	1,480
	Single Family Residential	571
Better Energy Solutions Inc.	Home Perf w Energy Star, Single Family Residential	342,252
	Single Family Residential	242,751
BFC 3 LLC	Electric Vehicles - Rebate, Clean Transportation	5,100
Bical Chevrolet Corp	Clean Transportation	1,700
	Electric Vehicles - Rebate, Clean Transportation	6,000
Black Cherry Services Group, Inc.	Home Perf w Energy Star, Single Family Residential	7,498
Black onerry bervices croup, inc.	Single Family Residential	5,580
Black Cloud Chimney Sweeps LLC	Renewable Heat NY, Clean Heating & Cooling	12,000
Black Cloud Chinney Sweeps LEC	Talent Pipeline:Internship Pgm, Workforce Dev & Train	31,032
BlueOx Corporation	Air Source Heat Pumps, Codes, Products and Standards	11,379
BMW of Manhattan Inc.	Clean Transportation	1,000
Dedek Diversing Heating Air Conditioning	Electric Vehicles - Rebate, Clean Transportation	16,200
Bodek Plumbing Heating Air Conditioning	Geothermal Incentive Program, Clean Heating & Cooling	25,005
Boralex Hydro Operations Inc.	CLEAN TRANSPORTATION, Clean Transportation	8,000
Bosch Thermotechnology Corp.	Air Source Heat Pumps, Codes, Products and Standards	45,334
BPTC	EMPOWER NY, Single Family Residential	66,370
	Home Perf w Energy Star, Single Family Residential	16,295
	Low Rise New Construction, New Construction	9,600
	Low Rise New Construction, RES-NewConst(no longer in use)	5,500
	NEW YORK ENERGY STAR HOMES, New Construction	3,700
	Single Family Residential	79,375
Breathe Easy of CNY Inc.	Air Source Heat Pumps, Codes, Products and Standards	18,550
	Home Perf w Energy Star, Single Family Residential	72,285
	Single Family Residential	89,934
Bright Building LLC	Talent Pipeline:Internship Pgm, Workforce Dev & Train	7,734
Bronxville Court, Inc.	CLEAN TRANSPORTATION, Clean Transportation	16,000
Browns of Bellport Inc	Clean Transportation	8,800
	Home Perf w Energy Star, Single Family Residential	65,291

Contractor	Contract Description	Total Expended Amount
Bruni & Campisi Energy &	HOME PERFORMANCE WITH ENERGY STAR, Single Family Residential	100
Buffalo Energy, Inc.	Air Source Heat Pumps, Codes, Products and Standards	11,312
	EMPOWER NY, Single Family Residential	343,660
	Home Perf w Energy Star, Single Family Residential	405,995
	Single Family Residential	179,905
Buffalo Geothermal Heating	Campus/Technical Assistance, Clean Heating & Cooling	863
	Geothermal Incentive Program, Clean Heating & Cooling	98,925
Buffalo Solar Solutions Inc	Talent Pipeline:Internship Pgm, Workforce Dev & Train	2,205
Building Efficiency Resources	Low Rise New Construction, New Construction	9,400
	Low Rise New Construction, RES-NewConst(no longer in use)	200
	NEW YORK ENERGY STAR HOMES, New Construction	100
	NEW YORK ENERGY STAR HOMES, RES-NewConst(no longer in use)	6,500
Burdick Cars Inc	Electric Vehicles - Rebate, Clean Transportation	20,200
Burdick Motors Inc.	Electric Vehicles - Rebate, Clean Transportation	11,000
Burns Management Corporation	CLEAN TRANSPORTATION, Clean Transportation	40,000
C&R Housing Inc.	EMPOWER NY, Single Family Residential	217,611
	Home Perf w Energy Star, Single Family Residential	29,694
	Single Family Residential	7,070
Capital Heat	Air Source Heat Pumps, Codes, Products and Standards	14,000
	Geothermal Incentive Program, Clean Heating & Cooling	32,250
Carr Development LLC	CLEAN TRANSPORTATION, Clean Transportation	8,000
Cars Unlimited of Suffolk LLC	Clean Transportation	26,500
	Electric Vehicles - Rebate, Clean Transportation	2,000
Cavallaro Neubauer Chevrolet Buick Inc	Electric Vehicles - Rebate, Clean Transportation	5,100
Cavallaro Neubauer Chevrolet Inc	Electric Vehicles - Rebate, Clean Transportation	5,400
Central Heating & Cooling, Inc.	Air Source Heat Pumps, Codes, Products and Standards	2,500
	Home Perf w Energy Star, Single Family Residential	10,527
Central Hudson Gas and Electric Corporat	Admin-General Charges	4,400,000
	GJGNY REVOLVING LOAN FUND, Single Family Residential	1,221
Central Nissan, LTD	Electric Vehicles - Rebate, Clean Transportation	20,000
Charles Graves Inc.	Home Perf w Energy Star, Single Family Residential	284,079
	Single Family Residential	31,625
Charlotte Appliances	Home Perf w Energy Star, Single Family Residential	42,499
	Single Family Residential	5,343
Chautauqua Opportunities, Inc.	EMPOWER NY, Single Family Residential	8,934
	Home Perf w Energy Star, Single Family Residential	3,118
	Single Family Residential	484
City of Binghamton	CLEAN TRANSPORTATION, Clean Transportation	8,000
City of Rochester	CLEAN TRANSPORTATION, Clean Transportation	6,000
City Suburban Environmental Systems, Inc	Geothermal Incentive Program, Clean Heating & Cooling	6,750
Clarkson Univ., Research Div.	Environmental Research, Environmental Research	3,500
		5,500
Clifton Park Heating & Cooling LLC	Air Source Heat Pumps, Codes, Products and Standards	
Oliffen Deuk Imneute Ine	Geothermal Incentive Program, Clean Heating & Cooling	10,830
Clifton Park Imports, Inc.	Electric Vehicles - Rebate, Clean Transportation	9,900
CNY Home Tech Services	Home Perf w Energy Star, Single Family Residential	15,230
ONV inculation Diverties	Single Family Residential	19,606
CNY Insulation Plus, Inc	ASSISTED HOME PERFORMANCE WITH ENERGY STAR, Single Family	406
	Home Perf w Energy Star, Single Family Residential	33,178
	Single Family Residential	15,232
Colonie Import Distributors LTD	Electric Vehicles - Rebate, Clean Transportation	31,900
Columbia Opportunities Inc.	Home Perf w Energy Star, Single Family Residential	74,886

Contractor	Contract Description	Total Expended Amount
Columbia Opportunities Inc.	Single Family Residential	26,737
Commission on Economic Opportunity	Home Perf w Energy Star, Single Family Residential	42,770
	Single Family Residential	18,272
Community Action Planning Council of Jef	Home Perf w Energy Star, Single Family Residential	35,270
	Single Family Residential	11,627
Competition Imports Inc	Clean Transportation	10,000
		5,500
	Electric Vehicles - Rebate, Clean Transportation	2,000
		500
Concord Servicing Corporation	GJGNY REVOLVING LOAN FUND, Codes, Products and Standards	453
	GJGNY REVOLVING LOAN FUND, Multifamily	82
	GJGNY REVOLVING LOAN FUND, Single Family Residential	622,694
	OTHER PROGRAM AREA, Single Family Residential	22,287
Condor Mount Kisco LLC	Electric Vehicles - Rebate, Clean Transportation	13,100
Consolidated Edison Company	Admin-General Charges	6,400,000
	GJGNY REVOLVING LOAN FUND, Codes, Products and Standards	600
	GJGNY REVOLVING LOAN FUND, Single Family Residential	568
Cornell University	Environmental Research, Environmental Research	3,400
Cornerstone Energy Services	Home Perf w Energy Star, Single Family Residential	38,389
	HOME PERFORMANCE WITH ENERGY STAR, Single Family Residential	500
	Single Family Residential	46,263
Cortland County Community Action Program	Home Perf w Energy Star, Single Family Residential	50,438
, , , ,	Single Family Residential	24,591
County Cooling, Corp.	Air Source Heat Pumps, Codes, Products and Standards	12,000
Cowles Company of Northern New York, Inc	Home Perf w Energy Star, Single Family Residential	114,880
,,,,,,	HOME PERFORMANCE WITH ENERGY STAR, Single Family Residential	250
	Renewable Heat NY, Clean Heating & Cooling	2,500
	Single Family Residential	57,604
Crossfield Home Energy Solutions	Air Source Heat Pumps, Codes, Products and Standards	13,500
erecencia riente znergy contaitorie	Home Perf w Energy Star, Single Family Residential	114,096
	HOME PERFORMANCE WITH ENERGY STAR, Single Family Residential	250
	Single Family Residential	4,447
Crown Ford Inc.	Clean Transportation	70,400
	Electric Vehicles - Rebate, Clean Transportation	12,100
Curry Motor Cars LLC	Electric Vehicles - Rebate, Clean Transportation	11,700
•	Geothermal Incentive Program, Clean Heating & Cooling	190,590
Dailey Electric Inc		
Dana Motors, Ltd.	Electric Vehicles - Rebate, Clean Transportation	53,900
Dandelion Energy Inc	Campus/Technical Assistance, Clean Heating & Cooling	12,500
Deve Heure Annlienes Contonins	Geothermal Incentive Program, Clean Heating & Cooling	360,383
Dave Hayes Appliance Center Inc.	Home Perf w Energy Star, Single Family Residential	7,683
	Single Family Residential	1,620
David L. Johnson	Air Source Heat Pumps, Codes, Products and Standards	18,500
David M Scott	Home Perf w Energy Star, Single Family Residential	22,679
	Single Family Residential	6,244
David Sellers Mechanical, Inc.	Air Source Heat Pumps, Codes, Products and Standards	5,500
Dazong HVAC & R, Inc.	Air Source Heat Pumps, Codes, Products and Standards	329,500
DCH Mamaroneck LLC	Electric Vehicles - Rebate, Clean Transportation	5,500
DCH NY Motors LLC	Electric Vehicles - Rebate, Clean Transportation	11,000
Delaware Opportunities, Inc.	Home Perf w Energy Star, Single Family Residential	31,379
	Single Family Residential	4,553
Della Auto Group, Inc.	Electric Vehicles - Rebate, Clean Transportation	10,100

Contractor	Contract Description	Total Expended Amount
Delmar Auto Plaza	Electric Vehicles - Rebate, Clean Transportation	6,800
Delmar Auto Plaza LTD	Electric Vehicles - Rebate, Clean Transportation	15,100
DeNooyer Chevrolet, Inc.	Electric Vehicles - Rebate, Clean Transportation	14,500
Destination 770 Auto Inc	Electric Vehicles - Rebate, Clean Transportation	10,000
DH Berry Inc.	Air Source Heat Pumps, Codes, Products and Standards	2,000
	EMPOWER NY, Single Family Residential	14,921
	Home Perf w Energy Star, Single Family Residential	20,136
	Single Family Residential	5,403
Doyle Chevrolet Inc	Electric Vehicles - Rebate, Clean Transportation	13,300
Driver's Village, Inc.	Electric Vehicles - Rebate, Clean Transportation	6,000
		6,500
Dutchess Cars LLC	Electric Vehicles - Rebate, Clean Transportation	10,200
E and V Energy Corporation	Air Source Heat Pumps, Codes, Products and Standards	46,545
Eagle Auto Mall Sales Inc	Clean Transportation	6,800
Earth Energy Connections Inc.	Geothermal Incentive Program, Clean Heating & Cooling	10,680
Earth Sensitive Solutions, LLC	Geothermal Incentive Program, Clean Heating & Cooling	50,790
East Syracuse Sales Co Inc	Electric Vehicles - Rebate, Clean Transportation	15,100
Eco Heating & Cooling Inc	Home Perf w Energy Star, Single Family Residential	14,880
	Single Family Residential	5,823
Ecogy Solar LLC	Talent Pipeline:Internship Pgm, Workforce Dev & Train	10,642
Economic Opportunity Program	Home Perf w Energy Star, Single Family Residential	39,174
	Single Family Residential	12,243
Elm Chevrolet Co Inc	Electric Vehicles - Rebate, Clean Transportation	5,400
Energy Answers	Home Perf w Energy Star, Single Family Residential	40,686
	Single Family Residential	8,585
Energy Conservation Specialists LLC	Home Perf w Energy Star, Single Family Residential	17,008
Energy Efficiency Solutions NY LLC	Home Perf w Energy Star, Single Family Residential	29,999
Energy Evolution Inc	Home Perf w Energy Star, Single Family Residential	69,356
	Single Family Residential	1,589
Energy Improvement Corporation	Talent Pipeline:Internship Pgm, Workforce Dev & Train	3,767
Energy Management Solutions, LLC	Home Perf w Energy Star, Single Family Residential	88,691
	Single Family Residential	29,502
Energy Savers Inc	EMPOWER NY, Single Family Residential	682
	Home Perf w Energy Star, Single Family Residential	278,939
	Single Family Residential	381,730
Energy Saving Solutions, LLC	EMPOWER NY, Single Family Residential	166,051
	Home Perf w Energy Star, Single Family Residential	34,221
	Single Family Residential	51,898
Energy Service Technologies, LLC	EMPOWER NY, Single Family Residential	5,647
	Home Perf w Energy Star, Single Family Residential	10,405
	Single Family Residential	6,219
Energy Solutions LLC	Home Perf w Energy Star, Single Family Residential	2,004
	Single Family Residential	9,476
EnergyPro Insulation, LLC	Home Perf w Energy Star, Single Family Residential	2,740
ENERGYSTARDAVE LLC	Air Source Heat Pumps, Codes, Products and Standards	5,500
Enertiv Inc.	Talent Pipeline:Internship Pgm, Workforce Dev & Train	7,920
Environmental Contracting LLC	Home Perf w Energy Star, Single Family Residential	42,971
	Single Family Residential	23,526
Eric Maskell	Geothermal Incentive Program, Clean Heating & Cooling	32,625
Euro and American Contracting	Home Perf w Energy Star, Single Family Residential	186,414

Contractor	Contract Description	Total Expended Amount
F.G. Downing Development, Inc.	Electric Vehicles - Rebate, Clean Transportation	9,000
Foam It Insulation, LLC	EMPOWER NY, Single Family Residential	6,402
	Home Perf w Energy Star, Single Family Residential	355,444
	HOME PERFORMANCE WITH ENERGY STAR, Single Family Residential	250
	Single Family Residential	38,022
Foothills MotorCar Corp	Electric Vehicles - Rebate, Clean Transportation	6,600
Foster Lawrence Enterprises, LLC	Home Perf w Energy Star, Single Family Residential	7,898
	HOME PERFORMANCE WITH ENERGY STAR, Single Family Residential	450
Fourth Coast, Inc.	Air Source Heat Pumps, Codes, Products and Standards	14,500
	Geothermal Incentive Program, Clean Heating & Cooling	28,755
Franzoso Energy Solutions, Inc.	Home Perf w Energy Star, Single Family Residential	4,320
Fred F. Collis & Sons, Inc.	Air Source Heat Pumps, Codes, Products and Standards	9,000
	ASSISTED HOME PERFORMANCE WITH ENERGY STAR, Single Family	270
	Home Perf w Energy Star, Single Family Residential	71,901
	HOME PERFORMANCE WITH ENERGY STAR, Single Family Residential	250
	Single Family Residential	104,923
Frederick A Proven	Geothermal Incentive Program, Clean Heating & Cooling	7,620
Frederick J Goris, Jr.	EMPOWER NY, Single Family Residential	379
,	Home Perf w Energy Star, Single Family Residential	352
	Single Family Residential	15,545
Friello and Sons Home Performance	Home Perf w Energy Star, Single Family Residential	35,604
	Single Family Residential	33,049
Fuccillo Hyundai of Syracuse Inc	Electric Vehicles - Rebate, Clean Transportation	13,500
Fuccillo Nissan Inc.	Electric Vehicles - Rebate, Clean Transportation	6,000
Fuccillo Ventures Inc	Electric Vehicles - Rebate, Clean Transportation	9,100
Fulmont Community Action Agency Inc.	Home Perf w Energy Star, Single Family Residential	4,681
rumont community Action Agency Inc.		15,673
G W Ebrbart Inc	Single Family Residential	22,000
G.W. Ehrhart, Inc.	Renewable Heat NY, Clean Heating & Cooling	
Gallagher Electrical Services Heat & Air	Home Perf w Energy Star, Single Family Residential	165,603
O ante an III la a	Single Family Residential	4,185
Garber H Inc	Electric Vehicles - Rebate, Clean Transportation	5,100
Garvey Hyundai, Inc	Electric Vehicles - Rebate, Clean Transportation	28,400
Gary Boyd	Home Perf w Energy Star, Single Family Residential	33,664
	HOME PERFORMANCE WITH ENERGY STAR, Single Family Residential	400
	Single Family Residential	71,955
Gaslight Apartments LLC	CLEAN TRANSPORTATION, Clean Transportation	8,000
Gault Chevrolet Co. Inc.	Electric Vehicles - Rebate, Clean Transportation	6,000
Geotherm Inc.	Geothermal Incentive Program, Clean Heating & Cooling	222,870
Geothermal Energy Options	Geothermal Incentive Program, Clean Heating & Cooling	84,375
Get Green Home Improvements LLC	Home Perf w Energy Star, Single Family Residential	9,175
Global Dwelling, LLC	Home Perf w Energy Star, Single Family Residential	193,344
	Single Family Residential	37,106
Gomez Comfort Systems, LLC	Home Perf w Energy Star, Single Family Residential	7,660
	Single Family Residential	2,780
Great Neck Ford LLC	Clean Transportation	6,600
	Electric Vehicles - Rebate, Clean Transportation	6,600
Green Audit USA, Inc.	Single Family Residential	18,068
Green City Force	Home Perf w Energy Star, Single Family Residential	269,012
	Single Family Residential	1,054
Green Energy Technology Labs, Inc.	Talent Pipeline:Internship Pgm, Workforce Dev & Train	7,776
Green Home Innovations, Inc	EMPOWER NY, Single Family Residential	141,846

Contractor	Contract Description	Total Expended Amount
Green Home Innovations, Inc	Home Perf w Energy Star, Single Family Residential	20,672
	Single Family Residential	135,852
Green Home Logic, Inc.	Consumer Ed and Market Support, Single Family Residential	1,350
	Home Perf w Energy Star, Single Family Residential	10,534
	HOME PERFORMANCE WITH ENERGY STAR, Single Family Residential	50
	Single Family Residential	202,389
Green Team USA LLC	Home Perf w Energy Star, Single Family Residential	12,306
Green Water and Power NYC Electrical LLC	CLEAN TRANSPORTATION, Clean Transportation	36,000
Greene Rose Inn, LLC	CLEAN TRANSPORTATION, Clean Transportation	8,000
H & K VanValkenburgh, Inc.	Renewable Heat NY, Clean Heating & Cooling	105,000
H2O Concept Plumbing & Heating Corp.	Air Source Heat Pumps, Codes, Products and Standards	836,500
Habberstad Motorsport Inc.	Clean Transportation	10,500
	Electric Vehicles - Rebate, Clean Transportation	1,500
Halcyon Inc.	Consumer Ed and Market Support, Single Family Residential	449
	EMPOWER NY, Single Family Residential	59,953
	Home Perf w Energy Star, Single Family Residential	2,107,249
	HOME PERFORMANCE WITH ENERGY STAR, Single Family Residential	1,500
	Single Family Residential	1,001,162
Halcyon, Inc.	Air Source Heat Pumps, Codes, Products and Standards	700
······ · ···· · · · · · · · · · · · ·		53,500
	Campus/Technical Assistance, Clean Heating & Cooling	2,729
	Geothermal Incentive Program, Clean Heating & Cooling	185,340
Hamilton College	CLEAN TRANSPORTATION, Clean Transportation	80,000
Haraden Motorcar Corp	Electric Vehicles - Rebate, Clean Transportation	20,400
Harvey, Bloch, Ortiz & Bailer Inc.	Geothermal Incentive Program, Clean Heating & Cooling	92,295
Hassett Ford Lincoln Mercury Inc	Clean Transportation	6,600
Hassell Ford Encont Mercury Inc	Electric Vehicles - Rebate, Clean Transportation	1,100
Hawn Heating & Energy Services LLC	Home Perf w Energy Star, Single Family Residential	17,946
nawii neating & Energy Services LLC		
	HOME PERFORMANCE WITH ENERGY STAR, Single Family Residential	250
Healey Chevrolet Inc.	Electric Vehicles - Rebate, Clean Transportation	5,700
Healey Hyundai, Inc	Electric Vehicles - Rebate, Clean Transportation	23,100
Healthy Home Energy & Consulting, Inc.	Air Source Heat Pumps, Codes, Products and Standards	4,637
	Home Perf w Energy Star, Single Family Residential	150,615
	Talent Pipeline:Internship Pgm, Workforce Dev & Train	10,597
Heart Volkswagen LLC	Electric Vehicles - Rebate, Clean Transportation	10,000
Hearths A Fire Inc.	Renewable Heat NY, Clean Heating & Cooling	108,500
Heat Keepers, Inc.	Home Perf w Energy Star, Single Family Residential	1,400
	HOME PERFORMANCE WITH ENERGY STAR, Single Family Residential	500
	Single Family Residential	4,331
Hempstead Lincoln Mercury Motors Corp.	Clean Transportation	50,600
	Electric Vehicles - Rebate, Clean Transportation	5,500
His Land, LLC	CLEAN TRANSPORTATION, Clean Transportation	64,000
Holbrook Heating, Inc.	Air Source Heat Pumps, Codes, Products and Standards	9,500
Home Energy Consultants Inc.	Home Perf w Energy Star, Single Family Residential	110,236
	Single Family Residential	38,990
Home Performance Professionals, Inc.	EMPOWER NY, Single Family Residential	26,989
	Home Perf w Energy Star, Single Family Residential	4,479
	Single Family Residential	119,632
Home Star Energy Services, Inc.	Single Family Residential	44,727
HomeWorks Energy, Inc.	Home Perf w Energy Star, Single Family Residential	250,961
	HOME PERFORMANCE WITH ENERGY STAR, Single Family Residential	100

Contractor	Contract Description	Total Expended Amount
HomeWorks Energy, Inc.	Single Family Residential	9,892
Hoselton Chevrolet, Inc.	Electric Vehicles - Rebate, Clean Transportation	51,400
Hoselton Imports, Inc	Electric Vehicles - Rebate, Clean Transportation	23,100
Hoselton Nissan Inc	Electric Vehicles - Rebate, Clean Transportation	36,000
Hot Water Solutions Inc	Air Source Heat Pumps, Codes, Products and Standards	26,500
Houghton College	CLEAN TRANSPORTATION, Clean Transportation	8,000
HSC Associates Heating & Air Conditionin	Air Source Heat Pumps, Codes, Products and Standards	7,500
Huntington Jeep Chrysler, Inc	Clean Transportation	10,000
Iceberg Mechanical Corp	Air Source Heat Pumps, Codes, Products and Standards	14,500
Ideal Energy Solutions LLC	EMPOWER NY, Single Family Residential	373,006
	Home Perf w Energy Star, Single Family Residential	121,799
	Single Family Residential	223,142
IGM Holdings, Inc.	Home Perf w Energy Star, Single Family Residential	683,404
Ingersoll Auto of Pawling LLC	Electric Vehicles - Rebate, Clean Transportation	6,000
Innovation Now, LLC	EMPOWER NY, Single Family Residential	6,996
	Home Perf w Energy Star, Single Family Residential	70,094
	HOME PERFORMANCE WITH ENERGY STAR, Single Family Residential	1,900
	Single Family Residential	17,156
Installed Building Products LLC	EMPOWER NY, Single Family Residential	125,270
-	Home Perf w Energy Star, Single Family Residential	14,159
	Single Family Residential	189,629
Interstate Heating, Inc.	Air Source Heat Pumps, Codes, Products and Standards	27,494
Isaac Heating and Air Conditioning, Inc.	Air Source Heat Pumps, Codes, Products and Standards	11,500
	ASSISTED HOME PERFORMANCE WITH ENERGY STAR, Single Family	1,632
	Home Perf w Energy Star, Single Family Residential	1,060,523
	HOME PERFORMANCE WITH ENERGY STAR, Single Family Residential	15,123
Island Design and Contracting, LLC	HOME PERFORMANCE WITH ENERGY STAR, Single Family Residential	200
	Single Family Residential	39,568
Ithaca Electricians Inc.	Air Source Heat Pumps, Codes, Products and Standards	7,000
Ivy Lea Construction	EMPOWER NY, Single Family Residential	182,317
	Home Perf w Energy Star, Single Family Residential	46,246
	Single Family Residential	78,659
J Synergy Green Inc	Home Perf w Energy Star, Single Family Residential	12,738
Jack Hall Plumbing and Heating, Inc.	Home Perf w Energy Star, Single Family Residential	33,169
Jack Hall Fluinbing and Heating, Inc.	Single Family Residential	2,860
James Cars of Rome LLC	Electric Vehicles - Rebate, Clean Transportation	11,000
James Richard Meehan III		34,667
	Home Perf w Energy Star, Single Family Residential	
	Single Family Residential	15,675 69,500
JL HVAC, Inc.	Air Source Heat Pumps, Codes, Products and Standards	
JM Huntington Motors LLC	Clean Transportation	29,700
Les Desil Cheurslet, Inc.	Electric Vehicles - Rebate, Clean Transportation	1,100
Joe Basil Chevrolet, Inc.	Electric Vehicles - Rebate, Clean Transportation	28,900
John Betlem Heating & Cooling Inc	Air Source Heat Pumps, Codes, Products and Standards	500
	ASSISTED HOME PERFORMANCE WITH ENERGY STAR, Single Family	336
	Home Perf w Energy Star, Single Family Residential	158,664
	HOME PERFORMANCE WITH ENERGY STAR, Single Family Residential	3,290
John D. Marcella Appliances, Inc	Home Perf w Energy Star, Single Family Residential	10,948
	Single Family Residential	8,080
Joint Council of Economic Opportunity	EMPOWER NY, Single Family Residential	417
	Home Perf w Energy Star, Single Family Residential	36,532
	Single Family Residential	26,512

Contractor	Contract Description	Total Expended Amount
Jones and Strong ETAL	CLEAN TRANSPORTATION, Clean Transportation	40,000
JS Huntington Auto Sales LLC	Clean Transportation	13,200
JS Huntington Motors LLC	Clean Transportation	5,700
	Electric Vehicles - Rebate, Clean Transportation	2,000
JS North Shore Motors LLC	Clean Transportation	5,100
	Electric Vehicles - Rebate, Clean Transportation	3,400
Keeler Motor Car Co Inc	Electric Vehicles - Rebate, Clean Transportation	6,100
Kenny and Kim LLC	CLEAN TRANSPORTATION, Clean Transportation	16,000
KI-PO Motors Chevrolet Inc	Electric Vehicles - Rebate, Clean Transportation	8,800
Kilbury's Feed Service Inc	Renewable Heat NY, Clean Heating & Cooling	8,430
Kings Nissan Inc	Electric Vehicles - Rebate, Clean Transportation	6,000
Kingston Automotive LLC	Clean Transportation	8,000
	Electric Vehicles - Rebate, Clean Transportation	38,000
Knoth Heating & Mechanical	Air Source Heat Pumps, Codes, Products and Standards	3,000
	Home Perf w Energy Star, Single Family Residential	2,151
	Single Family Residential	8,191
Kool-Temp Heating & Cooling	Air Source Heat Pumps, Codes, Products and Standards	2,000
	Geothermal Incentive Program, Clean Heating & Cooling	13,965
	Home Perf w Energy Star, Single Family Residential	6,079
L & S Motors Inc	Clean Transportation	6,800
L2 Automotive, Inc.	Electric Vehicles - Rebate, Clean Transportation	12,500
L.B. Auto of 112 LLC	Clean Transportation	12,100
	Electric Vehicles - Rebate, Clean Transportation	1,100
Lake Country Geothermal, Inc.	Campus/Technical Assistance, Clean Heating & Cooling	1,834
,	Geothermal Incentive Program, Clean Heating & Cooling	49,095
	Talent Pipeline:Internship Pgm, Workforce Dev & Train	3,335
LC DRives	Talent Pipeline:Internship Pgm, Workforce Dev & Train	12.655
Levittown Ford LLC	Clean Transportation	25,300
	Electric Vehicles - Rebate, Clean Transportation	1,100
Lewis County Opportunities, Inc.	Home Perf w Energy Star, Single Family Residential	5,636
· · · · · · · · · · · · · · · · · · ·	Single Family Residential	1,408
Lia Automotive, LLC	Electric Vehicles - Rebate, Clean Transportation	6,600
Lia Brewster Automotive LLC	Electric Vehicles - Rebate, Clean Transportation	8,500
Lia Kingston LLC	Electric Vehicles - Rebate, Clean Transportation	6,800
Linear Motors LLC	Clean Transportation	2,000
	Electric Vehicles - Rebate, Clean Transportation	19,900
LinLi HVAC Inc	Air Source Heat Pumps, Codes, Products and Standards	118,000
Liverpool World Corp	Electric Vehicles - Rebate, Clean Transportation	11,900
LJ Marchese Chevrolet Inc	Electric Vehicles - Rebate, Clean Transportation	5,700
Lloyd Hamilton	Geothermal Incentive Program, Clean Heating & Cooling	54,285
Long Island Power Authority	GJGNY REVOLVING LOAN FUND, Single Family Residential	61,643
, ,	CLEAN TRANSPORTATION, Clean Transportation	
Long View Lodge, LLC		8,000
Lotze Insulation Design, Inc.	Home Perf w Energy Star, Single Family Residential	225,690
	Single Family Residential	223,983
Luxury Cars of Bayside Inc.	Clean Transportation	5,000
	Electric Vehicles - Rebate, Clean Transportation	6,700
Mack Markowitz Inc	Clean Transportation	25,300
	Electric Vehicles - Rebate, Clean Transportation	1,100
Maguire Automotive LLC	Electric Vehicles - Rebate, Clean Transportation	10,500
Maguire Chevrolet LLC	Electric Vehicles - Rebate, Clean Transportation	17,300
Maguire Honda of Ithaca	Electric Vehicles - Rebate, Clean Transportation	15,300

Contractor	Contract Description	Total Expended Amount
Maguire Motors LLC	Electric Vehicles - Rebate, Clean Transportation	97,800
Malcarne Contracting, Inc.	Geothermal Incentive Program, Clean Heating & Cooling	10,080
	Home Perf w Energy Star, Single Family Residential	1,250
Mangino Value Center Inc.	Electric Vehicles - Rebate, Clean Transportation	14,300
Margert Community Corporation	Home Perf w Energy Star, Single Family Residential	57,024
Martin B Devit	Geothermal Incentive Program, Clean Heating & Cooling	54,945
Massapequa Motors LLC	Clean Transportation	4,400
	Electric Vehicles - Rebate, Clean Transportation	1,100
McCourt Heating and Cooling, LLC	Air Source Heat Pumps, Codes, Products and Standards	7,500
McGregor Saratoga LLC	CLEAN TRANSPORTATION, Clean Transportation	8,000
ME HVAC LLC	Air Source Heat Pumps, Codes, Products and Standards	45,711
Meier Supply Company	Air Source Heat Pumps, Codes, Products and Standards	37,300
Mercedes-Benz Manhattan, Inc.	Clean Transportation	1,700
	Electric Vehicles - Rebate, Clean Transportation	35,700
Metro NY Insulation LLC	Home Perf w Energy Star, Single Family Residential	105,416
	Single Family Residential	17,154
Metzger & Sons, LLC	CLEAN TRANSPORTATION, Clean Transportation	40,000
Michael B Kearney	ASSISTED HOME PERFORMANCE WITH ENERGY STAR, Single Family	400
	EMPOWER NY, Single Family Residential	6,753
	Home Perf w Energy Star, Single Family Residential	176
	Single Family Residential	13,934
Mid Island Hyundai LLC	Clean Transportation	17,700
Mid-York Chimney and Stove LLC	Renewable Heat NY, Clean Heating & Cooling	5,500
Middletown Nissan Inc	Electric Vehicles - Rebate, Clean Transportation	6,000
Mike Barneys Super Sports Inc	Electric Vehicles - Rebate, Clean Transportation	6,000
Mike Basil Motors Inc.	Electric Vehicles - Rebate, Clean Transportation	12,100
Millennium Super Store, LLC	Clean Transportation	5,500
• •	Electric Vehicles - Rebate, Clean Transportation	1,100
Miller Motor Car Corp.	Electric Vehicles - Rebate, Clean Transportation	7,100
MINISPLITCOMFORT CORP	Air Source Heat Pumps, Codes, Products and Standards	341,000
Mitchell McMillen	Air Source Heat Pumps, Codes, Products and Standards	34,500
Mohawk Valley Community Action Agency	Home Perf w Energy Star, Single Family Residential	56,678
monume valley community Action Agency	Single Family Residential	36,921
Molecular Glasses, Inc.	Talent Pipeline:Internship Pgm, Workforce Dev & Train	9,339
MR. AIR NYC Corp.	Air Source Heat Pumps, Codes, Products and Standards	9,509
Mt Kisco Import Cars Ltd	Electric Vehicles - Rebate, Clean Transportation	5,100
Mullarney's Garden Center	Renewable Heat NY, Clean Heating & Cooling	23,000
•	Air Source Heat Pumps, Codes, Products and Standards	
Nebrasky Plumbing & Heating		5,500
Neighberheed Heusing Comisse	Home Perf w Energy Star, Single Family Residential	4,710
Neighborhood Housing Services	EMPOWER NY, Single Family Residential	391
	Home Perf w Energy Star, Single Family Residential	225,605
	Single Family Residential	74,822
Neighborhood Housing Services (N.H.S) of	EMPOWER NY, Single Family Residential	44,264
	Home Perf w Energy Star, Single Family Residential	5,132
	Single Family Residential	6,031
Nemet Motors LLC	Clean Transportation	2,000
	Electric Vehicles - Rebate, Clean Transportation	6,000
NEW UTRECHT AC WHOLESALER CORP	Air Source Heat Pumps, Codes, Products and Standards	156,500
New York & Atlantic Railway	CLEAN TRANSPORTATION, Clean Transportation	16,000
New York Business Development Corp	GJGNY REVOLVING LOAN FUND, Efficiency Planning & Engineer	750
	Home Perf w Energy Star, Single Family Residential	19,103

Contractor	Contract Description	Total Expended Amount
New York Homeowners Construction Co., LL	- HOME PERFORMANCE WITH ENERGY STAR, Single Family Residential	250
New York State Foam & Energy LLC	Home Perf w Energy Star, Single Family Residential	7,839
	Single Family Residential	16,203
Newins Bay Shore Ford Inc	Clean Transportation	30,800
Niagara Mohawk Power Corporation	Admin-General Charges	9,000,000
	GJGNY REVOLVING LOAN FUND, Single Family Residential	1,578
Nispen Building Performance, Inc.	Home Perf w Energy Star, Single Family Residential	96,826
	Renewable Heat NY, Clean Heating & Cooling	7,500
	Single Family Residential	94,810
Nissan of Webster	Electric Vehicles - Rebate, Clean Transportation	6,000
North East Underlayments LLC	Home Perf w Energy Star, Single Family Residential	33,282
North Park Innovations Group, Inc.	Talent Pipeline:Internship Pgm, Workforce Dev & Train	22,590
North Shore Chevrolet of Smithtown	Clean Transportation	16,500
	Electric Vehicles - Rebate, Clean Transportation	3,400
Northeast Ductless Heating and Cooling	Air Source Heat Pumps, Codes, Products and Standards	19,007
Northeast Home Improvement, LLC	Home Perf w Energy Star, Single Family Residential	106,118
	Single Family Residential	15,598
Northeastern Fireplace and Design	Renewable Heat NY, Clean Heating & Cooling	7,000
Northtown Hyundai Inc	Electric Vehicles - Rebate, Clean Transportation	17,100
NP Environmental LLC	Air Source Heat Pumps, Codes, Products and Standards	2,000
	Geothermal Incentive Program, Clean Heating & Cooling	129,870
NS Auto Sales Inc.	Clean Transportation	5,100
Nunda Farm Service Inc.	Renewable Heat NY, Clean Heating & Cooling	19,300
NY Greentop	Home Perf w Energy Star, Single Family Residential	354,564
NYLSI, INC	Clean Transportation	7,700
- ,	Electric Vehicles - Rebate, Clean Transportation	1,100
NYS Association for Affordable Housing	Multifam Performance Pgm, Consumer Serv & Events Managem	2,500
NYS Dept. Taxation & Finance	Admin-General Charges	23,000,000
	ENERGY ANALYSIS, Energy & EnvironmentalAnalysis	1,000,000
	OTHER PROGRAM AREA, Admin-General Charges	150,000
NYS Energy Audits, Inc.	EMPOWER NY, Single Family Residential	422
ATO Energy Addits, inc.	Home Perf w Energy Star, Single Family Residential	644,870
	Single Family Residential	58,743
NYS Olympic Regional Development Auth.	CLEAN TRANSPORTATION, Clean Transportation	24,000
NYSEG	Admin-General Charges	5,120,000
NISEG		
O'Conner Chauralat Inc	GJGNY REVOLVING LOAN FUND, Single Family Residential	1,122
O'Connor Chevrolet, Inc.	Electric Vehicles - Rebate, Clean Transportation	19,000
ODA Community Development Corp.	Home Perf w Energy Star, Single Family Residential	91,291
Olum's of Binghamton, Inc.	EMPOWER NY, Single Family Residential	990
	Home Perf w Energy Star, Single Family Residential	68,225
	Single Family Residential	35,385
Opportunities for Chenango, Inc.	Home Perf w Energy Star, Single Family Residential	30,053
	Single Family Residential	18,207
Opportunities for Otsego, Inc.	EMPOWER NY, Single Family Residential	3,138
	Home Perf w Energy Star, Single Family Residential	49,898
	Single Family Residential	49,634
Orange and Rockland Utilities, Inc.	Admin-General Charges	1,664,000
	GJGNY REVOLVING LOAN FUND, Single Family Residential	1,201
Otis Ford Inc	Clean Transportation	15,400
	Electric Vehicles - Rebate, Clean Transportation	1,100
P.R.O. Home Improvement of CNY, LLC	Single Family Residential	40,307

Contractor	Contract Description	Total Expended Amount
Paddock Chevrolet, Inc.	Electric Vehicles - Rebate, Clean Transportation	14,800
PAG Greenwich B1, LLC	Electric Vehicles - Rebate, Clean Transportation	11,300
Pana Nissan, LLC	Clean Transportation	4,000
	Electric Vehicles - Rebate, Clean Transportation	48,000
Park South Partners LLC	CLEAN TRANSPORTATION, Clean Transportation	16,000
Patchogue 112 Motors LLC	Clean Transportation	8,800
Pathfinder Engineers & Architects, LLP	Campus/Technical Assistance, Clean Heating & Cooling	1,636
Pathstone Corporation	Home Perf w Energy Star, Single Family Residential	14,291
	Single Family Residential	8,007
Patriot Energy Solutions Corp	EMPOWER NY, Single Family Residential	4,091
	Home Perf w Energy Star, Single Family Residential	775,239
	Single Family Residential	5,145
Paul A Bradbury	POLICY DEVELOPMENT, Consumer Serv & Events Managem	3,100
PBL Equipment & Service Inc	Renewable Heat NY, Clean Heating & Cooling	12,500
PEG	Low Rise New Construction, New Construction	7,400
	Low Rise New Construction, RES-NewConst(no longer in use)	1,700
Penns Worldwide Auto Superstore LTD	Clean Transportation	7,700
People's Equal Action & Community Effort	Home Perf w Energy Star, Single Family Residential	108,978
	Single Family Residential	41,611
Perfection Contracting Inc	Campus/Technical Assistance, Clean Heating & Cooling	8,775
	Geothermal Incentive Program, Clean Heating & Cooling	12,705
Performance Systems Development, Inc.	Low Rise New Construction, New Construction	17,900
	Low Rise New Construction, RES-NewConst(no longer in use)	1,100
	NEW YORK ENERGY STAR HOMES, New Construction	11,400
Pet Partners LLC	CLEAN TRANSPORTATION, Clean Transportation	8,000
Peter Tavino PE PC	Campus/Technical Assistance, Clean Heating & Cooling	9,391
Phase Innovations LLC	Talent Pipeline:Internship Pgm, Workforce Dev & Train	10,859
Phoenix Geothermal Services	Campus/Technical Assistance, Clean Heating & Cooling	19,004
Phoenix Mechanical	Air Source Heat Pumps, Codes, Products and Standards	35,000
	Geothermal Incentive Program, Clean Heating & Cooling	8,190
	Home Perf w Energy Star, Single Family Residential	8,794
Plaza Automotive, Ltd.	Clean Transportation	23,800
	Electric Vehicles - Rebate, Clean Transportation	40,800
Plaza Motors of Brooklyn, Inc.	Clean Transportation	8,500
	Electric Vehicles - Rebate, Clean Transportation	40,800
Potamkin Cadillac Buick Chevrolet Geo Lt	Electric Vehicles - Rebate, Clean Transportation	5,700
Poughkeepsie Day School	CLEAN TRANSPORTATION, Clean Transportation	32,000
Precision Mechanical HVAC Corp.	Air Source Heat Pumps, Codes, Products and Standards	153,000
Prestige Automobiles Inc.	Electric Vehicles - Rebate, Clean Transportation	5,500
Prime Time Energy Services, Inc.	EMPOWER NY, Single Family Residential	370,913
Frime fille Lifergy Services, inc.		
	Home Perf w Energy Star, Single Family Residential	49,823
	Single Family Residential	55,460
Pro Action of Steuben & Yates, Inc.	EMPOWER NY, Single Family Residential	1,643
	Home Perf w Energy Star, Single Family Residential	8,617
Des Consisses Diversities & H. H.	Single Family Residential	13,050
Pro-Services Plumbing & Heating Inc	Air Source Heat Pumps, Codes, Products and Standards	46,500
R. McLagan, Inc.	Home Perf w Energy Star, Single Family Residential	9,050
R.G. Dixon Enterprises Inc.	Air Source Heat Pumps, Codes, Products and Standards	9,000
Rallye Westbury, LLC	Clean Transportation	9,700
	Electric Vehicles - Rebate, Clean Transportation	2,500
Ralph Automotive Inc.	Electric Vehicles - Rebate, Clean Transportation	5,100

Contractor	Contract Description	Total Expended Amount
Ramp Motors Inc	Clean Transportation	41,800
Ray Catena of Westchester, LLC	Electric Vehicles - Rebate, Clean Transportation	9,700
Regional Economic Community Action	Home Perf w Energy Star, Single Family Residential	123,657
	Single Family Residential	45,462
Renes Repair Inc	Renewable Heat NY, Clean Heating & Cooling	7,500
Rensselaer Polytechnic Institute	CLEAN TRANSPORTATION, Clean Transportation	56,000
Reynolds Group Enterprises, Inc.	Renewable Heat NY, Clean Heating & Cooling	8,300
RHM Inc.	ASSISTED HOME PERFORMANCE WITH ENERGY STAR, Single Family	400
	Home Perf w Energy Star, Single Family Residential	7,218
	HOME PERFORMANCE WITH ENERGY STAR, Single Family Residential	250
RI Suresky and Sons Inc	Electric Vehicles - Rebate, Clean Transportation	6,000
Richair Mechanical Inc.	Air Source Heat Pumps, Codes, Products and Standards	19,000
Rivera Auto Group Inc	Electric Vehicles - Rebate, Clean Transportation	17,600
Riverhead Motors, Inc.	Clean Transportation	18,700
RJ Chevrolet Inc	Clean Transportation	4,000
	Electric Vehicles - Rebate, Clean Transportation	30,700
Ro-Zap Enterprises, Inc.	CLEAN TRANSPORTATION, Clean Transportation	8,000
Robert Chevrolet Inc	Clean Transportation	5,400
Rochester Gas & Electric Corp.	Admin-General Charges	5,032,000
Rochester General Hospital	CLEAN TRANSPORTATION, Clean Transportation	76,000
Rodney Lind	Home Perf w Energy Star, Single Family Residential	131,102
-	Single Family Residential	61,873
Romano Ford of Fayetteville LTD	Electric Vehicles - Rebate, Clean Transportation	6,600
Romano Toyota	Electric Vehicles - Rebate, Clean Transportation	17,600
Romeo Chevrolet Buick GMC	Electric Vehicles - Rebate, Clean Transportation	23,400
Romeo Enterprises LLC	Electric Vehicles - Rebate, Clean Transportation	5,500
Rosenblum Development Corp	CLEAN TRANSPORTATION, Clean Transportation	48,000
Route 59 Automotive LLC	Electric Vehicles - Rebate, Clean Transportation	6,000
RT Automotive Industries LLC	Clean Transportation	6,600
Ruge's Automotive, Inc.	Electric Vehicles - Rebate, Clean Transportation	5,400
Ryan Plumbing Heating Air Conditioning	Home Perf w Energy Star, Single Family Residential	18,690
	HOME PERFORMANCE WITH ENERGY STAR, Single Family Residential	750
	Single Family Residential	6,503
Rycor LLC	Air Source Heat Pumps, Codes, Products and Standards	366,492
S & H Associates LLC	Electric Vehicles - Rebate, Clean Transportation	9,700
SANFILIPPO SOLUTIONS INC.	ASSISTED HOME PERFORMANCE WITH ENERGY STAR, Single Family	1,812
SANTILIFFO SOLUTIONS INC.	EMPOWER NY, Single Family Residential	32,090
	Home Perf w Energy Star, Single Family Residential	20,172
	HOME PERFORMANCE WITH ENERGY STAR, Single Family Residential	2,050
Sanata na Cauntu EQC	Single Family Residential	134,426
Saratoga County EOC	Home Perf w Energy Star, Single Family Residential	54,024
	Single Family Residential	9,026
Saratoga Excelsior Apartments LLC	CLEAN TRANSPORTATION, Clean Transportation	40,000
Saratoga Imports Inc	Electric Vehicles - Rebate, Clean Transportation	9,900
Saratoga Motors Inc.	Electric Vehicles - Rebate, Clean Transportation	5,100
Saratoga Regional Young Men's Christian	CLEAN TRANSPORTATION, Clean Transportation	40,000
Sawyer Chevrolet Inc.	Electric Vehicles - Rebate, Clean Transportation	5,400
SC Auto Corp	Clean Transportation	26,400
	Electric Vehicles - Rebate, Clean Transportation	1,100
Schoonover Plumbing and Heating	Geothermal Incentive Program, Clean Heating & Cooling	6,345
SCOOP HVAC, LLC	Air Source Heat Pumps, Codes, Products and Standards	22,250

Contractor	Contract Description	Total Expended Amount
Seneca County Weatherization	Home Perf w Energy Star, Single Family Residential	45,920
	Single Family Residential	5,913
SG Hylan Motors Corp	Electric Vehicles - Rebate, Clean Transportation	6,800
Sharp's Bulk Food Store	Renewable Heat NY, Clean Heating & Cooling	168,000
Sherwood Terrace Apartments LLC	CLEAN TRANSPORTATION, Clean Transportation	8,000
Sigma Tremblay, LLC	Air Source Heat Pumps, Codes, Products and Standards	12,150
	Home Perf w Energy Star, Single Family Residential	14,742
Simmons Contracting	Air Source Heat Pumps, Codes, Products and Standards	7,500
Simply Home Performance	Home Perf w Energy Star, Single Family Residential	468,811
	Single Family Residential	70,228
Simply Installs LLC	Air Source Heat Pumps, Codes, Products and Standards	38,150
Sinnott's Plumbing & Heating, LLC	Air Source Heat Pumps, Codes, Products and Standards	6,000
Skidmore Apartments LLC	CLEAN TRANSPORTATION, Clean Transportation	8,000
Skidmore College	CLEAN TRANSPORTATION, Clean Transportation	24,000
Smarter Grid Solutions, Inc.	Talent Pipeline:Internship Pgm, Workforce Dev & Train	3,305
Smith Cairns Ford, Inc	Electric Vehicles - Rebate, Clean Transportation	11,000
Smithtown Nissan Inc	Clean Transportation	8,000
	Electric Vehicles - Rebate, Clean Transportation	2,000
Snug Planet, LLC	Air Source Heat Pumps, Codes, Products and Standards	2,720
0 <i>i</i>	Consumer Ed and Market Support, Single Family Residential	449
	EMPOWER NY, Single Family Residential	3,300
	Home Perf w Energy Star, Single Family Residential	284,739
	HOME PERFORMANCE WITH ENERGY STAR, Single Family Residential	250
	Single Family Residential	133,581
Snyder Manufacturing, Inc	Geothermal Incentive Program, Clean Heating & Cooling	32,265
Solar Energy Haus, Inc.	Single Family Residential	103,633
South Shore Motors Corp	Clean Transportation	30,800
	Electric Vehicles - Rebate, Clean Transportation	2,200
St. Lawrence County Development Program	Home Perf w Energy Star, Single Family Residential	132
or. Lawrence obuilty Development Program	Single Family Residential	11,398
Stacey Bennett		21,500
Statley Bernett Stallmer & Sun Energy Efficiency Special	Renewable Heat NY, Clean Heating & Cooling Home Perf w Energy Star, Single Family Residential	15,343
Staimer & Sun Energy Eniciency Special	Single Family Residential	15,076
Standard Inculation Commons		
Standard Insulating Company	Air Source Heat Pumps, Codes, Products and Standards	7,000
	ASSISTED HOME PERFORMANCE WITH ENERGY STAR, Single Family	990
	EMPOWER NY, Single Family Residential	48,946
	Home Perf w Energy Star, Single Family Residential	1,505,944
	HOME PERFORMANCE WITH ENERGY STAR, Single Family Residential	1,125
	Single Family Residential	386,633
Star Auto Sales of Bayside Inc	Electric Vehicles - Rebate, Clean Transportation	7,700
Steet Ponte Inc	Electric Vehicles - Rebate, Clean Transportation	13,200
STNO, LLC	Clean Transportation	6,600
Stoler Gold Coast	Clean Transportation	10,300
	Electric Vehicles - Rebate, Clean Transportation	2,200
Stoler of Westbury	Clean Transportation	3,300
	Electric Vehicles - Rebate, Clean Transportation	3,300
Sun Dance Pool N Patio Inc.	Renewable Heat NY, Clean Heating & Cooling	12,000
Sundog Solar, Inc.	Geothermal Incentive Program, Clean Heating & Cooling	24,585
Sunny Clean Water, LLC	Talent Pipeline:Internship Pgm, Workforce Dev & Train	17,921
Sunrise Automall LLC	Clean Transportation	3,400
	Electric Vehicles - Rebate, Clean Transportation	1,700

Contractor	Contract Description	Total Expended Amount
Sunset Park Redevelopment Comm	Home Perf w Energy Star, Single Family Residential	54,233
SUNY New Paltz	CLEAN TRANSPORTATION, Clean Transportation	80,000
Superior Energy Innovations, LLC	EMPOWER NY, Single Family Residential	95,624
	Home Perf w Energy Star, Single Family Residential	27,535
	HOME PERFORMANCE WITH ENERGY STAR, Single Family Residential	2,450
	Single Family Residential	385,094
Superior Insulation Co., LLC	EMPOWER NY, Single Family Residential	6,565
	Home Perf w Energy Star, Single Family Residential	343,877
	Single Family Residential	306,772
Supportive Services Corporation	Single Family Residential	14,622
Sure Temp Company Inc.	Air Source Heat Pumps, Codes, Products and Standards	52,880
Sustainable Comfort, Inc	Low Rise New Construction, New Construction	35,000
	Talent Pipeline:Internship Pgm, Workforce Dev & Train	1,945
Sustainable Westchester	Talent Pipeline:Internship Pgm, Workforce Dev & Train	10,080
Syosset Hyundai LLC	Clean Transportation	23,300
T & C Sales & Service Inc.	Electric Vehicles - Rebate, Clean Transportation	12,100
T.A.S. Consulting International LLC	Renewable Heat NY, Clean Heating & Cooling	45,500
T.J.Nik Corp	Clean Transportation	13,900
	Electric Vehicles - Rebate, Clean Transportation	3,300
Tall Pines Farm Inc.	Renewable Heat NY, Clean Heating & Cooling	39,500
Taylor Group LTD	Combined Heat and Power, On-Site Power	1,570
	Community RH&C, Corporate Marketing	543
	Off-Shore Wind Pre-Dev Act, Corporate Marketing	867
Taylor Heating Inc.	Air Source Heat Pumps, Codes, Products and Standards	3,500
raylor roading mor	Home Perf w Energy Star, Single Family Residential	113,987
	HOME PERFORMANCE WITH ENERGY STAR, Single Family Residential	725
	Single Family Residential	7,861
Tesla Motors New York LLC	Clean Transportation	680,500
	Electric Vehicles - Rebate, Clean Transportation	1,376,000
The Bicknell Corporation	Renewable Heat NY, Clean Heating & Cooling	17,000
The Business Council of NYS, Inc.	POLICY DEVELOPMENT, Consumer Serv & Events Managem	1,000
The Dorschel Group	Electric Vehicles - Rebate. Clean Transportation	23,300
		44,000
		16,000
		11,300
The Energy Dectors	Home Perf w Energy Star, Single Family Residential	
The Energy Doctors		6,985
	Single Family Residential	39,515
The Fireplace Company Inc.	Renewable Heat NY, Clean Heating & Cooling	5,000
The Geothermal Group LLC	Campus/Technical Assistance, Clean Heating & Cooling	732
	Geothermal Incentive Program, Clean Heating & Cooling	6,000
The Inn At Houghton Creek	CLEAN TRANSPORTATION, Clean Transportation	8,000
The Insulation Man LLC	Consumer Ed and Market Support, Single Family Residential	699
	Home Perf w Energy Star, Single Family Residential	90,087
	HOME PERFORMANCE WITH ENERGY STAR, Single Family Residential	1,378
	Single Family Residential	21,972
The Levy Partnership, Inc.	Talent Pipeline:Internship Pgm, Workforce Dev & Train	5,324
The Radiant Store	Air Source Heat Pumps, Codes, Products and Standards	58,150
	Home Perf w Energy Star, Single Family Residential	2,180
	Talent Pipeline:Internship Pgm, Workforce Dev & Train	4,716
Three Peaks Energy Corp.	Home Perf w Energy Star, Single Family Residential	42,169
	Single Family Residential	31,088

Contractor	Contract Description	Total Expended Amount
Timothy Marlett	EMPOWER NY, Single Family Residential	43,424
	Home Perf w Energy Star, Single Family Residential	42,235
	HOME PERFORMANCE WITH ENERGY STAR, Single Family Residential	250
	Single Family Residential	13,188
Tioga Opportunities Inc.	EMPOWER NY, Single Family Residential	4,163
	Home Perf w Energy Star, Single Family Residential	105,929
	Single Family Residential	34,819
TLL Motors Inc	Clean Transportation	55,000
	Electric Vehicles - Rebate, Clean Transportation	1,100
Tompkins Community Action	Home Perf w Energy Star, Single Family Residential	25,112
	Single Family Residential	21,808
Total Comfort Heating and Air Conditioni	EMPOWER NY, Single Family Residential	2,946
	Home Perf w Energy Star, Single Family Residential	199,238
	Single Family Residential	4,955
Town of Big Flats	Clean Energy Communities, Communities & Local Government	5,000
Town of Bristol	Clean Energy Communities, Communities & Local Government	5,000
Town of Catlin	Clean Energy Communities, Communities & Local Government	5,000
Town of Cortlandt	CLEANER GREENER COMMUNITIES, Communities & Local Government	5,000
Town of Elizabethtown	Clean Energy Communities, Communities & Local Government	5,000
Town of Esopus	Clean Energy Communities, Communities & Local Government	5,000
Town of Geddes	Clean Energy Communities, Communities & Local Government	5,000
Town of Hancock	Clean Energy Communities, Communities & Local Government	5,000
Town of Highland	Clean Energy Communities, Communities & Local Government	5,000
Town of Marcellus	Clean Energy Communities, Communities & Local Government	5,000
Town of Nelson	Clean Energy Communities, Communities & Local Government	5,000
Town of Owasco	Clean Energy Communities, Communities & Local Government	5,000
Town of Pomfret	Clean Energy Communities, Communities & Local Government	5,000
Town of Pound Ridge	Clean Energy Communities, Communities & Local Government	5,000
Town of Saugerties	CLEAN TRANSPORTATION, Clean Transportation	16,000
Town of Sterling	Clean Energy Communities, Communities & Local Government	5,000
Towne Ford, Inc.	Electric Vehicles - Rebate, Clean Transportation	11,500
Tradition Chevrolet Buick Inc.	Electric Vehicles - Rebate, Clean Transportation	5,100
Transitowne Hyundai LLC	Electric Vehicles - Rebate, Clean Transportation	11,300
TRS Heating and Air Conditioning Co., In	ASSISTED HOME PERFORMANCE WITH ENERGY STAR, Single Family	296
	EMPOWER NY, Single Family Residential	39,507
	Home Perf w Energy Star, Single Family Residential	28,119
	Single Family Residential	54,962
True Building Performance LLC	Home Perf w Energy Star, Single Family Residential	70,787
-	Single Family Residential	25,575
True Energy Solutions	EMPOWER NY, Single Family Residential	23,025
	Home Perf w Energy Star, Single Family Residential	238,900
	Single Family Residential	151,006
Ulster Construction Co. Inc.	Home Perf w Energy Star, Single Family Residential	19,901
	Single Family Residential	15,800
Ulster County Community Action, Inc.	Home Perf w Energy Star, Single Family Residential	125,238
······································	Single Family Residential	36,029
Union College	CLEAN TRANSPORTATION, Clean Transportation	80,000
University of Rochester	Environmental Research, Environmental Research	11,993
Upstate Imports Inc	Electric Vehicles - Rebate, Clean Transportation	6,600
Upstate Spray Foam Insulation, LLC	ASSISTED HOME PERFORMANCE WITH ENERGY STAR, Single Family	221
epetate optay i ourn mountion, LEO	Home Perf w Energy Star, Single Family Residential	112,744
	Homo / on w Energy otal, ongie i anniy Residential	112,744

Contractor	Contract Description	Total Expended Amount
Upstate Spray Foam Insulation, LLC	Single Family Residential	114,491
Van Bortel Chevrolet, Inc.	Clean Transportation	1,700
	Electric Vehicles - Rebate, Clean Transportation	21,300
Van Bortel Ford Inc.	Electric Vehicles - Rebate, Clean Transportation	5,500
Van Hee Mechanical	Air Source Heat Pumps, Codes, Products and Standards	79,000
	Geothermal Incentive Program, Clean Heating & Cooling	171,285
Van Kleeck's Tire Inc	CLEAN TRANSPORTATION, Clean Transportation	8,000
Victor Auto Group LLC	Electric Vehicles - Rebate, Clean Transportation	7,100
Village of Camillus	Clean Energy Communities, Communities & Local Government	5,000
Village of Cuba	Clean Energy Communities, Communities & Local Government	5,000
Village of Hilton	Clean Energy Communities, Communities & Local Government	5,000
Village of Nyack	Clean Energy Communities, Communities & Local Government	5,000
Village of Phoenix	Clean Energy Communities, Communities & Local Government	5,000
Village of Port Byron	Clean Energy Communities, Communities & Local Government	5,000
Village of Rouses Point	CLEANER GREENER COMMUNITIES, Communities & Local Government	5,000
Village of Stamford	Clean Energy Communities, Communities & Local Government	5,000
Village of Trumansburg	Clean Energy Communities, Communities & Local Government	5,000
Vision Hyundai Of Webster LLC	Electric Vehicles - Rebate, Clean Transportation	19,100
Volkswagen Of Huntington LLC	Clean Transportation	4,000
	Electric Vehicles - Rebate, Clean Transportation	2,000
Vulcan Enterprises LLC	Renewable Heat NY, Clean Heating & Cooling	9,500
Warren Tire Service Center Inc	CLEAN TRANSPORTATION, Clean Transportation	16,000
Warren/Hamilton Counties ACEO	Home Perf w Energy Star, Single Family Residential	60,805
	Single Family Residential	7,910
WaterFurnace International, Inc.	Campus/Technical Assistance, Clean Heating & Cooling	6,706
Watertown Appliance and TV Center, Inc.	Home Perf w Energy Star, Single Family Residential	4,353
	Single Family Residential	1,156
Wayne County Action Program	EMPOWER NY, Single Family Residential	8,649
	Home Perf w Energy Star, Single Family Residential	76,690
	Single Family Residential	12,811
Weibel Avenue Apartments LLC	CLEAN TRANSPORTATION, Clean Transportation	40,000
West Herr Ford Inc	Electric Vehicles - Rebate, Clean Transportation	5,500
West Herr Ford of Amherst LLC	Electric Vehicles - Rebate, Clean Transportation	5,500
West Herr Honda	Electric Vehicles - Rebate, Clean Transportation	17,000
West Herr Oldsmobile Inc	Electric Vehicles - Rebate, Clean Transportation	6,000
Western New York Exteriors, LLC	EMPOWER NY, Single Family Residential	8,023
	Home Perf w Energy Star, Single Family Residential	1,100
	Single Family Residential	521
Weston Bros.	Air Source Heat Pumps, Codes, Products and Standards	67,000
WHAC LLC	Electric Vehicles - Rebate, Clean Transportation	10,000
Wheatfield Village Motors	Electric Vehicles - Rebate, Clean Transportation	11,900
Whiteman Chevrolet Inc	Electric Vehicles - Rebate, Clean Transportation	9,400
Whitmore Court Apartments LLC	CLEAN TRANSPORTATION, Clean Transportation	8,000
Williams Toyota Elmira	Electric Vehicles - Rebate, Clean Transportation	7,700
Willie Oxendine	Home Perf w Energy Star, Single Family Residential	48,648
	Single Family Residential	40,040
Wilson Appliance		
Wilson Appliance	Home Perf w Energy Star, Single Family Residential	2,037
Wiegenein Energy Concernation Com	Single Family Residential	6,899
Wisconsin Energy Conservation Corp	>200KW PV, NY-Sun	60,240
	Air Source Heat Pumps, Codes, Products and Standards	4,005
	ASSISTED HOME PERFORMANCE WITH ENERGY STAR, Low/Moderate	75,840

Contractor	Contract Description	Total Expended Amount
Wisconsin Energy Conservation Corp	ASSISTED HOME PERFORMANCE WITH ENERGY STAR, Single Family	6,209
	Geothermal Incentive Program, Clean Heating & Cooling	1,590
	GJGNY REVOLVING LOAN FUND, Single Family Residential	197,355
	Home Perf w Energy Star, Single Family Residential	288,516
	Low/Moderate Income	3,803,825
	Renewable Heat NY, Clean Heating & Cooling	33,870
Wise Home Energy, LLC	Air Source Heat Pumps, Codes, Products and Standards	3,500
	ASSISTED HOME PERFORMANCE WITH ENERGY STAR, Single Family	340
	Consumer Ed and Market Support, Single Family Residential	199
	EMPOWER NY, Single Family Residential	24,045
	Home Perf w Energy Star, Single Family Residential	511,702
	HOME PERFORMANCE WITH ENERGY STAR, Single Family Residential	752
	Single Family Residential	195,387
WK Mechanical	Air Source Heat Pumps, Codes, Products and Standards	5,100
Wood 'N Things	Renewable Heat NY, Clean Heating & Cooling	13,985
Woodridge Apartments Inc	CLEAN TRANSPORTATION, Clean Transportation	16,000
WP Cars LLC	Electric Vehicles - Rebate, Clean Transportation	8,000
WS Healey Chevrolet Buick Inc.	Electric Vehicles - Rebate, Clean Transportation	7,400
Zenner and Ritter Inc.	Air Source Heat Pumps, Codes, Products and Standards	27,500
	EMPOWER NY, Single Family Residential	54,716
	Home Perf w Energy Star, Single Family Residential	13,158
	Single Family Residential	9,503
Zerodraft of CNY - Syracuse	EMPOWER NY, Single Family Residential	4,711
	Home Perf w Energy Star, Single Family Residential	445,838
	Single Family Residential	74,896
Zerodraft Residential Inc.	ASSISTED HOME PERFORMANCE WITH ENERGY STAR, Single Family	275
	Home Perf w Energy Star, Single Family Residential	144,811
	HOME PERFORMANCE WITH ENERGY STAR, Single Family Residential	1,250
	Single Family Residential	135,250
Grand Total		104,912,322

NYSERDA

Public Authority Law Report

April 1, 2019 to September 30, 2019

Section Break

Contractor	Date Encumbered	Contract Description	Total Contract Amount
1st Light Energy, Inc.	8/27/2019	PON 2112 NY SUN	51,870
	9/18/2019	PON 2112 NY SUN	6,450
2G Energy Inc.	6/19/2019	Combined Heat and Power, CHPA - 2070-2080 Housing Corp	714,043
		Combined Heat and Power, CHPA - 2100 1st Avenue Bldg BC	981,527
		Combined Heat and Power, CHPA - Building D	714,043
5 Tellers Associates, LP	8/13/2019	Multifam Performance Pgm, Multifamily	147,000
22nd Century Technologies, Inc.	6/4/2019	NYSERDA ADMINISTRATION, Staff Augmentation	191,100
211 Sea Foam Properties LLC	7/15/2019	Multifam New Construction, MFNCP PHI T3-211 Passive H	31,500
295 Maryland, LLC	4/23/2019	NEW YORK ENERGY STAR HOMES, New Construction	4,000
455 Hospitality LLC	4/3/2019	Multifam Performance Pgm, 2019 Multifamily Summit	40,000
		New Construction- Housing, 2019 Multifamily Summit	10,000
770 Electric Corp.	6/25/2019	<200KW PV, NY-Sun	20,000
		NY-Sun	42,336
	8/12/2019	<200KW PV, NY-Sun	5,628
		NY-Sun	8,442
1067 Grant St LLC	7/16/2019	Multifam Performance Pgm, Multifamily	18,900
2018 ESA Project Company, LLC	9/3/2019	Fuel Cells, Fuel Cell Incentive - FC-025	948,750
ABB, Incorporated	4/23/2019	High Performing Grid, PON 3770 Smart Grid	864,400
ABH Capital Management, LLC	7/2/2019	VDI Server	7,607
	8/6/2019	Virtual Server 2	7,327
Abt Associates Inc.	5/15/2019	ENVIRONMENTAL RESEARCH, TWO#1 Pathways Health	200,000
Accelerate Solar LLC	8/13/2019	<200KW PV, PON 2112 NY SUN	3,150
	9/11/2019	<200KW PV, PON 2112 NY SUN	2,520
Accion Group, LLC	4/24/2019	REC:CES REC System Dev Costs, Large-Scale Renewables	64,100
Accord Power, Inc.	4/25/2019	NY Sun	1,005
	7/17/2019	PON 2112 NY SUN	23,400
	8/12/2019	<200KW PV, NY-Sun	7,020
Ace Natural	5/28/2019	Industrial Process Effic, Industrial Process Efficiency	57,702
Adam C. Boese	4/1/2019	Technical Services, RFP3628FlexTechConsultUmbrella	2,520
	4/2/2019	Technical Services, RFP3628FlexTechConsultUmbrella	2,500
	4/12/2019	Commercial Real Estate Ten, Daylight Saving-162 OldMill Rd	8,374
	4/18/2019	Technical Services, RFP3628FlexTechConsultUmbrella	1,015
	5/3/2019	Agriculture Energy Eff Pgm, RFP3628FlexTechConsultUmbrella	2,700
	7/19/2019		5,000
Adirondack Area Network	5/1/2019	Commercial Real Estate Ten, Daylight-225 Westchester Ave	15,000
		NYSERDA ADMINISTRATION, 2019 AA NET Recording Servic	
Adirondack Center for Loon	6/7/2019	Environmental Research, Climate impacts on ADK species	49,500
Advanced Radiant Design, Inc.	4/23/2019	Talent Pipeline:CE and OJT, OJT HIRE	5,760
	6/26/2019	Talent Pipeline:CE and OJT, OJT HIRE	5,760
	7/19/2019		5,760
AECOM Technical Services Inc.	9/9/2019	WEST VALLEY DEVELOPMENT PROGRAM, Environmental M.	253,747
Aegis Energy Services Inc.	4/5/2019	Combined Heat and Power, CHPA - Boro Park Center	288,750
		Combined Heat and Power, CHPA-Alexandria	148,500
	4/17/2019	Combined Heat and Power, CHPA-Centers-Triboro/DOJ	580,800
	4/18/2019	Combined Heat and Power, CHPA - 211 Central Park West	158,400
		Combined Heat and Power, CHPA - 1865 Broadway	153,000
	4/29/2019	Combined Heat and Power, CHPA-Bluestone Group - Norman	69,300
	5/7/2019	Combined Heat and Power, CHPA-Kenmore Hall	219,296
	6/3/2019	Combined Heat and Power, CHPA-Centers - Brooklyn	308,000
	6/6/2019	Combined Heat and Power, CHPA-LeFrak City-Columbia/Peru	100,800
	6/25/2019	Combined Heat and Power, CHPA-3 Hanover Square	42,000
		Combined Heat and Power, CHPA-The Citadel-The Salvation	280,000
	8/21/2019	Combined Heat and Power, CHPA - 42 Broad Street	213,000
	9/13/2019	Combined Heat and Power, CHPA-Archer Green Apartments	205,590
		Combined Heat and Power, CHPA-North Rockland High Schoo	84,375
	9/23/2019	Combined Heat and Power, CHPA-Centers - Beth Abraham 1	308,000

Contractor	Date Encumbered	Contract Description	Total Contract Amount
Agbotic Project #1 LLC	6/20/2019	NY Green Bank, Agbotic	6,000,000
AHA Development Corporation	5/10/2019	Low Rise New Construction, 2019 LRNCP	57,200
AIA - New York Chapter	6/24/2019	New Construction- Commercial, AIA-Strategic partnership	1,750
		New Construction- Housing, AIA-Strategic partnership	6,750
AKF-engineers	8/14/2019	Workforce Industry Partnership, PON 3715 Workforce Training	99,720
	8/23/2019	Commercial New Construc, Commercial New Construction	27,750
	9/4/2019	Flexible Tech Assistance, FT12239-MetropolitanClub-FTC	29,600
Akimeka, LLC	5/15/2019	Electric Vehicles - Innovation, Planning Board EVSE Promotion	40,003
		EVALUATION, RFQL3685 Round 1	14,972
	5/21/2019	CLEAN TRANSPORTATION, Oneida County ITS Study	15,024
		CLEANER GREENER COMMUNITIES, Animating the EV mark	226,087
	6/13/2019	OTHER PROGRAM AREA, RFQL3685 Round 1	150,000
Albany Housing Authority	4/2/2019	Multifam New Construction, New Construction	56,800
Albany Solar Solutions L.L.C.	4/8/2019	<200KW PV, PON 2112 NY SUN	5,317
	5/8/2019	<200KW PV, PON 2112 NY SUN	5,688
	5/10/2019	<200KW PV, PON 2112 NY SUN	8,680
	8/8/2019	<200KW PV, PON 2112 NY SUN	6,160
	9/9/2019	<200KW PV, PON 2112 NY SUN	8,750
Alberto Aceves Cornejo	5/7/2019	Agbotic - Tech. Due Diligence	1,271
Albireo Energy, LLC	4/23/2019	Real Time Enrgy Management, Albireo Energy-199 Water-RTEM	51,468
	8/29/2019	Real Time Enrgy Management, AE LLC - 60 Charlton St - RTEM	87,530
AlienVault, Inc.	8/2/2019	NYSERDA ADMINISTRATION, Alien Vault Licensing 1 year	12,209
All-State Air Control Sales & Service In	4/17/2019	Talent Pipeline:CE and OJT, OJT HIRE	7,680
Allegis Group Holdings Inc	4/8/2019	Campus/Technical Assistance, Staff Augmentation Services	24,444
Anogia Group Holdings inc	4/0/2010	Community RH&C, Staff Augmentation Services	73,333
		Renewable Heat NY, Staff Augmentation Services	65,185
	4/17/2019	NEW YORK GREEN BANK, Staff Augmentation Services	27,446
	4/22/2019		256,080
	5/22/2019	Real Time Enrgy Management, SA.043a - RTEM_PM	186,643
	7/3/2019	SA.050_TWO #8 - DER Coordinato	
		ENERGY ANALYSIS, Staff Augmentation Services	86,466
	8/26/2019	Consumer Ed and Market Support, SA.054_TWO #9 - SFR PM	129,925
Allen Devren lee	8/29/2019	Pay for Performance, SA.055_TWO #10 - P4P PM	352,972
Allen Power, Inc.	4/22/2019	<200KW PV, PON 2112 NY SUN	84,026
Alliance for Sustainable Energy, LLC	9/16/2019	Nat'l OffShWind R&D Consortium, NREL for OSW Consortium	56,434
	0/40/0040	NREL for OSW Consortium	28,566
Allied Microbiota LLC	6/19/2019	Cleantech Ignition, PON 3871 Ignition Grants	100,000
alpha-En Corporation	6/19/2019	Energy Storage Tech/Prod Dev, PON3585 R4 Energy Storage	999,608
Altanova LLC	4/1/2019	Commercial Real Estate Ten, Altanova, LLC - 621 W 55th St	14,979
	6/17/2019	Commercial Real Estate Ten, Altanova-100 Manhattanville Rd	14,000
	6/18/2019	Flexible Tech Assistance, FT12223-MealsWheels-SI.CHP-FTC	39,240
	7/3/2019	Flexible Tech Assistance, FT12220-Cush&Wake-MC-CHP-FTC	47,546
	7/11/2019	Commercial New Construc, Commercial New Construction	60,732
	8/23/2019	Commercial New Construc, Commercial New Construction	145,770
	9/16/2019	Commercial New Construc, Commercial New Construction	56,998
Alternative Power Solutions of NY, LLC	6/20/2019	<200KW PV, PON 2112 NY SUN	6,993
	6/21/2019	<200KW PV, PON 2112 NY SUN	17,500
	7/16/2019	<200KW PV, PON 2112 NY SUN	8,750
	8/6/2019	<200KW PV, PON 2112 NY SUN	8,750
AltPOWER, Inc.	8/12/2019	<200KW PV, NY-Sun	63,342
	8/20/2019	<200KW PV, NY-Sun	202,860
	8/22/2019	<200KW PV, NY-Sun	66,240
Amalgamated Housing Corporation	5/22/2019	Multifam Performance Pgm, Multifamily	1,040,900
American Council for an Energy Efficient	t 5/3/2019	Intervention Effectiv Training, 2020 ACEEE Finance Forum	45,000
	7/25/2019	Subscription/Data Access, Market Insights	12,000
American Energy Care, Inc.	4/2/2019	<200KW PV, PON 2112 NY SUN	5,751

American Energy Care, Inc. American Society of Heating,Refrigeratin American Solar Partners, LLC	7/1/2019 n 4/23/2019 4/3/2019	<200KW PV, NY-Sun New Construction- Commercial, New Construction New Construction- Housing, New Construction	5,808
			4,020
American Solar Partners, LLC	4/3/2019	New Construction- Housing, New Construction	
American Solar Partners, LLC	4/3/2019		16,080
	4/45/0040	PON 2112 NY SUN	13,140
	4/15/2019	PON 2112 NY SUN	20,700
	5/8/2019	PON 2112 NY SUN	20,095
	5/20/2019	PON 2112 NY SUN	39,639
	6/11/2019	PON 2112 NY SUN	29,565
Amsterdam Nursing Home Corporation	6/17/2019	Flexible Tech Assistance, FT12215-AmsterdamNursing-PON	11,913
Analemma Solar Corp.	6/24/2019 7/3/2019	Flexible Tech Assistance, FT12209 - AmsNursingHome - PON PON 2112 NY SUN	15,309
•	5/1/2019		21,600
Antares Group, Inc.	9/24/2019	Campus/Technical Assistance, FT12091-St. John's U - FTC ANAEROBIC DIGESTER, ADG - Antares - TWO	12,760 49,500
	9/24/2019	Combined Heat and Power, ADG - Antares - TWO	49,500
Apex Roofing, LLC	4/3/2019	<200KW PV, NY Sun	49,500
Apex Rooming, LLC	5/10/2019	PON 2112 NY SUN	61,650
Apex Solar Power LLC	4/2/2019	<200KW PV, NY-Sun	5,850
Apex Solar Power LLC	4/2/2019	<200KW PV, PON 2112 NY SUN	8,750
	5/10/2019	<200KW PV, PON 2112 NY SUN	14,040
	5/20/2019	<200KW PV, PON 2112 NY SUN	12,024
	5/30/2019	<200KW PV, PON 2112 NY SUN	5,250
	7/11/2019	<200KW PV, PON 2112 NY SUN	6,195
	8/1/2019	<200KW PV, PON 2112 NY SUN	5,040
	8/14/2019	<200KW PV, PON 2112 NY SUN	5,460
	9/30/2019	<200KW PV, PON 2112 NY SUN	6,750
APPEXTREMES, LLC	5/17/2019	NYSERDA ADMINISTRATION, Conga Composer 2019-2020	7,200
Arcadia Chair Company	7/9/2019	Office Furniture	5,281
Arcadis of New York, Inc.	4/18/2019	Technical Services, AEAP	5,978
· · · · · · · · · · · · · · · · · · ·	4/26/2019	Technical Services, AEAP	2,500
	5/6/2019	Technical Services, AEAP	3,478
	5/30/2019	Flexible Tech Assistance, FT12203-TownofUlster WWTP-FTC	13,890
	8/14/2019	Technical Services, AEAP	5,978
Arcadis U.S., Inc.	5/9/2019	EXISTING FACILITIES, Tech Review & Program Staff	4,279
	6/17/2019	K-12 SCHOOLS, P-12 Gap Pre-Qual Incentive	224,500
	9/27/2019	ANAEROBIC DIGESTER, ADG - Arcadis - TWO	66,000
		Combined Heat and Power, ADG - Arcadis - TWO	66,000
Arch Street Communications, Inc.	6/5/2019	CI Engy Siting & Soft Cost Red, TWO 3: LSR RFP Outreach	49,500
Association for Energy Affordability, In	5/6/2019	Talent Pipeline:CE and OJT, OJT HIRE	7,920
	5/7/2019	Talent Pipeline:CE and OJT, OJT HIRE	15,120
	5/9/2019	Talent Pipeline:CE and OJT, OJT HIRE	7,920
	8/7/2019	Talent Pipeline:CE and OJT, OJT HIRE	21,600
Atelier Ten	7/11/2019	Commercial New Construc, SUNY - Mini Bid (2019)	250,000
Atlas Public Policy	5/23/2019	Electric Vehicles - Innovation, Clean Transportation	167
Aurora Ridge Dairy LLC	7/26/2019	Anaerobic Digesters, PON 3739 CAT C	15,000
Autronic Plastics, Inc.	6/14/2019	Pub Transit & Elect Rail, Wireless Transit Lighting	244,000
Awards By Walsh's & Creative Marketing	g 9/4/2019	New Construction- Housing, Buildings of Excellence award	7,575
B & W Sound Services, Inc.	8/6/2019	OTHER PROGRAM AREA, 76West Awards Audio Visual	12,950
Bakerstand Solar LLC	9/6/2019	REC:CES REC Contracts, Bakerstand Solar	14,394,219
Baldwin Real Estate Development, Corp.	. 5/20/2019	Low Rise New Construction, 2019 LRNCP	317,600
Ballston Spa Central School	4/18/2019	Technical Services, OSEM27-C - Ballston Spa CSD	109,531
Banks II Quan Associates, Inc.	4/15/2019	CI Carbon Challenge, CICC Intl. Paper Tech Review	32,645
	9/12/2019	CI Carbon Challenge, CICC Intl. Paper Tech Review	108,161
Barbera Homes and Development, Inc.	4/12/2019	Low Rise New Construction, 2019 LRNCP	7,600
	7/8/2019	Low Rise New Construction, 2019 LRNCP	7,600
	9/10/2019	Low Rise New Construction, 2019 LRNCP	5,700
Barnard College	9/6/2019	REV Campus Challenge, Efficiency Planning & Engineer	150,000

Contractor	Date Encumbered	Contract Description	Total Contract Amount
Bartram Solar, LLC	9/20/2019	>200KW PV, NY Sun	1,198,125
Bashing Panels LLC	7/30/2019	<200KW PV, PON 2112 NY SUN	13,176
	9/24/2019	<200KW PV, PON 2112 NY SUN	5,124
Battelle Memorial Institute	9/4/2019	Code to Zero, BMI TWO #1-NYStretch Support	171,000
BDO USA LLP	8/16/2019	Background Investigation Servi	15,400
	9/17/2019	Background Investigation Servi	3,300
Belmont Housing Resources for WNY, I.		Low Rise New Construction, 2019 LRNCP	46,000
Belmonte Builders	4/24/2019	Low Rise New Construction, 2019 LRNCP	5,700
	6/26/2019	Low Rise New Construction, 2019 LRNCP	9,500
Benchemark Printing, Inc.	6/12/2019	OTHER PROGRAM AREA, Printing Services - EV Rebate	15,000
Benchmark Lancaster Towers, LP	6/7/2019	Multifam Performance Pgm, Multifamily	15,700
Bergmann Associates	4/1/2019	Technical Services, FlexTech Umbrella Agreement	2,500
	5/7/2019	Industrial Process Effic, Tech Review_Support_Umbrella	5,390
	5/10/2019	INDUSTRIAL PROCESS EFFICIENCY, Tech Review_Support	20,995
	6/17/2019	Commercial Real Estate Ten, Bergmann-224 Harrison 8th fl	5,000
		Commercial Real Estate Ten, Bergmann-224 Harrison St	5,000
		Commercial Real Estate Ten, Bergmann-224 HarrisonTnt Bl Gd	5,000
		Industrial Process Effic, IPE16237	19,875
	8/5/2019	Commercial Real Estate Ten, Berg-125EJefferson8,10,12,14	5,000
		Commercial Real Estate Ten, Bergman-125EJefferson7,9,11,15	5,000
		Commercial Real Estate Ten, Bergmann Associates - 125 E J	5,000
		Commercial Real Estate Ten, Bergmann-125EJefferson TBG	5,000
		Commercial Real Estate Ten, Bergmann-5000 Campuswood	5,000
		Commercial Real Estate Ten, Bergmann-5000 CampuswoodTBG	5,000
Best Energy Power	4/11/2019	<200KW PV, NY-Sun	20,000
		NY-Sun	88,536
	8/8/2019	<200KW PV, NY-Sun	18,760
		NY-Sun	28,140
	9/12/2019	PON 2112 NY SUN	90,168
Bettergy Corporation	9/4/2019	Energy Storage Tech/Prod Dev, NH3 Cracking Membrane Reac	359,968
Bishop House Consulting, Inc.	9/10/2019	NYSERDA ADMINISTRATION, Human Resources	32,000
BJ's Wholesale Club	8/6/2019	NY-Sun	1,948,284
	9/4/2019	<200KW PV, NY-Sun	337,212
BLIX Consultancy BV	7/19/2019	Environmental Research, Procurement support	50,000
BlocPower Community Corporation	7/1/2019	Community RH&C, PON 3922 CH&C Communities	200,000
Bloom Energy Corporation	7/15/2019	Fuel Cells, Fuel Cell - AT&T - 400 Hamilto	422,500
	7/16/2019	Fuel Cells, Fuel Cell - AT&T - 400 Hamilto	577,500
	8/8/2019	Fuel Cells, Fuel Cell Incentive FC-014	288,750
	8/19/2019	Fuel Cells, Fuel Cell Incentive - FC-015	231,000
Bloomberg Finance LP	9/18/2019	NEW YORK GREEN BANK, Bloomberg Datafeed Access	54,000
BME Yellowjacket LLC	7/11/2019	Anaerobic Digesters, PON 3739 CAT C	60,000
	8/2/2019	Anaerobic Digesters, PON 3739 CAT C	10,000
Bond, Schoeneck & King, PLLC	4/25/2019	OTHER PROGRAM AREA, RFP 3300 Outside Counsel Servi	32,927
	8/20/2019	NYSERDA ADMINISTRATION, RFP 3300 Outside Counsel Servi	203
		OTHER PROGRAM AREA, RFP 3300 Outside Counsel Servi	5,073
Borg Warner	6/17/2019	Industrial Process Effic, Industrial Process Efficiency	156,936
	8/5/2019	Industrial Process Effic, Industrial Process Efficiency	562,500
Borrego Solar Systems, Inc.	4/5/2019	>200KW PV, NY Sun	925,043
	5/28/2019	Solar Plus Energy Storage, NY Sun	2,184,000
	5/31/2019	>200KW PV, NY Sun	1,229,904
	8/8/2019	>200KW PV, NY Sun	898,128
	9/6/2019	>200KW PV, NY Sun	2,465,142
		>200KW PV, NY-Sun C&I	979,208
		ESTOR:Retail Storage Incentive, NY-Sun C&I	1,500,001
			1,000,001
Boundless Impact Investing	7/9/2019	Cleantech ICC Engage, Climate Impact Profile Pilot	48,000

Contractor	Date Encumbered	Contract Description	Total Contract Amount
Bridge Metals Industries	9/16/2019	Industrial Process Effic, Industrial Process Efficiency	15,362
Bright Power, Inc.	4/17/2019	NY Sun	3,726
	5/7/2019	<200KW PV, NY-Sun	24,480
	E (40/0040	NY-Sun	36,720
	5/13/2019	Real Time Enrgy Management, Brght Pwr-9745 Queens Blv-RT	98,238
	E/20/2010	Real Time Enrgy Management, Bright Power-Multisite-RTEM	119,889
	5/20/2019	<200KW PV, NY-Sun NY-Sun	20,000
	5/24/2019		54,432
	6/5/2019	Real Time Enrgy Management, Bright Power-Multisite-RTEM Flexible Tech Assistance, FT12093 - 205 W 39th St FTC	560,894
	0/3/2019	PON 2112 NY SUN	112,179
	6/17/2019	<200KW PV, NY-Sun	20,000
	0,11,2010	NY-Sun	37,152
	6/21/2019	Real Time Enrgy Management, Bright Power-Multisite-RTEM	42,056
	6/24/2019	PON 2112 NY SUN	339,831
	7/1/2019	Novel Bus Models & Offers, 3932 Novel Business Models	500,000
	7/2/2019	Flexible Tech Assistance, FT12212 - 370 Lexington - FTC	25,000
	7/23/2019	Real Time Enrgy Management, Bright Power, Inc - Multisites	560,320
	8/1/2019	Geothermal Incentive Program, FT12238-LeFrakCity-5917Jct-F	39,800
	8/6/2019	Real Time Enrgy Management, Bright Power-Multisite-RTEM	102,419
	8/9/2019	Real Time Enrgy Management, BrightPower-333 Lenox-RTEM	42,437
	8/20/2019	<200KW PV, NY-Sun	20,000
		NY-Sun	58,536
	8/29/2019	PON 2112 NY SUN	21,450
	9/16/2019	<200KW PV, NY-Sun	40,000
		NY-Sun	112,617
	9/17/2019	PON 2112 NY SUN	97,905
Brooklyn SolarWorks LLC	4/8/2019	PON 2112 NY SUN	5,832
	4/9/2019	PON 2112 NY SUN	14,904
	5/10/2019	PON 2112 NY SUN	13,194
	5/28/2019	PON 2112 NY SUN	6,899
	7/1/2019	PON 2112 NY SUN	6,804
BTMI Engineering, PC	8/16/2019	OREC: Technical Support, Large-Scale Renewables	35,000
Buffalo Ave Realty LLC	6/11/2019	Commercial New Construc, SF106872 - 170 Buffalo Ave	113,628
Buffalo Energy, Inc.	8/19/2019	Talent Pipeline:CE and OJT, OJT HIRE	7,200
Buffalo Geothermal Heating	6/3/2019	Geothermal Incentive Program, Clean Heating & Cooling	107,688
	6/24/2019	Geothermal Incentive Program, Large-Scale GSHP Rebate	18,504
Buffalo Renewables, Inc.	6/13/2019	Small Wind, WWind Turbine Incentive	143,250
Buffalo Solar Solutions Inc	4/2/2019	<200KW PV, PON 2112 NY SUN	6,038
	4/10/2019	<200KW PV, PON 2112 NY SUN	5,219
	5/15/2019	<200KW PV, PON 2112 NY SUN	6,210
	5/29/2019	<200KW PV, PON 2112 NY SUN	6,279
	5/30/2019	<200KW PV, PON 2112 NY SUN	5,313
	6/10/2019	<200KW PV, PON 2112 NY SUN	6,174
	6/19/2019	<200KW PV, PON 2112 NY SUN	7,486
	7/8/2019	<200KW PV, PON 2112 NY SUN	18,553
	7/9/2019	<200KW PV, PON 2112 NY SUN	29,610
	8/8/2019	<200KW PV, PON 2112 NY SUN	9,626
	8/14/2019	<200KW PV, PON 2112 NY SUN	90
	9/24/2019	<200KW PV, PON 2112 NY SUN	6,279
BuildingIQ, Inc.	9/30/2019	Real Time Enrgy Management, BuildingIQ - Multisite - RTEM	28,225
Buzzard's Ridge Group LLC	9/30/2019	<200KW PV, PON 2112 NY SUN	8,750
BVG Associates LLC	8/6/2019	REC:CES REC System Dev Costs, TWO-1-IE-2019	38,500
BW Research Partnership	4/24/2019	ENERGY ANALYSIS, New York Clean Energy Jobs Stu	121,686
Bynder LLC	9/10/2019	NYSERDA ADMINISTRATION, WebDAM Photo Library	8,975
Byrne Dairy, Inc.	7/15/2019	On-Site Energy Manager, OsEM31-I - Byrne Dairy	155,821

Contractor C.J. Brown Energy, P.C.	Date Encumbered	Contract Description Technical Services, RFP3628FlexTechConsultUmbrella	Total Contract Amount 2,500
C.J. Brown Energy, P.C.			
	5/1/2019	Flexible Tech Assistance, FT12102- Gates Chili CSD - FTC	6,632
	5/00/0040	Flexible Tech Assistance, FT12200 - Moravia CSD - FTC	12,700
	5/22/2019	Commercial New Construct, Commercial New Construction	24,345
	6/4/2019	Technical Services, AEAP	5,997
	7/24/2019	Flexible Tech Assistance, FT12228-ErieCo-92Franklin-FTC	76,749
C.T. Male Associates Engineering,	7/31/2019	SARATOGA TECHNOLOGY & ENERGY PARK, STEP	13,500
Calpine Corporation	4/19/2019	REC:CES REC Contracts, Large-Scale Renewables	137,079,080
Capital District Regional Planning Com	4/9/2019	Community RH&C, Cap Dist Heat & Cool Smart Cam	200,000
Carahsoft Technology Corporation	9/26/2019	NYSERDA ADMINISTRATION, Salesforce Journey Builder	30,896
Carbon Lighthouse	6/26/2019	Real Time Enrgy Management, CarbonLghthouse-Multisite-RTE	166,689
	9/9/2019	Real Time Enrgy Management, CL - College Point Blvd - RTEM	77,782
Carbon Trust Advisory Limited	8/6/2019	Carbon Trust OSW Consortium	25,541
		Nat'l OffShWind R&D Consortium, Carbon Trust OSW Consorti	50,459
Carter Ledyard & Milburn LLP	5/29/2019	NYSERDA ADMINISTRATION, Counsel's Office	10,000
Cascades Containerboard Packaging	7/1/2019	Flexible Tech Assistance, FT12204-CCP-Niagara Falls-PON	12,332
Catlin Solar 1 LLC	6/19/2019	>200KW PV, NY-Sun C&I	512,068
	7/9/2019	>200KW PV, NY-Sun C&I	512,068
Cayuga / Onondaga BOCES	9/19/2019	WORKFORCE DEVELOPMENT, FT12254 - Cayuga BOCES	21,400
Cayuga Community College	8/28/2019	Technical Services, OsEM24-C-Cayuga Community Coll	83,705
CBS Broadcasting Inc.	5/16/2019	Industrial Process Effic, Industrial Process Efficiency	91,808
	9/26/2019	Industrial Process Effic, Industrial Process Efficiency	10,556
CDG Sodus Solar 1 LLC	9/16/2019	<200KW PV, NY-Sun	303,345
CEC Stuyvesant Cove, Inc.	5/21/2019	Retrofit NY, RetrofitNY Solar Business Case	35,000
	6/27/2019	Talent Pipeline:CE and OJT, PON3981 WFD Capacity Building	100,066
Cedarwood Community Partners, LP	4/5/2019	Multifam Performance Pgm, Multifamily	144,200
Center for Internet Security Inc	7/12/2019	NYSERDA ADMINISTRATION, CIS Albert SM Monitoring 1 yr.	7,440
Center for Sustainable Energy	7/25/2019	CLEAN TRANSPORTATION, Centralized Services & Support	520,732
	112012010	OTHER PROGRAM AREA, Centralized Services & Support	10,000
CertainSolar, Inc.	6/14/2019	Fuel Cells, Fuel Cell Incentive - FC-027	1,000,000
CES Danbury Solar, LLC	5/29/2019	PON 2112 NY SUN	102,168
SES Danbury Solar, EES	9/30/2019	PON 2112 NY SUN	137,214
	7/11/2019		
CH4 Biogas, LLC		Anaerobic Digesters, PON 3739 CAT C	15,000
CH4 Generate Cayuga, LLC	9/23/2019	Anaerobic Digesters, PON 3739 CAT C	15,000
CHA Consulting Inc.	4/30/2019	Industrial Process Effic, IPE16223	5,715
	5/23/2019	CI Carbon Challenge, CICC RED Roch. Tech Review	205,750
	6/5/2019	INDUSTRIAL PROCESS EFFICIENCY, Technical Review and	10,200
	6/19/2019	Flexible Tech Assistance, FT12226-UltraDairy-6750W-FTC	106,000
	6/28/2019	Commercial Real Estate Ten, SA.051_TWO #6_EP&E APM	61,343
		EXISTING FACILITIES, SA.051_TWO #6_EP&E APM	106,281
		K-12 SCHOOLS, SA.051_TWO #6_EP&E APM	77,033
		REV Campus Challenge, SA.051_TWO #6_EP&E APM	61,615
		Technical Services, SA.051_TWO #6_EP&E APM	49,993
	9/30/2019	Flexible Tech Assistance, FT12261 - Union Coll CHP - FTC	222,450
Chappaqua Station, LLC	9/3/2019	Low Rise New Construction, 2019 LRNCP	28,000
Choice New York Management	5/2/2019	Technical Services, OsEM22-C - Choice New York	213,512
CIR ELECTRICAL CONSTRUCTION	4/29/2019	<200KW PV, PON 2112 NY SUN	114
CORP.	5/8/2019	<200KW PV, PON 2112 NY SUN	57,753
	7/22/2019	<200KW PV, PON 2112 NY SUN	11,997
Citistaffing, LLC	9/6/2019	NEW YORK GREEN BANK, TS.008 - NYGB Office Admin	6,555
City of New York, Dept. of Citywide	5/30/2019	EXISTING FACILITIES, EFP2525-DCAS;ACE Projects	183,166
City of Rochester	8/30/2019	Technical Services, OsEM32-C - City of Rochester	207,714
City of Salamanca	8/22/2019	CLEANER GREENER COMMUNITIES, City of Salamanca	100,000
City of Utica	4/26/2019	Community RH&C, Heat & Cool for Utica NYTBD	150,000
· · · · ·			
	6/13/2019	NY-SUN, Affordable Solar in Utica	130,000

Clean Energy States Alliance	7/15/2019	Prof & Expert Engagement, FY 2020 CESA Membership	68,500
CLEAResult Consulting, Inc.	6/18/2019	EXISTING FACILITIES, Centralized Services & Support	71,24
	7/2/2019 9/23/2019	Technical Support SFR	588,03 46,01
Climate Change & Environmentel		ESTOR: Implementation Support, Centralized Services & Suppo	
Climate Change & Environmental	4/15/2019	Commercial Real Estate Ten, Climate Chng Env-13030 31st Av	3,00
	4/17/2019	Commercial Real Estate Ten, CCES - 209-35 Northern Blvd	4,969
	5/13/2019	Commercial Real Estate Ten, CCES - 209-35 Northern Blvd	5,000
		Commercial Real Estate Ten, Climate Chng Env-13030 31st Av	4,999
	5/22/2019	Commercial Real Estate Ten, CCES-Multisite	8,190
CNY Solar, Inc.	4/11/2019	<200KW PV, PON 2112 NY SUN	11,19
	4/15/2019	<200KW PV, PON 2112 NY SUN	5,180
	5/10/2019	<200KW PV, NY-Sun	7,880
		<200KW PV, PON 2112 NY SUN	7,508
	7/1/2019	<200KW PV, PON 2112 NY SUN	5,801
	9/19/2019	<200KW PV, PON 2112 NY SUN	8,573
	9/24/2019	<200KW PV, PON 2112 NY SUN	53,546
COA Solar 2, LLC	4/16/2019	>200KW PV, NY-Sun C&I Payee Assignment	792,291
Code Green Solutions, Inc.	4/1/2019	Flexible Tech Assistance, FT12082-Glenhill Assoc307W-FTC	15,500
	4/10/2019	Flexible Tech Assistance, FT12083-Met Tower Diamond-FTC	24,375
	4/30/2019	Flexible Tech Assistance, FT12063- ABS 270 Madison - FTC	12,375
	5/28/2019	Flexible Tech Assistance, FT12202 - 3ColumbusCircle - FT	22,950
	5/31/2019	Flexible Tech Assistance, FT12201 - Super Nova 330 - FTC	19,000
	7/9/2019	Flexible Tech Assistance, FT12230-CBRE-123 William-FTC	24,000
	7/18/2019	Flexible Tech Assistance, FT12235-OneCity-111 8th-FTC	22,500
	9/23/2019	Flexible Tech Assistance, FT12240-RXR Realty-530 5th-FTC	19,750
		Flexible Tech Assistance, FT12251 - Macklowe - FTC	19,750
Cogeneration Contractors, Inc.	5/16/2019	Combined Heat and Power, CHPA - Fresh Meadows	697,500
Cohen Ventures Inc	9/9/2019	Air Source Heat Pumps, Product and Appliance Standard	50,000
Columbia University	8/14/2019	Industrial Process Effic, Industrial Process Efficiency	100,974
CON EDISON SOLUTIONS, INC.	6/7/2019	>200KW PV, NY Sun	249,480
Concern for Independent Living, Inc.	8/14/2019	MULTIFAMILY PERFORMANCE PROGRAM, Multifamily	9,900
Concur Technologies, Inc.	9/26/2019	NYSERDA ADMINISTRATION, 2018-2020 Concur annual cost	6,700
Continental Automated Buildings	8/23/2019	Subscription/Data Access, Market Insights	5,000
Control Solutions Group, Inc.	6/26/2019	NYSERDA ADMINISTRATION, HVAC Maintenance NYC Office	13,484
Conventures, Inc.	6/10/2019	EXISTING FACILITIES, 2019 Energy Solutions Summit	6,250
		INDUSTRIAL PROCESS EFFICIENCY, 2019 Energy Solutions	12,500
		Real Time Enrgy Management, 2019 Energy Solutions Summit	6,250
Convoy Solutions	6/19/2019	Energy Storage Tech/Prod Dev, Renewable Optimz Energy Stor	192,000
Corey Harrington	4/18/2019	OTHER PROGRAM AREA. National offshore Website	5,988
Cornell Cooperative Extension -	7/15/2019	Community Energy Engagement, CEEP North Country	122,33
Compkins	1113/2013	OTHER PROGRAM AREA, CEEP North Country	52,669
Cornell University	4/11/2019	OTHER PROGRAM AREA, 76West TWO 29	182,690
Somen Oniversity			199,573
	5/9/2019 6/13/2019	OTHER PROGRAM AREA, 76West TWO 27	
		Environmental Research, AQHE PON 3921	300,000
	6/19/2019	OTHER PROGRAM AREA, 76West TWO 28	116,440
	7/24/2019	OTHER PROGRAM AREA, Entr @ Cornell Sponsorship	30,000
	8/29/2019	OTHER PROGRAM AREA, 70333 TWO 30	18,75
Cornerstone Energy Services	5/9/2019	Talent Pipeline:CE and OJT, OJT HIRE	5,600
Cortex Building Intelligence, Inc.	4/17/2019	Real Time Enrgy Management, CBI-1700 Broadway-RTEM	48,828
	6/6/2019	Real Time Enrgy Management, CBI-1285 Ave of Americas-RTE	139,354
	8/2/2019	Real Time Enrgy Management, CBI-3 Bryant Park-RTEM	83,764
CoStar Realty Information, Inc.	4/23/2019	MARKET PATHWAYS, Codes, Products and Standards	4,940
		Subscription/Data Access, Market Insights	14,908
County of Chenango	9/4/2019	Clean Energy Communities, CEC011260-Chen Cnty	150,000
, ,			

Contractor CrystalCreek Organics Inc.	Date Encumbered 4/19/2019	Contract Description	Total Contract Amount 598,000
		OTHER PROGRAM AREA, Trial to enhance anaerobic dig	
Culture Shed	9/11/2019	NEW CONSTRUCTION PROGRAM, NCP11418 - Culture Shed	132,759
Cutone & Company Consultants, LLC	5/13/2019	EXISTING FACILITIES, EFP2639 - Cutone; 200 Lexingto	12,086
	8/13/2019	Commercial Real Estate Ten, LC Assoc-575 Lex Ave-CT	10,568
CVE North America, Inc.	8/20/2019	PON 2112 NY SUN	808,320
Cypress Creek Renewables LLC	6/5/2019	Solar Plus Energy Storage, NY Sun	1,424,500
	9/20/2019	>200KW PV, NY Sun	2,249,940
CyrusOne	5/30/2019 9/27/2019	Industrial Process Effic, Industrial Process Efficiency	88,303
D 9 D International I to		Industrial Process Effic, Industrial Process Efficiency	75,541
D & R International Ltd	9/24/2019	Eval MCDC Cross Cutting, Heating & Cooling Reports	115,500 23,100
Dandelion Energy Inc	8/8/2019	EVALUATION, Heating & Cooling Reports Novel Bus Models & Offers, 3932 Novel Business Models	500,000
Darling Advertising Agency Inc.	8/20/2019		83,452
Datto Inc	5/30/2019	NYSERDA ADMINISTRATION, Marketing Support for NYSERDA	28,174
Davidson Equities LLC	8/6/2019	Industrial Process Effic, Industrial Process Efficiency	204,707
Davidson Equities LLC	4/25/2019	NEW CONSTRUCTION PROGRAM, NCP11857 - Vernon Blvd NEW YORK GREEN BANK, Green Bank Outside Legal Couns	287,467
	6/11/2019		1,200
		NEW YORK GREEN BANK, Green Bank Outside Legal Cours	
Dayton T. Brown, Inc.	7/5/2019 9/12/2019	NEW YORK GREEN BANK, Green Bank Outside Legal Couns Pub Transit & Elect Rail, Subway energy use analysis	825
DealCloud Inc.			
Dealcloud Inc.	6/18/2019	NEW YORK GREEN BANK, DealCloud Licensing	33,000
Delawara Diver Seler LLC	8/26/2019	NEW YORK GREEN BANK, DealCloud Licensing	11,250
Delaware River Solar, LLC	4/24/2019	>200KW PV, NY Sun C&I	1,594,080
Dell, Inc.	8/23/2019	NYSERDA ADMINISTRATION, Dell Desktops - 10 Order #1	5,201
	9/3/2019	NYSERDA ADMINISTRATION, Laptops and Docking Qty.4	5,307
Dawkarm, Engineara Inc	9/26/2019	NYSERDA ADMINISTRATION, DELL-Laptops and Docks 7	9,288
Dewberry Engineers Inc	6/7/2019	Environmental Research, Transportation Climate ADP	7,500
Dick Kornbluth	6/4/2019	Home Perf w Energy Star, Single Family Residential	50,000
Dimien Inc.	7/11/2019	Energy Storage Tech/Prod Dev, zVO pouch cell proof concept	200,000
Direct Packet Inc.	6/5/2019	NYSERDA ADMINISTRATION, Video Endpoint for CEO	6,459
	8/9/2019	NYSERDA ADMINISTRATION, Video Service Renewal - Cisco	26,769
DJ Acquisition Management	7/25/2019	Industrial Process Effic, Industrial Process Efficiency	11,637
DNV GL Energy Insights USA Inc.	7/11/2019	Commercial Real Estate Ten, TWO 1 - CRE Tenant MAR Survey	163,589
De la Milde la e	9/17/2019	EVALUATION, TWO 7 - T&MD 2014-18 Impact Ev	185,000
Do-It-With Inc.	5/28/2019	NY-Sun	50,976
	9/9/2019	PON 2112 NY SUN	97,380
	9/24/2019	PON 2112 NY SUN	100,680
Doherty Electric, LLC	9/26/2019	<200KW PV, PON 2112 NY SUN	7,313
Dragon Innovation, Inc.	8/12/2019	M-Corps, Product Design Spec. Template	48,500
DRYDEN-TOMPKINS SOLAR I LLC	6/26/2019	>200KW PV, NY-Sun C&I	1,233,298
Dual Fuel Corp	4/30/2019	Real Time Enrgy Management, Dual Fuel-1900 Belmont-RTEM	33,366
	5/2/2019	Real Time Enrgy Management, Dual Fuel-1898 Belmont-RTEM	27,283
	5/7/0040	Real Time Enrgy Management, Dual Fuel-1908 Belmont-RTEM	33,366
	5/7/2019	Real Time Enrgy Management, Dual Fuel-1871 Seventh-RTEM	37,500
	6/11/2019	Real Time Enrgy Management, Dual Fuel-611 Academy St-RTE	29,247
	7/31/2019	Real Time Enrgy Management, Dual Fuel-370 Westchester-RT	7,695
	8/2/2019	Real Time Enrgy Management, Dual Fuel-60 W Broad-RTEM	49,092
	8/23/2019	Real Time Enrgy Management, Dual Fuel-905-907 Palmer-RTEM	50,594
	8/27/2019	Real Time Enrgy Management, DF - 815 West 180th St - RTEM	23,200
		Real Time Enrgy Management, DF – 4526 44th Street - RTEM	30,809
	0/0/00 12	Real Time Enrgy Management, Dual Fuel – 70 Prospect - RTEM	29,250
	9/3/2019	Real Time Enrgy Management, DF - 105 East 29th St - RTEM	32,813
	9/30/2019	Real Time Enrgy Management, DF - 718 Broadway - RTEM	7,395
		Deal Time Engrave Management DTEM One Mini Did Onetherst	750,000
		Real Time Enrgy Management, RTEM Gas Mini-Bid Contract	
DWM International Inc. E&S Environmental Chemistry Inc.	7/29/2019 4/11/2019	OTHER PROGRAM AREA, 2019 76West Trophy Procurement	8,645

Contractor	Date Encumbered	Contract Description	Total Contract Amoun
Ecolectro Inc	5/13/2019	OTHER PROGRAM AREA, PON3249 ACE-Exploratory resear	205,092
	9/17/2019	Cleantech Ignition, PON 3871 Ignition Grants	98,83
	9/27/2019	Energy Storage Tech/Prod Dev, Modular Ultra-Stable Alkaline	190,00
Ecosave Contract Assets LLC	6/27/2019	NY Green Bank, Ecosave	15,000,00
Ecosave, Inc.	4/1/2019	Real Time Enrgy Management, Ecosave-5901 Palisade Ave-RT	145,00
Edison Energy Group Inc	6/18/2019	Real Time Enrgy Management, EnerActive-300 E 66th St-RTEM	45,36
	6/28/2019	K-12 SCHOOLS, FlexTech Consultant Selection	544,11
Eiger 3970 Consultants Inc.	4/11/2019	<200KW PV, NY-Sun	6,480
	8/13/2019	<200KW PV, PON 2112 NY SUN	5,642
	8/20/2019	<200KW PV, NY-Sun	337,329
		NY-SUN, NY-Sun	224,886
	8/22/2019	<200KW PV, PON 2112 NY SUN	5,159
	9/16/2019	<200KW PV, NY-Sun	337,329
		NY-SUN, NY-Sun	224,886
Electric Power Research Institute	4/23/2019	High Performing Grid, PON3770 Effective Grounding	330,012
	4/24/2019	High Performing Grid, PON 3770	400,000
	5/1/2019	High Performing Grid, Smart Inverter Setting Guide	400,000
	5/13/2019	High Performing Grid, "Learning" Smart Inverters	350,000
	6/19/2019	High Performing Grid, PON 3770	399,79
ELP Greenport Solar LLC	5/31/2019	>200KW PV, NY Sun	1,336,000
ELP Kinderhook Solar LLC	8/23/2019	>200KW PV, NY Sun	1,497,600
ELP Stillwater Solar LLC	9/6/2019	REC:CES REC Contracts, Large-Scale Renewables	16,708,47
EMCOR Services Betlem	5/3/2019	Flexible Tech Assistance, FT12084 - Gleason Works - FTC	6,608
	5/15/2019	Flexible Tech Assistance, FT12207-AmericanPack-FTC	10,33
	6/19/2019	Flexible Tech Assistance, FT12222-IsleChem-2801 Long-FTC	10,17
EME Consulting Engineering Group, LLC	4/11/2019	REV Campus Challenge, SA.036c_TWO#8_EP&E PM	198,42
		Technical Services, SA.036c_TWO#8_EP&E PM	198,42
	4/29/2019	Flexible Tech Assistance, FT12080-NYU Langone Bkyn-FTC	60,00
	5/16/2019	Technical Services, Westchester Tech Services	1,000,000
	6/28/2019	Commercial Real Estate Ten, SA.052_TWO#9_EP&E PM	71,73
		EXISTING FACILITIES, SA.052_TWO#9_EP&E PM	124,29
		K-12 SCHOOLS, SA.052_TWO#9_EP&E PM	90,08
		REV Campus Challenge, SA.052 TWO#9 EP&E PM	72,05
		Technical Services, SA.052_TWO#9_EP&E PM	58,46
	8/26/2019	Real Time Enrgy Management, SA.056 TWO #10 RTEM MF P	188,66
	9/13/2019	Retrofit NY, SA.057_TWO #11 - Multifam APM	297,788
Empire Solar Solutions LLC	4/2/2019	<200KW PV, PON 2112 NY SUN	5,460
	4/5/2019	<200KW PV, PON 2112 NY SUN	5,618
	4/30/2019	<200KW PV, PON 2112 NY SUN	6,370
Employee Lessing of Creater NV	5/6/2019		
Employee Leasing of Greater NY		NYSERDA ADMINISTRATION, TS.006 - Facilities Support	24,66
	5/22/2019	NYSERDA ADMINISTRATION, Temp Employee Services	54,600
	5/29/2019	NYSERDA ADMINISTRATION, TS.006 - Facilities Support	24,668
	7/31/2019	NYSERDA ADMINISTRATION, Temp TWO	33,000
Empower CES, LLC	7/9/2019	NY-Sun	19,712
	8/21/2019	<200KW PV, PON 2112 NY SUN	5,984
	8/26/2019	ENERGY STORAGE, PON 2112 NY SUN	6,250
	9/23/2019	ENERGY STORAGE, PON 2112 NY SUN	12,500
	9/24/2019	<200KW PV, PON 2112 NY SUN	5,003
		PON 2112 NY SUN	176,80
Empower Equity Inc	6/4/2019	Novel Bus Models & Offers, EMPEQ - Scaling a Novel Busine	500,000
ENER-G Rudox, LLC	4/1/2019	Combined Heat and Power, CHPA - 250 South Street	341,35
		Combined Heat and Power, CHPA - St. Mary's Hospital	375,488
	4/2/2019	Combined Heat and Power, CHPA - The Rector	341,353
	5/31/2019	Combined Heat and Power, CHPA - MSK 415 East 68th	1,237,500
		Combined Heat and Power, CHPA - MSK 444 East 68th	1,185,896

Contractor Enercon Services Inc	Date Encumbered 8/26/2019	Contract Description WEST VALLEY DEVELOPMENT PROGRAM, TWO 1 - Review	Total Contract Amount 49,985
Energy & Resource Solutions, Inc.	4/2/2019	EVALUATION, TWO 2 - EEPS2 Closeout	2,088,363
	5/16/2019 5/23/2019	Technical Services, Westchester Tech Services INDUSTRIAL PROCESS EFFICIENCY, Technical Review and	1,000,000 6,105
	5/30/2019	Industrial Process Effic, IPE16226	5,000
	5/50/2019	Industrial Process Effic, IPE16232	7,297
	7/25/2019	Technical Services, RFP3628FlexTechConsultUmbrella	2,080
	8/2/2019	Industrial Process Effic, Technical Review and Program S	620
	8/13/2019	EVALUATION, TWO 3 - GJGNY Audit Only Study	117,427
	8/26/2019	Commercial Real Estate Ten, Efficiency Planning & Engineer	100,000
	9/26/2019	Pay for Performance, TWO 4 - P4P Event Evaluation	160,000
	9/27/2019	Industrial Process Effic, IPE16239	6,935
Energy and Environmental Economics	4/5/2019	Rmve Barriers Dist Enrgy Storg, TWO #16 Clean Peaks Study	225,000
Inc.	6/18/2019	Mkt Char: Tech Assist, TWO #17 Heat Pump Analysis	110,000
	7/22/2019	Community RH&C, TWO for Phase 2 Analysis	163,720
	8/1/2019	Electric Vehicles - Innovation, TWO#19 - EVSE/Util. Investment	47,750
Energy Improvement Corporation	4/19/2019	GJGNY REVOLVING LOAN FUND, EIC PACE financing progra	500,000
Energy Infrastructure Partners LLC	9/12/2019	Retrofit NY, Demand Pipeline Consultant	200,000
Energy Technology Savings, Inc.	6/21/2019	Real Time Enrgy Management, ETS - 90 Washington St - RTEM	2,438
Energy Week Holdings, LLC	5/22/2019	NYSERDA ADMINISTRATION, 2019 New York Energy Week	5,000
Enlighten Solar Inc	7/15/2019	>200KW PV, NY-Sun C&I	10,438
EnterSolar LLC	5/10/2019	PON 2112 NY SUN	577,530
Environment & Energy Publishing, LLC	4/12/2019	NYSERDA ADMINISTRATION, Counsel's Office	13,195
Erdman Anthony & Associates, Inc.	4/9/2019	Industrial Process Effic, Technical Review and Program S	6,336
	5/9/2019	Industrial Process Effic, IPE16209	5,615
	8/7/2019	INDUSTRIAL PROCESS EFFICIENCY, Technical Review and	1,954
	8/23/2019	Commercial New Construc, Commercial New Construction	38,619
		Industrial Process Effic, Technical Review and Program S	1,057
Erie Community College	7/31/2019	Workforce Industry Partnership, PON 3715 Workforce Training	65,720
Erin Renewables, LLC	9/26/2019	>200KW PV, NY Sun	587,412
Ery Tenant LLC	9/12/2019	NEW CONSTRUCTION PROGRAM, NCP11551 - Hudson Yard	450,293
ESRI, Incorporated	8/2/2019	NYSERDA ADMINISTRATION, ArcGIS Desktop and Spatial	22,200
Etsy, Inc.	5/1/2019	Flexible Tech Assistance, FT12103-Etsy BK HQ - PON	19,943
Ex Libris, LLC	6/5/2019	Multifam New Construction, 2019 MFCNP	102,400
Extraterrestrial Materials Inc.	5/28/2019	<200KW PV, PON 2112 NY SUN	6,930
	6/5/2019	<200KW PV, PON 2112 NY SUN	1,155
	9/27/2019	<200KW PV, PON 2112 NY SUN	14,333
Fairport Municipal Commission	6/21/2019	CLEANER GREENER COMMUNITIES, CEC300330-Vill of Fair	50,000
Fifth Avenue Committee, Inc.	5/21/2019	NY-SUN, FAC Solar	131,899
First Colonie Company	8/15/2019	Strategic Energy Manager, 2019 SEM Workshops	6,500
First Columbia Property Services, LLC	4/9/2019	NYSERDA ADMINISTRATION, Property Management	35,000
	4/10/2019	NYSERDA ADMINISTRATION, Property Management	230,372
	5/2/2019	Property Management	25,000
First Quality Maintenance II, LLC	6/20/2019	NYSERDA ADMINISTRATION, Admin-NYC (Accounting Use)	31,250
	9/25/2019	NYSERDA ADMINISTRATION, NYC Office Cleaning	122,137
	9/26/2019	NYSERDA ADMINISTRATION, NYC Office Cleaning-15th Floor	19,292
First Republic Corp of America	9/4/2019	Home Perf w Energy Star, 2019 NY Res Home Reg Training	4,000
Florenton River LLC	4/2/2019	<200KW PV, PON 2112 NY SUN	5,625
	9/23/2019	<200KW PV, PON 2112 NY SUN	8,750
Forbes-Capretto Homes	4/4/2019	Low Rise New Construction, 2019 LRNCP	5,700
Forest Hills MHA Housing Development.	. 4/19/2019	Multifam Performance Pgm, Multifamily	301,000
Forestville Central School District	4/30/2019	Flexible Tech Assistance, FT12079 - Forestville CSD -PON	12,000
Forteq North America Inc.	4/9/2019	Industrial Process Effic, Industrial Process Efficiency	9,860
Four Points Group, Inc.	8/23/2019	OTHER PROGRAM AREA, RFQL 3685 R2	48,888
Fourth Coast, Inc.	4/26/2019	<200KW PV, PON 2112 NY SUN	5,182
· -	5/30/2019	<200KW PV, PON 2112 NY SUN	56,430

Contractor Fourth Coast, Inc.	Date Encumbered	Contract Description	Total Contract Amoun
,	6/5/2019	<200KW PV, PON 2112 NY SUN	26,366
	9/12/2019	<200KW PV, PON 2112 NY SUN	11,138
	9/19/2019	<200KW PV, PON 2112 NY SUN	7,056
Fred F. Collis & Sons, Inc.	6/27/2019	Talent Pipeline:CE and OJT, OJT HIRE	6,720
	7/10/2019	Talent Pipeline:CE and OJT, OJT HIRE	7,200
	7/23/2019	Talent Pipeline:CE and OJT, OJT HIRE	6,240
	8/23/2019	Talent Pipeline:CE and OJT, OJT HIRE	9,600
	9/12/2019	Talent Pipeline:CE and OJT, OJT HIRE	9,600
Frederick A Proven	7/22/2019	<200KW PV, PON 2112 NY SUN	5,670
	8/13/2019	<200KW PV, PON 2112 NY SUN	9,765
	9/30/2019	<200KW PV, PON 2112 NY SUN	5,796
Frewsburg Central School	6/10/2019	Flexible Tech Assistance, FT12218 - Frewsburg CSD - PON	22,900
Frontier Energy, Inc.	5/28/2019	Air Source Heat Pumps, Develop ASHP Pro Forma Tool	39,000
	6/28/2019	INDUSTRIAL PROCESS EFFICIENCY, Technical Review_Prg	2,880
	7/19/2019	Geothermal Incentive Program, Technical Review_Prgm Support	45,000
	7/25/2019	Community RH&C, Technical Review_Prgm Support	12,000
		Industrial Process Effic, IPE16229	5,460
	9/27/2019	ANAEROBIC DIGESTER, ADG - Frontier - TWO	86,500
		Combined Heat and Power, ADG - Frontier - TWO	86,500
Fusco Personnel, Inc.	6/7/2019	NYSERDA ADMINISTRATION, Temp Services - Marketing PM	189,810
	6/26/2019	NYSERDA ADMINISTRATION, Temporary Services - Reception	9,461
	7/3/2019	NYSERDA ADMINISTRATION, TS.002_Multifamily Coordinator	31,325
	8/6/2019	REC:CES REC System Dev Costs, TS.007 - LSR Office Admini	107,671
Fusion Energy Services LLC	9/19/2019	<200KW PV, PON 2112 NY SUN	5,891
GCOM Software LLC	6/14/2019	NYSERDA ADMINISTRATION, Salesforce	1,200,000
Geatain Engineering PLLC	9/16/2019	Commercial Real Estate Ten, Geatain Engineer - 485 5th Ave	5,000
General Electric Co. Gobal Research	4/29/2019	On-Site Energy Manager, OsEM23- GE Global Research Cen	214,000
General Electric International Inc	5/28/2019	Solar Plus Energy Storage, NY Sun	3,500,000
	6/7/2019	>200KW PV, NY Sun	919,360
Generate Capital Inc.	7/3/2019	<200KW PV, NY-Sun	356,040
		NY-Sun	127,926
	7/9/2019	NY-Sun	86,112
	7/18/2019	NY-Sun	518.742
George E Denmark II	5/1/2019	<200KW PV, PON 2112 NY SUN	8,715
	9/12/2019	<200KW PV, PON 2112 NY SUN	7,686
Geotherm Inc.	4/17/2019	<200KW PV, PON 2112 NY SUN	8,680
Geotherm mc.	7/10/2019	<200KW PV, PON 2112 NY SUN	6,748
	8/8/2019		5,180
Gladstein, Neandross & Associates, LLC		<200KW PV, PON 2112 NY SUN	99,564
		Electric Vehicles - Innovation, DCFC Permitting Study	
Glenmere Lake Solar LLC	6/26/2019	Solar Plus Energy Storage, NY Sun	2,000,000
Global Dwelling, LLC	4/30/2019	Talent Pipeline:CE and OJT, OJT HIRE	7,200
	8/1/2019	Talent Pipeline:CE and OJT, OJT HIRE	7,200
Goldman Copeland Associates, P.C.	4/1/2019	Flexible Tech Assistance, FT12070-Vornado655-663 5th-FTC	13,991
	4/9/2019	Commercial Real Estate Ten, GoldmanCopelane - 230 Park Ave	10,997
	4/15/2019	Commercial Real Estate Ten, Goldman&Copeland-505 Park Ave	10,997
	5/14/2019	Flexible Tech Assistance, FT12101 - ERT 250 W 57th - FTC	14,993
	6/10/2019	Commercial Real Estate Ten, Goldman&Copeland-595 Madison	10,997
		Commercial Real Estate Ten, Goldman&Copeland-885 Second	11,965
	6/19/2019	Flexible Tech Assistance, FT12086-RFR Realty-390Park-FTC	18,997
	6/24/2019	Commercial Real Estate Ten, Goldman-2000 Westchester Av-CT	11,000
	7/1/2019	Commercial Real Estate Ten, Goldman&Copeland-32-36 Cooper	9,980
		Commercial Real Estate Ten, Goldman&Copeland-667 Madison	18,962
GPSDC New York Inc	9/23/2019	Industrial Process Effic, Industrial Process Efficiency	503,908
Green City Force	6/24/2019	Talent Pipeline:CE and OJT, PON3981 WFD Capacity Building	180,993
Green Hybrid Energy Solutions Inc.	5/16/2019	<200KW PV, NY-Sun	8,424
	7/17/2019	PON 2112 NY SUN	132,444

Contractor	Date Encumbered	Contract Description	Total Contract Amoun
Green Hybrid Energy Solutions Inc.	7/22/2019	<200KW PV, PON 2112 NY SUN	6,143
	7/23/2019	PON 2112 NY SUN	11,934
	8/20/2019	<200KW PV, PON 2112 NY SUN	167,040
Green Light New York, Inc.	4/25/2019	Real Time Enrgy Management, Green Seeds sponsorship	15,000
	5/15/2019	Prof & Expert Engagement, 2019 BEEx Watt Membership	50,000
Green Street Power Partners LLC	4/3/2019	PON 2112 NY SUN	349,488
	4/22/2019	PON 2112 NY SUN	77,760
	6/4/2019	PON 2112 NY SUN	178,920
	7/9/2019	<200KW PV, NY-Sun	20,000
		NY-Sun	30,150
		PON 2112 NY SUN	1,010,880
	7/17/2019	PON 2112 NY SUN	406,944
Green Team USA, LLC	6/28/2019	WORKFORCE DEVELOPMENT, OJT HIRE	10,240
	7/15/2019	WORKFORCE DEVELOPMENT, OJT HIRE	5,760
	7/16/2019	WORKFORCE DEVELOPMENT, OJT HIRE	6,080
	8/13/2019	WORKFORCE DEVELOPMENT, OJT HIRE	5,120
	8/27/2019	WORKFORCE DEVELOPMENT, OJT HIRE	7,040
	9/4/2019	WORKFORCE DEVELOPMENT, OJT HIRE	5,120
	9/18/2019	WORKFORCE DEVELOPMENT, OJT HIRE	5,120
	9/23/2019	Talent Pipeline:CE and OJT, OJT HIRE	5,760
Greenpac Mill, LLC	6/27/2019	Industrial Process Effic, Industrial Process Efficiency	153,500
GreenStar Cooperative Market	8/21/2019	Commercial New Construc, Commercial New Construction	36,778
Grid City Electric Corp	5/8/2019	<200KW PV, NY-Sun	20,000
		NY-Sun	37,584
	7/16/2019	<200KW PV, NY-Sun	19,152
		NY-Sun	28,728
	7/17/2019	PON 2112 NY SUN	6,132
	9/17/2019	PON 2112 NY SUN	26,796
	9/24/2019	PON 2112 NY SUN	18,711
Group-S LLC	5/21/2019	Flexible Tech Assistance, FT12211 - 90 Broad - FTC	29,000
	6/19/2019	Flexible Tech Assistance, FT12224-2 CharltonHouseCHP-FTC	30,750
	8/27/2019	Flexible Tech Assistance, FT12243-TempleIsraelofNR-FTC	8,500
GSPP Grand Island B, LLC	6/19/2019	>200KW PV, NY-Sun C&I	325,615
GSPP SP 1 55-30 58th St., LLC	4/25/2019	>200KW PV, NY-Sun C&I	559,705
GSPP SP 2 Sing Po, LLC	4/29/2019	>200KW PV, NY-Sun C&I	231,602
GTT Communications, Inc.	4/17/2019	Industrial Process Effic, Industrial Process Efficiency	34,437
GZA GeoEnvironmental of New York	4/19/2019	WEST VALLEY DEVELOPMENT PROGRAM, Trench 14 Investi	58,252
Habitat for Humanity (Capital District)	8/20/2019	Low Rise New Construction, 2019 LRNCP	6,800
Habitat Net Zero LLC	6/12/2019	Low Rise New Construction, 2019 LRNCP	54,600
labitat New Lots LLC	4/1/2019	Low Rise New Construction, 2019 LRNCP	12,000
lalcyon Inc.	9/6/2019	Novel Bus Models & Offers, Clean Energy as a Service	490,399
lalcyon, Inc.	7/11/2019	Talent Pipeline:CE and OJT, OJT HIRE	8,968
	7/15/2019	Talent Pipeline:CE and OJT, OJT HIRE	8,968
	9/24/2019	<200KW PV, PON 2112 NY SUN	6,762
lales Mills Solar, LLC	6/4/2019	Solar Plus Energy Storage, NY Sun	3,500,000
lannacroix Solar Facility LLC	7/15/2019	REC:CES REC Contracts, Large-Scale Renewables	5,460,400
larris Beach PLLC	8/2/2019	GJGNY REVOLVING LOAN FUND, RFP 3300 Outside Counsel	10,000
larris Wiltshire & Grannis LLP	5/2/2019	ENERGY ANALYSIS, RFP3776 Outside Counsel Servic	25,000
	9/18/2019	NYSERDA ADMINISTRATION, Green Economy Research	75,000
larvest Power, LLC	9/12/2019	<200KW PV, NY-Sun	13,334
		NY-Sun	20,001
	9/19/2019	PON 2112 NY SUN	16,320
lawn Heating & Energy Services LLC	5/31/2019	Talent Pipeline:CE and OJT, OJT HIRE	5,440
	9/5/2019	Talent Pipeline:CE and OJT, OJT HIRE	6,080
Heartshare Human Services of NY	6/13/2019	LMI Community Solar, SfA Outreach Assistance	50,000
Heat Keepers, Inc.	4/23/2019	Talent Pipeline:CE and OJT, OJT HIRE	5,120

Contractor Heat Keepers, Inc.	Date Encumbered	Contract Description	Total Contract Amoun
near Neepers, mc.	6/5/2019	Talent Pipeline:CE and OJT, OJT HIRE	5,120
	7/31/2019	Talent Pipeline:CE and OJT, OJT HIRE	5,120
Hecate Energy New York LLC	8/5/2019	REC:CES REC Contracts, Large-Scale Renewables	46,123,202
Helios Lenox 1 LLC	5/28/2019	Solar Plus Energy Storage, NY Sun	7,000,000
Heritage Village Apartments, LLC	7/17/2019	Multifam Performance Pgm, Multifamily	313,600
Hewlett-Packard Enterprise Company	8/9/2019	NYSERDA ADMINISTRATION, HP Server Maintenance	5,319
High Peaks Solar	4/2/2019	>200KW PV, NY Sun	1,254,528
	4/9/2019	<200KW PV, PON 2112 NY SUN	8,418
	4/11/2019	<200KW PV, PON 2112 NY SUN	5,544
	8/5/2019	<200KW PV, PON 2112 NY SUN	332
	8/13/2019	<200KW PV, PON 2112 NY SUN	6,048
Hilton Albany	4/2/2019	Off-Shore Wind Pre-Dev Act, 2019 Offshore Wind Sup Forum	13,407
	6/17/2019	Off-Shore Wind Pre-Dev Act, 2019 Offshore Wind Sup Forum	3,133
Hodgson Russ LLP	8/2/2019	Home Perf w Energy Star, RFP 3300 & RFP 3776 Outside Co	20,000
Holland & Knight LLP	6/6/2019	Green Bank Outside Legal Serv.	31,001
		NEW YORK GREEN BANK, Green Bank Outside Legal Serv.	48,668
	9/20/2019	NYSERDA ADMINISTRATION, Nuclear Facility Bankruptcy	272
Homeridae LLC	7/30/2019	>200KW PV, NY-Sun C&I	1,147,666
Honeywell International Inc.	7/2/2019	Home Perf w Energy Star, SQA HPwES/EmPower in LI	25,000
	7/11/2019	Air Source Heat Pumps, 3695 TWO Umbrella Agreement	95,000
	7/29/2019	3695 TWO Umbrella Agreement	25,000
		ASSISTED HOME PERFORMANCE WITH ENERGY STAR, 36	17,832
		EMPOWER NY, 3695 TWO Umbrella Agreement	30,634
		Home Perf w Energy Star, 3695 TWO Umbrella Agreement	757,740
		HOME PERFORMANCE WITH ENERGY STAR, 3695 TWO U	8,793
Houghton College	5/29/2019	Technical Services, OSEM28-C - Houghton College	172,735
Housing Works	5/3/2019	Workforce Industry Partnership, PON 3715 Workforce Training	6,555
HSBC Bank USA, N.A.	8/5/2019	Industrial Process Effic, Industrial Process Efficiency	19,173
HUB Controls USA Inc	4/17/2019	76 West, 76West Energy Bus Competition	500,000
Hudson River Renewables	7/22/2019	<200KW PV, PON 2112 NY SUN	5,040
Hudson Valley Clean Energy Inc.	5/13/2019	<200KW PV, PON 2112 NY SUN	8,978
	5/15/2019	<200KW PV, PON 2112 NY SUN	12,600
	7/1/2019	<200KW PV, PON 2112 NY SUN	8,559
	7/8/2019	>200KW PV, NY Sun	488,852
	7/17/2019	<200KW PV, PON 2112 NY SUN	14,142
	7/22/2019	<200KW PV, PON 2112 NY SUN	5,863
	7/23/2019	NY-SUN, NY-Sun	194,040
	7/24/2019	<200KW PV, PON 2112 NY SUN	1,102
	8/12/2019	<200KW PV, PON 2112 NY SUN	13,419
	8/29/2019	<200KW PV, PON 2112 NY SUN	21,863
	9/10/2019	<200KW PV, PON 2112 NY SUN	5,272
	9/16/2019	<200KW PV, PON 2112 NY SUN	8,750
	9/23/2019	<200KW PV, PON 2112 NY SUN	6,132
Hudson Valley Wind Energy, LLC	9/30/2019	<200KW PV, PON 2112 NY SUN	5,733
Hyatt Corporation as agent for Hyatt Equ	5/16/2019	Off-Shore Wind Pre-Dev Act, Reception at IPF Conference	9,430
	6/18/2019	Off-Shore Wind Pre-Dev Act, Reception at IPF Conference	5,000
ICF Incorporated LLC	9/11/2019	EVALUATION, TWO 1 -GJGNY Audit Only Impact	49,346
CF Resources, LLC	5/28/2019	Combined Heat and Power, TWO 3 Hybrid Prog. Support	9,961
	8/9/2019	Air Source Heat Pumps, P12 Clean Energy Screening TWO	59,681
		Campus/Technical Assistance, P12 Clean Energy Screening T	234,810
		K-12 SCHOOLS, P12 Clean Energy Screening TWO	58,703
	9/3/2019	ENERGY ANALYSIS, TWO #4 - Statewide NG Study	748,361
IESI NY Corporation	5/14/2019	NYSERDA ADMINISTRATION, Trash Removal from NYC Office	5,060
IHS Global Inc.	9/27/2019	ENERGY ANALYSIS, PointLogic Gas Service Subscri	5,000
IKEA US Retail LLC	9/12/2019	Fuel Cells, Fuel Cell Incentive - FC-022	288,750

Contractor	Date Encumbered	Contract Description	Total Contract Amoun
In Time of Need, Inc.	7/31/2019	NY-SUN, New Gospel Temple Bronx	89,000
Incorporated Village of Philmont	8/16/2019	CEC400097 - Village of Philmon	30,00
		Clean Energy Communities, CEC400097 - Village of Philmon	5,00
ndustrial Economics, Incorporated	5/15/2019	Large Scale Renewables, RFQ3183 Umbrella Agreement	6,72
	6/21/2019	EVALUATION, TWO 1 Grid Moderniz Case Study	15,99
		High Performing Grid, TWO 1 Grid Moderniz Case Study	15,99
	6/24/2019	OTHER PROGRAM AREA, TWO 2 New York State Truck – V	400,00
	7/22/2019	EVALUATION, TWO 1 Grid Moderniz Case Study	2,52
		High Performing Grid, TWO 1 Grid Moderniz Case Study	2,52
	9/16/2019	NYSERDA ADMINISTRATION, Research of Indian Point Purch	26,40
NF Associates LLC	7/1/2019	Commercial Real Estate Ten, INF Associates-250 W 55th St	5,00
	8/5/2019	Commercial Real Estate Ten, INF-19 E57th Street FI 3, 8-17	15,46
	8/21/2019	Commercial Real Estate Ten, INF Associates LLC - Multisite	50,00
	8/27/2019	Commercial Real Estate Ten, INF Associates LLC - Multisite	75,00
	9/10/2019	Commercial Real Estate Ten, INF - 1350 Ave Of The Americas	5,00
nfinity Solar Systems, LLC	7/22/2019	<200KW PV, PON 2112 NY SUN	5,04
	9/17/2019	<200KW PV, PON 2112 NY SUN	5,18
nTech Energy, Inc.	4/23/2019	Real Time Enrgy Management, InTech-6111 Queens Blvd-RTEM	28,32
	5/8/2019	Real Time Enrgy Management, InTech Energy-Multisite-RTEM	17,65
nterface Performance Material	6/10/2019	Industrial Process Effic, Industrial Process Efficiency	1,84
	8/28/2019	Industrial Process Effic, Industrial Process Efficiency	24,99
International Electronic Machines Corp.,	6/14/2019	CLEAN TRANSPORTATION, Noncontact Elect. Wheel Gauge	249,78
International Energy Program	6/27/2019	EVALUATION, Performance Management	5,00
Intralinks, Inc.	8/16/2019	NEW YORK GREEN BANK, 3PC VDR Services	4,50
somedix Operations Inc	9/12/2019	<200KW PV, NY-Sun	178,20
thaca Neighborhood Housing Services,		Low Rise New Construction, 2019 LRNCP	165,20
Jaros, Baum & Bolles	9/5/2019	Flexible Tech Assistance, FT12094 125 Broad-CushWake-FTC	40,78
Jaros, Daum & Dones	5/5/2015	Flexible Tech Assistance, FT12216 - 55 Water - FTC	40,00
JEM ENGINEERING SERVICES	7/10/2019	High Performing Grid, PN3770 Model Fault overvoltage	325,83
JFK Hotel Owner LLC			
	8/29/2019	Home Perf w Energy Star, 2019 NY Res. Reg. Training-NYC	5,00
Johnson Controls Inc.	6/24/2019	Real Time Enrgy Management, JohnsonChtrls-EmpireState-RT.	209,81
Johnson Controls, Inc. (Syracuse)	4/1/2019	Flexible Tech Assistance, FT12085 - Gananda CSD - FTC	35,25
Johnstown 2 Solar, LLC	9/11/2019	>200KW PV, NY Sun C&I	919,86
Jones Lang LaSalle Americas, Inc.	6/17/2019	Commercial Real Estate Ten, JJL Americas-Multisite	77,60
	7/1/2019	Commercial Real Estate Ten, JLL Americas, Inc-Multisite	35,000
	7/30/2019	On-Site Energy Manager, OsEM25-I - IBM North Castle	205,44
	8/26/2019	On-Site Energy Manager, OsEM29-I - IBM Poughkeepsie	214,000
	8/29/2019	Real Time Enrgy Management, JLL - Multisite - RTEM	102,18
	9/18/2019	Commercial Real Estate Ten, JLL - Multisite	40,00
		Commercial Real Estate Ten, JLL Americas, Inc - Multisite	55,00
Jordan Energy and Food Enterprises L	8/21/2019	<200KW PV, PON 2112 NY SUN	42,85
JR Language Translation Services, Inc.	9/3/2019	OREC: Technical Support, OSW Translation Services	50,00
Kamtech Restoration Corp	4/12/2019	<200KW PV, PON 2112 NY SUN	5,50
Kasselman Solar LLC	4/2/2019	<200KW PV, PON 2112 NY SUN	5,37
	4/9/2019	<200KW PV, PON 2112 NY SUN	2,46
	4/18/2019	<200KW PV, PON 2112 NY SUN	5,04
	4/23/2019	<200KW PV, PON 2112 NY SUN	5,04
	5/6/2019	<200KW PV, PON 2112 NY SUN	5,04
	5/8/2019	<200KW PV, PON 2112 NY SUN	13,68
	5/10/2019	<200KW PV, NY-Sun	6,06
	5/15/2019	<200KW PV, PON 2112 NY SUN	3,36
	5/23/2019	<200KW PV, NY Sun	1,81
	512012013	<200KW PV, PON 2112 NY SUN	2,70
	6/3/2010		
	6/3/2019	<200KW PV, PON 2112 NY SUN	23,004
	6/17/2019	<200KW PV, PON 2112 NY SUN	2,570
	6/24/2019	<200KW PV, NY-Sun	

Contractor Kasselman Solar LLC	Date Encumbered	Contract Description	Total Contract Amount
	6/26/2019	<200KW PV, PON 2112 NY SUN	5,152
	7/3/2019	<200KW PV, PON 2112 NY SUN	56,880
	7/9/2019	<200KW PV, PON 2112 NY SUN	11,690
	8/1/2019	<200KW PV, PON 2112 NY SUN	7,269
	8/5/2019	<200KW PV, PON 2112 NY SUN	2,700
	8/6/2019	<200KW PV, PON 2112 NY SUN	12,782
	8/13/2019	<200KW PV, PON 2112 NY SUN	5,712
	8/20/2019	<200KW PV, PON 2112 NY SUN	26,314
	8/22/2019	<200KW PV, PON 2112 NY SUN	8,211
	8/26/2019	<200KW PV, PON 2112 NY SUN	6,384
	8/29/2019 9/3/2019	<200KW PV, PON 2112 NY SUN	16,200
	9/4/2019	<200KW PV, PON 2112 NY SUN <200KW PV, PON 2112 NY SUN	4,500
	9/5/2019	<200KW PV, PON 2112 NY SUN	5,276
	9/12/2019		
	9/17/2019	<200KW PV, PON 2112 NY SUN <200KW PV, NY-Sun	5,276
	9/19/2019	<200KW PV, NY-Sun	10,480
	9/19/2019	<200KW PV, PON 2112 NY SUN	11,920
	9/30/2019	<200KW PV, PON 2112 NY SUN	18,722
Kawi Energy Group Corp.	6/27/2019	Commercial Real Estate Ten, Kawi Energy Group-Multisite	66,992
Kearns & West, Inc.	8/5/2019	REC:CES REC System Dev Costs, Large-Scale Renewables	24,403
Kelberman Center Inc	8/27/2019	Low Rise New Construction, 2019 LRNCP	56,000
Kelliher Samets Volk	4/5/2019	Intervention Effectiv Training, TWO 22 Building Labeling Mkt	12,920
	5/9/2019	Air Source Heat Pumps, Marketing Support for NYSERDA	300,000
	0/0/2010	Community RH&C, Marketing Support for NYSERDA	750,000
		ENERGY ANALYSIS, TWO 27: 2019 SEP Marketing	250,000
		Geothermal Incentive Program, Marketing Support for NYSERDA	750,000
		Renewable Heat NY, Marketing Support for NYSERDA	100,000
	6/28/2019	Intervention Effectiv Training, TWO 22 Building Labeling Mkt	249,900
	8/29/2019	New Construction- Commercial, TWO 28 Carbon Neutral Bldgs	200,000
		New Construction- Housing, TWO 28 Carbon Neutral Bldgs	400,000
	9/12/2019	NYSERDA ADMINISTRATION, TWO 29 Global Paid Search	12,000
Key Bank	5/21/2019	NY-Sun	346,500
	8/7/2019	ESTOR:Retail Storage Incentive, Energy Storage	464,000
	8/14/2019	<200KW PV, NY-Sun	691,713
	8/20/2019	<200KW PV, NY-Sun	304,776
Key Capture Energy, LLC	9/6/2019	ESTOR:Bulk Storage Incentive, Bulk Storage Incentive	1,361,250
Kilowatt Engineering, Inc.	4/29/2019	Industrial Process Effic, 2621 Umbrella Contract	2,617
	5/2/2019	Industrial Process Effic, IPE16230	5,164
	5/16/2019	Industrial Process Effic, IPE16236	8,228
	5/22/2019	Industrial Process Effic, 2621 Umbrella Contract	1,814
	6/19/2019	Industrial Process Effic, 2621 Umbrella Contract	6,146
	7/8/2019	Industrial Process Effic, IPE16242	16,782
		Industrial Process Effic, IPE16243	32,069
	7/9/2019	Industrial Process Effic, 2621 Umbrella Contract	4,332
	8/28/2019	Industrial Process Effic, IPE16230	7,000
Kisco River Solar, LLC	4/22/2019	NY-Sun	513,975
KPMG LLP	9/23/2019	NEW YORK GREEN BANK, Audit Services	14,960
L&S Energy Services, Inc.	4/9/2019	Industrial Process Effic, Umbrella Contract	6,900
		Technical Services, AGG1003 - L&S Energy Services	50,000
	4/10/2019	Technical Services, AGG1004 - L&S Energy Services	50,000
	4/18/2019	Commercial New Construc, RFP3771 Umbrella Contract	46,455
	4/30/2019	Industrial Process Effic, Industrial Process Efficiency	5,007
		Industrial Process Effic, IPE16220	5,000
	5/1/2019	REV Campus Challenge, Tech Assistance for Roadmaps	88,831
	6/17/2019	Industrial Process Effic, IPE16235	10,000

Contractor L&S Energy Services, Inc.	Date Encumbered		Total Contract Amount
Las Energy Services, Inc.	7/10/2019	NEW CONSTRUCTION PROGRAM, Umbrella Contract	5,000
	8/2/2019	Industrial Process Effic, Industrial Process Efficiency	4,735
LaBella Associates, P.C.	4/2/2019	Technical Services, RFP3628FlexTechConsultUmbrella	2,500
	4/18/2019	New Construction- Commercial, RFP3771 Umbrella Contract	10,940
	6/14/2019	Flexible Tech Assistance, FT12205 - Xerox Building - FTC	6,708
	9/25/2019	Geothermal Incentive Program, Large-Scale GSHP	126,996
Lamphear Court Townhomes LLC	4/2/2019 6/26/2019	Low Rise New Construction, New Construction	86,100
Lansing Renewables, LLC	0/20/2019	>200KW PV, NY-Sun C&I	1,354,645
Lapeer-Cortland Solar, LLC	4/2/2019	Solar Plus Energy Storage, NY-Sun C&I >200KW PV, NY Sun	3,499,999
Lapeer-Contianu Solar, LEC	6/18/2019	>200KW PV, NY Sun	3,000,000
LaRocque Business Management Servi		Electric Vehicles - Innovation, EV outreach @ home showcase	11,000
Legacy Yards Tenant LLC	9/26/2019	EXISTING FACILITIES, DMP Bonus - 10 Hudsdon Yards	124,526
Lemor Development Group, LLC	5/22/2019	Multifam Performance Pgm, Multifamily	150,500
	6/4/2019	Multifam New Construction, MFNCP - Balton Commons	129,500
Leonard Carl Neckers Jr	8/26/2019	Anaerobic Digesters, PON 3739 CAT C	129,000
Level 3 Communications, LLC	7/11/2019	NYSERDA ADMINISTRATION, Information Technology	215,001
Levitan & Associates, Inc.	6/28/2019		50,000
Levitari & Associates, IIIC.	7/16/2019	REC:CES REC System Dev Costs, Support for Index REC Petiti REC:CES REC System Dev Costs, RESRFP19-1 TEP Support	48,960
Lewis Custom Homes, Inc.	4/1/2019	Low Rise New Construction, 2019 LRNCP	5,000
Libolt & Sons, Inc.	9/26/2019	Low Rise New Construction, 2019 LRNCP	75,800
Lifetime Housing Development Corpora		Low Rise New Construction, 2019 LRNCP	48,000
Lincoln Park DG LLC	9/20/2019	ESTOR:Bulk Storage Incentive, Bulk Storage Incentives	8,800,000
Little Falls Solar, LLC	6/26/2019	>200KW PV, NY Sun	589,410
Livingston 4 Solar, LLC	9/12/2019	>200KW PV, NY Sun C&I	919,860
Local 32BJ Thomas Shortman Training	6/19/2019	Talent Pipeline:CE and OJT, PON3981 WFD Capacity Building	130,650
Lodestar Energy	9/20/2019	>200KW PV, NY Sun	1,472,120
Loeb & Loeb LLP	5/13/2019	NEW YORK GREEN BANK, Green Bank Outside Legal Couns	3,312
	6/6/2019	NEW YORK GREEN BANK, Green Bank Outside Legal Couns	12,450
Long Island Power Authority	9/4/2019	NY-SUN, LIPA MOU RGGI Compliance Progr	25,000,000
Loring Consulting Engineers, Inc.	4/30/2019	Flexible Tech Assistance, FT12099 – 25-30 Columbia – FTC	45,712
Lotus Energy, Inc.	4/4/2019	<200KW PV, PON 2112 NY SUN	6,300
	5/9/2019	<200KW PV, PON 2112 NY SUN	7,776
LTM Ventures LLC	9/17/2019	Cleantech ICC Engage, Customer Assessment	48,500
Luminate, LLC	5/31/2019	Outside Technical and Eng. Srv	30,000
Luminosity Events, Inc	9/10/2019	OTHER PROGRAM AREA, 2019 Climate Leadership Forum	13,518
	9/24/2019	OTHER PROGRAM AREA, 2019 Climate Leadership Forum	2,550
M.J. Beck Consulting LLC	8/7/2019	REC:CES REC System Dev Costs, TWO-2-IE_2019	35,000
M/E Engineering, P.C.	5/15/2019	Technical Services, Westchester Tech Services	1,000,000
	7/16/2019	REV Campus Challenge, RM30-Cornell University-FTC	224,140
	8/7/2019	Industrial Process Effic, Technical Review and Program S	6,000
MacQuesten Construction Management	6/4/2019	Multifam New Construction, New Construction	33,400
Maguire Cars LLC	4/26/2019	NYSERDA Administration	28,887
Malcarne Contracting, Inc.	4/9/2019	Talent Pipeline:CE and OJT, OJT HIRE	8,640
	7/8/2019	Talent Pipeline:CE and OJT, OJT HIRE	12,000
Malta Development Company Inc	7/16/2019	Low Rise New Construction, 2019 LRNCP	20,900
Maple Housing Development Fund Corp	4/5/2019	Multifam Performance Pgm, Multifamily	80,500
Marriott Hotel Services	8/20/2019	Combined Heat and Power, Onsite Resilient Power Conf	71,658
Marshall & Sterling, Inc.	4/12/2019	NYSERDA ADMINISTRATION, Property Liability and Other	275,000
Martin Energy Group Services, LLC	4/2/2019	Combined Heat and Power, CHPA-Amalgamated Housing Corp	202,236
Maspeth Contracting Corp.	5/16/2019	<200KW PV, NY-Sun	12,118
Mastercard International	5/20/2019	NY-Sun	298,080
Mayer Brown LLP	5/2/2019	Green Bank	17,282
	7/24/2019	Green Bank	3,205
McMahon and Mann Consulting	8/9/2019	WEST VALLEY DEVELOPMENT PROGRAM, 2019-2020 Annu	10,000
Engineers	8/23/2019	WEST VALLEY DEVELOPMENT PROGRAM, TWO 3 - Trench	55,000

Contractor memanon and mann consulting	Date Encumbered	Contract Description	Total Contract Amoun
Engineers	9/4/2019	WEST VALLEY DEVELOPMENT PROGRAM, TWO 2 - Evaluati	75,000
Mechanical Solutions, Inc.	6/24/2019	NextGen HVAC, Two Stage Centrifugal Compress	500,000
Meister Consultants Group, Inc.	7/8/2019	Commercial Real Estate Ten, RFP3631 - CTP Support - Cadmus	49,250
Messer LLC	7/18/2019	Industrial Process Effic, Industrial Process Effeciency	206,793
Michaels Group Homes, LLC	6/26/2019	Low Rise New Construction, 2019 LRNCP	18,050
Milliman, Inc.	7/3/2019	NYSERDA ADMINISTRATION, GASB74 Liab GASB75 OPEB e	5,000
MIMiC Systems Inc	7/24/2019	NextGen HVAC, NextGen HVAC Innovation	330,945
Mizkan Americas, Inc.	8/19/2019	Industrial Process Effic, Industrial Process Efficiency	12,826
MJW Technical Services, Inc.	4/22/2019	WEST VALLEY DEVELOPMENT PROGRAM, Radiation Protect	440,758
Moelis & Company Group LP	7/5/2019	NEW YORK GREEN BANK, 3PC raise advisory Services	100,000
Momentum NA, Inc.	6/17/2019	Commercial Real Estate Ten, RDA-300 Vesey St	10,750
Monolith Solar Associates, LLC	8/14/2019	<200KW PV, PON 2112 NY SUN	214,974
	8/29/2019	>200KW PV, NY Sun	780,000
Monroe Cable Company	9/4/2019	INDUSTRIAL PROCESS EFFICIENCY, Industrial Process Effici	314,532
Morse Manufacturing Company Inc	8/12/2019	Industrial Process Effic, Industrial Process Efficiency	6,800
Mount Sinai Medical Center	9/12/2019	Flexible Tech Assistance, FT12248-Mt Sinai-Brooklyn-PON	17,850
MyPower Corp	9/11/2019	>200KW PV, NY Sun C&I	1,331,022
	9/16/2019	>200KW PV, NY-Sun	1,331,022
	9/23/2019	>200KW PV, NY Sun C&I	2,123,296
Nagle House, Inc.	4/10/2019	Multifam Performance Pgm, Multifamily	126,000
NanoHydroChem	6/24/2019	Energy Storage Tech/Prod Dev, Renewable Optimz Energy Stor	200,000
NASEO	5/13/2019	Prof & Expert Engagement, Office of the President & CEO	15,354
National Home Performance Council	9/11/2019	Consumer Ed and Market Support, 2020 Home Performance Co	50,000
	7/11/2019		
National Wind Technology Consortium,	//11/2019	Nat'l OffShWind R&D Consortium, National OSW R&D Concorti	3,416,675
Navigant Consulting Inc.	6/10/2010	National OSW R&D Concortium.	1,729,428
Navigant Consulting Inc.	6/18/2019	ENVIRONMENTAL RESEARCH, TWO 1 - Assessment of Carb	250,000
NCM USA Bronx LLC	6/3/2019	Flexible Tech Assistance, FT12206 - NCM-USA - PON	16,806
NECEC Institute	6/12/2019	Cleantech ICC Engage, 2019 Webinar Series	40,000
	7/2/2019	Cleantech ICC Engage, NECEC 2019 Sponsorship	160,000
NESCAUM	4/23/2019	Prof & Expert Engagement, 2019 ZEV MOU Task Force dues	50,000
NESEA	7/31/2019	Commercial Real Estate Ten, 2019 NESEA BENYC Conf	4,750
		Geothermal Incentive Program, 2019 NESEA BENYC Conf	6,750
		Multifam Performance Pgm, 2019 NESEA BENYC Conf	3,250
		New Construction- Housing, 2019 NESEA BENYC Conf	7,000
		Prof & Expert Engagement, 2019 NESEA BENYC Conf	1,000
		Retrofit NY, 2019 NESEA BENYC Conf	3,250
Network Craze Technologies	8/7/2019	Redundant Network Gear - NYC	19,740
Network Experts of New York, Inc.	7/31/2019	NYSERDA ADMINISTRATION, WAN Redundancy Prof Services	7,860
	9/27/2019	NYSERDA ADMINISTRATION, WAN Redundancy Prof Services	7,860
New 56th and Park NY Owner LLC	8/27/2019	EXISTING FACILITIES, DMP Bonus - 56th & Park NY	94,321
New Buildings Institute, Inc.	6/19/2019	Code to Zero, Task Wok Order #2	100,000
	7/8/2019	Prof & Expert Engagement, Codes, Products and Standards	25,000
New Destiny Housing Corporation	7/2/2019	Multifam New Construction, New Construction	54,000
New York City Energy Efficiency Corp	4/25/2019	Intervention Effectiv Training, Marketing support IPNA	50,000
New York Marriott Marquis	5/8/2019	Off-Shore Wind Pre-Dev Act, 2019 OSW Supplier Forum	80,000
	7/15/2019	Off-Shore Wind Pre-Dev Act, 2019 OSW Supplier Forum	9,766
New York Passive House Inc.	5/8/2019	New Construction- Housing, 2019 NAPHN Annual Forum	7,500
		Retrofit NY, 2019 NAPHN Annual Forum	7,500
New York Power Authority,	5/7/2019	High Performing Grid, PON 3770	750,000
· · · · · · · · · · · · · · · · · · ·	5/13/2019	High Performing Grid, PON 3770	510,000
	5/22/2019	High Performing Grid, PON 3770	300,000
	5/24/2019	High Performing Grid, PON 3770	100,000
	6/4/2019	High Performing Grid, PON 3770	350,000
Navy Varia Calar Franciscus Industria	6/14/2019	OTHER PROGRAM AREA, Clean Transportation	380,000
New York Solar Energy Industries Asso.		>200KW PV, 2019 Policy Forum	10,000
New York State Ag & Markets	4/23/2019	POLICY DEVELOPMENT, 2019 DPS NYS Fair Exhibit	11,933

	•	Total Contract Amoun
		8,950
		5,500
		12,636
		5,150
		5,608
		6,174
		1,390,331
		6,184
4/11/2019		8,160
6/28/2019		496,000
6/13/2019	<200KW PV, PON 2112 NY SUN	5,980
4/9/2019	NEW YORK GREEN BANK, Green Bank Outside Legal Serv.	8,643
6/6/2019	Green Bank Outside Legal Serv.	49,635
7/5/2019	Green Bank Outside Legal Serv.	10,000
8/16/2019	NEW YORK GREEN BANK, Green Bank Outside Legal Serv.	1,108
7/10/2019	Anaerobic Digesters, PON 3739 CAT C	15,000
5/13/2019	Commercial New Construc, New Construction	89,360
9/5/2019	Flexible Tech Assistance, FT12231 - NYPH - Multi - FTC	178,840
9/12/2019	Flexible Tech Assistance, FT12245-Cogswell-215 W 125-FTC	21,765
8/27/2019	Low Rise New Construction, 2019 LRNCP	52,000
7/24/2019	New Construction- Housing, 2019 NAPHN Annual Forum	7,500
	Retrofit NY, 2019 NAPHN Annual Forum	7,500
9/19/2019	Talent Pipeline:CE and OJT, PON3981 Round 3	250,000
4/11/2019	Air Source Heat Pumps, 2019 NEEP Sponsorship	50,000
		25,000
		21,400
		25,000
6/27/2019		10,000
		98,111
0.1.2010		162,240
1/1/2010		26,280
		17,618
		2,531,848
		15,050
		5,670
		6,922
		5,120
		1,281,677
9/27/2019	>200KW PV, NY-Sun C&I	1,281,677
9/27/2019	>200KW PV, NY-Sun C&I	1,281,677
9/27/2019	>200KW PV, NY-Sun C&I	1,281,677
4/18/2019	>200KW PV, NY-Sun C&I	1,142,113
9/23/2019	>200KW PV, NY-Sun	1,194,826
8/23/2019	>200KW PV, Ny Sun C&I	822,961
7/19/2019	Industrial Process Effic, Industrial Process Efficiency	152,143
4/8/2019	OTHER PROGRAM AREA, EVSE Test System	11,850
9/3/2019	NYSERDA ADMINISTRATION, O365 Data Circuit 9/19 - 7/22	11,232
6/24/2019	POLICY DEVELOPMENT, 2019 NYS DPS Printing Services	25,000
6/10/2019	<200KW PV, PON 2112 NY SUN	10,044
8/15/2019	MOU	3,000,000
		.,
8/22/2019	<200KW PV, PON 2112 NY SUN	12.420
8/22/2019	<200KW PV, PON 2112 NY SUN K-12 SCHOOLS P-12 Schools Initiative – Out	12,420
8/22/2019 9/30/2019	K-12 SCHOOLS, P-12 Schools Initiative – Out	144,180
8/22/2019 9/30/2019 9/6/2019	K-12 SCHOOLS, P-12 Schools Initiative – Out Industrial Process Effic, SEM_WRRF_O'Brien&Gere_TWO	144,180 50,000
8/22/2019 9/30/2019	K-12 SCHOOLS, P-12 Schools Initiative – Out	144,180
	 4/9/2019 6/6/2019 7/5/2019 8/16/2019 7/10/2019 5/13/2019 9/5/2019 9/12/2019 8/27/2019 7/24/2019 4/11/2019 6/27/2019 5/1/2019 5/1/2019 8/12/2019 9/18/2019 9/18/2019 9/18/2019 9/18/2019 9/10/2019 9/10/2019 9/27/2019 9/23/2019 8/23/2019 7/19/2019 4/8/2019 9/3/2019 6/24/2019 6/10/2019 	6/27/2019 NYSERDA ADMINISTRATION, 2019 New York State Fair 9/9/2019 NYSERDA ADMINISTRATION, NYS Forum Agency Membership 5/8/2019 <200KW PV, PON 2112 NY SUN

Contractor	Date Encumbered	Contract Description	Total Contract Amoun
OLA Consulting Engineers, P.C.	5/16/2019	Technical Services, Westchester Tech Services	1,000,000
Omniafiltra	5/1/2019	Industrial Process Effic, Industrial Process Efficiency	214,842
One Vanderbilt Owner LLC	9/11/2019	NEW CONSTRUCTION PROGRAM, NCP11626 - 317 Madison	259,560
OnForce Solar	5/20/2019	PON 2112 NY SUN	547,938
OnRout Co.	4/8/2019	OTHER PROGRAM AREA, Dynamic Pricing for Parcels	250,000
Opinion Dynamics Corporation	5/2/2019	ADVANCED BUILDINGS, Pilot Evaluation Services.	43,148
		Clean Energy Communities, RFQ3183 Umbrella Agreement	81,199
		Cleantech Startup Growth, RFQ3183 Umbrella Agreement	70,088
		EVALUATION, RFQ3183 Umbrella Agreement	131,896
		Workforce Industry Partnership, RFQ3183 Umbrella Agreement	56
	5/10/2019	LMI Single Family /2525, TWO 11 BPI Survey	14,228
		Single Family Mt Rt Trans/2515, TWO 11 BPI Survey	14,228
	9/19/2019	Clean Energy Communities, RFQ3183 Umbrella Agreement	30,32
Oppenheim Solar South, LLC	7/11/2019	PV System @ SunyPoly	700,777
Optimal Energy Inc.	6/26/2019	EVALUATION, TWO #1 Downstate NG Peer Rev.	49,928
OPTIMAL SOLUTIONS, INC.	4/23/2019	High Performing Grid, PON 3770 Smart Grid	100,000
Otsego County	4/10/2019	CLEANER GREENER COMMUNITIES, CEC610873 - Otsego C	250,000
Owlville Creek Solar 2, LLC	6/26/2019	>200KW PV, NY-Sun C&I	1,294,704
		Solar Plus Energy Storage, NY-Sun C&I	3,500,000
Owlville Creek Solar, LLC	6/26/2019	>200KW PV, NY-Sun C&I	1,344,653
		Solar Plus Energy Storage, NY-Sun C&I	3,500,00
OYA 2643 Moore Road LLC	8/9/2019	ESTOR:Retail Storage Incentive, NY Sun	650,000
		Solar Plus Energy Storage, NY Sun	3,100,000
DYA BLANCHARD ROAD 2 LLC	8/9/2019	ESTOR:Retail Storage Incentive, NY Sun	3,750,000
DYA BLANCHARD ROAD LLC	8/9/2019	ESTOR:Retail Storage Incentive, NY-Sun	3,750,00
DYA GREAT LAKES SEAWAY LLC	8/9/2019	ESTOR:Retail Storage Incentive, NY Sun	3,750,000
DYA NYS RTE 12 LLC	8/9/2019	ESTOR:Retail Storage Incentive, NY Sun	3,750,00
PA Consulting Group	4/3/2019	ENERGY ANALYSIS, Con Ed NG Moratorium Study	615,193
	5/7/2019	ENERGY ANALYSIS, Con Ed NG Moratorium Study	234,54
	6/14/2019	ENERGY ANALYSIS, Con Ed NG Moratorium Study	28,43
	8/23/2019	ENERGY ANALYSIS, Con Ed NG Moratorium Study	82,04
Pace University School of Law	5/22/2019	CLEANER GREENER COMMUNITIES, CGC31911 - Pace Law.	9,900
Pactiv Corp.	7/25/2019	Industrial Process Effic, Industrial Process Efficiency	12,930
Paradise Energy Solutions, LLC	5/8/2019	<200KW PV, PON 2112 NY SUN	25,097
	5/9/2019	<200KW PV, PON 2112 NY SUN	18,630
	5/29/2019	<200KW PV, PON 2112 NY SUN	19,23 ⁻
	6/10/2019	<200KW PV, PON 2112 NY SUN	70,200
	8/28/2019	<200KW PV, PON 2112 NY SUN	5,717
	9/12/2019	<200KW PV, PON 2112 NY SUN	45,04
	9/23/2019	<200KW PV, PON 2112 NY SUN	6,048
	9/24/2019	<200KW PV, PON 2112 NY SUN	13,16
	9/26/2019	<200KW PV, PON 2112 NY SUN	9,620
Pathfindar Engineers & Architects II.D	4/18/2019	Commercial New Construc, RFP3771 Umbrella Contract	192,578
Pathfinder Engineers & Architects, LLP			
	5/22/2019	Commercial New Construct, New Construction	52,762
	9/16/2019	Commercial New Construct, Commercial New Construction	125,73
Pathstone Corporation	4/15/2019	Community RH&C, Sustainable Home Roch Part C	300,000
Patterson Farms, Inc.	7/29/2019	Anaerobic Digesters, PON 3739 CAT C	15,000
Paul A Bradbury	6/24/2019	POLICY DEVELOPMENT, DPS NYS Fair giveaways	5,12
	9/13/2019	POLICY DEVELOPMENT, DPS NYS Fair giveaways	6,429
Pelham Private Property Corp.	7/15/2019	Net Zero Energy for Eco Dev, NZEED 2018	1,092,000
Penda Aiken Inc.	4/29/2019	NYSERDA ADMINISTRATION, Temporary Receptionist	22,56
ennrose LLC	8/27/2019	New Construction- Housing, 2019 MFCNP	150,800
People United for Sustainable Housing	6/27/2019	Community RH&C, Community CH&C Dev in WNY	500,000
Pepsico, Inc.	6/24/2019	NY-Sun	601,176
	7/31/2019	Consumer Ed and Market Support, TWO 2 - Heat Pump Ready/	48,472
Performance Systems Development	1131/2019	Consumer Eu anu Market Support, 1900 2 - Meat Fump Readyr	40,472

Contractor Phoenix Geothermal Services	Date Encumbered 6/19/2019	Contract Description Talent Pipeline:CE and OJT, OJT HIRE	Total Contract Amoun 5,440
		•	,
Plant Manor LLC	8/22/2019	Geothermal Incentive Program, FT12236 - Alder Manor - PON	33,750
Plattsburgh Community Housing, Inc PlugPV, LLC	8/19/2019	Low Rise New Construction, 2019 LRNCP	40,000
	4/3/2019	<200KW PV, PON 2112 NY SUN	8,680
	4/11/2019	<200KW PV, PON 2112 NY SUN	8,489
	4/17/2019	<200KW PV, PON 2112 NY SUN	6,064
	4/19/2019	<200KW PV, PON 2112 NY SUN	5,954
	5/6/2019	<200KW PV, PON 2112 NY SUN	5,942
	5/7/2019	<200KW PV, PON 2112 NY SUN	5,317
	5/9/2019	<200KW PV, PON 2112 NY SUN	5,292
	5/14/2019	<200KW PV, PON 2112 NY SUN	5,366
	5/15/2019	PON 2112 NY SUN	492
	6/10/2019	<200KW PV, PON 2112 NY SUN	5,513
	7/1/2019	<200KW PV, PON 2112 NY SUN	6,064
	8/6/2019	<200KW PV, PON 2112 NY SUN	5,182
	8/29/2019	<200KW PV, NY-Sun	6,552
	9/9/2019	<200KW PV, PON 2112 NY SUN	11,356
	9/13/2019	<200KW PV, PON 2112 NY SUN	8,600
	9/23/2019	<200KW PV, PON 2112 NY SUN	28,257
	9/26/2019	<200KW PV, PON 2112 NY SUN	5,623
	9/30/2019	<200KW PV, PON 2112 NY SUN	5,292
Potentia Management Group LLC	6/4/2019	Talent Pipeline:CE and OJT, OJT HIRE	5,946
	8/19/2019	Talent Pipeline:CE and OJT, OJT HIRE	11,533
Power Guru, LLC	9/24/2019	<200KW PV, PON 2112 NY SUN	5,184
Powergen Development Group, LLC	4/12/2019	Combined Heat and Power, CHPA - One Carnegie Hill	202,236
Powerhouse Dynamics, Inc	6/17/2019	Real Time Enrgy Management, Powerhouse - Multisite - RTEM	1,062
,,,,,,,,	8/27/2019	Real Time Enrgy Management, Powerhouse-Multisite-RTEM	17,219
Premier Solar Solutions LLC	4/3/2019	PON 2112 NY SUN	90,660
	4/15/2019	PON 2112 NY SUN	42,402
	4/22/2019	PON 2112 NY SUN	77,034
	8/22/2019	PON 2112 NY SUN	44,178
	8/26/2019	PON 2112 NY SUN	15,984
	9/5/2019	PON 2112 NY SUN	20,304
	9/24/2019	<200KW PV, PON 2112 NY SUN	5,698
		PON 2112 NY SUN	75,258
Pro Custom Solar LLC	4/19/2019	<200KW PV, PON 2112 NY SUN	5,513
	5/24/2019	<200KW PV, PON 2112 NY SUN	5,348
Proenergy Consulting LLC	4/2/2019	NEW YORK GREEN BANK, Green Bank	50,000
Project Hospitality	6/14/2019	New Construction- Housing, 2019 MFCNP	48,000
ProjectEconomics, Inc.	9/9/2019	Cleantech Ignition, PON 3871 Ignition Grants	100,000
Providence Housing Development Corp	7/19/2019	Low Rise New Construction, 2019 LRNCP	37,000
Pterra, LLC	4/17/2019	High Performing Grid, PON3770 Overvoltage Protection	349,885
	5/7/2019	High Performing Grid, PTerra work for ITWG	250,000
Pyramid Energy Engineering Services	6/10/2019	ENVIRONMENTAL RESEARCH, FlexTech Consultant Selection	9,950
Quest Energy Group	5/7/2019	Commercial Real Estate Ten, Quest Energy Grp-1400 Broadway	8,750
	6/27/2019	Commercial Real Estate Ten, QuestEnergyGrp-1359 Broadway	7,500
	7/1/2019	Commercial Real Estate Ten, Quest Energy Group-20 W 34th	7,500
		Commercial Real Estate Ten, Quest Energy Group-350 5th Ave	7,500
Quest Home Improvement Inc	4/11/2019	PON 2112 NY SUN	26,508
Quixotic Systems, Inc.	5/29/2019	PON 2112 NY SUN	12,118
	9/17/2019	RENEWABLE THERMAL, Solar Thermal Incentive	6,000
	4/9/2019	<200KW PV, PON 2112 NY SUN	5,985
QwikSolar, LLC			0,000
QwikSolar, LLC	4/22/2019	<200KW PV. PON 2112 NY SUN	8 721
QwikSolar, LLC	4/22/2019 5/2/2019	<200KW PV, PON 2112 NY SUN <200KW PV, PON 2112 NY SUN	8,721
QwikSolar, LLC	4/22/2019 5/2/2019 5/28/2019	<200KW PV, PON 2112 NY SUN <200KW PV, PON 2112 NY SUN <200KW PV, PON 2112 NY SUN	8,721 5,586 5,187

QwikSolar, LLC	7/2/2019	Contract Description <200KW PV, PON 2112 NY SUN	63
· · · · · ·	9/23/2019	<200KW PV, PON 2112 NY SUN	11,970
R3 Energy Management Audit & Review		Real Time Enrgy Management, R3 Energy-575 Madison-RTEM	26,64
R.W. Beck Group, Inc.	5/13/2019	Commercial Real Estate Ten, StakeholderEngagement Outreach	80,972
	0/10/2010	K-12 SCHOOLS, StakeholderEngagement_Outreach	80,972
		Technical Services, StakeholderEngagement_Outreach	80,972
	7/2/2019	Technical Services, Targeted Healthcare Engagement	913,09
Randstad North America Inc	4/8/2019	NYSERDA ADMINISTRATION, TS.004 - Marketing_Coordinator	112,275
	5/21/2019	Cleantech ICC Engage, TS.003_TBI Coordinator	22,288
		Energy Storage Tech/Prod Dev, TS.003 TBI Coordinator	22,288
		High Performing Grid, TS.003_TBI Coordinator	22,288
		NextGen HVAC, TS.003_TBI Coordinator	22,288
		Pub Transit & Elect Rail, TS.003_TBI Coordinator	22,288
Randstad North America, Inc.	5/7/2019	NYSERDA ADMINISTRATION, Payroll Services	25,000
	5/13/2019	Environmental Research, Payroll Services	6,250
		NYSERDA ADMINISTRATION, Payroll Services	61,950
	5/30/2019	Consumer Ed and Market Support, Payroll Services	3,935
		NEW YORK GREEN BANK, Payroll Services	63,375
		NYSERDA ADMINISTRATION, Payroll Services	21,692
		REC:CES REC System Dev Costs, Payroll Services	4,125
	6/4/2019	NYSERDA ADMINISTRATION, Payroll Services	11,362
	6/11/2019	ENERGY ANALYSIS, Payroll Services	16,694
	6/28/2019	Home Perf w Energy Star, Payroll Services	10,920
		Multifam Performance Pgm, Payroll Services	10,920
	7/1/2019	Environmental Research, Payroll Services	7,602
		NYSERDA ADMINISTRATION, Payroll Services	845
	7/31/2019	CI Engy Siting & Soft Cost Red, TS.001 - CES Coordinator	160,542
	8/2/2019	NYSERDA ADMINISTRATION, Payroll Services	46,000
	8/8/2019	NYSERDA ADMINISTRATION, Payroll Services	23,000
	8/16/2019	NYSERDA ADMINISTRATION, Payroll Services	21,600
	9/19/2019	NYSERDA ADMINISTRATION, Payroll Services	8,450
	9/23/2019	NYSERDA ADMINISTRATION, TS.009 - Temp Office Admin	106,880
	9/25/2019	ENVIRONMENTAL RESEARCH, Payroll Services	89
Rapid Response Monitoring Services, I	7/25/2019	Industrial Process Effic, Industrial Process Efficiency	8,891
Ravena Coeymans Selkirk Central Scho	7/31/2019	OTHER PROGRAM AREA, RCSCSD-Lafarge settlement fund	1,228
RBC Capital Markets LLC	5/2/2019	Industrial Process Effic, Industrial Process Efficiency	63,760
	8/16/2019	Industrial Process Effic, Industrial Process Efficiency	29,089
RCPI Landmark Properties, LLC	9/6/2019	Real Time Enrgy Management, RCPI - Multisite - RTEM	7,600,000
RD & Associates Consulting LLC	6/14/2019	NextGen HVAC, Innovation Advisor	35,475
Recurve Analytics, Inc.	6/27/2019	Pay for Performance, RFP 3901 P4P-AMV Platform	1,848,836
Red Hook CSA, LLC	9/23/2019	>200KW PV, NY-Sun C&I	488,852
RED Rochester	4/2/2019	CI Carbon Challenge, RED C&I Carbon Challenge	5,000,000
	8/2/2019	Industrial Process Effic, Industrial Process Efficiency	1,000,000
	9/3/2019	Flexible Tech Assistance, FT12253-RED-1200Ridgeway-PON	7,371
Remix Software, Inc.	8/22/2019	Pub Transit & Elect Rail, Bus route planning software	228,925
Renew Solar CS4 Fund LLC	9/18/2019	>200KW PV, NY-Sun C&I	1,204,258
Renovus Energy, Inc.	4/1/2019	<200KW PV, PON 2112 NY SUN	12,076
	4/18/2019	<200KW PV, PON 2112 NY SUN	13,283
	4/22/2019	<200KW PV, PON 2112 NY SUN	5,871
	5/28/2019	<200KW PV, NY-Sun	5,598
	5/30/2019	<200KW PV, PON 2112 NY SUN	6,405
	5/31/2019	<200KW PV, PON 2112 NY SUN	5,313
	6/19/2019	<200KW PV, PON 2112 NY SUN	8,750
	6/21/2019	<200KW PV, PON 2112 NY SUN	6,521
	6/24/2019	<200KW PV, PON 2112 NY SUN	6,825
	7/3/2019	<200KW PV, PON 2112 NY SUN	8,750

Date Encumbered	Contract Description <200KW PV_PON 2112 NY SUN	Total Contract Amoun 6,038
		111,780
		6,762
0/12/2019		6,072
9/13/2010		6,624
		14,350
		6,279
		5,796
		5,796
		6,760
		350,043
		247,850
		249,940
		186,548
		27,949
		50,000
		36,266
		21,000
5/31/2019		603,451
4/00/0040		2,788,799
		12,600
		1,840,000
		8,700
		12,900
		25,000
		11,650
		16,050
		15,000
		130,120
		999,664
		44,000
		38,000
		57,460
		13,852
		6,080
		8,750
		1,226
		18,050
		12,650
		18,050
8/14/2019		22,800
8/29/2019		9,500
9/4/2019	Low Rise New Construction, 2019 LRNCP	2,550
9/26/2019	Low Rise New Construction, 2019 LRNCP	31,350
4/1/2019	Low Rise New Construction, 2019 LRNCP	114,800
8/22/2019	<200KW PV, PON 2112 NY SUN	69,120
8/29/2019	PON 2112 NY SUN	21,600
5/31/2019	Solar Plus Energy Storage, NY Sun	1,424,500
9/25/2019	NY Green Bank, Saranac Lake Resort	5,000,000
9/11/2019	>200KW PV, NY Sun	1,273,688
6/17/2019	Flexible Tech Assistance, FT12088-Club Qtrs-Rock Ctr-PON	7,775
6/17/2019	Industrial Process Effic, Industrial Process Efficiency	450,000
6/19/2019	Real Time Enrgy Management, Schneider-100 E. 77th St-RTEM	300,000
0/10/2010		
	9/4/2019 9/26/2019 4/1/2019 8/22/2019 8/29/2019 5/31/2019 9/25/2019 9/11/2019 6/17/2019	7/22/2019 <200KW PV, PON 2112 NY SUN

Second Nature Inc	5/22/2019	Cleantech ICC Engage, Overcoming University Barriers	49,200
Seed Renewables Inc.	6/28/2019	<200KW PV, PON 2112 NY SUN	10
Seneca Towers, Inc.	4/19/2019	Multifam Performance Pgm, Multifamily	343,70
Sentient Science Corporation	8/8/2019	Pub Transit & Elect Rail, DigitalClone for rail	610,46
Sheland Farms LLC	7/10/2019	Anaerobic Digesters, PON 3739 CAT C	15,00
SHI, Inc.	4/12/2019	NYSERDA ADMINISTRATION, Adobe Enterprise Licensing 1yr	44,512
Siemens Industry, Inc.	4/5/2019	Real Time Enrgy Management, Siemens-Multisite-RTEM	235,14
Siemens muusuy, mc.	6/6/2019	Real Time Enrgy Management, Siemens-1 Academic Dr-RTEM	235,14
	6/19/2019		300,00
	8/12/2019	Real Time Enrgy Management, Siemens-1585 Broadway-RTEM Real Time Enrgy Management, Siemens-1425 Portland-RTEM	88,15
	0/12/2019	Real Time Enrgy Management, Siemens-Multisite-RTEM	385,91
	8/29/2019		300,00
	9/17/2019	Real Time Enrgy Management, Siemens - 57 E 57 St - RTEM ENERGY ANALYSIS, TWO #1: 100x40 Study	300,00
	9/1//2019		
	9/18/2019	REC:CES REC System Dev Costs, TWO #1: 100x40 Study	500,00
		Real Time Enrgy Management, Siemens - 15 Old Falls - RTEM	66,61
Simple Energy Inc	9/24/2019	Real Time Enrgy Management, Siemens - 115 Brickman - RTEM	176,640
Simple Energy, Inc.	6/19/2019	Electric Vehicles - Innovation, PON 3578 R1 CAT4	483,975
Sitecore USA, Inc.	7/16/2019	NYSERDA ADMINISTRATION, Sitecore License 2019-2020	25,30
Sive Paget & Riesel PC	4/18/2019	WEST VALLEY DEVELOPMENT PROGRAM, RFP 3300 & RF	100,000
	7/31/2019	NYSERDA ADMINISTRATION, FOIL related Services	2,50
	8/14/2019	NYSERDA ADMINISTRATION, Counsel's Office	5,00
Skae Power Solutions	5/28/2019	Industrial Process Effic, Industrial Process Efficiency	61,61
	6/14/2019	Industrial Process Effic, Industrial Process Efficiency	93
ski Plattekill, Inc.	7/3/2019	Industrial Process Effic, Industrial Process Efficiency	6,83
Skyline Solar Inc.	4/8/2019	<200KW PV, PON 2112 NY SUN	8,64
	4/26/2019	<200KW PV, PON 2112 NY SUN	8,68
	4/29/2019	<200KW PV, PON 2112 NY SUN	5,62
	5/15/2019	<200KW PV, PON 2112 NY SUN	5,62
	6/7/2019	<200KW PV, PON 2112 NY SUN	1,20
	7/22/2019	<200KW PV, PON 2112 NY SUN	6,13
	8/13/2019	<200KW PV, PON 2112 NY SUN	5,46
	8/22/2019	<200KW PV, PON 2112 NY SUN	8,75
SL Green Management	7/26/2019	Flexible Tech Assistance, FT12233 - 420 Lexington - PON	29,90
Smart Phases Inc.	4/26/2019	Combined Heat and Power, CHPA - Plattsburgh Old AF Base	1,188,38
Smarter Grid Solutions, Inc.	9/5/2019	Talent Pipeline:CE and OJT, OJT HIRE	15,360
	9/19/2019	Talent Pipeline:CE and OJT, OJT HIRE	15,36
Smiley Brothers, Inc.	6/6/2019	Cleantech ICC Engage, 2019 Investors Portfolio Event	50,000
Smith Engineering PLLC	4/23/2019	Flexible Tech Assistance, FT12092 - RXR 1330 AOA - FTC	61,35
	7/11/2019	Workforce Industry Partnership, PON 3715 Workforce Training	796,52
	8/8/2019	Workforce Industry Partnership, PON 3715 Workforce Training	280,20
	9/19/2019	Flexible Tech Assistance, FT12237-Cornell-961EShore-FTC	49,53
Snug Planet, LLC	4/3/2019	Talent Pipeline:CE and OJT, OJT HIRE	8,64
	5/7/2019	Talent Pipeline:CE and OJT, OJT HIRE	8,64
	6/26/2019	Talent Pipeline:CE and OJT, OJT HIRE	8,64
	9/5/2019	Novel Bus Models & Offers, 3932 Novel Business Models	100,00
Snyder Manufacturing, Inc	7/8/2019	Geothermal Incentive Program, Large-Scale GSHP Rebate	34,39
	9/25/2019	Geothermal Incentive Program, Large-Scale GSHP Rebate	140,79
Sol Alliance Solar Development	5/20/2019	PON 2112 NY SUN	200,24
	7/9/2019	PON 2112 NY SUN	53,72
Solar Energy Systems, LLC	5/8/2019	PON 2112 NY SUN	29,48
	5/30/2019	PON 2112 NY SUN	39,00
	8/20/2019	PON 2112 NY SUN	193,15
Solar Liberty Energy Systems, Inc	4/22/2019	<200KW PV, NY-Sun	7,050
		<200KW PV, PON 2112 NY SUN	6,669
		NY-Sun	10,584
	4/23/2019	<200KW PV, PON 2112 NY SUN	5,723

Contractor Solar Liberty Energy Systems, Inc	Date Encumbered	Contract Description	Total Contract Amoun
	4/30/2019	<200KW PV, NY-Sun	112,500
	5/13/2019	<200KW PV, PON 2112 NY SUN	5,150
	5/20/2019	PON 2112 NY SUN	15,529
	5/28/2019	<200KW PV, NY-Sun	8,972
	0/4/0040	<200KW PV, PON 2112 NY SUN	5,891
	6/4/2019	<200KW PV, PON 2112 NY SUN	5,544
	6/5/2019	<200KW PV, NY-Sun	96,630
	0/11/2010	PON 2112 NY SUN	10,368
	6/11/2019	PON 2112 NY SUN	41,610
	6/14/2019	PON 2112 NY SUN	3,305
	6/17/2019	PON 2112 NY SUN	9,510
	6/18/2019	<200KW PV, PON 2112 NY SUN	6,825
	6/20/2019	PON 2112 NY SUN	9,186
	7/23/2019	<200KW PV, PON 2112 NY SUN	6,048
	7/26/2019	<200KW PV, PON 2112 NY SUN	7,392
	8/8/2019	>200KW PV, NY Sun	256,074
	8/12/2019	<200KW PV, NY-Sun	7,056
		NY-Sun	10,584
	8/22/2019	<200KW PV, NY-Sun	9,698
		<200KW PV, PON 2112 NY SUN	7,168
	8/23/2019	<200KW PV, PON 2112 NY SUN	5,460
	8/29/2019	<200KW PV, PON 2112 NY SUN	6,384
	9/11/2019	>200KW PV, NY Sun	420,810
	9/12/2019	<200KW PV, NY-Sun	11,282
	9/23/2019	<200KW PV, PON 2112 NY SUN	5,528
	9/25/2019	<200KW PV, NY Sun	13,365
		<200KW PV, PON 2112 NY SUN	6,867
	9/26/2019	<200KW PV, PON 2112 NY SUN	144,342
Solar One, Inc.	6/19/2019	PON 2112 NY SUN	209,592
Solar Star Prime 2, LLC	6/26/2019	NY-Sun	4,254,624
Solar Tompkins Inc.	7/19/2019	Community RH&C, PON3723 RH&C Campaigns	200,000
Solar Village Company LLC	6/4/2019	Talent Pipeline:CE and OJT, OJT HIRE	6,118
	7/10/2019	Talent Pipeline:CE and OJT, OJT HIRE	5,904
Solitude Solar LLC	4/2/2019	>200KW PV, NY Sun	1,468,800
	8/23/2019	>200KW PV, NY Sun	1,447,200
	9/11/2019	>200KW PV, NY Sun	734,400
SourceOne Power Technologies, Inc.	5/1/2019	Real Time Enrgy Management, SourceOne-733 3rd Ave-RTEM	76,950
Southview Manor Apartments LLC	8/6/2019	Multifam Performance Pgm, Multifamily	16,100
Spencer-Tioga Solar, LLC	6/26/2019	>200KW PV, NY-Sun C&I	2,719,239
Spruce NYGB Borrower LLC	4/29/2019	NY Green Bank, Spruce Finance	27,100,000
St. Lawrence County	4/29/2019	Clean Energy Communities, CEC711051 St. Lawrence Co	250,000
Stance Renewable Risk Partners LLC	5/24/2019	Green Bank	10,000
	6/10/2019	Green Bank	8,000
Stantec Consulting Services, Inc.	6/11/2019	Industrial Process Effic, IPE16231	8,035
	6/26/2019	Industrial Process Effic, Technical Review and Program S	3,559
Steele Sleepy Hollow LLC	5/7/2019	Multifam Performance Pgm, Multifamily	160,300
	9/4/2019	Multifam Performance Pgm, Multifamily	22,900
Sterling and Wilson Cogen Solutions, L	9/5/2019	Combined Heat and Power, CHPA-Agbotic Project#1 LLC	414,900
Steuben Churchpeople Against Poverty	5/16/2019	Low Rise New Construction, New Construction	86,100
Inc	7/24/2019	Low Rise New Construction, 2019 LRNCP	28,000
Steven Winter Associates, Inc.	4/15/2019	Retrofit NY, RetrofitNY project cost analys	47,366
	4/22/2019	NextGen HVAC, Cold Climate PTHP	108,650
	6/11/2019	Commercial New Construc, New Construction	23,807
	6/14/2019	Commercial New Construct, New Construction	35,000
	6/25/2019	Commercial New Construct, New Construction	4,185
		· · · · · · · · · · · · · · · · · · ·	.,

Contractor Steven Winter Associates, Inc.	Date Encumbered	Contract Description	Total Contract Amoun
Sleven winter Associates, inc.	7/16/2019	Workforce Industry Partnership, PON 3715 Workforce Training	245,26
	7/24/2019	Workforce Industry Partnership, PON 3715 Workforce Training	391,013
	7/31/2019	Real Time Enrgy Management, Steven Winter-150 E34thSt-RT	6,469
	8/5/2019	Talent Pipeline:CE and OJT, PON3981 WFD Capacity Building	249,163
	8/6/2019	Retrofit NY, Solution Optimization Consulta	50,000
	8/8/2019	Workforce Industry Partnership, PON 3715 Workforce Training	250,050
	8/29/2019	Workforce Industry Partnership, PON 3715 Workforce Training	396,750
	9/16/2019	New Construction- Housing, SF 107588 - 511 East 86th St.	10,000
	9/18/2019	Real Time Enrgy Management, SWA - 255 Hudson Street - RT	33,983
Stone Environmental, Inc.	6/13/2019	Informat. Products & Brokering, RTEM Gas Customer Targeting	101,000
	7/10/2019	Informat. Products & Brokering, Data Asset Matching STONE T	112,958
	9/23/2019	Community RH&C, Westchester Ground Source Heat	194,188
Suffolk County Community College	4/5/2019	REV CAMPUS CHALLENGE, RFP 3675 REV Campus Challen	495,297
		RFP 3675 REV Campus Challenge	500,000
Sun Source Technologies	4/4/2019	<200KW PV, PON 2112 NY SUN	24,638
	4/22/2019	<200KW PV, PON 2112 NY SUN	6,174
	5/28/2019	<200KW PV, PON 2112 NY SUN	12,058
	7/1/2019	<200KW PV, PON 2112 NY SUN	6,683
	7/8/2019	<200KW PV, PON 2112 NY SUN	8,750
	8/20/2019	<200KW PV, NY-Sun	206,880
	9/17/2019	<200KW PV, PON 2112 NY SUN	6,214
	9/19/2019	<200KW PV, PON 2112 NY SUN	8,750
SUN8 PDC LLC	5/20/2019	NY Green Bank, Distributed Sun - CDG Solar Bridge Loan	1,000,000
SuNation Solar Systems, Inc.	4/3/2019	<200KW PV, PON 2112 NY SUN	39,780
	4/9/2019	<200KW PV, PON 2112 NY SUN	26,085
	8/12/2019	ENERGY STORAGE, PON 2112 NY SUN	6,250
Sunnova Energy Corp	4/26/2019	<200KW PV, PON 2112 NY SUN	6,395
	4/29/2019	<200KW PV, PON 2112 NY SUN	5,602
Sunny Knoll Farms	7/15/2019	Anaerobic Digesters, PON 3739 CAT C	15,000
Sunnyside Farms, Inc.	7/11/2019		15,000
•		Anaerobic Digesters, PON 3739 CAT C <200KW PV, PON 2112 NY SUN	
SunPower Capital, LLC	4/10/2019		8,316
	5/2/2019	<200KW PV, PON 2112 NY SUN	7,812
	5/15/2019	<200KW PV, PON 2112 NY SUN	5,355
	5/16/2019	<200KW PV, PON 2112 NY SUN	15,411
	6/7/2019	<200KW PV, PON 2112 NY SUN	5,922
	6/21/2019	<200KW PV, PON 2112 NY SUN	6,015
	7/1/2019	<200KW PV, PON 2112 NY SUN	5,040
	7/18/2019	<200KW PV, PON 2112 NY SUN	7,420
	7/24/2019	<200KW PV, PON 2112 NY SUN	10,933
	8/13/2019	<200KW PV, NY-Sun	10,328
	8/29/2019	<200KW PV, PON 2112 NY SUN	5,268
	9/5/2019	<200KW PV, PON 2112 NY SUN	6,180
SUNRISE ELECTRICAL SERVICES	4/1/2019	<200KW PV, NY Sun	83,807
	4/3/2019	<200KW PV, PON 2112 NY SUN	99,536
Sunrise Solar Solutions, LLC	4/12/2019	<200KW PV, NY Sun	3,949
	5/10/2019	PON 2112 NY SUN	12,949
	7/2/2019	NY-Sun	840,840
		Solar Plus Energy Storage, Energy Storage	1,026,000
	9/3/2019	<200KW PV, PON 2112 NY SUN	7,500
SunRun, Inc	4/29/2019	<200KW PV, PON 2112 NY SUN	5,499
	5/23/2019	<200KW PV, PON 2112 NY SUN	5,660
	6/12/2019	<200KW PV, PON 2112 NY SUN	5,075
	6/17/2019	<200KW PV, PON 2112 NY SUN	5,124
	7/3/2019	<200KW PV, PON 2112 NY SUN	5,278
		,	
	7/8/2019	<200KW PV, PON 2112 NY SUN	6,505

		Total Contract Amount
		6,432
		5,551
		7,793
		6,566
		19,697
		173,122
		10,000
		42,653
		279,728
		15,795
		13,923
		1,067
		201
		10,692
		5,119
		6,055
		59,724
		5,915
		5,346
		15,000
6/24/2019		250,000
5/2/2019		150,000
6/4/2019	PON 2112 NY SUN	10,224
7/9/2019	PON 2112 NY SUN	31,200
8/15/2019	ESTOR:Retail Storage Incentive, NY Sun	1,017,500
5/6/2019	Cleantech Ignition, PON 3871 Ignition Grants	62,213
6/20/2019	NextGen HVAC, NextGen HVAC Innovation	350,000
5/29/2019	Clean Energy Communities, CEC210174 - City of Syracuse	150,000
4/12/2019	NYSERDA ADMINISTRATION, NET App Flash Storage 3 years	24,205
	NYSERDA ADMINISTRATION, NetApp Flash Storage for VDI	14,806
5/22/2019	NYSERDA ADMINISTRATION, ManageEngine Desktop Central	10,419
5/29/2019	High Performing Grid, PON 3770	732,785
4/1/2019	Technical Services, RFP3628FlexTechConsultUmbrella	2,500
4/10/2019	Geothermal Incentive Program, Technical Review and Program S	60,000
5/21/2019	Commercial Real Estate Ten, Taitem-110 S Albany St	13,600
7/2/2019	Geothermal Incentive Program, FT12227-256SunsetLake-FTC	9,336
7/10/2019	Multifam Performance Pgm, RFQL 3434 - Standards and Qual	464,250
7/11/2019	Commercial New Construc, New Construction	22,948
7/12/2019	Retrofit NY, Deep Energy Retrofits	3,371
8/2/2019	Air Source Heat Pumps, 3695 TWO Umbrella Agreement	45,000
	Multifam Performance Pgm, 3695 TWO Umbrella Agreement	180,000
9/11/2019	Air Source Heat Pumps, ASHP Technical Assistance	24,989
9/25/2019	Real Time Enrgy Management, RTEM Gas Mini-Bid Contract	374,975
9/26/2019	Commercial New Construc, Commercial New Construction	17,148
9/27/2019	Commercial New Construc, Commercial New Construction	38,247
5/24/2019	Real Time Enrgy Management, Energy Mangt Data_Tech Supp	2,146,000
9/6/2019	NYSERDA ADMINISTRATION, NYS Fair 2019 Display	7,280
7/12/2019	NYSERDA ADMINISTRATION, RFP3143 Umbrella Agreement	88,725
8/6/2019	NYSERDA ADMINISTRATION, RFP3143 Umbrella Agreement	378,225
9/11/2019	NYSERDA ADMINISTRATION, TWO Salesforce BA - Himmelfa	94,640
9/17/2019	NYSERDA ADMINISTRATION, RFP3143 Umbrella Agreement	7,875
9/20/2019	NYSERDA ADMINISTRATION, RFP3143 Umbrella Agreement	191,100
4/2/2019 4/18/2019	Combined Heat and Power, CHPA-Esplanade Gardens Bldg #1 Combined Heat and Power, CHPA-485 First Ave-Phipps Hous	323,438 126,225
	5/2/2019 6/4/2019 7/9/2019 8/15/2019 5/6/2019 6/20/2019 5/29/2019 4/12/2019 5/29/2019 4/12/2019 5/29/2019 4/10/2019 5/21/2019 7/10/2019 7/11/2019 7/11/2019 9/11/2019 9/20/2019 9/21/2019 9/21/2019 9/25/2019 9/26/2019 9/27/2019 5/24/2019 9/6/2019 7/12/2019 8/6/2019 9/11/2019 9/11/2019 9/11/2019 9/11/2019 9/11/2019 9/11/2019 9/11/2019	7/31/2019 <200KW PV, PON 2112 NY SUN

Contractor	Date Encumbered	Contract Description	Total Contract Amount
Tecogen	5/1/2019	Combined Heat and Power, CHPA-Esplanade Gardens Bldg #4	323,438
		Combined Heat and Power, CHPA-Esplanade Gardens Bldg #5	323,438
		Combined Heat and Power, CHPA-Esplanade Gardens Bldg #6	323,438
	5/2/2019	Combined Heat and Power, CHPA-Esplanade Gardens Bldg #2	323,438
	6/10/2019	Combined Heat and Power, CHPA-Normandie Court	323,438
		Combined Heat and Power, CHPA-Windsor Court	323,438
	6/11/2019	Combined Heat and Power, CHPA-Dorchester Towers	467,578
	6/14/2019	Combined Heat and Power, CHPA-Bedford Union Armory	1,003,078
	6/19/2019	Combined Heat and Power, CHPA-Domino - Building A	366,563
	6/21/2019	Combined Heat and Power, CHPA-The Lucida	178,750
	6/25/2019	Combined Heat and Power, CHPA-Ballston Spa Schools	803,086
	6/27/2019	Combined Heat and Power, CHPA-22 South West St Tower	178,750
	7/15/2019	Combined Heat and Power, CHPA-125 Broad Street	1,317,000
Tendril Networks, Inc.	6/27/2019	ASSISTED HOME PERFORMANCE WITH ENERGY STAR, Re	1,271
		EMPOWER NY, Residential Program MgtRFP3545	1,271
		Home Perf w Energy Star, Residential Program MgtRFP3545	186,958
		HOME PERFORMANCE WITH ENERGY STAR, Residential Pr	1,271
Tern Construction & Development, LLC	4/23/2019	Low Rise New Construction, 2019 LRNCP	63,800
Tesla Energy Operations Inc	9/23/2019	<200KW PV, PON 2112 NY SUN	5,733
The Brookings Institution	7/16/2019	OTHER PROGRAM AREA, Carbon Management Forum	50,000
The Business Council of NYS, Inc.	7/31/2019	Prof & Expert Engagement, Membership Business Council	6,385
The Cadmus Group, LLC	4/5/2019	Electric Vehicles - Innovation, TWO #3 DCFC design	75,000
The Gaunus Group, LEG	4/23/2019	Financing Solutions, Market research for SMBE	49,770
	6/25/2019	Environmental Research, TWO 3 - RegionalFundingEntity	18,523
	7/16/2019	EVALUATION, RFP3916 Res Bldg Stock Assessm	93,472
	7/17/2019	Consumer Ed and Market Support, Deemed Savings for HER Pi	34,500
	7/22/2019	EVALUATION, TWO#4 Soft Cost study	40,000
The Center for Urban Community Servi		MULTIFAMILY PERFORMANCE PROGRAM, Multifamily	1,800
The Cooper Union for the Advancement.		Workforce Industry Partnership, PON 3715 Workforce Training	232,325
The Hartz Group, Inc.	4/30/2019	Flexible Tech Assistance, FT12076 - 667 Madison - PON	39,200
The Radiant Store	4/16/2019	Renewable Heat NY, Radiant Store - Eberhardt	12,000
	5/3/2019	Campus/Technical Assistance, Direct contract w/Radiant Stor	30,252
The Renewables Consulting Group, LLC	6/28/2019	Nat'l OffShWind R&D Consortium, RCG work for OSW Consorti	247,579
		RCG work for OSW Consortium	125,318
The Research Foundation for SUNY	8/14/2019	Energy Storage Tech/Prod Dev, Renewable Optimz Energy Stor	200,000
The Trustees of Columbia University	4/2/2019	ENERGY ANALYSIS, Sabin Center Monthly Reports	5,000
The Woodlawn Cemetery	9/3/2019	Industrial Process Effic, Industrial Process Efficiency	15,096
Therm Controls Incorporated	4/9/2019	NextGen HVAC, NextGen HVAC Innovation	73,750
ThunderCat Technology LLC	4/29/2019	NYSERDA ADMINISTRATION, Atlassian (Jira) - Phase 1	94,567
	6/6/2019	NYSERDA ADMINISTRATION, NYC - Circuit 3 years	39,750
	9/13/2019	NYSERDA ADMINISTRATION, Atlassian Licenses - Jira	77,142
TM Montante Solar Developments, LLC	4/12/2019	<200KW PV, PON 2112 NY SUN	2,673
	9/12/2019	<200KW PV, PON 2112 NY SUN	48,195
Tompkins Consolidated Area Transit	9/13/2019	Pub Transit & Elect Rail, First/Last Mile in Tompkins Co	258,882
Total Comfort Heating and Air Condition	i 6/19/2019	Talent Pipeline:CE and OJT, OJT HIRE	8,000
	6/26/2019	Talent Pipeline:CE and OJT, OJT HIRE	7,040
Tower Enterprises of NY & NJ LLC	9/5/2019	Talent Pipeline:CE and OJT, OJT HIRE	8,000
Towerstream 1 Incorporated	7/2/2019	NYSERDA ADMINISTRATION, Circuit for NYC - Towerstream	37,500
Town of Black Brook	5/16/2019	Clean Energy Communities, CEC701091 - Town of Black Broo	50,000
Town of Chatham	4/17/2019	CEC400013 T of Chatham	30,000
		Clean Energy Communities, CEC400013 T of Chatham	5,000
Town of Colton	9/16/2019	Clean Energy Communities, CEC701140 - Town of Colton	50,000
Town of Dickinson			50,000
	8/23/2019	Clean Energy Communities, CEC001263 - Town of Dickinson	
Town of Enfield	4/4/2019	Clean Energy Communities, CEC001221 - Town of Enfield	50,000
Town of Greece	9/5/2019	Clean Energy Communities, CEC310376-Town of Greece	150,000 5,000
Town of Guilderland	5/29/2019	CEC400038 Town of Guilderlan	5

Contractor Town of Guilderland	Date Encumbered 5/29/2019	Contract Description Clean Energy Communities, CEC400038 Town of Guilderlan	Total Contract Amoun 30.000
			*
Town of Hempstead, Department of Co		CLEANER GREENER COMMUNITIES, CEC910525 - Town of	150,000
Town of Malone Town of Mamaroneck	4/26/2019 6/13/2019	Clean Energy Communities, CEC701017 Town of Malone Clean Energy Communities, PON 3298 CEC	50,000
Town of Northampton	5/9/2019	Clean Energy Communities, CEC600922 Town of Northampto	50,000
Town of Westport	5/15/2019	Clean Energy Communities, CEC000322 Town of Notitianplo	50,000
Town of Winfield	4/1/2019	Clean Energy Communities, CEC/01033 - Town of Westport	50,000
Trane	4/23/2019	Real Time Enrgy Management, Trane Us Inc-1177 6th Ave-RTE.	211,325
·	5/30/2019	Real Time Enrgy Management, Trane-17 Lansing St-RTEM	140,980
	6/11/2019	Real Time Enrgy Management, Hilton - 237 W 54th St - RTEM	822
IRC Energy Services	4/1/2019	Commercial Real Estate Ten, TRC EnergyServices-512 7th Ave	5,000
	4/2/2019	Technical Services, RFP3628FlexTechConsultUmbrella	2,500
	4/29/2019	Multifam Performance Pgm, Staff Augmentation Services	155,025
	5/24/2019	Renewable Heat NY, Ray Brook TWO	113,425
	5/29/2019	Multifam Performance Pgm, Staff Augmentation Services	116,910
	5/31/2019	Multifam Performance Pgm, Staff Augmentation Services	517,846
	6/7/2019	Talent Pipeline:CE and OJT, Technical Review and Program S	100,000
		Workforce Industry Partnership, Technical Review and Program.	100,000
	6/21/2019	ESTOR:Retail Storage Incentive, 3695 Energy Storage TWO	150,000
	6/25/2019	K-12 SCHOOLS, Staff Augmentation Services	18,977
	8/2/2019	Industrial Process Effic, Technical Review and Program S	967
	8/7/2019	Industrial Process Effic, Technical Review and Program S	791
	8/16/2019	Campus/Technical Assistance, Four-year contract for Technic	50,000
		ENERGY ANALYSIS, Staff Augmentation Services	237,003
	8/27/2019	Real Time Enrgy Management, Staff Augmentation Services	210,834
riad Technology Partners LLC	6/25/2019	NYSERDA ADMINISTRATION, Tableau Maintenance 1 yr	70,275
Triangle Electrical Systems, Inc.	5/28/2019	<200KW PV, NY-Sun	9,525
Frinity Heating & Air, Inc.	4/8/2019	<200KW PV, PON 2112 NY SUN	5,072
	4/12/2019	<200KW PV, PON 2112 NY SUN	6,619
	8/22/2019	<200KW PV, PON 2112 NY SUN	7,182
	8/29/2019	<200KW PV, PON 2112 NY SUN	5,843
Frove Predictive Data Science, Inc.	6/18/2019	Informat. Products & Brokering, DER Data Platform Pilot	175,000
True Building Performance LLC	9/5/2019	Talent Pipeline:CE and OJT, OJT HIRE	11,520
	9/12/2019	Talent Pipeline:CE and OJT, OJT HIRE	5,120
True Energy Solutions	4/16/2019	Talent Pipeline:CE and OJT, OJT HIRE	5,440
	5/9/2019	Talent Pipeline:CE and OJT, OJT HIRE	5,760
		Talent Pipeline:CE and OJT, OJT HIRE	8,160
	9/9/2019	Talent Pipeline:CE and OJT, OJT HIRE	6,400
Tully Rinckey PLLC	4/16/2019	Rmve Barriers Dist Enrgy Storg, outside counsel services	5,000
IVC Albany Inc.	4/26/2019	NYSERDA ADMINISTRATION, FirstLight - Redundant for Alb	57,600
J.S. Green Building Council, NY Chapter	7/11/2019	New Construction- Commercial, Partner Engagement	10,000
		New Construction- Housing, Partner Engagement	40,000
J&S Services, Inc.	5/6/2019	Remote Energy Management, RFP3683 REM Program	583,000
Jnderground Systems, Inc.	6/19/2019	High Performing Grid, PON 3770	592,712
Unique Comp Inc.	6/7/2019	NYSERDA ADMINISTRATION, RFP3143 Umbrella Agreement	191,100
	7/2/2019	NYSERDA ADMINISTRATION, TWO Salesforce Admin. Senecal	139,913
	8/2/2019	Pay for Performance, RFP3143 Umbrella Agreement	221,491
	8/12/2019	NYSERDA ADMINISTRATION, RFP3143 Umbrella Agreement	405,600
	9/18/2019	NYSERDA ADMINISTRATION, RFP3143 Umbrella Agreement	393,510
Jnique Electric Solutions of NYS LLC	9/16/2019	M-Corps, Upgrading UES Supply Chain	49,000
Jniversity at Albany	5/23/2019	High Performing Grid, PON 3770	84,500
	6/28/2019	Environmental Research, AQHE PON 3921	496,458
Iniversity of Dechaster	6/17/2019	OTHER PROGRAM AREA, Annual Support for Laboratory	825,000
oniversity of Rochester			
University of Rochester	6/19/2019 7/12/2019	High Performing Grid, PON 3770 Environmental Research, AQHE PON 3921	225,000 490,228

Contractor	Date Encumbered	Contract Description	Total Contract Amount
University of Rochester	9/18/2019	REV Campus Challenge, RFP 3675 REV Campus Challenge	1,000,000
University System of New Hampshire	7/22/2019	U.S. DOE SEP Grant for oTherm	142,502
Upstate Alternative Energy	6/3/2019	<200KW PV, PON 2112 NY SUN	5,434
Upstate Capital Association of New York		Cleantech ICC Engage, UCANY 2019 Sponsorship	30,000
Urban Electric Power, Inc.	8/6/2019	Energy Storage Tech/Prod Dev, PON 3585 R2	245,000
Urban Electric Power, LLC	7/25/2019	SMART GRID SYSTEMS, 1MWh Peak-Shaving Battery	500,000
	7/31/2019	Talent Pipeline:CE and OJT, OJT HIRE	9,600
	8/27/2019	Talent Pipeline:CE and OJT, OJT HIRE	10,240
US Energy Concierge Inc	6/10/2019 9/23/2019	<200KW PV, PON 2112 NY SUN <200KW PV, PON 2112 NY SUN	8,677
USE ACQUISITION LLC	6/27/2019	,	7,886
	0/21/2013	Real Time Enrgy Management, US Energy Grp-3161 Brighton Real Time Enrgy Management, US Energy-161 Corbin PI-RTEM	28,206
Utilities Program & Metering, Inc.	5/23/2019	Real Time Enrgy Management, Utility Prog-1 NY Plaza-RTEM	122,694
ounties Frogram & Metering, inc.	9/24/2019	Real Time Enrgy Management, UPM - 401 N Middletown - RTEM	180,208
Van Hee Mechanical	4/16/2019	Talent Pipeline:CE and OJT, OJT HIRE	8,640
	4/17/2019	Talent Pipeline:CE and OJT, OJT HIRE	15,360
Venture Home Solar LLC	7/8/2019	<200KW PV, PON 2112 NY SUN	5,226
Verizon Communications Inc	5/24/2019	Industrial Process Effic, Industrial Process Efficiency	817,744
Vermont Energy Investment Corporation		Industrial Process Effic, IPE16233	14,972
Vidaris, Inc.	4/3/2019	Code to Zero, TWO#3 NYStretch Cost Eff	136,380
,	6/13/2019	Code to Zero, TWO#1-DOS Rulemaking Support	20,000
	8/22/2019	Commercial New Construct, Commercial New Construction	66,840
	8/23/2019	Commercial New Construct, Commercial New Construction	83,815
		Commercial New Construct, New Construction	200,000
Vil of Coxsackie Muni Solar Project One,	8/8/2019	>200KW PV, NY Sun	173,880
Village of Brockport Solar 1, LLC	7/18/2019	<200KW PV, NY-Sun	355,212
Village of Canton Housing Authority	5/7/2019	Multifam Performance Pgm, Multifamily	65,800
Village of Fredonia	8/12/2019	INDUSTRIAL PROCESS EFFICIENCY, Industrial Process Effici	8,470
Village of Goshen	4/18/2019	Clean Energy Communities, Village of Goshen	50,000
Village of Herkimer	4/23/2019	Clean Energy Communities, CEC600882-Vill of Herkimer	50,000
Village of Lima Solar 1, LLC	4/15/2019	<200KW PV, NY-Sun	201,204
Village of Montour Falls	5/23/2019	Clean Energy Communities, CEC001316 V Montour Falls	50,000
Village of Northville	5/15/2019	Clean Energy Communities, CEC600919 Village of Northvill	50,000
Village of Sodus	4/29/2019	Clean Energy Communities, CEC300347 - Village of Sodus	50,000
Vincents Heating and Fuel Service, LLC	5/6/2019	Renewable Heat NY, Vincents Heating - Baxter	19,895
	6/13/2019	Renewable Heat NY, Vincents Heating - Avery	21,000
		Renewable Heat NY, Vincents Heating - Filer	20,750
	7/23/2019	Renewable Heat NY, Vincents Heating - Barry	28,260
Viola Homes Inc.	4/16/2019	<200KW PV, PON 2112 NY SUN	7,245
	4/22/2019	<200KW PV, PON 2112 NY SUN	10,557
	5/6/2019	<200KW PV, PON 2112 NY SUN	5,796
	5/9/2019	<200KW PV, PON 2112 NY SUN	8,645
	5/13/2019	<200KW PV, PON 2112 NY SUN	6,468
	5/15/2019	<200KW PV, PON 2112 NY SUN	8,211
	5/30/2019	<200KW PV, PON 2112 NY SUN	7,738
	6/3/2019	<200KW PV, PON 2112 NY SUN	5,527
	6/14/2019	<200KW PV, PON 2112 NY SUN	6,461
	6/21/2019	<200KW PV, PON 2112 NY SUN	7,969
	7/3/2019	<200KW PV, PON 2112 NY SUN	7,728
	7/11/2019	<200KW PV, PON 2112 NY SUN	6,006
	7/15/2019	<200KW PV, PON 2112 NY SUN	6,395
	8/9/2019	<200KW PV, PON 2112 NY SUN	6,279
	8/13/2019	<200KW PV, PON 2112 NY SUN	7,665
	8/16/2019	<200KW PV, PON 2112 NY SUN	5,110
	8/22/2019	<200KW PV, PON 2112 NY SUN	5,313
	8/23/2019	<200KW PV, PON 2112 NY SUN	6,930

Contractor	Date Encumbered	Contract Description	Total Contract Amount
Viola Homes Inc.	9/9/2019	<200KW PV, PON 2112 NY SUN	22,032
	9/11/2019	<200KW PV, PON 2112 NY SUN	8,694
	9/17/2019	<200KW PV, PON 2112 NY SUN	8,694
	9/19/2019	<200KW PV, PON 2112 NY SUN	8,211
	9/30/2019	<200KW PV, PON 2112 NY SUN	5,110
Virginia Tech Applied Research Corpor	4/17/2019	Energy Storage Tech/Prod Dev, PON 3585 R2	199,820
Vistex Composites, LLC	8/22/2019	Cleantech Ignition, PON 3871 Ignition Grants	100,000
Vivint Solar	7/22/2019	<200KW PV, PON 2112 NY SUN	6,284
	8/6/2019	<200KW PV, PON 2112 NY SUN	5,513
	9/13/2019	<200KW PV, PON 2112 NY SUN	87
	9/27/2019	<200KW PV, PON 2112 NY SUN	5,600
Wadsworth Energy LLC	7/16/2019	Rmve Barriers Dist Enrgy Storg, TWO #1 MDIWG Support	50,000
Wagner Farms	7/10/2019	Anaerobic Digesters, PON 3739 CAT C	15,000
Walter Snyder Printer, Inc.	6/12/2019	>200KW PV, Printing Services	6,223
Warwick Renewables, LLC	6/26/2019	>200KW PV, NY Sun	377,622
Wayne County Action Program	4/30/2019	Talent Pipeline:CE and OJT, OJT HIRE	7,440
WB Engineering & Consulting PLLC	6/19/2019	Commercial Real Estate Ten, WB Engineers-345 Hudson St	102,023
Weill Medical College at Cornell Univers	7/15/2019	Flexible Tech Assistance, FT12229-WeillGreenburg-PON	9,363
Wendel Energy Services, LLC	6/14/2019	Flexible Tech Assistance, FT12217-WashingtonCo Sewer-FTC	10,413
	6/24/2019	Flexible Tech Assistance, FT12219 -Town of Hamburg - FTC	30,000
	8/21/2019	Industrial Process Effic, SEM_WRRF_Wendel_TWO	50,000
	9/27/2019	ANAEROBIC DIGESTER, ADG - Wendel - TWO	55,000
		Combined Heat and Power, ADG - Wendel - TWO	55,000
Westchester Chamber Educational	5/8/2019	New Construction- Commercial, Sponsor West. Business Council	2,500
		New Construction- Housing, Sponsor West. Business Council	5,000
		Real Time Enrgy Management, Sponsor West. Business Council	7,500
Westchester Community Opportunity P	6/24/2019	Community RH&C, Putnam County CH&C Community	200,000
Wheelabrator Westchester	4/4/2019	Industrial Process Effic, Industrial Process Efficiency	79,893
Wilder Balter Partners, Inc.	4/2/2019	Low Rise New Construction, 2019 LRNCP	42,000
Willdan Energy Solutions	5/16/2019	Industrial Process Effic, IPE16195	25,607
	5/22/2019	Industrial Process Effic, Technical Review and Program S	10,931
	5/29/2019	Multifam Performance Pgm, Staff Augmentation Services	164,409
	6/27/2019	Industrial Process Effic, IPE16222	8,091
	8/5/2019	Commercial Real Estate Ten, Wildan-1345 AoA FIs47,48	7,875
	8/9/2019	Rmve Barriers Dist Enrgy Storg, FT12242-PhelpsMemorial-FTC	25,000
	9/26/2019	Industrial Process Effic, Technical Review and Program S	5,466
Willrab Realty Corp	4/5/2019	Multifam Performance Pgm, Multifamily	12,600
	4/8/2019	Multifam Performance Pgm, Multifamily	25,200
Wiltshire Renewable Energy Systems,	6/6/2019	<200KW PV, NY-Sun	6,830
LLC	9/16/2019	<200KW PV, NY-Sun	6,400
Wise Home Energy, LLC	6/26/2019	Talent Pipeline:CE and OJT, OJT HIRE	5,120
WSP USA Corp.	5/1/2019	Flexible Tech Assistance, FT12038 - Transwestern - FTC	30,000
Xerox Corp	5/3/2019	INDUSTRIAL PROCESS EFFICIENCY, Industrial Process Effici.	4,016
Xzerta Energy Group LLC	8/15/2019	>200KW PV, NY Sun	902,880
	9/20/2019	>200KW PV, NY Sun	1,378,944
	9/26/2019	>200KW PV, NY Sun	476,064
You Save Green Incorporated	7/22/2019	<200KW PV, NY-Sun	8,168
Zero Energy Solutions LTD	8/5/2019	Novel Bus Models & Offers, ZES Novel Business Model	412,136
Zones LLC			
LUNCS LLU	8/27/2019	NYSERDA ADMINISTRATION, Cisco VoIP Service Router	22,127

Contractor **Contract Description** 21C4E. Inc. COMMUNITY SOLAR. Solarize 2016 28th and 10th Associates LLC NEW CONSTRUCTION PROGRAM, NCP11469 - 28th Street 59 West 35th Street Operator, LLC 60 East 8th St Condo 77 Sands Owner LLC 130 7 Ave S Holdings LLC 145 West Street, LLC 425 Lexington Realty Company LLC 510 West 22nd Street Owner LLC 602 Partners LLC <200KW PV, NY-Sun 770 Electric Corp. NY-Sun 950 Summit Avenue LLC Abt Associates Inc. Access Supports for Living Inc. Access Systems, Inc. Accion Group, LLC

- Accord Power, Inc.
- Ace Natural ACEEE Active Solar Development, LLC
- Adam C. Boese
- Adelphi University Adirondack Beverages Corp.
- ADM Associates, Inc., Advanced Radiant Design, Inc. Aegis Energy Services Inc. Aeonsolar AFP 108 Corp Agrana Fruit US, Inc. **AHA Development Corporation** AHOLD USA INC
- Albany County Dept. of General Services Clean Energy Communities, Albany County **Albany Housing Authority** Low Rise New Construction, New Construction Albert Einstein College of Medicine Inc. Flexible Tech Assistance, FlexTech Program - PON 1746 AlienVault, Inc. NYSERDA ADMINISTRATION, Alien Vault Licensing 1 year

Flexible Tech Assistance, FT11681 - Hampton Inn-ESB-PON COMBINED HEAT AND POWER, Distributed Generation as Comb 686,277 NEW CONSTRUCTION PROGRAM, NCP11962 - 77 Sands Street Bro 266,284 NEW CONSTRUCTION PROGRAM, NCP12145 - 130 7th Ave S NEW CONSTRUCTION PROGRAM, NCP7242 - Affordable Housing T 116,949 EXISTING FACILITIES, EFP2358 - Hines - 425 Lexingto 808,050 NEW CONSTRUCTION PROGRAM, NCP11107 - 510 West 22nd Stree 106,963 Multifam Performance Pgm, Multifamily 226,800 12.960 MULTIFAMILY PERFORMANCE PROGRAM, Multifamily 69.600 Combined Heat and Power, Flex Energy Tech Analysis 2 149,905 Low Rise New Construction, New Construction 68,600 NYSERDA ADMINISTRATION, Enterprise Content Management 133,500 REC:CES REC System Dev Costs, Large-Scale Renewables 64,100 <200KW PV, NY Sun 100,784 >200KW PV, NY Sun 791,308 NY Sun Industrial Process Effic, Industrial Process Efficiency 57,702 Prof & Expert Engagement, 2019 ACEEE Membership 10,000 Subscription/Data Access, Market Insights 50,000 <200KW PV, NY Sun 178.532 **RENEWABLE THERMAL, Solar Thermal Incentive** 27,055 Solar Thermal, Solar Thermal Incentives

Total Contract Amount

5.000

99.517

6,150

9.543

8,640

1.005

5,000

2,500

20,200 79,535

2,400,000

129.827

265,551

114.331

193,200

36.800

403,095

22,032

6,000

971,464

65.200

27.282

250,000

23,000

33,523

12,209

5,760

Technical Services, RFP3628FlexTechConsultUmbrella COMBINED HEAT AND POWER, CHPPerformance Program-PON27.. Industrial Process Effic, Industrial Process Efficiency Adirondack North Country Association Community Energy Engagement, CEEP North Country Region-ANCA OTHER PROGRAM AREA, CEEP North Country Region-ANCA EVALUATION, RFQ3183 Umbrella Agreement Industrial Process Effic, RFQ3183 Umbrella Agreement Talent Pipeline:CE and OJT, OJT HIRE COMBINED HEAT AND POWER, CHPA - DO & CO Catering NY Sun Low-Income Forum on Energy, Llfe 2019 Reg Mtg - Western NY INDUSTRIAL PROCESS EFFICIENCY, Industrial Process Efficiency Low Rise New Construction. New Construction Commercial New Construc, NCP16010 - Stop & Shop Mahopac

Agriculture Energy Eff Pgm, FlexTech Consultant Selection

Agriculture Energy Eff Pgm, RFP3628FlexTechConsultUmbrella

chied in high the dag in the organization		
Contractor	Contract Description	Total Contract Amount
Allegany County Society for the Preventi	NEW CONSTRUCTION PROGRAM, NCP12291 - Allegany County SP	11,553
Allen Power, Inc.	SMART GRID SYSTEMS, RFP 3044 R2	993,819
Alliance for Housing Inc.	MULTIFAMILY PERFORMANCE PROGRAM, Multifamily	91,200
Alliance to Save Energy	Prof & Expert Engagement, 2019 ASE Membership	25,000
Altanova LLC	Commercial New Construc, Altanova - Energy Modeling Par	17,000
Alternative Power Solutions of NY, LLC	<200KW PV, PON 2112 NY SUN	41,993
American Council for an Energy Efficient	Intervention Effectiv Training, 2020 ACEEE Finance Forum	45,000
American Energy Care, Inc.	<200KW PV, NY-Sun	18,754
	<200KW PV, PON 2112 NY SUN	5,751
American Packaging Corp.	Commercial New Construc, NCP15059 - American Packaging	130,267
American Society of Heating,Refrigeratin	New Construction- Commercial, New Construction	4,020
	New Construction- Housing, New Construction	16,080
American Solar Partners, LLC	<200KW PV, NY-Sun	6,606
Amphora Consulting	NYSERDA ADMINISTRATION, Strategic Program Dev Training	608,400
Anheuser-Busch, Inc.	INDUSTRIAL PROCESS EFFICIENCY, Industrial and Process Efficie	1,000,000
Antares Group, Inc.	CI Engy Siting & Soft Cost Red, Technical Review and Program S	75,000
	Industrial Process Effic, Technical Review and Program S	19,643
	INDUSTRIAL PROCESS EFFICIENCY, Technical Review and Progra	62,062
Apex Roofing, LLC	<200KW PV, NY Sun	10,982
	NY Sun	15,705
	PON 2112 NY SUN	61,650
Apex Solar Power LLC	<200KW PV, PON 2112 NY SUN	43,524
APPEXTREMES, LLC	NYSERDA ADMINISTRATION, Conga Composer 2019-2020	7,200
Applied Materials Inc.	SMART GRID SYSTEMS, SCFCL Demonstration	1,153,814
Arcadis of New York, Inc.	Agriculture Energy Eff Pgm, RFP3628FlexTechConsultUmbrella	8,478
	ANAEROBIC DIGESTER, RPS-CST Quality Assurance/Qual	200,000
	EXISTING FACILITIES, Staff Augmentation Services	44,125
	Flexible Tech Assistance, FlexTech Consultant Selection	14,995
	Flexible Tech Assistance, RFP3628FlexTechConsultUmbrella	5,350
	Large Scale Renewables, Large Scales Renewables Techni	75,000
	Real Time Enrgy Management, Staff Augmentation Services	318,405
Arcadis U.S., Inc.	Commercial Imp Assist, Tech Review & Program Staff	46,500
	EXISTING FACILITIES, Tech Review & Program Staff	561,274
	FLEXIBLE TECHNICAL ASSISTANCE, Tech Review & Program Staff	40,000
	NYSERDA ADMINISTRATION, Greenling the Bronx M&V	259,940
Ashlee Kleinhammer	AGRICULTURE ENERGY EFFICIENCY, Agriculture Energy Efficiency	15,183
Associated Power Analysts Inc.	Rmve Barriers Dist Enrgy Storg, Energy Storage	48,000
Astrum Solar, Inc.	<200KW PV, NY Sun	111,371
Atelier Ten	NEW CONSTRUCTION PROGRAM, Technical Assistance Services	52,550
Atlas Public Policy	Electric Vehicles - Innovation, Clean Transportation	35,399
Avalon Willoughby West, LLC	NEW CONSTRUCTION PROGRAM, NCP11404 - Avalon Willoughby	305,649
Awards By Walsh's & Creative Marketing	New Construction- Housing, Buildings of Excellence award	7,575
Aztech Geothermal, LLC	Talent Pipeline:CE and OJT, OJT Hire	5,440
	Talent Pipeline:CE and OJT, OJT PON 3982	9,600
B & W Sound Services, Inc.	OTHER PROGRAM AREA, 76West Awards Audio Visual	12,950
BAE Systems Controls, Inc.	INNOVATION CAPACITY & BUSINESS DEVELOPMENT, Li-Ion Life	415,000
·····		

Contractor	Contract Description	Total Contract Amoun
Baldwin Real Estate Development, Corp.	Low Rise New Construction, New Construction	78,600
Ballston Spa Central School	SMART GRID SYSTEMS, Village of Ballston Spa Sch. D	99,873
Bard College	REV Campus Challenge, RM11 - Bard College	64,000
Bashing Panels LLC	<200KW PV, PON 2112 NY SUN	13,176
Battelle Memorial Institute	ENERGY ANALYSIS, Code Enable: NYStretch-Energy	99,365
Bennett & Moskowitz Etal Ptrs	MULTIFAMILY PERFORMANCE PROGRAM, Multifamily	96,600
Bergmann Associates	Agriculture Energy Eff Pgm, FlexTech Consultant Selection	5,000
	Agriculture Energy Eff Pgm, FlexTech Umbrella Agreement	5,000
	Commercial Real Estate Ten, Bergmann 1 Clinton Ave S TBG	5,000
	Commercial Real Estate Ten, Bergmann - 900 Jefferson Rd	5,000
	Commercial Real Estate Ten, Bergmann - Eaton Center Bldg 5	5,000
	Commercial Real Estate Ten, Bergmann - Eaton Center Blg 28	5,000
	Commercial Real Estate Ten, Bergmann - One East Avenue TBG	5,000
	Commercial Real Estate Ten, Bergmann - The Eaton Center	5,000
	Commercial Real Estate Ten, Bergmann Associates-1 E Ave-CT	5,000
	Commercial Real Estate Ten, Bergmann- Eaton Center Blg 2	5,000
	Commercial Real Estate Ten, Bergmann- Eaton Center Blg 27	5,000
	Commercial Real Estate Ten, Bergmann- Eaton Center Blg 30	5,00
	Commercial Real Estate Ten, Bergmann-1 Clinton Ave Sout-CT	5,00
	Commercial Real Estate Ten, BergmannAssociates-One EastAve	5,00
	EXISTING FACILITIES, Tech Review_Support_Umbrella	10,38
	Flexible Tech Assistance, FlexTech Umbrella Agreement	33,00
	Flexible Tech Assistance, Tech Review_Support_Umbrella	67,10
	FLEXIBLE TECHNICAL ASSISTANCE, Tech Review_Support_Umbre	298,79
	Industrial Process Effic, Tech Review_Support_Umbrella	53,52
	INDUSTRIAL PROCESS EFFICIENCY, Tech Review_Support_Umbre	361,61
	Renewable Heat NY, Tech Review_Support_Umbrella	2,60
	SARATOGA TECHNOLOGY & ENERGY PARK, STEP Engineering, D.	30,50
	Technical Services, FlexTech Umbrella Agreement	2.50
		2.300
Berry Plastics		
-	INDUSTRIAL PROCESS EFFICIENCY, Industrial Process Efficiency	243,00
-	INDUSTRIAL PROCESS EFFICIENCY, Industrial Process Efficiency <200KW PV, NY Sun	243,000 460,77
-	INDUSTRIAL PROCESS EFFICIENCY, Industrial Process Efficiency <200KW PV, NY Sun <200KW PV, NY-Sun	243,00 460,77 47,12
Best Energy Power	INDUSTRIAL PROCESS EFFICIENCY, Industrial Process Efficiency <200KW PV, NY Sun	243,00 460,77 47,12 70,68
Better Cities & Towns, Inc.	INDUSTRIAL PROCESS EFFICIENCY, Industrial Process Efficiency <200KW PV, NY Sun	243,00 460,77 47,12 70,68 175,00
Better Cities & Towns, Inc.	INDUSTRIAL PROCESS EFFICIENCY, Industrial Process Efficiency <200KW PV, NY Sun	243,00 460,77 47,12 70,68 175,00 193,05
Best Energy Power Better Cities & Towns, Inc. BHP Energy LLC	INDUSTRIAL PROCESS EFFICIENCY, Industrial Process Efficiency <200KW PV, NY Sun	243,00 460,77 47,12 70,68 175,00 193,05 180,50
Best Energy Power Better Cities & Towns, Inc. BHP Energy LLC Binghamton State University	INDUSTRIAL PROCESS EFFICIENCY, Industrial Process Efficiency <200KW PV, NY Sun	243,00 460,77 47,12 70,68 175,00 193,05 180,50 296,51
Best Energy Power Better Cities & Towns, Inc. BHP Energy LLC Binghamton State University BioDiversity Research Institute	 INDUSTRIAL PROCESS EFFICIENCY, Industrial Process Efficiency <200KW PV, NY Sun <200KW PV, NY-Sun NY-Sun CLEANER GREENER COMMUNITIES, CGC31774 - Better Cities To Combined Heat and Power, CHPA - Bouck Pool Building - S Combined Heat and Power, CHPA - Rosamond Gifford Zoo NEW CONSTRUCTION PROGRAM, NCP98603 - Center of Excellenc Environmental Research, Hg Monitoring Synthesis in NY 	243,00 460,77 47,12 70,68 175,00 193,05 180,50 296,51 250,00
Best Energy Power Better Cities & Towns, Inc. BHP Energy LLC Binghamton State University BioDiversity Research Institute Bloomberg Finance LP	INDUSTRIAL PROCESS EFFICIENCY, Industrial Process Efficiency <200KW PV, NY Sun	243,00 460,77 47,12 70,68 175,00 193,05 180,50 296,51 250,00 22,50
Best Energy Power Better Cities & Towns, Inc. BHP Energy LLC Binghamton State University BioDiversity Research Institute Bloomberg Finance LP Blue Heron Trail II, LLC	INDUSTRIAL PROCESS EFFICIENCY, Industrial Process Efficiency <200KW PV, NY Sun	243,00 460,77 47,12 70,68 175,00 193,05 180,50 296,51 250,00 22,50 57,00
Best Energy Power Better Cities & Towns, Inc. BHP Energy LLC Binghamton State University BioDiversity Research Institute Bloomberg Finance LP Blue Heron Trail II, LLC Boecker Consulting Services	INDUSTRIAL PROCESS EFFICIENCY, Industrial Process Efficiency <200KW PV, NY Sun	243,00 460,77 47,12 70,68 175,00 193,05 180,50 296,51 250,00 22,50 57,00 12,40
Best Energy Power Better Cities & Towns, Inc. BHP Energy LLC Binghamton State University BioDiversity Research Institute Bloomberg Finance LP Blue Heron Trail II, LLC Boecker Consulting Services	INDUSTRIAL PROCESS EFFICIENCY, Industrial Process Efficiency <200KW PV, NY Sun	243,000 460,77 47,124 70,680 175,000 193,050 180,502 296,519 250,000 222,500 57,000 12,400 203
Best Energy Power Better Cities & Towns, Inc. BHP Energy LLC Binghamton State University BioDiversity Research Institute Bloomberg Finance LP Blue Heron Trail II, LLC Boecker Consulting Services Bond, Schoeneck & King, PLLC	INDUSTRIAL PROCESS EFFICIENCY, Industrial Process Efficiency <200KW PV, NY Sun	2,500 243,000 460,77 47,124 70,680 175,000 193,050 296,519 250,000 22,500 57,000 12,400 200 138,000
Berry Plastics Best Energy Power Better Cities & Towns, Inc. BHP Energy LLC Binghamton State University BioDiversity Research Institute Bloomberg Finance LP Blue Heron Trail II, LLC Boecker Consulting Services Bond, Schoeneck & King, PLLC Booz Allen Hamilton, Inc. Borrego Solar Systems, Inc.	INDUSTRIAL PROCESS EFFICIENCY, Industrial Process Efficiency <200KW PV, NY Sun	243,000 460,77 47,124 70,680 175,000 193,050 180,502 296,519 250,000 222,500 57,000 12,400 203

Contractor	Contract Description	Total Contract Amount
BQ Energy, LLC	>200KW PV, commercial/industrial pv	1,147,666
Brenda Sayers	WEST VALLEY DEVELOPMENT PROGRAM, Janitorial Services Cont	33,480
Bridge 145, LLC	MULTIFAMILY PERFORMANCE PROGRAM, Multifamily	61,200
Bridge Land West LLC	NEW CONSTRUCTION PROGRAM, NCP11129 - Washington Street	162,300
Bright Power, Inc.	<200KW PV, NY Sun	363,820
	<200KW PV, NY-Sun	65,853
	Flexible Tech Assistance, FT12212 - 370 Lexington - FTC	25,000
	Flexible Tech Assistance, RFP3628FlexTechConsultUmbrella	27,900
	NY Sun	40,626
	NY-Sun	297,729
	Retrofit NY, Multifamily	75,000
Bristol Mountain	Industrial Process Effic, Industrial Process Efficiency	300,000
Brookhaven National Lab	OTHER PROGRAM AREA, ERL Test Accelerator (C-Beta)	25,000,000
Brooklyn SolarWorks LLC	NY-Sun	9,720
	PON 2112 NY SUN	47,633
Broome Community College	REV CAMPUS CHALLENGE, RFP 3214 REV Campus Challenge	1,000,000
BSREP UA Heritage LLC	MULTIFAMILY PERFORMANCE PROGRAM, Multifamily	390,000
Buck Hill Farm	AGRICULTURE ENERGY EFFICIENCY, Agriculture Energy Efficiency	10,720
Buffalo Neighborhood Stabilization Co	Low Rise New Construction, New Construction	31,000
Buffalo Renewables, Inc.	Small Wind, Wind Turbine Incentive	283,100
Buffalo Solar Solutions Inc	<200KW PV, NY Sun	104,483
	<200KW PV, PON 2112 NY SUN	98,028
Bynder LLC	NYSERDA ADMINISTRATION, WebDAM Photo Library	17,950
C.J. Brown Energy, P.C.	Flexible Tech Assistance, RFP3628FlexTechConsultUmbrella	4,490
	Technical Services, AEAP	5,997
C.T. Male Associates Engineering,	EXISTING FACILITIES, Technical Review and Program S	12,210
	Flexible Tech Assistance, FlexTech Consultant Selection	9,225
C&S Engineers, Inc.	Flexible Tech Assistance, RFP3628FlexTechConsultUmbrella	34,126
Cairo NY 1, LLC	>200KW PV, NY-Sun C&I	701,663
Caithness Long Island LLC	SMART GRID SYSTEMS, Competitive Greenhouse Gas	163,533
Calliope Solar, LLC	>200KW PV, NY Sun	845,093
Carahsoft Technology Corporation	Salesforces	1,326,217
Carrow Real Estate Services, LLC	Office Buildout at 15	10,962
Carter Ledyard & Milburn LLP	NYSERDA ADMINISTRATION, Counsel's Office	10,000
Cascades Containerboard Packaging	Flexible Tech Assistance, FlexTech Program - PON 1746	22,513
CEC Stuyvesant Cove, Inc.	CLEANER GREENER COMMUNITIES, EDGE Territory 3	2,587,506
	COMBINED HEAT AND POWER, EDGE Territory 3	120,000
Center for Internet Security Inc	NYSERDA ADMINISTRATION, CIS Albert SM Monitoring 1 yr.	7,440
Central New York Regional Planning and	CLEANER GREENER COMMUNITIES, CGC42070 - CNY Mitigation	249,750
CHA Consulting Inc.	EXISTING FACILITIES, Technical Review and Program S	106,500
-	Flexible Tech Assistance, RFP3628FlexTechConsultUmbrella	55,500
	Flexible Tech Assistance, Technical Review and Program S	197,086
	FLEXIBLE TECHNICAL ASSISTANCE, Technical Review and Progra	457,914
	Industrial Process Effic, Technical Review and Program S	30,000
Chadbourne & Parke LLP	NEW YORK GREEN BANK, Investec/Sunrun Legal Fees	1,567
		1,001

Contractor	Contract Description	Total Contract Amoun
Chris Benedict	Retrofit NY, Multifamily	75,000
CIR ELECTRICAL CONSTRUCTION CORP.	<200KW PV, NY Sun	7,350
	<200KW PV, PON 2112 NY SUN	79,031
City of Cortland	CLEANER GREENER COMMUNITIES, CGC39729 - City of Cortland	39,000
City of New York, Dept. of Citywide	>200KW PV, PV System @ NYC School K224	57,999
	>200KW PV, PV System @ NYC School K278	61,815
	>200KW PV, PV System @ NYC School K302	81,987
	>200KW PV, PV System @ NYC School K324	80,813
	>200KW PV, PV System @ NYC School K380	68,078
	>200KW PV, PV System @ NYC School K455	339,919
	>200KW PV, PV System @ NYC School K505	213,558
	>200KW PV, PV System @ NYC School K515	134,729
	>200KW PV, PV System @ NYC School M070	106,526
	>200KW PV, PV System @ NYC School Q072	105,532
	>200KW PV, PV System @ NYC School Q204	92,690
	>200KW PV, PV System @ NYC School Q226	79,73
	>200KW PV, PV System @ NYC School Q237	98,41
	>200KW PV, PV System @ NYC School Q445	111,68
	>200KW PV, PV System @ NYC School Q505	149,87
	>200KW PV, PV System @ NYC School R069	99,59
	>200KW PV, PV System @ NYC School R075	66,36
	>200KW PV, PV System @ NYC School R445	80,81
	>200KW PV, PV System @ NYC School R455	167,65
	>200KW PV, PV System @ NYC School X131	93,94
	>200KW PV, PV System @ NYC School X144	125,89
	>200KW PV, PV System @ NYC School X184	94,61
	>200KW PV, PV System @ NYC School X192	70,24
	>200KW PV, PV System @ NYC School X425	76,50
	EXISTING FACILITIES, EFP2525-DCAS; ACE Projects	183,16
City of Rome	Clean Energy Communities, CEC600853 - City of Rome	100,000
City of Schenectady	CLEANER GREENER COMMUNITIES, CGC61854 - City of Schenect	250,00
City Parks Foundation	GREENING THE BRONX, Greening The Bronx	2,244,26
Claire Weisz Architects	CLEAN TRANSPORTATION, Optimizing the Curb	145,00
Clarkson Univ., Research Div.	ENVIRONMENTAL RESEARCH, Energy Related Air Quality	349,69
Clean Energy States Alliance	Prof & Expert Engagement, FY 2020 CESA Membership	68,50
Clean Power Research	Electric Vehicles - Innovation, PO for 2019 WattPlan EV	18,000
Clifford Chance US LLP	NEW YORK GREEN BANK, Green Bank Outside Legal Serv.	36,00
Climate Change & Environmental	Commercial Real Estate Ten, CCES - 209-35 Northern Blvd	9,96
	Commercial Real Estate Ten, CCES-Aultisite	8,190
	,	
	Commercial Real Estate Ten, Climate Chng Env-13030 31st Av	7,99
Clough, Harbour & Associates, LLP	INDUSTRIAL PROCESS EFFICIENCY, EFP Task Work Order	16,500
	NYSERDA ADMINISTRATION, FlexTech Consultant Selection	23,30
CNY Solar, Inc.	<200KW PV, NY Sun	291,752
	<200KW PV, PON 2112 NY SUN	29,684
Code Green Solutions, Inc.	FLEXIBLE TECHNICAL ASSISTANCE, FlexTech Consultant Selection	20,445
Cogeneration Contractors, Inc.	COMBINED HEAT AND POWER, CHPA - 66-36 Yellowstone	255,25

Contractor	Contract Description	Total Contract Amount
Cogeneration Contractors, Inc.	COMBINED HEAT AND POWER, CHPA - 133 Greenwich Marriot	232,050
	COMBINED HEAT AND POWER, CHPA - Hudson Yards Tower C	1,500,000
	COMBINED HEAT AND POWER, CHPA - San Remo	375,912
Cohen Ventures Inc	EMERGING TECHNOLOGY / ACCELERATED COMMERCIALIZATIO	1,171,735
Cold Black River L.P.	Multifam Performance Pgm, Multifamily	92,000
Collegiate School Inc	NEW CONSTRUCTION PROGRAM, NCP11512 - Collegiate School r	189,051
Colliers International Holdings USA, Inc	Flexible Tech Assistance, Efficiency Planning & Engineer	5,675
Columbia University	NEW CONSTRUCTION PROGRAM, NCP11569 - ColumbiaBowtieBldg	78,770
	NEW CONSTRUCTION PROGRAM, NCP11570 - Columbia School Sit	147,940
	NEW CONSTRUCTION PROGRAM, NCP11571 - Columbia Business	179,540
	NEW CONSTRUCTION PROGRAM, NCP11572 - Lenfest Center for	149,731
CON EDISON SOLUTIONS, INC.	<200KW PV, NY Sun	140,301
Concord Servicing Corporation	GJGNY REVOLVING LOAN FUND, Codes, Products and Standards	240,000
	GJGNY REVOLVING LOAN FUND, Multifamily	150,000
	MULTIFAMILY PERFORMANCE PROGRAM, Multifamily	C
Concur Technologies, Inc.	NYSERDA ADMINISTRATION, Concur Tech Expense Expert	18,000
Conifer Lechase Construction	NEW YORK ENERGY STAR HOMES, RES-NewConst(no longer in us	70,000
ConMed Corporation	INDUSTRIAL PROCESS EFFICIENCY, Industrial Process Efficiency	340,639
Consortium for Energy Efficiency, Inc.	Prof & Expert Engagement, Industrial Process Efficiency	48,000
Continental Automated Buildings	Subscription/Data Access, market research for NYSERDA	6,900
Control Solutions Group, Inc.	NYSERDA ADMINISTRATION, HVAC Maintenance NYC Office	15,155
Conventures, Inc.	EXISTING FACILITIES, 2019 Energy Solutions Summit	6,250
	INDUSTRIAL PROCESS EFFICIENCY, 2019 Energy Solutions Summit	12,500
	Real Time Enrgy Management, 2019 Energy Solutions Summit	6,250
Cooper Friedman Electric Supply Co. Inc.	NY-SUN, NY-Sun Comp. Monroe Cable	787,874
Cooper Union	REV Campus Challenge, RM7 - Cooper Union University	154,000
COR Rensselaer Company III Inc	CLEANER GREENER COMMUNITIES, CGC31256 - COR Inner Harbor	1,343,000
Corey Harrington	OTHER PROGRAM AREA, National offshore Website	5,988
Cornell University	NEW CONSTRUCTION PROGRAM, NCP12380 - Gannett Health Cent	61,684
	NEW CONSTRUCTION PROGRAM, NCP12381 - Upson Hall	98,709
	NEW CONSTRUCTION PROGRAM, NCP12382 - College of Veterina	161,623
Cornell University-Office of Sponsored P	ENERGY ANALYSIS, Accelerated Recovery	26,095
	ENVIRONMENTAL RESEARCH, Accelerated Recovery	50,916
	ENVIRONMENTAL RESEARCH, virtual greenhouse tool	124,716
Cornerstone Energy Services	Renewable Heat NY, Cornerstone - Haney	15,975
	RENEWABLE HEAT NY, Cornerstone - North Country Sc	22,963
Corning Inc.	Industrial Process Effic, Industrial Process Efficiency	837,642
CoStar Realty Information, Inc.	MARKET PATHWAYS, Codes, Products and Standards	4,940
	MARKET PATHWAYS, Research Subscription	21,740
	Subscription/Data Access, CoStar Subscription	18,887
	Subscription/Data Access, Database/subscription services	21,250
	Subscription/Data Access, Market Insights	14,908
County of Erie Comptrollers Office	NEW CONSTRUCTION PROGRAM, NCP12832-ECCNorthCampusS.	81,408
Courtney-Strong Inc.	CLEANER GREENER COMMUNITIES, CGC53012 - Courtney Strong	792,441
Credit Suisse USA	NEW CONSTRUCTION PROGRAM, NCP12339 - Eleven Madison Av	220,633
		220,000

Contractor	Contract Description	Total Contract Amount
Crestwood Lake Heights Section 2 Corp.	MULTIFAMILY PERFORMANCE PROGRAM, Multifamily	111,000
Crestwood Lake Heights Section 3 Corp.	MULTIFAMILY PERFORMANCE PROGRAM, Multifamily	86,900
Crestwood Lake Heights Section 4 Corp.	MULTIFAMILY PERFORMANCE PROGRAM, Multifamily	44,550
Croton Energy Group, Inc.	<200KW PV, PON 2112 NY SUN	25,623
	NY Sun	24,966
Crotona Terrace Building A LLC	MULTIFAMILY PERFORMANCE PROGRAM, Multifamily	48,000
Cutone & Company Consultants, LLC	Commercial Real Estate Ten, LCA - 28 Liberty Street - CT	16,320
	Commercial Real Estate Ten, LCA - 79 Walker Street - CT	6,180
	Commercial Real Estate Ten, LCA - 120 Bloomingdale Rd - CT	6,620
	Commercial Real Estate Ten, LCA-JPMC#3 Multisite-CT	18,955
	EXISTING FACILITIES, EFP2639 - Cutone; 200 Lexingto	12,086
	NEW CONSTRUCTION PROGRAM, NCP12209 - 11 East 31st Street	12,151
CWC INC	NEW CONSTRUCTION PROGRAM, NCP12395 - 219 East 44th Stree	65,701
Cypress Creek Renewables LLC	>200KW PV, NY-Sun	1,204,258
	>200KW PV, NY-Sun C&I	2,662,043
	>200KW PV, NY-SunCI	1,109,185
Cypress Hills Local Development Corporat	MULTIFAMILY PERFORMANCE PROGRAM, Multifamily	119,962
D C Hotels Two, LLC	Low-Income Forum on Energy, 2018 LIFE Hotel - Holiday Inn	8,330
D. F. Brandt, Inc.	Industrial Process Effic, Industrial Process Efficiency	111,030
Danfoss Holding Security Corporation	EXISTING FACILITIES, EFP2446 - Danfoss; Shoprite	144,697
David P Bruns	NEW YORK ENERGY STAR HOMES, New Construction	288,000
Davis Polk & Wardwell LLP	NEW YORK GREEN BANK, Green Bank Outside Legal Couns	289,492
Delaware River Solar, LLC	>200KW PV, NY Sun	926,896
Dell, Inc.	NYSERDA ADMINISTRATION, Dell Desktops - 10 Order #1	5,201
	NYSERDA ADMINISTRATION, Laptops and Docking Qty.4	5,307
	NYSERDA ADMINISTRATION, MS Project and Visio	114,755
Denton Hill Family & Ski Resort, Inc.	Industrial Process Effic, Industrial Process Efficiency	124,200
Dentons US LLP	GJGNY REVOLVING LOAN FUND, Bond Counsel Services	26,000
DFB Sales Inc.	Black-out shades for NYC	6,325
Digital Realty Trust	Industrial Process Effic, Industrial Process Efficiency	366,252
Dimien LLC	ADVANCED BUILDINGS, Chromatic Window Coating	100,000
Direct Packet Inc.	NYSERDA ADMINISTRATION, Video Endpoint for CEO	6,459
	NYSERDA ADMINISTRATION, Video Service Renewal - Cisco	26,769
Diversified Control Inc.	INDUSTRIAL PROCESS EFFICIENCY, Industrial Process Efficiency	254,248
DNC Parks & Resorts at Gideon Putnam LLC	Low-Income Forum on Energy, 2017 LIFE Reg. Mtg Saratoga	7,000
DNV GL Energy Insights USA Inc.	EVALUATION, RFQ 3183 KEMA, Inc	136,882
	NEW YORK GREEN BANK, RFQ 3183 KEMA, Inc	739,307
Do-It-With Inc.	NY-Sun	50,976
Doherty Electric, LLC	<200KW PV, NY Sun	7,161
Dolomite Products Group, Inc.	Industrial Process Effic, Industrial Process Efficiency	44,897
Donald W Klemme II	AGRICULTURE ENERGY EFFICIENCY, Agriculture Energy Efficiency	16,875
Down Town Association	NEW CONSTRUCTION PROGRAM, NCP12542 - Down Town Associ	39,725
Downstate Technology Center, Inc.	NEW CONSTRUCTION PROGRAM, NCP98745 - Downstate Biotechno	47,669
Dr. Michael P. Wilson	WEST VALLEY DEVELOPMENT PROGRAM, WV-State Lics'd Dispos.	8,000
DRYDEN-TOMPKINS SOLAR I LLC	>200KW PV, NY-Sun C&I	1,332,897
DWM International Inc.	OTHER PROGRAM AREA, 2019 76West Trophy Procurement	8,645
by the international me.	othert Rookaw Area, 2010 rowest hopity hoculement	0,040

Contractor	Contract Description	Total Contract Amount
Dynamic Energy Solutions, LLC	>200KW PV, NY Sun	611,686
Earth Environmental Group, LLC	RENEWABLE THERMAL, Clean Heating & Cooling	52,962
	RENEWABLE THERMAL, Solar Thermal Incentives	52,962
Earth Sensitive Solutions, LLC	Geothermal Incentive Program, Large-Scale GSHP Rebate	547,524
EcoMarkets LLC	FUEL CELLS, RPS Customer Sited Tier Fuel C	1,000,000
Ecovis, Inc.	<200KW PV, NY Sun	5,950
	<200KW PV, NY-Sun	5,357
Eiger 3970 Consultants Inc.	<200KW PV, NY Sun	22,545
	<200KW PV, NY-Sun	6,480
	<200KW PV, PON 2112 NY SUN	5,642
El Mira Colony Park LLC	MULTIFAMILY PERFORMANCE PROGRAM, Multifamily	36,550
Eldor Contracting Corporation	<200KW PV, NY Sun	403,068
Electric Power Research Institute	ADVANCED BUILDINGS, Modular DR-ready HVAC	309,397
	ENVIRONMENTAL RESEARCH, Climate & future electric syst	299,652
Electrification Coalition Foundation	Electric Vehicles - Innovation, EV Awareness Campaign Design	50,000
Ellsworth Solar II, LLC	>200KW PV, NY Sun	1,014,112
eluminocity US, Inc.	CLEAN TRANSPORTATION, IoT for street lighting	499,980
EME Consulting Engineering Group, LLC	Agriculture Energy Eff Pgm, FlexTech Consultant Selection	5,000
	Agriculture Energy Eff Pgm, RFP3628FlexTechConsultUmbrella	2,500
	EXISTING FACILITIES, RFP3628FlexTechConsultUmbrella	37,500
	Flexible Tech Assistance, RFP3628FlexTechConsultUmbrella	9,375
	FLEXIBLE TECHNICAL ASSISTANCE, FlexTech Consultant Selection	700,000
	FLEXIBLE TECHNICAL ASSISTANCE, RFP3628FlexTechConsultUm.	28,125
	NEW CONSTRUCTION PROGRAM, Tech Review and Program Staff	8,240
Empire Solar Solutions LLC	<200KW PV, NY Sun	5,355
	<200KW PV, PON 2112 NY SUN	17,448
Employee Leasing of Greater NY	NY-SUN, Temp Employee Services	19,000
	NYSERDA ADMINISTRATION, Temp Employee Services	42,120
Empower CES, LLC	<200KW PV, NY Sun	5,400
Eneractive Solutions	K-12 SCHOOLS, FlexTech Consultant Selection	600,000
	Real Time Enrgy Management, EnerActive-300 E 66th St-RTEM	45,360
Energetics, Incorporated	CLEAN TRANSPORTATION, Planning Board EVSE Promotion	100,000
Energences, meorporateu	CLEAN TRANSPORTATION, Truck Platooning Study	99,505
	CLEAN TRANSPORTATION, Truck Platooning Workshops	29,941
	Electric Vehicles - Innovation, Planning Board EVSE Promotion	40,000
	EVALUATION, RFQL3685 Round 1	65,281
Energy & Resource Solutions, Inc.	Agriculture Energy Eff Pgm, RFP3628FlexTechConsultUmbrella	5,000
Energy & Resource Solutions, Inc.	EMERGING TECHNOLOGY / ACCELERATED COMMERCIALIZATIO.	
		19,140 772,800
	EVALUATION, Energy & Resource Sol. TWO	
	EXISTING FACILITIES, Technical Review and Program S	35,640
	Industrial Process Effic, Energy & Resource Sol. TWO	147,200
	Industrial Process Effic, Technical Review and Program S	112,468
	INDUSTRIAL PROCESS EFFICIENCY, Technical Review and Progra	716,257
	NEW CONSTRUCTION PROGRAM, Technical Assistance Services	125,340
	Rmve Barriers Dist Enrgy Storg, RFP 3407 Categories 2 & 3A	570,000
	Technical Services, RFP3628FlexTechConsultUmbrella	6,505

Contractor	Contract Description	Total Contract Amoun
Energy and Environmental Economics Inc.	>200KW PV, Tech Assist, REV Pool.	50,000
	ENERGY ANALYSIS, Tech Assist, REV Pool.	25,00
	Mkt Char: Tech Assist, Tech Assist, REV Pool.	594,63
	OTHER PROGRAM AREA, Tech Assist, REV Pool.	25,000
	Rmve Barriers Dist Enrgy Storg, Tech Assist, REV Pool.	277,81
Energy Improvement Corporation	CLEANER GREENER COMMUNITIES, CGC39896 - EIC	4,828,88
Energy Technology Savings, Inc.	Real Time Enrgy Management, Energy Tech-2 Water St-RTEM	8,40
	Real Time Enrgy Management, Energy Tech-60 W 23rd St-RTEM	11,64
	Real Time Enrgy Management, Energy Tech-145 W 67th St-RTEM	8,40
	Real Time Enrgy Management, Energy Tech-200 N End Ave-RTEM	9,90
	Real Time Enrgy Management, Energy Tech-245 E 44th St-RTEM	5,70
	Real Time Enrgy Management, Energy Tech-330 E 39th St-RTEM	5,70
	Real Time Enrgy Management, ETS-Moinian 100 John St-RTEM	8,220
	Real Time Enrgy Management, ETS-Moinian The Marc-RTEM	10,380
	Real Time Enrgy Management, ETS-Moininan Ocean-RTEM	10,380
Energy Week Holdings, LLC	NYSERDA ADMINISTRATION, 2019 New York Energy Week	5,00
EnergyPro Insulation, LLC	<200KW PV, NY-Sun	6,003
EnergySavvy Inc	ASSISTED HOME PERFORMANCE WITH ENERGY STAR, Residenti	7,18
	EMPOWER NY, Residential Program MgtRFP3545	7,18
	Home Perf w Energy Star, Residential Program MgtRFP3545	1,055,89
	HOME PERFORMANCE WITH ENERGY STAR, Residential Program	7,18
Enlighten Power Solutions, LLC	>200KW PV, NY Sun	10,43
EnterSolar LLC	PON 2112 NY SUN	577,53
Entic, Inc.	Real Time Enrgy Management, ShopsAtSkyVi-4024College-RTEM	31,56
Environment & Energy Publishing, LLC	NYSERDA ADMINISTRATION, Counsel's Office	13,19
Environmental Design & Research	Off-Shore Wind Pre-Dev Act, RFP3462 Umbrella Agreement	67,37
EQR-Fresca 2009 Limited Partnership	MULTIFAMILY PERFORMANCE PROGRAM, Multifamily	144,90
Erdman Anthony & Associates, Inc.	Flexible Tech Assistance, RFP3628FlexTechConsultUmbrella	9,95
· · · · · · · · · · · · · · · · · · ·	Industrial Process Effic, IPE16209	5,61
	Industrial Process Effic, Technical Review and Program S	20,45
	INDUSTRIAL PROCESS EFFICIENCY, Technical Review and Progra	6,63
	Technical Services, RFP3628FlexTechConsultUmbrella	5,000
ESRI, Incorporated	NYSERDA ADMINISTRATION, ArcGIS Desktop and Spatial	22,20
EthosGen, LLC	NextGen HVAC, PON3519 Round 1	825,00
EV Connect Inc.	CLEAN TRANSPORTATION, Electric Vehicle Supply Equipm	275,000
	CLEAN TRANSPORTATION, EV Connect, Inc. PON 2301 EVSE	249,81
Evelar, Inc.	<200KW PV, NY Sun	6,42
Extraterrestrial Materials Inc.	<200KW PV, NY Sun	31,35
Extraterrestriar materials inc.	<200KW PV, PON 2112 NY SUN	14,77
EYP Architecture & Engineering, PC	NEW CONSTRUCTION PROGRAM, Technical Assistance Services	21,90
Farmington Gardens II Associates, LLC	Low Rise New Construction, New Construction	83,40
Feit Electric Co.	MARKET PATHWAYS, Feit/Costco Retail Events	6,00
		20,93
Fiber Technologies Networks, LLC	NYSERDA ADMINISTRATION, Information Technology	
	NYSERDA ADMINISTRATION, Renewal: Dark Fiber	11,94
Fifth @ 42nd LLC	Flexible Tech Assistance, FT11673 - 5th@42-505 5th - PON	13,420
Finger Lakes ReUse, Inc.	CLEANER GREENER COMMUNITIES, CGC41134 - Finger Lakes Re	1,898,83

Contractor	Contract Description	Total Contract Amount
First Colonie Company	Environmental Research, AQHE Research Workshop	30,000
	Strategic Energy Manager, 2019 SEM Workshops	6,500
First Columbia Property Services, LLC	NYSERDA ADMINISTRATION, Property Management Services	638,498
First North American Holdings II Inc.	EXISTING FACILITIES, EFPCHP - PON1219	523,500
First Quality Maintenance II, LLC	NYSERDA ADMINISTRATION, Admin-NYC (Accounting Use)	214,311
	NYSERDA ADMINISTRATION, Multifamily	0
	NYSERDA ADMINISTRATION, NYC Office Cleaning	88,842
	NYSERDA ADMINISTRATION, Office Cleaning Contract	3,080
Florenton River LLC	<200KW PV, NY Sun	133,600
	<200KW PV, PON 2112 NY SUN	5,625
	NY Sun	3,400
	PON 2112 NY SUN	8,190
Fluor Industrial Services	Industrial Process Effic, Industrial Process Efficiency	82,833
FM Office Express	8 NYC Work Stations	15,345
Forbes-Capretto Homes	Low Rise New Construction, 2019 LRNCP	5,700
	Low Rise New Construction, LR NCP New Construction	23,750
	Low Rise New Construction, New Construction	28,500
ForeFront Power, LLC	>200KW PV, NY Sun	2,325,758
Fort Leazier Solar, LLC	>200KW PV, NY Sun	654,947
Fort Orange Press Incorporated	WORKFORCE DEVELOPMENT, Printing Services	11,633
Forteq North America Inc.	Industrial Process Effic, Industrial Process Efficiency	48,408
Fourth Coast, Inc.	<200KW PV, NY Sun	48,800
	<200KW PV, NY-Sun	7,705
Frederick A Proven	<200KW PV, PON 2112 NY SUN	5,670
Frontier Energy, Inc.	ANAEROBIC DIGESTER, RPS CST QA/QC Support	154,787
	Industrial Process Effic, Technical Review_Prgm Support	2,410
Fugro USA Marine, Inc.	Off-Shore Wind Pre-Dev Act, TWO 1 Agreement 111941	27,860
Fusion Energy Services LLC	<200KW PV, NY Sun	11,004
Galatea Solar, LLC	>200KW PV, NY Sun	654,947
Gallagher Bus Service Corp.	Commercial/Industrial -	29,776
	NY-SUN, Commercial/Industrial -	71,897
Gardiner & Theobald Inc	NYSERDA ADMINISTRATION, Multifamily	138,000
GCOM Software LLC	NYSERDA ADMINISTRATION, Staff Aug Umbrella Agreement	555,750
General Electric International, Inc.	ENERGY ANALYSIS, RFQL3685 Round 1	175,000
George E Denmark II	<200KW PV, PON 2112 NY SUN	8,715
Geotherm Inc.	<200KW PV, PON 2112 NY SUN	8,680
Global Common, LLC	SMART GRID SYSTEMS, RFP 3044 R2	1,000,000
Global Dwelling, LLC	Talent Pipeline:CE and OJT, OJT HIRE	7,200
Global Thermostat Operations LLC	OTHER PROGRAM AREA, RFQL3101 76W Clean Energy Comp	250,000
Goldman Copeland Associates, P.C.	Commercial Real Estate Ten, Goldman & Copeland - 55 E 52nd	10,997
	Commercial Real Estate Ten, Goldman Copelan-640 5th Ave-CT	10,997
	Commercial Real Estate Ten, Goldman Copeland-90 Park Av-CT	10,997
	Commercial Real Estate Ten, Goldman Copeland-150 E 58th-CT	10,997
	Commercial Real Estate Ten, Goldman Copeland-330MadisonAve	10,997
	Commercial Real Estate Ten, Goldman Copeland-888 7th Av-CT	10,997

Contractor	Contract Description	Total Contract Amount
Goldman Copeland Associates, P.C.	Commercial Real Estate Ten, Goldman-280 Park Ave-CT	10,997
	Commercial Real Estate Ten, GoldmanCopelane - 230 Park Ave	21,993
	Flexible Tech Assistance, RFP3628FlexTechConsultUmbrella	68,745
Goldman Sachs	Industrial Process Effic, Industrial Process Efficiency	77,165
Golub Corporation	CLEAN TRANSPORTATION, Golub Corporation PON 2301 EVS	321,000
Grand Island Solar, LLC	>200KW PV, NY Sun	325,615
GRE Fund II Holdco LLC	NY-Sun	428,726
	NY-SUN, NY-Sun	1,025,435
Greek Peak Holdings Inc	NEW CONSTRUCTION PROGRAM, NCP2376 - Hope Lake Lodge	40,000
Green City Force	WORKFORCE DEVELOPMENT, Career pathways training	367,000
Green Hybrid Energy Solutions Inc.	<200KW PV, PON 2112 NY SUN	6,143
	PON 2112 NY SUN	132,444
Green Light New York, Inc.	Prof & Expert Engagement, 2019 BEEx Watt Membership	50,000
	Real Time Enrgy Management, Green Seeds sponsorship	15,000
Green Options Buffalo	CLEAN TRANSPORTATION, Bicycling Education Campaign	30,000
Green Power Developers, LLC	<200KW PV, NY-Sun	36,773
Green Power Solutions, Inc.	<200KW PV, RES-NewConst(no longer in use)	11,063
Green Street Power Partners LLC	<200KW PV, NY Sun	998,718
	PON 2112 NY SUN	38,455
Greenpac Mill, LLC	Industrial Process Effic, Industrial Process Efficiency	477,000
Grenadier Realty Corp.	COMBINED HEAT AND POWER, On-Site Power	461,278
GRID Alternatives Tri-State, Inc.	<200KW PV, NY-Sun	12,883
	NY-Sun	19,325
Grid City Electric Corp	PON 2112 NY SUN	32,928
Group-S LLC	Flexible Tech Assistance, FlexTech Consultant Selection	8,000
Guth Deconzo Consulting Engineers	EXISTING FACILITIES, EFP2543-Guth Deconzo Consultin	67,792
Habitat for Humanity Dean Street Housing	MULTIFAMILY PERFORMANCE PROGRAM, Multifamily	18,000
Halcyon, Inc.	<200KW PV, NY Sun	5,145
	Talent Pipeline:CE and OJT, OJT HIRE	50,400
Harris Beach PLLC	WEST VALLEY DEVELOPMENT PROGRAM, RFP 3300 Outside Cou	10,000
Harris Wiltshire & Grannis LLP	OTHER PROGRAM AREA, RFP3776 Outside Counsel Servic	12,000
Harvest Power, LLC	<200KW PV, NY Sun	15,578
	<200KW PV, NY-Sun	11,050
	NY-Sun	16,575
Harwich Partners, LLC	SMART GRID SYSTEMS, REV Demo Implementation	97,500
Hecate Energy LLC	REC:CES REC Contracts, 11th Main Tier Solicitation	46,123,202
HH 310 Rainbow LLC	NEW CONSTRUCTION PROGRAM, NCP12990-NiagaraFallHotel-OF	30,000
High Hawk, LLC	MULTIFAMILY PERFORMANCE PROGRAM, Multifamily	149,929
High Peaks Solar	<200KW PV, PON 2112 NY SUN	14,294
Hilton Albany	Off-Shore Wind Pre-Dev Act, 2019 Offshore Wind Sup Forum	16,540
Hodgson Russ LLP	CI Engy Siting & Soft Cost Red, RFP 3300 & RFP 3776 Outside Co	20,000
Holland & Knight LLP	Green Bank Outside Legal Serv.	31,001
-	NEW YORK GREEN BANK, Green Bank Outside Legal Serv.	148,668
	NEW CONSTRUCTION PROGRAM, NCP14017 - HOLT Building	10,261
HOLT Architects PC		
HOLI Architects PC Homes for New Yorkers, Inc	MULTIFAMILY PERFORMANCE PROGRAM, Multifamily	180,000

Contractor	Contract Rescription	Total Contract Amount
Contractor Hudson Metropolitan LLC	Contract Description MULTIFAMILY PERFORMANCE PROGRAM, Multifamily	Total Contract Amount
Hudson River Renewables		90,000
Hudson Solar	<200KW PV, PON 2112 NY SUN	5,040
	<200KW PV, NY Sun	65,000
Hudson Valley Clean Energy Inc.	<200KW PV, NY Sun	6,867
	<200KW PV, PON 2112 NY SUN	42,646
	>200KW PV, NY Sun	488,852
	NY-SUN, NY-Sun	194,040
Hudson Valley Hospital	NEW CONSTRUCTION PROGRAM, NCP13047 - NYP Hudson Valley	52,539
Hudson Valley Wind Energy, LLC	<200KW PV, NY Sun	14,580
Hyatt Corporation as agent for Hyatt Equ	Off-Shore Wind Master Plan, Reception at IPF Conference	17,032
	Off-Shore Wind Pre-Dev Act, Reception at IPF Conference	15,998
i3 Electronics, Inc.	INDUSTRIAL PROCESS EFFICIENCY, Industrial Process Efficiency	4,270,395
ICAST	Retrofit NY, Multifamily	75,000
ICF Resources, LLC	Commercial Imp Assist, Technical Review and Program S	7,873
	EXISTING FACILITIES, Technical Review and Program S	11,462
IHS Global Inc.	ENERGY ANALYSIS, IHS/CERA Subscription	32,750
	FUEL NY, OPIS Rack Price Subscription	8,736
INF Associates LLC	Commercial Real Estate Ten, INF Associates LLC - Multisite	50,000
Infinity Solar Systems, LLC	<200KW PV, PON 2112 NY SUN	5,042
Institute for Building Technology and Sa	SQA - LS50 Direct Contract	25,000
Integral Group LLC	Commercial New Construc, Integral Group LLC-RFP3036 Ser	56,635
International Code Council, Inc.	ADVANCED ENERGY CODES, ECCCNYS Commentary IECC2015	256,730
International Energy Program	EVALUATION, Performance Management	5,000
Intrepid Museum Foundation	COMBINED HEAT AND POWER, Distributed Generation as CHP	2,000,000
Inverters Unlimited, Inc.	NY Sun	27,885
Ithaca College	Flexible Tech Assistance, FT12024 - Ithaca College - PON	14,428
	REV Campus Challenge, RM12 - Ithaca College	50,273
J Sarna D Rosen Et Al	MULTIFAMILY PERFORMANCE PROGRAM, Multifamily	317,000
J. Feil and M. Bernstein Et Al	MULTIFAMILY PERFORMANCE PROGRAM, Multifamily	269,750
Jefferson Community College	REV Campus Challenge, RM4 - SUNY Jefferson Community	52,528
John M Peila III	AGRICULTURE ENERGY EFFICIENCY, Agriculture Energy Efficiency	19,150
Johnson Controls, Inc. (Syracuse)	Flexible Tech Assistance, RFP3628FlexTechConsultUmbrella	26,265
JPMartin Energy Strategy LLC	OTHER PROGRAM AREA, PON 3249 ACELithium research	49,968
Kamtech Restoration Corp	<200KW PV, PON 2112 NY SUN	5,508
	NY Sun	39,744
Kasselman Solar LLC	<200KW PV, NY Sun	37,600
	<200KW PV, NY-Sun	11,571
	<200KW PV, PON 2112 NY SUN	99,495
Kearns & West, Inc.	OREC: Technical Support, OSW RFP Facilitation Support	36,433
Key Bank	<200KW PV, NY-Sun	546,669
Kilowatt Engineering, Inc.	EXISTING FACILITIES, 2621 Umbrella Contract	55,772
_ _	Industrial Process Effic, 2621 Umbrella Contract	71,285
	INDUSTRIAL PROCESS EFFICIENCY, 2621 Umbrella Contract	28,810
King & King Architects, LLP	Retrofit NY, Multifamily	75,000
Kroll Bond Rating Agency, Inc.	GJGNY REVOLVING LOAN FUND, Office of the Treasurer	65,000
Kuhl Solar, LLC	>200KW PV, NY Sun	845,093
		0+0,080

Contractor	Contract Description	Total Contract Amount
L&S Energy Services, Inc.	>200KW PV, Umbrella Contract	150,000
	Agriculture Energy Eff Pgm, RFP3628FlexTechConsultUmbrella	7,500
	Flexible Tech Assistance, FlexTech Consultant Selection	75,000
	Flexible Tech Assistance, RFP3628FlexTechConsultUmbrella	4,443
	GREENING THE BRONX, Greening the Bronx	99,934
	GREENING THE BRONX, GtB- Evaluation	42,814
	Industrial Process Effic, Umbrella Contract	27,008
	INDUSTRIAL PROCESS EFFICIENCY, Umbrella Contract	3,277
	Technical Services, RFP3628FlexTechConsultUmbrella	21,000
LaBella Associates, P.C.	Agriculture Energy Eff Pgm, FlexTech Consultant Selection	2,500
	Agriculture Energy Eff Pgm, RFP3628FlexTechConsultUmbrella	2,500
	EXISTING FACILITIES, Technical Review and Program S	25,457
	Flexible Tech Assistance, RFP3628FlexTechConsultUmbrella	46,750
	Geothermal Incentive Program, Large-Scale GSHP Rebate	273,000
	GJGNY REVOLVING LOAN FUND, Technical Review and Program S	49,640
	Industrial Process Effic, Technical Review and Program S	5,885
	NEW CONSTRUCTION PROGRAM, New Construction	9,913
	Technical Services, RFP3628FlexTechConsultUmbrella	5,000
Lafayette Development Partners LLC	NEW CONSTRUCTION PROGRAM, NCP12734 - Lafayette Developme	84,603
Lamont Financial Services Corporation	GJGNY REVOLVING LOAN FUND, Office of the Treasurer	468,100
	NYSERDA ADMINISTRATION, Office of the Treasurer	10,000
Lamphear Court Townhomes LLC	Low Rise New Construction, New Construction	86,100
Latham & Watkins LLP	NEW YORK GREEN BANK, Green Bank	25,000
Levitan & Associates, Inc.	REC:CES REC System Dev Costs, Support for Index REC Petition	50,000
Libolt & Sons, Inc.	NEW YORK ENERGY STAR HOMES, New Construction	100,000
Local 32BJ Thomas Shortman Training	Workforce Industry Partnership, Coordinate business case demo	15,000
Loeb & Loeb LLP	NEW YORK GREEN BANK, Green Bank Outside Legal Couns	15,762
Long Island Power Authority	NY-SUN, Statewide Solar Energy	54,200,000
Long Island Power Solutions	<200KW PV, NY Sun	16,505
Lotus Energy, Inc.	<200KW PV, PON 2112 NY SUN	14,076
Luminosity Events, Inc	OTHER PROGRAM AREA, 2019 Climate Leadership Forum	16,068
Lumsden & McCormick, LLP	NYSERDA ADMINISTRATION, Tax Compliance 2018- 3yr cycle	20,200
M.J. Beck Consulting LLC	OREC: Technical Support, RFQL3926 Umbrella Contract	65,000
M/E Engineering, P.C.	Commercial New Construc, M/E - EMP	31,775
,,	Industrial Process Effic, Technical Review and Program S	39,995
Maalka Inc	Cleantech Ignition, PON 3871 Ignition Grants	100,000
MacQuesten Construction Management LLC	NEW YORK ENERGY STAR HOMES, New Construction	103,500
Malcarne Contracting, Inc.	Talent Pipeline:CE and OJT, OJT HIRE	12,000
Maria Isabel HDFC	MULTIFAMILY PERFORMANCE PROGRAM, Multifamily	123,750
Maspeth Contracting Corp.	<200KW PV, NY-Sun	12,118
Maspeth Contracting Corp. Mastercard International	Commercial New Construc, NCP15000 - MasterCard HQ-OFLT	26,277
	NY-Sun	
Mayor Brown LLD		298,080
Mayer Brown LLP		20,487
MBD Community Housing Corp	MULTIFAMILY PERFORMANCE PROGRAM, Multifamily	151,000
McAlpin Industries Inc	INDUSTRIAL PROCESS EFFICIENCY, Industrial Process Efficiency	30,093
Meadows Senior Living L.P.	NEW YORK ENERGY STAR HOMES, New Construction	233,500

Contractor	Contract Description	Total Contract Amount
Meadows Senior Living L.P.	RENEWABLE THERMAL, Solar Thermal Incentive	54,110
Meals on Wheels of Staten Island, Inc.	NEW CONSTRUCTION PROGRAM, NCP12670 - MOWs Staten Is O	33,665
Melone Village II Limited Partnership	Low Rise New Construction, 2019 LRNCP	57,200
Melrose Apartments, L.P.	MULTIFAMILY PERFORMANCE PROGRAM, Multifamily	138,600
Memorial Hospital for Cancer & Allied Di	NEW CONSTRUCTION PROGRAM, NCP11556 - 327 E 64th Street C	271,367
Memorial Sloan Kettering Cancer Center	EXISTING FACILITIES, EFP2108 - Memorial Sloan Kette	2,342,145
Merrimack Energy Group, Inc.	OREC: Technical Support, RFQL3926 Umbrella Contract	65,000
Mesa Bioenergy Supply, LLC	CLEANER GREENER COMMUNITIES, CGC32404 Reassignment to	841,188
Micatu, Inc.	High Performing Grid, PON 3397 CAT D	2,033,083
Michaels Energy, Inc.	Industrial Process Effic, RFQ 3183 Michaels Energy	300,000
Milliman, Inc.	NYSERDA ADMINISTRATION, GASB74 Liab GASB75 OPEB exp	5,000
Mizkan Americas, Inc.	Industrial Process Effic, Industrial Process Efficiency	62,361
Moise Safra Community Center Inc	NEW CONSTRUCTION PROGRAM, NCP12117 - Moise Safra Comm	44,985
Momentum NA, Inc.	Commercial Real Estate Ten, RDA-300 Vesey St	10,750
Monolith Solar Associates, LLC	<200KW PV, NY Sun	414,665
	<200KW PV, PON 2112 NY SUN	14,990
Monticello Meadows LLC	Multifam Performance Pgm, Multifamily	123,200
Montreign Operating Company LLC	NEW CONSTRUCTION PROGRAM, NCP13163 - Montreign Resort Ca	640,352
Mount Sinai St. Lukes	FLEXIBLE TECHNICAL ASSISTANCE, FlexTech - PON1746	91,350
MOVE Systems International, LLC	CLEAN TRANSPORTATION, Ambulance Anti-Idling Stations	384,980
MSAF Group LLC	NEW CONSTRUCTION PROGRAM, NCP12811 - Sunshine Childrens	115,434
NASEO	Prof & Expert Engagement, Office of the President & CEO	15,354
Nassau County, Dept. of Public Works	SMART GRID SYSTEMS, Village of East Rockaway	100,000
National Grid	SMART GRID SYSTEMS, EPTD Smart Grid Program	496,985
Natural History Museum of the Adirondack	ADVANCED BUILDINGS, Retrofit Hi-Eff Wood Heat Sys	59,272
-	ENVIRONMENTAL RESEARCH, Retrofit Hi-Eff Wood Heat Sys	126,328
NBC Universal LLC	Industrial Process Effic, Industrial Process Efficiency	58,612
NECEC Institute	Cleantech ICC Engage, Inv/Corp Partner Webinar Pilot	40,000
Neighborhood Innovations, Inc	Low Rise New Construction, New Construction	58,300
NESCAUM	Prof & Expert Engagement, 2019 ZEV MOU Task Force dues	50,000
NESEA	Commercial Real Estate Ten, 2019 NESEA BENYC Conf	4,750
	Geothermal Incentive Program, 2019 NESEA BENYC Conf	6,750
	Multifam Performance Pgm, 2019 NESEA BENYC Conf	3,250
	New Construction- Housing, 2019 NESEA BENYC Conf	7,000
	Prof & Expert Engagement, 2019 NESEA BENYC Conf	1,000
	Retrofit NY, 2019 NESEA BENYC Conf	3,250
Network Experts of New York, Inc.	NYSERDA ADMINISTRATION, Adoption /Training Coordinator	90,000
New 56th and Park NY Owner LLC	EXISTING FACILITIES, DMP Bonus - 56th & Park NY	94,321
New Energy Equity LLC	>200KW PV, NY Sun	279,110
New York Battery and Energy Storage	CLEAN TRANSPORTATION, NYS Energy Storage Outreach	150,000
New York City Energy Efficiency Corp	GJGNY REVOLVING LOAN FUND, Multifamily	25,212
New York Marriott Marguis	Off-Shore Wind Pre-Dev Act, 2019 OSW Supplier Forum	89,766
New York Power Authority	EXISTING FACILITIES, EFP2213 - NYPA - NYS OMH	671,635
····· · ····· · ····· · · ············	Flexible Tech Assistance, FlexTech MOU NYSERDA-NYPA	109,080
	FLEXIBLE TECHNICAL ASSISTANCE, FlexTech MOU NYSERDA-NY.	274,942
	LEADER LEONING AR AUDIO FANOL, LICKTEON WOU NTOLINDAINT.	217,342

Contractor	Contract Description	Total Contract Amount
New York Presbyterian Hospital	NEW CONSTRUCTION PROGRAM, NCP12441 - NYP Adult ED	27,486
New York Solar Energy Industries Assoc.	>200KW PV, 2019 Policy Forum	10,000
New York State Ag & Markets	NYSERDA ADMINISTRATION, 2019 New York State Fair	8,956
	POLICY DEVELOPMENT, 2019 DPS NYS Fair Exhibit	11,933
New York State Solar Farm Inc.	<200KW PV, PON 2112 NY SUN	37,580
New York University	FLEXIBLE TECHNICAL ASSISTANCE, FlexTech Program - PON 1746	9,538
New York Wheel LLC	NEW CONSTRUCTION PROGRAM, NCP11781 - Staten Island Wheel	236,434
Nexant, Incorporated	EXISTING FACILITIES, Technical Review and Program S	8,377
	FLEXIBLE TECHNICAL ASSISTANCE, Technical Review and Progra	125,000
	Industrial Process Effic, Technical Review and Program S	5,590
Next Generation Solar, LLC	<200KW PV, NY-Sun	8,160
Nextera Energy Capital Holdings Inc	NY-SUN, NY Sun	939,510
Niagara Frontier Transportation Authorit	CLEAN TRANSPORTATION, Buffalo Niagara TMA	178,085
Nickels Energy Solutions LLC	<200KW PV, NY Sun	6,174
	<200KW PV, PON 2112 NY SUN	13,488
Nixon Peabody LLP	Green Bank Outside Legal Serv.	49,635
	NEW YORK GREEN BANK, Green Bank Outside Legal Serv.	9,750
Noble Wethersfield Windpark, LLC	LARGE SCALE RENEWABLES, Smart Grid Syst & Dist Eng Int	39,195,330
North American Passive House Network, In	New Construction- Housing, 2019 NAPHN Annual Forum	7,500
· · · · · · · · · · · · · · · · · · ·	Retrofit NY, 2019 NAPHN Annual Forum	7,500
Northbrook Lyons Falls, LLC	REC:CES REC Contracts, CESRFP1_Tier 1 RECS	8,618,492
Northeast Energy Efficiency Partnerships	Air Source Heat Pumps, 2019 NEEP Electrification Symp	10,000
Northeast Wind Partners II LLC	LARGE SCALE RENEWABLES, Smart Grid Syst & Dist Eng Int	3,835,000
NORWICH - CHENANGO SOLAR, LLC	>200KW PV. NY-Sun C&I	2,535,477
Novel Approaches Solar Applications, LLC	<200KW PV, NY Sun	2,333,477
NP Environmental LLC	Talent Pipeline:CE and OJT, OJT HIRE	10,000
NYC Climate Action Alliance Inc.	Commercial Real Estate Ten, NYC Climate Alliance - CT	50,000
NYS Department of Agriculture and Marke	OTHER PROGRAM AREA, EVSE Test System	11,850
NYS Department of Correctional Svc	EXISTING FACILITIES, EFP2550 - DOCCS - 1220 Washing	165,878
NYS Office of Mental Health	NEW CONSTRUCTION PROGRAM, NCP9236 - Central Services Bui	12,165
NVO Office of Dealer Deane (income	NEW CONSTRUCTION PROGRAM, NCP12785 - OMH Hutchings Ph3	78,101
NYS Office of Parks, Recreation and	<200KW PV, NY Sun	37,562
	<200KW PV, PON 2112 NY SUN	40,986
NYS Olympic Regional Development Auth.	Industrial Process Effic, Industrial Process Efficiency	32,228
	INDUSTRIAL PROCESS EFFICIENCY, Industrial Process Efficiency	35,469
NYU Langone Hospitals	NEW CONSTRUCTION PROGRAM, NCP12113 - NYULMC ACLS Viv	887,474
	NEW CONSTRUCTION PROGRAM, NCP13053-NYU Cobble Hill-OF	280,619
Ogden Cap Properties, LLC	Flexible Tech Assistance, FT11664 - Dorchester Towers	8,758
OLA Consulting Engineers, P.C.	Flexible Tech Assistance, RFP3628FlexTechConsultUmbrella	37,005
Olatokumbo Shobowale	Low Rise New Construction, New Construction	9,000
OLEDWorks LLC	INDUSTRIAL PROCESS EFFICIENCY, Industrial Process Efficiency	172,849
One Vanderbilt Owner LLC	NEW CONSTRUCTION PROGRAM, NCP11626 - 317 Madison	259,560
Oneida Public Library	NEW CONSTRUCTION PROGRAM, NCP11088 - Oneida Public Libra	13,391
OnForce Solar	PV System @ Manhattan Beer Dis	729,963
Open Energy Efficiency Inc.	Pay for Performance, RFP 3901 P4P-AMV Platform	1,935,220
Oracle America, Inc.	NYSERDA ADMINISTRATION, Oracle - User Productivity Kit	8,968

Contractor	Contract Description	Total Contract Amount
OwnSolar, LLC	NY-Sun	179,530
	NY-SUN, NY-Sun	169,770
Pace University	CLEANER GREENER COMMUNITIES, CGC39147 - Pace Sustainabil	250,000
Pactiv Corp.	Industrial Process Effic, Industrial Process Efficiency	151,317
Paradise Energy Solutions, LLC	<200KW PV, NY Sun	88,651
	<200KW PV, PON 2112 NY SUN	175,942
Park South Tenants Corp.	MULTIFAMILY PERFORMANCE PROGRAM, Multifamily	231,750
Paul A Bradbury	POLICY DEVELOPMENT, DPS NYS Fair giveaways	5,125
PDJ Inc	INDUSTRIAL PROCESS EFFICIENCY, DG CHP at Buyea Road Kiln	395,000
People United for Sustainable Housing In	CLEANER GREENER COMMUNITIES, CGC42826 - PUSH	680,965
Performance Systems Development	Pay for Performance, Task #1 contract 113650	26,663
Peter Tavino PE PC	Geothermal Incentive Program, Large-Scale GSHP Rebate	53,424
Phoenix Geothermal Services	Talent Pipeline:CE and OJT, OJT HIRE	5,440
Pine Tree Vintage, LLC	Multifam Performance Pgm, Multifamily	45,500
Plaza Apartments Owner LLC	Multifam Performance Pgm, Multifamily	24,500
PlugPV, LLC	<200KW PV, NY Sun	5,263
	<200KW PV, PON 2112 NY SUN	57,940
	PON 2112 NY SUN	19,680
Poseidon Systems, LLC	INNOVATION CAPACITY & BUSINESS DEVELOPMENT, Advanced	123,119
Power Advisory LLC	OREC: Technical Support, RFQL3926 Umbrella Contract	65,000
Premier Solar Solutions LLC	NY Sun	101,520
	PON 2112 NY SUN	20,952
President Container Group II, LLC	Industrial Process Effic, Industrial Process Efficiency	83,444
Pro Custom Solar LLC	<200KW PV, PON 2112 NY SUN	16,356
Pterra, LLC	DER Integration(Intrcnect), PON 3404 DER Integration	399,026
Pyramid Company of Onondaga	Commercial New Construc, NCP15002 - Destiny USA Hotel	45,167
Pyramid Energy Engineering Services PLLC	ENVIRONMENTAL RESEARCH, FlexTech Consultant Selection	9,950
	NextGen HVAC, FlexTech Consultant Selection	48,000
	Renewable Heat NY, FlexTech Consultant Selection	192,894
Quixotic Enterprises, LLC	RENEWABLE THERMAL, Solar Thermal Incentive	6,000
Quixotic Systems, Inc.	RENEWABLE THERMAL, Solar Thermal Incentive	6,000
QwikSolar, LLC	<200KW PV, PON 2112 NY SUN	33,900
R3 Energy Management Audit & Review, LLC	Real Time Enrgy Management, CardinalHS-650 Grand Conc-RTEM	19,560
	Real Time Enrgy Management, Jack Resnick-8 W 40th St-RTEM	17,760
	Real Time Enrgy Management, R3 - 880 3rd Avenue - RTEM	18,960
	Real Time Enrgy Management, SteinbergPokoik-1430Brdwy-RTEM	21,296
R. Edge Contracting LLC	NY Sun	171,072
Rafferty Enterprises, Inc.	NY-SUN, Temp Services	19,350
	NYSERDA ADMINISTRATION, Contract Management	23,184
	NYSERDA ADMINISTRATION, Temp Employee Services	153,337
	NYSERDA ADMINISTRATION, Temp Services	37,674
	RENEWABLE THERMAL, Temp Employee Services	28,008
	RENEWABLE THERMAL, Temp Employee Services	18,954
Pandstad North Amorica Inc		
Randstad North America Inc	NYSERDA ADMINISTRATION, Temporary mail room clerk	22,425
	NYSERDA ADMINISTRATION, TS.004 - Marketing Coordinator	112,275

Contractor	Contract Description	Total Contract Amount
Randstad North America, Inc.	Consumer Ed and Market Support, Temp Services Contract.	42,645
	Environmental Research, Temp Services Contract.	56,089
	Home Perf w Energy Star, Single Family Residential	50,000
	Home Perf w Energy Star, Temp Services Contract.	16,982
	Multifam Performance Pgm, Multifamily	50,000
	Multifam Performance Pgm, Temp Services Contract.	27,302
	NEW YORK GREEN BANK, Temporary Services	186,000
	NYSERDA ADMINISTRATION, Temp Services	226,950
	NYSERDA ADMINISTRATION, Temp Services Contract.	1,007,681
Rapid Response Monitoring Services, Inc	Industrial Process Effic, Industrial Process Efficiency	8,891
REACH Strategies	Electric Vehicles - Innovation, Ev Ride & Drive Events	50,000
Red Hook Solar Corp	<200KW PV, NY Sun	91,476
RED Rochester	Industrial Process Effic, Industrial Process Efficiency	2,000,000
Regeneron Pharmaceuticals Inc.	NEW CONSTRUCTION PROGRAM, NCP11664 - Regeneron RTI	860,659
RENEW Energy Partners, LLC	EMERGING TECHNOLOGY / ACCELERATED COMMERCIALIZATIO	65,400
Renovus Energy, Inc.	<200KW PV, NY Sun	295,020
	<200KW PV, NY-Sun	11,670
	<200KW PV, PON 2112 NY SUN	263,532
	>200KW PV, NY Sun	1,024,13
Rensselaer Polytechnic Institute	Environmental Research, AEAP Data compilation - RPI	12,23
Rensselaer Polytechnic Institute-LRC	ADVANCED BUILDINGS, EE LED Lighting Controls	197,62
Research Foundation of SUNY (Buffalo)	RENEWABLE HEAT NY, College Woodstove design team	75,00
, , , , , , , , , , , , , , , , , , ,		
Research Into Action, Inc.	ADVANCED BUILDINGS, Pilot Evaluation Services	139,673
	Clean Energy Communities, RFQ3183 Umbrella Agreement	263,55
	Cleantech Startup Growth, RFQ3183 Umbrella Agreement	150,58
	EVALUATION, RFQ3183 Umbrella Agreement	159,35
	Workforce Industry Partnership, RFQ3183 Umbrella Agreement	140,182
Rich & Gardner Construction Co., Inc.	Low Rise New Construction, New Construction	56,00
Riverdale Country School	NEW CONSTRUCTION PROGRAM, NCP13244 - Riverdale Country	64,734
Riverside Center Parcel 2 BIT Associates	NEW CONSTRUCTION PROGRAM, NCP11157 - Riverside Center	88,392
Robert Derector Associates	Commercial Real Estate Ten, Robert Derector - 33 W 44th St	5,000
	Commercial Real Estate Ten, Robert Derector-560 Lexingt-CT	5,000
Rochester Institute of Technology	NEW CONSTRUCTION PROGRAM, NCP14065 - The Magic Center	34,810
Rochester Steel Treating Works	Industrial Process Effic, Industrial Process Efficiency	30,050
Roedel Partners Saranac Lake LLC	NEW CONSTRUCTION PROGRAM, NCP12013 - Hotel Saranac	28,459
Ronald McDonald House of NY	EXISTING FACILITIES, Existing Facilities Program PO	186,830
Rush Around Acres	AGRICULTURE ENERGY EFFICIENCY, Agriculture Energy Efficiency	67,282
Rutland Road Associates	MULTIFAMILY PERFORMANCE PROGRAM, Multifamily	411,534
Ryan Homes (Virginia)	Low Rise New Construction, 2019 LRNCP	59,850
Safari Energy LLC	<200KW PV, NY Sun	69,120
	NY Sun	135,600
Salmstead Dairy Farm	AGRICULTURE ENERGY EFFICIENCY, Agriculture Energy Efficiency	30,00
Schenectady City School District	NEW CONSTRUCTION PROGRAM, NCP13108 - Mt. Pleasant Middle	55,82
Scott Shipley	<200KW PV, NY Sun	16,020
Scotto Brothers Woodbury Restaurant, LLC	Low-Income Forum on Energy, LIFE meeting Long Island	7,000

Contractor	Contract Description	Total Contract Amount
Senek Farms	AGRICULTURE ENERGY EFFICIENCY, Agriculture Energy Efficiency	6,874
Shared Mobility, Inc.	CLEAN TRANSPORTATION, Shared Mobility Network	281,961
SHI, Inc.	NYSERDA ADMINISTRATION, Adobe Creative Cloud Licenses	12,312
	NYSERDA ADMINISTRATION, Adobe Enterprise Licensing 1yr	44,512
Sierra-Cedar, Inc.	NYSERDA ADMINISTRATION, Consulting Services for 9.2	1,492,080
Sitecore USA, Inc.	NYSERDA ADMINISTRATION, Sitecore License 2019-2020	25,300
Siteimprove, Inc.	NYSERDA ADMINISTRATION, Siteimprove - Renewal	5,972
Sive Paget & Riesel PC	OREC: Technical Support, RFP 3300 & RFP 3776 Outside Co	75,000
Skae Power Solutions	Industrial Process Effic, Industrial Process Efficiency	229,102
Skyline Solar Inc.	<200KW PV, PON 2112 NY SUN	32,907
SmartCloud Inc.	ADVANCED BUILDINGS, FastDR from Comm Bldgs	257,600
Smarter Grid Solutions, Inc.	High Performing Grid, PON 3397 Round 2 - Category B	400,000
Smith Engineering PLLC	Flexible Tech Assistance, FT12092 - RXR 1330 AOA - FTC	61,350
	Flexible Tech Assistance, RFP3628FlexTechConsultUmbrella	42,333
SnowPlow LH LLC	NEW CONSTRUCTION PROGRAM, NCP11149 - 250 East 57th St	175,766
Snug Planet, LLC	Talent Pipeline:CE and OJT, OJT HIRE	8,640
Solar Alchemy, Inc.	<200KW PV, PON 2112 NY SUN	6,154
Solar Energy Systems, LLC	NY Sun	41,400
Solar Liberty Energy Systems, Inc	<200KW PV, NY Sun	214,727
	<200KW PV, NY-Sun	8,972
	<200KW PV, PON 2112 NY SUN	149,224
	<200KW PV, PV Incentive Program	87,024
	<200KW PV, RES-NewConst(no longer in use)	74,025
Solar One, Inc.	PON 2112 NY SUN	209,592
Solar Plumbing Design Inc	NY Sun	22,140
Solar Provider Group LLC	>200KW PV, NY Sun	1,616,325
Solcius, LLC	<200KW PV, NY Sun	10,658
	<200KW PV, PON 2112 NY SUN	5,124
Solitude Solar LLC	>200KW PV, NY Sun	842,076
South Bronx Development Corp.	MULTIFAMILY PERFORMANCE PROGRAM, Multifamily	210,000
Spencer-Tioga Solar, LLC	>200KW PV, NY-Sun C&I	2,746,767
Sperry Energy	OTHER PROGRAM AREA, RFP3267 Innovation Advis Pilot	350,000
St. Lawrence University	REV Campus Challenge, RM10 - St Lawrence University	116,500
Standard Insulating Company	Talent Pipeline:CE and OJT, OJT PON 3982	6,720
Stantec Consulting Services, Inc.	Commercial New Construc, Stantec-Energy Modeling Partne	13,980
	INDUSTRIAL PROCESS EFFICIENCY, Industrial Process Efficiency	21,100
STARK Technologies Group, Inc.	Remote Energy Management, RFP3683 REM Program	583,000
State University of New York College	NEW CONSTRUCTION PROGRAM, NCP12157-RedJacketDining-OF	15,232
Steven Winter Associates, Inc.	EXISTING FACILITIES, Technical Review and Program S	23,046
	NEW CONSTRUCTION PROGRAM, Technical Review and Program S	16,714
Sun Source Technologies	<200KW PV, NY Sun	8,750
	<200KW PV, NY-Sun	5,983
	<200KW PV, PON 2112 NY SUN	49,905
SuNation Solar Systems, Inc.	<200KW PV, NY Sun	232,000
Sunnova Energy Corp	<200KW PV, PON 2112 NY SUN	11,971
SunPower Capital, LLC	<200KW PV, NY Sun	21,312

Contractor	Contract Description	Total Contract Amount
SunPower Capital, LLC	<200KW PV, NY-Sun	10,328
	<200KW PV, PON 2112 NY SUN	91,473
SUNRISE ELECTRICAL SERVICES	<200KW PV, NY Sun	116,000
	<200KW PV, NY-Sun	10,238
Sunrise Solar Solutions, LLC	<200KW PV, NY Sun	11,771
	NY Sun	16,104
	PON 2112 NY SUN	12,949
SunRun, Inc	<200KW PV, NY Sun	12,850
	<200KW PV, PON 2112 NY SUN	23,090
SunVest, Solar INC	<200KW PV, NY Sun	20,670
SUNY Buffalo	NEW CONSTRUCTION PROGRAM, NCP11380 - SUCF 30B08 SMBS	875,000
SUNY College of Environmental Science an	Flexible Tech Assistance, FT11519 - SUNY College of Envi	62,300
SUNY Cortland	EXISTING FACILITIES, EFP2478-SUNY Cortland - Boiler	607,332
SUNY Oneonta	NEW CONSTRUCTION PROGRAM, NCP12946 - Milne Library Phase	25,605
SUNY Oswego	NEW CONSTRUCTION PROGRAM, NCP12908 - Scales Residence	19,913
SUNY Upstate Medical University	NEW CONSTRUCTION PROGRAM, NCP10283 - Clinical Cancer Cen	94,439
Sustainable Energy Advantage, LLC	REC:CES REC System Dev Costs, Large Scales Renewables Techni	254,206
Sustainable Energy Developments Inc.	<200KW PV, NY Sun	11,186
	<200KW PV, NY-Sun	5,413
	<200KW PV, PON 2112 NY SUN	62,966
	NY-Sun	35,976
	NY-SUN, NY-Sun	100,922
Sustainable Westchester	Clean Energy Communities, Westchester HS EV Video/Awards	2,500
	Electric Vehicles - Innovation, Westchester HS EV Video/Awards	2,500
	Rmve Barriers Dist Enrgy Storg, Feasibility of storage w PV	15,000
SWBR Architecture, Engineering & Landsca	Retrofit NY, Multifamily	75,000
Syracuse University	CLEAN TRANSPORTATION, Syracuse Transp Alternatives	150,000
Syska Hennessy Group	Commercial Real Estate Ten, Syska Hennessy-55 E 52nd St-CT	17,000
	Flexible Tech Assistance, FlexTech Consultant Selection	27,500
Systems Management Planning, Inc.	NYSERDA ADMINISTRATION, ManageEngine Desktop Central	10,419
	NYSERDA ADMINISTRATION, NetApp Flash Storage for VDI	14,806
	NYSERDA ADMINISTRATION, VMWare Airwatch 2019 - 2020	6,439
Taitem Engineering, P.C.	<200KW PV, NY Sun	12,461
	ADVANCED BUILDINGS, Deep Energy Retrofits	49,986
	Commercial New Construc, Taitem - EMP	23,947
	EMERGING TECHNOLOGY / ACCELERATED COMMERCIALIZATIO	248,870
	EVALUATION, Technical Review and Program S	64,425
	GREEN AFFORDABLE HOUSING, MEPP Quality Assurance Contrac	84,374
	MULTIFAMILY PERFORMANCE PROGRAM, MEPP Quality Assuranc	2,455,166
	NEW YORK ENERGY STAR HOMES, Technical Review and Program.	55,189
	Retrofit NY, Deep Energy Retrofits	3,371
	Technical Services, RFP3628FlexTechConsultUmbrella	2,500
Target Corporation	<200KW PV, NY-Sun	71,260
Tech Valley Talent, LLC	NYSERDA ADMINISTRATION, Server Admin- # 2	195,000
Tecogen	COMBINED HEAT AND POWER, CHPA - 205 West End Ave (West)	198,000
~	COMBINED HEAT AND POWER, CHPA - 205 West End Ave East	198,000

Contractor	Contract Description	Total Contract Amount
Tecogen	Combined Heat and Power, CHPA - Metropolitan Detention	346,500
	COMBINED HEAT AND POWER, CHPA - Spring Creek	216,000
Telx Group, Inc.	INDUSTRIAL PROCESS EFFICIENCY, Industrial Process Efficiency	328,108
Tern Construction & Development, LLC	Low Rise New Construction, New Construction	62,000
	NEW YORK ENERGY STAR HOMES, New Construction	188,500
TerraForm Solar XVIII, LLC	>200KW PV, Blue Mountain Middle School	83,363
	>200KW PV, Buchanan Verplanck School	99,659
	>200KW PV, Furnace Woods Middle School	108,937
	>200KW PV, Henrick Hudson High School	64,328
Terry Light	Low Rise New Construction, New Construction	5,000
Tesla Energy Operations Inc	>200KW PV, NY Sun	1,839,719
	ADVANCED BUILDINGS, Battery Demo w/ Commercial PV	690,450
	NY-SUN, PV System @ Halfmoon Water Tre	216,929
	NY-SUN, PV System @ Oneida Herkimer So	169,202
	NY-SUN, PV System @ Onondaga County Cl	273,673
	NY-SUN, PV System @ Otsego County Grav	126,489
	NY-SUN, PV System @ Sullivan County Ad	321,867
	NY-SUN, PV System at Onondaga County -	898,558
	PV System @ Halfmoon Water Tre	506,169
	PV System @ Oneida Herkimer So	394,805
	PV System @ Onondaga County Cl	638,570
	PV System @ Otsego County Grav	295,140
	PV System @ Sullivan County Ad	751,023
The Business Council of NYS, Inc.	Prof & Expert Engagement, Membership Business Council	6,385
The Cadmus Group, LLC	Eval MCDC Cross Cutting, RFQ3183 Umbrella Agreement	47,840
	NY-SUN, RPS-CST Quality Assurance/Qual	499,625
The Gap, Inc.	EXISTING FACILITIES, EFP2553-The Gap Inc The Gap	974,760
The Initiatives Group	Electric Vehicles - Innovation, HEVO Executive Training	50,000
The Jericho Project	MULTIFAMILY PERFORMANCE PROGRAM, Multifamily	90,000
The Levy Partnership, Inc.	Retrofit NY, Multifamily	75,000
The Logue Group	WEST VALLEY DEVELOPMENT PROGRAM, Facilitation Services	410,349
The McAulay Smith Firm, LTD	NYSERDA ADMINISTRATION, SrLdr Smart Grid Search Firm	50,000
The Radiant Store	Renewable Heat NY, Radiant Store - Chatham Hwy	7,000
	Renewable Heat NY, Radiant Store - Yelich Part 2	21,000
	Talent Pipeline:CE and OJT, OJT HIRE	6,000
The Renewables Consulting Group, LLC	Off-Shore Wind Pre-Dev Act, RFP 3462	167,698
The Research Foundation for the State	MARKET PATHWAYS, PV System @ SunyPoly	42,617
The Research Foundation for the State	Multifam Performance Pgm, 2019 NYS Green Buildings Conf	
		1,313
	New Construction- Housing, 2019 NYS Green Buildings Conf	2,625
	PV System @ SunyPoly	658,160
The Truckees of Octomble 11.1.1	Retrofit NY, 2019 NYS Green Buildings Conf	1,313
The Trustees of Columbia University	ENVIRONMENTAL RESEARCH, GIS flood mapping tool	291,929
Thomas Paino	Low Rise New Construction, New Construction	5,500
ThunderCat Technology LLC	NYSERDA ADMINISTRATION, Atlassian Licenses - Jira	77,142
	NYSERDA ADMINISTRATION, Circuit for NYC Office	34,689
	NYSERDA ADMINISTRATION, NYC - Circuit 3 years	39,750

Contractor	Contract Description	Total Contract Amount
ThunderCat Technology LLC	NYSERDA ADMINISTRATION, Precise Peoplesoft - Remote	15,120
	NYSERDA ADMINISTRATION, Precise Peoplesoft Software	66,842
TM Montante Solar Developments, LLC	<200KW PV, NY Sun	90,882
	<200KW PV, PON 2112 NY SUN	90,882
Tobi Jo Creative, LLC	NYSERDA ADMINISTRATION, NYSERDA Website Redesign	109,885
Town of Amherst	CLEANER GREENER COMMUNITIES, CGC42761 - Town of Amherst	161,250
Town of Franklin	Clean Energy Communities, CEC Town of Franklin	100,000
Town of Keene	Clean Energy Communities, CEC701169 - Town of Keene	50,000
Town of Marcy	CLEANER GREENER COMMUNITIES, CGC41854 - Town of Marcy	150,000
Trane	EXISTING FACILITIES, EFP3010 - Trane; Ithaca CSD-HS	69,286
	EXISTING FACILITIES, EFP3013 - Tarne; Ithaca CSD	26,080
	Real Time Enrgy Management, Trane Us Inc-Multisite-RTEM	27,424
Transit Wireless	Industrial Process Effic, Industrial Process Efficiency	30,000
TRC Energy Services	Agriculture Energy Eff Pgm, RFP3628FlexTechConsultUmbrella	7,500
	Commercial Real Estate Ten, TRC Energy Soluti-Multisite-CT	20,000
	Industrial Process Effic, Technical Review and Program S	25,158
	REC:CES REC System Dev Costs, Staff Augmentation Services	96,038
Triad Technology Partners LLC	NYSERDA ADMINISTRATION, Tableau Maintenance 1 yr	70,275
Triangle Electrical Systems, Inc.	<200KW PV, NY-Sun	9,525
Trinity Heating & Air, Inc.	<200KW PV, PON 2112 NY SUN	11,691
	NY Sun	20,700
True Energy Solutions	Talent Pipeline:CE and OJT, OJJT HIRE	5,760
	Talent Pipeline:CE and OJT, OJT hire	18,240
Tully Rinckey PLLC	Rmve Barriers Dist Enrgy Storg, outside counsel services	5,000
TYTHEdesign Inc	Multifam Performance Pgm, Multifamily	6,600
U.S. Green Building Council, NY Chapter	ADVANCED ENERGY CODES, Energy Code Training: A/Es	998,718
	Workforce Industry Partnership, Energy Efficiency Training	12,000
U.S. Nuclear Regulatory Commission	WEST VALLEY DEVELOPMENT PROGRAM, WV-State Lics'd Dispos	500,000
UGE USA Inc.	<200KW PV, NY Sun	53,810
Ultra Dairy, LLC	NEW CONSTRUCTION PROGRAM, NCP11487 - Ultra Dairy	105,508
United Health Services Hospitals Inc	EXISTING FACILITIES, Efficiency Planning & Engineer	781,472
	EXISTING FACILITIES, EFP3011 - United Health Servic	36,923
United Wind Project I, LLC	Small Wind, Wind Turbine Incentive	670,263
University at Albany Foundatio	INNOVATION CAPACITY & BUSINESS DEVELOPMENT, Consumer	25,000
University of Rochester	EXISTING FACILITIES, Efficiency Planning & Engineer	58,038
	EXISTING FACILITIES, EFP2450-University of Rocheste	1,006,751
Upstate Alternative Energy	<200KW PV, PON 2112 NY SUN	5,434
Upstate Venture Connect	Prof & Expert Engagement, UVC 2019 Sponsorship	25,000
Urban Homesteading Assistance Inc	NY-SUN, Affordable Solar Predev UHAB	143,925
USGS National Center MS270	ENVIRONMENTAL RESEARCH, Environmental Research	38,511
Utsayantha Solar LLC	>200KW PV, NY Sun	845,093
Van Hee Mechanical	Talent Pipeline:CE and OJT, OJT HIRE	9,600
Van Nostrand Energy & Environmental	Mkt Char: Tech Assist, Policy Development Services	200,000
Vatsal Bhatt	OTHER PROGRAM AREA, Review of EEA Project Program	25,000
Venture Home Solar LLC	<200KW PV, PON 2112 NY SUN	5,175
	PON 2112 NY SUN	16,481

Contractor	Contract Description	Total Contract Amount
Verizon Communications Inc	Industrial Process Effic, Industrial Process Efficiency	17,468
Verizon Corporate Services Group	INDUSTRIAL PROCESS EFFICIENCY, Industrial Process Efficiency	217,784
Verizon NY Inc.	Industrial Process Effic, Industrial Process Efficiency	369,925
Vermont Energy Investment Corporation	Industrial Process Effic, Umbrella Contract	9,426
Vertiv Services, Inc.	Industrial Process Effic, Industrial Process Efficiency	38,151
Vidaris, Inc.	Flexible Tech Assistance, RFP3628FlexTechConsultUmbrella	15,715
	FLEXIBLE TECHNICAL ASSISTANCE, FlexTech Consultant Selection	9,370
	NEW CONSTRUCTION PROGRAM, Vidaris - EMP	45,150
Village of Bergen	Clean Energy Communities, PON 3298 CEC	50,000
Village of Canton	COMMUNITY SOLAR, Solarize 2016	5,000
Village of Fair Haven	Clean Energy Communities, CEC200265 - Village of Fair Ha	50,000
Village of Falconer	CLEANER GREENER COMMUNITIES, Village of Falconer	50,000
Village of Fredonia	INDUSTRIAL PROCESS EFFICIENCY, Industrial Process Efficiency	69,250
Village of Marcellus	Clean Energy Communities, PON 3298 CEC	100,000
Village of Minoa	Clean Energy Communities, CEC200170-Village of Minoa	100,000
Village of Rockville Centre	SMART GRID SYSTEMS, RFP 3044 R2	1,000,000
Village of Tupper Lake	OTHER PROGRAM AREA, Tupper Lake District Heat	300,000
Vincents Heating and Fuel Service, LLC	Renewable Heat NY, Vincents Heating - Avery	21,000
	Renewable Heat NY, Vincents Heating - Barry	28,260
	Renewable Heat NY, Vincents Heating - Baxter	19,89
	Renewable Heat NY, Vincents Heating - Filer	20,750
Viola Homes Inc.	<200KW PV, PON 2112 NY SUN	101,950
Vivint Solar	<200KW PV, NY Sun	8,15
	<200KW PV, PON 2112 NY SUN	5,714
Walter Snyder Printer, Inc.	>200KW PV, Printing Services	6,223
Weaver Wind Energy, LLC	INNOVATION CAPACITY & BUSINESS DEVELOPMENT, Weaver Wi	839,05
Wendel Energy Services, LLC	Flexible Tech Assistance, RFP3628FlexTechConsultUmbrella	25,000
West 30th HL LLC	NEW CONSTRUCTION PROGRAM, NCP11468 - West 30th HL LLC	142,903
Westchester Chamber Educational	CLEANER GREENER COMMUNITIES, CGC26702 - WGBC	540,000
	New Construction- Commercial, Sponsor West. Business Council	2,500
	New Construction- Housing, Sponsor West. Business Council	5,000
	Real Time Enrgy Management, Sponsor West. Business Council	7,50
WGL Energy Systems, Inc.	NY-Sun	331,524
	NY-SUN, NY-Sun	142,082
WGS Arsenal Housing Associates, LLC	Multifam Performance Pgm, MPPTargeted-TruscottTerrace	5,292
Whole Foods Market Group, Inc.	NEW CONSTRUCTION PROGRAM, NCP14011 - Whole Foods Chap	97,738
Willdan Energy Solutions	Commercial Real Estate Ten, Willdan-Citi Bank Multisite-CT	16,108
	Flexible Tech Assistance, FlexTech Consultant Selection	75,200
	Flexible Tech Assistance, RFP3628FlexTechConsultUmbrella	89,560
	Industrial Process Effic, Technical Review and Program S	28,74
	INDUSTRIAL PROCESS EFFICIENCY, Technical Review and Program.	3,13
William J & Maryann M Christie	MULTIFAMILY PERFORMANCE PROGRAM, Multifamily	53,600
		25,00
William Morlok		
William Morlok Wiltshire Renewable Energy Systems, LLC	SARATOGA TECHNOLOGY & ENERGY PARK, STEP options paper	
William Morlok Wiltshire Renewable Energy Systems, LLC Wise Home Energy, LLC	SARATOGA TECHNOLOGT & ENERGY PARK, STEP options paper <200KW PV, NY Sun Talent Pipeline:CE and OJT, OJT HIRE	7,650

Contractor	Contract Description	Total Contract Amount
Xerox Corp	INDUSTRIAL PROCESS EFFICIENCY, Industrial Process Efficiency	340,243
	NYSERDA Administration	14,806
	NYSERDA ADMINISTRATION, Facilities Management	70,898
	NYSERDA ADMINISTRATION, Xerox Maintenace	84,771
Xzerta Energy Group LLC	>200KW PV, Commercial/Industrial PV	1,281,677
	>200KW PV, Commercial/IndustrialPV	2,563,354
	>200KW PV, NY Sun	3,931,020
	>200KW PV, NY-Sun	1,281,677
Yancey's Fancy Inc.	INDUSTRIAL PROCESS EFFICIENCY, Industrial Process Efficiency	68,871
You Save Green Incorporated	<200KW PV, NY-Sun	8,168
Zero Carbon Corporation	<200KW PV, NY Sun	15,336
Grand Total		371,434,108