



ANDREW M. CUOMO Governor

RICHARD L. KAUFFMAN

ALICIA BARTON President and CEO

June 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 October 1, 2018 through March 31, 2019.

- *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 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-june-nyserda-

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

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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 - October 1, 2018 through March 31, 2019

Revenue Source	Amount (\$000's)
State Appropriation	14,556
Utility Surcharge Assessments	247,280
Clean Energy Standard Proceeds	213,947
Allowance Proceeds	55,482
Third-party reimbursements	14,800
Federal grants	5,823
Interest subsidy	213
Project repayments	277
Rentals from leases	532
Fees and other income	5,215
Loans and financing receivables interest	11,624
Investment income	10,166
Total revenues	579,915

NYSERDA

Public Authority Law Report

October 1, 2018 to March 31, 2019

Section Break

Solicitation Summary October 1, 2018 to March 31, 2019

Solicitation No.	Title of Solicitation	Solicitation Description	Issue Date	Due Date/Round	Dollar Award
PON 3981	Workforce Development and Training	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.	10/15/2018	12/13/2018 - Round 1	\$7,000,000.00
PON 3982	On-the-Job Training for Energy Efficiency and Clean Technology	NYSERDA will provide funding to advance the goals of the Clean Energy Fund (CEF) by developing a workforce equipped to perform jobs in energy efficiency and clean technology, including training workers with skills and credentials to design, manufacture, specify, sell/distribute, install, operate, maintain, repair, audit, and inspect clean energy technology and systems.	10/15/2018	10/31/2020	\$10,000,000.00
PON 4000	New York State Clean Energy Intership Program	NYSERDA will provide funding to clean energy businesses interested in hiring interns to perform meaningful work in the clean energy sector. With this Program Opportunity Notice (PON), both clean energy business and interns can apply to participate in the program. NYSERDA will collect applications from both the business and potential interns and verify business eligibility to participate in the PON. Accepted businesses will select, interview and make an offer to intern candidates.	10/15/2018	12/30/2024	\$10,500,000.00
PON 3943	Net Zero Portfolio Support	The Net Zero Portfolio Support program offers assistance to large real estate portfolio owners, across all sectors, in developing performance standards and institutional mechanisms to enable the design, construction, and operation of Net Zero buildings. Entities receiving NYSERDA support must publicly commit to a Net Zero policy for future design, construction, renovation, and operation, for the whole portfolio or a clearly defined subset thereof.	10/24/2018	12/31/2019	\$1,000,000.00
RFI 5	Low and Moderate-Income Participation in CDG Projects in New York State	NYGB and NYSERDA seeks to connect with Community Distributed Generation project developers, sponsors, financiers, community-based organizations, and all other market participants who specifically focus on, or are interested in better serving, the Low and moderate-income market segment in the State.	10/31/2018	11/30/2018	No value was stated in solicitation
ORECRFP 18-1	Purchase of Offshore Wind Renewable Energy Certificates	NYSERDA seeks to procure Offshore Wind Renewable Energy Certificates associated with approximately 800 MW of offshore wind energy, in pursuit of New York State's goal of developing 2,400 megawatts of offshore wind energy by 2030 in a responsible and cost- effective manner.	11/8/2018	2/14/2018	No value was stated in solicitation

PON 3739 Categories A & B, PON 3739 Category C	Demonstration of New Business Models, Marketplace Development to Anaerobic Digester Gas to Electricity Systems Refurbisment of Existing Qualified Historically Farm-Related Anaerobic Digester Gas-to-Electricity Systems	NYSERDA is seeking proposals that: A) demonstrate new replicable business models or strategies for greater development of anaerobic digester gas-to-electricity projects in New York State B) proposals supporting analysis and coaching to improve the capabilities of the anaerobic digestion technology marketplace and C) applications to support refurbishment of certain existing historically farm-related ADG-to- electricity systems.	12/4/2018	3/7/2019	\$16,000,000.00
PON 3809	Advanced Agricultural Energy Technologies	NYSERDA is seeking applications for demonstrations of commercially- available clean energy technologies and practices with minimal penetration ("emerging") on animal- and crop-production farms ("host sites") in New York State. The technologies and practices must provide cost-effective energy efficiency improvements compared to current standard technology or practice and must be replicable at farms throughout the state.	12/4/2018	2/28/2019 - Round 1, 9/26/2019 - Round 2	\$3,000,000.00
PON 3844	Strategic Energy Management Pilot: Municipal Water Resource Recovery Facilities	NYSERDA is seeking applications from municipal water resource recovery facilities (WRRFs) that are interested in participating in a fully- funded, year-long Strategic Energy Management pilot. By participating in the pilot, WRRF management and staff will gain access to training, coaching, and peer-to-peer knowledge sharing to continuously enhance energy efficiency at their WRRF.	1/4/2019	3/13/2019	No value was stated in solicitation
PON 3411	Industrial Strategic Energy Management	NYSERDA is seeking applications from industrial facilities that are interested in participating in a fully-funded, year-long Strategic Energy Management pilot. By participating in the pilot, the industrial facility will gain access to training, coaching, and peer-to-peer knowledge sharing to continuously enhance energy efficiency at their facilities.	1/23/2019	6/20/2019	No value was stated in solicitation
PON 4062	RetrofitNY Gap Funding for High Performance Retrofit Projects (New York City)	NYSERDA will assist in providing project funding for up to three building owners whose respective buildings have had high-performance retrofit solutions designed for them under NYSERDA's RFP 3750. Buildings must be located inside the five boroughs of New York City and not be higher than seven stories. The goal of funding such projects is to demonstrate the efficacy of the retrofit solutions and lay the foundation for such solutions to be developed at large scale, significantly reducing their costs thereby and ultimately making the process self-financing and self-sustaining.	2/8/2019	7/31/2020	\$4,360,000.00
PON 4038	Home Energy Rating Provider	NYSERDA is seeking applications to competitively select home energy contractors to participate in a pilot program to use home energy ratings to encourage homeowners to invest in energy efficiency upgrades.	2/20/2019	3/14/2019	\$1,000,000.00
RFP 3928	Building of Excellence Competition	NYSERDA seeks proposals for projects that reduce their energy consumption and per capita carbon emissions in a manner which can be replicated at scale. Selected projects are eligible to receive up to \$1,000,000 in direct funding, as well as support for initiatives focused on broad marketing and public awareness. The Buildings of Excellence Competition aims to accelerate the design, development, construction and operation of very low or zero carbon buildings.	3/6/2019	6/4/2019	\$10,000,000.00

PON 4026	RetrofitNY Gap Funding for High Performance Retrofit Projects (Upstate New York)	NYSERDA will provide project funding for up to three building owners whose respective buildings have had high-performance retrofit solutions designed for them under NYSERDA's RFP 3750. Buildings must be located outside the five boroughs of New York City and not be higher than two stories. The goal of funding such projects is to demonstrate the efficacy of the retrofit solutions and lay the foundation for such solutions to be developed at large scale, significantly reducing their costs thereby and ultimately making the process self-financing and self-sustaining.	3/22/2019	7/31/2020	\$3,280,000.00
RFI 6	On-Lease Commercial tenant Energy Efficiency Financing	The objective of RFI 6 is to solicit feedback from real estate market participants on NY Green Bank's proposed on-lease commercial tenant energy efficiency financing product, identify prospective opportunities, and collaborate with potential end-users on their efficiency upgrade financing needs.	3/27/2019	5/17/2019	No value was stated in solicitation
PON 4082	Environmental and Fisheries Research for Offshore Wind Energy Development	NYSERDA seeks proposals from knowledgeable and objective organizations or teams interested in conducting comprehensive, collaborative research to address environmental and fisheries issues related to offshore wind (OSW) energy development. The PON addresses OSW research needs identified as high priority by scientists, New York State and Federal regulators and offshore wind developers.	3/27/2019	5/14/2019	\$2,000,000.00
PON 4124	National Offshore Wind research and Development Consortium	This PON is being executed on behalf of the National Offshore Wind Research and Development Consortium (Consortium) and seeks to develop and demonstrate technology innovations that will reduce the levelized cost of electricity (LCOE) for offshore wind in the United States. The Consortium is a nationally focused, independent, not-for-profit organization funded by NYSERDA and the U.S. Department of Energy, dedicated to supporting industry-led research and development activities that will remove barriers to implementation of offshore wind in all U.S. wind regions.	3/29/2019	12/31/2019	\$7,000,000.00

***REVISED SOLICITAIONS**

Solicitation No.	Title of Solicitation	Solicitation Description	Issue Date	Due Date/Round	Dollar Award
PON 3717 Revised	Low-rise Residential New Construction Program	NYSERDA Low-rise Residential New Construction Program (LR NCP) supports the achievement of increased levels of energy performance, up to and including homes or low-rise multifamily buildings that are designed and constructed to achieve net zero energy performance.	1/8/2019	12/31/2020	\$7,900,000.00
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 goal is to increase awareness of and demand for advanced clean energy solutions while strengthening the capacity of clean energy professional to deliver design and construction services. This program targets the Low to Moderate Income housisng but not exclusively.	1/8/2019	12/31/2020	\$15,844,000.00
PON 2112 Revised	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. Incentives will be granted on a first-come, first-served basis, and PV project applications will be accepted through December 29, 2023.	10/29/2018	12/29/2023	No value was stated in solicitation
PON 3082 Revised	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. Incentives will be allocated on a first-come, first-served basis and applications will be accepted on a rolling basis through December 29, 2023.	10/25/2018	12/29/2023	No value was stated in solicitation
PON 3519 Revised	NextGen HVAC Innovation Challenges	The NextGen HVAC Program supports the development of energy efficient building technologies and new business models for New York's building industry. This funding opportunity focuses on cutting edge HVAC systems including new renewable heating and cooling systems and the integration of advanced controls.	12/6/2018	1/17/2019 - Round 3, 8/29/2019 - Round 4	\$15,000,000.00
PON 3875 Revised	Cleantech Accelerator	NYSERDA is looking to support the launch and operation of one or more programs that will facilitate the market validation of promising clean energy technologies and bring them to market through either new business formation or strategic partnerships. To be successful, the Cleantech Accelerator will implement an integrated set of activities involving recruitment and team formation; market validation and entrepreneurial training; and, business formation and launch.	1/7/2019	3/6/2019	\$10,000,000.00

RFP 3771 Revised	New Construction Initiatives Support Services	NYSERDA is accepting applications from firms capable of delivering energy modeling and analysis, building commissioning, third-party Quality Assurance, Measurement and Verification, Smart Building services, and advanced building facilitation and project mentorship, including, but not limited to: Passive House consulting, and Zero Net Energy consulting services.	1/8/2019	12/28/2023	No value was stated in solicitation
PON 3914 Revised	Public Transit Technology and Innovation Program	The Public Transit Technology and Innovation Program seeks proposals to develop and demonstrate innovative public transportation technologies and strategies. These technologies and strategies must have the potential to reduce greenhouse gas emissions (GHG) and associated energy consumption of the existing transit bus, rail, and connected intermodal transit systems in New York State.	2/1/2019	3/28/2019 - Round 2	\$5,000,000.00
PON 3689 Revised	Real Time Energy Management (RTEM)	NYSERDA Real Time Energy Management ("RTEM") Program (the "Program") seeks 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	12/3/2018	6/30/2021	\$31,000.000.00 - Commercial, \$5,700,000.00 - Industrial, \$2,830,000.00 - Multifamily
PON 3841 Revised	Stationary Fuel Cell Program	The Stationary Fuel Cell Program (PON 3841) funded by the Clean Energy Fund supports the purchase, installation, and operation of continuous duty stationary fuel cell electric power generation equipment at eligible host sites in New York State. The Fuel Cell Program is targeted at power generation sited at the electric customer's location and used primarily to serve the electric customer's load or for community distributed generation.	2/19/2019	12/31/2019	\$15,000,000.00
PON 3438 Revised	REV Campus Challenger Technical Assistance for Roadmaps	The REV Campus Challenge Technical Assistance for Roadmaps (the "Program") supports REV Campus Challenge members by enabling them to hire a third party energy consultant to aid in the evaluation of existing energy-related conditions on campus and establish a plan for managing changing campus energy needs ("Roadmap").	3/12/2019	12/31/2019	No value was stated in solicitation
PON 3739 Categories A & B, and Category C Revised	Demonstration of New Business Models, Marketplace Development and Refurbishment of Existing Qualified Historically Farm-Related Anaerobic Digester Gas-to-Electricity Systems	Demonstration of New Business Models, Marketplace Development and Refurbishment of Existing Qualified Historically Farm-Related Anaerobic Digester Gas-to-Electricity Systems (PON 3739). NYSERDA is seeking proposals that: A) demonstrate new replicable business models or strategies for greater development of anaerobic digester gas-to- electricity projects in New York State B) proposals supporting analysis and coaching to improve the capabilities of the anaerobic digestion technology marketplace and C) applications to support refurbishment of certain existing historically farm-related ADG-to-electricity systems.	2/21/2019	3/7/2019	\$16,000,000.00

NYSERDA

Public Authority Law Report

October 1, 2018 to March 31, 2019

Section Break



The New York State Energy Research and Development Authority (NYSERDA) seeks to procure Offshore Wind Renewable Energy Certificates ("ORECs")¹ as authorized by the New York State Public Service Commission's <u>Order Establishing Offshore Wind Standard and Framework for Phase 1 Procurement</u>, issued on July 12, 2018 in Case No. 18-E-0071. All Proposers are advised to review the Order and its Appendices before participating in this Request for Proposals (RFP).

Proposals are due on February 14, 2019 by 3:00 p.m. ET.

Proposals must be held firm and valid for 180 days from February 14, 2019.

All relevant documents pertaining to this RFP are on available on NYSERDA's solicitation website at <u>https://www.nyserda.ny.gov/offshore-wind-2018-solicitation</u>. Proposers are advised to check this website regularly for updates.

Questions about this RFP should be directed to Doreen Harris, Adrienne Downey, Gregory Lampman, or Matt Vestal (the Designated Contacts) at <u>offshorewind@nyserda.ny.gov</u> (no phone calls). A <u>Proposers</u> <u>Conference</u> will be held on November 29, 2018 at 10:00 a.m. ET. No communication intended to influence this procurement is permitted except by contacting the Designated Contacts through this email address. Contacting anyone other than the Designated Contacts (either directly by Proposer or indirectly through a lobbyist or other person acting on Proposer's behalf) to influence the procurement may result in: (1) a Proposer being deemed a non-responsive offeror, and (2) Proposer not receiving an award.

¹ Please note that while the Order uses the generic term "credits," the term "certificates" is used here, as successful Proposers will be required to participate in NYGATS, and NYGATS uses the term "certificates." NYGATS Certificates are minted on a one per MWh basis. Each NYGATS OREC Certificate will include a unique serial number.

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ACRONYMS AND DEFINITIONS

Actual Production – The amount of electric energy production from the Project, in MWh delivered to the Injection Point, for which NYSERDA is obligated to purchase the associated ORECs under Article II of the Agreement.

Agreement – Offshore Wind Renewable Energy Certificate Standard Form Purchase and Sale Agreement.

Alternate Proposal – a Proposal defined in Section 2.1.2.

Annual OREC Cap – The amount of ORECs equal to the product of 1.1 and the P10 Annual OREC Exceedance.

Applicable OREC Price Method – The method employed by NYSERDA in each month for determining the Monthly OREC Price as determined in Section 4.01 of the Agreement.

Award Notification Date – The date upon which NYSERDA provides written confirmation to a Proposer indicating that a Project has been selected for contract negotiations.

Benchmark LNOC – The confidential maximum price levels for the Fixed OREC and the Index OREC offers that NYSERDA will employ in its evaluation.

BOEM – The Bureau of Ocean Energy Management within the U.S. Department of the Interior.

CES – Clean Energy Standard.

Commercial Operation – A state of operational readiness under which (i) generating capacity is available and physically producing electric energy and associated ORECs, and (ii) all rights, abilities, permits and approvals to schedule and deliver energy to the Delivery Point have been obtained.

Commercial Operation Date – The date upon which the Project or the first portion of the Project enters Commercial Operation.

Contingent Economic Benefits –Economic benefits, related to the development, refurbishment, or expansion of port facilities in New York State that are contingent on the support, funding, investment, or cooperation of New York State or its instrumentalities, in a manner that would be in addition to New York State's standard economic development support and incentive programs (See https://esd.ny.gov/industries/cleantech-and-renewable-energy), detailed in Appendix C.

Contract Delivery Term – The period of performance under the Agreement. The Contract Delivery Term will commence on the first day of the month after any portion of the Project commences Commercial Operation and end at the earlier of (i) the date upon which the Contract Tenor has elapsed, or (ii) the Outer Limit Date.

Contract Tenor – The maximum duration of the Contract Delivery Term. The Contract Tenor shall be stated in years.

Contract Year – A 12-month period commencing with the beginning of the Contract Delivery Term and each anniversary thereof during the Contract Delivery Term. The phrase "Contract Year" followed by a number shall refer to a discrete Contract Year within the Contract Delivery Term such that "Contract Year 1" refers to the first 12-month period commencing with the beginning of the Contract Delivery Term, "Contract Year 2" refers to the second such 12-month period, and so on.

Delivery Point – For Projects that inject energy directly into the New York Control Area, the generator bus or location where (a) the administrator of the wholesale power market, or (b) the operator of the transmission/distribution utility, public authority or municipal electric company, measures, or otherwise determines, energy production from the Project. For Projects that inject energy outside of the New York Control Area, the generator bus or location where the NYISO measures energy delivery from the Project into the New York Control Area.

Economic Benefits Plan – A plan submitted as part of the Proposal, as further described in Appendix C.

Economic Benefits Report – An independently audited report, documenting the total dollar amount of actual Economic Benefits accrued to New York and associated activities and commitments undertaken from the Award Notification Date through the end of the first three (3) years of the Contract Delivery Term (See Appendix C).

Environmental Attributes – All environmental characteristics, claims, credits, benefits, emissions reductions, offsets, allowances, allocations, howsoever characterized, denominated, measured or entitled, attributable to the generation of Actual Eligible Production by a Selected Project, consistent with the delineation of attributes set forth in the Agreement.

Expected Total Dollars – The total dollar amount of Economic Benefits in Categories 1 and 2 as presented in the Proposal and accepted by NYSERDA, expected to accrue to New York State as a result of the development, construction, modification, interconnection, and operation of the Selected Project from the Award Notification Date through the end of the first three (3) Contract Years.

Fixed OREC Price – A fixed, as-offer price in dollars per OREC as described in Section 4.02 of the Agreement.

FOIL – New York's Freedom of Information Law, Public Officers' Law Article 6.

Index OREC Price – An adjustable price in dollars per OREC that nets a fixed, as-offered strike price monthly against a reference price expressed in a market index as determined by NYSERDA pursuant to Section 4.03 of the Agreement.

Incremental Economic Benefits – Those economic benefits within the categories specified in Appendix C that a Proposer can demonstrate: (1) will accrue subsequent to an award under this RFP, (2) would not

have accrued but for the award of a contract under this RFP, and (3) are not contingent on the support, funding, investment, or cooperation of New York State or its instrumentalities.

Injection Point – For Selected Projects that interconnect directly into the New York Control Area, the Injection Point is the Delivery Point. For Selected Projects that interconnect outside of the NYCA, the Injection Point shall be the generator bus or the location where the administrator of the local control area measures energy delivery from the Selected Project into the local market.

Levelized Unit Net OREC Cost (LNOC) – A means of comparing Proposals with different pricing structures, OREC quantity schedules, Commercial Operation Dates, and Contract Tenors, as described in Section 4.3.

Long-Term Jobs – Jobs lasting three or more years.

LSE – Load-serving entity.

Major Supplier – A supplier of goods and services to Proposer with an anticipated contract value of \$5 million or greater.

Monthly OREC Price – A price in dollars per OREC determined by NYSERDA for each month of the Contract Delivery Term. If the Applicable OREC Price Method is the Fixed OREC Price, the Monthly OREC Price shall be calculated pursuant to Section 4.02 of the Agreement. If the Applicable OREC Price Method is the Index OREC Price, the Monthly OREC Price shall be calculated pursuant to Section 4.03 of the Agreement.

New York Control Area (NYCA) – The geographic bounds of the electricity system that is under the control of the NYISO, which includes transmission facilities listed in the ISO/Transmission Owner Agreement Appendices A-1 and A-2, as may be amended from time to time.

New York Generation Attribute Tracking System (NYGATS) – The tracking system that records electricity generation attribute information within New York State, and processes generation attribute information from energy imported and consumed within New York State, as a basis for creating generation attribute certificates, including ORECs. NYGATS will create exactly one OREC per MWh of generation attributable to the Project and delivered to the Delivery Point.

NYISO Capacity Market – Collectively, the wholesale markets for capacity administered by NYISO.

NYISO Energy Market – Collectively, the wholesale markets for electric energy administered by NYISO.

NYSERDA Consultants – Consultants engaged by NYSERDA to assist with the evaluation of Proposals.

Offer Capacity – The electric generating capacity of the Project, measured as the installed (nameplate) capacity in alternating current at the Offshore Wind Generation Facility.

Offshore Wind Generation Facility – The installed wind turbine generators and all other associated offshore equipment and infrastructure located within the BOEM lease area.

Offshore Wind Order – The New York Public Service Commission's <u>Order Establishing Offshore Wind</u> <u>Standard and Framework for Phase 1 Procurement</u>, issued and effective on July 12, 2018 in Case No. 18-E-0071.

Offshore Wind Renewable Energy Certificate (OREC) – The electronic record of generation data created by NYGATS and representing all of the attributes, including all Environmental Attributes, of one MWh of electric generation from an Offshore Wind Facility delivered into the New York Control Area and registered with the NYGATS tracking system. The attributes represented in each OREC include all environmental characteristics, claims, credits, benefits, emissions reductions, offsets, allowances, allocations, howsoever characterized, denominated, measured or entitled, attributable to the generation of Actual Eligible Production by a Project, including but not limited to: (i) any direct emissions or any avoided emissions of pollutants to the air, soil or water including but not limited to sulfur oxides (SO_x) , nitrogen oxides (NO_x) , carbon monoxide (CO), particulate matter and other pollutants; (ii) any direct or avoided emissions of carbon dioxide (CO₂), methane (CH₄) and other greenhouse gases (GHGs) that have been or may be determined by the United Nations Intergovernmental Panel on Climate Change to contribute to the actual or potential threat of altering the Earth's climate by trapping heat in the atmosphere; (iii) all set-aside allowances and/or allocations from emissions trading programs made unnecessary for compliance in such program as a result of performance under the Agreement, including but not limited to allocations available under 6 NYCRR §§ 204, 237 and 238; and (iv) all credits, certificates, registrations, recordations, or other memorializations of whatever type or sort, representing any of the above.

Outer Limit Date – A backstop date upon which the Contract Delivery Term ends regardless of whether the full Contract Tenor has elapsed. If the Contract Tenor is 20 years, the Outer Limit Date is January 1, 2047. If the Contract Tenor is 25 years, the Outer Limit Date is January 1, 2052.

P10 Annual OREC Exceedance – An amount of electrical energy (in MWh), such that the estimated probability in any given year that generation from the Project delivered to the Delivery Point would exceed that amount is 10 percent.

Project – An Offshore Wind Generation Facility and the associated equipment, infrastructure, and support facilities necessary to construct, operate and deliver energy to the designated Delivery Point and the corresponding ORECs to an account designated by NYSERDA in the NYGATS.

Proposal – An offer to sell ORECs from an Offshore Wind Generation Facility for a given installed capacity, strike price, tenor, and Delivery Point that conforms to the requirements of this RFP.

Proposer – The business entity that submits a Proposal in response to this RFP.

Reference Capacity Price – A broad index of NYISO Capacity Market prices for NYISO Zones G to K as set forth in Section 4.03 of the Agreement.

Reference Energy Price – A broad index of NYISO Energy Market prices for NYISO Zones J and K as set forth in in Section 4.03 of the Agreement.

Required Base Proposal – A Proposal of a required installed capacity range, 25-year tenor, and constant nominal Fixed OREC and Index OREC strike prices, as described in Section 2.1.2.

Required Transmission Proposal – A required technical configuration as described in Section 2.1.2 that includes a direct marine cable interconnection from the Offshore Wind Generation Facility to a point in NYISO Zone J or Zone K.

Scoring Committee – Members of NYSERDA Staff, New York State Department of Public Service Staff, and competitively-selected Independent Evaluators responsible for evaluating Proposals received through this RFP.

Seller – A Proposer selected by NYSERDA who has executed an Agreement to sell ORECs to NYSERDA pursuant to this RFP.

Short-Term Jobs – Jobs lasting less than three years.

TWG – Technical Working Group.

Verified Total Dollars – The total dollar amount of Economic Benefits in Categories 1 and 2 verified by NYSERDA to have accrued to New York as a result of the development, construction, modification, interconnection, and operation of the Project from the Award Notification Date through the end of the first three (3) Contract Years.

1 INTRODUCTION

1.1 New York's Clean Energy Standard and Offshore Wind Standard

New York State has adopted some of the most ambitious clean energy goals in the nation, with the stated goal of reducing greenhouse gas emissions by 40% by 2030, and 80% by 2050. In concert with the State's greenhouse gas reduction goals, the New York State Energy Planning Board issued the 2015 State Energy Plan (SEP), which established that 50% of New York's electricity be derived from renewable energy sources by 2030 ("50 by 30" goal). On August 1, 2016, the New York State Public Service Commission (Commission) adopted a Clean Energy Standard (CES) to help achieve the SEP goals.²

Recognizing that New York has a substantial potential for offshore wind production, the Commission requested that NYSERDA perform a study to identify the appropriate mechanisms to achieve this potential and make recommendations for the Commission's consideration. On January 29, 2018, NYSERDA released the New York State Offshore Wind Master Plan (Master Plan), which presents a comprehensive roadmap to encourage the development of 2,400 MW of offshore wind by 2030. The Master Plan includes over 20 studies that gather data on environmental, social, economic, regulatory, and infrastructure issues relevant to offshore wind energy development, and cover a wide variety of topics related to siting, regulatory, wildlife, commercial, economic, and other important considerations. The Master Plan also includes the results of the State's extensive outreach efforts with interested agencies, entities, communities, and individuals, in order to achieve a balanced evaluation of the potential for offshore wind development.

The Commission issued its Order Establishing Offshore Wind Standard and Framework for Phase 1 Procurement on July 12, 2018 (Offshore Wind Order).³ The Offshore Wind Order adopts the goal of procuring Offshore Wind Renewable Energy Certificates (ORECs) associated with 2.4 GW of offshore wind capacity by 2030, in furtherance of the achievement of the CES. The Offshore Wind Order further authorized NYSERDA to implement Phase 1 of an offshore wind procurement program, which consists of procuring ORECs associated with approximately 800 MW of offshore wind, to be contracted in 2018 and 2019, pursuant to methods and criteria prescribed therein. The Offshore Wind Order further permits NYSERDA to award more than 800 MW in contracts in this first round of the Phase 1 solicitation if sufficient attractive offers are received, in which case further Commission action would be required to authorize the 2019 procurement. For avoidance of doubt, NYSERDA seeks to acquire ORECS only, and will not have any claim to associated electric energy, capacity, or ancillary services associated with the ORECs.

² Case 15-E-0032, Proceeding on Motion of the Commission to Implement a Large-Scale Renewable Program and a Clean Energy Standard, Order Adopting a Clean Energy Standard (issued August 1, 2016).

³ Case 18-E-0071, In the Matter of Offshore Wind Energy, Order Establishing Offshore Wind Standard and Framework for Phase 1 Procurement (issued July 12, 2018).

1.2 Background on NYSERDA

NYSERDA was created in 1975 by the New York State Legislature as a public authority and public benefit corporation. Similar to NYSERDA's role in solicitations issued under the CES and the former Renewable Portfolio Standard Main Tier,⁴ the Offshore Wind Order authorizes NYSERDA to act as the central administrator of the Offshore Wind Standard program.

Pursuant to the Offshore Wind Order, NYSERDA will purchase ORECs from the contracted Project on behalf of the jurisdictional and voluntarily-complying Load Serving Entities (LSEs) in New York State within the Public Service Commission's jurisdiction, as well as the non-jurisdictional New York Power Authority and Long Island Power Authority that may opt to use NYSERDA as the purchasing entity, and will then sell the ORECs to the LSEs for compliance with the LSEs' offshore wind obligation. Each LSE will be obligated to purchase a percentage of ORECs purchased by NYSERDA in a year that represents the portion of the electric energy load served by the LSE in relation to the total electric energy load served by all LSEs operating in New York State during that period.

1.3 Schedule

The schedule for ORECRFP18-1 is as follows (all times ET):

RFP Release Date	November 8, 2018
Proposers Conference	November 29, 2018, 10:00 a.m.
State of the Science Workshop on Wildlife and Offshore Wind Energy Development ⁵	November 13, 2018, 10:00 a.m. – 8:30 p.m.
(This in-person event is optional but recommended)	November 14, 2018 8:00 a.m. – 4:30 p.m.
New York Offshore Wind Supplier Forum ⁶ (This in-person event is optional but recommended)	November 15, 2018, 9:00 a.m. – 4:00 p.m.
Deadline for Submission of Written Questions	December 6, 2018, 3:00 p.m.
Responses to Written Questions Posted	December 13, 2018
Deadline for Notice of Intent to Propose	December 20, 2018, 3:00 p.m.
Deadline for NYSERDA Portal Registration	February 7, 2019, 3:00 p.m.
Deadline for Submission of Proposals	February 14, 2019, 3:00 p.m.
NYSERDA Award Notification Date	April 2019
Contract(s) Executed	June 2019

Please note that the above dates are subject to change. Notification of any changes to the RFP process or documents will be posted on the <u>NYSERDA Offshore Wind 2018 Solicitation website</u> and sent via email to those parties who have submitted a Notice of Intent to Submit Proposal.

⁴ Under the CES and former Renewable Portfolio Standard Main Tier, NYSERDA has supported the development of approximately 2,000 MW of operating land-based wind projects; additional renewable capacity of approximately 2,000 MW is contracted and is under development.

⁵ <u>http://www.briloon.org/offshorewindny/workshop</u>

⁶ <u>https://www.nyserda.ny.gov/All-Programs/Programs/Offshore-Wind/Contact/Events/Supplier-Forum</u>

1.4 Notice of Intent to Propose

Prospective Proposers are encouraged to submit a Notice of Intent to Propose, which is attached as Appendix A to this RFP. NYSERDA will email updates regarding this RFP to prospective Proposers who submit a Notice of Intent to Propose. This does not relieve prospective Proposers of their responsibility to check the <u>NYSERDA Offshore Wind 2018 Solicitation website</u> for news and updates. Prospective Proposers who submit a Notice of Intent to Propose are not obligated to submit a Proposal, and Proposals will be accepted from parties who do not submit a Notice of Intent to Propose. The Notice of Intent to Propose form should be sent to <u>offshorewind@nyserda.ny.gov</u> by the date indicated in Section 1.3 using the subject line: Notice of Intent to Propose ORECRFP18-1.

1.5 Proposal Fee

Proposals must be accompanied by a proposal fee which will be used by NYSERDA to offset the cost of the evaluation of Proposals. The base proposal fee is \$300,000 which will cover the Required Base Proposal and the Required Transmission Proposal (if separate from the Required Base Proposal), as defined in Section 2.1.2. Alternate Proposals, as also defined in Section 2.1.2, are permitted. Each Alternate Proposal that has a different installed capacity, transmission system, delivery point, technical configuration, and/or expected Commercial Operation Date will require an additional \$40,000 proposal fee. Alternate Proposals that vary only the strike prices and/or Contract Tenor will require an additional \$20,000 proposal fee. The proposal fee will automatically be computed within the forms used to submit a Proposal. The proposal fee and the Contract Security amounts set forth in Article XV of the Purchase and Sale Agreement are the only fees or monetary obligations of Proposer.

All proposal fees must be clearly labeled with a unique Description/Reference described below.

Electronic Proposal Fee Instructions

If paying via ACH:

Name of Bank: Bank of America For the Account of: NYSERDA MAC 30 ABA #: 021000322 Account #: 6010316543 Description/Reference: (Proposer -Name of Project_ ORECRFP18-1)

<u>If paying via wire</u>: Name of Bank: Bank of America For the Account of: NYSERDA MAC 30 ABA #: 026009593 Account #: 6010316543 Description/Reference: (Proposer - Name of Project_ ORECRFP18-1)

If paying via Certified Funds:

If the Proposal Fee is provided via a cashier's check or other certified funds, the proposal fee must be payable to NYSERDA and clearly labeled with Proposer's name, name of Project and ORECRFP18-1.

Joanne Sullivan, ORECRFP18-1 NYS Energy Research and Development Authority 17 Columbia Circle Albany, NY 12203-6399

The proposal fee is non-refundable unless NYSERDA cancels this RFP. If this RFP is canceled by NYSERDA, uncommitted proposal fees will be returned. In no other event will any portion of the proposal fee be refunded, regardless of whether or not a Proposal(s) is (are) selected by NYSERDA.

1.6 Proposers Conference and Communications with NYSERDA

A Proposers Conference for interested persons will be held via Webinar (<u>https://nyserda-</u> <u>events.webex.com/nyserda-events/onstage/g.php?MTID=e2cd79881e7deed788c1707b1266d50d7</u>). Links can be similarly found via <u>NYSERDA's Offshore Wind 2018 Solicitation website</u>. Proposers are encouraged to register for this event as early as possible. The purpose of Proposers Conference is to provide Proposers the opportunity to clarify their understanding of any aspect of this RFP. Prospective Proposers may ask questions during Proposers Conference, and NYSERDA may respond orally. However, only written answers that are provided by NYSERDA in response to questions and posted on the <u>NYSERDA Offshore Wind 2018 Solicitation website</u> by the deadline for responses listed in in the schedule in Section 1.3 will constitute official responses.⁷ Questions and responses will be anonymized.

With the exception of Proposers Conference, all pre-Proposal contacts with NYSERDA by prospective Proposers and interested parties regarding this RFP or related matters must be via email to the Designated Contacts at <u>offshorewind@nyserda.ny.gov</u>. Prospective Proposers are encouraged to submit written questions about this RFP with the subject line "ORECRFP18-1 Question" on or before the date indicated in Section 1.3.

1.7 Modification or Cancellation of the RFP and Solicitation Process

The terms and conditions of this RFP may, at any time, be changed, postponed, withdrawn, and/or canceled, including any requirement, term or condition of this RFP, without any liability to NYSERDA, NYSERDA Consultants, or members of the Scoring Committee. Any changes to this RFP will be posted on the on the <u>NYSERDA Offshore Wind 2018 Solicitation website</u> and an email will be sent to all prospective Proposers who have submitted a Notice of Intent to Propose. Prospective Proposers are encouraged to check the website frequently to be advised of any RFP changes or other news.

1.8 Updates to Proposals

Proposers will not have an opportunity to refresh or restate Proposals after the Deadline for Submission of Proposals. If, prior to the Deadline for Submission of Proposals, a Proposer wishes to modify a Proposal that was submitted before the Deadline for Submission of Proposals, Proposer should contact NYSERDA's Designated Contacts. Otherwise, Proposers may provide new information that was not available at the time of their Proposal submission or the deadline for submission of Proposals. For example, this may include updates on the status of obtaining permits, interconnection studies, or

⁷ Questions solely regarding the calculation or payment of the proposal fee may be directed to the Designated Contacts at <u>offshorewind@nyserda.ny.gov</u> and will be answered in confidence to Proposer.

financing. Unless the information is provided at NYSERDA's request under Section 1.9, these updates are for informational purposes only and will not be treated by the Scoring Committee as a change or revision to the terms of the Proposal. If there are any material events that affect the validity of the Proposal, Proposers must promptly notify NYSERDA in writing. NYSERDA reserves the right to consider these material changes during Proposal evaluation.

1.9 Requests for Additional Information

Following the submission of Proposals, NYSERDA and the Scoring Committee may request clarification and additional information from Proposers at any time throughout duration of the evaluation process. Such information will be subject to protection of proprietary information as described in Section 8.1, consistent with other Proposal submission materials. 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 or the Scoring Committee to allow a reasonable and appropriate evaluation.

1.10 Interviews with Proposers

NYSERDA may request in-person interviews with any Proposer, to be scheduled at a mutually convenient time.

2 PROJECT ELIGIBILITY REQUIREMENTS

2.1 Eligibility

To participate in this RFP, all Proposals must demonstrate compliance with each of the eligibility requirements enumerated in this Section 2.1.1 through 2.1.6. As used in this RFP, the term "Project" includes the Offshore Wind Generation Facility, along with all associated equipment, infrastructure, and support facilities necessary to develop, operate, transmit, and deliver energy from the Offshore Wind Generation Facility to the Delivery Point, and ORECs to an account designated by NYSERDA in NYGATS.

2.1.1 ORECs Offered

NYSERDA is seeking to procure ORECs produced from one or more Offshore Wind Generation Facilities located in the ocean waters of the United States that become operational on or after January 1, 2015 and with approximately 800 MW of total installed capacity. NYSERDA may award contracts for ORECs from less than 800 MW or more than 800 MW of total installed capacity if the submitted Proposals justify the larger quantity.

The OREC production from the Offshore Wind Generation Facility offered to NYSERDA through this RFP, up to the Annual OREC Cap, may not be contractually committed to any other entity over the proposed Contract Delivery Term. Awardee will retain ownership and all rights to ORECs that exceed the Annual OREC Cap.

2.1.2 Required and Alternate Proposals

All Proposers must submit a Required Base Proposal and a Required Transmission Proposal but may also submit Alternate Proposals with varied parameters as described below.

- A **Required Base Proposal** must be for ORECs delivered from an approximately 400 MW Offshore Wind Generation Facility,⁸ for a 25-year Contract Tenor.⁹ The Required Base Proposal must include both Fixed OREC and Index OREC pricing expressed as a constant nominal strike price over the Contract Tenor.
- A **Required Transmission Proposal** must be for ORECs associated with energy delivered through a direct marine cable interconnection from the Offshore Wind Generation Facility to a point in NYISO Zone J or Zone K. The Required Transmission Proposal may be included as part of the Required Base Proposal but is not a mandatory component of the Required Base Proposal and may instead be submitted as a second required Proposal. If the Required Transmission Proposal is part of the Required Base Proposal, it must meet all the requirements of the Required Base Proposal. Otherwise, a separate Required Transmission Proposal does not need to be for an approximate 400 MW Offshore Wind Generation Facility but must include both Fixed OREC and

⁸ The Required Base Proposal may reasonably deviate from the 400 MW target requirement if the design capacity of individual components of the Offshore Wind Generation Facility do not sum to exactly 400 MW. The allowed capacity range for the Required Base Proposal is between 380 and 420 MW.

⁹ See Section 15.08 of the Agreement.

Index OREC pricing over the Contract Tenor. A separate Required Transmission Proposal may be for either a 20-year or 25-year Contract Tenor and may offer constant nominal or non-decreasing nominal Fixed OREC and Index OREC Strike Prices as described in Section 2.1.3.

• Alternate Proposals may be for ORECs delivered from Offshore Wind Generation Facilities of other technical configurations or interconnection points, other installed capacity, or other expected Commercial Operation Dates. However, Proposals for less than 200 MW will not be eligible. Alternate Proposals may be for either a 20-year or 25-year Contract Tenor and may offer constant nominal or non-decreasing nominal Fixed OREC and Index OREC Strike Prices as described in Section 2.1.3.

A Proposer may condition the acceptance of one Proposal based on the withdrawal or acceptance of other Proposals. Project eligibility requirements do not preclude the option to propose multiple interconnection points in NYCA as may be necessary to reasonably minimize interconnection costs.

2.1.3 Pricing

Each Proposal must include firm offer prices in two different forms: Fixed OREC pricing and Index OREC pricing. Offer prices for each Proposal, including for the Required Transmission Proposal, are all-inclusive; that is, for all components of the Project. Under Fixed OREC pricing, the OREC price is equal to the corresponding Contract Year's Fixed OREC Strike Price in the offer price schedule. Under Index OREC pricing, the OREC price varies monthly, and is equal to the corresponding Contract Year's Index OREC Strike Price and the monthly Reference Capacity Price, as further described in Section 4.1.2. For both forms of pricing, and consistent with the conditions described in Section 2.1.2, only constant nominal pricing or pricing that increases nominally by Contract Year, subject to a maximum of 2.0% annual nominal escalation, will be accepted.

2.1.4 Site Control

Proposer must hold (a) an irrevocable right or option to develop the entire Offshore Wind Generation Facility site footprint within a federal Bureau of Ocean Energy Management (BOEM) commercial wind energy lease area; or (b) demonstrate the existence, within or as a part of the Proposal, of a fullyexecuted lease for the BOEM commercial wind energy lease area within which the Offshore Wind Generation Facility is to be sited; or (c) demonstrate that it is a provisional winner of a BOEM wind energy area lease sale pursuant to 30 C.F.R. 585 and is proceeding toward lease execution. Proposers must notify NYSERDA promptly upon the execution of such lease. Section 9.01(c) of the Agreement requires Seller to warrant that it "has, or reasonably expects to have prior to the time needed, all real property rights to construct, interconnect, and operate the Selected Project."

Proposers must identify the proposed interconnection point(s), describe what rights Proposer has to the interconnection point(s), and provide a detailed plan and timeline for the acquisition of any additional rights necessary for the interconnection(s) and for the right-of-way for transmission radial line to the interconnection point(s). Such rights may be held by Proposer directly or indirectly via partnership with a transmission developer. Proposers may enter into contract arrangement with a transmission

developer to support evidence of site control, which NYSERDA may consider in its determination of project viability.

2.1.5 Interconnection and Delivery

Proposers must demonstrate that energy generated by the Offshore Wind Generation Facility can be delivered into the NYCA. An Offshore Wind Generation Facility may interconnect in an adjacent Control Area (except in the case of the Required Transmission Proposal); such Proposals must address how Proposers intend to fulfill the Electricity Delivery Requirements contained in Article III of the Agreement.

For the Required Transmission Proposal or for any Proposal including a direct interconnection to the NYCA, Proposers must have submitted a valid Large Facility Interconnection Request with NYISO. For Offshore Wind Generation Facility Proposals that would interconnect in an adjacent Control Area, Proposers must have submitted a similar interconnection request to ISO New England or PJM, as applicable.

2.1.5.1 Conformance with NYGATS Operating Rules

If awarded a contract, Proposers must obtain a valid NYGATS ID for the Offshore Wind Generation Facility and operate in conformance with the NYGATS Operating Rules. Delivery of electricity during the Contract Delivery Term that complies with the Electricity Delivery Requirement contained in Article III of the Agreement will be sufficient to support the creation of ORECs by NYGATS and the implementation of the Forward Certificate Transfer of ORECs, up to the Annual OREC Cap, into NYSERDA's NYGATS Account. NYSERDA will make payment for ORECs from the Offshore Wind Generation Facility delivered to NYSERDA's NYGATS account.

2.1.6 Contract Delivery Term

Each Proposal must specify an expected Commercial Operation Date. For a multi-phase installation, the Commercial Operation Date will be the date of operation of the first phase of installed capacity.

The Contract Delivery Term will commence on the first day of the month after the actual Commercial Operation Date and end after the term of the Contract Tenor or at the Outer Limit Date, whichever occurs first. If less than twenty-five percent (25%) of the Project has commenced Commercial Operation (as determined on an installed capacity basis as compared to the Offer Capacity), Seller may elect to delay the commencement of the Contract Delivery Term for a period not to exceed one year after any portion of the Project has achieved Commercial Operation.

The OREC production from the Offshore Wind Generation Facility offered to NYSERDA through this RFP, up to the Annual OREC Cap, may not be contractually committed to any other entity over the Contract Delivery Term.

2.2 Contract Commitments Relating to Considerations Identified in the Offshore Wind Order

The Offshore Wind Order authorizes NYSERDA to include at its discretion, certain contract requirements in agreements resulting from this solicitation. NYSERDA has adopted the following requirements and has incorporated them into the Agreement.

2.2.1 Prevailing Wage Requirement

Although this is not a public work covered by NYS Article 8, and unless otherwise provided in a Project Labor Agreement (PLA) covering the construction on the Project, all laborers, workmen and mechanics (within the meaning of those terms under NYS Labor Law Article 8) performing construction activities within the United States (including federal waters) with respect to the Project, including, but not limited to, the assembly, staging, installation, erection, and placement of the Project and its electrical interconnection as well as those construction activities related to start-up and commissioning of the Project, whether through long-term or short-term employment, must be paid wages and benefits in an amount not less than the Prevailing Rates (as determined under NYS Section 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 subject Project construction activities occur. Unless provided otherwise in any negotiated PLA, it is generally expected that covered construction, for these purposes, will include United States-based offsite fabrication traditionally performed on-site by construction craft when that fabrication produces items specifically designed for construction of the Project, fabrication occurs off-site for the convenience of the contractor, and the fabrication is part of a single integrated construction process. For construction activities in federal waters, the rates shall be those applicable at the location of the port or ports from which the laborers, workmen or mechanics are based for purposes of that offshore work. 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 or Contingent Economic Benefit in its Proposal. See Section 18.10 of the Agreement.

2.2.2 Project Labor Agreement

The Offshore Wind Order authorizes NYSERDA to consider the inclusion of a Project Labor Agreement (PLA) requirement in its RFP. As referenced here, a PLA refers generally to a single collective bargaining agreement (including a pre-hire agreement) covering both contractors in the construction industry working on a Project and a bona fide building and construction trade labor organization representing the craft workers on that Project.

After consideration of the potential impact of a PLA, NYSERDA has concluded that a PLA, with appropriate terms, could serve the State's and public's interest. Accordingly, as is described more fully in Section 18.11 of the Agreement, each awardee will be required to present to NYSERDA for its review, within 30 days of the date of the Bureau of Ocean Energy Management's (BOEM) approval of the Construction and Operation Plan (COP) for the Project, a plan outlining its intentions with respect to the negotiation of a PLA to cover all construction activities on the Project, as defined in Section 2.2.2, within the United States (including in federal waters). NYSERDA should thereafter be kept apprised of negotiations as they proceed, and NYSERDA shall have the right to have one or more representatives attend negotiation sessions as it determines is in its best interests.

Such negotiations are to cover, at a minimum, the topics described below.

The PLA should contain:

- 1. Provisions that appropriately limit applicability of the PLA to United States-based (including federal waters) covered work on the Project (and not extending to any other work performed by Project contractors and subcontractors, or to the work of their affiliated entities), ensuring that Project contractors or subcontractors are not required to become a signatory to any other labor agreement, and appropriately providing for the supremacy of the PLA over any potentially conflicting labor agreements that might otherwise apply to contractors and subcontractors. The PLA must apply to all covered construction and all contractors and subcontractors, of whatever tier, performing construction work on the Project (subject to appropriate exceptions), and the PLA should be available to all contractors and subcontractors, of whatever tier, regardless of their union affiliation;
- Provisions for appropriate union recognition and security (limited to Project work) and the referral of skilled craft workers, including provisions for staffing in the event qualified referrals are not reasonably available and for the reasonable use of a number of core employees by contractors and subcontractors (regardless of union affiliation and referral practices that might otherwise exist);
- 3. Comprehensive labor harmony provisions to ensure against Project disruption as a result of worksite disputes or other labor disputes of any kind;
- 4. Comprehensive provisions for the resolution of workplace disputes through third party resolution, including provisions for the resolution of jurisdictional disputes (without Project disruption), and appropriate provisions for labor management cooperation;
- 5. Appropriate provisions to allow the cost effective and efficient coordination of multiple trades and contractors and subcontractors (notwithstanding any local labor agreements that might otherwise be applicable to contractors and subcontractors), as well as other appropriate management rights (such as adequately ensuring the Contractors'/subcontractors' choice of materials, techniques, methods, technology or design, or, regardless of source or location; use and installation of equipment, machinery, package units, pre-cast, pre-fabricated, pre-finished, or pre-assembled materials, tools, or other labor-saving devices; the installation or use of materials, supplies or equipment regardless of their source (including as may be required by a vendor and/or to ensure warranty coverage); and to perform off-site work, subject to any restrictions imposed by law);
- 6. Appropriate provisions promoting MWBE employment, as well as the employment of New York workers and low-income workers;
- 7. Appropriate provisions for the use of apprentices; and
- 8. Appropriate provisions for rules governing worksite access and conduct.

Awardees may appoint or delegate to a contractor or third party the authority to conduct such negotiations and/or to execute the PLA; however, the responsibility to deliver the PLA and to ensure its

sufficiency and compliance with its terms will remain with awardee. A final PLA consistent with this Section shall be presented to NYSERDA for review and approval within 180 days of BOEM's approval of the COP for the Project. Section 18.11 of the Agreement provides further procedures should the awardee fail to reach agreement on a final PLA within that timeline.

NYSERDA's review of any agreed-upon PLA will be based on the specific terms of the negotiated PLA and will take into account the best interests of NYSERDA with respect to the Project, and the public it serves, and will include consideration of Project viability, the cost-effectiveness of the PLA, and the need for timely Project completion.

2.2.3 Consultation with New York State Agencies

Proposers must agree, if awarded a contract, to consult with certain New York State agencies during planning and development of the Offshore Wind Generation Facility, including the transmission radial line to the on-land interconnection point. The intention of these consultations is to provide the agencies with a greater understanding of the Project and inform the contract awardee about important resource considerations and the permitting approach early in the process, and to inform the approach with feedback from stakeholders and New York State agencies in an effort to reduce uncertainty, improve transparency, and minimize conflicts. Earlier, periodic informal consultations are advised to narrow issues and streamline the formal process. This requirement will be accomplished in parallel with the federal process, recognizing that the Bureau of Ocean Energy Management (BOEM) has primary jurisdiction over the offshore aspects of a Project.

At a minimum, contract awardees will be required to consult with the following agencies relating to agency goals and responsibilities on the following topics:

- 1. The New York State Department of State (DOS) with respect to a Project's consistency with the policies set forth in the State's Coastal Management Program;
- 2. The New York State Department of Environmental Conservation (DEC) with respect to assessment and mitigation of potential environmental impacts, including but not limited to, water quality, air quality, benthic communities, fish, fisheries and wildlife impacts of the Project;
- 3. The New York State Office of Parks, Recreation and Historic Preservation (OPRHP) with respect to the assessment and mitigation of effects on sites of historic or archeological significance;
- 4. The New York State Department of Public Service (NYDPS) with respect to a Project's electrical interconnection and any applicable regulatory requirements under the Public Service Law;
- 5. The New York State Office of General Services (OGS) with respect to a Project's electrical interconnection involving State land; and
- 6. NYSERDA as a point of contact with respect to a Project's general consistency with the New York State Offshore Wind Master Plan and stakeholder feedback.

More specifically, the required consultation will consist of the following steps:

1. At the time it submits a proposed Site Assessment Plan (SAP) to BOEM, a contract awardee will also submit the proposed SAP to DOS, DEC, OPRHP, NYDPS, OGS, NYSERDA, and any other state agency that NYSERDA notifies contract awardee to include (each, a "Consulting State Agency"), so that each such Consulting State Agency may provide input on the SAP concurrently with BOEM's review. Each Consulting State Agency will provide to the contract awardee the agency's initial comments on the proposed SAP – either jointly or individually – within 60 calendar days of receipt. The contract awardee then must meet or engage with each Consulting State Agency that requests a meeting at reasonable times and intervals in an effort to attempt to resolve any issues.

If a contract awardee has already submitted its SAP to BOEM at the time of its Proposal under this RFP, the contract awardee should so state in its Proposal and propose an alternative process for consultation with the Consulting State Agencies.

- 2. At the time it submits a proposed Construction and Operations Plan (COP) to BOEM, a contract awardee will also submit the proposed COP to the Consulting State Agencies, so that each Consulting State Agency may provide input on the SAP concurrently with BOEM's review. Each Consulting State Agency will provide to the contract awardee that agency's initial comments on the proposed COP jointly or individually within 60 days of receipt. The contract awardee then must meet or engage with those Consulting State Agencies that request such a meeting, at reasonable times and intervals in order to attempt to resolve any issues. If a contract awardee has already submitted to BOEM a COP at the time of its Proposal under this RFP, the contract awardee should so state in its Proposal and propose an alternative process for consultation with the Consulting State Agencies with respect to the COP.
- 3. The requirements and processes set forth in paragraphs 1 and 2 above will apply to any component, or resubmittal of a SAP or a COP, respectively, that a contract awardee submits to BOEM, including, but not limited to, any required surveys or documentation required under the National Environmental Policy Act. Thus, the contract awardee will submit all SAP and COP components and revisions to the Consulting State Agencies concurrent with submission to BOEM.
- 4. Proposers are directed to reference Section 8.1 of the RFP, where the treatment of confidential information is discussed. The Consulting State Agencies will not disclose information generated by those agencies (such as comments on draft materials) that they determine contains confidential trade secret information provided by a contract awardee to third parties. Notwithstanding an assertion by a contract awardee that particular information constitutes confidential trade secret information exempt from FOIL, the Consulting State Agencies will make their own determinations as to how to comply with the law and whether a FOIL exemption applies. In order to do so, the Consulting State Agencies may request further information from a contract awardee about contract awardee's asserted justification for withholding designated information. Any agreement on the part of any Consulting State Agency to exempt certain information from FOIL disclosure shall not bind any other agency and shall not diminish a contract awardee's obligation to make non-proprietary Site and Environmental Data available to the public.

5. The consultation requirements set forth above in this Section 2.2.3 do not obviate or replace the federal Coastal Zone Management Act regulatory requirement in 15 CFR Part 930 and in the event of conflicting timeframes, the federal regulations will prevail.

2.2.4 Participation in Technical Working Groups

Proposers must agree, if awarded an Agreement, to reasonably participate in the Environmental, Commercial and Recreational Fishing, Maritime, and Jobs and Supply Chain Technical Working Groups (TWGs) as directed by NYSERDA. This includes participation in TWG meetings and engaging with the relevant stakeholder groups within the TWG regarding the proposed Project.

2.2.5 Site and Environmental Data Transparency

If awarded a contract, Proposers must agree to make publicly available any information or data and supporting metadata that is developed in furtherance of a Project and relates to environmental characteristics, or use by wildlife, of any offshore, nearshore or onshore areas, as well as any data sponsored or developed by a contract awardee relating to the potential impacts of the construction, operation, or decommissioning of a Project on the environment and wildlife of such areas (separately and collectively, "Site and Environmental Data"). Contract awardees will be required to make Site and Environmental Data publicly available on an ongoing basis as soon after collection as is practicable for use by third parties in decision making around adaptive management. Data typically classified as proprietary, such as metocean data and geophysical/geotechnical data, will not be considered Site and Environmental Data for purposes of this requirement.

Real or nearly real-time reporting of marine mammal sighting and detections may be required and the timing of the availability of other data will be determined though consultations with DOS, DEC or NYSERDA, either individually or as a group. Other environmental data must be made available as soon after collection as is reasonable, on an ongoing and routine basis as appropriate to the collection method and as discussed with DOS, DEC, NYDPS, or NYSERDA, either individually or as a group.

Contract awardees may choose to use existing publicly accessible data repositories and/or developer sponsored websites as venues to host the data and metadata. The intention of this requirement is to allow independent data users the opportunity to develop an understanding of the environmental characteristics of potential offshore wind energy development areas, including areas within which Projects may be located, and to independently assess the impacts of offshore wind energy development on those characteristics in a timely manner. Site and Environmental Data includes information that a contract awardee develops before, during, and after this RFP process, and includes, but is not limited to, information relating to the following topics:

- 1. Air quality and emissions
- 2. Water quality
- 3. Fish and fish habitats
- 4. Birds and bats
- 5. Marine mammals and sea turtles
- 6. Benthic communities

2.2.6 Lighting Controls

If awarded a contract, Proposers must agree to install lighting controls to minimize nighttime visibility. NYSERDA will require that any wind turbines installed by a contract awardee in furtherance of such Contract employ aircraft detection lighting systems ("ADLS") in order to meet Federal Aviation Administration obstruction lighting requirements while minimizing lighting-related visual impact and impacts on avian species. In the event that ADLS systems do not meet Federal Aviation Administration Requirements or another technology produces a better outcome, the best available approved technology may be used upon consultation and approval of NYSERDA. Inclusion of ADLS, or an alternative approved by NYSERDA, in a contract awardee's COP submitted to BOEM will also be a requirement of any Contract.

2.2.7 Fisheries Mitigation

Proposers must submit with their Proposal, and subsequently develop and implement a Fisheries Mitigation Plan, further described in Section 6.4.12 and Appendix D.

2.2.8 Environmental Mitigation

Proposers must submit with their Proposal, and subsequently develop and implement an Environmental Mitigation Plan, further described in Section 6.4.13 and Appendix E.

2.2.9 New York State Supplier Opportunity

If awarded a contract, Proposers must agree to provide New York companies with the opportunity to offer to provide goods and services to developers and suppliers of the Project for which there is capability in New York State. Proposer must communicate all opportunities for contracts with an anticipated contract value of \$5 million or greater not already committed at the time of offer submission to a New York State vendor list maintained by NYSERDA and provided to contract awardees, except for the provision of goods and services that cannot practically be performed by the New York State supply chain at this time. The opportunity may come from goods or services directly tendered by Proposers or from goods and services tendered by its Major Suppliers.

If selected for an award, Proposer will be required to report on New York State Supplier Opportunity activities as a part of the progress reports to be provided under Section 6.02 of the Agreement.

3 NON-PRICE EVALUATION

3.1 Overview

The Scoring Committee will evaluate Proposals to determine whether they meet each of the eligibility requirements defined in Section 2.1. Proposals that fail to meet these requirements may be ineligible for an award. Proposals that meet the eligibility requirements will be scored and ranked with respect to three components as defined in the Offshore Wind Order.

NYSERDA will employ a scoring system that weights price and non-price factors, for a maximum total of 100 points, as follow:

- 1. Project Viability: 10 points Non-Price Evaluation
- 2. New York Economic Benefits: 20 points Non-Price Evaluation
- 3. Offer Prices: 70 points Price Evaluation

The Scoring Committee will award points for the non-price evaluation components of each Proposal (project viability and New York economic benefits).

3.2 Project Viability

The project viability evaluation considers a series of factors that demonstrate whether the proposed Project can reasonably be expected to be in service on or before the proposed Commercial Operation Date. To maximize the score received under this scoring component, Proposers must provide evidence that Project development plans are sufficiently mature, and technically and logistically feasible, that Proposers have sufficient experience, expertise, and financial resources to execute the development plans in a commercially reasonable and timely manner, and that the Project as proposed can be developed in a manner which is sensitive to ocean users and coastal communities.

Specific categories to be evaluated by the Scoring Committee include:

3.2.1 Permitting Plan and Status

Proposers must demonstrate a complete, credible and achievable plan for successfully obtaining necessary permits within the proposed Project milestones. All required federal, regional, state and local permits must be identified, and the status of each permit must be provided. Proposers must also provide information describing the extent to which support or opposition to the Project may materially affect the Project's permitting approval timelines.

3.2.2 Financing Plan

Proposers must demonstrate that they have sufficient scale, financial resources, and insurance for developing the Project, and a credit rating sufficient for Project development. Proposers must demonstrate that they have completed sufficient due diligence regarding the formulation of a credible project financing plan. A demonstration of recent experience in successfully financing like technology of comparable size and complexity will be viewed favorably.

3.2.3 Developer Experience

Proposers must demonstrate that the development team has sufficient relevant experience and expertise to successfully finance, develop, construct, operate and maintain its Project. Financing, development, and construction experience can be established by demonstrating that principals of the development team have undertaken relevant project management responsibilities, including: (1) successful development, construction, and operation of a similar type of project within or outside of the U.S.; or (2) successful development, construction, and operation of one or more projects of similar size or complexity or requiring similar skill sets, including experience in New York State.

3.2.4 Proposed Technology

Proposers must demonstrate that the technology it proposes to use is technically viable, and that the primary components can be procured to meet the required development schedule. Technical viability may be demonstrated by showing that the technology is commercially available, is reasonably expected to be commercially available prior to the commencement of Project construction or has been used successfully on other similar projects within or outside the U.S. in commercial operation. The Proposal must also provide a reasonable timeline and plan for procuring the primary components from identified suppliers.

3.2.5 Development and Logistics Plan

Proposers must demonstrate the logistical viability of the Project through a construction plan covering the necessary specialized equipment (*e.g.*, vessels), and applicable maritime law (*e.g.*, Jones Act compliance) to complete Project development. Proposer must demonstrate that it has a plan to secure marine terminal facilities necessary for staging and deployment of major components to the Project site.

3.2.6 Interconnection and Delivery

Proposer must provide a detailed plan and a reasonable timeline to complete the interconnection process with NYISO for direct interconnection(s) to the NYCA and, if applicable, for any other interconnecting authority in an adjacent control area. The timeline must be consistent with meeting the overall development schedule and proposed Commercial Operation Date. Proposer must detail the status (and results, if applicable) of interconnection application and studies, as further described in Section 6.4.7.

NYSERDA is seeking ORECs from Offshore Wind Generation Facilities that will deliver their energy to an identified Delivery Point within NYCA over the Contract Delivery Term, in accordance with the Electricity Delivery Requirement contained in Article III of the Agreement. Proposers are obligated to demonstrate how this requirement will be satisfied. NYSERDA will not be responsible for any wheeling charges or any other transmission or administrative related cost levied by an adjacent Control Area associated with delivery of energy to the NYCA, other than payment of the contractually determined OREC Price.

Project eligibility requirements do not preclude the option to propose multiple interconnection points in NYCA as may be necessary to reasonably minimize interconnection costs. Proposals must further provide detail regarding the available capacity, at the time of submission, of the proposed Injection Point. Proposals that demonstrate efficient interconnections and that avoid the creation of stranded assets. may receive higher project viability scores.

3.2.7 Proposed Commercial Operation Date

Proposer must provide a proposed Commercial Operation Date, accounting for the permitting, financing, interconnection, and other development milestones associated with the Proposal.

The Proposal must demonstrate that the Project can reasonably be permitted, developed, financed, and constructed within the proposed Project schedule. Proposers must submit reasonable milestones that are achievable, thereby placing the Project on an achievable milestone schedule to support the proposed Commercial Operation Date. Proposals with an earlier proposed Commercial Operation Date may receive higher project viability scores so long as the Scoring Committee concludes that the proposed Commercial Operation Date is reasonable and is supported by the overall Proposal, including the Project Schedule submitted by Proposers in accordance with Section 6.4.10 of this RFP.

3.2.8 Community Outreach

The Proposal must present a reasonable community outreach plan with a thoughtful approach to build Project support and respectfully respond to opposition. Proposers awarded a contract are encouraged to consult with NYSERDA before and during the implementation of their community outreach plans and will be required to update NYSERDA on their community outreach progress and plans in their quarterly progress reports. Thoughtful community outreach plans may include: a description and analysis of affected communities; a plan for regionally targeted education and marketing strategies that include advertisements and/or direct mailings, outreach events and activities such as exhibiting at local events, hosting open houses, and targeted engagement with local community groups. Community outreach plans should also demonstrate consideration for engagement of priority or disadvantaged populations located near Project sites.

3.2.9 Fisheries and Environmental Mitigation Plans

Proposers must provide a fisheries mitigation plan that demonstrates a full understanding of the potential impact of the Offshore Wind Generation Facility on commercial and recreational fishing and provides a feasible plan to mitigate such impacts. Proposers must also provide an environmental mitigation plan that demonstrates an understanding of environmental impacts during construction and operation of the Offshore Wind Generation Facility and provides a feasible plan to mitigate such impacts.

3.2.10 Visibility and Viewshed Impacts

Proposers must address a Project's visibility from shore as described in Section 6.4.15, with more stringent requirements placed on Projects proposed to include turbines less than 20 statute miles from the nearest shoreline point.

3.2.11 Energy Resource Assessment

The Proposal must demonstrate the credibility of the energy resource assessment and production profile, sufficient to demonstrate the Project's financeability and to support the purported environmental and reliability benefits.

3.3 New York Economic Benefits

Inclusion of the New York economic benefits evaluation criteria reflects the importance of positive impacts of the OREC procurement on New York State's economy, and the long-term benefits that a mature, locally-based industry can sustain. New York economic benefits include both Incremental Economic Benefits and Contingent Economic Benefits, as described below. Both should be included in the Offer Data Form and the Economic Benefits Plan.

At the time of award, a determination will be made as to whether and/or how the Contingent Economic Benefits claims will be included in the Expected Total Dollars or Economic Benefits Report and whether and/or how such claims will subject to any subsequent verification process (see Appendix C and Section 12.01(b) of the Agreement).

Incremental Economic Benefits. Those economic benefits within the categories specified in Appendix C that a Proposer can demonstrate: (1) will accrue subsequent to an award under this RFP, (2) would not have accrued but for the award of a contract under this RFP, and (3) are not contingent on the support, funding, investment, or cooperation of New York State or its instrumentalities.

Contingent Economic Benefits. Contingent Economic Benefits claims include those that are contingent on support, funding, investment, or cooperation of New York State or its instrumentalities, related to the development, refurbishment, or expansion of port facilities in New York State that are in addition to New York State's standard economic development support and incentive programs.¹⁰ Any Contingent Economic Benefits claim should align with needs identified by New York State through its Jobs and Supply Chain Technical Working Group.

Three general New York economic benefits categories will be considered by the Scoring Committee:

Category 1: Project-specific spending and job creation in New York State.

Category 2: Investment in offshore wind-related supply chain and infrastructure development in New York State.

Category 3: Input activities that provide opportunities for the New York offshore wind supply chain, workforce, and research and development.

The Scoring Committee will consider the support for each claim provided in an Economic Benefits Plan submitted with the Proposal. Incremental and/or Contingent Economic Benefits must be quantifiable and verifiable. For evaluation purposes, additional weight will be attributed by the Scoring Committee to those expenditures and investments that are firm and credible and that create persistent and sustainable institutional or worker capabilities in New York State, as well as those expenditures and investments expected to lower the cost of future offshore wind projects, both to the State and the region.

¹⁰ <u>https://esd.ny.gov/industries/cleantech-and-renewable-energy</u>

For Categories 1 and 2, to facilitate comparison by the Scoring Committee between Project submissions with larger or smaller Offer Capacities, the total of such adjusted claimed expenditures and investments will be unitized by dividing each Proposal's eligible claims by the Offer Capacity offered in the Proposal.

In Category 3, Proposals will be assessed on the scale of the likely impact of the proposed actions and the firmness of the commitments. Proposals will be scored on the number, range, maturity, firmness, and credibility of the commitments being made and the scale of the potential benefits. In awarding points in Category 3, the Scoring Committee will consider the:

- 1. nature, quantity and importance of the proposed claims;
- 2. effectiveness of the approach to developing the proposed claims;
- 3. supporting documentation to substantiate the nature, firmness and maturity of their commitments, including, for example, letters of support, memoranda of understanding, letters of intent, option agreements, or binding contracts.

4 OFFER PRICING STRUCTURE AND PRICE EVALUATION

Two separate offer prices are required for each Proposal. One offer will be for a Fixed OREC price, and the other will be for an adjustable OREC price based on an offer strike price using an Index OREC price. The two offers will be weighted according to the procedure noted in Section 4.3, and the price component of the Proposal will be scored based on the combined weighted value of both offers.

NYSERDA may select either price structure as the Applicable OREC Price Method. NYSERDA's decision will be based upon NYSERDA's projection of the different relative costs of the Fixed ORECs and Index ORECs over the life of the contract compared to NYSERDA's projection of the different relative price risks of the Fixed ORECs and Index ORECs over the life of the contract.

If NYSERDA selects the Fixed OREC Price, the Fixed OREC Price shall remain the Applicable OREC Price Method for the entire Contract Delivery Term. If NYSERDA selects the Index OREC Price, the Index OREC Price shall remain the Applicable OREC Price Method unless and until such Index OREC Price is invalidated, as further described in Section 4.01 of the Agreement.

4.1 OREC Products Pricing

4.1.1 Fixed OREC Pricing

Under the Fixed OREC pricing, the Monthly OREC Price is equal to the Fixed OREC Strike Price, shown in Equation 1, below.

Monthly OREC Price =
$$OSP^{Fixed}$$
 (Equation 1)

where:

4.1.2 Index OREC Pricing

Under the Index OREC pricing, the Monthly OREC Price varies monthly during the Contract Delivery Term and is calculated according to Equation 2, below.

Monthly OREC Price =
$$OSP^{Index} - REP - RCP$$
 (Equation 2)

where:

OSP^{Index} = Index OREC Strike Price (\$/MWh)

REP = Reference Energy Price (\$/MWh)

RCP = Reference Capacity Price (\$/MWh)

NYSERDA will calculate the Reference Energy Price and Reference Capacity Price for each month according to Section 4.03 of the Agreement. The Monthly OREC Price will be calculated during a settlement period following the conclusion of each month according to Section 4.04 of the Agreement.

The calculation of each month's Reference Capacity Price will be based on a Reference UCAP Price, as defined in Section 4.03 of the Agreement. The Reference UCAP Price is converted to its \$/MWh equivalent, the Reference Capacity Price, through Equation 3, below.

$$RCP = \frac{RUP \times UPF \times IC \times 1,000}{OQ}$$
(Equation 3)

where:

RUP = Reference UCAP Price (\$/kW-month)

UPF = UCAP Production Factor (decimal fraction)

IC = Installed capacity (ICAP) of the generator (MW)

OQ = Metered delivered energy

1,000 = kW to MW conversion factor

The UCAP Production Factor multiplied by the Project's installed capacity is a proxy for the NYISO UCAP in MW. The UCAP Production Factor will be specified separately for a Winter Capability Period (November through April) and a Summer Capability Period (May through October). A default UCAP Production Factor of 38% for both capability periods may be used, consistent with current guidance from the NYISO's Installed Capacity Manual.¹¹ Proposers have the option to replace these default values with Proposal-specific UCAP Production Factors that shall be constant throughout the Contract Delivery Term. Any winter and summer UCAP Production Factor values between 0 and 1 are allowed.

4.2 Settlement Mechanism

To calculate the amount payable to Seller, the Monthly OREC Price will be multiplied by the number of ORECs produced from Actual Eligible Production in the prior month and delivered into NYSERDA's NYGATS account. These payments will be calculated after the close of each calendar month during the Contract Delivery Term. During each month's settlement period, NYSERDA will only purchase ORECs such that the cumulative ORECs purchased in the active Contract Year do not exceed the Annual OREC Cap. The Annual OREC Cap is 1.1 multiplied by the P10 Annual Exceedance Estimate, which may be adjusted prior to Commercial Operation, per Section 2.01(e) of the Agreement.

In the case of a negative Monthly OREC Price, the associated payment from Seller to NYESRDA will not be cash-settled on a month-by-month basis. Instead, the amount owed from Seller to NYSERDA will accrue as a debit to be deducted from each subsequent monthly payment until fully recovered. If, due

¹¹ NYISO Installed Capacity Manual, published March 2018.

http://www.nyiso.com/public/webdocs/markets_operations/documents/Manuals_and_Guides/Manuals/Operations/icap_mnl.pdf

to sustained negative OREC prices, any such debit goes unrecovered for twelve months, Seller shall pay the unrecovered amount to NYSERDA in cash as described in Section 4.05 of the Agreement.

4.3 Offer Price Evaluation Metric

The offer pricing evaluation will be conducted by NYSERDA and NYSERDA Consultants. A quantitative method will be applied to all offers in order to screen and rank the pricing offers using a uniform cost metric. For evaluation purposes, offer strike prices will be converted to a Levelized Net OREC Cost (LNOC) in base year \$/MWh for both the Fixed OREC and Index OREC Strike Price offers. The LNOC price measure allows for an equitable comparison among Proposals with different pricing structure (constant or non-decreasing schedule), OREC quantities schedule, Commercial Operation Date, and Contract Tenor.

The LNOC for Proposal *p* using pricing form *f* is the quotient of the cumulative present value of the annual net OREC costs for each calendar year over the proposed Contract Tenor, divided by the cumulative present value of the projected annual number of ORECs produced from Actual Eligible Production over the same calendar years. The annual quantities are discounted at a real discount rate. The resulting quotient is expressed in base year dollars per OREC or MWh.

where:

$$= \sum_{y=2019}^{y=2050} \left\{ \sum_{m=1}^{m=12} OSP_{p,m,y}^{Fixed} \times OQ_{p,m,y} \right\} \div (1 + NDR)^{(y-Y_b)}$$

*PVNOC*_{p,Index} = PV of Net OREC Cost for Proposal *p*, pricing form Index (\$ PV)

$$= \sum_{y=2019}^{y=2050} \left\{ \sum_{m=1}^{m=12} \left(OSP_{p,m,y}^{Index} - RPE_{m,y}^{Pred} - RPC_{m,y}^{Pred} \right) \times OQ_{p,m,y} \right\} \div (1 + NDR)^{(y-Y_b)}$$

 $PVOQ_p$ = PV of OREC delivery quantities for Proposal p (MWh)

$$= \sum_{y=2019}^{y=2050} \left\{ \sum_{m=1}^{m=12} OQ_{p,m,y} \right\} \div (1 + RDR)^{(y-Y_b)}$$

 $OQ_{p,m,y}$ = OREC delivery quantity for Proposal p applicable to month m of calendar year y (OREC or MWh)

 $RPE_{m,y}^{Pred}$ = Predicted Reference Energy Price index for month *m* in calendar year *y* (nominal \$/MWh)

 $RPC_{m,y}^{Pred}$ = Forecasted Reference Capacity Price index for month *m* in calendar year *y* (nominal \$/MWh)

NDR = Nominal Discount Rate (decimal)

INF = Inflation Rate (decimal)

RDR = (1 + NDR) / (1 + INF) - 1 = Real Discount Rate

 Y_b = Base year for cost and PV

A nominal discount rate of 6.55% per year and a long-term inflation rate assumption of 2.0% per year will be used in the LNOC calculation procedure.

For the Index OREC form of pricing, strike prices will be converted into expected annual OREC values by subtracting a forecast of expected Reference Energy Prices and Reference Capacity Prices from the strike prices, based on the energy and capacity prices forecasted with a regional multi-zonal hourly production cost simulation model. Multiple long-run scenarios will be developed, and a probability-weighted average of the individual scenario forecast values will be used as a proxy for expected future energy and capacity prices. Neither the price forecasts nor details of the modeling procedures will be disclosed to Proposers.

4.4 Offer Price Scoring

The dual Fixed OREC and Index OREC offer strike prices will be evaluated with a hybrid LNOC index value calculated by using constant weighting factors to combine the separate LNOC values for the Fixed OREC and Index OREC forms of pricing. The weighting factors will be 0.1 for the Fixed OREC LNOC and 0.9 for the Index OREC LNOC.

For purposes of cost containment, Benchmark LNOC prices will be derived for both the Index OREC and the Fixed OREC. NYSERDA will employ Benchmark LNOCs in the offer evaluation process that support the consideration of and potential disqualification for award of all Proposals that exceed either Benchmark LNOC price. For purposes of this procurement, the Benchmark LNOC price is synonymous with the "Maximum Acceptable Offer Price Metric" used in NYSERDA's Tier 1 RES procurements. The calculation method will materially differ, however. NYSERDA retains the right to reject any and all project Proposals that exceed the benchmark price(s). Use of the Benchmark LNOC Prices will support a reasonable balance between encouraging investment in new offshore wind projects and protecting ratepayer interests from the incurrence of any deadweight costs associated with accepting a Proposal at any price.

In deriving the Benchmark LNOC prices, NYSERDA will, in particular, account for the price results in recent procurements held in New England. A number of additional considerations will be factored into the derivation of the Benchmark LNOC prices. Either positive or negative, such additional considerations may include: different hedge efficiency attributes related to the PPA structure used in New England versus the Index or Fixed OREC structure; geotechnical and physical considerations; local spend considerations in New York State, including labor; transmission interconnection and deliverability

criteria; the market value of energy and/or capacity; environmental mitigation costs; Project size; and Project timing. In formulating benchmark prices, NYSERDA may add or subtract from the list of additional cost considerations.

Proposals with a LNOC higher than the applicable Benchmark LNOC will not be eligible for an award. NYSERDA has at all times the authority to reject all Proposals, taking into account not only the Benchmark LNOC but also recent auctions and market conditions.

Eligible Proposals with LNOC values below the Benchmark LNOCs will have their LNOC values converted into points. The Proposal with the lowest hybrid LNOC will receive the maximum 70-point score and higher LNOC offers will receive lower scores. NYSERDA will implement a method that ensures that the scores of higher LNOC Proposals are sufficiently dispersed below the maximum of 70 points such that the final score that aggregates price, viability, and economic benefits retains the intended scoring emphasis on price to the maximum reasonable extent.

5 PRELIMINARY RANKING, PORTFOLIO EVALUATION, AND FINAL AWARD GROUP

5.1 Preliminary Rank Order

The calculated scores for the project viability, New York economic benefits, and offer strike price components of the Proposal scoring system will be summed. The Proposals will then be ranked by their total scores as a preliminary step in selection.

5.2 Portfolio Evaluation; Consideration of Commission Objectives

In its Offshore Wind Order the Commission identified many potential benefits for this initiative beyond its contribution to the achievement of the CES mandate and the reduction of greenhouse gas emissions. The Offshore Wind Order also recognized that award decisions may be influenced by portfolio considerations including but not limited to diversity, economy of scale and market competition.

The final evaluation steps are to consider and balance a set of program policy factors, which include the composition of the portfolio and timing criteria, as well as the various non-scored aspects of each Proposal in relation to the objectives identified by the Commission when it established the Offshore Wind Standard. The final evaluation will consider the efficient utilization of key transmission points of interconnection.

In making awards the Scoring Committee and NYSERDA may consider the following list of program policy factors:

- Reliability and geographic benefits and/or costs in the NYCA, and the reduction of execution risk through diversity;
- Public health benefits of reducing local air contaminants by displacing fossil generation in downstate New York;
- Secondary economic benefits in addition to those represented in the quantification of Incremental Economic Benefits, including those provided by indirect jobs and new and increased tax payments;
- Potential for visual, environmental and economic impacts and benefits, including the potential for a new source of coastal tourism;
- Competitive benefits of two or more smaller Projects versus the potential scale economy anticipated with a single large Project;
- Economic and environmental tradeoffs related to accelerated fulfilment of the 2,400 MW offshore wind procurement goal earlier versus the potential OREC cost reduction in future procurements due to technology progress, offshore wind transmission infrastructure development, and supply chain efficiencies serving New York.

5.3 Award Group

The initial award group will be comprised of the Proposal(s) that demonstrate the most valuable contribution in securing the various benefits for which the Offshore Wind Standard was created. In

addition to the numerical-score components that support the preliminary rank, NYSERDA, NYDPS, and the Scoring Committee must assess and balance the elements of each Proposal and the stated Commission objectives. As granted by the Offshore Wind Order, the portfolio, timing, and balancing of benefits considerations and the conformance of the Project(s) with the Commission's objectives will be components of the Scoring Committee's collective judgment to determine the initial award group.

To be eligible for an initial award the Proposer must have demonstrated the existence of a fullyexecuted lease for the BOEM commercial wind energy lease area within which the Offshore Wind Generation Facility is to be sited. NYSERDA will notify the initial awardees by both voice and written communication. The date upon which NYSERDA provides such written notification shall be the initial Award Notification Date.

Selection for an initial award does not give the Proposer any legal right or entitlement. Once selected for initial award, Proposers must negotiate a final version of the Agreement with NYSERDA. See Sections 6.6 and 7. NYSERDA also reserves the right to solicit revised Offer Prices and/or to make counteroffers as it deems appropriate. In such case NYSERDA will provide notice by voice communication and email to Proposer's Authorized Agent(s), as identified on the Proposal. Proposer's Designated Agent(s) must be authorized to respond and to commit to counteroffers on behalf of Proposer.

NYSERDA may also establish a waitlist of Proposals beyond those Projects offered an initial award. Proposals represent offers to contract and must remain open for a period of at least 180 days from the Deadline for Submission of Proposals indicated in Section 1.3.

NYSERDA RESERVES THE RIGHT TO REJECT OR ACCEPT ANY OR ALL PROPOSALS.

6 INSTRUCTIONS TO PROPOSERS

6.1 Preparation of Proposals

Each Proposer shall have sole responsibility for reviewing this RFP and all attachments hereto and for investigating and informing itself with respect to all matters pertinent to this RFP, including the <u>NYGATS</u> <u>Operating Rules</u> and NYISO's Open Access Transmission Tariff (OATT) and market rules, and those of the control area into which the Project may interconnect.

Proposers should rely only on information provided in this RFP and any associated written updates posted on the on the <u>NYSERDA Offshore Wind 2018 Solicitation website</u> when preparing their Proposals. Each Proposer shall be solely responsible for and shall bear all of its costs incurred in the preparation of its Proposal and/or its participation in this RFP. Submission of Proposals including confidential information shall be filed in accordance with Section 6.2.2 of this RFP.

6.2 Organization and Submission of the Proposal

6.2.1 Organization of the Proposal

Proposers are required to organize their Proposals consistent with the instructions provided herein. Each Proposal must include three separate files:

- Offer Data Form, a provided Excel workbook template, contains pricing, technical, and operational information for the proposed Offshore Wind Generation Facility, and claimed Incremental and Contingent Economic Benefits of the Project. The Offer Data Form allows any of the four combinations of pricing and tenor for a technical configuration.
- 2. **Proposal Narrative**, a description of the proposed Project including the Offshore Wind Generation Facility, information required to demonstrate the eligibility, viability, claimed Incremental and Contingent Economic Benefits of the Project, and other relevant information and supporting documentation required to evaluate the Proposal. The organization and contents of the Proposal narrative *must* be organized in the order presented in Section 6.4 and may include appendices.
- 3. **Proposal Certification Form,** a form (Appendix B) that must be signed by Proposer's authorized representative to certify the validity of the offer and attest to other representations.

Proposers may also submit an unlimited number of supporting attachments (each file size capped at 100MB) to provide information or studies related to the Proposal.

In addition, a single set of files must be provided that cover all Proposals:

4. **Master Offers Form,** a provided Excel workbook template, contains common Project descriptive information and a list of one or more Offer Data Form files.

If a Proposer submits a separate Required Transmission Proposal or Alternate Proposals, a separate set of Offer Data Forms, Proposal Narratives, and Proposer Certifications must be submitted for each

Proposal. A Proposer may submit the same marked up Agreement for all Proposals, or a Proposer may submit separate marked up Agreements for each Proposal if there are reasons for material differences.

6.2.2 Submission Instructions

NYSERDA uses a secure Salesforce site to accept Proposal submissions.

To use this site, Proposers must first <u>register</u> to the Salesforce Portal at: <u>https://portal.nyserda.ny.gov/Core_Registration_Page?programName=Offshore_Wind</u>.

For detailed instructions toward submission and interfaces with this site refer to Appendix I, Proposal Submission Guide. Proposers must submit two versions for each Proposal: a complete, unredacted version of the Proposal and a public version of the Proposal Narrative, as described below. Both versions of the Proposal must be uploaded to NYSERDA's secure Salesforce site at: https://portal.nyserda.ny.gov/login.

Technical support for NYSERDA's Salesforce application may be reached by emailing <u>offfshorewind@nyserda.ny.gov</u>.

6.2.2.1 Confidential Version of Proposals

A Proposer must submit an unredacted complete version of the Proposal(s). The confidential version of the Proposal must include the Offer Data Form as a working Excel file, with all required information included. The confidential version of the Proposal will be treated as confidential and sensitive information by the Scoring Committee, subject to the treatment of confidential information discussed in Section 8.1 of this RFP.

6.2.2.2 Public Version of Proposal Narrative

Each Proposal Narrative must be also submitted to NYSERDA in a publicly available version. The public version must include descriptive information on all categories described in Section 6.4, but Proposers may redact information where there is a reasonable basis to assert that Proposer would be commercially harmed as a result of the disclosure of such information. See Section 8.1.

This public version of the Proposal Narrative will be posted on <u>the NYSERDA Offshore Wind 2018</u> <u>Solicitation website</u> shortly after the Proposal submittal deadline. The file name of the submitted file should include the words "Public Version." NYSERDA will not further redact the public versions of Proposal Narrative. Anything submitted in the public version will be made available to the public.

6.3 Offer Data Forms

The Master Offers Form and Offer Data Form (ODF) documents are Microsoft Excel workbooks that can be downloaded from the <u>NYSERDA Offshore Wind 2018 Solicitation website</u>. Each Proposer must submit a single Master Offers Form. A separate ODF document is required for the Required Base Proposal, the Required Transmission Proposal, and each Alternate Proposal with respect to aspects other than pricing. All pricing alternatives for Proposals with the same non-price aspects are included within a single ODF document. General user guide information for both forms is included in the Master Offers Form. The purpose of the Master Offers Form is to summarize the Proposals and to calculate the total Proposal fee. The Master Offers Form includes common Project information, the list of ODF filenames and their respective aspects (capacity, interconnection control area, and the number of pricing/tenor offers) that create additional Proposal fees. The Master Offers Form also identifies, by ODF ID number, other ODFs with Proposals that would be precluded or required upon selection of a given Proposal.

The ODF document has five parts, listed below. If Proposer provides information in other sections of its Proposal(s) that conflicts with the information provided in the ODF, the ODF shall be considered to contain the governing and binding information for both the evaluation and any resulting contract offer.

Part I Identification Worksheet

Proposer name, Offshore Wind Generation Facility unique Proposal name, BOEM renewable energy lease number, installed Offer Capacity, proposed interconnection (Injection Point) control area, names of other ODFs containing Proposals that would be precluded or required upon selection of a given Proposal.

Part II Project Definition Worksheet

Indicate whether full Offer Capacity will enter Commercial Operation in more than one tranche, the expected Commercial Operation Date of the first tranche, a monthly schedule of installed capacity for the first three years of Commercial Operation, the P10 Annual OREC Exceedance value, the summer and winter UCAP production factors, and Injection Point and Delivery Point descriptive information.

Part III Expected Performance Worksheet

Table III-1. P50 Generation (before outages and land-based transmission and curtailment losses) as fractions of installed capacity by month and hour of day.

Table III-2. Operable NYCA delivery capability as fractions of installed capacity by month and hour of day.

Part IV Pricing Worksheet

Offer nominal prices by Contract Year for each tenor and price shaping schedule selected. Four schedules are allowed, 25 and 20-year tenors combined with constant and non-decreasing prices. For each type of pricing schedule, both Fixed OREC Prices and Index OREC Strike Prices must be provided. The ODF with the Required Base Proposal must include offers for the nominal level 25-year Contract Tenor pricing schedule.

Part V Economic Benefits Worksheets (See 6.4.16 and Appendix C)

Table V-1. Incremental Economic Benefits Category 1, Project-specific spending and job creation data are entered by ID number, Project phase, expenditure type, classified as

related to the development, construction, or operation phase, and the net expenditure (stated in constant dollars) and the numbers of short-term and long-term jobs (stated in FTE-years) created in New York State. Expenditure and jobs data are included through the end of the third year of Commercial Operation. Also, the ID numbers of any related Economic Benefits Category 2 items are referenced for individual Category 1 expenditures.

Table V-2. Incremental Economic Benefits Category 2, offshore wind industry-related supply chain and infrastructure investment data are entered by ID number, Project phase, and investment type. Net investment costs (stated in constant dollars) are included through the end of the third year of Commercial Operation. Also, the ID numbers of any related Economic Benefits Category 3 activities are referenced for individual Category 2 expenditures.

Table V-3. Incremental Economic Benefits Category 3, input activities data are entered by ID number, commitment type, Proposer's planned measurement metric, quantity of the input activity, and references to corresponding sections or pages in the Economic Benefits Plan.

Tables V-1C, V-2C, and V-3C are for Contingent Economic Benefits in Categories 1, 2, and 3, respectively. For such contingent activities, both the private and public dollars are to be stated in Tables V-1C and V-2C, and both the private and public roles in cooperative input activities are to be stated in Table V-3C. These tables will support the broader narrative and detail that are included in the Contingent Economic Benefits analysis, as described in Appendix C.

6.4 Proposal Narrative

6.4.1 Executive Summary of the Proposal

Proposers are required to provide an executive summary of the Proposal that documents the eligibility of the proposed Offshore Wind Generation Facility, the proposed Contract Tenor, the overall Project schedule including expected Commercial Operation Date, any contingencies specific to the Proposal or to other Proposals, and other factors Proposers deem to be important.

6.4.2 Proposer Experience

Proposers are required to demonstrate project experience and management capability to successfully develop and operate the Project proposed. NYSERDA is interested in project teams that have demonstrated success in developing generating facilities of similar size and complexity and can demonstrate an ability to work together effectively to bring the Project to commercial operation in a timely fashion. Proposers are required to provide the following information with their Proposal:

1. An organizational chart for the Project that lists the Project participants and identifies the corporate structure, including general and limited partners.

- 2. Statements that list the specific experience of Proposers and each of the Project participants (including, when applicable, Proposers, partners, and proposed contractors), in developing, financing, owning, and operating generating and transmission facilities, other projects of similar type, size and technology, and any evidence that the Project participants have worked jointly on other projects.
- 3. A management chart that lists the key personnel dedicated to this Project and resumes of the key personnel. Key personnel of Proposer's development team having substantial Project management responsibilities must have:
 - a. Successfully developed and/or operated one or more projects of similar size or complexity or requiring similar skill sets; and
 - b. Experience in financing power generation projects (or have the financial means to finance the Project on Proposer's balance sheet).
- 4. A listing of projects the Project sponsor has successfully developed or that are currently under construction. Provide the following information for each project as part of the response:
 - a. Name of the project
 - b. Location of the project
 - c. Project type, size and technology
 - d. Commercial Operation Date
 - e. Estimated and actual capacity factor of the project for the past three years
 - f. Availability factor of the project for the past three years
 - g. References, including the names and current addresses and telephone numbers of individuals to contact for each reference.
- 5. With regard to Proposer's Project team, identify and describe the entity responsible for the following, as applicable:
 - a. Construction Period Lender, if any
 - b. Operating Period Lender and/or Tax Equity Provider, as applicable
 - c. Financial Advisor
 - d. Environmental Consultant
 - e. Facility Operator and Manager
 - f. Owner's Engineer
 - g. EPC Contractor (if selected)
 - h. Transmission Consultant
 - i. Legal Counsel
- 6. Details of Proposer's experience in NYISO markets. With regard to Proposer's experience with NYISO markets, please indicate the entity that will assume the duties of Market Participant for your proposed Offshore Wind Generating Facility. Please provide a summary of Proposer's or Market Participant's experience with the wholesale market administered by NYISO as well as transmission services performed by Con Edison, NYPA, and PSEG-LI/LIPA.

6.4.3 Project Description and Site Control

Identify the BOEM wind energy area where the proposed Offshore Wind Generation Facility will be located. Provide documentation that Proposer has a valid lease or irrevocable lease option to develop the leased area within this wind energy area over the entire Contract Tenor.

Provide a site plan (or plans) including a map (or maps) that clearly identifies the location of the proposed Offshore Wind Generation Facility, collection facilities, offshore and onshore route of the generator lead line to the interconnection point, converter station(s), and the assumed right-of-way width. Identify the anticipated interconnection point, support facilities, and the relationship of the interconnection point to other local infrastructure, including transmission facilities, roadways, and waterways.

Identify any rights that Proposer or its development partner has at the interconnection point and for the generator lead line right of way. Provide a detailed plan and timeline for the acquisition of any additional rights necessary for interconnection and for the generator lead line right-of-way. Include these plans and the timeline in the overall Project schedule in Section 6.4.10.

In addition to providing the required map(s), provide a site layout plan that illustrates the location of all on-shore and offshore equipment and facilities and clearly delineates the perimeter of the area in which offshore wind turbines will be placed. Identify the distance in statute miles between the nearest shoreline point and the nearest Offshore Wind Generation Facility turbines.

6.4.4 Energy Resource Assessment and Plan

Provide a summary of all collected wind data for the proposed Offshore Wind Generation Facility site. Identify when and how (*e.g.*, meteorological mast or LiDAR – for "Light Detection and Ranging") the data was collected and by whom.

Indicate where the data was collected and its proximity to the proposed Offshore Wind Generation Facility site. Include an identification of the location and height for the anemometers and/or "range gate" heights for sensing by LiDAR that were used to arrive at an assessment of the site generation capability. Describe any additional wind data collection efforts that are planned or ongoing. Provide at least one year of hourly wind resource data. Data collected from the site is preferred, though projected data is permissible. The method of data collection must also be included.

Provide a wind resource assessment report for the Proposed Offshore Wind Generation Facility site. Include an analysis of the available wind data which addresses the relationship between wind conditions and electrical output. Provide a site-adjusted power curve. Each curve should list the elevation, temperature and air density used.

6.4.5 Operational Parameters

Provide partial and complete planned outage requirements in weeks or days for the Offshore Wind Generation Facility. Also, list the number of months required for the cycle to repeat (*e.g.*, list time interval of minor and major overhauls, and the duration of overhauls).

Provide all the expected operating constraints and operational restrictions for the Project, the reason for the limitation, and characterize any applicable range of uncertainty.

6.4.6 Business Entity and Financing Plan

Proposers are required to demonstrate the financial viability of their proposed Project. Proposers should provide the following information:

- 1. Submit information and documentation that demonstrates that a long-term contract resulting from this RFP process would either permit Proposers to finance Proposals that would otherwise not be financeable or assist Proposers in obtaining financing of its Proposal.
- 2. Describe the business entity structure of 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, and document Proposers' right to submit a binding Proposal.
- 3. Provide a description of the financing plan for the Project, including construction and term financing. The financing plan should address the following:
 - a. Who will finance the Project (or are being considered to finance the Project) and the related financing mechanism or mechanisms that will be used (*i.e.*, convertible debenture, equity or other) including repayment schedules and conversion features
 - b. The Project's existing initial financial structure and projected financial structure
 - c. Expected sources of debt and equity financing
 - d. Describe how any such agreements would differ, contingency on NYERDA's selecting either the Fixed OREC or Index OREC form of pricing
 - e. Estimated construction costs
 - f. The projected capital structure
 - g. Describe any agreements, both pre and post Commercial Operation Date, entered into with respect to equity ownership in the proposed Project and any other financing arrangement.
- 4. Provide documentation illustrating the experience of Proposer in securing financing for projects of similar size and technology. For each project previously financed provide the following information:
 - a. Project name and location
 - b. Project type and size
 - c. Date of construction and permanent financing
 - d. Form of debt and equity financing
 - e. Current status of the project
- 5. Provide evidence that Proposer has the financial resources and financial strength to complete and operate the Project as planned.

- 6. Describe the role of the Federal Production Tax Credit or Investment Tax Credit (or other incentives) on the financing of the Project, including presumed qualification year and percentage. The Proposal may not be contingent on receipt of the Production Tax Credit or Investment Tax Credit.
- 7. Provide complete copies of the most recent audited financial statement and annual report for each Proposer for each of the past three years; including affiliates of Proposer (if audited statements are not available, reviewed or compiled statements are to be provided). Also, provide the credit ratings 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.
- 8. List the board of directors, officers and trustees for the past three years and any persons who Proposer knows will become officers, board members or trustees.
- 9. Demonstrate Proposer's ability (and/or the ability of its credit support provider) to provide the required security, including its plan for doing so.
- 10. Provide 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.
- 11. Disclose any pending (currently or in the past three years) litigation or disputes related to projects planned, developed, owned or managed by Proposer or any of its affiliates in the United States, or related to any energy product sale agreement.
- 12. Provide the expected operating life of the proposed Project and the depreciation period for all substantial physical aspects of the offer, including generation facilities, generator lead lines to move power to the grid, and transmission system upgrades.
- 13. List all of Proposers' affiliated entities and joint ventures transacting business in the energy sector.
- 14. Describe any litigation, disputes, claims or complaints, or events of default or other failure to satisfy contract obligations, or failure to deliver products, involving Proposer or an affiliate, and relating to the purchase or sale of energy, capacity or RECs or other electricity products.
- 15. Confirm that 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).

6.4.7 Interconnection and Deliverability

Proposers are required to demonstrate the Offshore Wind Generation Facility's interconnection status and deliverability capabilities. Proposers should provide the following information:

- 1. Provide documentation to show evidence of the interconnection request to NYISO or any neighboring control areas for Capacity Resource Interconnection Service (CRIS) or for Energy Resource Interconnection Service, or similar interconnection standards in neighboring control areas. For Proposals where capacity is to be delivered to NYCA, Proposers should describe any required transmission system upgrades and provide an estimate of the required transmission system upgrade costs under NYISO CRIS to meet deliverability requirements in NYISO. Evidence that Proposer has a pending, valid interconnection request is sufficient. Describe the status of any planned interconnection to the grid. Any interconnection studies undertaken by the applicable control area or third parties on behalf of Proposer must be provided.
- 2. Provide a copy of an electrical one-line diagram showing the interconnection facilities and the relevant facilities of the transmission provider.
- 3. Identify and provide an estimate of cost, supported by an independent third party, for all proposed or anticipated interconnection and transmission upgrades, including any transmission upgrades beyond the point of interconnection that are needed to ensure delivery of energy from the Offshore Wind Generation Facility into NYCA. Describe measures to identify and control the regulatory and operational risks related to the delivery of energy from the Offshore Wind Generation Facility.
- 4. Demonstrate that energy and associated ORECs generated by the facility can be delivered into the NYCA. For an Offshore Wind Generation Facility interconnecting in an adjacent Control Area, describe how Proposer intends to fulfill the External Project Delivery Requirement.
- 5. Provide detail regarding the available capacity, at the time of submission, of the proposed Injection Point.

6.4.8 Environmental Assessment and Permit Acquisition Plan

Proposers are required to demonstrate a plan for environmental assessment and permit acquisition for the Offshore Wind Generation Facility. Proposers should provide the following information:

- Provide a comprehensive list of all the permits, licenses, and environmental assessments and/or environmental impact statements required to construct and operate the Project. Along with this list, identify the governmental agencies that are responsible for issuing approval of all the permits, licenses, and environmental assessments and/or environmental impact statements. If a Proposer has secured any permit or has applied for a permit, please indicate this in the response.
- 2. Provide the anticipated timeline for seeking and receiving the required permits, licenses, and environmental assessments and/or environmental impact statements. Include a Project approval assessment which describes, in narrative form, each segment of the process, the required permit or approval, the status of the request or application and the basis for projection of success by the milestone date. All requirements should be included on the Project schedule in as described in Section 6.4.10.

3. Provide the SAP and COP, if completed. If the SAP and/or COP are not completed, provide the status of development of these plans and a proposed plan and timeline for completion.

6.4.9 Engineering and Technology

Provide information about the specific technology or equipment including the track record of the technology and equipment and other information as necessary to demonstrate that the technology is viable.

- 1. Provide a preliminary engineering plan which includes at least the following enumerated information. If specific information is not known, identify manufacturers, vendors, and equipment that will be considered.
 - a. Type of foundation, Offer Capacity, and generator lead line transmission technology
 - b. Major equipment components to be used, including nacelle, hub, blade, tower, foundation, transmission structures and platforms, electrical equipment and cable)
 - c. Manufacturer of each of the equipment components as well as the location of where each component will be manufactured
 - d. Status of acquisition of the equipment components
 - e. Status of any contracts for the equipment Proposer has or Proposer's plan for securing equipment and the status of any pertinent commercial arrangements
 - f. Equipment vendors selected/considered
 - g. Track record of equipment operations
 - h. Design considerations (technology selection, layout) for climate adaptation and resiliency such as sea level rise, potential impacts from increased frequency and severity of storms (i.e. superstorms, hurricanes), seismic activity, etc.
 - i. In the event the equipment manufacturer has not yet been selected, identify in the equipment procurement strategy the factors under consideration for selecting the preferred equipment as well as the anticipated timing associated with the selection of the equipment manufacturer, including the timing for binding commercial agreement(s).
- 2. Describe the lighting controls that will be utilized on the Offshore Wind Generation Facility and explain how these controls comply with the minimum contract standards and the Offshore Wind Order.

6.4.10 Project Schedule

A Proposer must demonstrate that its Project can be developed, financed, and constructed within a commercially reasonable timeframe. Proposer is required to provide sufficient information and documentation showing that Proposer's resources, process, and schedule are adequate for the acquisition of all rights, permits, and approvals for the financing of the Project consistent with the proposed milestone dates that support the proposed Commercial Operation Date.

Proposers are required to provide a complete critical path schedule for the Project from the notice of award to the start of commercial operations. For each Project element listed below, provide the start and end dates:

- Identify the elements on the critical path. The schedule should include, at a minimum, preliminary engineering, financing, acquisition of real property rights, Federal, state and/or local permits, licenses, environmental assessments and/or environmental impact statements (including anticipated permit submittal and approval dates), completion of interconnection studies and approvals culminating in the execution of the Interconnection Service Agreement, financial close, engineer/procure/construct contracts, start of construction, construction schedule, and any other requirements that could influence the Project schedule.
- 2. Describe the anticipated permissible offshore construction windows, and how the construction milestones will be accommodated within these windows.
- 3. Detail the status of all critical path items, such as receipt of all necessary siting, environmental, and NYISO approvals.

6.4.11 Construction and Logistics

This section of the Proposal addresses necessary arrangements and processes for outfitting, assembly, storage, and deployment of major Project components such as turbine nacelles, blades, towers, foundations, and transmission support structures. Please provide a construction and logistics plan that captures the following objectives:

- 1. List the major tasks or steps associated with deployment of the proposed Project and the necessary specialized equipment (*e.g.*, vessels, cranes).
- 2. Identify the marine terminals and other waterfront facilities that will be used to stage, assemble, and deploy the Project for each stage of construction.
 - a. If available, evidence that Proposer or the equipment/service provider have right(s) to use a marine terminal and/or waterfront facility for construction of the Project (*e.g.*, by virtue of ownership or land development rights obtained from the owner).
 - b. If not available, describe the status of acquisition of real property rights for necessary marine terminal and/or waterfront facilities, any options in place for the exercise of these rights and describe the plan for securing the necessary real property rights, including the proposed timeline. Include these plans and the timeline in the overall Project schedule in Section 6.4.10.
 - c. Identify any joint use of existing or proposed real property rights for marine terminal or waterfront facilities.
- 3. Describe the proposed approach for staging and deployment of major Project components to the Project site. Include a description and discussion of the laydown facility/facilities to be used for construction, assembly, staging, storage, and deployment.
- 4. Indicate the number, type and size of vessels that will be used, their respective uses, and how vessels will be secured for the required construction period. Explain how Proposer's deployment strategy will conform to requirements of the Merchant Marine Act of 1920 (the Jones Act).

5. List the party or parties responsible for each deployment activity and describe the role of each party. Describe the status of Proposer's contractual agreements with third-party equipment/service providers.

6.4.12 Fisheries Mitigation Plan

Proposers must include in their Proposal a Fisheries Mitigation Plan in as much detail as possible that describes how Proposer will mitigate adverse impacts on the commercial fishing industry that may be caused by the Project. Elements of the Fisheries Mitigation Plan are described in detail in Appendix D. Proposers are advised to review the Fish and Fisheries Study prepared for the New York State Offshore Wind Master Plan with respect to the potential impacts of offshore wind energy development on the fishing industry, and also are advised to include in their mitigation plan the appropriate Best Management Practices described in the Master Plan and supporting studies.

6.4.13 Environmental Mitigation Plan

Proposers must include in their Proposals a detailed Environmental Mitigation Plan that describes how Proposer will mitigate adverse environmental impacts that may be caused by the Project. Elements of the Environmental Mitigation Plan are described in detail in Appendix E. Proposers are advised to review the environmental studies prepared for the New York State Offshore Wind Master Plan with respect to the potential impacts of offshore wind energy development on the environment, and also are advised to include in their mitigation plan the appropriate Best Management Practices described in the Master Plan and supporting studies.

6.4.14 Community Outreach Plan

Provide a community outreach plan that identifies proposed stakeholder engagement activities during construction and operation of the Project. Provide copies of any agreements with communities and other constituencies impacted by the Project, not already covered in the Fisheries Mitigation Plan or the Environmental Mitigation Plan. Discuss the status of implementing the community outreach plan.

Provide documentation identifying the level of public support for the Project including letters from public officials, newspaper articles, *etc*. Include information on specific localized support and/or opposition to the Project of which Proposer is aware.

6.4.15 Visibility and Viewshed Impacts

Proposers must address a Project's visibility from shore. If a Project is proposed to include turbines less than 20 statute miles from the nearest shoreline point of any state, Proposers must explain (i) how the Project will minimize adverse impacts related to visibility of turbines, including potential impacts on the local and state economy and historic and visual resources, such as publicly-accessible viewsheds, and (ii) how consideration of economic and environmental concerns contributed to the proposed distance from shore.

Additionally, all Proposals, regardless of distance from the nearest shoreline, must include a visibility study that presents visual simulations of the proposed Offshore Wind Generation Facility. Visibility studies must include a map or maps along with supporting GIS shape files that depict the nearest coastline, the boundary of the proposed site to be developed and any other reasonable reference points

(e.g. coastal cities, historic sites, other wind energy areas). Simulations must be single frame, photographic images with superimposed simulations of the proposed wind turbine technology configured to represent a commercially-scaled and technically feasible scenario that is consistent with the proposed Project including operating capacity, wind turbine size, and generic spacing and configuration. Viewing instructions must be included on each simulation.

Visual simulations must represent, at a minimum, clear, partly cloudy, and overcast conditions during early morning, mid-afternoon, and late day, as well as one simulation at night with the turbines lit under clear conditions. Visual simulations must be provided from a minimum of two representative vantage points which represent the closest points to shore from any turbine within the Offshore Wind Generation Facility and, if applicable, any sensitive or historic viewpoints within 20 statute miles of the nearest turbine. The visibility study must also include analysis of the percentage of time during which different visibility conditions are expected to occur based on past meteorological data.

The simulations must be provided in a format suitable to be printed or electronically viewed by the public and/or the Scoring Committee.

6.4.16 New York Economic Benefits (See Appendix C)

Proposers must submit their claimed Incremental Economic Benefits and Contingent Economic Benefits by category using the Offer Data Form and support these claims by submitting an Economic Benefits Plan. All claimed expenditures and investments should be in real dollars (U.S.) at the time of Proposal submission.

The Economic Benefits Plan must include descriptions and supporting documentation for their Incremental Economic Benefits and Contingent Economic Benefits claims, as described below.

The prorated portion of investments in oversized transmission and interconnection facilities not needed to support the Offshore Wind Generation Facility shall not be included as an Economic Benefit.

6.4.16.1 Economic Benefits Plan

The purpose of the Economic Benefits Plan is (i) to allow Proposer to document its approach to fulfilling the claims that are provided in the Offer Data Form, (ii) to allow Proposer to explain and justify its Incremental and Contingent Economic Benefits claims, (iii) to help NYSERDA assess the credibility of the Incremental and Contingent Economic Benefits claimed in the Offer Data Form.

Contingent Economic Benefits must also be supported by a Contingent Economic Benefit analysis to be submitted as part of the Economic Benefits Plan. The Contingent Economic Benefit analysis must include technical, financial, operational, and economic detail sufficient for NYSERDA to evaluate such claims for their technical, financial, and operational viability, as well as their short- and long-term economic benefits to New York.

In the Economic Benefits Plan, Proposer must also describe the manner in which Proposer will comply with the New York State Supplier Opportunity requirement described in Section 2.2.9. The Economic Benefits Plan should:

- 1. Provide a description of how Proposer will evidence in post-contracting biannual reports such compliance for any package of work, on Proposer's behalf or on behalf of its Major Suppliers, with respect to information such as:
 - a. The expected scope of work;
 - b. The estimated value of the scope of work;
 - c. The names of New York companies invited to tender; and
 - d. Evidence that New York State companies have been made aware of the opportunity.
- 2. Identify any exceptions to providing opportunities to New York vendors for those opportunities deemed by Proposer as impractical to be serviced by the New York State supply chain at this time, along with the reason and justification for designating the contracting opportunity as an exception. There are three exceptions to providing opportunities to New York vendors:
 - a. No New York company can reasonably be expected to I have the capability to deliver a scope of work in the timescale needed for the Project;
 - b. Proposer or its Major Suppliers have existing or committed contractual arrangements at the time of the offer with suppliers outside of New York; or
 - c. The selection of a New York supplier would be impractical (for example, if the customer for the scope of work is outside of New York) or if it would add significant commercial or technical risk to the Project.

6.4.16.2 Economic Benefits Category 1: Project-Specific Spending and Job Creation

Economic Benefits Category 1 is comprised of offshore wind Project-specific spending and job creation in New York State. It includes those net expenditures by developers and their supply chains in New York State, including in-state purchases, employment, and payments/benefits to New York State government or other entities. The Proposal will also describe the degree to which the development and construction of the Offshore Wind Generation Facility will directly create short and long-term jobs in New York State. Induced benefits related to the expenditure of workers' and proprietors' salaries will not be considered.

A description of Category 1 expenditure types is provided in Appendix C.

Under Category 1 and Category 2, New York State content is the percentage of New York State expenditure in the base costs, where the base cost is the value of aggregated internal costs and external subcontracts. The calculation of New York State content excludes the ultimate destination of profits. If it is unclear whether an expenditure belongs in Category 1 or Category 2, Proposer may elect an allocation of the investment or expenditure between Categories 1 and 2 provided that there is no double counting of the same dollar expenditure, expenditures are appropriately cross referenced in the Offer Data Form, and such allocation is described in the Economic Benefits Plan. For dollars allocated to Category 2, Proposer must explain the basis for the claim of persistency.

6.4.16.3 Economic Benefits Category 2: Offshore Wind Industry-related Supply Chain and Infrastructure Investment

Category 2 includes long-term capital investments in offshore wind-enabling supply chain, infrastructure, workforce development and research and development (R&D) initiatives in the state that will have an enduring impact on the offshore wind industry and the New York State economy. Such investments are expected to include economic benefits from subsequent Project development that would leverage improved infrastructure and deliver additional long-term economic benefits to New York State, lower the cost of future offshore wind energy, and/ or reduce future offshore wind project risk.

For Category 2, the Economic Benefit Plan must include a written description of the investments and benefits that are expected to arise from supply chain and infrastructural investments, including a description of the persistent nature of the investment. For each listed investment, Proposer must describe its approach, cost, the circumstances under which the investment will take place, and any risks or uncertainties associated with the likelihood that the investment will occur. Commitments of greater maturity and/or firmness will be considered to carry greater weight.

Proposer should quantify and provide a written description of the expenditures that are expected to arise from investment in enabling offshore wind supply chain, infrastructure, workforce development, and research and development (R&D) investment in New York State. Emphasis should be placed on investments that create an enduring impact on future offshore wind economic activity in New York, reduce cost of future offshore wind energy or reduced future offshore wind project risk. Proposer should explain the strategic importance of its commitment and how it fits into overall regional offshore wind market development and identify the duration of any commitment. In addition, Proposer may identify and discuss the capability of any partners, and provide supporting documentation to substantiate the nature, firmness and maturity of their commitments.

Investments meeting the definition of Incremental Economic Benefits that are not unique to the Project (*e.g.*, supporting multiple offshore wind facilities) may be included for consideration under this RFP, provided that the investment is made on Category 2 investment types listed in Appendix C.

6.4.16.4 Economic Benefits Category 3: Input Activities

Category 3 consists of input activities that provide opportunities for New York State supply chain, workforce, and research and development. This category includes programmatic actions that will have desirable impacts on the New York State supply chain and workforce, but the value of which is not denominated in dollars and is therefore indirectly tied to, or difficult to compare to the large expenditures grouped under Category 1 or Category 2. These input activities include impactful actions taken on the part of Proposer to enhance the New York offshore wind market, supply chain development, or local workforce. Expenditures associated with these actions should be included in Category 2. The actions and value of those actions and metrics by which they are to be measured should be included in Category 3.

Input activities that have the potential to benefit New York State may include but are not limited to those actions and/or developments are delineated in Appendix C. Category 3 input activities are

additional to the New York State Supplier Opportunity threshold requirement that Proposers must agree to provide companies with the opportunity to offer to provide goods and services to developers of the Project for which there is capability in New York State.

The Economic Benefit Plan must include a written description of the input activities that Proposer will take under Category 3. Where possible, Proposer should seek to quantify the input activities, and provide documentary evidence of past examples of similar activities and the impacts they had and supporting documentation from potential partners or beneficiaries. In general terms, Proposers should describe:

- 1. The nature of the intended commitment;
- 2. The timetable for undertaking the activity;
- 3. A discussion of any risks or uncertainties, including the degree to which it is dependent on factors outside Proposer's control, and describe what these factors are;
- 4. The potential impact of the activities and the factors that will influence the impact;
- 5. The resources Proposer will deploy (financial or manpower) to deliver the activity; and
- 6. The organizations with whom Proposer will work.

Proposer should summarize any engagement with third-party organizations that would be involved in the successful delivery of Proposer's commitments. The Category 3 description must also include subsections for Business and Workforce Engagement Plans. Proposer should explain the strategic importance of commitment and how it fits into overall regional offshore wind market development and identify the duration of any commitment.

6.5 Proposer Certification

Proposer must complete and submit the Proposer Certification in Appendix B. The Proposer Certification must be signed by an authorized officer or other duly authorized representative of Proposer.

6.6 Exceptions to Agreement

If Proposer is proposing any exceptions to the Agreement, included as Appendix F, Proposer must provide a redlined markup of the Agreement and provide an explanation and justification for each requested change.

Note that ORECRFP18-1 is a competitive procurement. Competitive procurement rules and the Offshore Wind Order limit NYSERDA's ability to alter the terms of the Agreement. Should the Project receive an award, NYSERDA will contact Proposers to schedule a discussion regarding the terms identified in the redlined markup of the Agreement. Requested changes that recognize the limitations imposed by the competitive procurement rules and the Offshore Wind Order will have no impact on the scoring or evaluation of the Proposal.

7 POST-AWARD PROCESS

7.1 Provision of Contract for Execution

Upon successful completion of negotiations regarding the terms and conditions, NYSERDA will prepare a conformed copy of the Agreement (Appendix F) which will be delivered to the awarded Proposer, in a manner to be agreed upon, for Proposer's execution and return. NYSERDA may rescind an award should negotiations with the Proposer fail or should such negotiations continue unsuccessfully beyond a reasonable time beyond the initial Award Notification Date.

7.2 Provision of Contract Security

Upon successful completion of negotiations, Awardees will be required to provide Contract Security as described in Article XV of the Agreement.

8 GENERAL CONDITIONS

8.1 Proprietary Information

Consideration should be given before confidential information is submitted to NYSERDA as part of any 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. The Public Officers Law includes exceptions to disclosure, including Section 87(2)(d) which 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 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. NYSERDA reserves the right to make public, after the fifth anniversary of the award date, the Agreement executed with any awarded Proposal.

8.2 State Finance Law Sections 139-j & 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>http://www.ogs.ny.gov/aboutogs/regulations/advisoryCouncil/StatutoryReferences.html</u>

Proposer must certify that he/she will comply with State Finance Law sections 139-j and 139-k and a provide disclosure statement regarding whether Proposer has been found non-responsible under section 139-j of the State Finance Law within the previous four years.

8.3 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 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>.

8.4 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

8.5 Disclosure Requirement

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.

8.6 Press Releases and Media Contact

Proposer shall not distribute any press release or contact the media until after the Agreement is executed by both parties and any New York State press releases regarding the awards have been issued. If Proposer wishes to contact the press regarding the award, Proposer must collaborate with NYSERDA's Designated Contacts and 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 Agreement executed with any awarded Project.

8.7 Independent Entities/Limitation of Liability

Neither this RFP nor any other aspect of this solicitation shall create an agency, partnership, joint venture, or co-tenancy relationship among the members of the Evaluation Team or any other individuals or entities involved in the development or administration of this RFP (collectively, the "RFP Parties"), nor any other relationship or liability beyond those (if any) explicitly adopted in writing and executed by authorized representatives of the applicable RFP Parties. None of the RFP Parties shall be liable for any act or omission of any other RFP Party. Neither this RFP nor any other aspect of this solicitation creates or is intended to create third-party beneficiaries hereunder. In no event will an RFP Party be liable to any person for special, incidental, punitive, exemplary, indirect or consequential damages or lost profits, whether by statute, in tort or contract or otherwise.



ANDREW M. CUOMO Governor RICHARD L. KAUFFMAN Chair ALICIA BARTON President and CEO

Industrial Strategic Energy Management Program Opportunity Notice (PON) 3411

Applications due June 20, 2019* by 3:00 PM Eastern Time

Program Summary: This New York State Energy Research and Development Authority (NYSERDA) Program Opportunity Notice (PON) 3411 seeks applications from Industrial facilities that are interested in participating in a fully-funded, year-long Strategic Energy Management ("SEM") pilot (the "Pilot"). By participating in the Pilot, the industrial facility will gain access to training, coaching, and peer-to-peer knowledge sharing to continuously enhance energy efficiency at their facilities. This solicitation is intended as an initial Pilot to expand awareness and uptake of Strategic Energy Management in industrial facilities in New York. Participation in the Pilot will be offered to industrial sites with an energy spend of \$500,000 or more (all fuels). Pilot Participants must be willing to share results and lessons learned to further the Pilot's objective of increasing the penetration of Strategic Energy Management at industrial facilities.

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).

All Program questions should be directed to Kathleen Dooley, 518-862-1090 x3475, <u>Energymanagement@nyserda.ny.gov</u>. All Contractual questions should be directed to: Nancy Marucci, at 518-862-1090 x3335, <u>NancySolicitations@nyserda.ny.gov</u>.

* All applications must be received by 3pm Eastern Standard 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 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 applications. The electronic application system closes promptly at 5pm, files in process or attempted edits or submission after 5pm 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/sem.

I. INTRODUCTION

This solicitation is divided into the following components:

- 1. Section I: Introduction
- 2. Section II: Definitions
- 3. Section III: Program Description
- 4. Section IV: Eligibility
- 5. Section V: Application Requirements
- 6. Section VI: Application Evaluation
- 7. Section VII: General Considerations
- 8. Section VIII: Attachments

Strategic Energy Management (SEM) is a long-term holistic approach to managing energy use which goes beyond the sporadic implementation of energy efficiency improvements. The Pilot will prove the value of SEM at industrial facilities; demonstrating that integrating energy management as a core business practice and applying principles of continuous improvement will foster substantial, long-term savings. Industrial facilities that participate in the Pilot will, among other things, develop tools for continuous SEM integration including:

- an energy assessment specific to their facility;
- an energy map or model for their plant or process;
- a list of identified energy savings opportunities and an implementation plan;
- a plan for employee engagement;
- long term energy savings goals; and
- a method for systematic measurement and reporting of energy performance.

The purpose of the Solicitation is to obtain qualified Participants to undergo SEM training. Data gathered from the Pilot will be used to prove the business case for SEM and to disseminate case studies, tools, and resources to the market for broader adoption. Pilot Participants are required to share challenges, success stories, and best practices to facilitate this market transformation activity.

NYSERDA will fund the Pilot, which will consist of one or more cohorts of up to eleven industrial facilities, to guide manufacturers through the process of establishing and implementing a SEM system. Participants will receive this training at no cost to them. NYSERDA reserves the right to determine number of cohorts and cohort size based on applications received.

II. DEFINITIONS

Participant: The entity awarded to participate in an Industrial SEM Pilot. If desired, Participants may partner with a consultant who may participate in the trainings with them and support the implementation of SEM at their facility.

Energy Champion: The Participant staff member responsible for attending the cohort sessions, receiving training from the *Energy Coach*, sharing information with the *Energy Team*, and leading the SEM effort at their facility. Should understand the manufacturing process and is empowered to reduce energy intensity and transfer the knowledge to the wider organization.

Energy Coach: Firm under contract with NYSERDA through RFP 3352 to provide SEM training at each cohort session and technical assistance to Participants throughout the Pilot. At the time of this solicitation, Vermont Energy Investment Corporation (VEIC) and Cascade Energy are under contract with NYSERDA to perform Energy Coach duties.

Energy Team: Successful Energy Teams generally are comprised of individuals from multiple levels of the organization who have knowledge about existing systems (production, capital project planning, facilities and maintenance, financial, etc.) and management support to participate in this effort. The Energy Team includes the *Energy Champion, Executive Sponsor*, and key facility and operational staff. Finance, marketing, and other areas are also important to consider to ensure that the Energy Team understands the Participant's financial decision-

making requirements for any projects requiring capital, as well as the elements of behavioral initiatives. The Energy Team is expected to continue beyond the Pilot.

Executive Sponsor: A member of the Participant's executive management (President, CEO, COO, CFO, etc.) who has the authority to commit to undergoing SEM at the facility, commit to devoting staff time to this endeavor, and support projects and trainings that are critical to implementation of SEM.

III. PROGRAM DESCRIPTION

This initiative is a structured series of NYSERDA-funded 'learn-by-doing' trainings that focus on behavioral and operational changes to equip and enable plant management and staff to reduce energy intensity over time. The SEM Pilot will consist of twelve (12) training sessions, led by the Energy Coach, over twelve (12) months. The sessions will be a combination of in-person and web-based events. Participants will learn to identify areas for improvement, drive managerial and corporate behavioral changes with respect to energy, and develop the mechanisms to track and evaluate energy optimization efforts versus other business investment opportunities. For information on the program start date and pre-launch meetings for selected Participants, visit the website at https://www.nyserda.ny.gov/sem.

The training session curriculum covers the topics indicated in the outline below. This outline also includes the schedule for the program as well as the session type. Please note that travel will be required for the group workshops. The group workshops gather all Participants in the cohort and will be held either at Participant facilities or in meeting spaces across the state. The individual training sessions occur on-site for each Participant and are tailored for each specific Participant's needs and goals. It is required that the identified Energy Champion attend all training sessions. The Executive Sponsor and Energy Team members are invited to attend all the training sessions, and are strongly encouraged to attend the webinar sessions as well as the individual training sessions.

Month	Training Session	Session Type	Objective
1	Establishing an SEM Program	Full Day Group Workshop	Introduction to SEM and how to get started at your company How to jumpstart organizational change
			through quick wins
2	Saving Energy	Full Day Group Workshop	Provide strategies for achieving quick wins and organizational buy-in
			Explore systems basics and common opportunities for energy savings
			Develop near-term technical opportunities using straight-forward concepts, processes and tools
2	Metering Toolkit	Webinar	Develop skillset needed to utilize temporary data metering hardware to identify energy- saving opportunities
			Introduction to energy intensity modeling
2-4	Energy Map	Individual Training	Learn how to increase awareness and visibility of where and how energy is consumed in participant facilities
			How to prioritize energy efficiency opportunities
2-4	Treasure Hunt	Individual Training	Training on the Treasure Hunt process
			Jumpstart SEM adoption through a list of actionable energy savings opportunities

5	Tracking Energy Performance	Half Day Group Workshop	Learn to quantify the value energy efficiency activities generate as quick wins are achieved Use customized energy intensity models and other analytical tools to assess and measure energy performance
7	Engaging Employees	Half Day Group Workshop	Learn organizational development strategies Learn to manage culture change through employee engagement and recognition
7-9	Employee Engagement Toolkit	Webinar	Learn to translate employee engagement strategies into actions for each participant
8-9	Onsite Energy Management Assessment	Individual Training	Explore existing energy management practices for participants
			Identify strengths and weaknesses in current energy management practices, organizational barriers, and baseline performance to measure progress
			Motivate leadership to address gaps
9-10	Onsite Employee Engagement	Individual Training	The Energy Team receives assistance with at least one initiative from the Employee Engagement Toolkit at their facilities
10	Making it Stick	Half Day Group Workshop	Teach participants how to create enduring management systems
			Learn from fellow participants through a series of collaborative exercises
12	Celebrating Accomplishments	Half Day Group Workshop	Celebrate and recognize accomplishments and generate enthusiasm for continued focus on energy
			Work with the Energy Coach to prepare a presentation of participants' SEM story

Program Deliverables:

During Pilot

- Participation in all 12 training sessions over 12 months;
- Monthly deliverables as assigned during cohort training sessions including:
 - o The completion of Energy Management Assessments to benchmark and track progress;
 - The development of facility goals and metrics;
 - The creation and maintenance of an Energy Intensity Model;
 - The identification of energy drivers and energy savings opportunities; and
 - The development and execution of employee engagement activities
- Annual energy savings report documenting results from efficiency projects; and
- Peer-to-peer sharing with other cohort members.

Post Pilot

- Bi-monthly Office Hour check-ins, Bi-monthly SEM Implementation check-ins, and Bi-monthly Energy Intensity Model Maintenance check-ins with NYSERDA and the Energy Coach via teleconference for one year following the Pilot;
- Quarterly submission to NYSERDA of the site's opportunity register with energy savings results from implemented energy projects for the length of the Participation Agreement;

- Support development of case study, including savings metrics; and
- Future sharing of information as needed for Pilot evaluation.

IV. ELIGIBILITY

Eligible Pilot Participants include NYS industrial facilities with annual energy costs that exceed \$500,000, all fuels, and that contribute to the System Benefits Charge (SBC) on their electric utility bills. In addition, Energy Champions must have the ability to travel to cohort meetings to receive the SEM trainings.

Customers may not participate in both NYSERDA's Industrial On-site Energy Manager Pilot and SEM Pilot at the same time.

V. APPLICATION REQUIREMENTS

Strategic Energy Management Application package, required documentation:

- 1. Current, complete electric utility bill documenting payment into SBC
- 2. Attachment A: Industrial Strategic Energy Management Application
- 3. Attachment B: NYSERDA Participation Agreement, signed by the Facility
- 4. Attachment C: Letter of Commitment from the Executive Sponsor

VI. APPLICATION EVALUATION

Applications will be reviewed every three (3) weeks. Applications that meet the application requirements will be reviewed by a Scoring Committee using the Evaluation Criteria identified below. After the applications are reviewed, NYSERDA will notify each applicant indicating the evaluation results no later than 6 weeks after the application due date. The goal of the selection process is to identify the industrial facilities that are most qualified and positioned for success in implementing SEM at their facility. Obtaining 70% of the points outlined below is the minimum threshold for acceptance.

Participant Commitment

- Potential Participant demonstrates strong commitment from an Executive Sponsor to support pursuing long-term strategic energy management – up to 5 points
- Potential Participant demonstrates commitment to investing capital in energy efficiency improvements up to 3 points
- Potential Participant identifies personnel available to devote to pursuing strategic energy management (including the Energy Champion and Energy Team) – up to 5 points
- Potential Participant demonstrates enthusiasm for behavioral, organizational, and business-process change resulting from strategic energy management up to 5 points
- Willingness to host a cohort meeting at your facility 1 point

Energy Efficiency Savings Potential

- Potential Participant demonstrates they have high energy usage and/or cost up to 3 points
- Potential Participant indicates that energy is a high cost relative to other organizational costs -1 point
- Potential Participant has multiple locations across NYS 1 point

Knowledge

- Potential Participant demonstrates energy efficiency competency through the successful implementation energy efficiency projects and activities – up to 5 points
- Potential Participant tracks energy data in their facility 1 point
- Potential Participant demonstrates internal energy-focused initiatives (e.g. existing energy policy, corporate energy goals, energy plan, sustainability plan, or sustainability reporting) up to 2 points
- Participation in external energy-focused initiatives (e.g. Factory of the Future or Better Plants) 1 point

Culture

- Experience with systematic behavioral management systems (e.g. ISO9000, lean, TQM, 5S, Six Sigma, Kaizen, etc.) up to 5 points
- Company has an internal training structure in place 1 point
- Company has a practice of celebrating success 1 point

Programmatic Considerations: In order for the Pilot to be as compelling as possible to the NYS market, NYSERDA may consider the following Program Policy Factors in making award selection decisions:

- Diversity of awards, including location and industrial sector
- Existing energy management information system

Accepted Applications: Selected Participants will be notified and the Participation Agreement (Attachment B) will be co-signed by NYSERDA and sent back to the Participant for their records. The Scoring Committee will meet and evaluation results will be returned to Participants no later than 6 weeks after the due date.

Denied Applications: Applicants whose applications are denied may request a de-briefing and may apply to a future cohort.

VII. GENERAL CONSIDERATIONS

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

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 expects to notify Participants in approximately six (6) 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 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.

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: Strategic Energy Management Cohort Participant Application Attachment B: Participation Agreement Attachment C: Letter of Commitment Requirements



Demonstration of New Business Models, Marketplace Development and Refurbishment of Existing Qualified Historically Farm-Related Anaerobic Digester Gas-to-Electricity Systems Program Opportunity Notice (PON) 3739 \$16 Million Total Available NYSERDA reserves the right to extend and/or add funding to the

Solicitation should other program funding sources become available.

Applications/Proposals Due: March 7th, 2019 by 3:00 PM Eastern Time*

NYSERDA SEEKS TO (A) IDENTIFY AND DEMONSTRATE NEW BUSINESS MODELS FOR A SELF-SUSTAINING ANAEROBIC DIGESTER TECHNOLOGY MARKET (B) PROVIDE ANALYSIS AND COACHING TO THE MARKETPLACE AND (C) SUPPORT REFURBISHMENT OF EXISTING QUALIFIED FARM-RELATED PROJECTS

The New York State Energy Research and Development Authority (NYSERDA) invites applications/proposals in three categories; Category A (competitive) proposals that demonstrate new replicable business models or strategies that promise greater development of anaerobic digester gas (ADG)-to-electricity projects in New York State, Category B (competitive) proposals supporting analysis and coaching to improve the capabilities of the anaerobic digestion technology marketplace, as well as Category C (formula-based) applications to support refurbishment of qualified existing historically farm-related ADG-to-electricity systems.

Category A is expected to provide approximately of \$7.75 million in funding to support one or more portfolios of viable anaerobic digestion projects that demonstrate replicable business models and strategies that are expected to lead to a self-sustaining anaerobic digestion technology marketplace that can continue in the absence of additional NYSERDA funding. A total of approximately \$250,000 is being made available under Category B to support one or more projects designed to develop public information to identify and elucidate opportunities that can bring cost-reduction, revenue-enhancement or other improved capabilities to the anaerobic digestion technology marketplace and where appropriate to provide training, guidance and other coaching support for use of such information.

Category C is expected to provide approximately of \$8 million in funding to support refurbishment of existing historically farm-related ADG-to-electricity systems that achieved commercial operation before January 1, 2015. Category C offers co-funding to help support:

- refurbishment of an existing engine generator
- refurbishment of an existing hydrogen sulfide (H₂S) reduction system and/or gas handling system or installation of a new hydrogen sulfide reduction system where none previously exists; and
- refurbishment of an existing anaerobic digester

Applicants may be eligible for refurbishment funding of an existing or new H₂S reduction/gas handling or anaerobic digester systems funding regardless of whether they intend to also refurbish the generator and continue to self-produce electricity or whether they intend to decommission the generator and instead use the ADG produced for other purposes such as but not limited to fueling of transportation vehicles and/or injection of renewable natural gas into a utility gas pipeline.

Application/Proposal Submission: Online submission is preferable. Applicants/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. Application/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 applicant's/proposer's entity name in the title of the document. NYSERDA will also accept applications/proposals by mail or hand-delivery if online submission is not possible. For detailed instructions on how to submit an application/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>). If you intend to apply for more than one Category (A, B or C) you must submit separate proposals for each Category.

No communication intended to influence this procurement is permitted except by contacting Designated Contacts Tom Fiesinger at (518) 862-1090 ext. 3218 tom.fiesinger@nyserda.ny.gov, or Stephen Hoyt (518) 862-1090 ext. 3587 stephen.hoyt@nyserda.ny.gov. Contractual questions should be directed to Venice Forbes, (518) 862-1090 ext. 3507, venice.forbes@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 offeror, and (2) may result in the proposer not being awarded a contract.

* All applications/proposals must be received by 3pm Eastern Time on the date noted above. Late, faxed, or emailed applications/proposals will not be accepted. Incomplete applications/proposals may be subject to disqualification. It is the applicant's/proposer's responsibility to ensure that all pages have been included in the application/proposal. Please note: for online submission, there are required questions that you will have to answer in addition to uploading attachments and once you have completed your application/proposal forms you should allot at least an additional 60 minutes to enter/submit that application/proposal into the online application/proposal system. The online application/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.

Applicants/Proposers Webinar & Inquires

NYSERDA will hold a webinar for Applicants/Proposers on **Wednesday**, **January 17th**, **2019 at 1:30 p.m. EDT**. **Applicants/**Proposers are encouraged to submit questions prior to the webinar to tom.fiesinger@nyserda.ny.gov. On the webinar, NYSERDA will review the program and requirements. Questions will be taken and, to the extent possible, responses will be provided during the conference. To sign up for the Applicant's/Proposers' Webinar please visit <u>https://nyserda-events.webex.com/nyserda-</u>

<u>events/onstage/g.php?MTID=e27228d1a497015d1fc4f241c36309171</u>. Respondents will be provided with webinar credentials. All prospective Applicants/Proposers are strongly encouraged to participate in the webinar. NYSERDA may schedule additional webinars about PON 3739. Applicants/Proposers should check NYSERDA's website for updates.

Assistance in Developing Farm-Based Projects

Proposers that are considering ADG project(s) sited at New York State farm(s), and owners of existing farm-sited AD systems can avail themselves of support services, free of charge, from the AD Assistance Initiative provided by Cornell University under contract to NYSERDA. Contact information below:

Curt Gooch

Cornell PRO-DAIRY Program Direct: (607) 255-2088 Cell: (607) 592-2027 https://prodairy.cals.cornell.edu/ www.manuremanagement.cornell.edu

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I. Category A: Demonstration of Replicable Business Models and Strategies for a Self-Sustaining Marketplace

A. Introduction

Anaerobic digestion technology can reduce methane emissions resulting from long-term disposal or storage of organic food wastes, manures and other organic materials while producing renewable electricity and/or renewable natural gas. In support of the development of anaerobic digestion projects in New York State, NYSERDA previously offered funding to ADG-to-Electricity projects via PON 2828 on a first come-first-served basis. Funding was limited to a maximum of \$2 million per project, paid out in a partial payment when the equipment was commissioned, with the remainder paid out over 10 years of operation and based on a capacity factor of 75%.

Although PON 2828 and previous versions of the ADG-to-Electricity program succeeded in supporting the construction and operation of multiple ADG-to-Electricity projects, the ADG technology market has not yet developed into a self-sustaining marketplace and has remained dependent on NYSERDA funding. Although recent changes to electrical tariffs via Value of Distributed Energy Resources appear to improve the potential for additional value to ADG projects from electrical production generally, it is not clear if this value is sufficient to stimulate development of new ADG-to-Electricity projects. Additionally, projects have tended to be developed on a one-off basis, increasing costs and project risks, and are often dependent on uncontrollable external factors such as the spot market for food waste tipping fees or the price of milk (for farm projects).

Via this funding solicitation, PON 3739, in Category A, NYSERDA will employ a competition to strategically select proposals that demonstrate replicable business models or strategies that reduce costs, risks and/or increase revenues thereby reducing or eliminating the market dependence on incentive funding for anaerobic digester technology projects. Proposals are expected to include the installation and sustained operation of a portfolio of anaerobic digester gas-to-electricity projects developed by one entity, thereby benefiting from economies-of-scale. Proposals will be assessed to determine the strength of the proposed portfolio and the Proposers ability to implement and operate the projects. Approximately half of the maximum potential point score for this solicitation will be based on a competitive bid price submitted by the Proposer. NYSERDA anticipates bid prices to reflect significantly reduced overall funding requests on a per kWh basis compared to the previous funding program, PON 2828.

B. Program Requirements

Eligibility

- ADG-fueled power generation systems must be interconnected to the grid and the interconnected power generation system must be located at a host site that pays the Systems Benefit Charge on electric bills specific to the utility meter at that site behind which the generator is interconnected. For specific questions regarding this eligibility requirement refer to the Designated Contact.
- Major components of the proposed projects must consist of Commercially Available Technologies, which are defined as technologies that have operated satisfactorily for a minimum of one year at similar scale, with similar inputs and with similar output as described for the projects in the proposal; or which can be otherwise demonstrated to NYSERDA's satisfaction of having a proven 1-year operating history.
- Eligible Biomass Feedstocks include manure, agricultural residues and biomass, industrial organic wastes (e.g., food wastes), municipal wastewater and municipal organic solids. (Note: Electricity generated by landfill biogas is not eligible.)

Limitations

- For proposals in which new anaerobic digesters will be located at different sites from new power generation systems, biogas (either refined or unrefined) may be transported to the new power generation system via natural gas pipeline (Renewable Natural Gas), dedicated pipeline, truck transportation or other means. However, clear documentation will be required that demonstrates that the anaerobic digester gas injected into a pipeline or otherwise transported is consumed in an equivalent amount at an associated power production site. The documentation process will be defined in an approved Quality Assurance Quality Control Plan.
- Proposals are expected to include at least three sites with new anaerobic digester gas-to-electricity power generation systems, paired with new anaerobic digesters, all located in NYS. New anaerobic digester gasto-electricity power generation systems can be supplied from more than one new anaerobic digester system located at a different site if necessary to produce sufficient quantity of anaerobic digester gas to supply a given power generation system.
- Electric generation will form the basis of payments and is the focus of the competitive scoring process. However, to the extent that sizing an ADG system to include additional non-electric use of ADG may capture greater economic value for a project, Proposers are encouraged to pursue such business models as it may reduce the amount of funding requested thereby potentially resulting in a more competitive bid price proposal and improving the overall strength of the proposal.
- Sites that are receiving or have received NYSERDA funding related to anaerobic digestion and/or fuelbased power generation are not eligible to be host sites for projects under Category A of this PON. Power generation installed as part of this PON will not be eligible to seek CHP funds through NYSERDA PON 2568 or through NYSERDA's Fuel Cell solicitation PON 3841. Applicants who have applied for funding under PON 3739 but have not yet been approved for funding may proceed with their project(s) at their own risk. However, projects may not be included as part of a proposal under Category A if construction is already underway or major components have already been delivered to the site or a staging area prior to NYSERDA receiving the application for funding under PON 3739.

C. Proposal Process

Note that the application forms for Category A (in Attachment A.1) require detailed information, which may be considered proprietary in nature. Proposers may request that proprietary information be kept confidential, particularly information on the Site Financial Sustainability Assessment Forms. Please refer to "Proprietary Information" in Section III for further detail. However, a general description of the business model provided on the Portfolio Business Model Description Form may be made public after winning proposals are announced and therefore proprietary information should not be included on that page.

To apply to Category A, Proposers must respond to all questions and complete all forms found in Attachment A.1 Proposal Forms and provide all required supporting documentation clearly marked indicating the section of the proposal to which it refers. Proposal Forms in Attachment A.1 are comprised of: a Portfolio Business Model Description Form; Financial Sustainability Assessment Forms; a Bid Price Proposal Form; a Minimum Requirements and Assessment Summary Form and; a Replicability Impact Form. In addition, a budgeted per project kWh allocation and annual payments are shown on the Payment Distribution Table page. Specific instructions are included within each form of Attachment A.1.

<u>Portfolio Business Model Description Form</u> Each proposal is expected to be based on a portfolio of projects to be owned and operated by the proposing entity. Proposers first enter a description of the overall business model for the portfolio on the Portfolio Business Model Description Form.

<u>Financial Sustainability Assessment Forms.</u> A separate Financial Sustainability Assessment Form, (identified as Sites A, B, C, etc.) with site specific information on the expected inputs, outputs, revenues, costs and assumptions must be completed for each Anaerobic Digester Gas (ADG) Production Site in a portfolio of demonstration projects. All information provided must be justified with supporting documentation as appropriate. Power generation associated with a particular ADG Production Site, whether located at the site or remotely, must be included. If a remote power generation facility is to be supplied with anaerobic digester gas from more than one ADG Production Site then the electrical capacity and expected power generation must be proportioned across the Financial Sustainability Assessment Form pages for those ADG Production Sites as appropriate.

Five Financial Sustainability Assessment Forms are provided, if more than 5 ADG Production sites will be proposed, contact the Designated Contacts.

Each of the ADG production projects and associated power generation projects encompassed by a single portfolio proposal will be individually assessed based on 10 years of projected operation. Proposers must provide detailed information for each individual proposed demonstration project including:

- Site description and project financial approach
- Project energy mass balance
- Past performance of similar projects
- Assumptions regarding energy production, revenue or avoided expenses
- Organic resources
- Projected revenues and avoided expenses
- Capital cost estimates
- Operation and maintenance costs estimates

<u>Bid Price Proposal Form.</u> The Bid Price Proposal (see section D. Scoring) is a major element of program scoring. To calculate the Bid Price Proposal, Proposers enter the total amount of funding requested to build and operate the portfolio of demonstration projects for 10 years and a Capacity Factor for each project during projected hours of generation. The expected hours of generation for each project are automatically entered on the Bid Price Proposal Form for each project based on information entered on each Financial Sustainability Assessment Form. The maximum Capacity Factor a Proposer may enter on the Bid Price Proposal Form for power production potential over 10 years for each project in the portfolio is 75%. However, Proposers may opt to select a Capacity Factor of less than 75% if the projects are intended to operate only during peak periods or if lower past performance of similar projects or other reasons indicate that the projects are unlikely to operate at that level.

<u>Replicability Impacts Form</u> Through Category A funding NYSERDA seeks to highlight and support new business models or strategies for the anaerobic digestion technology market that can play a significant role in transitioning anaerobic digestion technology from a subsidized marketplace to one that is self-sustaining. Proposers will need to respond to the following question and will be scored based on potential replicability impacts on electrical production from anaerobic digester gas, potential greenhouse gas reductions and potential numbers of anaerobic digestion projects: "How would the successful demonstration of your model or strategy lead toward a self-sustaining market for anaerobic digesters and anaerobic digester gas-to-electricity technology in New York State without funding support from NYSERDA?" Proposers must provide sufficient evidence to justify their claims.

<u>Minimum Requirements and Assessment Summary Form</u>. The Minimum Requirements and Assessment Summary Form page summarizes the Site Assessments and calculates a Net Portfolio Value, used in Minimum Requirement 1. Proposals will be judged first on a pass/fail assessment of the bid price compared to an "Upset Price" which will not be disclosed by NYSERDA. <u>Proposals with a Bid Price that exceeds the Upset Price will</u> <u>be removed from further consideration</u>. Proposals that pass the Bid Price screening will then be evaluated on a pass/fail basis regarding the following 4 Minimum Requirements:

• **Minimum Requirement 1 - Net Portfolio Value**. The Net Portfolio Value as described below must be positive.

All the demonstration projects encompassed within that portfolio proposal will be assessed to determine if, as a group, they appear to be financially sustainable over 10 years of operation (including requested NYSERDA funding) based on the information provided by the Proposer in the Financial Sustainability Assessment Forms. Reviewers may use judgement to gauge the likelihood of success including derating of inadequately substantiated values for the claimed projected quantities of Organic Resources and Revenues/Avoided Expenses or impose an additional contingency percentage to the estimated Capital Costs or Operation and Maintenance Costs. Adjustments by the Reviewers during the review and scoring process can alter the financial sustainability assessments of the individual projects and in the assessment of the Net Portfolio Value.

Portfolios of projects will be evaluated using an undiscounted Net Portfolio Value, calculated as the excess of 10-year portfolio profit:

Net Portfolio Value = Total Revenues and Avoided Costs – Total O&M* and Admin. Costs -Total Portfolio Capital Cost

(*Include reserve for replacements required during 10-year life)

• **Minimum Requirement 2 - Site Control Letter**. Site owners where ADG production, ADG-fueled power generation and any central site integral to the portfolio of projects will be located, must sign the Site Control Letter (Attachment A.2.). If any site identified in the application forms or otherwise described by the Proposer as integral to the portfolio of projects (including but not limited to sites that are not associated with power production such as those that produce biogas only or a central processing or handling facility) does not have a signed Site Control Letter, the portfolio of the portfolio associated with that site may not be included in determining the Net Portfolio Value and therefore the Net Portfolio Value may have a negative result

• **Minimum Requirement 3 - Access to Financing**. The Proposer must demonstrate credible evidence of access to financing sufficient to complete the proposed demonstration projects. This may include but is not limited to: term sheets for debt and/or equity; evidence of creditable capital; prior project finance history and letters of interest.

• **Minimum Requirement 4 - Portfolio Project Team Experience**. The Proposer must provide documentation that demonstrates that the Portfolio Project Team has sufficient experience in developing, building and operating anaerobic digestion, power generation and any other major systems included in the projects and that those reference projects are of similar scale, similar inputs and similar outputs to the proposed portfolio of projects.

Proposals that fail any of the 4 Minimum Requirements will be removed from further consideration.

D. Scoring

Proposals that pass the Bid Price and Minimum Requirements screening will be scored by a Scoring Committee of Reviewers based on the following allocation of a total of 100 points (Note that proposals must meet all minimum threshold requirements including a bid price not exceeding the "Upset Price" to proceed to the scoring step.):

1. <u>Bid Price Proposal (max. 49 points possible)</u> will be scored according to the following formulas:

 $Bid Price (\$/kWh) = \frac{Total Funding Requested (\$)}{Total Power Production (kWh)}$

In which: *Total Funding* refers to the total amount of funding requested to support the installation and operation of the proposed portfolio of demonstration projects and *Total Production* refers to the aggregation of 10 years of operation of each site within the portfolio at a Bid Price Capacity Factor (defined on the Bid Price Proposal Form) chosen by the proposer (max. 75%). (As indicated above, Proposers may opt to select a capacity factor of less than 75% if past performance or other reasons indicate that the projects are unlikely to perform at that level).

In which: **Upset Price** refers to a maximum price per kWh which NYSERDA has determined to be acceptable (NYSERDA will not reveal the Upset Price to maintain a competitive bid process). Maximum allowable score is **49 points**.

2. <u>Proposing Team/Overall Viability (total 21 points possible)</u>

The **Overall Viability of Portfolio** of demonstration projects will be scored out of a **maximum 12 points** and based on the financial and overall strength of the approach or business model proposed.

The **Proposing Team** will be scored out of a **maximum 9 points** for the strength of the team in being able to execute the projects as well as its experience in developing successful anaerobic digestion projects.

3. <u>Replicability Impacts (total 30 points possible)</u>

Reviewers will score proposers for relative replicability impact in each of the following areas as compared to the current portfolio of NYSERDA ADG projects and relative to the potential impacts from other proposers as appropriate. Note that Greenhouse Gas Reduction Impact will be based on potential reductions from both the demonstration projects and market projections of follow-on projects built by 2030. Proposers must provide sufficient evidence to justify their claims. A combined maximum of 30 points is available. Replicability Impacts will be scored based on the potential for the proposed business model or strategy to lead toward a self-sustaining market for anaerobic digestion technology in terms of:

- Potential Electrical Production maximum 12 points
- Potential Greenhouse Gas Reductions Impact maximum 12 points
- Potential Numbers of New Projects maximum 6 points

E. Payments

NYSERDA expects to notify Proposers that are selected for funding within approximately 60 days of the submission due date. A contract for funding will then be prepared by NYSERDA and offered to the awardee. Once an awardee signs and NYSERDA then countersigns thereby making the contract fully executed, the awardee will become a Contractor to NYSERDA to build and install the proposed portfolio of anaerobic digester and power generation projects. The Contractor will be paid in three annual payments, based on a "Performance Payment Rate" calculated by multiplying the Contractor's proposed Bid Price by 31/3, for each kWh of electricity production up to a maximum as shown on the Payment Distribution Table in Exhibit A from each of the power generation projects in the proposed demonstration project portfolio.

For example, if the Bid Price for potential generation is 0.03 per kWh, the Performance payments would be based on a rate of 0.03 multiplied by $3\frac{1}{3}$ which computes to 0.10/kWh for 3 years of operation. See Article IV of the Standard Agreement.

Quality Assurance/Quality Control

Promptly after NYSERDA executes a contract, a QA/QC Plan must be developed for each project within a proposed Category A portfolio of projects. The plan can either be developed by the technical consultant provided by NYSERDA, or by the Contractor in conjunction with the NYSERDA's assigned technical consultant. Guidance on developing the QA/QC Plan is included in Attachment A.3 *QA/QC Requirements*. A sample QA/QC Plan can be requested from Tom Fiesinger or Stephen Hoyt (contact information provided on the title page).

Payment Process

To allow the Contractor flexibility in implementing and managing a portfolio of projects, the following payment process will be employed:

- <u>End Dates</u> The Contractor will have 3 years from the Effective Date of the contract in which to commission each project in the portfolio and the contract payment period will extend not longer than six years from the contract Effective Date.
- <u>Substitutions</u> Since the proposal is being reviewed and scored based on the specific host sites included in the proposal, any future request to substitute host sites is highly discouraged but may be considered on a very limited case-by-case basis at NYSERDA's sole discretion.
- KWh Allocation and Performance-based Payments Timely commissioning of each project within the portfolio will trigger the allocation of a set number of kWh's of production for that specific project over a 36month term for which the Contractor may request payment (if there is underperformance at one site, the amount of unused allocation at that site cannot be transferred to another site which may happen to be over-performing, therefore, underperformance places the Contractor at risk of not receiving disbursement of the maximum amount awarded). The contracted kWh allocation will be based on the projected hours of annual production from the Bid Price page in the application which accounts for the as-proposed capacity factor of the project and will extend for 36 months from the start of the Performance Period as established in the Project Commissioning Report approved by NYSERDA in accordance with the QA/QC Plan for each project in the portfolio. Projects within the portfolio can have staggered start dates, and each project will be eligible to invoice for payments upon reaching its 12-month, 24-month, and 36-month milestones. If an ADG-to-Electricity power generation system is supplied with ADG from more than one ADG Production Site, the Commissioning Report can only be completed and the Performance Period only set after the power generation and associated ADG Production sites have all begun operation. The contracted kWh allocation for the associated ADG Production Sites will be grouped with the respective ADG-to-Electricity power generation system when determining Performance payments.

II. Category B - Analysis and Coaching for Marketplace Development

A. Introduction

The objective of Category B work is to employ analysis and coaching to develop and provide publicly available information that will be used effectively to reduce costs, enhance revenues, or provide other tools or information that will expand and improve the capabilities of the anaerobic digestion marketplace. Coaching includes information transfer, training, guidance, other activities that support the ability of marketplace participants to make effective use of information and tools from Category B work and other sources that can enhance the capabilities of the marketplace. Via this funding solicitation, PON 3739, in Category B, NYSERDA will employ a competition to strategically select proposals that provide Analysis and Coaching projects which may include, but are not limited to, addressing the following more specific objectives and approaches:

- Expanding the number of active marketplace participants by identifying and recruiting additional potential participants and compiling information about their basic capabilities and interest areas for other marketplace participants.
- Developing standardized contracts or instruments used for transactions by analysis and compilation of model contracting documents and training marketplace participants how to use them.
- Analysis of the potential value and revenue enhancement of various anaerobic digester project revenue sources (tipping fees, RINS, RECS, solids etc.) including analysis of potential enhancements of values, cost reductions, and new business strategies.
- Developing mechanisms or tools for communicating pricing for value and revenue enhancement sources and strategies to access those values. Such a mechanism might include a cooperative sale of environmental attributes.
- Assisting participants in understanding tariffs and other potential values and costs and providing review and guidance as they make projections for their proposed anaerobic digestions systems.
- Developing information exchanges that can persist with appropriate updating in the absence of subsequent NYSERDA funding.
- Developing mechanisms that benefit the general market for facilitating deals and transactions, such as recruiting potential ADG project site owners to cooperate in a group or project cluster or establishing other matchmaking approaches among market participants. Training participants how to use them effectively.
- Preparing other deliverables that would be made widely available to support the development of the anaerobic digester technology marketplace.

B. Program Requirements

Eligibility

Anaerobic digestion marketplace participants include multiple entities such as host sites, sources of digestion feedstocks, purchasers and recipients of digestion outputs, providers of services for anaerobic digestion system design, equipment, installation, and operation and maintenance, sources of capital for these activities, sources of information for effecting sustainable transactions among these market participants, regulators of these transactions, and others.

All marketplace participants, other than government organizations, are eligible to apply including for-profit and not-for-profit entities and universities whether as a stand-alone proposer or as the lead of a project team. Government (Federal, State, and Local) entities are eligible to participate on a project team but not as a

stand-alone applicant.

Limitations

Proposals selected under Category B will make deliverables and other results widely available to anaerobic digester technology marketplace participants to support the development of the sector. NYSERDA funding for Category B is not intended for developing proprietary information or tools or for recruiting customers for subsequent exclusive marketing of services. With respect to digestion system technologies associated with Category B work, NYSERADA funding is not intended for research and development, but seeks to encourage greater market uptake of commercially available anaerobic digestion technologies.

C. Proposal Process

Proposal packages for Category B must include the following completed documents:

- A completed Category B Fillable Proposal Form found in Attachment B.1 and supporting documentation as described in the proposal instructions contained in that Attachment B.1.
- The proposed Statement of Work using the template found in Attachment B.2., and
- The Contract Pricing Proposal Form (CPPF) also found in Attachment B.2.

D. Proposal Evaluation

1. Evaluation Criteria

The proposal will be scored by a Scoring Committee according to the four criteria categories listed below, which are listed in order of importance. After the proposal is reviewed, NYSERDA will issue a letter to all Category B Proposers indicating the proposal evaluation results. A proposer receiving favorable evaluations may be invited to enter into contract negotiations with NYSERDA.

a) Challenges and Proposed Solution

- **Problem, information gap or opportunity**. How clearly and correctly does the proposed project address one or more current problems, information gaps or opportunities that are not being adequately addressed by others in the anaerobic digestion marketplace?
- **Target marketplace participants.** How clearly and correctly has the proposer identified significant target participants in the anaerobic digestion marketplace who will benefit from this project? How much has the proposer interacted with target participants to validate the proposer's understanding of their challenges and documented the interest of key target participants in the project solution concepts and deliverables?
- Solution description and rationale. How clearly, correctly and convincingly has the proposer described the project's solution concepts and deliverables and how the project results will address the problems, information gaps or opportunities facing the target marketplace participants? How clearly and correctly has the proposer described the adequacy of the value proposition(s) for the types of participants in the target group for motivating their adoption of the solution concept and deliverables? To what extent has the proposer described alternative approaches and provided convincing rationale for why the proposed solution concepts and deliverables are superior compared to those other approaches?

• **Projected significance of marketplace improvement**. How clearly, correctly, and convincingly has the proposal reasonably described the potential impact of the solution(s) and deliverable(s) for increasing the potential for implementation of anaerobic digestion in NYS, considering such factors as (1) the portion of the marketplace that will benefit and (2) the impact of the solution on the overall economic sustainability of anaerobic digestion systems? How achievable are the proposed project objectives for the extent of enhancement of marketplace capabilities resulting from the proposed project solution concepts and deliverables? How reasonable and well-substantiated are these objectives based on the proposal estimates of the types, size, and numbers of participants benefitting both at project completion and later when project results may be more fully adopted by key marketplace participants?

b) Quality of Work Plan.

- Statement of Work and Schedule To what degree are the proposed statement of work and schedule feasible, innovative, measurable, and adjustable? How well designed are they for successfully achieving the proposed analysis, completing the proposed deliverables, and implementing a coaching strategy for securing adoption or use of the project results?
- **Rates and Costs** How reasonable are the rates proposed for the individual components of the budget? How reasonable are the overall costs for completing the objectives, tasks and deliverables described in the proposal?
- Work in NYS. Will a significant part of the work on the project take place in New York State?

c) Project Team and Commitments.

- **Qualifications and expertise**. To what degree do the key individuals on the team have relevant and necessary qualifications and expertise to complete the proposed work and to evaluate its potential for enhancing capabilities of the marketplace considering evolving tariff structures?
- **Experience.** To what degree has the proposer successfully completed similar types of analysis, developed similar models or tools, and/or provided solution coaching outreach as proposed?
- **Resource plan.** How effectively can the proposer be expected to complete the project, considering the organization and staffing plan, and other resources proposed for the project?
- **Commitments**. How firm are the commitments and support from essential participants and other organizations that are part of the proposed project team? To what extent have any marketplace participants shown commitment to the project and its solution concepts by offering cost-sharing for the project work?

d) Overall Project Value. How cost-effective is the proposed project, considering the cost to NYSERDA, the importance of the problem, information gap or opportunities addressed, the proposed solution concept and deliverables, the significance of the proposed marketplace improvement, the quality of the work plan and the capabilities of the project participants?

2. Other Considerations. The proposal's fit with NYSERDA's overall objectives will also be considered, including: risk/reward relationships, similar ongoing or completed projects, and the general distribution of projects among industries, organizations, and locations in New York State. NYSERDA reserves the right to accept or reject proposals based on the following factor(s):

a) The degree to which the proposed project, including cost share, optimizes the use of available funding to achieve programmatic objectives such as NYS Energy Plan targets for renewable power generation and greenhouse gas reduction.

Category B Provisions

b) The degree to which the proposed project duplicates, complements, or avoids duplication of higherranked Category B proposals in terms of technology, business model, location, barrier addressed, etc.

c) The degree to which the proposed project complements, or avoids duplication of, work to be performed in implementing proposals awarded in Category A in terms of problem(s), information gap(s) or opportunities addressed

E. Payments

Payment for Category B Contract work will be paid on a cost reimbursement basis, including staff charges, direct charges, and indirect costs allowable under the terms of the Agreement. The Contractor may submit invoices for progress payments no more than once each month and no less than once each calendar quarter for Work performed during such period. A retainage of 10% will be withheld from each invoice, pending final acceptance by NYSERDA of all deliverables contained in Agreement Exhibit A Statement of Work. The Sample Agreement containing standard terms and conditions is in Attachment B.2. of this PON. The template for preparing Statements of Work for Category B proposals is in Attachment B.2. The project term is expected to typically run three (3) years or less.

II. Category C - Refurbishment of Existing Historically Farm-Related ADG-to-Electricity Projects

A. Introduction

NYSERDA seeks to extend the intended operating life of existing, historically farm-related ADG-to-Electricity systems for at least an additional 7 years. In Category C, NYSERDA provides an open application period in which existing New York State historically farm-related ADG-to-Electricity systems, that began operation prior to January 1, 2015, may apply for cost-sharing for refurbishment of those systems. NYSERDA will provide 75% of actual out-of-pocket expenses for such refurbishments, not to exceed a maximum NYSERDA amount (NYSERDA will employ a formula-based mechanism to determine such maximum NYSERDA amounts for eligible applicants). Refurbishment activities should include all refurbishment activities necessary and sufficient to enable the project to continue to operate for an additional 7 years. Applicants may select one or more of the types of activities on the Application Form C.1. Activities may include one or more of the following types:

- 1. Refurbishment of the ADG fueled engine which may include what is generally known as a "major overhaul" or a "full rebuild" that includes not only a "top-end" or cylinder head rebuild but also engine block overhaul or full in-frame rebuild.
- 2. Refurbishment or installation of hydrogen sulfide reduction systems (e.g., gas scrubber) and/or refurbishment of gas handling systems.
- 3. Refurbishment of the anaerobic digester vessel, cover, mixing systems and other related systems.

Successful applicants will be offered a NYSERDA contract in which Task #1 will require a Refurbishment Plan to be prepared by a consultant (which must be signed by a Professional Engineer) detailing needed refurbishment tasks and how they will be implemented. NYSERDA will provide \$15,000 for preparation of the Refurbishment Plan. After a review of the Refurbishment Plan by NYSERDA, a Go/No-Go decision point will follow (as shown in Sample Agreement for Category C included in the PON as Attachment C.3). If the Refurbishment Plan is approved a Notice to Proceed will be issued by NYSERDA to begin refurbishment activities.

Note that eligible existing historically farm-related ADG-to-Electricity project applicants are permitted to use their refurbished systems to produce RNG instead of, or in addition to, electricity and may therefore request funding for the 2nd and/or 3rd Refurbishment Activities alone.

B. Program Requirements

Eligibility

Only existing NYS historically farm-related anaerobic digester projects that became operational to produce electricity with an electrical grid interconnection completed prior to 1/1/15 are eligible for Category C of this solicitation. Historically farm-related systems include those that are either 1) located at a farm and that are or had digested a significant amount of livestock manure and other farm wastes on an on-going basis from that farm or 2) have been previously determined by NYSERDA to be a farm-related ADG system under PON 2828.

To be considered eligible, the Applicant must also name a consultant or team of consultants that demonstrate, to NYSERDA's satisfaction, qualifications showing a depth of knowledge and experience in the design, installation and operation of anaerobic digestion, gas handling/H₂S reduction and power generation systems similar to the Applicant's existing systems, as needed, in order to prepare the Refurbishment Plan. The consultant must be, or the consultant team must include, a Professional Engineer who is licensed and registered to practice in the State of New York.

Category C Provisions

Facility Electric Capacity of Historically Farm-related Anaerobic Digester Gas-to-Electricity Systems (kW)	Maximum* Reimbursement for Power Generation Refurbishment	Maximum Reimbursement for H2S Reduction and Gas Handling	Maximum Reimbursement for Digester and Other
50	\$31,875	\$110,750	\$110,000
100	\$41,250	\$114,500	\$122,000
130	\$46,875	\$116,750	\$129,200
180	\$56,250	\$120,500	\$141,200
225	\$64,688	\$123,875	\$152,000
280	\$75,000	\$128,000	\$165,200
300	\$78,750	\$129,500	\$170,000
321	\$82,688	\$131,075	\$175,040
400	\$97,500	\$137,000	\$194,000
405	\$98,438	\$137,375	\$195,200
406	\$98,625	\$137,450	\$195,440
502	\$116,625	\$144,650	\$218,480
541	\$123,938	\$147,575	\$227,840
600	\$135,000	\$152,000	\$242,000
633	\$141,188	\$154,475	\$249,920
648	\$144,000	\$155,600	\$253,520
1000	\$210,000	\$182,000	\$338,000
1246	\$256,125	\$200,450	\$397,040

If you are contemplating applying to PON 3739 Category C, and the size of your Historically Farm-related Anaerobic Digester Gas-to-Electricity System is not indicated above, please contact Steve Hoyt or Tom Fiesinger (contact information is included on the second page of this PON) for assistance with computing the dollar amounts applicable to your situation.

* If the site has two (2) engines that are to both be refurbished summing to the system size (kW) shown above, add \$22,500 to the corresponding amount shown in the column labeled "Maximum Reimbursement for Power Generation Refurbishment."

Payment for Category C refurbishment tasks and equipment/materials will be cost-shared on a reimbursement basis only. 75% of actual costs incurred can be reimbursed up to the total award amount for each refurbishment activity included in the agreement.

Limitations

NYSERDA funding for Category C is intended to substantially refurbish and thereby extend the useful life of existing infrastructure; any expansion of the generating capacity of the legacy system achieved via the NYSERDA funding should only be minor and coincidental (activities concurrently undertaken by the applicant at their sole expense to expand the output is permissible).

Category C Provisions

Refurbishment work eligible for support is limited to work for which equipment purchase or construction is (1) initiated after NYSERDA's written approval of the Refurbishment Plan and (2) completed within 3 years of contract award.

C. Application Process

Applicants must complete the Application Form (Attachment C.1) which includes:

- Selection of the types of refurbishment activity funding requested. The maximum cost-sharing in each category is a function of the existing system's engine generator capacity (kW). Table C1 on page 15 contains the maximum cost-sharing amounts calculated for different kW capacities.
- A section in which the Applicant must provide a general description of the current state of the project and the anticipated refurbishment tasks that are necessary and sufficient to enable continued intended operation of the system for at least 7 years following the refurbishment.

The applications will be evaluated by NYSERDA for eligibility and reasonableness of the anticipated refurbishment tasks for continued operation. NYSERDA strongly encourages prospective applicants to contact Steve Hoyt or Tom Fiesinger (contact information is included on the second page of this PON) to discuss Category C prior to submitting their application.

D. Refurbishment Plan

Awardees of Category C must prepare a Refurbishment Plan with the assistance of a Professional Engineering consultant. The Refurbishment Plan must be submitted to NYSERDA for review, amendment and approval and must include the following:

- Assessment of the current state of all major components of the ADG-to-Electricity System and identification of the specific items in need of refurbishment and other needs to address in order to enable continued operation for 7 years
- Identification of necessary and sufficient refurbishment activities and identification of the Project Team including all subcontractors and documentation of their qualifications and hourly billing rates
- Recommissioning procedures to document successful completion of planned significant refurbishments
- Procedures for on-going monitoring and communicating data that document system energy production

If the Refurbishment Plan is determined by NYSERDA to be a complete and acceptable product and no further amendments are required, the Contractor may invoice NYSERDA for payment in the amount of \$15,000 for preparation of the Plan by a consultant. NYSERDA may accept the completed Refurbishment Plan for implementation, in which case eligible expenses associated with the refurbishment activities may be paid as further specified below, or NYSERDA may reject the Refurbishment Plan for being incomplete, in which case the \$15,000 will be withheld and funds for implementation of the Refurbishment Plan will not be disbursed. A Refurbishment Plan that does a complete and thorough review may invoice for payment of the \$15,000 for Refurbishment Plan preparation even if the Plan reaches the conclusion that implementation of the refurbishment activities should not proceed.

Note that labor costs detailed in the Refurbishment Plan should be based on most-favorable labor charge rates (including all overhead costs) for the work being undertaken to implement the refurbishment tasks. Additionally:

• Subcontractor rates that exceed \$150/hour may be subject to a rate analysis by NYSERDA. If subcontractor charge rates are found to be excessive, NYSERDA may reject the Refurbishment Plan.

 Farm labor charge rates should be justified based on historic payments made to wage earners and/or published or rate schedules that have been found acceptable via a recent federal or state government audit. Skilled farm labor, including that which is not typically/historically paid as an hourly wage, can be submitted for 75% reimbursement (under a contract resulting from PON 3739 Category C) at rates specified in the table Maximum Labor Cost Charge Rates for Contractor's Workers Without Documented Wage Rates in Attachment C.2.

E. Project Recommissioning Report

Upon completion of all refurbishment activities, NYSERDA will direct a technical consultant, paid by NYSERDA, to inspect the project and determine if the project has been refurbished in accordance with the Refurbishment Plan and has met the following requirements:

- 1. Documentation that recommissioning of the System is satisfactorily complete;
- 2. Documentation that the System remains interconnected with the utility grid, if producing power;
- 3. Documentation that the System has satisfactorily operated for at least seven consecutive days, post refurbishment and is not found to be emitting or venting significant quantities of methane not combusted by a flare nor destroyed by other means.
 - "Satisfactorily operated" for a power generation-related refurbishment means that the biogas-fueled kWh output averages at least 75% capacity factor;
 - "Satisfactorily operated" for a gas handling and H2S reduction refurbishment/installation means the biogas quality exiting the gas handling system averages less than 400 ppm or meets alternative specifications set in the approved Refurbishment Plan; and
 - "Satisfactorily operated" for digester and other related refurbishments means that the biogas
 production rates meet the specifications set in the approved Refurbishment Plan, which may be based
 on biogas output during past successful performance, biogas needed for 75% capacity factor power
 generation, or other reasonable specification factors set in the approved Refurbishment Plan.
- 4. Documentation that the System has demonstrated the ability to upload information to NYSERDA's DER Website.
- 5. Provision of As-Built Diagrams of a newly installed H2S reduction system, as needed.

F. Payments

A milestone payment by NYSERDA of \$15,000 will be made once NYSERDA determines that the Refurbishment Plan is acceptable in meeting the requirements of the Guide and Requirements for Developing an Implementing a Refurbishment Plan.

Payment for Category C refurbishment tasks and equipment/materials will be cost-shared on a reimbursement basis only. 75% of actual eligible costs incurred can be reimbursed up to the total maximum cost-sharing for each of the three types of refurbishment activities included in the agreement. The eligibility of such costs for reimbursement will be determined at NYSERDA's sole discretion. The Contractor may invoice NYSERDA not more frequently than once per month for eligible expenses and must provide a progress report which details the work accomplished and justifies the amount being invoiced. NYSERDA will pay 90% of the amount of each approved eligible NYSERDA payment in accordance with NYSERDA's prompt payment policy. The remaining 10% will be paid when the refurbishments outlined in the Refurbishment Plan have been completed and the Project Recommissioning Report is approved by NYSERDA. The project term is not to exceed 3 years or less from the award notification date.

IV.GENERAL CONDITIONS FOR CATEGORIES A, B, AND C

A. Proprietary Information - Careful consideration should be given before confidential information is submitted to NYSERDA as part of your application/proposal. Review should include whether it is critical for evaluating an application/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 applicant/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 Applicants/Proposers are required to answer questions during application/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 applicant/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/st220ex 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/st220ex 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>.

E. Contract Award –NYSERDA anticipates making multiple awards under all three Categories of this solicitation and expects to notify awardees within 90 days. A contract may be awarded based on initial applications/proposals without discussion, or following limited discussion or negotiations pertaining to the Statement of Work. Each application/proposal should be submitted using the most favorable cost and technical terms. NYSERDA may

request additional data or material to support applications/proposals. NYSERDA will use the Sample Agreements (A and B and C) to contract successful applications/proposals. NYSERDA may at its discretion elect to extend and/or add funds to any project funded through this solicitation and/or add funds to this solicitation's budget and/or adjust the allocation of the budget across the three categories in response to the quantity and quality of proposals/applications received. 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. Applicants/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.

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 <u>NYSERDA's Accessibility Requirements</u>.

G. Limitation - This solicitation does not commit NYSERDA to award a contract, pay any costs incurred in preparing an application/proposal, or to procure or contract for services or supplies. NYSERDA reserves the right to accept or reject any or all applications/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 applications/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 applicants/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 applicant/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 an applicant/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. Applicants/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

- A. Attachments for Category A
 - 1. Attachment A.1 Proposal Forms
 - 2. Attachment A.2 Site Control Letter
 - 3. Attachment A.3 QA/QC Requirements
 - 4. Attachment A.4 Sample Agreement for Category A
- B. Attachments for Category B
 - 1. Attachment B.1. Fillable Proposal Form
 - 2. Attachment B.2. Sample Agreement for Category B
- C. Attachments for Category C
 - 1. Attachment C.1. Application Form
 - 2. Attachment C.2 Guide and Requirements for Developing and Implementing a Refurbishment Plan
 - 3. Attachment C.3. Sample Agreement for Category C



"Advancing Agricultural Energy Technologies" Program Opportunity Notice (PON) 3809 \$3,000,000 Available

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

- Proposals Due*:
- Round 1 February 28, 2019 by 3:00 pm Eastern Time
- Round 2 September 26, 2019 by 3:00 pm Eastern Time

Program Summary: The Advancing Agricultural Energy Technologies (AAET) initiative (PON 3809) seeks to accelerate the adoption and market penetration of commercially-available clean energy technologies and practices with minimal market penetration ("emerging") by animal- and crop-production farms ("farms") in New York State. The technologies and practices must provide cost-effective energy efficiency improvements compared to current standard technology or practice; and must be replicable at farms throughout the state. Ideally, the technologies and practices will also provide other benefits to farms (i.e., process efficiency improvements, greenhouse gas (GHG) emissions reductions, reduced operating costs, improvements to local waterbodies). Eligible technologies and practices include, but are not limited to, hardware, software, process alterations, and new operating strategies.

The objectives of the AAET initiative are to demonstrate technologies and practices on Host Site Farms in New York State; validate performance of the technologies and practices through data collection and analyses; develop easy to understand technical and economic information that can be used by farms to make sound investment decisions associated with implementing the technologies and practices; and increase awareness of the technologies and practices via reporting and outreach to target audiences throughout the state.

NYSERDA has a total of \$3,000,000 available under this PON and plans to award one or more contracts. The NYSERDA cost-share of any project will not exceed 75% of total project costs. Additionally, NYSERDA will provide measurement and verification (M&V) for each project, which will be performed by M&V Technical Consultants (M&V TC) selected and funded by NYSERDA.

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 Kathleen O'Connor (Designated Contact) at (518) 862-1090, ext. 3422 or by e-mail <u>kathleen.oconnor@nyserda.ny.gov</u> or Jessica Zweig (Designated Contact) at (518) 862-1090, ext.3346 <u>jessica.zweig@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 nancy.marucci@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 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

There are over 35,000 farms in New York State, which in aggregate contribute \$5.4 billion annually to the state's economy. Total energy use on farms accounts for approximately 9% of total far expenditures, or approximately \$450 million annually. Of this, approximately one-third is spent on electricity and other non-electric utilities; and two-thirds is spent on gas, diesel, and other fuels. Farms operate under tight margins; and as such are focused on reducing operating expenses to maintain profitability and long-term viability. Clean energy technologies and practices represent major cost savings opportunities for farms; however, identifying and obtaining information on relevant technologies and practices to use as the basis of investment decisions can be onerous.

The Clean Energy for Agriculture Task Force (CEATF), created by Governor Andrew Cuomo and comprised of the state's leading agricultural market participants, developed a Strategic Plan that identified numerous strategies to address barriers and assist farms. One of these strategies is focused on farm energy efficiency; the AAET initiative is a component of this strategy. The AAET initiative seeks to achieve the following goals:

- Increase the number of farms adopting cost-effective, emerging technologies and practices associated with increasing energy efficiency;
- Increase communication and market awareness of the technologies and practices to promote adoption and market penetration.

The AAET initiative seeks to achieve these goals by:

- Demonstrating cost-effective, emerging technologies and practices at farms across New York State;
- Collecting, analyzing, and verifying data from the demonstrations, using third-party M&V technical contractors selected and funded by NYSERDA, to support claims that the technologies and practices provide cost-effective energy efficiency improvements;
- Developing easy to understand technical and economic information that can be used by farms to make sound investment decisions associated with implementing the technologies and practices, including capital and other installation requirements and costs, operation and maintenance requirements and costs, potential savings and payback, and other relevant cost benefit analyses.
- Disseminating the information to the agricultural community using webinars, workshops, events, and other strategies via resources trusted in the community (e.g., Cornell Cooperative Extension, PRO-Dairy) and peer-to-peer sharing.

II. Program Requirements

Definitions

- <u>Eligible Technologies/Practices</u>: Emerging technologies and practices that provide cost-effective energy efficiency improvements to farms in New York State, compared to current standard technology or practice, and are replicable throughout the state. Ideally, the technologies and practices will also provide other benefits to farms (i.e., process efficiency improvements, greenhouse gas (GHG) emissions reductions, economic, environmental). Eligible technologies and practices include, but are not limited to, hardware, software, process alterations, and operational strategies.
- <u>Emerging</u>: Commercially-available technology or practice with minimal market penetration; and having third-party performance data that can be provided to NYSERDA, which supports claims that technology or practice has previously demonstrated the ability to produce cost-effective energy savings and other benefits, as appropriate. Sources of data may include energy efficiency program administrators, utility researchers, national laboratories, independent research laboratories, colleges and universities, etc.
- <u>Greenhouse Gas (GHG) Emissions Reductions</u>: Reduced GHG emissions from farm operations and practices (e.g., livestock, agricultural soils/tilling practices, tractors, other non-electric vehicles) and those associated with grid electricity used by the farm.
- <u>Host Site Farms</u>: Animal- or crop-production farms that host a demonstration, which are located in New York State, and pay into the System Benefits Charge (SBC) on their electricity bill. A Program Participant may own or otherwise have an existing business relationship with Host Site Farms.
- <u>Measurement and Verification (M&V)</u>: The collection and analysis of data and other information used to compare base case and post-installation scenarios to determine the effectiveness and efficiency of the Eligible Technology/Practice.
- <u>Measurement and Verification Technical Consultant (M&V TC)</u>: A consultant selected and funded by NYSERDA to perform M&V for each demonstration project.
- <u>Participant Team</u>: The Program Participant, Host Site Farms(s), and any other entities that have committed to a project (i.e., will perform work on, provide services or equipment to, or provide cost sharing). Letter of Commitment from all members of the Participant Team must be included in the proposal.
- <u>Program Participant</u>: The entity that will enter into an agreement with NYSERDA if their proposal is recommended for funding. Program Participants will be required to:
 - Manage and co-fund the project.
 - Support the M&V process at the Host Site Farm(s), which includes providing ready access to relevant data, staff, and equipment.
 - Submit a project final report to NYSERDA, as well as interim reports at agreed-upon intervals, to share findings such as project performance, costs, barriers, and lessons learned.
 - Perform outreach activities, such as webinars, press events and releases, site tours, reports and articles, case studies, and presentations at conferences and seminars. If the technology or practice is not sufficiently proven by the end of the demonstration period, a brief final report will be submitted to NYSERDA, and no additional outreach activities will be required.
- <u>Proposer</u>: The entity who submits a proposal to PON 3809.

Eligibility

Teaming is strongly encouraged to enhance the likelihood of project success. Eligible Program Participants and Participant Team members include, but are not limited to:

- Developers, manufacturers, or vendors;
- Animal and/or crop production farm owners;
- Trade or professional organizations or utilities;
- Universities and other academic institutions.

The following categories of proposals will not be funded through this PON:

- Proposals requesting support for demonstrations of mature technologies and practices.
- Proposals requesting support for demonstrations of technologies and practices that are not commercially-available; or are currently under development.

III. Proposal Requirements

To be eligible for funding, proposals must:

- Show a potential to provide cost-effective energy efficiency improvements; and if applicable, other benefits to farms in New York State.
- Show the potential for replicability on farms across New York State.
- Provide third-party performance data that supports claims that the technology or practice is emerging and has previously demonstrated the ability to produce cost-effective energy savings, and if applicable, other benefits, compared to current standard technologies or practices.
- Provide an Outreach Plan that clearly and completely describes the approach to be used to achieve replicability in the target market.
- Provide cost sharing in the form of cash or in-kind labor, materials, equipment, facilities, or other resources of at least 25% of the total cost of the project.
- Include Letters of Commitment from all members of the Participant Team, including Host Site Farm owners.

A proposal may be considered non-responsive, and therefore will not considered in the review process, if it fails to comply with the Proposal Requirements listed above, the Specific Proposal Criteria below, or the General Conditions of Section V.

Specific Proposal Criteria

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., Contract Pricing Proposal Form, resumes, supporting materials associated with third-party data). 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.

- 1. Project Concept:
 - a. Technology/Practice:
 - i. Describe the technology/practice.
 - ii. Describe the measurable, quantitative energy efficiency goal(s) of the demonstration (e.g., to prove that by using an innovative configuration of sensors and emerging ventilation controls, energy efficiency on a pound per milk basis will increase from 10X kWh/pound milk to X

kWh/pound milk as a result of increased cow comfort, a subsequent increase in milk production, and energy use on par with the baseline conditions).

- iii. Describe the other goals of the demonstration (e.g., to prove the operating expenses can be reduced, to prove local water quality can be improved, to prove odors can be reduced)?
- iv. Provide third-party data that support your claims that the technology/practice is emerging, can achieve the energy efficiency goal(s), and other goals as applicable, and is superior to current standard technologies/practices? Please summarize data in the body of the proposal and include supporting materials, as appropriate, as attachments to the proposal.
 - b. Target Market(s):
- i. What target market(s) would benefit from use of the technology/practice (e.g., vineyards, dairy farms, orchards, crop-production farms, etc)?
- ii. Would the technology/practice be applicable to all farms in the target market(s); or would it only be applicable to farms within specific size ranges?
- iii. Based on the answers to 1 (b) i and 1 (b) ii, estimate the number of farms in New York State for which the technology/practice is relevant.
- iv. Based on the answer to 1 (b) iii, estimate the percentage of farms that could realistically be expected to install the technology/practice within the next five years if provided with information from a successful demonstration. Describe the assumption(s) on which this estimate is based.
- v. For replication to occur on these farms, would other barriers need to be addressed (e.g., purchase of unique equipment, specialized training, specific site requirements, large capital expenditures)?
- 2. Project Scope: Please be reminded that the goals of the program are to accelerate the adoption and market penetration of clean energy technologies/practices by animal- and crop-production farms in New York State.
 - a. Technology Evaluation Plan: Clearly and completely describe the approach you will use to assess if the technology/practice is operating properly (i.e., as designed) and successfully (i.e., achieving the energy efficiency goal of the project, and other goals as applicable).
 - b. Outreach Plan: Clearly and completely describe the approach you will use to achieve replicability in the target market (e.g., series of four webinars; workshops held in three distinct geographic location in the state; a case study of each Host Site Farm; an open house held at each Host Site Farm; etc); including the channels you will use to disseminate successful project results (i.e., Cornell Cooperative Extension, Pro-Dairy, other resources trusted by the agricultural sector, etc).
 - c. Describe each task of the project, including a Project Management Task, Technology Evaluation Task, and an Outreach task; and indicate who will perform each task.
 - d. Provide an estimated schedule for completing the project, including milestones for each of the tasks.
- 3. Project Benefits:
 - a. Briefly describe the Host Site Farm(s); and estimate the specific impacts to the Host Site Farm(s) associated with the project in terms of energy savings, and if applicable, other benefits.
 - b. Based on the answer to 1 (b) iv, estimate the impacts that would accrue state-wide in terms of energy savings, and if applicable, other benefits.

- 4. Participant Team: Identify all significant participants, their primary relevant qualifications, and their roles and responsibilities. Also, for the Host Site Farm(s), describe what is produced and approximately how much is produced per year.
- Budget: Complete the attached Contract Pricing Proposal Form showing the total project cost (including in-kind contributions) in the column labeled "Total Project Cost". Indicate requested NYSERDA funding in the column labeled "Funding & Co-funding via NYSERDA". NYSERDA's share of funding is limited to a maximum of 75% of total project costs. Digital versions of the Contract Pricing Proposal Form can be downloaded at <u>https://www.nyserda.ny.gov/Funding-Opportunities/Standard-Forms-and-Agreements</u>.
- 6. 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. Show the cost-sharing plan in the following format (expand table as needed):

	Cash	In-kind Contribution	Total
NYSERDA	\$	\$	\$
Proposer	\$	\$	\$
Others (list individually)	\$	\$	\$
Total	\$	\$	\$

7. Letters of Commitment: The proposal should include a Letter of Commitment from each Host Site Farm owner and any other entity who will perform work on, or provide services or equipment to, the project; or who provide cost sharing. The letter must describe the entity's proposed participation and/or financial commitment in the project; and letters from Host Site Farm owners must also confirm that NYSERDA and the M&V Technical Consultant will have access to the demonstration site to gather data and perform other necessary M&V tasks.

IV. Proposal Evaluation

Proposals that comply with the Proposal Requirements, as well as the General Conditions of Section V, 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. Concept Technology/Practice:
 - a. Is the technology/practice reasonable for the identified application? Has at least one quantifiable energy efficiency goal been identified and is it meaningful? Are there other benefits and if so, are they meaningful?
 - b. Have third-party data been provided that support claims that the technology/practice is emerging and has previously demonstrated the ability to produce cost-effective energy savings, and if

applicable, other benefits (e.g., process efficiency improvements, GHG emissions reductions, economic, environmental), compared to current standard technologies or practices?

Concept - Target Market(s):

- c. Is there a market for the technology/practice? Is it anticipated that a significant number of farms in New York State could realistically install the technology/practice within the next five years? If so, have these farms been identified/characterized in a meaningful way?
- d. Are there other barriers that need to be addressed for replication to occur on these farms? Are they surmountable?
- 2. Scope:
 - a. Is the Technology Evaluation Plan likely to achieve the project energy efficiency goal(s), and other goals as applicable?
 - b. Is the Outreach Plan likely to produce useful information describing project results? Does it include an approach for disseminating the information such that the material can be used by farms to make sound investment decisions associated with implementing the technology/practice within the next five years if the demonstration is successful?
 - c. Are the tasks reasonable; and once completed, will they result in achieving project goals? Is the schedule reasonable?
- 3. Benefits:
 - a. How significant are the potential energy savings to the Host Site Farm(s)? If applicable, how significant are the other benefits to the Host Site Farm(s)?
 - b. Based on the number of New York State farms that could install the technology/practice over the next five years, are the potential statewide energy savings significant? If applicable, are the other goals of the demonstration meaningful?
- 4. Participant Team Qualifications and Letters of Commitment:
 - a. Do the Project Participants have the necessary qualifications, experience, resources, and facilities to achieve the project goals?
 - b. Have credible letters of commitment from Project Participants been provided?
- 5. Project Budget and Cost-sharing: Is the overall cost reasonable and justified when measured against the project goals, statewide benefits, and project scope? Has a minimum 25% cost share been identified by the proposer?

Programmatic Considerations

NYSERDA may consider the following Program Policy Factors in making funding decisions:

- The degree to which the proposed project optimizes the use of available funding to achieve programmatic objectives.
- The degree to which proposed Host Site Farm(s) are geographically distributed, vary with respect to production focus (e.g., dairy farm, animal production farm, orchard, vineyard, other crop production farm), and vary with respect to size (e.g., head cattle, acreage, pounds produced annually).

Proposals Recommended for Funding

It is anticipated that proposers submitting proposals that are recommended for funding will be notified by NYSERDA within approximately eight weeks after a round due date. NYSERDA reserves the right to modify a project's Statement of Work; and may offer to fund a proposal at a lower level than that requested.

Proposals Not Recommended for Funding

Proposers submitting proposals that are not recommended for funding may request a de-briefing and may apply to a subsequent round, if applicable.

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 one or multiple award under this solicitation. NYSERDA anticipates a contract duration of up to 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 six 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 – Budget Form Attachment B – Sample Agreement



RICHARD L. KAUFFMAN Chair ALICIA BARTON President and CEO

Strategic Energy Management Pilot for Municipal Water Resource Recovery Facilities Program Opportunity Notice (PON) 3844

Applications due March 13, 2019* by 3:00 PM Eastern Time

Program Summary: The New York State Energy Research and Development Authority (NYSERDA) Program Opportunity Notice (PON 3844) seeks applications from New York State Municipalities, Sewer Districts, and Sewer Authorities interested in having the management and staff of their water resource recovery facilities (WRRFs) participate in Cohort 2 of a Strategic Energy Management (SEM) Pilot (pilot), which will be cost-shared 100% by NYSERDA. SEM is a holistic approach to managing energy use, focusing both on behavioral and operational changes, that results in continuously improving energy performance and long-term energy, cost, and carbon savings. The training, coaching, on-site activities, and peer-to-peer knowledge sharing to be provided will arm WRRF management and staff with the tools necessary to integrate energy management and continuous improvement into core practices.

NYSERDA is offering the pilot to municipal WRRF staff and management with the goal of expanding awareness of the benefits of SEM to, and subsequently, increasing penetration of SEM in, the WRRF sector. As such, participants must be willing to share results and lessons learned both internally and externally. Similar to Cohort 1, participation in Cohort 2 is offered to the management and staff of up to ten WRRFs that spend \$200,000 or more annually on energy (all fuels) and that contribute to the System Benefits Charge (SBC) on their electric utility bills.

Application Submission: Electronic 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. For ease of identification, all electronic files must be named using the applicant's facility name in the title of the document. NYSERDA will also accept applications by mail or hand-delivery if electronic submission is not possible. For detailed instructions on how to submit an application (electronic or paper submission), click the link for the Application Instructions and Portal Training Guide within the WRRF Strategic Energy Management: Pilot Solicitation (PON 3844) 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 Kathleen O'Connor (Designated Contact) at (518) 862-1090, ext. 3422 or by e-mail <u>energymanagement@nyserda.ny.gov</u> or Kathleen Dooley (Designated Contact) at (518) 862-1090, ext. 3475 or by e-mail <u>energymanagement@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 Standard 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 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 applications. The electronic application 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/Funding-Opportunities/Current-Funding-Opportunities.aspx.

I. INTRODUCTION

This solicitation is divided into the following components:

Section I: Introduction Section II: Definitions Section III: Program Description Section IV: Eligibility Section V: Application Requirements Section VI: Application Evaluation Section VII: General Considerations Section VIII: Attachments

The goal of the SEM Pilot for WRRFs (pilot) is to prove that when municipal WRRFs integrate SEM and continuous improvement into core practices, substantial, long-term energy, cost, and carbon savings are achieved. Management and staff from the following nine municipal WRRFs are currently participating in Cohort 1 of the pilot:

- Bird Island WRRF (Buffalo Sewer Authority)
- Southtowns WRRF (Erie County Sewer District)
- Van Lare and Northwest Quadrant WRRFs (Monroe County)
- Cortland WRRF (City of Cortland)
- Chemung County Milton Street WRRF (Chemung County Sewer District)
- North Tonawanda WRRF (City of North Tonawanda)
- Eastside WRRF (City of Oswego)
- Syracuse Metro WRRF (Onondaga County)

Preliminary results from Cohort 1 suggest strong savings for WRRFs; overall the group is on pace to save at least 5% annually on non-capital (operations and maintenance) projects alone.

The purpose of this PON is to obtain qualified participants for Cohort 2 of the pilot. Participants will gain access to training, coaching, site-specific activities and materials, and peer-to-peer knowledge sharing including:

- an energy assessment;
- an energy map/model;
- a list of identified energy savings opportunities and an implementation plan;
- a plan for wide-spread employee engagement;
- long term energy savings goals; and
- a method for systematic measurement and reporting of energy performance.

Data gathered from the pilot will expand awareness of the benefits of SEM, and subsequently, increase penetration of SEM in the WRRF sector. Participants are required to share challenges, success stories, and best practices to facilitate this sector transformation activity.

NYSERDA will provide 100% of the cost-share for WRRF management and staff to participate in Cohort 2 of the pilot; and is also pursuing Continuing Education Units (CEU) accreditation for participating operators.

NYSERDA reserves the right to determine the number of participants in Cohort 2 based on applications received. reserves the right to determine the number of Participants in Cohort I based on applications received.

II. DEFINITIONS

Cohort: Group of management and staff from up to 10 municipal WRRFs.

Energy Champion: The WRRF staff person designated as responsible for attending all training sessions, working directly with the Energy Coach, disseminating information to the Energy Team and other facility staff, and leading implementation of SEM at the WRRF.

Energy Coach: The team of wastewater experts under contract with NYSERDA to provide SEM training and technical assistance to cohort participants throughout the pilot. Vermont Energy Investment Corporation (VEIC) and Cascade Energy are currently under contract with NYSERDA to perform Energy Coaching duties.

Energy Team: A group of WRRF management and staff with diverse knowledge of WRRF processes and practices; and authorized to make operational changes as a normal part of their work. A strategically-selected and enthusiastic team is critical to the success of SEM. Ideally, the Representative for the Municipality/Sewer District/Sewer Authority will also participate as a member of the Energy Team.

Participants: The management and staff of the WRRF selected though this PON to participate in Cohort 2 of the pilot. If desired, a consultant working with WRRF management and staff may also participate in the training sessions.

SEM Pilot for WRRFs (pilot): PON 3844 is soliciting participants for Cohort 2 of the pilot. Management and staff from nine municipal WRRFs are currently participating in Cohort 1 of the pilot. The goal of the pilot is to prove that when municipal WRRFs integrate SEM and continuous improvement into core practices, substantial, long-term energy, cost, and carbon savings are achieved.

Representative for the Municipality/Sewer District/Sewer Authority: An employee whose responsibilities may include, but are not limited to, supervising, planning, directing, and administering public projects undertaken by the Municipality, Sewer District, or Sewer Authority, such as a Public Works Commissioner, Sewer District Executive Director, Sewer Authority Executive Director, etc.

III. PROGRAM DESCRIPTION

The pilot consists of two cohorts; Cohort 1 is currently underway. Each cohort participates in a structured series of NYSERDA-funded 'learn-by-doing' training sessions focus on behavioral and operational changes. Participants learn to identify areas for improvement, drive managerial and staff behavioral changes with respect to energy, and develop the mechanisms to track and evaluate energy optimization efforts. Over a period of 12-month, participants take part in an individual on-site kick-off meeting; five workshops; a webinar; and two additional individual on-site visits. All activities are led by an Energy Coach. The anticipated start date for the second cohort is early May 2019.

The curriculum and schedule are outlined below. Ideally, workshops will be held at participants' facilities; otherwise they will be held in meeting spaces convenient to participants (to the extent possible). Travel to the workshops may be required. Individual trainings will be held on-site at each WRRF. The Energy Champion is required to attend all training sessions; members of the Energy Team are strongly encouraged to attend all training sessions as well.

Month	Training Session	Session Type	Objective
	Site Visit #1 - On-site Kick-		Conduct baseline EMA at each WRRF. EMAs are a
1 - 2	off and Baseline Energy	Individual	facilitated process to benchmark current energy
1-2	Management Assessment	Training	management practices, focusing on organizational rather
	(EMA)		than engineered systems.

3	Workshop #1 - Establishing a SEM Program	Group Workshop	Introduction to SEM and how to get started. The key take- away from this workshop is that quick-wins are needed to jumpstart organizational change and leadership buy-in.
4	Workshop #2 - Saving Energy without Spending Money	Group Workshop	Learn about commonly-found energy savings within WRRFs that don't require capital investment; and develop other savings opportunities using straight-forward concepts and tools.
5	Webinar #1 - Metering Toolkit	Webinar	Develop skills needed to use data metering hardware to identify and vet energy-saving opportunities.
5 - 7	Site Visit #2 - Treasure Hunt	Individual Training	Guided on-site training to identify quick-wins and detailed list of actionable energy-savings opportunities.
8	Workshop #3 – Gaining Momentum and Tracking Energy Performance	Group Workshop	Learn to quantify the value achieved by quick-wins using customized Energy Intensity Models.
9	Workshop #4 – Cementing Action, Engaging Employees, and Capital Planning	Group Workshop	Learn about new and advanced technologies; strategies for incorporating energy efficiency into capital upgrades; and strategies for changing culture through employee engagement and recognition.
10 - 11	Site Visit #3 – Technical Coaching and Follow-up EMA	Individual Training	Uncover strengths and weaknesses in current energy management practices, including organizational barriers, and measure EMA progress against original baseline. Learn to motivate leadership to overcome barriers.
12	Workshop #5 – Presenting Accomplishments	Group Workshop	Learn to recognize, celebrate, and share accomplishments to generate enthusiasm for continued focus on energy improvements. The Energy Coach will work with each team to prepare a presentation of their SEM "story".

Program Deliverables:

During the 12 months of Cohort 2 of the pilot, the Energy Champion shall:

- Participate in all training sessions;
- Prepare and submit monthly deliverables as assigned during training sessions including:
 - Energy Management Assessments;
 - Document describing facility goals and metrics;
 - Updated Energy Intensity Model;
 - o Document describing energy drivers and energy savings opportunities; and
 - o Document describing implemented employee engagement activities.
- Prepare and submit annual energy savings report documenting results from efficiency projects; and
- Participate in peer-to-peer sharing with other Cohort members.

Following completion of the Cohort 2 training sessions, the Energy Champion shall:

- Over 12 months on a bi-monthly basis, participate in teleconference with NYSERDA and the Energy Coach to discuss the site's SEM progress and Energy Intensity Model maintenance;
- Over 12 months on a quarterly basis, submit the site's Opportunity Register, which describes energy savings resulting from implemented energy projects, to NYSERDA;
- Support development of a case study, including savings metrics; and
- On an as needed basis, share of information with NYSERDA for evaluation of the SEM Pilot for WRRFs initiative.

IV. ELIGIBILITY

Eligible participants in Cohort 2 include management and staff of WRRFs associated with New York State Municipalities, Sewer Districts, and Sewer Authorities that spend \$200,000 or more annually on energy (all fuels) and

that contribute to the System Benefits Charge (SBC) on their electric utility bills. In addition, Energy Champions must have the ability to attend all training sessions, which may include travel to workshops.

V. APPLICATION REQUIREMENTS

A complete Strategic Energy Management Application package must include the following:

- 1. Current, complete electric utility bill documenting payment into SBC
- 2. Completed Strategic Energy Management Pilot Participation Application (see Attachment A)
- 3. Letter of Commitment from Representative (see Attachment A)
- 4. Strategic Energy Management Participant Agreement (see Attachment B)

VI. APPLICATION EVALUATION

The goal of the evaluation process is to identify the Municipalities, Sewer Authorities, Sewer Districts that are most qualified and positioned for success in implementing SEM at their WRRFs. Applications that meet the application requirements will be reviewed by a Scoring Committee using the Evaluation Criteria identified below; achieving at least 70% of the Evaluation Criteria is required for WRRF management and staff to be considered for inclusion in Cohort 2. NYSERDA will notify each WRRF of the results of the review no later than six weeks after the application due date.

Commitment & Energy Efficiency Savings Potential

- Municipality/Sewer Authority/Sewer District demonstrates strong commitment to support pursuing long-term strategic energy management at their WRRF, including devoting staff/management labor to serving as Energy Champion and serving on Energy Team
- Municipality/Sewer Authority/Sewer District demonstrates commitment to supporting fast-track implementation of no- and low-cost energy efficiency improvements at their WRRF
- Application demonstrates high energy usage and/or costs associated with the WRRF
- Municipality/Sewer Authority/Sewer District demonstrates commitment to investing capital in energy efficiency improvements at their WRRF
- Municipality/Sewer Authority/Sewer District is willing to host a Cohort meeting at their WRRF

Knowledge & Culture

- Municipality/Sewer Authority/Sewer District demonstrates energy efficiency competency through the successful implementation of previous energy efficiency projects and activities at their WRRF
- Municipality/Sewer Authority/Sewer District tracks energy data at their WRRF
- Municipality/Sewer Authority/Sewer District demonstrates enthusiasm for behavioral and organizational change at their WRRF resulting from strategic energy management
- Municipality/Sewer Authority/Sewer District has internal energy-focused initiatives (e.g. energy policy, energy goals, energy plan) and/or has participated/is participating in external energy-focused initiatives (e.g. Better Plants)
- Municipality/Sewer Authority/Sewer District has an internal training structure in place at their WRRFMunicipality/Sewer Authority/Sewer District has a practice of celebrating success

Programmatic Considerations: NYSERDA may consider the following Program Policy Factors in making Cohort I selection decisions:

- Location of facility
- Municipality, Sewer Authority, Sewer District has more than one location in NYS

Accepted Applications: WRRFs selected for inclusion in Cohort 2 will be notified by NYSERDA in approximately six weeks after the application due date. NYSERDA will co-sign the Participation Agreement (Attachment B) and return the Agreement to the Participant for their files.

Denied Applications: Applicants whose applications are denied for participation in Cohort 2 may request a debriefing. If future cohorts are offered, applicants may apply to future cohorts.

VII. GENERAL CONSIDERATIONS

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 <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 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:

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

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 12 months, 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 enter into Strategic Energy Management Participation Agreement with successful applicants. NYSERDA expects to notify Participants in approximately six (6) weeks from the receipt of an application whether your application has been selected to receive an award. NYSERDA may decline to enter into a Participant Agreement 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> 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.

VIII. ATTACHMENTS

Attachment A: Strategic Energy Management Participation Application with Letter of Commitment Requirements Attachment B: Strategic Energy Management Participation Agreement



RICHARD L. KAUFFMAN Chair ALICIA BARTON President and CEO

Net Zero Portfolio Support

Program Opportunity Notice (PON) 3943 \$1 Million Available NYSERDA reserves the right to extend and/or add funding to the Solicitation should other program funding sources become available.

Applications accepted continuously through December 31, 2019 by 3:00 PM Eastern

Program Summary: The New York State Energy Research and Development Authority (NYSERDA) is accepting Applications from large owners of buildings and real estate portfolios who require support to develop performance standards and institutional mechanisms to enable the design, construction, or operation of Net Zero buildings. Applicants may include real estate developer-owners, colleges and universities, retailers, public sector entities, or other private, public, or non-profit entities ("Applicants"). Entities receiving NYSERDA support must establish an institutional definition of Net Zero, and must publicly commit to this Net Zero policy for future design, construction, renovation, and operation, for the whole portfolio or a clearly defined subset thereof. NYSERDA's assistance may support the development of portfolio-wide protocols, guidance documents, employee and contractor training procedures, peer design reviews of sites that pay into the New York State System Benefits Charge, or prototype designs, details, and specifications. NYSERDA may consider additional tasks at its sole discretion, that it determines are consistent with the intent of this solicitation.

Through this solicitation, NYSERDA may provide up to one hundred percent of the costs, up to a maximum amount of \$250,000 per approved Applicant on a first-come, first-served basis. The assistance will be provided by a Primary Energy Consultant (PEC) approved through NYSERDA's RFP 3771. It is expected that the NYSERDA team will work closely with the Applicant's team.

The assistance offered through this solicitation is for portfolio-wide initiatives. The design, construction, renovation, and operation of individual buildings will not be funded through this program. Individual building projects may participate in NYSERDA's other New Construction initiatives, or in other NYSERDA or utility programs.

Deliverables developed pursuant to this initiative may be made publicly available by NYSERDA. Activities undertaken with NYSERDA support through this PON are expected to be completed within eighteen (18) months of the issuance of an approved Task Work Order. Program engagements may be extended for up to twelve (12) additional months at NYSERDA's discretion, to complete the work.

* New York's System Benefits Charge (SBC), established in 1996 by the New York Public Service Commission (PSC), supports energy efficiency, education and outreach, research and development, and low-income energy assistance. To support the SBC program, the state's six investor-owned electric utilities collect funds from customers through a surcharge on customers' bills.

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 (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 Zach Zill (Designated Contact) at (518) 862-1090, ext. 3092 or by e-mail <u>zachary.zill@nyserda.ny.gov</u> or Steve Finkle (Designated Contact) at (518) 862-1090, ext. 3505 or by e-mail <u>Stephen.Finkle@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>Venice.Forbes@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, 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 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

The goal of this solicitation is to drive increased uptake of advanced clean energy buildings in New York State, by supporting owners of large portfolios who commit to Net Zero design, construction, renovation, or operations. Through this solicitation, NYSERDA intends to cultivate a group of leading businesses and institutions who set an example by demonstrating the technical feasibility and cost-effectiveness of Net Zero buildings.

Approved Applicants are expected to:

A. **Define the "Net Zero" portfolio policy**, which could be:

- 1. **Net zero energy**: A building or project where the total amount of energy used annually is roughly equal to the annual amount of renewable energy created on the site;
- 2. **Zero carbon**: A highly energy efficient building that produces on-site, or procures, enough carbon-free renewable energy to meet building operations energy consumption annually;
- 3. **Zero energy/carbon ready**: A highly efficient project that, with the addition of renewable energy systems on site or the purchase of renewable power, would be zero carbon;
- 4. **Zero energy/carbon adaptable**: A highly efficient project designed to enable the easy replacement of fossil fuel burning equipment with electric equipment, so the project could become zero carbon when electrified equipment becomes cost effective; or
- 5. NYSERDA may consider, at its sole discretion, another definition consistent with the above.

The policy must also define a clear scope for future Net Zero projects, whether applicable to the entire portfolio or to some clearly-defined subset, such as by building type or by construction type (ie, gut rehab vs. new construction).

The policy may include adjustments for projects with high plug or process loads, such as laboratories. At a minimum, the policy must ensure that buildings be designed to use 30% less source energy than the applicable Energy Conservation Construction Code (ECCC) of NYS.

For Applicants whose portfolios include buildings outside of New York State: all program eligibility requirements, participation requirements, and NYSERDA support are intended to apply only to the New York State portion of the portfolio.

B. Establish or update standards, protocols, procedures, or guidance documents for building design, construction, and operations, which may include any of the following:

- 1. Defining qualifications for design and construction teams and the expertise that the Applicant needs to have on staff or by contract.
- 2. Establishing efficiency or low carbon standards and strategies to be utilized on all projects.
 - a. For portfolios with similar building types (such as all multifamily buildings):
 Developing a replicable prototype design that achieves the desired performance.
 - (Replicable is defined as: right-sized, cost effective, and readily constructible) Developing cost/benefit (payback) analyses and tool(s) to account for
 - Developing cost/benefit (payback) analyses and tool(s) to account for incremental costs of measures identified in the standards/prototype, and the projected operational savings
 - Developing comprehensive standards, specifications, and/or details that are required or recommended. Standards, details, and specifications could include but are not limited to the following systems or sub-systems: building envelope assemblies, HVAC, lighting, domestic hot water, appliances, data centers, sensors, controls, and data loggers, miscellaneous equipment, renewable energy and energy storage, and space planning standards and space utilization programs. Special attention should be paid to systems that typically burn fuel on site, that are intended to become all-electric.
 - b. For portfolios with varied building types (such as universities with labs, classrooms, sports facilities, etc.):
 - Developing comprehensive standards, specifications, and/or details that are required or recommended. Standards, details, and specifications could include but are not limited to the following systems or sub-systems: building envelope assemblies, HVAC, lighting, domestic hot water, appliances, data centers, sensors, controls, and data loggers, miscellaneous equipment, renewable energy and energy storage, and space planning standards and space utilization programs. Special attention should be paid to systems that typically burn fuel on site, that are intended to become all-electric.
 - Such standards should reference the building types contained within the portfolio and note which standards would pertain to which building types.
 - Developing cost/benefit (payback) analyses and tool(s) to account for incremental costs of measures identified in the standards, and the projected operational savings.
- 3. Establishing design-phase protocols to ensure projects are designed in an integrated manner. This may include: template contract language/requirements; space utilization planning; early phase goal-setting charrette(s); design-phase input from construction experts and building operators; and regular reviews during design to ensure the performance goals and budget requirements are being met, including peer review.

- 4. Establishing construction-phase protocols to ensure that projects meet their design objectives, which may include: template contract language/requirements; identifying required training for construction teams or personnel; progress inspections; and as-built drawings and energy models capturing changes during construction.
- 5. Establishing protocols to ensure post-construction performance, which may include: requirements for commissioning, operations and maintenance; training of building operators; performance monitoring and real-time energy management; space-utilization planning and scheduling; and the potential to reduce energy use through occupant behavior. These protocols should identify what data is to be collected, audiences for the data, data presentation platforms, and data analysis and report methodologies.
- 6. Conduct peer review of project designs for sites that pay into the New York State System Benefits Charge program. Reviews may suggest alternatives, or other improvements to demonstrate the types of design changes that would need to occur to most cost effectively achieve required programming, and net zero performance.
- 7. The following Additional Services may be approved on a portfolio-by-portfolio basis, if funding permits:
 - a. Developing strategies and protocols for assessing and reducing the embodied carbon of projects;
 - b. Developing strategies and protocols for assessing and reducing the carbon emissions from transportation and waste during building operation.

Standards developed pursuant to this initiative will be made publicly available by NYSERDA.

II. Application Requirements

Eligibility

Applicants under this solicitation must meet the following criteria:

- 1) Applicant is a developer-owner or a public-sector entity;
- Applicant has publicly committed, or will commit, to designing, constructing, and operating newly built or renovated space in their portfolio or in a clearly-defined subset thereof, to meet Net Zero performance*;
- 3) Applicant has built or has under construction at least one project of at least 100,000 gross sq. ft. that was designed to perform at least 30% better than the applicable ECCC of NYS;
- 4) From 2013-2023, Applicant has constructed or plans to construct in New York State projects with a total gross floor area greater than 2.5 million sq. ft. For owners electing a net zero standard for a subset of their portfolio, this size threshold would apply to the subset.
- 5) Entities must own and operate at least 2.5 million sq. ft. of buildings that pay the System Benefit Charge.

* Public commitments may be made through a NYSERDA press release and posting to a list of Net Zero Portfolio Owners on NYSERDA's website; or through another mechanism of Applicant's choosing, subject to NYSERDA approval. Commitments must be made before NYSERDA issues Notice to Proceed to the Applicant's selected PEC.

For Applicants whose portfolios include buildings outside of New York State: all program eligibility requirements, participation requirements, and NYSERDA support are intended to apply only to the New York State portion of the portfolio.

Application Process

Applications may be submitted as detailed above in Application Submission. The Application package consists of the following:

- Application form
- Supporting Documents (using NYSERDA templates, see Attachments):
 - Proof of past, current, and future project pipeline (Attachment A)
 - Proof of past completion of one high performance project (Attachment A)
 - Proposed definition of Net Zero and proposed Scope of Work (Attachment B page 1)
 - Pre-existing Net Zero commitment, if applicable

Applications will be reviewed in the order that they are received. Applicants will be notified of acceptance or rejections within six (6) weeks after a complete application is received. Any clarification required by NYSERDA review staff will be communicated to the Applicant via written comments. Applicants will be required to respond to comments in a timely fashion. If there is a significant delay in Applicant's response to NYSERDA comments, NYSERDA reserves the right to disqualify or reject the application.

III. Program Requirements

Program Participation Process

Applicants who meet the minimum eligibility requirements will be accepted into the program on a first-come, first-served basis, through December 31, 2018, or as long as funding is available. After NYSERDA's review of an application determines an Applicant is eligible to receive support, program participation proceeds as follows:

- Applicant will select a PEC approved under the Advanced Clean Energy Buildings Facilitation service category through NYSERDA RFP 3771. PEC selection for Applicants that are public sector entities must follow the Applicant's institutional procurement requirements.
- 2) Applicant will hold a 1-hour long scoping meeting with NYSERDA and selected PEC.
- 3) Applicant will work with selected PEC and with NYSERDA to develop, refine, and finalize the Scope of Work proposal.
- 4) PEC will submit final Task Work Order (TWO) Scope and Budget proposal to NYSERDA for approval.
- 5) Applicant will publicly commit, if they have not done so already, to Net Zero policy as defined in the TWO, through a NYSERDA press release or through another mechanism of Applicant's choosing, subject to NYSERDA approval.
- 6) NYSERDA will issue Notice to Proceed to Applicant's PEC.
- 7) PEC and Applicant will carry out the work and submit milestone and final deliverables, subject to NYSERDA review and approval, and as defined in the TWO.
- 8) NYSERDA may elect to make publicly available the approved final deliverable(s) developed with the support of this initiative.

Activities undertaken with NYSERDA support through this PON are expected to be completed within eighteen (18) months of the issuance of an approved Task Work Order. Program engagements may be extended for up to twelve (12) additional months at NYSERDA's discretion, to complete the work.

Program Payments & PEC Maximum allowance

Payments under this solicitation will be made by NYSERDA directly to the Applicant's selected PEC. Milestone payments will be made by NYSERDA to the PEC based on the submittal and approval of deliverables as identified and scheduled in the Task Work Order. For any services above and beyond those identified in the NYSERDA-approved Task Work Order, the Applicant is expected to enter into a separate contract with the selected PEC.

No single PEC may receive more than \$250,000 in NYSERDA support under this program.

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.

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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

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anticipates a contract duration of eighteen (18) months, 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 Task Work Order (Attachment B) 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 six (6) 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.

V. ATTACHMENTS:

Attachment A – Project Pipeline Worksheet Attachment B – Task Work Order Template Attachment C – Terms & Conditions

The following request REQ 3943 was submitted on May 25, 2018 by zachary.zill

Paste Amendment Text Here

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



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.

Round 1 Proposals Due: December 13, 2018, 3:00 PM Eastern Time* Round 2, March 13, 2019; Round 3, May 23, 2019; Round 4, August 6, 2019, Round 5, October 22, 2019; Round 6 January 23, 2020. Rounds 2-6 dependent upon 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:
 - Veterans
 - 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.
 - 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. Solicitations specifically targeting offshore wind training will be issued in the future.
- "Training providers" must have training locations located in System Benefits Charge/Clean Energy Fund (SBC/CEF) service territories and 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.

A minimum of \$7 million is available in multiple rounds for projects to develop and/or deliver training, hands-on experience and job placement assistance. 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. Proposals below \$50,000 or above \$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.

Proposers must provide a 30 percent cost share. Cost share can be in the form of cash, labor costs, equipment donations, etc. Proposers must 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.

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 trainings funded under this solicitation must be held within SBC/CEF service territories, and the training must be designed to meet the needs of energy efficiency and clean technology businesses within the SBC/CEF territories.

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 Vicki.Colello@nyserda.ny.gov or Adele Ferranti at (518) 862-1090, ext. 3206 or by e-mail Adele.Ferranti@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 Nancy.Marucci@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 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

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:

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

- 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 is also developing new 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
 - 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

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.

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. Solicitations specifically targeting offshore wind training will be issued in the future.
- "Training providers" (description and requirements in Section II) must pay into and have training locations located in the SBC/CEF service territory and can include technical high schools, community colleges, universities, trade associations, manufacturers, unions, community-based organizations and non-forprofit 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. 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.

Proposers will be required to provide a 30 percent cost share, which 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.

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, personal devices and cell phones **are not** eligible for NYSERDA funding. Reasonable, in-state travel is eligible for NYSERDA funding.

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 services/trainings funded under this solicitation must be held within SBC/CEF service territories, and the training must be designed to meet the needs of energy efficiency and clean technology businesses within 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, students 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 students 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 students 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 students. 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.
- 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, 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 where available 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 students/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:

- 1. SBC/CEF requirements must be met.
- 2. 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.
- 3. 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.
- 4. 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? 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 students 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?

Does the proposal address preferences for targeting both priority populations and recruiting workers from potential environmental justice areas?

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/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</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.

VI. Attachments:

Attachment A – Funding Application Form Attachment B – Sample Agreement including Exhibit A - Template Statement of Work Attachment C – Budget Form



RICHARD L. KAUFFMAN Chair ALICIA BARTON President and CEO

On-the-Job Training for Energy Efficiency and Clean Technology Program Opportunity Notice PON 3982 \$10 Million Available NYSERDA reserves the right to extend and/or add funding to the Solicitation should other program funding sources become available

Applications accepted through October 31, 2020 by 3:00 PM Eastern Time, or until funds are fully committed, whichever occurs first

Program Summary

The New York State Energy Research and Development Authority (NYSERDA) is seeking proposals to advance the goals of the Clean Energy Fund (CEF) by developing a workforce equipped to perform jobs in energy efficiency and clean technology, including training workers with skills and credentials to design, manufacture, specify, sell/distribute, install, operate, maintain, repair, audit, and inspect clean energy technology and systems. For the purposes of this solicitation:

- "Workers" include those individuals who design, manufacture, specify, sell/distribute, install, operate, maintain, repair, audit, inspect, and train people on energy efficiency and clean energy technologies and systems.
- "Priority populations" of potential hires (or Priority Workers) include the following groups:
 - Veterans
 - Native Americans
 - Individuals with disabilities
 - Low-income individuals at or below 60% of State median income, including those participating in Temporary Assistance for Needy Families (TANF), Supplemental Nutrition Assistance Program (SNAP), Home Energy Assistance Program.
 - Unemployed power plant workers
 - 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 Potential Environmental Justice (EJ) Areas, as defined by the New York State Department of Environmental

Conservation (NYSDEC)¹, with job opportunities. In addition to the health and other negative impacts to quality of life caused by these environmental burdens, residents of Potential EJ Areas typically face multiple barriers of access to stable, living-wage employment. NYSERDA encourages proposers to include efforts to recruit residents from Potential EJ Areas, as defined by NYSDEC.

"Eligible Applicants" are energy efficiency and clean technology businesses and business or labor management organizations working on behalf of energy efficiency or clean technology businesses located in New York State. Such businesses must provide services in the following areas: 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. Additional targeted areas related to energy efficiency and clean technology areas may be included in the future. Energy efficiency and clean technology training providers also may apply for OJT support to expand their clean energy training staff.

NYSERDA is requesting proposals from eligible applicants seeking incentives to hire and provide on-the-job training (OJT) for workers for energy efficiency and clean technology jobs. Additional incentives are available for priority populations, as identified above.

Eligible applicants that are training entities must be: a private for-profit business (including LLPs and LLCs), a private not-for-profit business, or a private for-profit or private not-for-profit training provider (including private colleges and universities).

Applications will be accepted on a continuous <u>first-come</u>, <u>first-served basis</u> until funds are expended. For eligible energy efficiency and clean technology businesses with 100 employees or less, NYSERDA will pay 50 percent of a new employee's hourly wage for 16 weeks. If the employer hires an employee from one of the priority populations defined above, NYSERDA will pay 50 percent of a new employee's hourly wage for 24 weeks. Businesses with 101 employees or more are eligible for OJT incentives for an individual in a priority population <u>only</u>, at 50 percent of a new employee's hourly wage, for 24 weeks. Eligible Applicants will be required to provide a 50 percent cost share, and NYSERDA funding is capped at \$100,000 per business/applicant and a maximum of \$16 per hour for the NYSERDA cost share for each hire.

PON 3982 application begins with the submission of a notice of "Intent to Apply" by the Eligible Applicant via email to NYSERDA (<u>PONOJT@nyserda.ny.gov</u>). Please see application details within.

All program questions should be directed to: Vicki Colello, Designated Contact, <u>Vicki.Colello@nyserda.ny.gov</u>, (518) 862-1090, ext. 3273, or Adele Ferranti, <u>Adele.Ferranti@nyserda.ny.gov</u>, (518) 862-1090, ext. 3206. All contractual questions should be directed to: Nancy Marucci (Designated Contact) at (518) 862-1090, ext. 3335 or <u>Nancy.Marucci@nyserda.ny.gov</u>.

I. Introduction

NYSERDA's On-the-Job Training (OJT) for Energy Efficiency and Clean Technology program will provide incentives to Eligible Applicants for OJT to reduce the financial risk of hiring and training new workers. NYSERDA is working closely with the New York State Department of Labor (NYSDOL) to deliver this OJT program to develop job skills for new workers in energy efficiency and clean technology businesses. This program is intended to advance the goals of the Clean Energy Fund (CEF) by developing a workforce equipped to perform jobs in energy efficiency and clean

¹ As established in <u>DEC Commissioner Policy 29 on Environmental Justice and Permitting</u> (CP-29), Potential EJ Areas are U.S. Census block groups of 250 to 500 households each that, in the Census, had populations that met or exceeded at least one of the following statistical thresholds: (1) At least 51.1% of the population in an urban area reported themselves to be members of minority groups; or (2) At least 33.8% of the population in a rural area reported themselves to be members of minority groups; or (3) At least 23.59% of the population in an urban or rural area had household incomes below the federal poverty level. See <u>https://www.dec.ny.gov/public/911.html.</u>

technology, including providing workers with skills and credentials to design, manufacture, specify, sell/distribute, install, operate, maintain, repair, inspect, and train on clean energy technology and systems.

NYSDOL will assist Eligible Applicants with developing OJT training plans as well as assessing necessary skills and available workers that match those skills. OJT initiatives that advance the goals of the CEF by developing a workforce equipped to implement energy efficiency and clean technology jobs are eligible for funding. The goals are to advance the occupational skills of new workers through OJT without undermining pay structures for skilled workers. 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.

For the purposes of this solicitation, OJT is defined as training provided by an Eligible Applicant to an employee while the employee is engaged in productive work in a job. The primary purpose of OJT funding is to train new hires for entry-level work. An individual's skills are assessed (with the assistance of NYSDOL's Business Services or Apprenticeship Representatives (BSR), as described below) prior to employment, and the gap between their skills and those required to perform the full job duties is identified. Working with the NYSDOL, a training plan is developed to address skill gaps. OJT, for the purposes of this solicitation, must teach the trainee occupational skills (skills that apply to the specific job the trainee is entering, such as conducting an audit, installing insulation, smart grid technologies, heat pumps, etc.).

Eligibility

Eligible Applicants as defined above must meet these additional basic requirements:

- 1. The Eligible Applicant must have at least one physical business location in New York State at the time of application.
- 2. The Eligible Applicant must conduct OJT at a NYS job location and must be able to demonstrate that the OJT is related to CEF goals of increasing energy efficiency and the use of clean energy technologies and decreasing greenhouse gas emissions.
- 3. The Eligible Applicant must have met all requirements and completed all deliverables under any prior NYSERDA contracts or NYSDOL grants.
- 4. The Eligible Applicant must provide all information requested in the Application Process outlined in this PON and have clearly set objectives for the use of funds.
- 5. The Eligible Applicant who enters into an OJT agreement must attest to compliance with all applicable labor laws, and that it has not failed to file any applicable local, state or federal tax returns, nor failed to pay New York State Unemployment Insurance. The NYSDOL will conduct a due diligence search to confirm this information.
- 6. The Eligible Applicant must have at least two or more employees or the equivalent of two full-time employees. Principals of corporations and owners of businesses such as sole proprietors or partners are not considered to be employees for this eligibility requirement. If the applicant has no employees or if the workers are independent contractors, subcontractors or contract employees, they are not eligible. However, if an applicant leases its employees for payroll and tax reporting purposes, and has authority over the hiring, firing and scheduling of workers, they would be eligible for funding consideration.
- 7. The candidate being hired under the incentive program must reside in NYS.

Funding

Up to \$10 million is being made available to advance worker skills through OJT by facilitating worker recruitment and hiring of entry-level workers, including priority populations as described in the Program Summary. NYSERDA reserves the right to extend and/or add funding should other program funding sources become available.

The maximum OJT award amount for a business is \$100,000. For eligible energy efficiency and clean technology businesses with 100 employees or less, NYSERDA will pay 50 percent of a new employee's hourly wage for 16 weeks. If the employer hires an employee from one of the priority populations defined above, NYSERDA will pay 50 percent of a new employee's hourly wage for 24 weeks. Businesses with 101 employees or more are eligible for OJT incentives <u>only</u> for an individual in a priority population, at 50 percent of a new employee's hourly wage for 24 weeks. Applicants will be required to provide a 50 percent cost share, and NYSERDA funding is capped at \$100,000 per business/applicant and a maximum of \$16 per hour for the NYSERDA cost share for each hire. There is no minimum award amount per applicant. All awards are subject to funding availability.

Eligible Applicants may apply for funding more than once to add OJT positions, if the total requested is under the \$100,000 cap. Additional awards will be made on a first-come first-served basis and are subject to funding availability.

For the purposes of determining the maximum award, the term "Eligible Applicant" includes all entities in which the Eligible Applicant has a 10 percent or greater interest in ownership or control. Eligible Applicants with multiple branches, locations and/or related companies under separate names with unique Federal Employer Identification Numbers (FEINs) will generally be considered separate Eligible Applicants but may be considered a single Eligible Applicant at the sole discretion of NYSERDA. National or chain accounts are considered a single "Eligible Applicant" and subject to the maximum incentive per applicant.

Contract payments will be made to Eligible Applicants only and will be on a reimbursable basis (i.e., the employee must be paid full wages before the Applicant requests an allowable reimbursement payment from NYSERDA). The Eligible Applicant must submit requests for reimbursement of wages and training support that have been paid in accordance with the approved contract budget. The contract budget will generally require reimbursement requests to be submitted within 20 days after the end of each month.

Please note: If funding becomes limited, if interest is limited as evidenced by lack of response to this PON, or if there is no longer a valid need for the services, the program will be suspended with notice in the New York Contract Reporter and posted on NYSERDA's web site: https://www.nyserda.ny.gov/Funding-Opportunities/Current-Funding-Opportunities

Those applications that are received after the suspension date will not be considered for funding.

NYSERDA and NYSDOL will work with Applicants on OJT applications, training plans and program monitoring.

II. Application and Evaluation Process

The OJT program application begins with the submission of an "Intent to Apply" via e-mail to NYSERDA to PONOJT@nyserda.ny.gov and then requires the submission of a detailed application, which will be prepared with assistance from a NYSDOL Business Services Representative. **The resulting OJT contract will be between NYSERDA and the Applicant.**

To submit an "Intent to Apply" under this solicitation, the Applicant must send an e-mail to <u>PONOJT@nyserda.ny.gov</u>. Please write "**PONOJT Intent to Apply**" in the subject line and include the following information in the body of the e-mail:

• Applicant name

- Utility Service Provider
- Address
- Federal Employer Identification Number (FEIN). Your FEIN is NOT your Social Security Number (SSN). Do NOT submit an SSN to NYSERDA via email. If you do not have a FEIN, or if you think your FEIN is an SSN, please submit all other information requested except for the FEIN and call Kelli Herndon at 518-862-1090, ext. 3392 for alternative options.
- Existing NYSERDA partnership agreement or contract (if the applicant has one)
- Contact Person:
 - o Name
 - o Title
 - Phone Number
 - o E-mail Address
- Title and salary range for each anticipated position

Preliminary Evaluation by NYSERDA – Upon receipt of the "Intent to Apply" email, the Applicant will be screened for eligibility by NYSERDA.

"Intent to Apply" e-mails will be accepted on a continuous basis until all funds for this program have been committed. Application reviews and award decisions will be made on an ongoing basis until all funds available for this program have been fully committed. Unsuccessful applicants will be notified of their application's status along with reasons for the decision. Applicants will be able to address deficiencies and reapply.

- Contact and Evaluation by NYSDOL For Applicants who meet eligibility criteria or resolve unmet eligibility criteria, NYSERDA will forward the "Intent to Apply" information to NYSDOL for further processing. The Applicant will then be contacted by a NYSDOL Business Services Representative (BSR). The NYSDOL Representative will work with the applicant on recruitment, skills assessment and the application process, described below.
- 2. Identify List of Candidates The BSR will identify a list of candidates to meet each Applicant's hiring needs. The BSR will share the list of candidates with the Applicant, schedule an in-person meeting with the Applicant to discuss desired candidates to be interviewed, and review the interview schedule. The meeting will also include an assessment of the potential OJT needs of the candidates, and applicable benefits available to the Applicant through Work Opportunity Tax Credits and other available hiring benefits. The BSR also will develop a training plan with the Applicant, obtain required signatures and submit the plan to NYSERDA for contract development.
- 3. Interviewing and Identification of Desired Candidates Applicants will conduct interviews and determine the candidate(s) they are interested in hiring.
- 4. **Application Development –** The BSR will work closely with the Applicant to develop OJT applications for desired candidate(s). **The application is not completed until a candidate is chosen for hire.**
 - **a.** Applicants will work with NYSDOL to design and describe an OJT program to teach workers the skills needed to perform clean energy/energy services work effectively.
 - **b.** The final application will require original signatures on all documents (copies will be made by the BSR).

- 5. **Application Review and Contract Development** Once the application is complete, the application will be submitted to NYSERDA by the Applicant for final review.
 - If approved, an award letter will be issued and a contract between the Applicant and NYSERDA will be sent for review and signature. The approved application will be used as the basis for the contract.
 - If not approved, the Applicant will receive a letter of explanation and will be referred to the BSR for additional assistance in resubmitting an application.
- 6. **Hiring of Desired Candidate** For a new hire, the desired candidate may begin his or her employment at any time after the date the award letter is issued to the business. For past employees who are rehired, training to address the skills gap may begin after the date of the award letter. The Applicant must submit reimbursement requests to NYSERDA for wage reimbursements per the terms of the contract.
- 7. **Documentation of OJT Activity** Applicants must provide documentation of OJT activities within the first four (4) weeks of executing a contract. NYSERDA reserves the right, in its sole discretion, to terminate any agreement with a business that does not meet this obligation, in accordance with the terms of the attached Sample Agreement.
- 8. **Follow-up and Monitoring** –NYSERDA staff or Business Services Representatives will conduct monitoring over the term of the contract.

III. Requirements and Assurances

- 1. The Applicant must have the legal authority to hire employees and conduct business in New York State.
- 2. The OJT must occur at a physical business location in New York State. The maximum duration of OJT is four months, or up to a maximum of six months for priority populations.
- 3. The OJT must be for a full-time job opportunity (defined as 35 hours or more per week).
- 4. Wage calculations to determine OJT reimbursement can not include payment for holiday or overtime hours worked.
- 5. The hires must become employees of the Applicant and not independent contractors or contract employees.
- 6. The Applicant may not apply for positions based on the addition of commission or tips to a sub-minimum wage base salary.
- 7. The Applicant receiving OJT funds must be in good standing regarding: Unemployment Insurance records; WARN notices²; ongoing investigations with NYSDOL's Public Works, Labor Standards and/or Safety and Health Divisions; registration with the NYS Department of State's Division of Corporations; Workers Compensation Insurance and Disability Insurance coverage; federal OSHA records; and contracts/agreements from NYSDOL and NYSERDA received during the past three years.

The Applicant must be willing to assure the following:

1. The Applicant's intention in participating is for the newly hired and/or current employee to remain employed with the business upon completion of the OJT.

² Information on WARN notices can be found here: <u>http://www.labor.ny.gov/workforcenypartners/warn/warnportal.shtm</u>.

- 2. OJT will take place during the employee's work hours (i.e., during the shift/hours for which the worker was hired), and the employee will be compensated at no less than their normal rate of pay.
- 3. No worker shall be displaced by the OJT employee, including a partial displacement such as a reduction in the hours, wages, or employment benefits.
- 4. The business will comply with New York State labor law and federal law for the protection of workers.

Reporting

If an Applicant is awarded a contract, it becomes the "Contractor." The Contractor must agree to the following terms and conditions regarding OJT expenses:

1. The Contractor must maintain a copy of all applications/training plans applicable to this contract and must make the agreements/training plans available to NYSERDA upon request.

2. The Contractor must keep records of the trainee's progress according to the application/training plan and must make these records available to NYSERDA and NYSDOL upon request.

3. The Contractor must acknowledge that failure to maintain the required OJT records will result in disallowance of OJT costs.

4. The Contractor also must acknowledge that on-site fiscal and programmatic monitoring of contract activities will take place at regular intervals during the contract by either NYSERDA or NYSDOL staff. Requested records must be made available to representatives during these monitoring visits.

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 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 award(s) under this solicitation. NYSERDA anticipates a contract duration of up to six months, unless NYSERDA management determines a different structure is more efficient based upon applications 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. 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 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 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: Application Form Attachment B: Sample Agreement



RICHARD L. KAUFFMAN Chair ALICIA BARTON President and CEO

New York State Clean Energy Internship Program Program Opportunity Notice (PON) 4000 \$10.5 Million Available NYSERDA reserves the right to extend and/or add funding to the Solicitation should other program funding sources become available

Applications accepted through: December 30, 2024 by 3:00 PM Eastern Time

Program Summary

Through this program, the New York State Energy Research and Development Authority (NYSERDA) will provide funding to clean energy businesses interested in hiring interns to perform meaningful work in the clean energy sector. With this Program Opportunity Notice (PON), both clean energy business and interns apply to participate in the program. NYSERDA will collect applications from both the businesses and potential interns and verify business and intern eligibility to participate in the program. Accepted businesses will select, interview and make an offer to intern candidates.

For the purposes of this solicitation:

"Eligible Businesses" are energy efficiency and clean technology businesses, including start-up companies, or business or labor management organizations working on behalf of energy efficiency or clean technology businesses. Eligible businesses must also be a private for-profit business (including LLPs and LLCs) or a private notfor-profit business. Eligible businesses must be located in the System Benefits Charge (SBC)/Clean Energy Fund (CEF) service territories, as defined below, and provide services related to research, manufacture, design, procurement, installation, operation, commissioning, technical sales, etc., in the following areas:

- Energy Efficiency- including lighting; heating, ventilation and air conditioning; air source heat pumps; advanced building materials; insulation and air sealing and; other high efficiency product and services.
- Renewable Electric Power Generation- including solar, wind; geothermal, low-impact hydropower and, other renewable generation technologies.
- Grid Modernization and Energy Storage- including smart grid, microgrid, demand response management and, grid storage.
- Alternative Transportation including electric, hybrid, plug-in hybrid and fuel cell/hydrogen vehicles, battery storage, as well as natural gas and other alternative fuel buses.
- Renewable Fuels including biofuels such as wood pellets and ethanol

"Eligible Interns" are: students attending or having attended a college or university located in New York State within the last calendar year; a New York State resident attending or having attended a college or university outside of New York State within the last calendar year; or an 18- to 24-year-old participating in a work preparedness training program such as Board of Cooperative Educational Service (BOCES), technical high schools, AmeriCorps NCC, the Excelsior Conservation AmeriCorps, etc. Note that internships for out-of-state students must take place during the summer session.

Applications from eligible businesses will be accepted on a continuous <u>first-come, first-served basis</u> each term until funds are expended. Funding limits of approximately \$1.75 million per year (2019-2025), are outlined for each term in the funding section. It is anticipated that annual funding will support over 450 interns per year. Funding may be adjusted depending on demand and availability of additional funds.

Eligible businesses with 20 or fewer employees will be reimbursed 90 percent of intern wages. Eligible Businesses with 21 to 100 employees are eligible for reimbursement of 75 percent of an intern's wages and those with 100 employees or more, NYSERDA will pay 50 percent of an intern's hourly wages. Businesses can hire up to five interns per session with a total of 12 over the life of the program.

Eligible intern applicants can apply on NYSERDA's website for fall, spring, or summer terms. New applications should be submitted each term.

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 companies that participate under this PON must have offices in the SBC/CEF service territory or, if a training provider, must have training locations in SBC/CEF service territory. Any new hire supported under this PON must work in SBC/CEF territory.

All program questions should be directed to Angela Datri, Designated Contact, <u>Angela.Datri@nyserda.ny.gov</u>, (518) 862-1090, ext. 3515, or Adele Ferranti, Designated Contact, <u>Adele.Ferranti@nyserda.ny.gov</u>, (518) 862-1090, ext. 3206. All contractual questions should be directed to Nancy Marucci (Designated Contact) at (518) 862-1090, ext. 3335 or <u>Nancy.Marucci@nyserda.ny.gov</u>.

I. Introduction

The New York State Clean Energy Internship Program is a workforce development initiative offered through NYSERDA. The program focuses on enhancing the talent pipeline for New York State businesses engaged in the clean energy industry by facilitating the placement of students and recent graduates considering career opportunities in clean energy into paid internships across the state. Consistent with NYSERDA's role as a catalyst in growing the talent needed by the clean energy industry, the internship program is designed to provide interns and businesses with the tools to connect. NYSERDA reimburses eligible businesses for a percentage of the intern's wages.

Prospective interns looking for an internship in the clean energy industry are required to complete an online application through NYSERDA's web portal https://nyserda.ny.gov/All-Programs/Programs/Clean-Energy-Workforce-Development/NYS-Clean-Energy-Internships/Prospective-Interns and include a cover letter, resume, and transcripts. Students will be asked to identify their academic background, the industry subsector in which they would prefer to intern, and the geographic location where they are available to work.

Eligible businesses looking to host interns also apply through NYSERDA. Businesses interested in hiring an intern will complete an application. The NYS Department of Labor (NYSDOL) will assist NYSERDA in screening businesses for eligibility. Eligible businesses will then review intern applications shared with them by NYSERDA and select candidates with the qualifications that are most suited to their needs. Host businesses must provide a meaningful internship opportunity. A meaningful internship is a form of experiential learning that integrates knowledge and

theory learned in the classroom with practical application and skills development in a professional setting. Internships give students the opportunity to gain valuable applied experience and make connections in professional fields they are considering for career paths; and give employers the opportunity to guide and evaluate talent.

Internships take place over a particular session (fall, spring, or summer) on a full- or part-time basis. Full-time internships are only available for the summer session. Upon completion of the internship, eligible businesses will request a reimbursement from NYSERDA for the wages paid to the intern.

Business Eligibility

Completing the Business Application Form does not guarantee or entitle an organization to receive internship funds. To gain approval for participation, the organization must complete the following steps:

- Be an "eligible business" as defined on page 1.
- Be registered to do business in New York State.
- Must have the legal authority to hire employees and conduct business in New York State and must have its business address within SBC/CEF service territory.
- Provide a meaningful internship, which is work that will introduce interns to jobs in clean energy careers.
- Successfully demonstrate that the organization has a formal office in New York State.
- Not be an academic or government entity.
- Be in good standing with NYSERDA and the NYS Department of Labor.
- Agree to the Host Business Agreement Terms and Conditions (Attachment A)

Once your organization receives approval from NYSERDA to participate as an Eligible Business in the program, you must complete the following tasks:

Host Business Program Participation Steps

- Register to participate by completing the online business application form <u>https://nyserda.ny.gov/All-Programs/Programs/Clean-Energy-Workforce-Development/NYS-Clean-Energy-Internships/Clean-Energy-Business</u> Once the application has been submitted and approved, the business will be eligible to participate. All approved businesses may participate in the program for a full year from the date of their application.
- 2. Receive participation approval from NYSERDA via email. If funds for the session are fully reserved, you will be placed on a waitlist. All waitlist applicants will also be put on a list for future sessions.
- 3. If selected, the business will obtain access to NYSERDA's online portal to choose candidates. NYSERDA will check eligibility of all intern names that match the business' needs. Should the business select its own interns, interns will still need to submit an application on the NYSERDA website and be approved by NYSERDA to be part of the program.
- 4. When the business is ready to hire an intern, it must prepare and send the selected intern(s) an offer letter for signature. The offer letter should be on company letterhead and, at a minimum, state the intern's name, expected date range to be worked, and wage/hour.
 - a. Once the business receives the signed offer letter from the student, it must be counter-signed and sent to <u>CleanEnergyInternship@nyserda.ny.gov</u> with a copy of the job description. <u>Signed</u> <u>offer letters must be submitted within 30 days after the intern's start date</u>. NYSERDA may at its discretion give conditional approval for an intern to work at a Host Business once a signed offer letter is received and the award letter is drafted. Failure to comply with this requirement may result in the Host Business' disqualification from the program.
 - b. When NYSERDA has received the fully counter-signed offer letter for the eligible candidate, and all previous requirements in steps #1 and #2 have been met, funding will be reserved for that

intern for the session <u>providing that funding is still available</u>. NYSERDA is not able to reserve funding before receiving the signed document.

- 5. Upon receipt of approved offer letters, NYSERDA will notify businesses that funds have been set aside. NYSERDA will not provide reimbursement for interns without this confirmation.
- 6. At the conclusion of the internship, Host Businesses must submit the Reimbursement Package (to be provided by NYSERDA). <u>The Host Business must submit a fully completed reimbursement package within 30 days after the end of the approved term.</u> NYSERDA may not provide any reimbursements for packages submitted past this date. NYSERDA reserves the right to deny reimbursement funding for a Host Business' session if a complete reimbursement package is not received by the session's submission deadline.
 - a. NYSERDA will provide reimbursement materials and instructions via an online form. <u>Please send</u> only one reimbursement package for all interns in a particular session, if possible.
 - b. In order to receive reimbursement, the following items are required to be submitted through the online portal:
 - 1. The reference number from the business application.
 - 2. Backup documentation in the form of <u>paycheck stubs and/or a payroll</u> <u>summary</u> showing YTD wages and applicable taxes paid for each intern.
 - 3. Completed mandatory survey.

II. Funding

Up to \$10.5 million is being made available over approximately 6 years to enhance the talent pipeline through meaningful clean energy internships to students as described above. NYSERDA reserves the right to extend and/or add funding should other program funding sources become available.

Session	2019	2020	2021	2022	2023	2024
Spring	\$450,000	\$450,000	\$450,000	\$450,000	\$450,000	\$450,000
Summer	\$850,000	\$850,000	\$850,000	\$850,000	\$850,000	\$850,000
Fall	\$450,000	\$450,000	\$450,000	\$450,000	\$450,000	\$450,000

Funding is allocated on a first-come first-served basis to eligible businesses that register, are confirmed as eligible, and submit all completed materials to NYSERDA. Funding will be allocated until it is exhausted for each session. The funding table above provides estimated funding amounts per session. NYSERDA reserves the right to shift funding from one session to the next. To check on the availability of funding, please contact <u>CleanEnergyInternship@nyserda.ny.gov</u>. Additional interns cannot be placed once the available funding is fully reserved. If funding is exhausted for the session, a waitlist will be established, and pending applications will be considered in future sessions.

Reimbursement will be on a sliding scale depending on the size of the business:

- Percent of intern wage funded by NYSERDA for businesses with 20 or fewer employees: 90%
- Percent covered for businesses with 21 to 100 employees: 75%
- Percent covered for businesses with 100 or more employees: 50%

Internships will last a maximum of 12 weeks. In the fall or spring, interns can work a maximum of 18 hours per week; in the summer, the maximum is 40 hours per week. Internships of a longer duration may be considered, however total hours eligible for reimbursement are capped at 216 hours for spring and fall sessions and 480 hours for summer sessions. Intern wages that will be reimbursed can range from the NYS minimum wage at the time of hire to up to \$2 above minimum wage. Currently minimum wage in NYS ranges from \$11.10 per hour to \$15.00 per hour, depending upon location. Eligible businesses will be able to hire up to five interns per session and a maximum of 12 interns over the course of the program.

Payments will be made to eligible businesses only and will be on a reimbursable basis (i.e., the intern must be paid full wages for the entirety of the internship before the eligible business requests an allowable reimbursement

payment from NYSERDA). The eligible business must submit requests for reimbursement of wages that have been paid in accordance with the approved internships. Reimbursement requests should be submitted within 20 days after the end of the internship.

Please note: If funding becomes limited, if interest is limited as evidenced by lack of response to this PON, or if there is no longer a valid need for the services, the program will be suspended with notice in the New York Contract Reporter and posted on NYSERDA's web site (<u>http://www.nyserda.ny.gov</u>). Those applications that are received after the suspension date will not be considered for funding.

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 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 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 award(s) under this solicitation. A contract may be awarded based on initial applications without discussion, or following limited discussion or negotiations. 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 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 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 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. Attachment:

Attachment A: Host Business Agreement Terms and Conditions



RetrofitNY Gap Funding for High-Performance Retrofit Projects (Upstate New York)

Program Opportunity Notice (PON) 4026 Up to \$ 3,280,000 Available

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

Applications accepted from March 22nd, 2019 through July 31st, 2020 by 3:00 PM Eastern Time

Program Summary: The goal of RetrofitNY is to spearhead the creation of standardized, scalable solutions and processes that will dramatically improve the energy performance of multifamily residential buildings while improving their health, comfort and aesthetics. An initiative of NYSERDA's Clean Energy Fund, RetrofitNY is working aggressively to bring a substantial portion of New York's affordable housing units to or near net-zero energy performance over the next decade, and in so doing develop significant new business opportunities in the State. Our efforts support Governor Andrew M. Cuomo's ambitious climate goals while improving the quality of life for affordable housing residents.

The purpose of this solicitation is to provide limited project gap funding to produce and install these highperformance retrofit solutions in instances where (a) the cost of the retrofit solution exceeds available project financing and (b) that additional cost cannot be fully underwritten by the projected energy and operational savings produced by that retrofit solution. The goal of funding such projects is to demonstrate the efficacy of the retrofit solutions and lay the foundation for net zero or near net zero retrofit solutions to be developed at large scale, thereby significantly reducing the costs of such solutions and ultimately making the process self-sustaining. Through this Program Opportunity Notice (PON), NYSERDA intends to select up to three building owners to receive gap funding whose respective buildings have had a retrofit solution designed for it through NYSERDA RFP 3750, are located outside the five boroughs of New York City and are low-rise structures (not more than two stories above grade).

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. 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 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.aspx).

No communication intended to influence this procurement is permitted except by contacting Saul Brown at (518) 862-1090, ext. 3028 or by e-mail at <u>RetrofitNY@nyserda.ny.gov</u>, or Christopher Mahase at (518) 862-1090, ext. 3534. If you have contractual questions concerning this solicitation, contact Assistant Contract Manager, Tara Mae Tobler at (518) 862-1090, ext. 3444 or

<u>TaraMaeSolicitations@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 offeror, 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, faxed, or emailed proposals will not be accepted. Incomplete proposals may be subject to disqualification. It is the applicant'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

Retrofitting occupied buildings on a large scale requires innovative solutions that enable highperformance retrofits while the residents remain in their apartments. However, cost effective solutions that can be implemented on a large scale currently do not exist in the United States. Following RFP 3750, which commissioned designs for such solutions, this gap-funding PON represents the next step toward NYSERDA facilitating the development of simplified, scalable solutions for constructing high-performance retrofits in tenanted multifamily buildings, cultivating market development and developing financing and business models to foster high performance retrofits in New York State's affordable multifamily building market segment.

Under this solicitation NYSERDA will be accepting applications from building owners whose building had a high- performance solution designed for it through RFP 3750, and who have agreed to procure the solution from the solution provider team that designed that solution. At a minimum, this means the retrofit solution will be procured from the team's general contractor or builder with other team members continuing to oversee production, installation and commissioning of the retrofit solution. No team member may be replaced or substituted without written permission of NYSERDA.

To be eligible, applicants must meet all eligibility criteria defined in Section II below. Funds will be allocated proportionate to demonstrated project need as documented by the applicant in the financial Application Workbook (Attachment A) required with each application. Awards will fund unfinanced incremental costs attributable to the retrofit solution up to a total project amount of \$30,000 per dwelling unit. Projects shall also be eligible for additional project funds if either a high-performance prefabricated panel system for the envelop treatment or an innovative integration of mechanical systems (both defined in Section II) are employed to promote industrialized construction techniques required to achieve scalability. The maximum additional amount such a project will qualify for will be \$10,000 per dwelling unit.

Applications will be reviewed by NYSERDA program staff for up to 18 months from the PON release date or until three projects have been awarded or all funds allocated. Applications received during this period that meet eligibility requirements will be qualified to receive funding. Funding awards will be proportionate to project need demonstrated by materials submitted and evaluated by program staff.

II. Program Requirements

To facilitate adoption of final retrofit designs by building owners, NYSERDA is working closely with affordable housing regulatory agencies and private lenders associated with each project to integrate NYSERDA's funding into the project's existing financing process while minimizing the NYSERDA subsidy required for any given project.

All applications will be reviewed by NYSERDA to determine whether they meet minimum eligibility criteria. All funds awarded will be proportionate to demonstrated project need resulting from the unfinanced incremental cost of the retrofit solution and the gap between this cost and the conventional renovation for which the building was scheduled. Awards will be up to a total project

amount equivalent to \$30,000 per dwelling unit. If demonstrated need exceeds this amount, certain projects may be eligible for up to an additional \$10,000 per dwelling unit if they employ:

(a) a high-performance prefabricated panel system for their envelope treatment, AND/OR(b) an innovative integration of mechanical systems

Whether deployed singly or in conjunction, these measures should promote industrialized construction techniques required to achieve scalability and are defined as follows:

Panel systems must meet the following criteria:

- Be manufactured off-site including application of finishes and membranes
- Accommodate flat surfaces, corners and other irregular contours
- Fasten securely to an existing building structure while providing continuous insulation and sealing, and prevent thermal bridges
- Have either:
 - windows/doors built in offsite, OR
 - made-to-measure openings including jambs and trim that allow for windows/doors to snap in and seal
- Be resilient against below-grade conditions
- Require minimal on-site labor

Integrated mechanical systems must meet the following criteria:

- Be substantially manufactured off-site or capable of off-site manufacture after prototype phase
- Provide a modular approach to design
- Be readily adaptable to a low-rise building typology
- Provide all or some combination of building heating, domestic hot water, ventilation, air conditioning, solar inverter or control system functionality.

Projects employing a Panelized System, an Integrated Mechanical Systems, or both, must demonstrate additional incremental cost for these measures and will be eligible to receive additional funding commensurate with said cost up to \$10,000 per dwelling unit total. Should the additional cost for employing either or both of these measures, alone or in combination, exceed this additional amount, regardless the maximum additional award a project shall receive will remain \$10,000 per dwelling unit total.

NYSERDA will evaluate applications from building owners whose project financing is insufficient to cover the incremental costs of the retrofit solution designed for their building through RFP 3750, meaning that:

- the total costs of the rehabilitation, including the incremental costs for the retrofit solution, exceed the financing originally arranged for the conventional rehabilitation planned, and
- those incremental costs cannot be completely covered by additional subsidies from affordable housing agencies or by a lender underwriting to the projected operational savings the retrofit solution will provide.

NOTE: Incremental costs will be defined as the total cost attributable to the retrofit solution, minus any and all costs for items or elements that were included in the original project budget for the conventional business-as-usual rehabilitation planned for the building which elements or items are rendered unnecessary or redundant due to the inclusion of similar or overriding elements or items specified by the retrofit solution.

Eligibility Requirements

Prior to NYSERDA gap funding being released, the following requirements must be satisfied:

- Applicant is the legal building owner for one of the three projects awarded under RetrofitNY RFP 3750 which is located outside the five boroughs of New York City and is a low-rise structure not more than 2-stories in height
- Applicant confirms that following completion of renovation, the building will still qualify as affordable housing as defined in RFP 3750 for a period commensurate with regulatory agreements executed with affordable housing agencies, and that capital improvements funded by NYSERDA's incentives under this PON will not result in rent increases

- The total final project budget for the Retrofit Solution requires gap funding based on financing/funding sources currently available after completing the template provided by NYSERDA
- Applicant has applied to lenders in an attempt to underwrite potential savings
- Applicant has submitted a written commitment to abide by a construction schedule that demonstrates the Retrofit Solution will be installed within a reasonable period of time and not in excess of 24 months from qualification of applications. If more time is required due to particular project requirements, this must be approved by NYSERDA.
- Applicant has signed a Data Release Authorization Forms (DRAF) permitting NYSERDA to collect utility data for a period of occupancy up to 10 years, and committed in writing to allow NYSERDA or its agents to perform Measurement and Verification on the buildings for up to ten years after completion of Retrofit Solution installation and to use the data accrued as NYSERDA sees fit
- If other than a master metered building for either gas or electric use, at least two-thirds of residents have signed Data Release Authorization Forms (DRAFs) permitting NYSERDA to collect utility data for a period of occupancy up to 10 years
- Applicant and applicant's financing partners have agreed in writing to proceed with work once NYSERDA funds are committed to the project
- Applicant and applicant's financing partners have agreed in writing to include NYSERDA in the requisition process required by applicant's lenders and to provide regular project reporting to demonstrate project status, allocation of funds, any change orders (adds or deducts), cost or time overruns or underruns consistent with that provided to the project's other lenders
- Applicant has provided written permission for NYSERDA to study, promote, publish, and generally distribute information about the project publicly for at least ten years and will make it a requirement of any sale agreement transferring control of ownership that new owner abides by this agreement
- Applicant has provided an executed contract to procure the Retrofit Solution from the Solution Provider Team that designed and developed that solution under RFP 3750, or received written approval from NYSERDA for any requested changes to the Solution Provider Team members
- Applicant has provided final construction documents that incorporate the Retrofit Solution as designed under RFP 3750 or received written approval from NYSERDA for any requested changes to the Retrofit Solution, and a construction schedule detailing dates for the procurement, production and installation of the Retrofit Solution
- Applicant has provided a persuasive resident management plan that suggests the likely acceptance by the residents of the Retrofit Solution and that includes a Building Operations and Maintenance Manual and Plan, a Resident Manual that explains the intent, benefits, use and maintenance of the building's high performance energy features and practices, and ongoing training of residents in systems' operation and best practices
- Applicant has provided a persuasive maintenance plan to ensure successful operation and maintenance of all systems long term and that includes initial and ongoing training of maintenance personnel in systems' operation and best practices as well as all available maintenance agreements, warranties and commitments by systems' manufacturers and solution providers
- Applicant has provided a variance or a letter of intent to issue such variance from the relevant agency for any aspect of the Retrofit Solution that does not conform with applicable building codes or other codes

In addition, prior to an Incentive Letter being awarded and funds being released, NYSERDA must have received and approved from the Solution Provider Team the Retrofit Solution final report and deliverables as defined under RPF 3750 in a format ready for publication as open source documents with the team agreeing in writing to release of all materials for open source publication. The retrofit solution design must:

- utilize heat pump-based technology for space heating and cooling
- utilize energy or heat recovery ventilation technology
- demonstrate it will not exceed a site Energy Use Intensity (EUI) of 27 kBtu/ft²/year and an air tightness of 2.0 ACH₅₀

Upon qualifying an application, NYSERDA will notify the applicant of its determination and the funding amount for which the project has qualified through a Funding Eligibility Letter. Upon receipt of all required items after the completion of the six-month design phase, NYSERDA will issue a final Incentive Letter to the applicant for the amount qualified by the application. Funds will only be released after the financial closing with all those providing project financing for the full scope of the applicable renovation project, and payments will be made as provided below. As proof of this, applicant must provide NYSERDA with (a) a firm commitment on all project financing for mall financing partners for the amounts indicated in the capitalization plan, (b) an executed contract between the building owner and the solution provider team procuring the retrofit solution from that team, and (c) construction drawings that demonstrate that the retrofit solution designed through RFP 3750 and approved by NYSERDA has been incorporated into the overall scope of the renovation project. If any changes to the high-performance retrofit solution are proposed or requested by applicant at any time prior to completion of construction and commissioning, these changes must be reviewed and approved by NYSERDA in order to be eligible for funding.

NOTE: Buildings that qualify for funding under this PON will not be eligible for additional funding from the NYSERDA Multifamily Performance Program, but may still be eligible for funding from other NYSERDA programs.

III. Application Requirements

Application Process

Applicant must complete an application form and include all documentation detailed therein. This will include:

- Application Workbook (Attachment A) detailing project budget and financing plan
- Written response from lenders to underwrite project savings
- Written commitment from applicant's financing partners to finance project once NYSERDA funds are committed
- Written commitment from applicant's financing partners to include NYSERDA in the project payment requisition process as defined in PON 4026 Terms and Conditions Section 7 (d)
- PON 4026 Terms and Conditions form (Attachment B) signed by applicant

Upon completing initial review of an application, NYSERDA will issue a Funding Eligibility Letter (see Attachment C for sample) indicating the project funding amount for which the applicant has been deemed eligible and the contingencies that will need to be met prior to funds being released. These contingencies include applicant submitting to NYSERDA and NYSERDA approving the following additional documents:

- Final Construction Schedule
- Data Release Authorization Forms (DRAFs) from applicant and at least two-thirds of residents if building is not master metered
- Executed contract procuring the retrofit solution from solution provider team
- Final construction documents that include the retrofit solution
- Building operation and maintenance manual and plan
- Resident manual and training schedule
- Building maintenance plan
- Variances or letter of intent to issuance such variance from relevant agency if applicable
- Retrofit Solution final report and deliverables as defined under RPF 3750 and approved by NYSERDA

Upon satisfaction of required contingencies, NYSERDA will then issue a final Incentive Letter (see Attachment D for sample) indicating that the initial reserved award amount will be released. If the applicant undergoes any change in project funding need, either upwards or downwards, prior to project financial closing, the applicant shall resubmit the application workbook showing this adjustment. If, at its sole discretion, NYSERDA deems the request legitimate and elects to adjust the award amount, NYSERDA will indicate the final award amount in the Incentive Letter. Changes in funding need must be submitted to NYSERDA at least five (5) business days prior to project financial closing. In no instance will the adjusted amount exceed the cap defined above for each dwelling unit.

Payment Terms

Payment terms will be based on construction progress and standard requisitions with disbursements proportionate to those released by other project lenders provided the retrofit solution and its various components are integrated with all other work as per the construction schedule provided prior to project mobilization. If, however, the retrofit solution and its various components are not procured, produced or installed until the later stages of the project, NYSERDA may elect to withhold funds and only make disbursements proportionate to retrofit solution procurement, production and installation costs as these are requisitioned. Payments will be made in accordance with NYSERDA's Prompt Payment Policy Statement (Exhibit B to the Terms and Conditions).

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 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 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 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 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 .

Incentive Award - NYSERDA anticipates making up to three awards under this solicitation. 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 relating to exceptions to standard Terms and Conditions in Attachment B. NYSERDA expects to notify applicants in approximately two weeks from the receipt of an application whether the application has been determined eligible 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 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 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.

V. Attachments

Attachment A – Application Workbook

Attachment B – PON 4026 Terms and Conditions forms

Attachment C – Funding Eligibility Letter (sample)

Attachment D – Incentive Letter (sample)



Application Due Date All applications are due by 3:00pm Eastern Time ¹				
Round	Participant	Due Date		
1	Participating Contractors in NYSERDA's Home Performance with ENERGY STAR [®] Program	March 14, 2019		
Proposers should check NYSERDA's website at (<u>https://www.nyserda.ny.gov/Funding-Opportunities.aspx</u>) for the latest updates and revisions to PON 4038.				

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

Open now:

Round 1: NYSERDA is seeking 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.

Future rounds:

Round 2: NYSERDA will seek Applications from licensed home inspectors to deliver ratings to home buyers as part of a pre-purchase inspection.

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 home buyers as part of a pre-purchase inspection.

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 1 on Thursday February 28th, 2019 at 9:00am EST during which NYSERDA will review the requirements of this solicitation and answer questions. Applicants who intend to participate must register using this link: <u>https://nyserda-events.webex.com/nyserda-events/onstage/g.php?MTID=e7b66a67ef924d1bcaefbec120ed56ede</u>

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

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

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 homeowners who are ready to invest in their homes and are looking for independent, trustworthy information. Selected contractors and home inspectors (Pilot Providers) will provide homeowners with third-party home energy performance ratings including opportunities for improving their energy efficiency and therefore their home's comfort, safety and cost performance.

The pilot targets market-rate homeowners, that is homeowners who are not eligible for low- or moderate-income services.

The objectives of the Pilot are to:

- Encourage homeowners to make energy efficiency upgrades
- Establish the best practices for implementing home energy ratings as a sales tool for energy efficiency services
- Establish the best practices for delivering home energy ratings to home buyers

Home Energy Ratings are similar to a Miles Per Gallon rating on a car, providing easy-to-understand visual reports that give the homeowner insight into how their 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 homeowner plan upgrades to increase the efficiency, comfort, and value of their home.

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 tested in:

- Queens
- Broome County
- Town of Tonawanda

Pearl Home Certification will be tested in:

- Staten Island
- Tompkins County
- Town of Irondequoit

Benefits of participating in the Pilot include:

- Free training and mentoring
- Ability to offer free or reduced cost third party ratings to customers and prospects
- Capture new customers who learn about ratings via NYSERDA-sponsored marketing and promotional efforts
- Become a market leader and position yourself to earn referrals from customers, agents, and inspectors as the Pilot expands
- Leverage third party Pilot partner quality control to increase credibility with customers

Expectations for Pilot Providers:

- Each person providing ratings must attend training. For Home Energy Score, the training process concludes by each person completing and passing the DOE's Simulation Training & Test.
- Each person providing ratings must work with a mentor, provided through this Pilot, during onboarding
- Dedicate some or all sales staff to using the Rating Systems as sales tool
- Deliver an average of five (5) completed ratings per month (averaged over 3 months)
- Support quality assurance reviews
- Actively provide feedback and make adjustments based on pilot learnings

Round 1 of this PON is open to Full Status contractors in NYSERDA's Home Performance with ENERGY STAR[®] Program.

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 two to three 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

Applicants must meet all the following minimum qualifications:

- Full Status participant in NYSERDA's Home Performance with ENERGY STAR[®] Program (Round 1 Applicants only).
- Applicants must have staff that hold one of the following professional certifications to be eligible to participate:
 - The staff performing the ratings must have one or more of the following certifications: BPI Energy Auditor, BPI Building Analyst, BPI Healthy Home Evaluator, HERS Rater, LEED Rater; OR
 - The staff performing the ratings must hold one of the following designations and a BPI Building Science Principles Certificate of Knowledge (or equivalent training): ASHI Certified Inspector, InterNACHI Home Energy Inspector; OR
 - Other equivalent certifications may be considered with documentation
- Maintain and adhere to a documented quality management plan (A copy must be submitted with the Application).
- Maintain and adhere to a documented customer dispute resolution plan (A copy must be submitted with the Application).
- Maintain liability insurance and worker's compensation coverage per sections 2.07 and 2.08 of the Participation Agreement. (Proof of coverage must be submitted with the Application).

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 market area, a separate Application must be completed for each Pilot market area.

The online Application includes:

- 1. An online form with information about your company.
- 2. An Application Questionnaire that must be downloaded, filled out, then uploaded as part of the application. See Attachment B.
- 3. Uploaded copies or images 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. Applicants who apply to more than one market area will have their applications reviewed independently of each other.

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):

- NYSERDA process engagement
 - Degree to which the Applicant meets or exceeds Pilot requirements
 - Degree to which the Applicant has been a valuable partner with NYSERDA, providing feedback, participating in pilots, etc.
- Pilot partnership
 - Willingness to partner with NYSERDA
 - o Commitment to using Rating Systems as sales tool for staff
 - Committed staff for Pilot participation
 - Number of rating expected to be completed per month
- Quality control and business practices
 - Home Performance with ENERGY STAR[®] Quality Assurance scores, if applicable
 - o Strength of internal quality management plan and commitment to delivering quality
 - Use of customer relationship management software
- Relevant experience
 - Applicant's residential energy efficiency experience through their service territory, and in the specific pilot market in which they are applying

- Commitment to ethical business practices and customer satisfaction
 - Strength of customer dispute resolution plan and commitment to customer satisfaction
 - Strength of online reviews and ratings
 - Strength of Better Business Bureau rating or accreditation (if applicable)
- Home energy rating experience
 - o Level of experience delivering ratings/scores/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 use Ratings as a sales tool.
- 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 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 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).

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



RetrofitNY Gap Funding for High-Performance Retrofit Projects (New York City)

Program Opportunity Notice (PON) 4062 Up to \$ 4,360,000 Available

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

Applications accepted from February 8, 2019 through July 31st, 2020 by 3:00 PM Eastern Time

Program Summary: The goal of RetrofitNY is to spearhead the creation of standardized, scalable solutions and processes that will dramatically improve the energy performance of multifamily residential buildings while improving their health, comfort, and aesthetics. An initiative of NYSERDA's Clean Energy Fund, RetrofitNY is working aggressively to bring a substantial portion of New York's affordable housing units to or near net-zero energy performance over the next decade, and in so doing develop significant new business opportunities in the State. Our efforts support Governor Andrew M. Cuomo's ambitious climate goals while improving the quality of life for affordable housing residents.

The purpose of this solicitation is to provide limited project gap funding to produce and install these highperformance retrofit solutions in instances where (a) the cost of the retrofit solution exceeds available project financing and (b) that additional cost cannot be fully underwritten by the energy and operational savings produced by that retrofit solution. The goal of funding such projects is to demonstrate the efficacy of the retrofit solutions and lay the foundation for net zero or near net zero retrofit solutions to be developed at large scale, thereby significantly reducing the costs of such solutions and ultimately making the process self-sustaining. Through this Program Opportunity Notice (PON), NYSERDA will select up to three building owners to receive gap funding whose respective buildings have had a retrofit solution designed for it through NYSERDA RFP 3750, are located inside the five boroughs of New York City and are mid-rise structures (not more than seven stories above grade).

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. 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 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).

No communication intended to influence this procurement is permitted except by contacting Saul Brown at (518) 862-1090, ext. 3028 or by e-mail at <u>RetrofitNY@nyserda.ny.gov</u>, or Christopher Mahase at (518) 862-1090, ext. 3534. If you have contractual questions concerning this solicitation, contact Assistant Contract Manager, Tara Mae Tobler at (518) 862-1090, ext. 3444 or <u>TaraMaeSolicitations@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, faxed, or emailed proposals will not be accepted. Incomplete proposals may be subject to disqualification. It is the applicant'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 5pm 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

Retrofitting occupied buildings on a large scale requires innovative solutions that enable high-performance retrofits while the residents remain in their apartments. However, cost effective solutions that can be implemented on a large scale currently do not exist in the United States. Following RFP 3750, which commissioned designs for such solutions, this gap-funding PON represents the next step toward NYSERDA facilitating the development of simplified, scalable solutions for constructing high-performance retrofits in tenanted multifamily buildings, cultivating market development and developing financing and business models to foster high performance retrofits in New York State's affordable multifamily building market segment.

Under this solicitation NYSERDA will be accepting applications from building owners whose building had a high- performance solution designed for it through RFP 3750, and who have agreed to procure the solution from the solution provider team that designed that solution. At a minimum, this means the retrofit solution will be procured from the team's general contractor or builder with other team members continuing to oversee production, installation and commissioning of the retrofit solution. No team member may be replaced or substituted without written permission of NYSERDA.

To be eligible, applicants must meet all eligibility criteria defined in Section II below. Funds will be allocated proportionate to demonstrated project need as documented by the applicant in the financial Application Workbook (Attachment A) required with each application. Awards will fund unfinanced incremental costs attributable to the retrofit solution up to a total project amount of \$40,000 per dwelling unit.

Applications will be reviewed by NYSERDA program staff for up to 18 months from the PON release date or until three projects have been awarded or all funds allocated. Applications received during this period that meet eligibility requirements will be qualified to receive funding. Funding awards will be proportionate to project need demonstrated by materials submitted and evaluated by program staff.

II. Program Requirements

To facilitate adoption of final retrofit designs by building owners, NYSERDA is working closely with affordable housing regulatory agencies and private lenders associated with each project to integrate NYSERDA's funding into the project's existing financing process while minimizing the NYSERDA subsidy required for any given project.

All applications will be reviewed by NYSERDA to determine whether they meet minimum eligibility criteria. All funds awarded will be proportionate to demonstrated project need resulting from the unfinanced incremental cost of the retrofit solution and the gap between this cost and the conventional renovation for which the building was scheduled. Awards will be up to a total project amount equivalent to \$40,000 per dwelling unit.

NYSERDA will evaluate applications from building owners whose project financing is insufficient to cover the incremental costs of the retrofit solution designed for their building through RFP 3750, meaning that:

- the total costs of the rehabilitation, including the incremental costs for the retrofit solution, exceed the financing originally arranged for the conventional rehabilitation planned, and
- those incremental costs cannot be completely covered by additional subsidies from affordable housing agencies or by a lender underwriting to the projected operational savings the retrofit solution will provide.

NOTE: Incremental costs will be defined as (x) the total cost attributable to the retrofit solution, minus (y) any and all costs for items or elements that were included in the original project budget for the conventional business-as-usual rehabilitation planned for the building which elements or items are rendered unnecessary or redundant due to the inclusion of similar or overriding elements or items specified by the retrofit solution.

Eligibility Requirements

Prior to NYSERDA gap funding being released, the following requirements must be satisfied:

- Applicant is the legal building owner for one of the three projects awarded under RetrofitNY RFP 3750 which is located inside the five boroughs of New York City and is a mid-rise structure not more than 7-stories in height
- Applicant confirms that following completion of renovation, the building will still qualify as
 affordable housing as defined in RFP 3750 for a period commensurate with regulatory agreements
 executed with affordable housing agencies, and that capital improvements funded by NYSERDA's
 incentives under this PON will not result in rent increases
- The total final project budget for the Retrofit Solution requires gap funding based on financing/funding sources currently available after completing the template provided by NYSERDA
- Applicant has applied to lenders in an attempt to underwrite potential savings
- Applicant has submitted a written commitment to abide by a construction schedule that demonstrates the Retrofit Solution will be installed within a reasonable period of time and not in excess of 24 months from qualification of applications. If more time is required due to particular project requirements, this must be approved by NYSERDA.
- Applicant has signed a Data Release Authorization Forms (DRAF) permitting NYSERDA to collect utility data for a period of occupancy up to 10 years, and committed in writing to allow NYSERDA or its agents to perform Measurement and Verification on the buildings for up to ten years after completion of Retrofit Solution installation and to use the data accrued as NYSERDA sees fit
- If other than a master metered building for either gas or electric use, at least two-thirds of residents have signed Data Release Authorization Forms (DRAFs) permitting NYSERDA to collect utility data for a period of occupancy up to 10 years
- Applicant and applicant's financing partners have agreed in writing to proceed with work once NYSERDA funds are committed to the project
- Applicant and Applicant's financing partners have agreed in writing to include NYSERDA in the requisition process required by applicant's lenders and to provide regular project reporting to demonstrate project status, allocation of funds, any change orders (adds or deducts), cost or time overruns or underruns consistent with that provided to the project's other lenders
- Applicant has provided written permission for NYSERDA to study, promote, publish, and generally distribute information about the project publicly for at least ten years and will make it a requirement of any sale agreement transferring control of ownership that new owner abides by this agreement
- Applicant has provided an executed contract to procure the Retrofit Solution from the Solution Provider Team that designed and developed that solution under RFP 3750, or received written approval from NYSERDA for any requested changes to the Solution Provider Team members
- Applicant has provided final construction documents that incorporate the Retrofit Solution as designed under RFP 3750 or received written approval from NYSERDA for any requested changes to the Retrofit Solution, and a construction schedule detailing dates for the procurement, production and installation of the Retrofit Solution

- Applicant has provided a persuasive resident management plan that suggests the likely acceptance by the residents of the Retrofit Solution and that includes a Building Operations and Maintenance Manual and Plan, a Resident Manual that explains the intent, benefits, use and maintenance of the building's high performance energy features and practices, and ongoing training of residents in systems' operation and best practices
- Applicant has provided a persuasive maintenance plan to ensure successful operation and maintenance of all systems long term and that includes initial and ongoing training of maintenance personnel in systems' operation and best practices as well as all available maintenance agreements, warranties and commitments by systems' manufacturers and solution providers
- Applicant has provided a variance or a letter of intent to issue such variance from the relevant agency for any aspect of the Retrofit Solution that does not conform with applicable building codes or other codes

In addition, prior to an Incentive Letter being awarded and funds being released, NYSERDA must have received and approved from the Solution Provider Team the Retrofit Solution final report and deliverables as defined under RPF 3750 in a format ready for publication as open source documents with the team agreeing in writing to release of all materials for open source publication. The retrofit solution design must:

- utilize heat pump-based technology for space heating and cooling
- utilize energy or heat recovery ventilation technology
- demonstrate it will not exceed a site Energy Use Intensity (EUI) of 30 kBtu/ft²/year and an air tightness of 2.0 ACH₅₀

Upon qualifying an application, NYSERDA will notify the applicant of its determination and the funding amount for which the project has qualified through a Funding Eligibility Letter. Upon receipt of all required items after the completion of the six-month design phase, NYSERDA will issue a final Incentive Letter to the applicant for the amount qualified by the application. Funds will only be released after the financial closing with all those providing project financing for the full scope of the applicable renovation project, and payments will be made as provided below. As proof of this, applicant must provide NYSERDA with (a) a firm commitment on all project financing from all financing partners for the amounts indicated in the capitalization plan, (b) an executed contract between the building owner and the solution provider team procuring the retrofit solution from that team, and (c) construction drawings that demonstrate that the retrofit solution designed through RFP 3750 and approved by NYSERDA has been incorporated into the overall scope of the renovation project. If any changes to the high-performance retrofit solution are proposed or requested by applicant at any time prior to completion of construction and commissioning, these changes must be reviewed and approved by NYSERDA in order to be eligible for funding.

NOTE: Buildings that qualify for funding under this PON will not be eligible for additional funding from the NYSERDA Multifamily Performance Program, but may still be eligible for funding from other NYSERDA programs.

III. Application Requirements

Application Process

Applicant must complete an application form and include all documentation detailed therein. This will include:

- Application Workbook (Attachment A) detailing project budget and financing plan
- Written response from lenders to underwrite project savings
- Written commitment from applicant's financing partners to finance project once NYSERDA funds are committed
- Written commitment from applicant's financing partners to include NYSERDA in the project payment requisition process as defined in PON 4062 Terms and Conditions Section 7 (d)

• PON 4062 Terms and Conditions form (Attachment B) signed by applicant

Upon completing initial review of an application, NYSERDA will issue a Funding Eligibility Letter (see Attachment C for sample) indicating the project funding amount for which the applicant has been deemed eligible and the contingencies that will need to be met prior to funds being released. These contingencies include applicant submitting to NYSERDA and NYSERDA approving the following additional documents:

- Final Construction Schedule
- Data Release Authorization Forms (DRAFs) from applicant and at least two-thirds of residents if building is not master metered
- Executed contract procuring the retrofit solution from solution provider team
- Final construction documents that include the retrofit solution
- Building operation and maintenance manual and plan
- Resident manual and training schedule
- Building maintenance plan
- Variances or letter of intent to issuance such variance from relevant agency if applicable
- Retrofit Solution final report and deliverables as defined under RPF 3750 and approved by NYSERDA

Upon satisfaction of required contingencies, NYSERDA will then issue a final Incentive Letter (see Attachment D for sample) indicating that the initial reserved award amount will be released. If the applicant undergoes any change in project funding need, either upwards or downwards, prior to project financial closing, the applicant shall resubmit the application workbook showing this adjustment. If, at its sole discretion, NYSERDA deems the request legitimate and elects to adjust the award amount, NYSERDA will indicate the final award amount in the Incentive Letter. Changes in funding need must be submitted to NYSERDA at least five (5) business days prior to project financial closing. In no instance will the adjusted amount exceed the cap defined above for each dwelling unit.

Payment Terms

Payment terms will be based on construction progress and standard requisitions with disbursements proportionate to those released by other project lenders provided the retrofit solution and its various components are integrated with all other work as per the construction schedule provided prior to project mobilization. If, however, the retrofit solution and its various components are not procured, produced or installed until the later stages of the project, NYSERDA may elect to withhold funds and only make disbursements proportionate to retrofit solution procurement, production and installation costs as these are requisitioned.

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 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 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 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

<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>.

Incentive Award - NYSERDA anticipates making up to three awards under this solicitation. 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 relating to exceptions to standard Terms and Conditions in Attachment B. NYSERDA expects to notify applicants in approximately two weeks from the receipt of an application whether the application has been determined eligible 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 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 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.

V. Attachments

- Attachment A Application Workbook
- Attachment B PON 4062 Terms and Conditions forms
- Attachment C Funding Eligibility Letter (sample)
- Attachment D Incentive Letter (sample)



RICHARD L. KAUFFMAN Chair ALICIA BARTON President and CEO

Environmental and Fisheries Research for Offshore Wind Energy Development

Program Opportunity Notice (PON) 4082 **\$ 2,000,000 Available** NYSERDA reserves the right to extend and/or add funding to the Solicitation should other program funding sources become available.

Proposals Due: May 14, 2019 by 3:00 PM Eastern Time*

The *New York State Offshore Wind Master Plan* (Master Plan)¹ advances the development of offshore wind (OSW) in a manner that is cost-effective while also being sensitive to environmental, maritime, economic, and social issues. This Program Opportunity Notice (PON) supports independent research to improve the scientific and technical foundation for addressing key policy-relevant questions related to the development of OSW and stakeholder-identified environmental and fisheries concerns.

The research questions addressed in this solicitation build on the goals of the New York State Offshore Wind Master Plan and support OSW development by providing relevant information to key stakeholders on high priority environmental and fisheries issues. The solicitation addresses key research needs identified as high priority by scientists, fishermen, environmental organizations, New York State and federal regulators, and offshore wind developers engaged in environmental (E-TWG) and fisheries (F-TWG) technical working groups formed under the OSW Master Plan. Through this solicitation, NYSERDA expects to select one or more projects in the following five categories:

- A. Ecosystem Dynamics: Examine the relationships between environmental processes, primary productivity, and distributions of species at higher trophic levels
- B. Commercial Fishing Access: Understanding offshore wind development constraints to commercial fishing access
- C1. Approaches for Offshore Wind Pre- and Post-construction Monitoring
- **C2.** Leveraging Non-traditional Data: Approaches for leveraging non-traditional data for offshore wind environmental decision making
- **C3.** Modeling the Effects of Offshore Wind Developments: Modeling the effects of offshore wind developments on the Cold Pool stratification

A total of approximately **\$2,000,000** is being made available through this solicitation. Awards for Category A and B are limited to \$500,000 and Awards in Category C1, C2, and C3 are limited to \$300,000. NYSERDA anticipates making one or more awards in each category. If the funds from the individual areas are not exhausted, NYSERDA reserves the right to allocate the remaining funds to another area. Total funds available may not be sufficient to

¹ NYS Offshore Wind Master Plan. <u>https://www.nyserda.ny.gov/All-Programs/Programs/Offshore-Wind/Offshore-Wind-in-New-York-State-Overview/NYS-Offshore-Wind-Master-Plan</u>

fund all proposals received. Cost-sharing by proposers of at least 25% is encouraged but not required. In-kind cost-sharing is acceptable. Leveraging of other research funding and projects is strongly encouraged. NYSERDA may fund selected proposals in phases or assign a Project Advisory Committee to help guide the project. NYSERDA reserves the right to build teams between selected contractors and stakeholders and/or other supported research to maximize the value of the research effort and/or to improve regional coordination. For teaming opportunities, see Section III. Proposals should identify, build upon or coordinate with existing efforts, and not duplicate work by others. To assure transparency of the work products, any data collected, models, or model parameters created under this scope of work must be made available to State and federal agencies and their partners. If the proposer wishes to provide alternative options to those presented here for consideration by the reviewers, they may be presented along with appropriate justification and sufficient cost implications. NYSERDA reserves the right to negotiate changes to the proposed project approach, deliverables and deliverable formats with the selected proposer.

Proposal Submission: Online submission is preferred. Proposers may submit to multiple categories, but each category must be submitted to individually. Proposers may submit Word, Excel, PDF or zip files (file formats include: csv, doc, docx, gif, jpeg, jpg, pdf, png, ppt, pptx, pps, ppsx, tif, txt, xls, xlsx, and zip). **However, regardless of file format, proposals for each category must be submitted as a single file, inclusive of all supporting documents.** 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 Kate McClellan Press – primary designated contact at (518) 862-1090, ext. 3110 or <u>fisheriesandoffshorewind@nyserda.ny.gov</u> or Gregory Lampman – secondary contact (Designated Contact) at (518) 862-1090, ext. 3372 or by e-mail <u>fisheriesandoffshorewind@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 offeror, 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. 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. Proposals or files in process, or attempted edits or submission at any time 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

On January 15, 2019, Governor Cuomo announced the Green New Deal, including a plan to increase New York's Clean Energy Standard so that 70% of electricity will come from renewable resources by 2030. Further, the Governor announced that New York will increase its offshore wind target from 2.4 GW by 2030 to 9.0 GW by 2035. On behalf of New York State, NYSERDA is working to ensure that OSW is developed cost-effectively and in a responsible manner that is sensitive to the environment, ocean activities, and coastal communities.²

Although there is growing interest in developing OSW in the United States, there are limited published studies on potential wildlife or fisheries interactions. As a result, inferences about risks to marine wildlife and fisheries from OSW are drawn from comparisons to land-based wind turbines; from European studies in marine waters, where OSW facilities have been operational since 1991; or from other marine industries, such as offshore oil and gas development. Although these comparisons can provide some perspective, data gaps and unmet research needs can hamper efforts to identify appropriate mitigation methods to reduce risks. Having a better understanding of potential wildlife and fisheries interactions with US OSW will support responsible development, potentially reduce stakeholder concerns, and accelerate OSW project development by identifying and reducing risks early.

The E- and F-TWGs were formed to provide insights into environmental and fisheries issues and concerns with OSW and inform decision-making that could help reduce or eliminate impacts from offshore wind energy development, including supporting scientific and technical research that addresses issues related to offshore wind energy planning, siting, construction, operation, monitoring, or related topics. The research areas in this PON have been reviewed and prioritized by the E- and F-TWGs as important to reduce risk to wildlife and fisheries and inform the OSW development process.

Proposals will be considered responsive to this solicitation only if they address the research categories described below or provide sufficient justification for modifications or alternatives. Preferred projects are those that (in no particular order): have application to the Mid-Atlantic Bight and New England waters; are comprised of interdisciplinary teams including ocean users (e.g. commercial fishermen where appropriate) (for resources to help identify other interested parties, see Section III); and leverage out-of-State, federal, or other resources to address offshore wind development.

II. Research Categories

A. Ecosystem Dynamics:

Examine the relationships between environmental processes, primary productivity, and distributions of species at higher trophic levels

Background

Tracking, predicting, and understanding the environmental drivers that effect the abundance, distribution, reproductive success, and health of populations of higher trophic level species are a priority for many state and federal agencies due to either their commercial importance (e.g. fisheries) or their state or federal protections (e.g. Marine Mammal Protection Act, Endangered Species Act, Migratory Bird Treaty Act), as well as their potential vulnerability to impacts from the construction and operations of offshore wind facilities. Understanding the distribution and abundance of these key species and predicting how they may change over time and due to OSW is critical for assessing cumulative impacts. While this is required through the National Environmental Policy

² NYSERDA. Toward a Clean Energy Future: A Strategic Outlook 2019-2022. <u>https://www.nyserda.ny.gov/About/Publications/Program%20Planning%20Status%20and%20Evaluation%20Reports/Strateg</u> <u>ic%20Outlook</u>

Act (NEPA) process, there is often a lack of information on the environmental and ecological drivers that impact the presence, habitat use, movements, and health of populations of many of these species.

The distribution and abundance of populations of higher trophic level species, including marine mammals, sea turtles, birds, elasmobranchs and economically important fish and invertebrates, are driven by the distribution of prey populations as well as oceanographic characteristics and processes. Oceanographic features, such as sea surface temperature (SST), chlorophyll *a*, front locations, upwellings, oxygen content, currents, and wind patterns, are often correlated to patterns of primary productivity, which influences prey availability and indirectly influences the distributions of species at higher trophic levels. Understanding populations at lower trophic levels (e.g. plankton, forage fishes, etc.), including their distributions, seasonal and inter-annual variability, recruitment, and the environmental drivers of those patterns, can also inform our understanding of the drivers of trends in wildlife populations at upper trophic levels. Existing information about environmental characteristics or prey presence may be used to assist with the identification of important habitat areas³ and predict areas of high use in the future.

Environmental covariate data have been collected for some areas along the Atlantic coast, but it has proved difficult to directly link these data to distributions of organisms at higher trophic levels for the geographic scope of interest (the Mid-Atlantic Bight and New England waters, with a focus on the New York Bight), due in part to the geographic scale of data collection and/or ad hoc approaches to data integration. There have also been recent efforts to describe seasonal patterns in environmental processes and primary productivity for the New York Bight,⁴ but they lack the temporal detail necessary to develop an understanding of these conditions or their implications for middle and higher trophic levels.⁵

Research Focus

NYSERDA seeks collaborative, multi-disciplinary research proposals to synthesize and analyze local and regional oceanographic and lower trophic level datasets from the Mid-Atlantic Bight and New England waters, including development of novel ways to use these datasets to understand and predict presence, habitat use, and movements of upper trophic level species and identify critical gaps in these data. Proposals should include an assessment of the statistical rigor and/or qualitative sensitivity analyses relating to the ability of the dataset to predict relationships. Proposals could also explore how datasets or survey methodologies could be integrated to increase efficiency or decrease costs for assessing wildlife distributions. Any data collected, models, or model parameters created under this scope of work must be made available to State and federal agencies and their partners; proposals could explore options for setting up and maintaining databases.

³ Valavanis VD, Kapantagakis A, Katara I, Palialexis A. 2004. Critical regions: a GIS-based model of marine productivity hotspots. Aquatic Sciences 66: 139-148.

⁴ Kinlan BP, Poti M, Menza C. 2012a. Chapter 4: Oceanographic setting. Pp. 59-68. In: C. Menza, BP Kinlan, DS Dorfman, M Poti, and C Caldow (eds.). A Biogeographic Assessment of Seabirds, Deep Sea Corals and Ocean Habitats of the New York Bight: Science to Support Offshore Spatial Planning. NOAA Technical Memorandum NOS NCCOS 141. Silver Spring, MD. 224 pp.

⁵ Kinlan BP, Menza C, Huettmann F. 2012b. Chapter 6: Predictive modeling of seabird distribution patterns in the New York Bight. Pp. 87-224. In: . In: C. Menza, BP Kinlan, DS Dorfman, M Poti, and C Caldow (eds.). A Biogeographic Assessment of Seabirds, Deep Sea Corals and Ocean Habitats of the New York Bight: Science to Support Offshore Spatial Planning. NOAA Technical Memorandum NOS NCCOS 141. Silver Spring, MD. 224 pp.

B. Commercial Fishing Access: Understanding offshore wind development constraints to commercial fishing access

Background

The New York Bight and New England marine space hosts a diverse commercial, for-hire, and recreational fishing industry from around the region, which includes a variety of gear types and fishing vessels. Offshore wind will likely affect commercial fishing activity at each phase of development, including temporarily restricting access to some fishing areas for some fisheries during construction, or permanently through the placement of fixed structures. Access to an OSW area may be influenced by many factors,⁶ including but not limited to:

- Pre-construction exploratory surveys causing temporary displacement;
- Construction activities such as pile driving, jet plowing, cable dredging, and backfilling causing temporary displacement;
- Turbines and cables potentially causing navigational hazards or the risk of snagging gear; or
- Turbines and other structures making it difficult to actively fish or navigate through a wind farm under some conditions.

For the two industries to co-exist in an economically meaningful way, opportunities to reduce risk for fishermen working within, or transiting through an OSW development is critical. These opportunities could include turbine layouts and spatial arrangements, technology to address radar interference, alterations in traditional fishing methods, snag risk mitigations, etc.

State and federal regulators, including the United States Coast Guard and Bureau of Ocean Energy Management (BOEM), have consistently stated that they do not intend to restrict access within turbine arrays. However, it is important to determine the extent to which OSW may restrict the access of fishermen due to self-determined risk assessments or the physical constraints of vessels and gear types. A variety of spatial data have been used to identify important fishing areas for commercial and recreational fisheries. Several recent studies have created spatial maps of fisheries and fishing revenues using information from NOAA Fisheries programs (e.g. Vessel Monitoring System, Vessel Trip Reports) to aid in identifying new potential wind energy areas. While these datasets suggest how the space is currently being fished, they do not provide any insights into how fishermen could use the space following the construction of a wind farm.

Additional information would be valuable in understanding how fishing within turbine arrays and transiting through turbine arrays is constrained. These constraints are expected to vary by gear type, vessel size, weather, density of cable crossings, spatial arrangement of turbine arrays, and other factors. By understanding and prioritizing what constrains fishing activities within a turbine array, mitigations can be evaluated and potentially implemented to provide the greatest access by the greatest number of fishermen, based on the unique characteristics and location of each wind farm.

Research Focus

NYSERDA seeks a proposal from a multidisciplinary team to determine how OSW operations and design may affect access to fisheries operating in the Northwest Atlantic. Teams should include, or work in partnership with,

⁶ Ecology and Environment Engineering, P.C. 2017. New York State Offshore Wind Master Plan Fish and Fisheries Study. New York State Research and Development Authority Report 17-25j. https://www.nyserda.ny.gov/-/media/Files/Publications/Research/Biomass-Solar-Wind/Master-Plan/17-25j-Fish-and-Fisheries-Study.pdf

both fishermen and developers to ensure open communications and transparency. Additional baseline technical (e.g. radar) and spatial data (e.g. measurements and modeling of spatial use for all gear types and environmental conditions) as well as estimates of risk (i.e. probabilities of snags, collision) are needed to understand what may limit fishing access. Proposals could also suggest ways to reduce these constraints by informing decision making by developers or regulators, and/or identifying ways in which current fishing operations could be modified to provide the greatest access to the greatest number of fishermen. Proposers are encouraged to consider health and safety standards around the world and to develop metrics describing the degree to which proposed mitigations increase fishing access. Where possible, estimates of relative costs to implement the mitigations in relation to their benefits should be described.

C1. Approaches for Offshore Wind Pre- and Post-construction Monitoring

Background

To inform the responsible development of OSW, it is essential to monitor changes in wildlife populations at and near development sites. The European experience with OSW has produced important lessons learned, including: the importance of identifying clear monitoring objectives and hypotheses; conducting site-specific pre-construction, construction, and post-construction studies; monitoring a large enough area around the project footprint to detect changes due to OSW; and targeting monitoring to specific wildlife and habitats of interest, particularly those perceived as being vulnerable to site-specific as well as cumulative impacts of construction and operations of offshore wind facilities along the east coast of the US. Without clear research questions and monitoring standards, large amounts of data can be collected that do little to advance knowledge about the effects of OSW more broadly.⁷

Based on these recommendations, standardized monitoring protocols are needed to support efforts to detect and measure environmental change resulting from OSW. It is important that these monitoring protocols allow for sufficient inference to determine whether observed changes are due to the effects of OSW or due to broader ecological changes in species distributions or abundance. It is also critical that scientific methodologies and approaches used to collect data can be compared across development sites and more broadly, across regions. A monitoring framework and standardized protocols that meet these goals would provide numerous benefits, including streamlining the regulatory process of permitting, reducing uncertainty, and providing greater understanding of the cumulative effects of OSW. Because each OSW project will have different needs based on their design and location, not all of these protocols should be considered compulsory, but instead suggested as a guide for developers and regulators to determine the most appropriate monitoring approach.

Monitoring protocols exist for a variety of offshore industries, but standardized protocols for monitoring effects to wildlife and habitats related to OSW in the United States have not been developed. However, BOEM reports have suggested preliminary protocols for baseline studies and monitoring for offshore renewable energy.⁸ There is also an effort currently funded by Massachusetts Clean Energy Center and BOEM, the Protected Species Project, focused on designing studies that can separate changes in marine mammal populations or presence caused by OSW from other oceans uses or changes in the environment. In Europe, the five-year Dutch Governmental Offshore Wind Ecological Program (WOZEP, 2016-2021) includes a range of studies to fill data gaps

⁷ Wilding et al., 2017

⁸ McCann J. 2012. Developing environmental protocols and modeling tools to support ocean renewable energy stewardship: National Oceanographic Partnership Program. Bureau of Ocean Energy Management Contract Number M10PC00097 OCS Study BOEM 2012-082. 622 pp.

regarding effects of OSW and assumptions made during the ecological assessment of Dutch wind farms as new facilities are developed (Rijkswaterstaat, 2016).⁹ Monitoring protocols appropriate for the US, that build on lessons learned from OSW in Europe and other offshore industries, would be valuable to facilitate improvements in our understanding of how OSW impacts species, and to inform future risk assessments and mitigation measures.

Research Focus

NYSERDA seeks proposals from teams of qualified experts to develop standardized monitoring protocols for preconstruction, construction, and post-construction. The intention of this work is to develop approaches that will establish credible baselines to inform risk assessments, and to potentially inform construction and postconstruction assessments. Proposals should describe how they will provide sound scientific guidance on study design, data analysis, and interpretation of monitoring data to tease apart impacts from construction and operations OSW from other sources (e.g. weather, climate, fishing, etc.). The proposed approaches must include a thorough literature review, including existing methods used or proposed by offshore wind developers and federal regulators, as well as expert consultation and stakeholder engagement to vet proposed protocols.

C2. Leveraging Non-traditional Data:

Approaches for leveraging non-traditional data for offshore wind environmental decision making

Background

Non-traditional methods of data collection can have legitimate potential to collect information on natural resources in cost-effective ways. Because of this, an increasing number of data collection and collaborative research programs have been developed that seek to meet the needs of monitoring agencies. In New York, there is a great potential for ocean users, ranging from the general public to ocean-related professionals, to collect and provide data for scientific use. Many may have already contributed to one of the many existing ocean science programs. For example, the New York Department of Environmental Conservation (NYDEC) encourages several citizen science programs (e.g. Shark Spotter, Striped Bass Cooperative Anglers Program, Got Seagrass?)¹⁰ as a way for people to gain hands-on data collection experience while providing NYDEC with essential data for informed decision making. At the federal level, there are successful cooperative research programs with both commercial and recreational fishing (e.g. Cooperative Research Study Fleet,¹¹ Atlantic Cooperative Shark Tagging Program¹²). Vessels in transit have also been used to collect valuable oceanographic data (e.g. Ships of Opportunity, ferry-based data collection on Long Island Sound¹³). Given the large number of informed ocean users in the region, there may be novel ways to incorporate existing or new validated citizen science data into OSW-related environmental analyses.

⁹ Rijkswaterstaat (Dutch Ministry of Infrastructure and the Environment). 2016. Offshore wind energy ecological programme (Wozep): monitoring and research programme 2017-2021. 69 pp. www.noordzeeloket.nl/en/functions-and-use/offshore-wind-energy/ecology/offshore-wind/@166963/offshore-wind-energy/

¹⁰ New York Department of Environmental Conservation. Citizen Involvement in Marine Fisheries.

https://www.dec.ny.gov/outdoor/109925.html

¹¹ NEFDC Study Fleet https://www.nefsc.noaa.gov/read/popdy/studyfleet/

¹² NMFS Cooperative Shark Tagging Program https://www.nefsc.noaa.gov/nefsc/Narragansett/sharks/tagging.html

¹³ https://seagrant.sunysb.edu/Images/Uploads/PDFs/2008-Research/ResearchImpact08-Waliser.pdf

Research Focus

NYSERDA seeks proposals from teams of ocean users and scientists to gather existing citizen science data and evaluate them in scientifically credible ways that enable their integration with, or interpretation alongside, standardized survey methodologies, or to initiate new data collection efforts that make use of ocean users while also providing quality assurance and quality controls on the data. Proposals must describe how the proposed effort would inform OSW development processes or understanding, and how the data will be made available. Proposals must also describe the proposed methods for determining appropriate credibility metrics for the data, and the avenues for expert review.

C3. Modeling the Effects of Offshore Wind Developments:

Modeling the effects of offshore wind developments on the Cold Pool stratification

<u>Background</u>

The design of an offshore wind farm, such as the location, number of turbines, and foundation types, may affect local and regional hydrodynamics.¹⁴ The potential effects of construction on vertical mixing range from "negligible" to "very significant" depending on site and turbine characteristics.¹⁵ One of the concerns highlighted by the commercial fishing industry is the potential effect OSW turbines could have on local thermal stratification in the New York Bight. Currently, there is no research that has determined whether a large OSW development or developments could affect vertical mixing and stratification in the New York Bight.

The "Cold Pool" is a highly variable 20-60 m thick band of trapped cold, near-bottom water that exists during the spring, summer, and fall in the mid- and outer-shelf of the Mid-Atlantic Bight and Southern Flank of Georges Bank. The Cold Pool, along with other oceanographic and meteorological factors, has been shown to affect phytoplankton productivity and the behavior and recruitment of pelagic and demersal fish.^{16, 17} Due to the Cold Pool's effects on fisheries, it is important to understand the oceanographic processes that influence it and whether OSW may alter its presence. New York fishermen are especially concerned about identifying the magnitude and layout of turbine foundations that would cause the Cold Pool stratification to dissipate.

Research Focus

NYSERDA seeks proposals from qualified scientists to use existing data to model the effects of offshore wind development location and turbine configuration on Cold Pool stratification. In particular, proposals should describe how the project team will examine the influence of location, number of turbines, and foundation types on mixing, and the degree to which that mixing could alter the spatial distribution of marine species, with an emphasis on fisheries. A phased approach is encouraged. A primary analysis could focus on understanding the degree of potential influence of likely turbine development in the region, then, if warranted, a more detailed assessment of the effects could be conducted.

¹⁴ Segtnan OH, Christakos K. 2015. Effect of offshore wind farm design on the vertical motion of the ocean. Energy Procedia 80(2015): 213-222.

¹⁵ Clark S, Schroeder F, Baschek B. 2014. The influence of large offshore wind farms on the North Sea and Baltic Sea – a comprehensive literature review. Helmholtz-Zentrum Geesthacht Report 2014-6. 33 pp.

¹⁶ Malone TC, Hopkins TS, Falkowski PG, Whitledge TE. 1983. Production and transport of phytoplankton biomass over the continental shelf of the New York Bight. Continental Shelf Research 1: 305-337.

¹⁷ Sullivan MC, Cowen RK, Steves BP. 2005. Evidence for atmosphere-ocean forcing of yellowtail flounder (*Limanda ferruginea*) recruitment in the Middle Atlantic Bight. Fisheries Oceanography 14: 386-399.

III. Proposal Requirements

Proposers may submit to one or more categories, but each category must be submitted to individually. Proposals must follow the format provided below and should include succinct information to support the proposed approach, confirm the requirements and answer the questions described in the Proposal Evaluation Criteria listed in Section IV. Proposals should not be excessively long or submitted in an elaborate format. Unnecessary attachments beyond those sufficient to present a complete, comprehensive, and effective response will not influence the evaluation of the proposal. The maximum length of each proposal section is shown and should not be exceeded. If the proposer wishes to provide alternative options to those presented here for consideration by the reviewers, they may be presented along with appropriate justification and sufficient cost implications. NYSERDA reserves the right to negotiate changes to the proposer.

All responses submitted as part of this solicitation process become the property of NYSERDA. 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. (See Section V below, "Proprietary Information", for details.) Proposers will not be reimbursed by NYSERDA for any costs associated with the preparation of their proposals.

Teaming Opportunities

Proposers that are interested in collaborating and identifying other potential proposers to work with should email Kate McClellan Press, <u>fisheriesandoffshorewind@nyserda.ny.gov</u>, with the following information:

- Name
- Email address
- Categories (example: A and C2).
- Brief description of what you offer another team or what you are looking for to augment your team (<250 words)

All information for potential proposers looking for collaborators will be posted on <u>Environmental</u> and <u>Fisheries</u> Technical Working Groups webpages. An email will go out to proposers opting in to this team building resource with the website information. By sending this information to NYSERDA, you are consenting to your information being included on a list of individuals/entities interested in collaborating on a proposal, on the webpages noted above. Beyond making the information available, NYSERDA will not proactively endeavor to build teams or discuss the relative benefits of any teaming arrangements.

Proposal Submittal

For ease of identification, all electronic files must be named using the proposer's entity name in the title of the document. 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 (<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.

Proposal Format

Proposals must be submitted as a single file, inclusive of all supporting documents. The file should be 100MB or less in file size. Proposers must submit a complete proposal in either PDF or MS Word format. Proposal PDFs should be searchable and should be created by direct conversion from MS Word, or other conversion utility, rather than scanning. Each page of the proposal should state the name of the proposer, "PON 4082" and the page number. Proposals should follow the format below and provide sufficient and succinct information to complete the required descriptions and answer the questions described in the "Proposal Evaluation" criteria listed in Section IV. The preferred length of each proposal section is shown.

Project Summary (2-4 pages total)

Project Summary Background, Objectives and Outcomes

Summarize the proposed project approach and proposer qualifications as they pertain to this PON. Describe the issue being addressed and how it will bring value to responsible OSW development. Detail the project goals and major objectives. Provide context for the approach and experience in relation to completed and ongoing relevant work in the region and around the world. Describe the outcome or products and how they will be disseminated. Proposals should include coordination with other national, state or local cooperative research initiatives. Include a description of the limitations of the project.

Summary of Project Methods

Summarize the proposed project methods and overall research design. Explain why the equipment, models, methods, and other aspects of the work are expected to be capable of meeting objectives. Describe the extent to which these have been accepted by the scientific community and policy making organizations, or otherwise demonstrated to be valid. The methods must be outlined in detail and clearly designed to meet the project objectives, including spatial and temporal resolution. Proposals should identify existing datasets. If applicable, the methodology for statistical analysis of the data from all aspects of the project must be clearly presented.

Statement of Work (3-9 pages total)

<u>Tasks</u>: The Statement of Work is the primary contractual document that identifies the task sequence, deliverables, and provides the basis for progress payments. It is an action document, divided by the individual tasks or procedures required to accomplish the project objectives. Each task should be identified with a description of its objective, how it will be performed, and the anticipated deliverables and milestones. As appropriate, tasks should include a clear description of general operating procedures, quality control and quality assurance measures, analytical procedures, data analysis, evaluation, and statistical analysis to be used to optimize the quality of the data and project results.

<u>Information Transfer and Dissemination Plan:</u> The Statement of work must include a task for reporting and information transfer. The following baseline reporting and information transfer work will be required for each project and should be considered in allocating resources for this task: presentations at meetings; completing monthly or quarterly progress reports including a substantive description of project

progress and of successful data capture and quality control; a comprehensive final technical report; and articles for submission to peer-reviewed journals. Some projects may be assigned a Project Advisory Committee by NYSERDA. NYSERDA reserves the right to build teams between selected contractors and stakeholders and/or other supported research to maximize the value of the research effort and funding.

Additional methods of information transfer and reporting may be proposed to involve pertinent policy makers or regulators and other target audience representatives during the project and to achieve projected public benefits using the anticipated project results. Efforts to increase access to, or use of, data collected is encouraged. Outreach or education about project findings is also encouraged.

<u>Master Schedule (1 page)</u>: Complete a schedule showing start and completion times for all major tasks, in terms of months after project initiation. Include major milestones and meetings, tests, demonstrations, publications, workshops, reports, and other key deliverables. The Schedule should be realistic and reflect the nature of environmental research.

<u>Budget Form (1 page)</u>: Complete the attached Budget Form (Attachment A) for the entire project, including any in-kind contributions and other cost-sharing. The degree of cost-sharing will be considered in the evaluation of proposals. **Cost-sharing of at least 25% is preferred**. Leveraging of other research funding is preferable. In-kind cost-sharing is acceptable. Proposers must provide sufficient detail in the supporting schedule for each cost element, its description, and amount to justify the budget and allow for evaluation. (Not included in page count).

Supporting Documentation (5 pages total, + supporting documents not included within the page count)

Management Plan and Qualifications:

- Organizational Chart (1 page) Prepare an organizational chart listing all key personnel by name. The role for each team member must be clearly described in the proposal. Include any subcontractors, postdoctoral or graduate students if known, and other sponsors involved in the project, showing their roles and responsibilities.
- Tasking Chart (1 page) Prepare a tasking chart, describing approximately in hours or days the effort contributed by each of the *key* personnel to each task and the total effort.
- Related Projects (up to 3 pages) Provide a sample of related projects undertaken by the proposer and/or subcontractors. For each project provide a brief summary, describing its title, scope, funding amount and client contact numbers. NYSERDA may contact listed clients.
- Resumes (not included in page count) Submit relevant portions of resumes of all key project personnel, including those of proposed subcontractors, and postdoctoral or graduate students if known. Include education and experience that are relevant to the proposed work. (One (1) page each — not included in page count)
- A. Letters of Commitment or Support: If you are relying on other organizations or businesses to do work, provide services, equipment, or data, or share in the non-NYSERDA cost, include a letter from that organization or business describing their commitment. If the use of unpublished data from other researchers is necessary for the project to be successful, letters of support showing the availability of these data must be included. Absence of letters of commitment or support will be interpreted as the proposer not having commitment/support from those parties. (One (1) page each not included in page count)

B. <u>Cost Sharing</u>: A cost-share of at least 25% of the total project cost is preferred. 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 that have already been undertaken. The proposer or proposing team cannot claim as cost-share any expenses that have already been incurred. If applicable, show the cost-sharing plan in the following format (expand table as needed, maximum one (1) page).

	Cash	In-Kind Contribution	Total
NYSERDA	\$	\$	\$
Proposer	\$	\$	\$
Others (list individually)	\$	\$	\$
Total	\$	\$	\$

Attach supporting documentation to support indirect cost (overhead) rate(s) included in your proposal as follows:

- Describe the basis for the rates proposed (i.e., based on prior period actual results; based on projections; based on federal government or other independently-approved rates).
- If rate(s) is approved by an independent organization, such as the federal government, provide a copy of such approval.
- 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) is consistent with generally accepted accounting principles for indirect costs.
- Provide a detailed budget for the overall project.
- Include a detailed budget for each of the subcontractors/consultants that justifies the amount proposed.

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.

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. Publications, presentations, posters, and briefings are common metrics for projects supported by this PON. 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 C: Sample Metrics Reporting Guides for the metrics that you will be expected to provide and the reporting duration. <u>NYSERDA may decline to contract</u>

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

IV. Proposal Evaluation

Proposals that meet solicitation requirements will be reviewed by a Technical 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 clarifications outlined in the proposals. Proposers will be notified if they are requested to attend an interview. If an investigator(s) identified in a proposal is an investigator on one (1) or more current or previous NYSERDA-funded projects, performance on these projects will be considered in the evaluation of the current proposal.

A. <u>Technical Evaluation Criteria:</u> (listed in order of importance)

- a. Usefulness and Value of Project Results Does the project indicate how each of the main goals of the project relate to one or more Research Categories? How useful are the project results expected to be in validating or improving New York State policies, regulations, impact assessments, models, or mitigation methods? Will the results be available in a timely manner? To what extent will the project use and integrate other relevant data and coordinate with other research/monitoring initiatives (e.g., with field sampling and data analysis) to provide maximum value to New York State?
- b. Soundness of Project Methods and Research Design/Statement of Work and Schedule How suitable are the proposed project methods and overall research design for meeting the project objectives and yielding accepted results? How comprehensive, realistic, and explicit is the Statement of Work with respect to the project objectives and proposal requirements? Are specific measurable targets of success provided where applicable? Are the Tasks reasonable and clearly described? Are the methods outlined in detail and clearly designed to meet the project objectives? Are the deliverables for each task clearly presented? Is there a coherent plan for synthesizing the data set?
- c. Management Plan and Qualifications How well has the proposer organized a management plan and a project team with the necessary educational, technical, operations, technology transfer, financing, and administrative experience for successfully completing the project? Are all roles and responsibilities clearly defined? Does the team include partnerships with other research groups? Has an interdisciplinary team been assembled, including environmental scientists, social scientists/public policy analysts, and technologists as appropriate? How many of the team members are located in New York State? Have letters of support demonstrating the availability of data and agreement to participate been included?
- d. Communication of Results How promising is the reporting and information transfer plan for successfully using project results to realize the potential benefits of the project? Has the proposer described a comprehensive final technical report, and articles for submission to peer-reviewed journals? Does the proposer have a well-crafted plan and partnerships to prepare a short paper summarizing the usefulness of their research findings for environmental and/or energy policy formulation, and identified an interested audience? Has the proposer included a review of the draft final report by a technical editor? Has the proposer planned to present results to NYSERDA's Environmental Research Program Advisory Group and invited guests at annual meetings (in Albany,

NY) arranged by NYSERDA staff? Has the proposer acknowledged the project may be assigned a Project Advisory Committee by NYSERDA?

- e. Cost Criteria How justifiable and reasonable are the overall costs compared to the expected usefulness of the project results and the level of effort and duration of the project? How justified and reasonable are the proposer's cost allocations and co-funding contributions (cash, in-kind services, etc.)? To what degree does the proposal include meaningful cost-sharing from other key organizations important for the success of the project? Is there a detailed budget provided for the overall project, including sufficient detail in the supporting schedule for each cost element, its description, and amount to justify the budget?
- B. <u>Other Considerations</u>: Projects will also be reviewed to determine whether they reflect the overall mission of NYSERDA, including:
 - The balance among projects of long- and short-term benefits and risk/reward relationships, and whether similar projects are presently or have been previously funded.
 - The general distribution of projects of diverse topics related to program goals.
 - The ease of measuring project success in quantifiable ways.
 - If applicable, the responsiveness of the proposer in conducting other NYSERDA-funded 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 loc

al 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>.

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 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 (See Attachment B) 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 approximately 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.

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 – Budget Form

Attachment B – Sample Agreement including Exhibit A - template Statement of Work Attachment C – Sample Metrics Reporting Guide

NYSERDA

National Offshore Wind Research and Development Consortium Program Opportunity Notice (PON) 4124 Up to \$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 submissions accepted until December 31,2019 3:00PM EST or until all funds are committed.

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I. INTRODUCTION

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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 AdvancementPillar #2: Offshore Wind Power Resource and Physical Site CharacterizationPillar #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.

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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.

* 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 .



II. SOLICITATION TOPICS AND REQUIREMENTS

This Solicitation includes Technical Challenge Areas for Pillar #1 only.

A. Priority Technical Challenge Areas for Pillar #1

The Consortium members utilized the Pillar #1 topics identified in the Roadmap to identify the highest priority technical challenges for the U.S. offshore wind industry. 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-of-the-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.

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

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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.

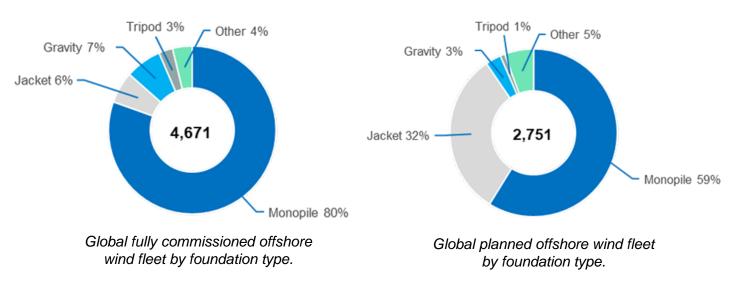


Figure 1. Global Offshore Wind Fleet Source: <u>GRIP</u>, The Renewables Consulting Group, 2018

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



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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.

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- 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,

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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.

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- 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. Proposal Categories

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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.

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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.

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 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.



C. 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.
- Provide benefits to multiple end users. R&D projects that benefit multiple end users are expected to have a greater impact toward achieving the Consortium's industry-wide cost reduction targets compared to R&D projects focused on a developer's specific commercial offshore wind project.

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

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 (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 (%)
CapEx	=	capital expenditures (\$/kW)
OpEx	=	average annual operational expenditures (\$/kW/year)
$AEP_{net} =$	net av	erage 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

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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.

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- 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



"NextGen HVAC Innovation Challenges" Program Opportunity Notice (PON) 3519 Up to \$15 Million Available Round 3 of 4

NYSERDA reserves the right to extend, and/or add or reduce funding to this solicitation

Important Dates* by: Rounds 1 & 2: 5:00 pm Eastern Time Rounds 3 & 4: 3:00 pm Eastern Time					
Round	Challenge Areas	Challenge Announcement	Concept Paper Due Date(s)	Full Proposal Due Date(s) (Tentative)	
1	Heat Pumps, HVAC Controls, Compressorless HVAC, GHEX	June 29, 2017	August 3, 2017	November 16, 2017	
2	Heat Pumps, HVAC Controls, Compressorless HVAC	March 22, 2018	April 26, 2018	August 14, 2018	
3	Heat Pumps, Thermal Distribution, Open	December 6, 2018	January 17, 2019	May 9, 2019	
4	TBD	July 25, 2019	August 29, 2019	December 5, 2019	
*Dates are subject to change. Proposers should check NYSERDA's website (<u>https://portal.nyserda.ny.gov/CORE_Solicitation_Detail_Page?SolicitationId=a0rt0000006nDncAAE</u>) for the latest updates and revisions to PON 3519.					

I. Introduction

Buildings are a large user of energy, a major contributor to greenhouse gas emissions (GHG) and system peak demand, and an important critical infrastructure for New York State (NYS). Heating, ventilation, and air conditioning (HVAC) equipment consumes approximately 40% of the energy used by residential and commercial buildings, making this end use responsible for approximately 25% of the total energy used and 36% of the GHG emissions in NYS. The cooling requirement for buildings is the primary contributor to the difference between peak electric system demand (>32 GW) and average base-load system demand (<18 GW).

The large capital investment and long asset life of existing HVAC equipment requires new HVAC technologies to have compelling value propositions in order to achieve market adoption. Some innovations have been technically compelling but not commercially successful. Additionally, solutions on the market today do not address New York's diverse climate or dense urban population and are not sufficient to meet New York's aggressive energy and GHG reduction goals.

The NYSERDA NextGen HVAC program seeks to reduce the energy use of NYS consumers through advancements in the performance and capabilities of economically viable HVAC solutions. By supporting HVAC innovations, the program will enable buildings to be more energy efficient, load flexible, and resilient. Additionally, many HVAC innovations have the added benefit of improved indoor air quality and quality of life for consumers, providing not only economic value, but also improved consumer comfort.

This solicitation focuses resources on the successful commercialization of HVAC innovations. In addition to articulating the technical innovation, proposers must describe their commercialization strategy,



including: customer discovery and channel strategy, competitive landscape, intellectual property, fundraising needs, manufacturing and scale-up, key partners, and team qualifications and development.

Through this solicitation, NYSERDA will issue a series of innovation challenges over four Rounds and three years (2017-2019). NYSERDA will identify attributes to drive HVAC innovation and challenge innovators to develop solutions that deliver on those attributes. Each Round of this solicitation will begin with the announcement of one or more specific innovation challenges. The areas NYSERDA expects to address through this solicitation include: heat pumps, compressorless HVAC, thermal distribution, advanced HVAC controls, renewable HVAC, integration of renewables/storage with conventional HVAC, solutions for decoupling the sensible and latent cooling requirements, and reductions in peak demand.

NYSERDA will announce the specific innovation challenge(s) for each Round on the tentative dates listed above. Interested proposers should check each Round for the specific innovation challenge areas. NYSERDA reserves the right to add, delete, or modify any of the innovation challenges over the course of this solicitation.

All Concept Papers and Proposals for Round 3 must address one of the following Innovation Challenge Areas: Heat Pumps; Thermal Distribution; or Open. For detailed discussion of each area, refer to Attachments E1 – E3 respectively.

A two-step evaluation process will be used. For each Round of the solicitation, proposers will be required to submit a Concept Paper by the indicated due date. All Concept Papers will be reviewed by a Scoring Committee (SC) based on the evaluation criteria listed in Section IV. NYSERDA may invite proposers whose Concept Papers have been selected for further consideration to submit a Full Proposal. The invitation will include the date by which Full Proposals must be received. Failure to submit a Concept Paper precludes submission of a Full Proposal. Submission of Full Proposals is by invitation only.

Submittal Instructions: Electronic submission is preferable. Proposers may submit a Word, Excel, or PDF file (file formats include: csv, doc, docx, gif, jpeg, jpg, pdf, png, ppt, pptx, pps, ppsx, tif, txt, xls, xlsx, and zip). 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 Concept Papers or Proposals by mail or hand-delivery if electronic submission is not possible. For detailed instructions on how to submit a proposal, click the link "NYSERDA Solicitation – User Guide" located in the "Current Opportunities" section of NYSERDA's website (<u>https://www.nyserda.ny.gov/Funding-Opportunities/Current-Funding-Opportunities.aspx</u>). If mailing or hand-delivering, proposers must submit (2) paper copies of their Concept Paper or Proposal, along with either a PDF or MS Word digital copy, following the above guidelines. Mailed or hand-delivered Concept Papers or Proposals must be clearly labeled and submitted to:

Jillina Baxter, Concept Papers, PON 3519; or Jillina Baxter, Proposals, PON 3519 NYS Energy Research and Development Authority 17 Columbia Circle Albany, NY 12203-6399

Questions? Please see the list of Designated Contacts below. No communication intended to influence this procurement is permitted except by contacting the Designated Contacts named herein.

- For technology-specific questions and questions on Attachment A1 Statement of Work, see Section II: Innovation Challenge Areas below for a list of Designated Contacts.
- For commercialization-specific questions and questions on Attachment A2 TRL/CRL Calculator, contact Erica lannotti at (518) 862-1090 ext. 3285 or by email (<u>Erica.lannotti@nyserda.ny.gov</u>).
- For contractual questions concerning this solicitation, contact Venice Forbes at (518) 862-1090, ext. 3507 or by email (<u>Venice.Forbes@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) 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 submissions will be returned. Incomplete proposals may be subject to disqualification. It is the proposer's responsibility to ensure that all pages have been included in the proposal. Faxed or e-mailed proposals will not be accepted. Proposals 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://portal.nyserda.ny.gov/CORE_Solicitation_Detail_Page?SolicitationId=a0rt0000006nDncAAE.

II. Innovation Challenge Areas

All submissions for Round 3 must address one of the following Innovation Challenge Areas:

- Innovation Challenge Area 1: Heat Pumps See Attachment E1
 Technical questions concerning Heat Pumps should be directed to Robert Carver (Designated
 Contact) at (518) 862-1090 ext. 3242 or by email (<u>Robert.Carver@nyserda.ny.gov</u>).
- Innovation Challenge Area 2: Thermal Distribution See Attachment E2 Technical questions concerning Thermal Distribution should be directed to Michael Genovese (Designated Contact) at (518) 862-1090 ext. 3103 or by email (<u>Michael.Genovese@nyserda.ny.gov</u>).
- Innovation Challenge Area 3: Open See Attachment E3 Technical questions concerning Open should be directed to Michael Genovese (Designated Contact) at (518) 862-1090 ext. 3103 or by email (<u>Michael.Genovese@nyserda.ny.gov</u>).

If the Designated Contact for a given technology area is not available, technology-specific questions should be directed to Joseph Borowiec (Designated Contact) at (518) 862-1090 ext. 3381 or by email (Joseph.Borowiec@nyserda.ny.gov).

III. Program Requirements

Projects selected for funding must:

- 1. Show potential to reduce GHG emissions from the building sector in New York State.
- 2. Demonstrate benefits to electric System Benefits Charge (SBC) ratepayers (<u>https://www.nyserda.ny.gov/About/Funding</u>), regardless of the initial stage.
- 3. Address an opportunity to increase the energy-efficiency and/or advance the energy performance of new and/or existing buildings in the residential, multi-family, commercial, or institutional sector.
- 4. Provide direct and quantifiable energy, environmental, and economic benefits to New York State such as energy savings, demand response, emissions reductions, job creation, product manufacturing and sales, and/or reduced energy costs.
- 5. Satisfy the Concept Paper requirements and, if selected, Full Proposal requirements and sufficiently address the evaluation criteria (see Sections IV and V).
- 6. Complete all necessary attachments, including the Concept Paper Template (Attachment B) and, if selected, the Proposal Narrative (Attachment A), Statement of Work (Attachment A1), TRL/CRL Calculator (Attachment A2) and Budget Form (Attachment C).
- 7. Agree to pay recoupment to NYSERDA for commercial sales or licensing revenues of new technologies, services, or products developed with NYSERDA funding (see Section VI).
- 8. Agree to Annual Metrics Reporting terms (see Section VI) and General Conditions (see Section VII).
- 9. Development activities should describe their commercialization strategy and include other commercialization activities; basic research is ineligible.



- 10. Demonstration projects must take place within New York State and include a letter of support from the site owner(s)/decision maker(s).
- 11. Provide a letter of support and commitment from all funding sources.

Technology Stages Proposals will consist of one or more of the following stages as defined by Technology Readiness Level (TRL). Only the following three stages will be considered for funding:

Technology Stages	TRL	Proposer Cost Share
Feasibility	1-3	20%
Development	4-7	50%
Demonstration	8-9	40%

Proposals must articulate a plan to take the technology in its current stage through the Demonstration Stage. In other words, if the initial technology stage is Feasibility, the proposal should also include schedules and budgets for the Development Stage and Demonstration Stage. If the initial technology stage is Development, the proposal should also include a schedule and budget for the Demonstration Stage.

All activities with a **stage** budget in excess of \$350,000 may be broken down into **phases** at NYSERDA's discretion. Funding may be awarded for multiple phases with funding for each phase beyond the initial phase conditional upon meeting predefined goals of prior phases and contingent upon the availability of funds. An additional review will be required for projects to move between **stages**. For more information regarding the stage gating process, please refer to section 3 of 'Project Schedule, Staging, and Teaming' below.

Proposers should allocate 10-25% of the project budget for commercialization-related tasks, such as customer discovery, IP protection, business plan development, and design for manufacturing.

- 1. Feasibility Stage (Proposer cost share of 20% or greater)
 - a. Applied research aimed at early development of a new product or technology, policy, business, and/or regulatory model.
 - b. The Feasibility Stage of any proposed project will be limited to \$350,000 total.
 - c. Projects beginning in this stage should have a TRL of 1-3. If the TRL is of a greater value, the proposer should apply under the Development or Demonstration Stage.
 - d. After completing the Feasibility Stage, the sub-components should be validated and testing of the complete system should be underway.
 - e. After completing the Feasibility Stage, the innovation should be validated as commercially viable through discussions with potential customers and/or users.
- 2. Development Stage (Proposer cost share of 50% or greater)
 - a. Development and commercialization of products/services for improving the energy performance of new or existing buildings in NYS. Technical and commercial feasibility of the innovation should have been demonstrated prior to submitting to this stage. If feasibility has not yet been shown, the proposer may apply under the Feasibility Stage.
 - b. Development activities may include field testing to help improve the product/service or expected performance and value proposition.
 - c. Projects beginning in this stage should have a TRL of 4-7. If the TRL is less than 4, the proposer should submit under the Feasibility Stage. If the TRL is over 7, the proposer should submit under the Demonstration stage.
 - d. After completing the Development Stage, a prototype that can reliably perform all functions that would be required in an operational system should exist.
 - e. After completing the Development Stage, the team should have a strong, market-validated commercialization strategy that addresses commercialization activities.



- 3. **Demonstration Stage** (Proposer cost share of 40% or greater)
 - a. Demonstrations of new or under-utilized technologies or practices that advance the energy performance of either new or existing buildings in NYS.
 - b. Proposals beginning in the Demonstration Stage should not include technology or product development activities. If technology or product development activities are appropriate, the proposer may propose under the Feasibility Stage or Development Stage.
 - c. Demonstration proposals should clearly identify how the project will bring the product, technology, or practice closer to commercial success and how the demonstration will lead to increased use of the technology or practice in NYS.
 - d. Demonstration proposals should include a detailed plan for disseminating project results to a wide audience.
 - e. Evaluation of the demonstration should be conducted by a recognized and independent thirdparty evaluator (i.e., evaluator has no financial interest in the outcome of the demonstration).
 - f. The demonstration must take place at a site that pays into the Clean Energy Fund (<u>https://www.nyserda.ny.gov/About/Funding</u>) through the electric SBC unless significant statewide benefits are demonstrated.
 - g. Projects submitted under the Demonstration Stage should have a TRL of 8-9. If the TRL is less than 8, the proposer should submit under the Feasibility Stage or Development Stage.
 - h. After completing the Demonstration Stage, the product should be in its final form and ready for market.
 - i. After completing the Demonstration Stage, the team should have a strong, market-validated commercialization strategy.

Project Schedule, Staging, and Teaming: All proposers should consider the following guidelines when developing their submissions:

- 1. Proposers must select an initial stage and indicate it in their proposal. Unless the initial stage selected is Demonstration, the proposal will be a multi-stage proposal with commercialization as the end goal.
 - a. The proposer should describe how they will complete their initial stage and any following stage along with significant milestones, total cost, and schedule for each stage.
 - b. For example, if the initial stage is Feasibility, the proposal should also include separate tasks, schedules, and budgets for the Development Stage and Demonstration Stage. If the initial stage is Development, the proposal should also include separate tasks, schedule, and budget for the Demonstration Stage.
 - c. NYSERDA reserves the right to modify a project's Statement of Work and may offer to fund part of the proposal or stage therein at a level lower than that requested, such as offering to fund only a single **stage** of a multi-stage proposal rather than a full development effort.



- A project is expected to begin within nine months of the proposal due date. No project schedule should exceed a total of 36 months, except to indicate commercialization activities beyond those of the proposed project.
- 3. For multi-stage proposals:
 - a. Any contract awarded to fund one or more stage(s) of a multi-stage project does not in any way obligate NYSERDA to fund the later stages.
 - 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.
- iii. Later stages may be funded at NYSERDA's sole discretion, using a stage gating review process: at the completion of each stage, project outcomes will be evaluated to determine if the project will continue to be funded. The evaluation criteria will include: probability of technical and commercial success, potential market impact, leverage of resources, strategic fit within the program portfolio, and the availability of program funds.
- iv. NYSERDA expects it may award more contingent funding than is available for this program.
- b. The proposal must meet the minimum proposer cost share for each stage (20% feasibility, 50% development, 40% demonstration).
- 4. A proposal may be considered non-responsive if it fails to comply with the requirements above, the Proposal Requirements of Section IV, or the General Conditions of Section VIII.
- 5. Prior to an award being made, proposers may be required to demonstrate confirmation of cost share, participation of key individuals and team, commitment from demonstration site, and the ability to qualify for an award under applicable laws and regulations.
- 6. Preference will be given to proposers that provide attractive leverage (cash co-funding, partnerships) opportunities for NYSERDA, and proposers who have a strong path to commercialization.

A payment based on the final deliverable will be reserved until project completion. If awarded, NYSERDA may choose to negotiate the amount of such payment. If the project is a multi-stage project, a report should be delivered following the completion of each stage.

NYSERDA seeks teaming arrangements that increase probability of success and commercialization of technologies that yield NYS 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 or interest from each identified team member in the 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, 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 businesses or other organizations critical to the future commercialization, demonstration, or implementation 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. However, in the instance that a proposal is beginning in the Feasibility Stage, a letter of commitment from a Host Site may be difficult to secure. In this instance, a proposer should indicate their intention to secure the commitment and that more time is necessary to do so. Letters should not be solicited from NYSERDA personnel.

IV. Concept Paper & Full Proposal Requirements

- 1. **Concept Paper:** Submission of a Concept Paper is required for initial consideration under this solicitation. Failure to submit a Concept Paper precludes submission of a Full Proposal. Concept Papers must conform to the following requirements:
 - The Concept Paper Template (Attachment B) must be complete. If a required question is not answered, the Concept Paper may be deemed unresponsive and may be returned;
 - Concept Paper submitters are required to use the format of the Concept Paper Template. The intent of the template is to lead the proposer through the requirements in an organized manner without repeating or restating necessary information. Concept Papers using a different format may be deemed unresponsive;



- Concept Papers must be submitted in Adobe PDF format, be written in English, be single spaced, use black 11 point Times New Roman font (except in Figures and Tables), and be formatted to fit on 8.5 inch by 11-inch paper with margins no less than 1 inch;
- Concept Papers shall not exceed four (4) pages in length including graphics, figures, and/or tables; and
- Concept Papers must prominently display on each page the Principle Investigator's Last Name and be completed in accordance with the Submittal Instructions.
- 2. **Full Proposal:** If notified by NYSERDA of a favorable Concept Paper review, the proposer will be invited to submit a Full Proposal. Full Proposals must include the following:
 - The Proposal Narrative (Attachment A) form-fillable document must be complete. The Innovation Challenge Area and initial Technology Stage must be clearly indicated. The Proposal Narrative must have all the required questions/sections answered. If a required question is not answered, the proposal could be deemed non-responsive.
 - The Statement of Work (Attachment A1), TRL/CRL Calculator (Attachment A2), and Budget Form (Attachment C) must be completed.
 - Proposals should not be submitted in an elaborate format. Unnecessary appendices 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 PON number, and the page number.
 - **Cost Sharing:** The proposal should show non-NYSERDA funding of at least 20% of the Feasibility Stage, 50% of the Development Stage, and 40% of the Demonstration Stage. 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.

V. Proposal Evaluation

1. **Concept Papers**: Concept Papers determined compliant with application procedures and eligible and responsive to PON 3519 will be subject to NYSERDA review. Eligible Concept Papers will be reviewed and scored per the criteria and point system below. A score of 65 points is the minimum threshold of 100 possible points. No proposal with a score of less than 65 will be considered for an invitation to submit a Full Proposal.

Evaluation Criteria in Order of Importance:

- New York State Impact (20 points)
 - Is the proposed approach an advancement over existing solutions which, if successful, will result in truly significant improvements in energy technology and in energy utilization, GHG emission reductions, building resiliency and utilization in New York State?
 - Is the proposed approach likely to enable benefits at scale, that is, if developed, could supplant existing technology and/or create entirely new marketplaces in New York State, stimulating clean technology manufacturing and business growth and improving consumer choice?
 - Is the proposed concept consistent with the innovation challenge, and NYSERDA programmatic goals and mission?

Innovation (20 Points)

- Is the proposed approach unique and innovative?
- o Is the proposed approach technically sound?
- Is the proposed approach aimed at the development of technology or innovative business practice, as opposed to basic research aimed at discovery and fundamental knowledge generation?



• Does the proposal have a market-based approach? Is the proposed commercialization strategy comprehensive and practical?

• Competitive Landscape and Market Barriers (20 Points)

- Does the proposer demonstrate an understanding of existing and other emerging solutions?
- Has the market been identified and characterized and are there sufficient markets or needs for the concept/technology, project, or study?
- To what extent has the proposer engaged the market? To what extent does the proposer understand the market?
- How significant are the barriers to market entry or adoption of the concept, product, or technology?
- Is the value proposition sufficient that the concept or technology will likely be successful in the target market?

• Risks and Challenges (15 Points)

- o Does the proposal clearly identify the technical and commercial risks and challenges?
- o Have key technical and commercial challenges been identified and prioritized?
- o Is there an understanding of competitive options being developed by others?

• Team (15 Points)

- Who are the key team members on the proposed effort?
- What organizations will be involved with the proposed effort and what will each contribute?
- Does the proposed team have the necessary expertise and resources to carry out the proposed work?

• Project Plan (10 Points)

- o Does the proposal clearly outline how the key risks and challenges will be addressed?
- o Do the proposed project objectives, if achieved, validate the proposed concept?
- Do the proposed project objectives, if achieved, outline a clear path to market?
- Can the proposed work be reasonably accomplished for the amount of time, effort, and resources proposed?
- Review and Selection Process: Selected Concept Paper applicants will be invited to submit Full Proposals. Only those demonstrating significant and clear technical merit and market viability will result in an invitation from NYSERDA to submit a Full Proposal.
- 3. **Full Proposal:** Full Proposals will be reviewed by a Scoring Committee (SC) and will be scored and ranked according to the following criteria, **listed in order of importance**. After the Full Proposals are reviewed, NYSERDA will issue a letter to each proposer indicating the proposal evaluation results. Proposers receiving favorable evaluations may be invited to enter into contract negotiations with NYSERDA. The proposer may be required to submit additional details for the Statement of Work, budget, and schedule, and may also be asked to address specific questions or recommendations of the SC before contract award.

Proposals that meet solicitation requirements will be reviewed by a Scoring Committee using the Evaluation Criteria below.

Evaluation Criteria in Order of Importance:

• **Proposed Solution/Scope.** Does the proposed project specifically address a problem or opportunity identified in an Innovation Challenge Area and sub-category 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? Is there 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?

- **Project Benefits.** 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 there additional significant benefits, such as improvement in the building sector's resiliency to disasters? Will a significant part of the work on the project take place in New York State?
- 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 replication? Is there a process or strategy in place to measure progress and success?
- **Project 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, co-funders, and other organizations? Has the proposer demonstrated support from necessary market actors and potential customers?

Other Considerations. Proposals and concept papers will be reviewed to determine if they meet all Program Requirements, fit well within the selected Innovation Challenge Area and have been submitted under the proper Stage. The proposal and concept paper's fit with NYSERDA's overall objectives will also be considered, including: risk/reward relationships; similar ongoing or completed projects; the general distribution of projects among innovation challenges, industries, and other organizations and locations in New York State; and, the degree to which there is a diversity of technologies, approaches, time-to-market, geographic locations, methods, and institutions in the existing portfolio of projects funded by NYSERDA. NYSERDA reserves the right to accept or reject proposals based on the degree to which pricing and hourly rates are in line with the rest of the market.

VI. Recoupment and Metrics

Recoupment - For any new projects exceeding \$75,000 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.

1. <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.



2. <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.

Projects where NYSERDA's share of funding is \$75,000 or less will 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.

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. Please refer to Section VII: General Conditions for more information regarding Annual Metrics Reports.

NYSERDA may decline to contract with awardees that are delinquent with respect to recoupment payments or sales/metrics reporting for any previous 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, 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 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 one or multiple award(s) 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 7 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 1.5% of sales or ten percent (10%) of all license revenue accruing to the Contractor for products produced in New York State (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) and 5% of sales or thirty percent (30%) of all licensing revenues accruing for products produced outside of New York State (for a period of fifteen years or until the Contractor pays NYSERDA and 5% of sales or thirty percent (30%) of all licensing revenues accruing for products produced outside of New York State (for a period of fifteen years or until the Contractor pays NYSERDA and amount equal to three times the amount of funds paid by NYSERDA to the Contractor, whichever comes first).

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> 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.

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 year's activities (i.e. reporting period). Please see Attachment C (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. Attachments

 $\begin{array}{l} \mbox{Attachment A - \underline{Proposal Narrative} \\ \mbox{Attachment A1 - \underline{Statement of Work} \\ \mbox{Attachment A2 - \underline{TRL/CRL Calculator} \\ \mbox{Attachment B - \underline{Concept Paper Template} \\ \mbox{Attachment C - \underline{Budget Form and Instructions} \\ \mbox{Attachment D - \underline{Metrics Reporting Guide} \\ \mbox{Attachment E1 - \underline{Heat Pumps} \\ \mbox{Attachment E2 - \underline{Thermal Distribution} \\ \mbox{Attachment E3 - \underline{Open} \\ \mbox{Attachment F - \underline{Sample Agreement} \\ \end{array}} \end{array}$



NY-Sun Residential/Nonresidential Incentive Program Program Opportunity Notice (PON) 2112 October 25, 2018

NY-Sun Residential & Nonresidential Incentive Program NY-Sun Project Applications and Contractor Applications Accepted August 12, 2010 through December 29, 2023 By 5:00 PM Eastern Time

The New York State Energy Research and Development Authority (NYSERDA) provides cash incentives and/or financing 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 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>venice.forbes@nyserda.ny.gov</u>. All Technical questions should be directed to Frank Mace at (518) 862-1090, ext. 3433 or <u>frank.mace@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 cash incentives and/or financing 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 Powerclerk 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 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 20%.
- 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 October 25, 2018

NY-Sun Commercial & Industrial Incentive Program NY-Sun Project Applications and Contractor Applications Accepted May 4, 2015 through December 29, 2023 By 5:00 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>.

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 PVprocessing@nyserda.ny.gov.

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>venice.forbes@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 ny.gov/become-a-solar-contractor.

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 ny-sun.ny.gov.



REV Campus Challenge Technical Assistance for Roadmaps

Program Opportunity Notice PON 3438

Applications accepted on a first come, first served basis through December 31, 2019 by 3:00 PM Eastern Time or until funding is exhausted.

The REV Campus Challenge is part of Governor Andrew M. Cuomo's Reforming the Energy Vision (REV), a strategy to build a clean, resilient, and affordable energy system for all New Yorkers. The REV Campus Challenge recognizes achievements among institutions of higher education and enables exchange of best practices and lessons learned. The REV Campus Challenge aims to help colleges and universities meet their financial, environmental, academic, and community goals through clean energy solutions that also help scale up total clean energy use in New York State.

The **REV Campus Challenge Technical Assistance for Roadmaps (the "Program")** supports REV Campus Challenge members by enabling them to hire a third-party energy consultant to aid in the evaluation of existing energy-related conditions on campus and establish a comprehensive plan, or "Roadmap", for managing campus energy needs. REV Campus Challenge members can apply to receive up to \$150,000 per member in NYSERDA cost-shared funding. A bonus of up to \$4,000 can be applied to fund the cost of utilizing of a student intern to assist in the completion of the Roadmap. The student intern bonus can be applied in addition to the \$150,000 funding cap (i.e. a total funding cap of \$154,000, if applicable).

This Program is administered through the REV Campus Challenge and therefore only REV Campus Challenge members are eligible to apply. REV Campus Challenge members must pay into the electric System Benefits Charge (SBC) to be eligible. A limited amount of funding is also available to non-SBCpaying Long Island Power Authority (LIPA) customers. A note will be added on the Current Funding Opportunities Page¹ when a particular funding source is no longer available.

How to Apply:

Program funding requests **must be** submitted to <u>commercialprograms@nyserda.ny.gov</u> and include the following:

- Technical Assistance for Roadmaps Application (Attachment A)
- Scope of work including a schedule and budget (see Section III: Application Requirements, Attachment B: Roadmaps Scope of Work Template, and Attachment C: Sample Budget Template)
- Collaborative Commitment(s) as applicable, for use when REV Campus Challenge members are collaborating on a single Application (Attachment D)

Program questions can be directed to: Tiffany Nicolella, 518-862-1090 ext. 3548, revcampuschallenge@nyserda.ny.gov Contractual questions should be directed to: Venice Forbes, 518-862-1090 ext. 3507, VeniceSolicitations@nyserda.ny.gov

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 <u>www.nyserda.ny.gov</u>.

¹ https://www.nyserda.ny.gov/Funding-Opportunities/Current-Funding-Opportunities

I. Introduction

Launched in October 2015, the REV Campus Challenge promotes clean energy efforts by recognizing and supporting New York State (NYS) institutions of higher education that implement clean energy projects on campus, in the classroom, and in surrounding communities. Workshops held with REV Campus Challenge members in Spring 2016 identified that many NYS colleges and universities have not set carbon or energy reduction goals and, moreover, have not established a baseline or action plan to address campus energy usage and resulting greenhouse gas (GHG) emissions.

The objective of this Program is to kick-start campus clean energy progress by enabling institutions to hire an energy consultant to aid in the evaluation of existing energy-related conditions on campus and establish a comprehensive plan for managing campus energy needs.

Participant level REV Campus Challenge members – those institutions that are interested in pursuing clean energy goals, but have made little to no progress – are the target audience for this Program, although all REV Campus Challenge members are eligible to apply. Institutions at this early membership level pose the greatest opportunity for clean energy implementation.

This Program is administered through the REV Campus Challenge and therefore only REV Campus Challenge members are eligible to apply. REV Campus Challenge members must pay into the electric System Benefits Charge (SBC) to be eligible. A limited amount of funding is also available to non-SBC-paying Long Island Power Authority (LIPA) customers. If you are a REV Campus Challenge member interested in this Program and are unsure if you meet this eligibility criterion, please contact NYSERDA at revcampuschallenge@nyserda.ny.gov.

II. Program Details

Program Definitions and Parameters

Institution: The two- or four-year, public or private, college, university, or community college seeking Roadmaps technical assistance. The Institution must be a REV Campus Challenge member.

Energy Consultant: The third-party consultant hired by the Institution to assist in developing and implementing the Project. The third-party consultant may also be a NYSERDA FlexTech Consultant.

Applicant: The entity receiving the approved incentive amount upon Project completion. In some cases, the Applicant will be the Institution. However, a NYSERDA FlexTech Consultant may also apply on behalf of the Institution.

Project: The work to be completed as defined by the approved scope of work.

Roadmap: The comprehensive plan developed as part of the project and scope of work. The Roadmap should summarize the work completed, provide clear and prioritized next steps for the Institution, and quantify energy savings/GHG reductions for applicable recommendations.

The Project must be ready to commence within three (3) months of the issued NYSERDA purchase order date.

NYSERDA is not committed to cost-sharing an application until a Purchase Order (PO) is issued. Institutions and Energy Consultants are encouraged to commence work after NYSERDA issues a PO. Commencement of Project activities prior to receiving a PO is at their own risk.

NYSERDA reserves the right to cancel or prorate NYSERDA cost-share based upon Project deliverables not being met.

Unless otherwise negotiated, all work funded under this program must be completed within two (2) years of issuance of the PO.

Funding

Available funding will be administered as follows:

- 1. For Projects with scope of work budgets less than or equal to \$10,000, NYSERDA will pay 100% of the eligible Energy Consultant costs.
- 2. For Projects with scope of work budgets greater than \$10,000, NYSERDA costsharing will vary based on the type and cost of assistance being sought.
- 3. Funding is capped at \$150,000 per Institution. A bonus of up to \$4,000 may be applied to cover the cost of utilizing a student intern(s) to assist in the completion of the Roadmap. The student intern bonus can be applied in addition to the \$150,000 funding cap. Refer to the **Student Intern Bonus** section below for more details.
- 4. Funding must be used to hire an Energy Consultant to complete work as detailed in a scope of work that supports the objective of this Program.
- 5. Funding must be used for the technical assistance services identified in the final scope of work only.

*See **Table 1: Eligible Scope of Work Activities** for more information on costsharing. At NYSERDA's discretion and approval, a portion of the cost-share may be available for non-energy sustainability measures.

The Institution's cost-share must be in the form of cash contribution to the project. Inkind contribution is allowable up to 15% of Institution's cost-share amount.

Institution Responsibilities

Institutions must be current REV Campus Challenge members and identify an Energy Consultant with whom they will partner to complete the Project. Institutions may use their own Energy Consultant or may choose from NYSERDA's list of FlexTech Consultants.

- Visit <u>www.nyserda.ny.gov/rev-campus-challenge/</u> to become a REV Campus Challenge member.
- Visit <u>www.nyserda.ny.gov/flextech</u> for the current listing of FlexTech Consultants.

If the Institution elects to use a FlexTech Consultant, the FlexTech Consultant may apply on the Institution's behalf. Otherwise, the Institution will be the Applicant.

The Institution must:

- Designate a supervisor (i.e. the Institution's REV Campus Challenge point of contact) to oversee the Energy Consultant and manage the Project and deliverables. This designee must be a staff or faculty member currently employed by the respective Institution.
- Be willing to share best practices, lessons learned, or other information as a means of furthering clean energy planning and adoption on NYS campuses. This could be executed through development of one or more of the following: development of success story, presentation at a REV Campus Challenge workshop or related industry event, on campus presentation, or other identified and agreed upon format.

Institution and Energy Consultant Responsibilities

The Institution and its Energy Consultant must:

- Develop a scope of work (see Section III Application Requirements).
- Perform the technical assistance services as described in the scope of work.
- Attend periodic project management check-ins via phone call with NYSERDA, at NYSERDA's discretion.
- Provide quarterly reports documenting actions taken and progress toward completion of the Project.
- Identify clear, prioritized follow-up actions as part of a Roadmap for the Institution to pursue as a means of maintaining momentum toward achieving its clean energy goals. A minimum two (2) year outlook is required and should highlight any activities the institution already has plans to implement.
 - The Roadmap should be developed collaboratively between the Institution and its Energy Consultant based on opportunities uncovered during the completion of the Project.
 - Roadmaps may further include guidance on:
 - Procuring additional technical services to support clean energy implementation.
 - Hiring of dedicated energy and/or sustainability staff.
 - Establishing an internal sustainability committee to drive success.
 - Other follow-up actions to address opportunities identified during the completion of the Project.

Eligible Scope of Work Activities

The following **Table 1: Eligible Scope of Work Activities** are supported through this Program. The scope of work must have a direct link to achieving energy savings/GHG emission reductions and involve a comprehensive evaluation of campus energy/sustainability needs. **Contact NYSERDA for further clarification if necessary.**

Table 1: Eligible Scope of Work Activities	NYSERDA Cost Share (% of total activity cost)
Establish reporting protocol and report to voluntary third-party energy or GHG certification organizations (i.e. AASHE Sustainability Tracking, Assessment & Rating System (STARS), Green Revolving Investment Tracking System (GRITS), the Climate Commitment, NYC Carbon Challenge)	100%
Establish baseline building energy consumption	75%
Complete greenhouse gas (GHG) emission inventory	75%
Develop energy master plan	75%
Develop climate action or sustainability plan	75%
Conduct level 2 or level 3 ASHRAE building audit	50%
Identify energy conservation measures	50%
Conduct feasibility assessment and/or financial analyses for clean energy projects	50%
Identify funding opportunities for clean energy projects	50%
Develop grant and/or incentive Applications for clean energy projects	50%
Assistance in developing clean energy project contracting and procurement	50%
Purchase and/or install permanent meters or permanent sub-meters	50% (Capped at \$10,000 per REV Campus Challenge Member)

Scope of work activities **ineligible** for cost-share include:

- Commissioning, including retro-commissioning
- Activities lacking a clear link to achieving energy savings and/or GHG emission reductions
- Installation of clean energy projects

NYSERDA reserves the right to adjust the cost-share from the guidelines provided based on actual scope of work activities. The Applicant will be notified in writing of any such changes prior to issuance of a purchase order.

REV Campus Challenge Member Collaboration

Collaboration amongst REV Campus Challenge members is encouraged. Eligible Institutions are strongly encouraged to partner and submit a joint Application with a single Energy Consultant.

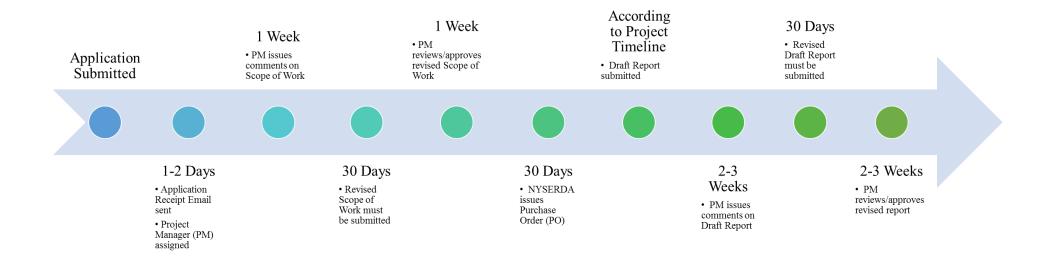
- Funding provided through this Program is on a per-Institution basis, so applying jointly will NOT negatively affect funding provided.
- The Application must designate a single Institution to be the lead Institution. The lead Institution:
 - Will act as the primary point of contact for NYSERDA for all Project-related matters
 - Is responsible for completing and submitting the Technical Assistance for Roadmaps Application (Attachment A)
 - $\circ~$ Should coordinate with partnering Institutions in developing the scope of work and budget
- Each additional Institution(s) must provide a signed Collaborative Commitment (Attachment D).
- The scope of work must clearly identify which tasks apply to each Institution. The scope of work must follow the requirements and preferred format in Attachment B: Roadmaps Scope of Work Template
- Each Institution must identify a supervisor to oversee the completion of relevant tasks.
- Each Institution must provide copies of Energy Consultant invoices to NYSERDA as appropriate.

Student Intern Bonus

Student engagement is encouraged. A bonus of up to \$4,000 may be applied to cover the cost of utilizing a student intern(s) to assist in the completion of the Roadmap. Institutions may share student interns. Each REV Campus Challenge member is eligible for one (1) bonus of up to \$4,000 under this Program. This bonus is in addition to the \$150,000 cap above, ultimately resulting in a \$154,000 funding cap, if applicable. The Student Intern Bonus is capped at the lesser of 10% of the NYSERDA cost-share, or a maximum of \$4,000.

- The use of student interns is strongly encouraged to support the execution of the Project, as appropriate. Student internships can provide valuable learning opportunities for students.
- Student interns are required to provide a final report on the tasks they completed relevant to the Project, which should be submitted as part of the final report.
- Student intern(s) must be managed by a staff or faculty member employed by the Institution. The designated supervisor will be responsible for coordinating directly with the Energy Consultant and ensuring the student intern(s) is effectively supporting the completion of the Project.
 - In the case where multiple Institutions are submitting a joint Application for funding and utilizing the same student intern(s), student intern(s) will be managed by a staff or faculty member employed by their respective Institution.
- Requests for the student intern bonus should be noted in the Technical Assistance for Roadmaps Application (Attachment A) and intern work should be included as a task in the scope of work (Attachment B).

Participation Process



Please Note:

- Scopes of Work and Draft Reports may require more than one round of comments.
- Failure to submit items within the specified timeline may result in cancellation.

III. Application Requirements

Application Submission

Program funding requests must be submitted to <u>commercialprograms@nyserda.ny.gov</u> and include the following:

- 1. Technical Assistance for Roadmaps Application (Attachment A)
- 2. Scope of work including schedule. The submitted scope of work must follow the structure and guidelines established in Attachment B: Roadmaps Scope of Work Template
- 3. Task-by-task budget (see Attachment C: Sample Budget Template)
- 4. Collaborative Commitment(s) as applicable, from REV Campus Challenge members applying under one Application (Attachment D)

Application forms are available at <u>www.nyserda.ny.gov/rev-campus-challenge</u>.

NYSERDA will review the submitted Application and respond to the Applicant (either the Institution or a FlexTech Consultant applying on behalf of the Institution, see Section II: Program Details) within 30 days of receipt. 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. After formal, written approval of the Application, NYSERDA will issue a Purchase Order. Funding is NOT reserved until a Purchase Order is issued.

IV. Final Deliverables and Invoicing

Upon scope of work completion, the Applicant (either the Institution or a FlexTech Consultant applying on behalf of the Institution, see Section II: Program Details) must submit a **final report**, including the Roadmap described in Section II: Program Details, to NYSERDA for review and approval. The Program's Final Report Requirements, including the Project Summary Sheet, are sent to the Institution and Energy Consultant when a project's Purchase Order is issued.

The Program's Final Report Requirements and Project Summary Sheet are also available as resources at <u>https://www.nyserda.ny.gov/All-Programs/Programs/REV-Campus-Challenge/Program-Opportunities/Roadmaps/Resources</u>

NYSERDA will review the submitted report and issue comments or approval to the Applicant within 30 days of receipt. In the event NYSERDA has comments, the Applicant is required to submit written responses and/or revisions to NYSERDA within 30 days of receiving NYSERDA's comments. NYSERDA may engage a third-party engineering firm, at no cost to the Institution, to assist in review of the final report. The Energy Consultant authoring the final report should budget time for revision(s) to the final report, subject to NYSERDA's comments.

Once the final report is approved by NYSERDA, the Applicant must submit an invoice to NYSERDA in accordance with Exhibit C, NYSERDA Prompt Pay Policy Statement (see Attachment E: Sample Terms and Conditions). The Applicant may invoice NYSERDA as they incur costs in completion of the scope of work, not to exceed 50% of the Purchase Order amount. Copies of the Energy Consultant invoices must be provided and must be broken out by non-labor costs, individuals, titles, hourly rates, dates, and hours worked on each task in the final scope of work. Travel costs are limited to 3% of the total cost. NYSERDA reserves the right to withhold payment in cases where Program deliverables are not being met.

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 "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 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

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 \$150,000, 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/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 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 expects to notify Applicants in approximately thirty (30) days from the receipt of an Application whether your Application has been selected to receive an award.

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.

VI. Attachments

Attachment A: Technical Assistance for Roadmaps Application
Attachment B: Roadmaps Scope of Work Template
Attachment C: Sample Budget Template
Attachment D: Collaborative Commitment(s) – for use when REV Campus Challenge members are collaborating on a single Application
Attachment E: Sample Terms and Conditions



REAL TIME ENERGY MANAGEMENT (RTEM) Program Opportunity Notice (PON) 3689 \$31 Million Available for Commercial RTEM \$5.7 Million Available for Industrial RTEM \$2.83 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 5:00 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 cost-shared 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 Michael Reed (866-NYSERDA, ext. 3244). All Contractual questions should be directed to Nancy Marucci (866-NYSERDA, ext. 3335) or <u>nancy.marucci@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, multi-family, or industrial facility owner or manager who is procuring the RTEM system and service.

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 <u>http://nyserda-</u>



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.

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 one year of receiving a NYSERDA Purchase Order ("PO"). A one-time extension of up to twelve months may be requested. Failure to install within the one-year 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 \$200,000 (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.

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. All industrial projects must monitor and integrate production or production-related data. Monitoring hardware must be permanently installed, and not intended for temporary use.

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.
- An autonomous Building Automation System executing local terminal and machine control functions does not qualify.
- New facilities, or those that have undergone substantial renovations, that have been occupied for less than one year are ineligible.

III: PROGRAM INCENTIVES

All projects must include cost-sharing in the form of matching cash support from the site(s). Each qualifying project site is limited to receiving \$155,000 of program funding based on the following:



For RTEM System Installations:

• 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.

There are two cost-share incentive options available. RTEM

Applicants will be able to select, on project-by-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.

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 qualifying project site is limited to receiving \$155,000 of program funding.

Commercial Portfolio Expansion Cap

A portfolio of commercial sites submitted as an aggregated project or as separate Applications having the same ownership or management capable of authorizing the installation of and acting upon information from a RTEM system are limited to receiving funding for either a maximum of ten (10) sites OR a combined square footage total of 300,000 ft².

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 \$200,000.

Provider Cap

Commercial and Multifamily sectors: each applicant is limited to receiving 20% of overall available program funding.

Industrial sector: there is no applicant funding cap.

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 (Attachment A-1).
- 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.

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 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 bi-annual information and supporting documentation to help summarize the performance of the project on a bi-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.

RTEM Service Reports for Industrial projects will be required to provide CUSUM Energy Savings Model data. This regression model must be developed as per the standards of any of the following:

- IPMVP Option C;
- NREL Uniform Methods Project SEM Protocol; OR
- Equivalent standards at the discretion of NYSERDA.

PROJECT PAYMENTS:

NYSERDA intends to issue progress payments based on the following:

- 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 <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/NYSERDARegulations.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:

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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

https://www.ogs.ny.gov/aboutogs/regulations/advisoryCouncil/sfl139-j.htm 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 Nonresponsibility form includes a disclosure statement regarding whether the proposer has been found nonresponsible 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

<u>https://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.

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.

VI: ATTACHEMENTS FOR REFERENCE

Attachment A-1 - RTEM Industrial Application

- Attachment A-2 Multiple Sites Template
- Attachment A-3 Terms and Conditions

Attachment B - Waiver of RTEM Service Requirement Request for RTEM Projects

Attachment C - RTEM Contract Addendum Guidelines



Multifamily New Construction Program Program Opportunity Notice (PON) 3716 \$15,844,000 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 (518) 862-1090, ext. 3385, or Zachary Zill (Designated Contact) at (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.

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: <u>https://www.energystar.gov/index.cfm?c=bldrs_lenders_raters.nh_mfhr_guidance.</u>

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.

	Ма	rket Rate				LMI	
Up to 50 velling units		re than 50 Iling units	Сар	Performance Tier	p to 50 Iling units	re than 50 Illing 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

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			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 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 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.

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.

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:

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		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*:
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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		
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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 by3:00 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 (518) 862-1090 ext. 3004, or Patrick Fitzgerald (Designated Contact) at (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).

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

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-

Low-rise Residential New Construction Program

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.

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.

<u>Glossary of Terms:</u> 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	Homes and		Performance Tier	Multi-unit		For 1-2 family homes and the
Up to 50 Dwelling units	More than 50 Dwelling units	the first 10 attached townhouses	tached	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

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,

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- 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

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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 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
	Certified Homes Version		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>3.1</u> plus additional requirements detailed throughout this document	The as-built dwelling unit must achieve a HERS Index ≤10, inclusive of installed solar PV.
			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 Dump 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.
Parking Garages	Enclosed garages must be depressurized relative to occupied or inhabited spaces.
	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 Area HVAC Systems	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.
	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

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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

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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. 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.

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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



Demonstration of New Business Models, Marketplace Development and Refurbishment of Existing Qualified Historically Farm-Related Anaerobic Digester Gas-to-Electricity Systems Program Opportunity Notice (PON) 3739 \$16 Million Total Available NYSERDA reserves the right to extend and/or add funding to the Solicitation should other program funding sources become available.

Applications/Proposals Due: March 7th, 2019 by 3:00 PM Eastern Time*

NYSERDA SEEKS TO (A) IDENTIFY AND DEMONSTRATE NEW BUSINESS MODELS FOR A SELF-SUSTAINING ANAEROBIC DIGESTER TECHNOLOGY MARKET (B) PROVIDE ANALYSIS AND COACHING TO THE MARKETPLACE AND (C) SUPPORT REFURBISHMENT OF EXISTING QUALIFIED FARM-RELATED PROJECTS

The New York State Energy Research and Development Authority (NYSERDA) invites applications/proposals in three categories; Category A (competitive) proposals that demonstrate new replicable business models or strategies that promise greater development of anaerobic digester gas (ADG)-to-electricity projects in New York State, Category B (competitive) proposals supporting analysis and coaching to improve the capabilities of the anaerobic digestion technology marketplace, as well as Category C (formula-based) applications to support refurbishment of qualified existing historically farm-related ADG-to-electricity systems.

Category A is expected to provide approximately of \$7.75 million in funding to support one or more portfolios of viable anaerobic digestion projects that demonstrate replicable business models and strategies that are expected to lead to a self-sustaining anaerobic digestion technology marketplace that can continue in the absence of additional NYSERDA funding. A total of approximately \$250,000 is being made available under Category B to support one or more projects designed to develop public information to identify and elucidate opportunities that can bring cost-reduction, revenue-enhancement or other improved capabilities to the anaerobic digestion technology marketplace and where appropriate to provide training, guidance and other coaching support for use of such information.

Category C is expected to provide approximately of \$8 million in funding to support refurbishment of existing historically farm-related ADG-to-electricity systems that achieved commercial operation before January 1, 2015. Category C offers co-funding to help support:

- refurbishment of an existing engine generator
- refurbishment of an existing hydrogen sulfide (H₂S) reduction system and/or gas handling system or installation of a new hydrogen sulfide reduction system where none previously exists; and
- refurbishment of an existing anaerobic digester

Applicants may be eligible for refurbishment funding of an existing or new H_2S reduction/gas handling or anaerobic digester systems funding regardless of whether they intend to also refurbish the generator and continue to self-produce electricity or whether they intend to decommission the generator and instead use the ADG produced for other purposes such as but not limited to fueling of transportation vehicles and/or injection of renewable natural gas into a utility gas pipeline.

Application/Proposal Submission: Online submission is preferable. Applicants/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. Application/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 applicant's/proposer's entity name in the title of the document. NYSERDA will also accept applications/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), see the "NYSERDA Solicitations User Guide" available at this link: "Application Instructions and Portal Training Guide

[PDF]. If you intend to apply for more than one Category (A, B or C) you must submit separate proposals for each Category.

No communication intended to influence this procurement is permitted except by contacting Designated Contacts Tom Fiesinger at (518) 862-1090 ext. 3218 tom.fiesinger@nyserda.ny.gov, or Stephen Hoyt (518) 862-1090 ext. 3587 stephen.hoyt@nyserda.ny.gov. Contractual questions should be directed to Venice Forbes, (518) 862-1090 ext. 3507, venice.forbes@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 offeror, and (2) may result in the proposer not being awarded a contract.

* All applications/proposals must be received by 3pm Eastern Time on the date noted above. Late, faxed, or emailed applications/proposals will not be accepted. Incomplete applications/proposals may be subject to disqualification. It is the applicant's/proposer's responsibility to ensure that all pages have been included in the application/proposal. Please note: for online submission, there are required questions that you will have to answer in addition to uploading attachments and once you have completed your application/proposal forms you should allot at least an additional 60 minutes to enter/submit that application/proposal into the online application/proposal system. The online application/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.

Applicants/Proposers Webinar & Inquires

NYSERDA will hold a webinar for Applicants/Proposers on **Wednesday**, **January 17th**, **2019 at 1:30 p.m. EDT**. **Applicants/**Proposers are encouraged to submit questions prior to the webinar to tom.fiesinger@nyserda.ny.gov. On the webinar, NYSERDA will review the program and requirements. Questions will be taken and, to the extent possible, responses will be provided during the conference. To sign up for the Applicant's/Proposers' Webinar please visit <u>https://nyserda-events.webex.com/nyserda-</u>

<u>events/onstage/g.php?MTID=e27228d1a497015d1fc4f241c36309171</u>. Respondents will be provided with webinar credentials. All prospective Applicants/Proposers are strongly encouraged to participate in the webinar. NYSERDA may schedule additional webinars about PON 3739. Applicants/Proposers should check NYSERDA's website for updates.

Assistance in Developing Farm-Based Projects

Proposers that are considering ADG project(s) sited at New York State farm(s), and owners of existing farm-sited AD systems can avail themselves of support services, free of charge, from the AD Assistance Initiative provided by Cornell University under contract to NYSERDA. Contact information below:

Curt Gooch

Cornell PRO-DAIRY Program Direct: (607) 255-2088 Cell: (607) 592-2027 https://prodairy.cals.cornell.edu/ www.manuremanagement.cornell.edu

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I. Category A: Demonstration of Replicable Business Models and Strategies for a Self-Sustaining Marketplace

A. Introduction

Anaerobic digestion technology can reduce methane emissions resulting from long-term disposal or storage of organic food wastes, manures and other organic materials while producing renewable electricity and/or renewable natural gas. In support of the development of anaerobic digestion projects in New York State, NYSERDA previously offered funding to ADG-to-Electricity projects via PON 2828 on a first come-first-served basis. Funding was limited to a maximum of \$2 million per project, paid out in a partial payment when the equipment was commissioned, with the remainder paid out over 10 years of operation and based on a capacity factor of 75%.

Although PON 2828 and previous versions of the ADG-to-Electricity program succeeded in supporting the construction and operation of multiple ADG-to-Electricity projects, the ADG technology market has not yet developed into a self-sustaining marketplace and has remained dependent on NYSERDA funding. Although recent changes to electrical tariffs via Value of Distributed Energy Resources appear to improve the potential for additional value to ADG projects from electrical production generally, it is not clear if this value is sufficient to stimulate development of new ADG-to-Electricity projects. Additionally, projects have tended to be developed on a one-off basis, increasing costs and project risks, and are often dependent on uncontrollable external factors such as the spot market for food waste tipping fees or the price of milk (for farm projects).

Via this funding solicitation, PON 3739, in Category A, NYSERDA will employ a competition to strategically select proposals that demonstrate replicable business models or strategies that reduce costs, risks and/or increase revenues thereby reducing or eliminating the market dependence on incentive funding for anaerobic digester technology projects. Proposals are expected to include the installation and sustained operation of a portfolio of anaerobic digester gas-to-electricity projects developed by one entity, thereby benefiting from economies-of-scale. Proposals will be assessed to determine the strength of the proposed portfolio and the Proposers ability to implement and operate the projects. Approximately half of the maximum potential point score for this solicitation will be based on a competitive bid price submitted by the Proposer. NYSERDA anticipates bid prices to reflect significantly reduced overall funding requests on a per kWh basis compared to the previous funding program, PON 2828.

B. Program Requirements

Eligibility

- ADG-fueled power generation systems must be interconnected to the grid and the interconnected power generation system must be located at a host site that pays the Systems Benefit Charge on electric bills specific to the utility meter at that site behind which the generator is interconnected. For specific questions regarding this eligibility requirement refer to the Designated Contact.
- Major components of the proposed projects must consist of new equipment and Commercially Available Technologies, which are defined as technologies that have operated satisfactorily for a minimum of one year at similar scale, with similar inputs and with similar output as described for the projects in the proposal; or which can be otherwise demonstrated to NYSERDA's satisfaction of having a proven 1-year operating history.
- Eligible Biomass Feedstocks include manure, agricultural residues and biomass, industrial organic wastes (e.g., food wastes), municipal wastewater and municipal organic solids. (Note: Electricity generated by landfill biogas is not eligible.)

Limitations

- For proposals in which new anaerobic digesters will be located at different sites from new power generation systems, biogas (either refined or unrefined) may be transported to the new power generation system via natural gas pipeline (Renewable Natural Gas), dedicated pipeline, truck transportation or other means. However, clear documentation will be required that demonstrates that the anaerobic digester gas injected into a pipeline or otherwise transported is consumed in an equivalent amount at an associated power production site. The documentation process will be defined in an approved Quality Assurance Quality Control Plan.
- Proposals are expected to include at least three sites with new anaerobic digester gas-to-electricity power generation systems, paired with new anaerobic digesters, all located in NYS. New anaerobic digester gas-to-electricity power generation systems can be supplied from more than one new anaerobic digester system located at a different site if necessary to produce sufficient quantity of anaerobic digester gas to supply a given power generation system.
- Electric generation will form the basis of payments and is the focus of the competitive scoring process. However, to the extent that sizing an ADG system to include additional non-electric use of ADG may capture greater economic value for a project, Proposers are encouraged to pursue such business models as it may reduce the amount of funding requested thereby potentially resulting in a more competitive bid price proposal and improving the overall strength of the proposal.
- Sites hosting projects that have been awarded or are subject to a NYSERDA funding award for installation of an anaerobic digestion system through another solicitation, such as but not limited to PON 2828, are not eligible to be host sites for proposed projects under Category A of PON 3739 (i.e. they cannot be the host site of anaerobic digester gas production system components and cannot be the host site of anaerobic digester gas-fueled power generation system components). Sites participating in projects that have been awarded or are the subject to a NYSERDA funding award related to fuel-based power generation system installation through another solicitation, such as but not limited to PON 2828, PON 2568, and PON 3841, are not eligible to be host sites for anaerobic digester gas-fueled power generation system components of proposed projects under Category A of PON 3739, but are not prohibited from being host sites for new anaerobic digester gas production system components of Category A proposals in which the anaerobic digester gas from that new digester will be exported from that site and then used to fuel proposed Category A power generation equipment at a different, eligible host site (exported via a natural gas pipeline, truck transportation or other means of delivery).
- Power generation installed as part of this PON will not be eligible to seek CHP funds through NYSERDA PON 2568 or through NYSERDA's Fuel Cell solicitation PON 3841.
- Applicants who have applied for funding under PON 3739 but have not yet been approved for funding may proceed with their project(s) at their own risk. However, projects may not be included as part of a proposal under Category A if construction is already underway or major components have already been delivered to the site or a staging area prior to NYSERDA receiving the application for funding under PON 3739.

C. Proposal Process

Note that the application forms for Category A (in Attachment A.1) require detailed information, which may be considered proprietary in nature. Proposers may request that proprietary information be kept confidential, particularly information on the Site Financial Sustainability Assessment Forms. Please refer to "Proprietary Information" in Section III for further detail. However, a general description of the business model provided on the Portfolio Business Model Description Form may be made public after winning proposals are announced and therefore proprietary information should not be included on that page.

To apply to Category A, Proposers must respond to all questions and complete all forms found in Attachment A.1 Proposal Forms and provide all required supporting documentation clearly marked indicating the section of the proposal to which it refers. Proposal Forms in Attachment A.1 are comprised of: a Portfolio Business Model Description Form; Financial Sustainability Assessment Forms; a Bid Price Proposal Form; a Minimum Requirements and Assessment Summary Form and; a Replicability Impact Form. In addition, a budgeted per project kWh allocation and annual payments are shown on the Payment Distribution Table page. Specific instructions are included within each form of Attachment A.1.

<u>Portfolio Business Model Description Form</u> Each proposal is expected to be based on a portfolio of projects to be owned and operated by the proposing entity. Proposers first enter a description of the overall business model for the portfolio on the Portfolio Business Model Description Form.

<u>Financial Sustainability Assessment Forms.</u> A separate Financial Sustainability Assessment Form, (identified as Sites A, B, C, etc.) with site specific information on the expected inputs, outputs, revenues, costs and assumptions must be completed for each Anaerobic Digester Gas (ADG) Production Site in a portfolio of demonstration projects. All information provided must be justified with supporting documentation as appropriate. Power generation associated with a particular ADG Production Site, whether located at the site or remotely, must be included. If a remote power generation facility is to be supplied with anaerobic digester gas from more than one ADG Production Site then the electrical capacity and expected power generation must be proportioned across the Financial Sustainability Assessment Form pages for those ADG Production Sites as appropriate.

Five Financial Sustainability Assessment Forms are provided, if more than 5 ADG Production sites will be proposed, contact the Designated Contacts.

Each of the ADG production projects and associated power generation projects encompassed by a single portfolio proposal will be individually assessed based on 10 years of projected operation. Proposers must provide detailed information for each individual proposed demonstration project including:

- Site description and project financial approach
- Project energy mass balance
- Past performance of similar projects
- Assumptions regarding energy production, revenue or avoided expenses
- Organic resources
- Projected revenues and avoided expenses
- Capital cost estimates
- Operation and maintenance costs estimates

<u>Bid Price Proposal Form.</u> The Bid Price Proposal (see section D. Scoring) is a major element of program scoring. To calculate the Bid Price Proposal, Proposers enter the total amount of funding requested to build and operate the portfolio of demonstration projects for 10 years and a Capacity Factor for each project during projected hours of generation. The expected hours of generation for each project are automatically entered on the Bid Price Proposal Form for each project based on information entered on each Financial Sustainability Assessment Form. The maximum Capacity Factor a Proposer may enter on the Bid Price Proposal Form for power production potential over 10 years for each project in the portfolio is 75%. However, Proposers may opt to select a Capacity Factor of less than 75% if the projects are intended to operate only during peak periods or if lower past performance of similar projects or other reasons indicate that the projects are unlikely to operate at that level.

<u>Replicability Impacts Form</u> Through Category A funding NYSERDA seeks to highlight and support new business models or strategies for the anaerobic digestion technology market that can play a significant role in transitioning anaerobic digestion technology from a subsidized marketplace to one that is self-sustaining. Proposers will need to respond to the following question and will be scored based on potential replicability impacts on electrical production from anaerobic digester gas, potential greenhouse gas reductions and potential numbers of anaerobic digestion projects: "How would the successful demonstration of your model or strategy lead toward a self-sustaining market for anaerobic digesters and anaerobic digester gas-to-electricity technology in New York State without funding support from NYSERDA?" Proposers must provide sufficient evidence to justify their claims.

<u>Minimum Requirements and Assessment Summary Form</u>. The Minimum Requirements and Assessment Summary Form page summarizes the Site Assessments and calculates a Net Portfolio Value, used in Minimum Requirement 1. Proposals will be judged first on a pass/fail assessment of the bid price compared to an "Upset Price" which will not be disclosed by NYSERDA. <u>Proposals with a Bid Price that exceeds the Upset Price will</u> <u>be removed from further consideration</u>. Category A Provisions

Proposals that pass the Bid Price screening will then be evaluated on a pass/fail basis regarding the following 4 Minimum Requirements:

• **Minimum Requirement 1 - Net Portfolio Value**. The Net Portfolio Value as described below must be positive.

All the demonstration projects encompassed within that portfolio proposal will be assessed to determine if, as a group, they appear to be financially sustainable over 10 years of operation (including requested NYSERDA funding) based on the information provided by the Proposer in the Financial Sustainability Assessment Forms. Reviewers may use judgement to gauge the likelihood of success including derating of inadequately substantiated values for the claimed projected quantities of Organic Resources and Revenues/Avoided Expenses or impose an additional contingency percentage to the estimated Capital Costs or Operation and Maintenance Costs. Adjustments by the Reviewers during the review and scoring process can alter the financial sustainability assessments of the individual projects and in the assessment of the Net Portfolio Value.

Portfolios of projects will be evaluated using an undiscounted Net Portfolio Value, calculated as the excess of 10-year portfolio profit:

Net Portfolio Value = Total Revenues and Avoided Costs – Total O&M* and Admin. Costs -Total Portfolio Capital Cost

(*Include reserve for replacements required during 10-year life)

• **Minimum Requirement 2 - Site Control Letter**. Site owners where ADG production, ADG-fueled power generation and any central site integral to the portfolio of projects will be located, must sign the Site Control Letter (Attachment A.2.). If any site identified in the application forms or otherwise described by the Proposer as integral to the portfolio of projects (including but not limited to sites that are not associated with power production such as those that produce biogas only or a central processing or handling facility) does not have a signed Site Control Letter, the portfolio of the portfolio associated with that site may not be included in determining the Net Portfolio Value and therefore the Net Portfolio Value may have a negative result

• **Minimum Requirement 3 - Access to Financing**. The Proposer must demonstrate credible evidence of access to financing sufficient to complete the proposed demonstration projects. This may include but is not limited to: term sheets for debt and/or equity; evidence of creditable capital; prior project finance history and letters of interest.

• **Minimum Requirement 4 - Portfolio Project Team Experience**. The Proposer must provide documentation that demonstrates that the Portfolio Project Team has sufficient experience in developing, building and operating anaerobic digestion, power generation and any other major systems included in the projects and that those reference projects are of similar scale, similar inputs and similar outputs to the proposed portfolio of projects.

Proposals that fail any of the 4 Minimum Requirements will be removed from further consideration.

D. Scoring

Proposals that pass the Bid Price and Minimum Requirements screening will be scored by a Scoring Committee of Reviewers based on the following allocation of a total of 100 points (Note that proposals must meet all minimum threshold requirements including a bid price not exceeding the "Upset Price" to proceed to the scoring step.):

1. Bid Price Proposal (max. 49 points possible) will be scored according to the following formulas:

 $Bid Price (\$/kWh) = \frac{Total Funding Requested (\$)}{Total Power Production (kWh)}$

In which: **Total Funding** refers to the total amount of funding requested to support the installation and operation of the proposed portfolio of demonstration projects and **Total Production** refers to the aggregation of 10 years of operation of each site within the portfolio at a Bid Price Capacity Factor (defined on the Bid Price Proposal Form) chosen by the proposer (max. 75%). (As indicated above, Proposers may opt to select a capacity factor of less than 75% if past performance or other reasons indicate that the projects are unlikely to perform at that level).

And: Score = 50 x (Upset Price – Bid Price)/Upset Price

In which: **Upset Price** refers to a maximum price per kWh which NYSERDA has determined to be acceptable (NYSERDA will not reveal the Upset Price to maintain a competitive bid process). Maximum allowable score is **49 points**.

2. Proposing Team/Overall Viability (total 21 points possible)

The **Overall Viability of Portfolio** of demonstration projects will be scored out of a **maximum 12 points** and based on the financial and overall strength of the approach or business model proposed.

The **Proposing Team** will be scored out of a **maximum 9 points** for the strength of the team in being able to execute the projects as well as its experience in developing successful anaerobic digestion projects.

3. <u>Replicability Impacts (total 30 points possible)</u>

Reviewers will score proposers for relative replicability impact in each of the following areas as compared to the current portfolio of NYSERDA ADG projects and relative to the potential impacts from other proposers as appropriate. Note that Greenhouse Gas Reduction Impact will be based on potential reductions from both the demonstration projects and market projections of follow-on projects built by 2030. Proposers must provide sufficient evidence to justify their claims. A combined maximum of 30 points is available. Replicability Impacts will be scored based on the potential for the proposed business model or strategy to lead toward a self-sustaining market for anaerobic digestion technology in terms of:

- Potential Electrical Production maximum 12 points
- Potential Greenhouse Gas Reductions Impact maximum 12 points
- Potential Numbers of New Projects maximum 6 points

E. Payments

NYSERDA expects to notify Proposers that are selected for funding within approximately 60 days of the submission due date. A contract for funding will then be prepared by NYSERDA and offered to the awardee. Once an awardee signs and NYSERDA then countersigns thereby making the contract fully executed, the awardee will become a Contractor to NYSERDA to build and install the proposed portfolio of anaerobic digester and power generation projects. The Contractor will be paid in three annual payments, based on a "Performance Payment Rate" calculated by multiplying the Contractor's proposed Bid Price by 31/3, for each kWh of electricity production up to a maximum as shown on the Payment Distribution Table in Exhibit A from each of the power generation projects in the proposed demonstration project portfolio.

For example, if the Bid Price for potential generation is \$0.03 per kWh, the Performance payments would be based on a rate of \$0.03 multiplied by 3¹/₃ which computes to \$0.10/kWh for 3 years of operation. See Article IV of the Standard Agreement.

Quality Assurance/Quality Control

Promptly after NYSERDA executes a contract, a QA/QC Plan must be developed for each project within a proposed Category A portfolio of projects. The plan can either be developed by the technical consultant provided by NYSERDA, or by the Contractor in conjunction with the NYSERDA's assigned technical consultant. Guidance on developing the QA/QC Plan is included in Attachment A.3 *QA/QC Requirements*. A sample QA/QC Plan can be requested from Tom Fiesinger or Stephen Hoyt (contact information provided on the title page).

Payment Process

To allow the Contractor flexibility in implementing and managing a portfolio of projects, the following payment process will be employed:

- <u>End Dates</u> The Contractor will have 3 years from the Effective Date of the contract in which to commission each project in the portfolio and the contract payment period will extend not longer than six years from the contract Effective Date.
- <u>Substitutions</u> Since the proposal is being reviewed and scored based on the specific host sites included in the proposal, any future request to substitute host sites is highly discouraged but may be considered on a very limited case-by-case basis at NYSERDA's sole discretion.
- KWh Allocation and Performance-based Payments Timely commissioning of each project within the portfolio will trigger the allocation of a set number of kWh's of production for that specific project over a 36month term for which the Contractor may request payment (if there is underperformance at one site, the amount of unused allocation at that site cannot be transferred to another site which may happen to be over-performing, therefore, underperformance places the Contractor at risk of not receiving disbursement of the maximum amount awarded). The contracted kWh allocation will be based on the projected hours of annual production from the Bid Price page in the application which accounts for the as-proposed capacity factor of the project and will extend for 36 months from the start of the Performance Period as established in the Project Commissioning Report approved by NYSERDA in accordance with the QA/QC Plan for each project in the portfolio. Projects within the portfolio can have staggered start dates, and each project will be eligible to invoice for payments upon reaching its 12-month, 24-month, and 36-month milestones. If an ADG-to-Electricity power generation system is supplied with ADG from more than one ADG Production Site, the Commissioning Report can only be completed and the Performance Period only set after the power generation and associated ADG Production sites have all begun operation. The contracted kWh allocation for the associated ADG Production Sites will be grouped with the respective ADG-to-Electricity power generation system when determining Performance payments.

II. Category B - Analysis and Coaching for Marketplace Development

A. Introduction

The objective of Category B work is to employ analysis and coaching to develop and provide publicly available information that will be used effectively to reduce costs, enhance revenues, or provide other tools or information that will expand and improve the capabilities of the anaerobic digestion marketplace. Coaching includes information transfer, training, guidance, other activities that support the ability of marketplace participants to make effective use of information and tools from Category B work and other sources that can enhance the capabilities of the marketplace. Via this funding solicitation, PON 3739, in Category B, NYSERDA will employ a competition to strategically select proposals that provide Analysis and Coaching projects which may include, but are not limited to, addressing the following more specific objectives and approaches:

- Expanding the number of active marketplace participants by identifying and recruiting additional potential participants and compiling information about their basic capabilities and interest areas for other marketplace participants.
- Developing standardized contracts or instruments used for transactions by analysis and compilation of model contracting documents and training marketplace participants how to use them.
- Analysis of the potential value and revenue enhancement of various anaerobic digester project revenue sources (tipping fees, RINS, RECS, solids etc.) including analysis of potential enhancements of values, cost reductions, and new business strategies.
- Developing mechanisms or tools for communicating pricing for value and revenue enhancement sources and strategies to access those values. Such a mechanism might include a cooperative sale of environmental attributes.
- Assisting participants in understanding tariffs and other potential values and costs and providing review and guidance as they make projections for their proposed anaerobic digestions systems.
- Developing information exchanges that can persist with appropriate updating in the absence of subsequent NYSERDA funding.
- Developing mechanisms that benefit the general market for facilitating deals and transactions, such as recruiting potential ADG project site owners to cooperate in a group or project cluster or establishing other matchmaking approaches among market participants. Training participants how to use them effectively.
- Preparing other deliverables that would be made widely available to support the development of the anaerobic digester technology marketplace.

B. Program Requirements

Eligibility

Anaerobic digestion marketplace participants include multiple entities such as host sites, sources of digestion feedstocks, purchasers and recipients of digestion outputs, providers of services for anaerobic digestion system design, equipment, installation, and operation and maintenance, sources of capital for these activities, sources of information for effecting sustainable transactions among these market participants, regulators of these transactions, and others.

All marketplace participants, other than government organizations, are eligible to apply including for-profit and not-for-profit entities and universities whether as a stand-alone proposer or as the lead of a project team. Government (Federal, State, and Local) entities are eligible to participate on a project team but not as a

stand-alone applicant.

Limitations

Proposals selected under Category B will make deliverables and other results widely available to anaerobic digester technology marketplace participants to support the development of the sector. NYSERDA funding for Category B is not intended for developing proprietary information or tools or for recruiting customers for subsequent exclusive marketing of services. With respect to digestion system technologies associated with Category B work, NYSERADA funding is not intended for research and development, but seeks to encourage greater market uptake of commercially available anaerobic digestion technologies.

C. Proposal Process

Proposal packages for Category B must include the following completed documents:

- A completed Category B Fillable Proposal Form found in Attachment B.1 and supporting documentation as described in the proposal instructions contained in that Attachment B.1.
- The proposed Statement of Work using the template found in Attachment B.2., and
- The Contract Pricing Proposal Form (CPPF) also found in Attachment B.2.

D. Proposal Evaluation

1. Evaluation Criteria

The proposal will be scored by a Scoring Committee according to the four criteria categories listed below, which are listed in order of importance. After the proposal is reviewed, NYSERDA will issue a letter to all Category B Proposers indicating the proposal evaluation results. A proposer receiving favorable evaluations may be invited to enter into contract negotiations with NYSERDA.

a) Challenges and Proposed Solution

- **Problem, information gap or opportunity**. How clearly and correctly does the proposed project address one or more current problems, information gaps or opportunities that are not being adequately addressed by others in the anaerobic digestion marketplace?
- **Target marketplace participants.** How clearly and correctly has the proposer identified significant target participants in the anaerobic digestion marketplace who will benefit from this project? How much has the proposer interacted with target participants to validate the proposer's understanding of their challenges and documented the interest of key target participants in the project solution concepts and deliverables?
- Solution description and rationale. How clearly, correctly and convincingly has the proposer described the project's solution concepts and deliverables and how the project results will address the problems, information gaps or opportunities facing the target marketplace participants? How clearly and correctly has the proposer described the adequacy of the value proposition(s) for the types of participants in the target group for motivating their adoption of the solution concept and deliverables? To what extent has the proposer described alternative approaches and provided convincing rationale for why the proposed solution concepts and deliverables are superior compared to those other approaches?

• **Projected significance of marketplace improvement**. How clearly, correctly, and convincingly has the proposal reasonably described the potential impact of the solution(s) and deliverable(s) for increasing the potential for implementation of anaerobic digestion in NYS, considering such factors as (1) the portion of the marketplace that will benefit and (2) the impact of the solution on the overall economic sustainability of anaerobic digestion systems? How achievable are the proposed project objectives for the extent of enhancement of marketplace capabilities resulting from the proposed project solution concepts and deliverables? How reasonable and well-substantiated are these objectives based on the proposal estimates of the types, size, and numbers of participants benefitting both at project completion and later when project results may be more fully adopted by key marketplace participants?

b) Quality of Work Plan.

- Statement of Work and Schedule To what degree are the proposed statement of work and schedule feasible, innovative, measurable, and adjustable? How well designed are they for successfully achieving the proposed analysis, completing the proposed deliverables, and implementing a coaching strategy for securing adoption or use of the project results?
- Rates and Costs How reasonable are the rates proposed for the individual components of the budget? How reasonable are the overall costs for completing the objectives, tasks and deliverables described in the proposal?
- Work in NYS. Will a significant part of the work on the project take place in New York State?

c) Project Team and Commitments.

- **Qualifications and expertise**. To what degree do the key individuals on the team have relevant and necessary qualifications and expertise to complete the proposed work and to evaluate its potential for enhancing capabilities of the marketplace considering evolving tariff structures?
- **Experience.** To what degree has the proposer successfully completed similar types of analysis, developed similar models or tools, and/or provided solution coaching outreach as proposed?
- **Resource plan.** How effectively can the proposer be expected to complete the project, considering the organization and staffing plan, and other resources proposed for the project?
- **Commitments**. How firm are the commitments and support from essential participants and other organizations that are part of the proposed project team? To what extent have any marketplace participants shown commitment to the project and its solution concepts by offering cost-sharing for the project work?

d) Overall Project Value. How cost-effective is the proposed project, considering the cost to NYSERDA, the importance of the problem, information gap or opportunities addressed, the proposed solution concept and deliverables, the significance of the proposed marketplace improvement, the quality of the work plan and the capabilities of the project participants?

2. Other Considerations. The proposal's fit with NYSERDA's overall objectives will also be considered, including: risk/reward relationships, similar ongoing or completed projects, and the general distribution of projects among industries, organizations, and locations in New York State. NYSERDA reserves the right to accept or reject proposals based on the following factor(s):

a) The degree to which the proposed project, including cost share, optimizes the use of available funding to achieve programmatic objectives such as NYS Energy Plan targets for renewable power generation and greenhouse gas reduction.

Category B Provisions

b) The degree to which the proposed project duplicates, complements, or avoids duplication of higherranked Category B proposals in terms of technology, business model, location, barrier addressed, etc.

c) The degree to which the proposed project complements, or avoids duplication of, work to be performed in implementing proposals awarded in Category A in terms of problem(s), information gap(s) or opportunities addressed

E. Payments

Payment for Category B Contract work will be paid on a cost reimbursement basis, including staff charges, direct charges, and indirect costs allowable under the terms of the Agreement. The Contractor may submit invoices for progress payments no more than once each month and no less than once each calendar quarter for Work performed during such period. A retainage of 10% will be withheld from each invoice, pending final acceptance by NYSERDA of all deliverables contained in Agreement Exhibit A Statement of Work. The Sample Agreement containing standard terms and conditions is in Attachment B.2. of this PON. The template for preparing Statements of Work for Category B proposals is in Attachment B.2. The project term is expected to typically run three (3) years or less.

II. Category C - Refurbishment of Existing Historically Farm-Related ADG-to-Electricity Projects

A. Introduction

NYSERDA seeks to extend the intended operating life of existing, historically farm-related ADG-to-Electricity systems for at least an additional 7 years. In Category C, NYSERDA provides an open application period in which existing New York State historically farm-related ADG-to-Electricity systems, that began operation prior to January 1, 2015, may apply for cost-sharing for refurbishment of those systems. NYSERDA will provide 75% of actual out-of-pocket expenses for such refurbishments, not to exceed a maximum NYSERDA amount (NYSERDA will employ a formula-based mechanism to determine such maximum NYSERDA amounts for eligible applicants). Refurbishment activities should include all refurbishment activities necessary and sufficient to enable the project to continue to operate for an additional 7 years. Applicants may select one or more of the types of activities on the Application Form C.1. Activities may include one or more of the following types:

- 1. Refurbishment of the ADG fueled engine which may include what is generally known as a "major overhaul" or a "full rebuild" that includes not only a "top-end" or cylinder head rebuild but also engine block overhaul or full in-frame rebuild.
- 2. Refurbishment or installation of hydrogen sulfide reduction systems (e.g., gas scrubber) and/or refurbishment of gas handling systems.
- 3. Refurbishment of the anaerobic digester vessel, cover, mixing systems and other related systems.

Successful applicants will be offered a NYSERDA contract in which Task #1 will require a Refurbishment Plan to be prepared by a consultant (which must be signed by a Professional Engineer) detailing needed refurbishment tasks and how they will be implemented. NYSERDA will provide \$15,000 for preparation of the Refurbishment Plan. After a review of the Refurbishment Plan by NYSERDA, a Go/No-Go decision point will follow (as shown in Sample Agreement for Category C included in the PON as Attachment C.3). If the Refurbishment Plan is approved a Notice to Proceed will be issued by NYSERDA to begin refurbishment activities.

Note that eligible existing historically farm-related ADG-to-Electricity project applicants are permitted to use their refurbished systems to produce RNG instead of, or in addition to, electricity and may therefore request funding for the 2nd and/or 3rd Refurbishment Activities alone.

B. Program Requirements

Eligibility

Only existing NYS historically farm-related anaerobic digester projects that became operational to produce electricity with an electrical grid interconnection completed prior to 1/1/15 are eligible for Category C of this solicitation. Historically farm-related systems include those that are either 1) located at a farm and that are or had digested a significant amount of livestock manure and other farm wastes on an on-going basis from that farm or 2) have been previously determined by NYSERDA to be a farm-related ADG system under PON 2828.

To be considered eligible, the Applicant must also name a consultant or team of consultants that demonstrate, to NYSERDA's satisfaction, qualifications showing a depth of knowledge and experience in the design, installation and operation of anaerobic digestion, gas handling/H₂S reduction and power generation systems similar to the Applicant's existing systems, as needed, in order to prepare the Refurbishment Plan. The consultant must be, or the consultant team must include, a Professional Engineer who is licensed and registered to practice in the State of New York.

Table C1: NYSERDA Reimbursement Not to Exceed the following Maximums for Each Refurbishment Activity			
Facility Electric Capacity of Historically Farm-related Anaerobic Digester Gas-to-Electricity Systems (kW)	Maximum* Reimbursement for Power Generation Refurbishment	Maximum Reimbursement for H2S Reduction and Gas Handling	Maximum Reimbursement for Digester and Other
50	\$31,875	\$110,750	\$110,000
100	\$41,250	\$114,500	\$122,000
130	\$46,875	\$116,750	\$129,200
180	\$56,250	\$120,500	\$141,200
225	\$64,688	\$123,875	\$152,000
280	\$75,000	\$128,000	\$165,200
300	\$78,750	\$129,500	\$170,000
321	\$82,688	\$131,075	\$175,040
400	\$97,500	\$137,000	\$194,000
405	\$98,438	\$137,375	\$195,200
406	\$98,625	\$137,450	\$195,440
502	\$116,625	\$144,650	\$218,480
541	\$123,938	\$147,575	\$227,840
600	\$135,000	\$152,000	\$242,000
633	\$141,188	\$154,475	\$249,920
648	\$144,000	\$155,600	\$253,520
1000	\$210,000	\$182,000	\$338,000
1246	\$256,125	\$200,450	\$397,040

If you are contemplating applying to PON 3739 Category C, and the size of your Historically Farm-related Anaerobic Digester Gas-to-Electricity System is not indicated above, please contact Steve Hoyt or Tom Fiesinger (contact information is included on the second page of this PON) for assistance with computing the dollar amounts applicable to your situation.

* If the site has two (2) engines that are to both be refurbished summing to the system size (kW) shown above, add \$22,500 to the corresponding amount shown in the column labeled "Maximum Reimbursement for Power Generation Refurbishment."

Payment for Category C refurbishment tasks and equipment/materials will be cost-shared on a reimbursement basis only. 75% of actual costs incurred can be reimbursed up to the total award amount for each refurbishment activity included in the agreement.

Limitations

NYSERDA funding for Category C is intended to substantially refurbish and thereby extend the useful life of existing infrastructure; any expansion of the generating capacity of the legacy system achieved via the NYSERDA funding should only be minor and coincidental (activities concurrently undertaken by the applicant at their sole expense to expand the output is permissible).

Category C Provisions

Refurbishment work eligible for support is limited to work for which equipment purchase or construction is (1) initiated after NYSERDA's written approval of the Refurbishment Plan and (2) completed within 3 years of contract award.

C. Application Process

Applicants must complete the Application Form (Attachment C.1) which includes:

- Selection of the types of refurbishment activity funding requested. The maximum cost-sharing in each category is a function of the existing system's engine generator capacity (kW). Table C1 on page 15 contains the maximum cost-sharing amounts calculated for different kW capacities.
- A section in which the Applicant must provide a general description of the current state of the project and the anticipated refurbishment tasks that are necessary and sufficient to enable continued intended operation of the system for at least 7 years following the refurbishment.

The applications will be evaluated by NYSERDA for eligibility and reasonableness of the anticipated refurbishment tasks for continued operation. NYSERDA strongly encourages prospective applicants to contact Steve Hoyt or Tom Fiesinger (contact information is included on the second page of this PON) to discuss Category C prior to submitting their application.

D. Refurbishment Plan

Awardees of Category C must prepare a Refurbishment Plan with the assistance of a Professional Engineering consultant. The Refurbishment Plan must be submitted to NYSERDA for review, amendment and approval and must include the following:

- Assessment of the current state of all major components of the ADG-to-Electricity System and identification of the specific items in need of refurbishment and other needs to address in order to enable continued operation for 7 years
- Identification of necessary and sufficient refurbishment activities and identification of the Project Team including all subcontractors and documentation of their qualifications and hourly billing rates
- Recommissioning procedures to document successful completion of planned significant refurbishments
- Procedures for on-going monitoring and communicating data that document system energy production

If the Refurbishment Plan is determined by NYSERDA to be a complete and acceptable product and no further amendments are required, the Contractor may invoice NYSERDA for payment in the amount of \$15,000 for preparation of the Plan by a consultant. NYSERDA may accept the completed Refurbishment Plan for implementation, in which case eligible expenses associated with the refurbishment activities may be paid as further specified below, or NYSERDA may reject the Refurbishment Plan for being incomplete, in which case the \$15,000 will be withheld and funds for implementation of the Refurbishment Plan will not be disbursed. A Refurbishment Plan that does a complete and thorough review may invoice for payment of the \$15,000 for Refurbishment Plan preparation even if the Plan reaches the conclusion that implementation of the refurbishment activities should not proceed.

Note that labor costs detailed in the Refurbishment Plan should be based on most-favorable labor charge rates (including all overhead costs) for the work being undertaken to implement the refurbishment tasks. Additionally:

• Subcontractor rates that exceed \$150/hour may be subject to a rate analysis by NYSERDA. If subcontractor charge rates are found to be excessive, NYSERDA may reject the Refurbishment Plan.

Category C Provisions

• Farm labor charge rates should be justified based on historic payments made to wage earners and/or published or rate schedules that have been found acceptable via a recent federal or state government audit. Skilled farm labor, including that which is not typically/historically paid as an hourly wage, can be submitted for 75% reimbursement (under a contract resulting from PON 3739 Category C) at rates specified in the table Maximum Labor Cost Charge Rates for Contractor's Workers Without Documented Wage Rates in Attachment C.2.

E. Project Recommissioning Report

Upon completion of all refurbishment activities, NYSERDA will direct a technical consultant, paid by NYSERDA, to inspect the project and determine if the project has been refurbished in accordance with the Refurbishment Plan and has met the following requirements:

- 1. Documentation that recommissioning of the System is satisfactorily complete;
- 2. Documentation that the System remains interconnected with the utility grid, if producing power;
- 3. Documentation that the System has satisfactorily operated for at least seven consecutive days, post refurbishment and is not found to be emitting or venting significant quantities of methane not combusted by a flare nor destroyed by other means.
 - "Satisfactorily operated" for a power generation-related refurbishment means that the biogas-fueled kWh output averages at least 75% capacity factor;
 - "Satisfactorily operated" for a gas handling and H2S reduction refurbishment/installation means the biogas quality exiting the gas handling system averages less than 400 ppm or meets alternative specifications set in the approved Refurbishment Plan; and
 - "Satisfactorily operated" for digester and other related refurbishments means that the biogas
 production rates meet the specifications set in the approved Refurbishment Plan, which may be based
 on biogas output during past successful performance, biogas needed for 75% capacity factor power
 generation, or other reasonable specification factors set in the approved Refurbishment Plan.
- 4. Documentation that the System has demonstrated the ability to upload information to NYSERDA's DER Website.
- 5. Provision of As-Built Diagrams of a newly installed H2S reduction system, as needed.

F. Payments

A milestone payment by NYSERDA of \$15,000 will be made once NYSERDA determines that the Refurbishment Plan is acceptable in meeting the requirements of the Guide and Requirements for Developing an Implementing a Refurbishment Plan.

Payment for Category C refurbishment tasks and equipment/materials will be cost-shared on a reimbursement basis only. 75% of actual eligible costs incurred can be reimbursed up to the total maximum cost-sharing for each of the three types of refurbishment activities included in the agreement. The eligibility of such costs for reimbursement will be determined at NYSERDA's sole discretion. The Contractor may invoice NYSERDA not more frequently than once per month for eligible expenses and must provide a progress report which details the work accomplished and justifies the amount being invoiced. NYSERDA will pay 90% of the amount of each approved eligible NYSERDA payment in accordance with NYSERDA's prompt payment policy. The remaining 10% will be paid when the refurbishments outlined in the Refurbishment Plan have been completed and the Project Recommissioning Report is approved by NYSERDA. The project term is not to exceed 3 years or less from the award notification date.

IV.GENERAL CONDITIONS FOR CATEGORIES A, B, AND C

A. Proprietary Information - Careful consideration should be given before confidential information is submitted to NYSERDA as part of your application/proposal. Review should include whether it is critical for evaluating an application/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 applicant/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 Applicants/Proposers are required to answer questions during application/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 applicant/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/st220td_fill_in.pdf). Prior to contracting with the Department.

<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>.

E. Contract Award –NYSERDA anticipates making multiple awards under all three Categories of this solicitation and expects to notify awardees within 90 days. A contract may be awarded based on initial applications/proposals without discussion, or following limited discussion or negotiations pertaining to the Statement of Work. Each application/proposal should be submitted using the most favorable cost and technical terms. NYSERDA may

request additional data or material to support applications/proposals. NYSERDA will use the Sample Agreements (A and B and C) to contract successful applications/proposals. NYSERDA may at its discretion elect to extend and/or add funds to any project funded through this solicitation and/or add funds to this solicitation's budget and/or adjust the allocation of the budget across the three categories in response to the quantity and quality of proposals/applications received. 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. Applicants/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.

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 <u>NYSERDA's Accessibility Requirements</u>.

G. Limitation - This solicitation does not commit NYSERDA to award a contract, pay any costs incurred in preparing an application/proposal, or to procure or contract for services or supplies. NYSERDA reserves the right to accept or reject any or all applications/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 applications/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 applicants/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 applicant/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 an applicant/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. Applicants/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

- A. Attachments for Category A
 - 1. Attachment A.1 Proposal Forms
 - 2. Attachment A.2 Site Control Letter
 - 3. Attachment A.3 QA/QC Requirements
 - 4. Attachment A.4 Sample Agreement for Category A
- B. Attachments for Category B
 - 1. Attachment B.1. Fillable Proposal Form
 - 2. Attachment B.2. Sample Agreement for Category B
- C. Attachments for Category C
 - 1. Attachment C.1. Application Form
 - 2. Attachment C.2 Guide and Requirements for Developing and Implementing a Refurbishment Plan
 - 3. Attachment C.3. Sample Agreement for Category C



CLEAN ENERGY FUND STATIONARY FUEL CELL PROGRAM

Program Opportunity Notice **(PON) 3841** Total Program Funding: \$15 Million \$7.5 Million Per Year NYSERDA reserves the right to extend and/or add funding to the Solicitation should other program funding sources become available.

Funding is on a first-come, first-served basis until all funding has been fully committed, with the caveat that no single OEM's equipment can be awarded more than half of the program's budget. Applications will be accepted through December 31st, 2019 until 3:00 pm.

Financial incentives are available to support the installation and operation of continuous-duty, stationary fuel cell systems at eligible host sites in New York State, with two years of funding available totaling up to \$15 million. Only projects installed at sites where the host pays the System Benefits Charge (SBC) on the electric bill for the meter behind-which the fuel cell system will be installed are eligible to receive funding through this program. In order to participate in PON 3841, applicants must comply with all program rules, procedures, and eligibility requirements, submit all required forms and supplemental documentation, and enter into a Standard Performance Agreement (SPA) with NYSERDA. Applicants must also adhere to the performance measurement requirements throughout the term specified in the SPA.

Application Submission: Applications (including any required attachments and supporting documentation) must be completed and submitted online at https://nyserda.seamlessdocs.com/f/FuelCell_proj_app Incomplete or inaccurate applications will not be accepted. Faxed or e-mailed applications will not be accepted. 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.

Contact Information: All Program Questions should be directed to: Mark Mayhew, (518) 862-1090 ext. 3319, <u>fuel.cells@nyserda.ny.gov</u>. All Contractual Questions should be directed to: Venice Forbes, (518) 862-1090 ext. 3507, <u>VeniceSolicitation@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 12/31/2019. Late, faxed, or emailed applications will not be accepted. Incomplete applications 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 3:00 PM, 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

Through the Clean Energy Fund (CEF), NYSERDA seeks to promote the development of clean, local energy resources that strengthen and improve the reliability of the grid. Continuous-duty stationary fuel cells operate as dispatchable, ultra-clean distributed generation resources, which can relieve stress on the grid and where applicable, enhance the resiliency of the host site. NYSERDA's offering will provide financial support to reduce the upfront costs to install and operate fuel cells, reduce energy expenses, and greenhouse gas emissions.

The CEF Stationary Fuel Cell Program seeks to support the purchase, installation, and operation of continuousduty stationary fuel cell electric power generation equipment at eligible host sites in New York State. The Fuel Cell Program is targeted at either (1) "behind the meter" generation (i.e. generation that is sited at the electric customer's location, used primarily to serve the electric customer's load at the meter behind which it is interconnected, and not for the purpose of significant proportions being exported to the utility grid for sale), or (2) for Community Distributed Generation. PON 3841 will support the installation of a large fuel cell module with a nameplate rating greater than 25 kW. A "fuel cell system" may consist of one or more large fuel cell module(s) installed at a project site. This initiative is aimed at quickly maximizing the amount of electricity produced by fuel cells in New York State, and therefore addresses rapid installation and long-term operation of mature, commercially-available, continuous-duty fuel cell systems. NYSERDA maintains a list of fuel cell systems which are eligible to participate in this solicitation; for details, see Appendix E and check NYSERDA's website for periodic updates to Appendix E.

II. Program Requirements

A. System Performance: Eligibility Criteria and Incentive Payment

Since the CEF Fuel Cell Program is aimed at electric generation, the recovery and beneficial use of heat produced by the fuel cell is not mandated under this program, however, to be eligible for the program, a project must be configured so that the fuel cell systems will have a Total System Efficiency of 45% or greater, based on the Higher Heating Value (HHV) of the input fuel. Applicants selecting fuel cell systems which do not meet or exceed 45% electrical efficiency are advised to consider maximizing the efficiency of their systems by including heat recovery features as an approach to meet the minimum program requirements and optimize the economic life cycle of their projects. Applicants will be required to submit supporting documentation as part of their application which demonstrates a design intent that will meet or exceed the 45% threshold. Total System Efficiency (EFF_{Total}) will be calculated by dividing the sum of the Net Useful Electric Power (P) and the Net Useful Thermal Production (Q) by the Total Fuel Input (F) based on HHV; as expressed in the following equation:

$$EFF_{Total} = \frac{P+Q}{F}$$

All projects will be required to institute performance measurement procedures to be eligible to receive payment from NYSERDA. The Contractor must develop a Performance Measurement Plan (in accordance with Appendix C of this document) *in conjunction with NYSERDA's Agent.* The Performance Measurement Plan must be received and approved by NYSERDA prior to submittal (or payment) of any invoices. The Contractor shall be responsible to provide the instrumentation (sensors and meters) and communications capability specified within the approved Performance Measurement Plan; all performance measurement activities shall be conducted in accordance with the approved Performance Measurement Plan. The site will be required to install and maintain on-site sensors and meters approved by NYSERDA or NYSERDA's designated agent, which will be used for monitoring and data acquisition to confirm the amount of energy production and gas consumption. All data acquired by NYSERDA will be made available to the general public.

Contractors will be responsible for the purchase and installation of the necessary sensors and meters (*e.g.,* revenue grade fuel and electric meters), and provide the necessary instrumentation and communications systems (*e.g.,* phone lines, internet access) to monitor systems for remote data collection. If not provided by the project site, NYSERDA will arrange for connecting sensors and meters to data acquisition systems. Projects must provide monitoring data for a minimum of three consecutive years through an automated data collection and remote

transfer mechanism that will compile 15-minute interval data and at least once per day transfer such data to NYSERDA whereat NYSERDA will make such data available to the general public by posting at https://der.nyserda.ny.gov/. See Appendix C for more details.

A Performance/Efficiency Incentive payment will be offered through this program for the system's net production (the portion of verified fuel cell electricity generation, which exceeds the fuel cell system's parasitic consumption) and may be provided to sites that meet the efficiency criteria in the year subsequent to commissioning. Performance/Efficiency Incentives are offered based on <u>verified</u> net kWh of generation.

Fuel cell systems installed under PON 3841 must operate at an annual capacity factor of 50% or greater and at total system efficiency of 45% or greater based on HHV to be eligible for the Performance/Efficiency Incentive. Annual Capacity Factors (ACF) will be determined by dividing the net output of the fuel cell system during a one-year period by the maximum rated output (nameplate rating) of the fuel cell times 8760 hours per year; as expressed in the following equation:

$$ACF = \frac{Actual Net Annual Output}{Nameplate rating x 8760}$$
 where;

Actual Net Annual Output is the total verified electrical energy delivered by the fuel cell system to the site per year (i.e. fuel cell stack production minus parasitic consumption)

B. Eligible Customers and Host Site

The Fuel Cell Program is targeted at "behind the meter" generation (i.e. generation that is sited at the electric customer's location, used primarily to serve the electric customer's load (1) at the meter behind which it is interconnected, and not for the purpose of significant proportions being exported to the utility grid for sale), or (2) for Community Distributed Generation. The Project Site is where the fuel cell is located.

The Host is the owner or tenant of the Project Site, who pays the SBC Program Surcharge. The fuel cell system must be installed behind an electric meter, where the accompanying utility account include the SBC Program Surcharge.

For Community Distributed Generation (CDG) projects, the CDG Host must also meet the requirements mandated in the most current version of the electric utility's tariff filing with the Public Service Commission. In addition, the CDG project must also meet all the required conditions specified in said tariff.

Project Funding Cap: \$1 million per project.

Related Projects Funding Cap: \$1 million in aggregate total for a batch of related projects. A batch of related projects could consist of but is not limited to projects in a given building serving different utility meters. A batch of related projects could consist of but is not limited to projects in different buildings all located at a destination grouping such as a college campus or a shopping center or an industrial park. A batch of related projects could consist of but is not limited to project or an industrial park. A batch of related projects could consist of but is not limited to project operating in a Community Distributed Generation format that are owned and/or developed and/or operated and/or managed by a particular entity or by numerous entities that are related entities (related entities include but are not limited to those with a significant extent of common ownership and/or a significant extent of common management team). Related applications, even if submitted at different times throughout the term of this program, may nevertheless still be considered to represent a batch of related projects.

Eligibility Note 1: Third Party Ownership

Under a third-party ownership scenario, contractors that meet the eligibility requirements included in this solicitation may be permitted to build, own, and operate a fuel cell project at an eligible host site, if the Host pays the SBC surcharge on the electric meter behind-which the fuel cell system will be installed and if the contractual relationship between the Host and the third party clearly indicates that the entire incentive payment is being

passed on to the Host (or in the case of CDG, documentation showing that the entire incentive payment is being passed on to the CDG-membership satellite accounts).

C. Incentives

<u>Maximum Total Project Incentive</u>: The Maximum Total Project Incentive is the sum of the Total Base Incentive plus all eligible Bonus Incentives. Bonus Incentives are calculated based on the Total Base Incentive. The Maximum Total Project Incentive shall not exceed \$1,000,000 regardless of system size or qualification for Bonus Incentives.

<u>Base Incentive:</u> Fuel cell systems installed to operate in parallel with the electric grid will be eligible to receive incentives of \$1,000 per kW of installed capacity not to exceed the Maximum Total Project Incentive cap.

<u>Grid Independent Incentive:</u> NYSERDA strongly encourages the installation of distributed generation resources that are capable of grid independent operation. Fuel cell systems installed under PON 3841 that are configured to run in the event of a grid outage will be eligible to receive a grid independent operation/standalone capability incentive of \$500 per kW of installed capacity or the remainder of the Maximum Total Project Incentive cap, whichever is less. For installations with islanding capability, the Contractor shall demonstrate the actual operation of the fuel cell system in grid-parallel mode, its transition to and operation in stand-alone mode where it actually serves the facility to the fullest extent intended, and its transition back to and operation in grid-parallel mode.

Total Base Incentive: The Total Base Incentive is the sum of the Base Incentive plus the Grid Independent Incentive, if applicable. Any eligible Bonus Incentive will be calculated based on the Total Base Incentive. Total incentives for any project may not exceed the Maximum Total Project Incentive cap of \$1 million.

Bonus Incentives

<u>Downstate Differential Incentive</u>: The Total Base Incentive will be increased by 10% for fuel cell systems installed in the Downstate region of NY State. The incentive regions are defined as:

- Upstate Customer sites located in the area of the State north and west of Westchester County.
- Downstate Customer sites located in New York City and Westchester County

Target Zone Incentive (Consolidated Edison Territory Only):

CHP Target Zones have been established by Consolidated Edison for load service areas of particular interest and will also be applied to fuel cell projects installed via this solicitation. Each of these Target Zones has been assigned a target year. If a project site is within a Target Zone based on the Consolidated Edison Target Zone map that is in effect as of the date of application approval by NYSERDA, an additional bonus equal to 25% of the Total Base Incentive of the Fuel Cell Program incentive will be paid as part of the final invoice, provided the fuel cell system is fully operational prior to May of the target year and the total Fuel Cell Program incentive does not exceed \$1.0 million. Information about Target Zones, and maps showing their locations, can be found at: <u>https://www.coned.com/en/save-money/using-private-generation-energy-sources</u>. The Target Zone maps may be updated frequently. Sites appearing on a map in close proximity to the border of a Target Zone may be subject to confirmation by Consolidated Edison whether the site is in fact within the Target Zone.

<u>Critical Infrastructure Incentive:</u> Critical infrastructure are those systems and assets so vital to the state that the disruption, incapacitation or destruction of such systems or assets, could jeopardize the health, safety, welfare or security of the state, its residents or its economy, including sites that are designated to be an official "facility of refuge" (as recognized by the American Red Cross or the local Office of Emergency Management). Examples of critical infrastructure include, but are not limited to:

- Hospitals and nursing homes
- Public safety facilities (police, fire, emergency medical services, emergency management, dispatch center or public safety answering point)
- Communications facilities (broadcasting, telecommunications)
- Utilities (water, wastewater treatment)

Food and medicine warehousing and distribution centers (supermarkets, pharmacies)

The Total Base Incentive will be increased by 25% for fuel cell systems installed to support critical infrastructure provided that the electric and/or thermal output of the fuel cell benefits that portion of the building(s) designated as critical infrastructure and that the fuel cell system is configured to run during a grid outage.

<u>Community Microgrid Incentive</u>: NY Prize seeks to support the development of community grids connected to multiple, uniquely owned/controlled buildings that act as a group of interconnected loads and distributed energy resources, lie within a clearly defined electrical boundary and act as a single controllable entity, which can connect and disconnect from the surrounding utility grid and operate in both grid-connected or island mode, and encompassing no less than one facility providing a critical service to the public. The Total Base Incentive will be increased by 25% for fuel cell systems installed with Grid Independent capability to support at least the Critical Infrastructure component of a Community Microgrid.

Incentive Payment Schedule:

<u>Milestone 1: Capacity Incentive:</u> 50% of the Maximum Total Project Incentive will be paid when:

- The Performance Measurement Plan has been approved by NYSERDA and NYSERDA's Agent
- The fuel cell system is fully installed, including interconnections to building systems, and written
 permission to operate the system has been obtained from the utility and submitted to the NYSERDA
 project manager
- The fuel cell system is fully commissioned and operational and reporting data to the NYSERDA Distributed Energy Resources website,
- An Installation Report, including a detailed cost breakdown, has been accepted by the NYSEDA project manager
- Documentation to substantiate any claims for Bonus Incentives (including demonstration of transitioning to and back from Grid Independent operation, if applicable) has been accepted by the NYSERDA project manager
- A copy of the final interconnection agreement between the host and the utility has been submitted to the NYSERDA project manager
- A post-installation site inspection has been completed by NYSERDA or NYSERDA's agent

<u>Milestone 2: Performance/Efficiency Incentive:</u> The fuel cell system must achieve full operation within 15 months of the NYSERDA contract effective date in order to be eligible for disbursement of the Milestone 2 payment, and if so the remaining 50% of the Maximum Total Project Incentive will be paid when:

- The fuel cell system has completed one year of operation subsequent to the date of commissioning and has met the minimum capacity factor and efficiency requirements for PON 3841
- A performance report detailing the operational data for one year subsequent to the date of commissioning and calculations showing that the fuel cell system has met the minimum capacity factor and efficiency requirements for PON 3841 has been accepted by the NYSERDA project manager

The Incentive Calculator: The CEF Fuel Cell Program Incentive Calculator (Appendix A) can be used to calculate the incentive that will be available for a particular fuel cell system design at a specific site. Note: The Incentive Calculator is only to be used to obtain an estimate of the Fuel Cell Program Incentive applicable to a proposed project. NYSERDA takes no responsibility for errors or misinterpretations resulting from its use. NYSERDA will review each application, and in its sole discretion, assign the appropriate incentive.

CEF Stationary Fuel Cell System Incentive Summary

Definitions: Fuel cell modules greater than 25 kW **CEF Program Funding Allocation:** \$7.5 million per year for 2 years **Project Funding Cap:** \$1 million per project. **Related Projects Funding Cap:** \$1 million in aggregate total for a batch of related projects. A batch of related projects could consist of but is not limited to projects in a given building serving different utility meters. A batch of related projects could consist of but is not limited to projects in different buildings all located at a destination grouping such as a college campus or a shopping center or an industrial park. A batch of related projects could consist of but is not limited to project and/or a community Distributed Generation format that are owned and/or developed and/or operated and/or managed by a particular entity or by numerous entities that are related entities (related entities include but are not limited to those with a significant extent of common ownership and/or a significant extent of common management team). Related applications, even if submitted at different times throughout the term of this program, may nevertheless still be considered to represent a batch of related projects.

Base Incentive:

• Fuel Cells: \$1,000 per kW not to exceed the Maximum Total Project Incentive cap.

Grid Independent Operation/Standalone Capability Incentive:

 Additional \$500 per kW of installed capacity or the remainder of the Maximum Total Project Incentive cap, whichever is less.

Total Base Incentive:

 Sum of the Base Incentive and the Grid Independent/Standalone Capability Incentive not to exceed the Maximum Total Project Incentive cap.

Downstate Differential Incentive:

 Additional 10% of the Total Base Incentive as calculated by the CEF Fuel Cell Incentive Calculator or the remainder of the Maximum Total Project Incentive cap, whichever is less.

Consolidated Edison Target Zone Incentive:

 Additional 25% of the Total Base Incentive as calculated by the CEF Fuel Cell Incentive Calculator or the remainder of the Maximum Total Project Incentive cap, whichever is less.

Critical Infrastructure Incentive:

 Additional 25% of the Total Base Incentive as calculated by the CEF Fuel Cell Incentive Calculator or the remainder of the Maximum Total Project Incentive cap, whichever is less.

Community Microgrid Incentive:

 Additional 25% of the Total Base Incentive as calculated by the CEF Fuel Cell Incentive Calculator or the remainder of the Maximum Total Project Incentive cap, whichever is less.

Maximum Total Project Incentive:

• Sum of the Total Base Incentive and all eligible Bonus Incentives, not to exceed \$1 million.

D. Eligibility:

To participate in PON 3841 CEF Stationary Fuel Cell Program, the following criteria must be met:

- Only new generation equipment purchased or installed under a fully-executed PON 3841 CEF Fuel Cell Program Standard Performance Agreement will be eligible for the program;
- Fuel cell modules must be greater than 25 kW;
- Project sites must be located at eligible host sites in New York State, and must be positioned at the site at an elevation above the 500-year floodplain;
 - If the site is located within a 500-year flood zone as shown on an approved or proposed FEMA flood zone map, then the fuel cell system, including all components required for proper operation (pumps, controls, switch gear, etc.) must be located above the expected 500-year flood level. NYSERDA may wave this requirement on a case-by-case bases for sites located within a 500-year flood zone, but outside of a 100-year flood zone if a flood mitigation plan acceptable to NYSERDA is provided.
- Projects must be located at sites where the Host pays the NYS SBC Program Surcharge on the electric meter behind-which the fuel cell system will be installed

• Fuel cell electricity must be generated and used primarily by the Host behind the meter to which it is interconnected, or in a Community Distributed Generation arrangement.

Fuel cell systems must:

- Consist of commercially-available technologies as listed at Appendix E,
- Be warranted for continuous-duty for three consecutive years by the original equipment vendor, and
- Have a detailed maintenance agreement with a factory service provider for the duration of the three-year warranty period.

Applications must include:

- A signed contract between the Host and the project developer (including a chain of contracts extending to the Fuel Cell OEM, if different than the project developer), showing the full team's readiness and willingness to proceed contingent upon receiving an award from NYSERDA under PON 3841.
- An analysis showing that the fuel cell system design intent is forecasted to achieve 45% or greater Total System Efficiency, based on the HHV of the input fuel and a Capacity Factor of 50% or greater.
- An analysis of the expected operation and performance of the proposed fuel cell system based on the 8760-hour load profile including monthly (12 consecutive months) and annual performance estimates, including:
 - operating efficiency,
 - fuel input, net electric (kWh) output (i.e. less parasitic electric use),
 - thermal energy generated,
 - thermal energy usable, and
 - run hours.
 - A copy of 12 consecutive months utility bills for the host site
- A site plan showing the intended placement of the fuel cell system and affirming that it will be placed above the 500-year floodplain.
- An installation schedule showing delivery dates for major components and full operation within 15 months of the NYSERDA contract's Effective Date.
- A list of all permits and approvals required.
- Electric interconnect application submitted, and a Preliminary Determination and Cost Estimate for the Coordinated Electric System Interconnection Review (CESIR) received from the electric utility.
- Preliminary determination of gas availability from the gas utility, if the fuel cell system will be fueled by pipeline natural gas.
- All proposals must include a completed and signed Part 1 SEQR Short Environmental Assessment Form (Appendix G).

Applicants, contractors and Hosts must comply with all applicable:

- Federal, State and Local codes, rules, and regulations;
- Federal, State and Local permitting requirements; and
- Federal, State and Local emissions limits

E. Limitations:

Incentives will only be paid for systems installed as approved by NYSERDA. Any system modifications or equipment changes must be approved by NYSERDA in writing before a system is installed. Failure to get NYSERDA approval on any and all modifications may result in revocation of the incentive reservation or nonpayment of the incentive.

The purpose of NYSERDA's CEF Fuel Cell 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 fuel cell electric generation system that can be installed. Systems shall be sized such that the expected annual energy produced (kWh/year) by the system will not exceed 110% of the Host's grid-supplied electric energy usage per year of the meter to which the fuel cell system is interconnected (therefore, in a "behind the meter" configuration, aggregation of meters for the purpose of justifying a system size is not permitted under this program). For CDG applications, the system shall be sized such that the expected annual energy produced (kWh/year) by the system shall be sized such that the cDG Satellites proposed with their utility CDG application. 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.

III. Application Requirements

Processing of Applications

Applications (including any required attachments and supporting documentation) must be completed and submitted online at https://nyserda.seamlessdocs.com/f/FuelCell_proj_app Only projects installed at sites where the electric customer pays the System Benefits Charge (SBC) on the electric bill for the meter behind-which the fuel cell system will be installed are eligible to receive funding through this program. In order to participate in PON 3841, applicants must comply with all program rules, procedures, and eligibility requirements, submit all required forms and supplemental documentation, and enter into a Standard Performance Agreement (SPA) with NYSERDA. Applicants must also adhere to the performance measurement requirements throughout the term specified in the SPA.

Be sure to have all required information with you before completing this application, since you will not be able to save partially completed applications. If you wish to have any information submitted as part of this application treated as proprietary or confidential, you must 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 and the associated regulations. However, NYSERDA cannot guarantee the confidentiality of any information submitted. Your written request must be uploaded in the Uploads Section, under Confidentiality.

You will receive a tracking number and confirmation on your screen to print or save after you have submitted the application, this will establish your position in the queue if and only if your submittal is full and complete. However, if your submittal is incomplete, it will be rejected, and you will need to re-submit the application in its entirety and upon doing so you will receive a new tracking number and position in the queue.

NYSERDA anticipates that there will be more requests for funds under PON 3841 than there are funds available, and therefore establishes the following rigid procedure for establishing and managing a queue of applicants.

a) An application will be entered into the rear of the queue when NYSERDA deems the application to be full and complete. Full and complete applications will be entered into the queue in the order that they are received as determined by fuel cell application number and the date and time stamp on the completed application. If an application had previously been deemed by NYSERDA to be deficient, the new application number and the date and time stamp of receipt of the supplemental application materials that resolve such deficiencies will be used to determine its order in the queue.

b) NYSERDA has an interest in promoting diversity of equipment in the program, therefore, no single original equipment manufacturer's (OEM) product line may be awarded more than 50% of the total program budget. NYSERDA will accept applications for fuel cell systems within each OEM's product line, regardless of vendor, until the total amount of funds requested for fuel cell systems within any single OEM's product line is equal to 50% of the total amount of funds requested for fuel cell systems enough full and complete applications that the total amount of funds requested for fuel cell systems within any single OEM's product line is equal to 50% of the total program budget. Once NYSERDA receives enough full and complete applications that the total amount of funds requested for fuel cell systems within any single OEM's product line equals 50% of the total program budget, NYSERDA will no longer accept applications involving equipment from that OEM.

c) If an application from within an OEM's product line, which is requesting up to 50% of the program budget, cannot proceed and withdraws from the program, NYSERDA will resume accepting applications from that OEM's product line up to the 50% program budget limit. However, funds from the withdrawn application will be allocated to the next eligible full and complete application(s) in the queue regardless of OEM.

d) When NYSERDA determines that an application is full and complete, and sufficient funds are available and have been set aside, NYSERDA will issue the applicant an SPA. The applicant will then have 30 days to return the signed SPA to NYSERDA.

NYSERDA will promptly review applications and supplemental application materials in the order that they are received, and applications deemed full and complete in their "as received" form will be entered into the queue in the order the application was received. Deficient or incomplete applications will not be accepted or entered into

the queue. Deficient or incomplete applications that have been rejected will be invited to reapply to the program once they are full and complete (at which point the applicant will be placed at the rear of the queue).

Applicants should be "ready to go" when submitting their application so that the applicant will be capable of complying with the thirty (30) day requirement to submit a signed contract with NYSERDA for the installation of the fuel cell system as proposed.

State Environmental Quality Review Act (SEQR)

NYSERDA is required under SEQR to consider the environmental implications of all funded projects. All proposals must include a completed SEQR Short Environmental Assessment Form (Appendix G).

Coordination of Public/Utility Funding

If a project to install a fuel cell system is awarded other public grant funding and/or utility incentive funding, NYSERDA may reduce the incentive amount with the intent that total public/utility funding, including NYSERDA's incentive, will not exceed 100% of the total project cost. The Applicants must inform NYSERDA's project manager of all pending and awarded public grant funding and utility incentives related to the project.

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 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. NYSERDA may request additional data or material to support applications. NYSERDA will use the Sample Agreement to contract successful proposals. NYSERDA expects to notify applicants in approximately one week from the date of 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.

V. Appendices:

Appendix A: Incentive Calculator

Appendix B: Sample Standard Performance Agreement

Appendix C: Performance Measurement Requirements

Appendix D: Project Installation Report Requirements

Appendix E: List of Eligible Fuel Cell Modules by Manufacturer Make and Model

Appendix F: Instructions to Manufacturers of Fuel Cells – How to Request Addition of Your Equipment to the List of Eligible Fuel Cells

Appendix G: SEQR Short Environmental Assessment Form

VI Attachments:

Attachment A: Proposal Checklist Attachment B: Disclosure of Prior Findings of Non-Responsibility



Cleantech Accelerator Program Opportunity Notice (PON) 3875 \$10,000,000 Available NYSERDA reserves the right to extend and/or add funding to the Solicitation should other program funding sources become available.

REVISED

Proposals Due: March 6, 2019 by 3:00 PM Eastern Time*

Program Summary: This New York State Energy Research and Development Authority (NYSERDA) Program Opportunity Notice (PON) 3875, Cleantech Accelerator, seeks proposals from organizations interested in launching and managing a new statewide Cleantech Accelerator in New York. This PON is a continuation of NYSERDA's successful Proof-of-Concept Center (POCC) program. The goal of the POCCs, and now the Cleantech Accelerator, is to catalyze researchers and practitioners to transition cutting-edge clean energy enabling innovation from the laboratory to proof of product/market fit. The Cleantech Accelerator will make early-stage investments and provide supporting services to enable the development and validation of promising clean energy technologies that are, or will become, the platform for startup companies located in New York State. NYSERDA's strategy is to create long-lasting programs that catalyze clean energy commercialization and provide targeted support to help companies achieve product/market fit then accelerate their path to market. Through this competitive solicitation, NYSERDA is seeking proposals to launch and manage a new Cleantech Accelerator, which will deliver POCC programs to teams and companies across the entire state. It is anticipated that an additional competitive solicitation will be issued in the future for academic institution-based POCCs. Up to \$10,000,000 of NYSERDA funding is available through this PON. NYSERDA anticipates making one or more awards as a result of this solicitation. Awarded contract(s) will be for an initial term of five years with one, one-year option to renew. All, some, or none, of the available funds may be awarded through PON 3875. NYSERDA reserves the right to add or reduce time and/or funding to awarded contract(s).

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 Jeff Peterson (Designated Contact) at (518) 862-1090, ext. 3288 or by e-mail

jeff.peterson@nyserda.ny.gov or Nicholas Querques (Designated Contact) at (518) 862-1090, ext. 3086 or by e-mail <u>nicholas.querques@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 on page 1.

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 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

The Cleantech Accelerator initiative is a continuation of the NYSERDA Proof-of-Concept Center (POCC) program. The focus of the POCC program is to accelerate the commercialization of clean energy-related technologies approaching the "proof-of-concept" stage and provide programming to link researchers, entrepreneurs, investors, development partners, and the broader innovation ecosystem. The goal is to address the primary challenges of a technology startup, including successfully structuring a team, defining and validating the business concept in the context of the market realities, and delivering benefits for target customers while creating value for the entrepreneur and investors.

POCC Program Background

NYSERDA founded its Proof-of-Concept Center (POCC) program to catalyze researchers and practitioners to transition cutting-edge clean energy enabling innovation from the laboratory to proof of product/market fit. In 2012, NYSERDA issued a competitive solicitation (PON 2537) that resulted in the selection of three POCC awardees. Academic institution-based POCC programs were awarded to Columbia University and New York University. Columbia University and New York University combined the collective efforts of their respective POCC programs under the PowerBridgeNY brand. Columbia University partners with Stony Brook University, Brookhaven National Laboratory and Cornell Tech while New York University is partnering with the City University of New York. PowerBridgeNY is currently working with its fifth cohort of teams and expects to add a sixth cohort to the program in 2019. Under the PowerBridgeNY program, only teams affiliated with the partner academic institutions are eligible to participate in the program. In addition to Columbia University and New York University, High Tech Rochester was selected as the POCC program in Upstate New York under the same competitive solicitation. High Tech Rochester branded their program NEXUS-NY and recently concluded working with its fifth and final cohort. Participants in the NEXUS-NY program do not have to be affiliated with any particular academic institution in order to participate. As of the completion of the fifth cohort for

each program, PowerBridgeNY and NEXUS-NY have assisted 90 teams that have gone on to raise a combined \$47 million in private investment, \$29 million of non-NYSERDA grant funding, and \$578,000 in sales.

In addition to these three contracts for POCC programs, NYSERDA has an ongoing contract with the New York Academy of Sciences to support the overall POCC initiative. The activities under this contract include: (1) formation and management of an advisory board; (2) implementation of an evaluation program to identify and track outcomes, experiences, and lessons learned from the individual POCC activities; and (3) dissemination of professional quality media to communicate the experiences and lessons learned from the three POCC programs and fold these learnings back into all the ongoing and new POCC programs for continuous improvement.

Objectives and Expected Outcomes

NYSERDA views the Cleantech Accelerator as an investment of public funds to catalyze the implementation of multiple long-lasting POCC programs. The goal is to make early-stage investments and provide supporting services to enable the development and validation of promising clean energy technologies that are, or will become, the platform for startup companies located in New York State. The objectives of the Cleantech Accelerator, and the broader NYSERDA POCC initiative, include:

- De-risking and accelerating proof-of-concept and market validation while also enabling subsequent commercialization of innovations from research organizations into the marketplace, particularly through startup companies.
- Matching emerging clean energy technologies that have scalable commercialization potential, based on real market need, with the investment community and development partners.
- Developing a sustainable business model for the Cleantech Accelerator and successfully executing on it.
- Leveraging and/or establishing sustainable regional innovation ecosystems of potential entrepreneurs, investors, and development partners in clean energy technologies and solidifying linkages to them.

The Cleantech Accelerator must develop and sustain relationships and steward interactions and handoffs with the full spectrum of organizations that support technology-based startup companies. These may include academic and research institutions, entrepreneurs, investors, corporate/strategic partners, customers, service providers, and venture development organizations.

NYSERDA Context

Within the overall NYSERDA Technology to Market portfolio, the Proof-of-Concept Centers (POCCs) are the first step in the transition of research, inventions, and/or ideas into market-validated products and solutions. In addition, to the POCCs, NYSERDA supports six Clean Energy Incubators and a \$3 million Ignition Grant fund for clients of those incubators, an Entrepreneurs-In-Residence program to provide mentoring and advisory services, a Manufacturing Corps program to support hardware companies with manufacturing development, the 76West Clean Energy Competition, and several other investment funds and commercialization support programs for early-stage companies.

The subsequent sections of this PON are as follows:

- Program Requirements (page 4)
- III. Proposal Requirements (page 7)
- IV. Proposal Evaluation (page 8)
- V. General Conditions (page 11)
- VI. Attachments (page 13)

II. PROGRAM REQUIREMENTS

Eligibility and Proposer Requirements

All entities, both for-profit and not-for-profit, are eligible to apply. Proposers may be existing NYSERDA-sponsored organizations and/or new organizations that are not currently supported by NYSERDA. Proposers must be located in New York State, which means that their principal place of business and management team must be primarily based within the state.

The Cleantech Accelerator must develop and implement programs that are open to any qualified team or company from New York State and/or qualified teams or companies located outside of New York State which can demonstrate they are committed to establishing their principal place of business, manufacturing, or research and development in New York State.

Proposers should provide at least three illustrative examples of clean energy and advanced technology companies that have directly benefited from their acceleration and/or commercialization support. Examples should clearly and succinctly articulate how the proposer helped these companies achieve significant technical and business milestones, such as achieving higher technical and commercial readiness levels, attracting investment, securing partnerships, commercializing products, identifying customers, generating revenue, and/or realizing liquidity events. Proposers should provide contact information for any specified companies listed in the proposal. NYSERDA reserves the right to verify any information provided in the proposal.

Eligible Technologies

For the purpose of this solicitation, 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.

Available Funding and Cost Sharing

Up to \$10,000,000 of NYSERDA funding is available through this PON. NYSERDA anticipates making one or more awards as a result of this solicitation. Awarded contract(s) will be for an initial term of five years with one, one-year option to renew. All, some, or none, of the available funds may be awarded through PON 3875. NYSERDA reserves the right to add or reduce time and/or funding to awarded contract(s). Successful proposers will be required to provide cost sharing; at least 20% 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 is the preferred form of cost share.

Up to \$3,000,000 of NYSERDA funds can be designated for follow-on funding in companies that complete the programs offered by the Cleantech Accelerator. A maximum of \$250,000 of NYSERDA funds can be provided to an individual company over one or more tranches. The NYSERDA funding must be matched; \$1 dollar of NYSERDA funding must be matched by at least \$2 dollars of private (non-state or federal funding) investment. These co-investment funds are not considered part of the cost sharing requirement.

Refer to the following sections of Attachment A Form Fillable Proposal Narrative for additional information and requirements:

- Section 4.4: Implementation Strategy and Plan Stage 3: Business Formation and Launch
- Section 6: Financial Management Plan
- Section 7.3: Milestone/Performance Payment Plan Client Driven Milestones

Range/Scope of Services

Proposers are asked to submit proposals for launching and managing the Cleantech Accelerator, which will make early-stage investments and provide supporting services to enable the development and validation of promising clean energy technologies that are, or will become, the platform for startup companies located in New York State. Proposers are expected to develop models that leverage regional assets while also utilizing national best practices from leading accelerators. To be selected for funding, proposals must outline strategies for how they will address and execute on the following key program activities:

- Operations Strategies and activities related to the operation and administration of the accelerator. For information and material to include in the proposal, refer to the Proposal Narrative (Attachment A) requirements for Section 3: Management Structure, Proposing Team Qualifications and Institutional Capability. Operational activities will be relayed to NYSERDA via periodic reporting which quantifies the impact of the accelerator (refer to Section 5: Measure of Success and Expected Outcomes) as well as progress made, and milestones achieved by client companies and graduates.
- Programs The core of the Cleantech Accelerator is the design and implementation of strategies and activities that identify scalable clean energy enabling technologies, establish entrepreneurial teams that can build a business around the technology or solution and bring it to market, and provide the mentorship and network to succeed. The Proposal Narrative requirements in Section 4: Implementation Strategy and Plan outlines a three-stage program: (1) Recruitment and Team Formation; (2) Market Validation and Entrepreneurial Training; and (3) Business Formation and Launch. Proposers are asked to present an implementation plan segmented by these stages.
- Client-Driven Milestones Strategies and activities focused specifically on increasing the likelihood of accelerator team/company success. The proposer is required to provide a Milestone/Performance Payment Plan (refer to the Proposal Narrative requirements for Section 7: Milestone/Performance Payment Plan) that, in part, outlines outcome-based milestones related to new startup companies emerging from the Cleantech Accelerator's work. These may include the establishment of a new business enterprise to commercialize the market validated clean energy enabling technology, the establishment of a strategic corporate commercialization partnership, the introduction of a commercial product incorporating the technology, the successful raising of early-stage capital, or other outcomes that support the objectives of the program.

The following chart provides representative values of a budget allocation to each stage. The proposer is free to recommend different funding allocations for a stage.



Schedule and Teaming

The following guidelines should be considered when developing proposals:

- Projects are expected to begin within six months of the proposal due date. Awarded contract(s) will be for an initial term of five years with one, one-year option to renew.
- 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 accelerators. Include letters of commitment or interest from each identified team member in Section 8 of the Proposal Narrative.

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 should not be solicited from NYSERDA personnel.

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 performance by team members and partners of the proposed contract. Describe how your firm would resolve conflicts of interest.

Individuals that have an active contractual relationship with NYSERDA to provide strategic guidance and advisement to Technology and Business Innovation staff, such as Innovation Advisors, are not eligible to serve in a management role of a proposed Cleantech Accelerator or to assist in the preparation of any proposals submitted under this solicitation. In addition, these individuals shall not provide written endorsements, references, or support letters to any proposers for this PON.

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 of Section III, or the General Conditions of Section V.
- Prior to an award being made, potential awardees may be required to demonstrate the following via formal documentation: (1) a strong track record in the identification and commercialization of clean energy enabling technologies; (2) access to financial resources and human capital sufficient to perform the proposed work; (3) technical experience and adequate facilities (or the ability to access them); and (4) 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 contractor 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). Proposals that grossly exceed the page limits or fail to follow the format guidelines in Attachment A may be rejected as non-responsive. If you believe proprietary information must be submitted to provide an adequate proposal, you must comply with the General Conditions of 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.

Procurement Lobbying Requirements

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 Narrative

Complete the Proposal Narrative form-fillable document as part of the PON (Attachment A). The Proposal Narrative contains the following sections:

- Section 1: Executive Summary
- Section 2: Business Formation and Growth for the Clean Energy Market
- Section 3: Management Structure, Team Qualifications, and Institutional Capability
- Section 4: Implementation Strategy and Plan
- Section 5: Measure of Success and Expected Outcomes
- Section 6: Financial Management Plan
- Section 7: Milestone/Performance Payment Plan
- Section 8: Additional Information

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.

A payment based on the final deliverable will be reserved until project completion. If awarded, NYSERDA may choose to negotiate the amount of such payment.

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. A proposer receiving a favorable evaluation 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, 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 may cause the proposal to be rejected or significantly reduce the score of a proposal.

- At least a 20% cost share is substantiated by documentation included in the proposal.
- The proposer is located in New York State (refer to Section II, Program Requirements).
- The proposal, and any supporting materials, documents that the identified Cleantech Accelerator team members have experience with the commercialization of clean energy enabling technologies.

Evaluation Criteria in Order of Importance

Implementation Strategy and Plan

- Does the proposed project define a clear and compelling value proposition and an executable strategy that will result in the identification and evaluation of promising research that can serve as the platform for clean energy technology business formation, and accelerate progress to the viability of any resulting business? Is there a demonstrated understanding and effective design of the process for establishing proof-of concept, validating product/market fit and moving technologies toward commercialization?
- Will the proposed Cleantech Accelerator implement programs that are open to any qualified team or individual from any part of New York State or, if the team or individual is located outside of New York State, is there a requirement to demonstrate commitment to establish its principal place of business, manufacturing, or research and development in New York State?
- Does the timeline of program activities beginning with the marketing for submission of applications through to support and services to graduating teams or businesses represent a reasonable approach to support market validation and business formation?
- Is the financial support proposed to be provided to individual teams, broken down by direct financial support to the team and by the estimated dollar value of support provided directly to individual teams by a service provider, generally sufficient for the team to make progress in market validation and business formation?
- Is there a mechanism/process to timely exit teams which have no chance of becoming a successful business and document lessons learned, or to enable a pivot which will enable success?
- Does the Communications Strategy outline a clear set of tasks to develop the appropriate media to inform the market of the activities of the Cleantech Accelerator and active/graduated teams?
- Can the strategy be tested, measured, and adjusted with ease?

Management Structure, Team Qualifications, and Institutional Capabilities

- Does the Cleantech Accelerator management team have a proven track record in providing business formation support to start-up and early stage technology companies? How much of this track record involves clean energy-enabling technologies? Does the Cleantech Accelerator Director have sufficient management authority to operate an effective Cleantech Accelerator?
- Has the proposer clearly identified team members with credentials in entrepreneurship and technology commercialization? Do team members have demonstrated experience with business formation involving clean energy enabling technologies?
- For proposals that include the use of NYSERDA funds for follow-on funding in companies completing the Cleantech Accelerator program, do the team members responsible for managing the investments have demonstrated experience in raising investment capital for pre-seed and seed-stage businesses?
- Have gaps in the management team for the Cleantech Accelerator been identified? Is there a clear plan to successfully fill the gaps?

Business Formation and Growth

• Does the proposal accurately identify the challenges that technologists and entrepreneurs face during the very early stage of business formation with an emphasis on clean energy enabling technologies?

• For proposals that include the use of NYSERDA funds for follow-on funding in companies completing the Cleantech Accelerator program, is the proposed structure and business model of the investments likely to generate return on investment to investors and provide the support and resources to entrepreneurs that is needed for them to succeed?

Measure of Success and Expected Outcomes

- Are the expected outcomes challenging but realistic?
- Is there an effective plan to accurately measure progress towards the expected outcomes?
- Based on a review of the proposal, how likely is it that the proposed work plan, as implemented by the proposing team, will result in the expected performance targets?

Financial Management

- Does the cash flow projection table present a cost sharing commitment greater than or equal to 20% of the total NYSERDA)?
- Does the Financial Plan present a clear and realistic budget allocation that is necessary to achieve the goals and objectives of the Cleantech Accelerator program?
- For proposals that include the use of NYSERDA funds for follow-on funding in companies completing the Cleantech Accelerator program, is the requested amount less than or equal to \$3 million? Is there a clear plan to leverage the NYSERDA funds to attract co-investment (\$2 of private capital for every \$1 of NYSERDA funds) from private investors for each deal?

Performance Payment Plan

- How meaningful and impactful are the proposed milestones? How aligned with client success is the proposed milestone payment plan?
- Do the proposed program targets and payment plan demonstrate an appropriate level of risk sharing regarding Cleantech Accelerator operation? Are deliverables tangible? Do they represent progress towards program goals? Do they reward real outcomes?

Project Benefits

- How significant are the economic and environmental benefits from the project, in the form of subsequent leveraged investment, new product commercialization, and job creation by Cleantech Accelerator teams and graduates?
- Will the proposed project effectively leverage NYSERDA's investment by attracting additional funding and support from other sponsors? Are there existing or future commitments or interest from other sponsors for the proposed projected?

Other Considerations

NYSERDA reserves the right to accept or reject proposals – or adjust award amounts – based on the following factor(s):

- Duplication of other proposed or awarded projects.
- The degree to which the proposed project directly addresses NYSERDA's mission and strategic goals.
- The degree to which there is industry involvement and demonstrated ability to commercialize energy or related technologies.
- The degree to which the applicant has the resources (human and financial) to be able to complete the project.

• Track record and previous performance of proposer(s).

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/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 (available at http://www.tax.ny.gov/pdf/publications/sales/pub223.pdf).

Contract Award

NYSERDA anticipates making one or more awards under this solicitation. NYSERDA anticipates a contract duration of five years with a one-year option, 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, .w av, 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 at https://www.nyserda.ny.gov/-/media/Files/About/Style-Guide/ADA-Accessibility-Requirements.pdf).

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 under this PON, the contractor will be required to submit to NYSERDA's Project Manager on a biannual basis, the following metrics for the Cleantech Accelerator's client 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 the Cleantech Accelerator's client companies and graduates. Reporting shall commence the first calendar quarter after the contract is executed. Reports shall be submitted 30 days after the previous reporting period.

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

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, 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

The following attachments are required for each submitted proposal to be considered complete:

- Attachment A Proposal Narrative
- Attachment B Mission Model Canvas
- Attachment C Sample Agreement



Public Transit Technology and Innovation Program Program Opportunity Notice (PON) 3914 Up to \$5,000,000 Available NYSERDA reserves the right to extend and/or add funding to the Solicitation should other program funding sources become available

Concept Papers will be accepted through November 20, 2019 by 3:00 PM Eastern Time or until all funds are committed

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I. INTRODUCTION

New York State has more public transportation ridership than any other state, in terms of both overall and per capita ridership. This ridership demand has been increasing in recent years, especially in dense urban environments like the New York City area and is expected to continue to grow. With some transit systems already at or over capacity, new investments are needed to keep up with demand. There exists a critical opportunity to rethink public transportation operations as transit agencies seek innovative ways to serve riders more efficiently, such as wider adoption of technological advancements and capitalization of industry expertise through public private partnerships. Furthermore, there exists opportunities to help transit agencies improve energy efficiency and to improve transit ridership in transit deserts especially in suburban and upstate areas. To date, many of these opportunities have not been undertaken due to technical and operational hurdles including a lack of dedicated research and development (R&D) budget for product development and demonstration, procurement challenges, financing challenges and logistical hurdles. Innovative energy efficiency solutions could potentially generate sustainable environmental, social and economic benefits through reduced greenhouse gas (GHG) emissions, improved quality of commute for riders and millions of dollars in annual cost savings.

The New York State Energy Research and Development Authority (NYSERDA) seeks proposals to develop and demonstrate innovative public transportation technologies and strategies that have the potential to reduce GHG emissions and associated energy consumption of the existing transit bus, rail and connected intermodal transit systems in New York State. Proposals should focus on new or underutilized solutions that can help transit agencies make tangible improvements to their operations while achieving real energy savings, especially in transit bus efficiency and electrified rail. Proposals should demonstrate a feasible path to economic viability and be replicable and transferrable throughout the State by different size transit agencies. Private, non-profit, and public entities are eligible to propose. The goal of this program is to develop and demonstrate innovative technologies and operational approaches that are required for New York's public transportation systems, while contributing to the State's energy and GHG reduction goals.

II. PROGRAM INFORMATION

Projects **MUST** address one or more of the following Challenges and Focus Areas, which should be identified in the proposal. Proposals that do not address one or more of the Challenges and Focus Areas may be considered unresponsive.

A. Innovation Challenges

Goal: To develop and demonstrate new products and strategies that can reduce energy use from rail traction power, increase efficiency of transit bus service, and improve transit agency operations and ridership statewide.



Challenge 1 – Improve Efficiency and Reliability of Rail Traction Power

- Innovations that advance the state of technology for energy efficiency improvements to electrified rail transit that address **one or more of the following focus areas**:
 - **Rail equipment** that can reduce third rail electrical loss, lower resistance, and improve power reliability during periods of peak demand
 - Advances in energy management and harvesting that can a) accelerate and improve the energy capture and use of rail regenerative braking technologies, b) overcome integration challenges of energy storage systems to the power distribution system used by trains, c) allow operators to increase service frequency and reduce headways without the need to substantially upgrade existing substations, and/or d) improve monitoring, measurement and control of energy use and energy efficiency at a targeted site level within a transit system
 - **Train equipment innovations** such as optimizing vehicle weight and reducing unnecessary load without compromising safety, and improving the efficiency and maintainability of on-board systems including HVAC and lighting
 - Improvements to train operations including ways to a) optimize speed profiles and reduce inconsistent and inefficient braking, b) reduce dwell time in stations and yards and reduce HVAC loss, and/or c) improve the efficient distribution and dispatching of trains and reduce the amount of train travel without passengers

<u>Sample Target Metrics</u>: Peak demand (MW), Percentage of traction energy recovered through regeneration, Greenhouse Gas (GHG) emissions per Passenger Mile Traveled (PMT), Third rail voltage

Challenge 2 – Expand Electrification and Improve Efficiency of Buses and Fleets

- Innovations that advance the state of technology for energy efficiency improvements to transit buses, paratransit, and non-revenue vehicle operations that address **one or more of the following focus areas**:
 - Innovations that facilitate bus and paratransit electrification, including projects that a) develop and demonstrate new technologies or strategies to improve the electrification of diesel buses and paratransit vehicles and facilitate cost-effective, faster, universal charging of electric buses and/or b) identify ways to reduce the total cost of ownership of purchasing or converting to electric vehicles while streamlining the necessary operational and maintenance modifications
 - Innovative approaches to bus operations that can reduce inconsistent and inefficient braking, reduce dwell time and improve on/offboarding, alleviate bus bunching and/or reduce the time buses spend in traffic
 - Technologies or strategies to reduce energy use from non-revenue fleets through the electrification of diesel and gasoline O&M vehicles and equipment or the reduction of idling

<u>Sample Target Metrics</u>: Miles per gallon gasoline equivalent (MPGe), Gallons of diesel/gasoline saved, GHG emissions per PMT, Electricity dispensed by EV chargers, Total cost of ownership



Challenge 3 – Improve the Transit Experience

- Innovations that serve to expand transit ridership and improve the efficiency of transit facilities that address one or more of the following focus areas:
 - Innovative approaches to improve customer experiences using data to improve route planning, information sharing, and decision-making tools for riders
 - Development and demonstration of technologies, strategies, or partnerships to improve first and last-mile connections to public transit hubs, especially in rural areas or transit deserts
 - Innovations that reduce energy use in transit facilities through improvements in operations or maintenance procedures

<u>Sample Target Metrics</u>: Vehicle Miles Traveled (VMT) avoided, GHG emissions per PMT avoided, Annual ridership

B. Funding Categories.

Three (3) categories will be considered for funding. Proposals must identify which single category they are applying for:

1. <u>Technical Feasibility Studies</u>: Category 1 is for feasibility studies that conduct preliminary research into the concepts underlying new products, systems, or services as a first stage of product or service 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. NYSERDA's share of funding for any project of this type will be limited to a maximum of \$200,000. All Category 1 projects are required to provide at least 50% of total project costs in non-NYSERDA matching funds.

2. <u>New Product Development</u>: Category 2 includes efforts that are crucial to the development of a marketable product, system, or service and any demonstration, testing, or validation of an innovation that is not already commercially available in an application with high impact on the public transportation sector. NYSERDA's share of funding for any project of this type will be limited to a maximum of \$1,000,000. All Category 2 projects are required to provide at least 50% of total project costs in non-NYSERDA matching funds.

3. <u>Demonstration of Technologies and Business Models</u>: Category 3 is aimed at demonstrating emerging public transportation related technologies, services, or strategies that are commercially available but have not yet been significantly deployed in NYS. This includes hardware, software, policies, and market development initiatives. An example could be a new wayside energy storage system that is in use in Europe but not yet sold or demonstrated in New York. NYSERDA's share of funding for any project of this type will be limited to a maximum of \$1,000,000. All Category 3 projects are required to provide at least 50% of total project costs in non-NYSERDA matching funds.

Proposers must select <u>only one (1) funding category per proposal</u>, which must be indicated in the proposal. 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 proposal. Proposers applying



under Category 1 or Category 2 should allocate 10-25% of the project budget for commercializationrelated tasks, such as customer discovery and market research, IP protection, business plan development, and design for manufacturing tasks. Category 1 and Category 2 proposals are subject to NYSERDA's recoupment requirements, as outlined in Section V. 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.

NYSERDA reserves the right to modify a project's Statement of Work and 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.

C. Program Requirements

Project Scope. To qualify for funding, proposals must:

- Show a potential to reduce GHG emissions by improving or expanding public transportation use in NYS
- Address an innovative, under-utilized technology that would benefit from public exposure using credible performance metrics
- Provide quantifiable benefits to NYS with respect to the public transportation market
- Emphasize development of marketable products, services or strategies rather than basic research that is not replicable
- Provide products or strategies that minimize excessive customization tailored to one transit agency
- Identify a clear value chain and provide products or strategies that can be easily inserted into a transit agency's own value chain or operating/capital processes
- Show a potential to reduce a transit agency's operating or capital costs

Project Schedule, Phasing and Teaming. The following guidelines should be considered when developing proposals:

- Projects are expected to begin within six months of the proposal due date. As transit ridership continues to increase, infrastructure operates beyond useful life and technology evolves quickly, shorter projects are strongly preferred. Generally, the project schedule should not exceed: 18 months for Categories 1; and 24 months for Categories 2 and 3.
- Teaming Agreements are strongly encouraged, where appropriate, to enhance the likelihood of project success. Teams may include commercial firms, industry associations, research organizations, universities, government agencies, end-users, or other stakeholders.

Letters of Commitment or Interest. If relying on any other organization to do some of the work, provide services or equipment, or share in the non-NYSERDA cost, you must include a letter from that organization describing its planned participation and financial commitment if there is one. The lack of such letters is viewed as a very serious proposal deficiency and will be judged accordingly in the



evaluation process. 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 working with a transit agency.** Absence of letters of commitment or interest may be interpreted as meaning that the proposer does not have support from the subject parties. Letters should not be solicited from NYSERDA personnel.

III. CONCEPT PAPER AND FULL 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.

NYSERDA is employing a two-step application process in this solicitation.

1) Concept Paper. All proposers will be required to initially submit a four-page Concept Paper by the indicated due date using the Concept Paper Template provided in Attachment A. The Concept Paper should provide a concise overview of the proposer's public transportation innovation. The Concept Paper will be reviewed and scored by a scoring committee based on the Evaluation Criteria in Section IV. NYSERDA will invite proposers whose Concept Papers have been selected for further consideration to submit a Full Proposal. The invitation will include the date by which Full Proposals must be received. Failure to submit a Concept Paper precludes submission of a Full Proposal. **Submission of Full Proposals is by invitation only.**

2) Full Proposal. If notified by NYSERDA of a favorable Concept Paper review, the proposer will be invited to submit a Full Proposal using the instructions and attachments listed below.

The proposer's goal should be to concisely present the information needed to fully address the Full Proposal evaluation criteria (Section IV). Proposals that grossly exceed the word limits or fail to follow the 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 IV 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.

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 a minimum, the following documents:

Proposal Narrative (with required attachments) Statement of Work (instructions are in the Proposal Narrative files) Budget Form (instructions are in the Proposal Narrative files)

Each Funding Category has its own respective Proposal Narrative, with the sections listed below. Proposer must follow the instructions provided during the Proposal Submission process to ensure that all required documents for the selected Funding Category are submitted.



Proposal Narrative - Funding Category 1 (Attachment B1)

- Executive Summary
- Problem Statement and Proposed Solution
- State of Research and Technology Targets
- TRL/CRL Calculator (Attachment C3)
- Commercialization Potential of Proposed Solution
- Feasibility Study Information
- Statement of Work (Attachment C1) and Schedule
- Project Benefits
- Budget
- Proposer Qualifications
- Letters of Commitment
- Attachments

Proposal Narrative - Funding Category 2 (Attachment B2)

- Executive Summary
- Problem Statement and Proposed Solution
- Business Model Canvas (Attachment C2)
- State of Research and Technology Targets
- TRL/CRL Calculator (Attachment C3)
- Commercialization Potential of Proposed Solution
- Three-Year Financial Projections Worksheet (Attachment C4)
- 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 C1) and Schedule
- Project Benefits
- Budget
- Proposer Qualifications
- Letters of Commitment
- Attachments

Proposal Narrative - Funding Category 3 (Attachment B3)

- Executive Summary
- Problem Statement and Proposed Solution
- Business Model Canvas (Attachment C2)
- State of Research
- TRL/CRL Calculator (Attachment C3)
- Commercialization Potential of Proposed Solution
- Three-Year Financial Projections Worksheet (Attachment C4)
- Demonstration Site and Product
- Replication Potential of Proposed Demonstration
- Statement of Work (Attachment C1) and Schedule
- Project Benefits
- Budget



- Proposer Qualifications
- Letters of Commitment
- 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.

Cost Sharing

The proposal should show non-NYSERDA funding of at least 50% of the total cost of the project. 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 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.

	Cash	In-kind Contribution	Total
NYSERDA	\$	\$	\$-
Proposer	\$	\$	\$ -
Others (list individually)	\$	\$	\$ -
Total	\$-	\$-	\$-

Show the cost-sharing plan in the following table (expand table as needed):

A. Submission Process and Requirements

NYSERDA strongly prefers online submission for all solicitations. NYSERDA does not accept faxed or emailed submissions.

Complete and submit your application/proposal online at:

https://portal.nyserda.ny.gov/CORE_Solicitation_Detail_Page?SolicitationId=a0rt000000FoKymAAF 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 application/proposal. The online proposal system closes promptly at 3:00 PM on the date above. 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.



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 in approximately 4-6 weeks 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. Proposers who are invited to submit a Full Proposal will have 45 calendar days from the date of the letter accepting their Concept Paper to submit their Full Proposal.

When completing your application, submit documents only in the follow formats:

- .doc, .docx
- .pdf
- .xls, xlsx
- .ppt, .pptx, pps, ppsx
- Compressed versions of the above files types in .zip format

File names must include the proposer's entity name.

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 influence the evaluation of the proposal.

For detailed instructions on how to submit a proposal, read the "<u>Application Instructions and Portal</u> <u>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>).. NYSERDA will also accept proposals by mail or hand-delivery if online submission is not possible.

B. Contacting NYSERDA about a Proposal

No communication intended to influence this procurement is permitted.



If you have technical questions about this solicitation, contact **Richard Mai** at (212) 971-5342, ext. 3476 or by email at Richard.Mai@nyserda.ny.gov or Adam Ruder, Program Manager at (518) 862-1090, ext. 3411 or by email at Adam.Ruder@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 Nancy.Marucci@nyserda.ny.gov. Questions regarding Attachments C2-C4 should be directed to Nicholas Querques at (518) 862-1090, ext. 3086 or by email at Nicholas.Querques@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.

C. 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 AND FULL PROPOSAL EVALUATION

1) <u>Concept Paper Evaluation</u>. Concept Papers will be reviewed and scored by the scoring committee as per the evaluation criteria listed below. Those submitting Concept Papers that receive a favorable review, will then be invited to submit a Full Proposal. NYSERDA expects to notify proposers in approximately 4-6 weeks from Concept Paper due date if they are invited to submit a Full Proposal.

New York State Impact

- Is the proposed approach a transformational advancement over existing solutions which, if successful, will result in truly significant improvements in energy use in public transportation, public transit ridership, GHG emission reductions, grid resiliency and utilization in New York State?
- Is the proposed approach likely to enable benefits at scale, that is, if developed, become an economically viable, replicable, and transferrable solution that can help NYS transit agencies make tangible improvements to their operations while achieving real energy savings?
- Is the proposed concept consistent with NYSERDA programmatic goals and mission?

Innovation

- Is the proposed approach unique and innovative?
- Is the proposed approach technically sound?



• Is the proposed approach aimed at the development and commercialization of technology or innovative business practice, as opposed to basic research aimed at discovery and fundamental knowledge generation?

State of the Art

- Does the applicant demonstrate an understanding of existing and other emerging solutions?
- Has a target market been identified and characterized and are there sufficient markets or needs for the concept/technology, project, or study?
- To what extent has the proposer engaged the market? To what extent does the proposer understand the market?
- Is there an understanding of competitive options being developed by others?
- Is the value proposition sufficient that the concept or technology will likely be successful in the target market?

Risks and Challenges

- Does the proposal clearly identify and prioritize the technical and techno-economic risks and challenges?
- Does the proposal offer a compelling explanation of how it will address barriers to market entry or adoption of the concept, product, or technology?

Project Plan

- Does the proposal clearly outline how the proposed outcomes will be achieved?
- Are the proposed project objectives reasonable and, if achieved, will they validate the proposed concept?
- Can the proposed work be reasonably accomplished for the amount of time, effort, and resources proposed?

Team

• Does the proposed team have the necessary expertise and resources to carry out the proposed work?

2) <u>Full Proposal Evaluation</u>. Full Proposals that meet solicitation requirements will be reviewed by a Scoring Committee using the following evaluation criteria:

Proposed Solution/Scope

• The proposal identifies a core problem pertinent to NYS that is essential to the advancement of Public Transportation technical solutions.

• The proposed project is feasible, innovative, and superior to alternatives, and will make significant progress toward solving the identified problem.

- The approach is testable and flexible, and the work schedule is reasonable.
- The selected Funding Category is appropriate for the proposed solution.

Project Benefits

• The proposed solution has the potential to significantly reduce GHG emissions or energy use from public transportation, or by helping more people use public transportation in NYS.



• There are sizable economic benefits to NYS in the form of innovation, manufacturing, or technical services, and there will be NYS jobs created and/or retained because of this project.

• There are additional significant benefits, such as increased resiliency to disasters or air quality improvements.

• A significant portion of the work will take place in NYS.

Market Potential

• The proposed solution addresses a core public transportation problem that is not being addressed by others and provides the potential for wide-scale replicability.

• 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 proposer has exhibited a strong market demand for this solution and has already identified target customers or end-users.

Project Team/Support

• The project team has both a strong technical and business background with the relevant and necessary expertise to complete the proposed work.

• 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 both letters and cost sharing, and has demonstrated strong support from necessary market actors.

• For projects relying on a public transit authority or agency, all necessary project team support such as availability of drawings, Right-of-Way access and protection, and Operations & Maintenance staff buy-in has been obtained

Project Value

• The cost of the project is strongly justified with respect to the expected benefits and the potential market or deployment opportunity.

• The proposer has met or exceeded the recommended cost share amount, and these contributions are appropriate given the financial resources of the team and the degree of risk.

• The proposal outlines a plan for pursuing additional funding and development support, if necessary, to bring the proposed solution to full commercialization.

• The proposal shows a strong potential to reduce a transit agency's operating and capital costs.

NYSERDA may request additional data or material to support applications/proposals. NYSERDA may also request 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.

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 advance the goals of the State Energy Plan and the Clean Energy Fund, which include improving resilience and reducing GHG emissions.



- 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.
- 3) The degree to which the proposed project contributes to the geographic diversity of public transportation projects funded by NYSERDA.
- 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 expected benefits are commensurate with the size and risk profile of the proposed project and are aligned with the program objectives.
- 7) The degree to which the amount and type of proposed cost share is appropriate to the size and risk profile of the proposed project.
- 8) Past performance of the proposer on other NYSERDA projects
- 9) The degree to which the applicant has the resources (human and financial) to be able to complete the project.
- 10) The degree to which pricing and hourly rates are in line with the rest of the market.

NYSERDA expects to notify awardees in approximately 6-10 weeks from proposal due date if your proposal has been selected to receive an award.

V. AWARDEE CONDITIONS

If selected for an award under this solicitation, 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 contractor. 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 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 nonproprietary/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 of such 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 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 Accessibility Requirements</u>.¹

C. 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 recoupment terms are valid 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. The recoupment terms are:

¹ https://www.nyserda.ny.gov/-/media/Files/About/Style-Guide/ADA-Accessibility-Requirements.pdf



For products made in New York State:

- 1.5% of sales
 - or
- 10% of all license revenue

For products made outside of New York State:

- 5% of sales
 - or

•

• 30% of all licensing revenues

For any new projects exceeding \$75,000 that involve product development, including business development, NYSERDA will require a royalty based on sales and/or licensing of the new product developed (see Attachment E, Sample Agreement for specific recoupment obligations). Recoupment is not required for demonstration projects. See the definitions below to determine if your project will be subject to recoupment. Note that NYSERDA will make final determinations as to whether proposals fit within the demonstration or product development categories. **Proposals to PON 3914 under Funding Category 1 and Funding Category 2 are subject to these product development recoupment requirements.** Proposals submitted under Category 3 that NYSERDA deems to be more appropriately classified as product development may also be subject to these product development recoupment requirements.

- <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.
- <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.

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.

NYSERDA may decline to contract with awardees that are delinquent with respect to recoupment payments or sales reporting for any previous NYSERDA agreement.



VI. GENERAL CONDITIONS

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</u>, <u>Section 89(5) and the procedures set forth in 21 NYCRR Part 501</u>.² However, NYSERDA is bound by State Freedom of Information Law and cannot guarantee the confidentiality of any information submitted.

B. Freedom of Information Law

The New York State Freedom of Information Law, Public Officers law, Article 6,³ 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

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:

² <u>https://www.nyserda.ny.gov/About/-/media/Files/About/Contact/NYSERDA-Regulations.ashx</u>

³ <u>https://www.dos.ny.gov/coog/foil2.html</u>



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</u> <u>Finance Law sections 139-j and 139-k</u>.⁴ 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>.⁵ 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 <u>ST-220-CA</u>.⁶ The Department has also developed <u>guidance</u>⁷ 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 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.

⁴<u>https://online.ogs.ny.gov/legal/lobbyinglawfaq/default.aspx</u>

⁵ http://www.tax.ny.gov/pdf/current_forms/st/st220td_fill_in.pdf

⁶ http://www.tax.ny.gov/pdf/current_forms/st/st220ca_fill_in.pdf

⁷ http://www.tax.ny.gov/pdf/publications/sales/pub223.pdf



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.

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.

VI. ATTACHMENTS

Attachment A – Concept Paper Template

- Attachment B1 Proposal Narrative for Funding Category 1 Technical Feasibility Studies
- Attachment B2 Proposal Narrative for Funding Category 2 New Product Development
- Attachment B3 Proposal Narrative for Funding Category 3 Demonstration of Technologies and Business Models
- Attachment C1 Statement of Work Sample Format
- Attachment C2 Business Model Canvas Template
- Attachment C3 Technology and Commercialization Readiness Level Calculator
- Attachment C4 Three-Year Financial Projections Worksheet
- Attachment D Budget Form and Instructions
- Attachment E Sample Agreement



New Construction Initiatives Support Services

Request for Proposals (RFP) 3771 **No funding is associated with this Solicitation** NYSERDA reserves the right to extend and/or add funding to the Solicitation should other program funding sources become available.

Applications accepted continuously through December 28, 2023 by 3:00 PM Eastern Time*

New York State Energy Research and Development Authority (NYSERDA) is accepting Applications from firms to become approved Primary Energy Consultants, serving projects in NYSERDA's New Construction Initiatives. NYSERDA seeks firms capable of delivering energy modeling and analysis, building commissioning, advanced building facilitation and project mentorship, third-party Quality Assurance, Measurement and Verification, and Smart Building services to significantly increase the performance of buildings and their energy systems to reduce overall greenhouse gas emissions. Primary Energy Consultants will deliver these services to building owners, developers, and leaseholders. Approved Consultants will execute two-year agreements with NYSERDA, with two (2) two-year options to renew at NYSERDA's discretion. All Agreements will end no later than two years following the close of the RFP or when all work assigned under the Agreement has been completed.

NYSERDA offers the following benefits to approved Primary Energy Consultants:

- Access to New Construction Initiative cost-share funding, as applicable;
- Access to technical guidance documents, case studies and other materials;
- Promotional materials such as NYSERDA literature and messaging support;
- Publicity through NYSERDA's website at <u>www.nyserda.ny.gov</u>.

Primary Energy Consultants approved via this solicitation will be eligible to provide services under NYSERDA New Construction Initiatives, including the standard incentive programs, competitive award programs, and portfolio support programs. Some programs may require specific service category approvals for a Primary Energy Consultant to serve applicants in those programs. In addition, firms approved for the Energy Modeling Service category will be considered eligible modeling entities under PON3308: Commercial Tenant Program. Future Initiatives that require similar technical support services may be added to this solicitation, in alignment with NYSERDA's Clean Energy Fund Investment Plans.

Firms will be required to demonstrate relevant staff credentials, experience on at least three previous projects in which the applicant has provided energy consulting services, and evidence that the applicant has achieved abovecode energy performance on at least one project since 2009. Applicants may indicate their interest in providing one or more services as a Primary Energy Consultant. Specific service categories may have additional requirements for approval. Upon request, firms qualified under RFQ 3691 as Real Time Energy Management (RTEM) System Providers may also be listed on NYSERDA's website under this solicitation as Smart Buildings service providers.

Application Submission: Applicants may submit an online Primary Energy Consultant Vendor Application via: https://portal.nyserda.ny.gov/CORE_CONAPP_Program_Page

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

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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 Zach Zill (Designated Contact) at (212) 971-5342 ext. 3092, or Pat Fitzgerald (Designated Contact) at (518) 862-1090 ext. 3385 (for technical questions). 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: (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

The goal of this solicitation is to expand the market of firms that provide energy consulting services for building design and construction, as listed and described in Section II below. NYSERDA seeks to provide project owners with the expertise they need to achieve significant energy savings in the design and delivery of new construction and gut rehabilitation projects in New York State. Additionally, NYSERDA seeks to facilitate the development of increased proficiency among service providers in delivering advanced clean energy buildings. By providing a pathway for a range of firms to participate in advanced clean energy building projects, NYSERDA aims to drive market development and reduce barriers and soft costs in the production of energy efficient new buildings.

Firms are invited to apply as providers of one or multiple of the following technical support services. These services are required by projects receiving support through NYSERDA's New Construction Initiatives. Selection through this RFP serves as a pre-condition for eligibility to receive NYSERDA New Construction Task Work Orders and incentive payments.

The specific activities expected of approved Consultants will vary depending on the Initiative and project sector, but may include:

- Scoping meetings, integrated project delivery services, and charrettes;
- Developing scope and budget estimates for technical support services;
- Evaluating building systems;
- Energy modeling using a variety of software tools;
- Performance validations;
- Certification services for RESNET HERS Ratings, Passive House, Net Zero energy, or other standards
- Quality Assurance of projects following third party standards;
- Building commissioning;
- Smart Building system design and installation;
- Oversight and mentorship of other energy consultants; or
- Other related areas or services as directed by NYSERDA or by the project owner.

Applicants are encouraged to familiarize themselves with the requirements and procedures of NYSERDA's current New Construction initiatives:

- PON 3609 Commercial New Construction Program
- PON 3716 Low-rise Residential New Construction Program
- PON 3717 Multifamily Residential New Construction Program
- PON 3881 Net Zero Energy for Economic Development

• PON 3943 – Net Zero Portfolio Support

NYSERDA intends to issue additional Initiatives in the coming years, and vendors approved under this solicitation may be eligible support those Initiatives. Approved Consultants will be listed as participating in all New Construction initiatives that correspond to their approved service categories and their desired market sector(s).

II. Service Categories

A. Energy Modeling & Analysis

Advanced clean energy building design often depends upon predictive energy models that approximate how a building will consume energy in the real world. NYSERDA seeks firms capable of advising project owners on the most effective and cost-efficient design strategies for achieving energy savings, utilizing high-quality energy modeling via a variety of software tools. This service category applies to entities capable of modeling commercial and multifamily buildings. For HERS Raters, see Category B.

B. HERS Rating

This service category is for entities that can deliver services based on the ANSI/RESNET 301 Standard for the Calculation and Labeling of the Energy Performance of Low-Rise Residential Buildings using the HERS Index. Certified RESNET Home Energy Raters conduct comprehensive energy audits and use diagnostic equipment and computer software to derive an energy efficiency rating for individual housing units. NYSERDA seeks certified HERS Raters, working under the purview of a HERS Quality Assurance Provider approved in New York State.

C. Building Commissioning

Building Commissioning ensures that projects are delivered according to the Owner's Project Requirements, resulting in buildings that are more energy efficient with lower operations and maintenance costs. Commissioning and its documentation are critical to correctly benchmark the baseline energy consumption of a facility. NYSERDA seeks firms capable of delivering commissioning services, including early development of Project Requirements, Basis of Design, Operations & Maintenance Manual(s), and Commissioning Plan(s).

D. Advanced Clean Energy Building Facilitation

Projects seeking to achieve advanced clean energy performance require specialized consultants. Buildings designed to perform at least 30% better than current energy code, including to a Passive House or Zero Net Energy standard, require detailed guidance from the design and modeling phase, through the specification of components, through construction, airtightness testing, and verification. These projects often perform early coordination among stakeholders, also known as the Integrated Project Delivery model. Firms with project experience and staff credentials in achieving energy performance of 30+% above code minimum, including Passive House, Zero Net Energy, and Integrated Project Delivery consulting are invited to apply under this solicitation.

E. Advanced Clean Energy Project Mentorship

NYSERDA seeks exceptionally experienced consultants to provide mentorship services to project teams pursuing Passive House, Net Zero, or other high-performance standards for the first or second time. Firms with appropriate credentials and experience on multiple projects certified to Passive House, Net Zero Energy, or other verified high-performance standards are invited to apply under this service category. Mentors will provide design and certification support on a variety of projects including high-rise and mixed-use buildings. Mentors may be asked to assist with energy modeling, mechanical systems design review and recommendations, façade consulting, trainings for Construction Management/General Contractor/Project Management staff, and field verification, including airtightness testing.

F. Third Party Quality Assurance

Many clean energy standards rely on third party review to verify that new construction projects are on track to achieve the energy savings required by their standards. For example, Residential Energy Services Network (RESNET)-accredited Rating Providers perform quality assurance and verification of Home Energy Rating System (HERS) Ratings achieved by projects. NYSERDA invites firms capable of providing third party quality assurance oversight for the following standards to apply under this solicitation (other market-based quality assurance providers may be approved under this category at NYSERDA's sole discretion).

F1. RESNET-Accredited Rating Providers

F2. EPA ENERGY STAR Multifamily Review Organizations (MRO) F3. PHIUS+ Rater, PHIUS+ Verifier, or PHI-accredited Certifier

G. Smart Buildings Services

Smart buildings use Information and Communication Technologies (ICT) to enable automated building operations and control, and to optimize operations and whole-building performance. Smart buildings allow operators and occupants to interface with the building, providing visibility into its operations and actionable information. Smart buildings can be responsive to electric grid conditions, create a better environment for occupants, improve resiliency and reliability, and decrease operations and maintenance costs and effort. Installing Smart Buildings equipment during initial building construction is far more cost-effective than retrofitting equipment into existing buildings. NYSERDA invites firms who can provide Smart Building design and installation services to apply under this solicitation. Upon request, firms qualified under RFQ 3691 as RTEM System Providers may also be listed on NYSERDA's website under this solicitation.

H. Measurement & Verification

Measurement & Verification (M&V) is a formal, systematic process for determining the energy performance and cost savings of a building's energy-using systems, in part to verify if the project is generating the expected level of savings over a baseline. M&V is used to:

- Allocate risks between the contractor and the customer
- Accurately assess energy savings and persistence of savings for a project
- Reduce uncertainties to reasonable levels
- Aid in monitoring equipment performance
- Identify additional savings
- Improve operations and maintenance (O&M)
- In aggregate, provide data that informs program impact evaluations

NYSERDA seeks firms capable of providing M&V services for projects. Applicants should have demonstrated experience performing M&V using the Federal Energy Management Program (FEMP) guidelines, the Efficiency Value Organization's (EVO) International Performance Measurement & Verification Protocol (IPMVP), ASHRAE's Guideline 14-2014, the US DOE's Uniform Methods Project, or other publicly verifiable methodologies.

III. Eligibility Requirements

Applicant eligibility under this solicitation will be determined by the firm's credentials and experience. At a minimum, applicants must demonstrate the following:

- 1) Evidence that a current staff member has at least one of the following credentials (other credentials submitted to NYSERDA with justification will be considered on a case-by-case basis)
 - Certified Passive House Consultant (CPHC)
 - Certified Passive House Designer (CPHD)
 - Certified Energy Manager (CEM)
 - Building Energy Modeling Professional (BEMP)
 - Building Energy Simulation Analyst
 - Passive House Institute of United States (PHIUS)+ Rater
 - PHIUS+ Verifier
 - o RESNET HERS Rater
 - o RESNET Quality Assurance Designee
 - o Certified Building Commissioning Professional (AEE)
 - AEE Certified Green Building Engineer (CGBE)
 - AEE Certified Measurement & Verification Professional (CMVP)
 - Building Commissioning Professional (BCxP), American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE)
 - o ASHRAE/ANSI Commissioning Process Management Professional (CPMP)
 - ASHRAE High Performance Building Design Professional (HPBD)
 - o Certified Commissioning Professional, American National Standards Institute (ANSI)
 - o Certified Commissioning Authority (CxA) Certified
 - o Building Performance Institute (BPI) Multifamily Building Analyst
 - o Leadership in Energy and Environmental Design Accredited Professional (LEED AP);
 - o EPA-qualified Multifamily High-Rise Multifamily Review Organization (MRO)

AND

- 2) Experience on at least three (3) previous projects in which the applicant company has provided energy consulting services aligned with this RFP. Applicants must submit a minimum of three project work samples, including at least one project corresponding to each service category they are applying for; **AND**
- 3) Evidence that the applicant company, or a current staff member, provided energy consulting services on at least one project since 2009 that achieved above-code energy performance. Above-code performance can be demonstrated by
 - third-party certification achievement, with appropriate documentation, including but not limited to ENERGY STAR, PHI, PHIUS, LEED, Net Zero Energy Building (NZEB), or Zero Energy Ready Homes (ZERH) certification, OR
 - State or federal energy efficiency program approval and certification.
 - Other evidence of above-code performance submitted to NYSERDA with justification will be considered on a case-by-case basis.

Work samples submitted to demonstrate an applicant's project experience may be for new construction or a substantial renovation, and must include a narrative, not to exceed ten (10) pages, that describes the following:

- The project background
- Scope of work (including square footage) and budget
- Service(s) provided
- Design process
- Initial goals for the project, including the relevant energy code baseline.
- Measures and alternatives presented to the customer
- List of personnel and roles on the project
- Energy modeling software used (if applicable)
- Results of technical assistance provided to the customer, including the resulting energy efficiency of the project.

The following service categories require additional documentation, as described below:

B. HERS Raters

Raters applying under this solicitation must be affiliated with a NYSERDA-recognized RESNET-Accredited Provider. Raters should provide the information for their affiliated Provider in the application document upload.

E. Advanced Clean Energy Project Mentorship

Mentors must:

- have a Certified Passive House Consultant or Designer staff credential, or BEMP or CEM credential; and
- demonstrate that they were the lead energy & certification consultant on at least two projects as described below; **and**
- demonstrate a track record of multiple instances leading trainings, conference workshop presentations, or other educational activities geared toward an audience of building industry professionals, on a technical subject related to exceptional building energy performance.

Project work samples submitted to demonstrate this service capability may be Passive House certified, designed and constructed to achieve Zero Net Energy performance, LEED certified with a minimum of 14 Optimize Energy Performance credits (LEED v2009 or later), or have an as-built Energy Rating Index of 10 or less.

F1. RESNET-Accredited Rating Providers

Upload list of raters working under your providership, and the certification status of each.

Approved applicants may have their credentials and project experience displayed publicly on NYSERDA's website. Applicants are encouraged to submit materials demonstrating their range of qualifications and achievements, and to provide comprehensive staff credentials related to the design and construction of clean energy buildings, above and beyond the minimum listed above. Approved Primary Energy Consultants will be subject to occasional performance reviews by NYSERDA staff or Designees. Performance reviews may take into consideration project owner feedback regarding the Consultant's performance. Approved Consultants whose performance is deemed unsatisfactory may be disqualified from further serving NYSERDA's New Construction Initiatives. NYSERDA may, in the future, create a mechanism whereby project owners can provide public feedback on the services received from their selected Primary Energy Consultant.

IV. Application Process

Applications may be submitted as described on page 1 of this solicitation. Online submission is preferable, via NYSERDA's online portal:

https://portal.nyserda.ny.gov/CORE_CONAPP_Program_Page

Applicants are invited to document their skills, expertise, and qualifications in any or multiple of the service areas listed in this solicitation. Applicants are permitted to team with subcontractors who offer complementary expertise. The Application package consists of the following:

- Online submission of company information, including primary contact and regions served, and document upload of a one-page company profile;
- Online submission and document uploads of relevant credentials held by Applicant staff;
- Online submission and document uploads for at least three (3) **project work samples**, with relevant project information, services provided, energy savings metrics, narratives, and third-party certifications or verification (if applicable);
- Billing rate schedule in NYSERDA-provided format;
- Review and agreement with, or proposed modifications to, solicitation Terms & Conditions;
- **Disclosure** of past bankruptcy or felony conviction and Prior Findings of Non-Responsibility, and esignature certification

Applications will be reviewed in the order that they are received. Applicants will be notified of acceptance or rejections within four (4) weeks after a complete application is received. Any clarification required by NYSERDA review staff will be communicated to the applicant via written comments. Applicants will be required to respond to comments in a timely fashion. If there is a significant delay in Applicant's response to NYSERDA comments, NYSERDA reserves the right to disqualify or disapprove the application.

Firms whose applications are rejected may request a de-briefing and may reapply. Firms whose applications are rejected twice may not reapply until 12 months after the initial application date.

Firms previously approved under RFP 3036 will automatically be approved under this solicitation. These firms may indicate their interest in providing additional services as identified herein, via the NYSERDA portal or by written communication with NYSERDA staff.

V. Approved Primary Energy Consultant Responsibilities

Approved applicants will enter into a standard two-year NYSERDA contract Agreement with a Statement of Work, with two (2) two-year options to renew at NYSERDA's discretion. All Agreements will end no later than two years following the close of the RFP or when all work assigned under the Agreement has been completed. Work conducted under the Agreement will assigned by NYSERDA via a project-specific Task Work Order (TWO).

Upon contract execution, approved applicants will be required to undergo training on how to navigate NYSERDA's project databases and successfully usher a project through the New Construction Initiatives process. NYSERDA may facilitate regular training sessions to keep approved Consultants up to date with New Construction Initiatives. Approved firms will be listed on NYSERDA's website and may be contacted by project owners assembling a team to design and construct an advanced clean energy building.

At the end of each contract period, each vendor will be evaluated based on the performance criteria in the RFP, and NYSERDA will determine whether to exercise an option to extend the Agreement for an additional term.

Approved Primary Energy Consultants are responsible for:

- A. Promoting the use of effective, energy-efficient products, services and designs, as defined by this RFP;
- B. Abiding by the Terms and Conditions in this RFP;
- C. Keeping relevant credentials up to date. If the Consultant allows credentials to lapse or qualified staff to leave the firm, such that the firm no longer meets the minimum eligibility requirements, their approved status will be terminated;
- D. Keeping up to date with NYSERDA's New Construction Initiatives;
- E. Fully cooperating in any NYSERDA investigation of a possible violation of these rules. Failure to comply may result in the approved Consultant losing its approved status. Becoming an approved Primary Energy Consultant is completely voluntary and NYSERDA can remove a firm from the list at any time for any reason. NYSERDA may revoke a firm's status and remove them from NYSERDA's website if the firm does not meet all Initiative requirements. Firms may also request to be removed from the New Construction Qualified Primary Energy Consultant list.

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, 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 contractor prior to contacting 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.

VII: ATTACHMENTS FOR REFERENCE

Attachment A – Sample Agreement, Scope of Work, and Terms & Conditions Attachment B – Project Billing Rates Template





NY Green Bank & NYSERDA

Low and Moderate-Income Participation in CDG Projects in New York State

Request for Information

Responses Due: December 31, 2018, by 3:00 p.m. EST

RFI No. 5

Version 2.0 - November 30, 2018

1. Introduction

The New York State Energy Research and Development Authority ("**NYSERDA**") is committed to making Community Distributed Generation ("**CDG**") projects accessible to all New York State ratepayers. NYSERDA, through the NY-Sun initiative and NY Green Bank ("**NYGB**"), has been working to develop financing arrangements and incentive programs to encourage and support the deployment of CDG projects.

Under this Request for Information ("**RFI**"), NYGB and NYSERDA seek to connect with CDG project developers, sponsors, financiers, community-based organizations, and all other market participants who specifically focus on, or are interested in better serving, the low and moderate-income ("**LMI**") market segment in the State (defined as households with annual incomes at or below 80% of Area Median Income).

NYGB and NYSERDA seek to receive feedback from such parties regarding the following:

- (a) Project data and performance history that can be used by market participants to evaluate the validity of perceived risks associated with serving LMI customers and communities;
- (b) Existing NYGB CDG financing approaches (which currently include projects that target LMI customers and, in some cases, do not require FICO scores);
- (c) Forms of NYGB credit enhancement (including loan loss reserve programs) that could facilitate third party financing; and
- (d) Market barriers (such as actual or perceived increased customer acquisition and management costs), and other related NYSERDA interventions that could promote greater LMI participation in CDG projects.

2. Background

2.1 Low Income VDER Working Group and Commission Order

New York's CDG program was initiated in July 2015 by a Public Service Commission Order.¹ Since then, CDG stakeholders, including the Low-Income Value of Distributed Energy Resources ("VDER") Working Group, have identified several potential barriers to LMI participation in CDG projects. Among other solutions, multiple stakeholders advanced a "loan loss reserve" model to address the perceived risks of LMI participation in CDG projects. On July 12, 2018, the New York State Public Service Commission directed NYSERDA, "through the NY Green Bank or other appropriate portfolio, to develop a loss reserve program for CDG projects serving low-income subscribers."²

2.2 NYSERDA Support for LMI Community Solar

In May 2018, NYSERDA, through NY-Sun, released a request for proposals ("**RFP**") for community solar projects to commit capacity to the Solar for All program, which provides no-cost community solar subscriptions to low income customers (households with incomes at or below 60% of the State Median Income). Solar for All will include approximately 10,000 low income participants by the end of 2020. Potential participants may sign up for the program directly with NYSERDA or with the assistance of local agencies and community organizations.

Through the REVitalize and Affordable Predevelopment and Technical Assistance Programs, NYSERDA has also funded 15 initiatives, including support for local agencies, affordable housing providers, and community organizations, to initiate solar projects serving LMI residents. NYSERDA will continue these efforts with a renewed focus on community-based project models.

See <u>http://documents.dps.ny.gov/public/MatterManagement/CaseMaster.aspx?MatterCaseNo=15-E-0082&submit=Search+by+Case+Number.</u>

² See http://documents.dps.ny.gov/public/Common/ViewDoc.aspx?DocRefId={A3AC5DF4-C427-4B47-AAAB-1BF50965EB76}.

2.3 NYGB's Financing Approach for Subscription-Based CDG Projects (Applicable to Projects Targeting LMI and/or where FICO Scores may not be Required)

Initially issued in December 2017, NYGB's RFP 10: "Construction & Aggregation-to-Term Financing for Community Distributed Generation Projects" outlines NYGB's approach for financing subscription-based CDG projects, and forms part of NYGB's longstanding effort to attract private market participation in this nascent and attractive market by addressing financing gaps, creating scale and promoting standardization to drive down transaction costs. NYGB revised and reissued RFP 10 in October 2018 to specifically include projects paired with storage.

NYGB's underwriting approach with respect to these types of projects and business models accounts for the regulatory mechanisms that allow a project sponsor to manage subscriber turnover through the ongoing allocation of project-generated credits. Moreover, NYGB places significant emphasis on the responsibilities and qualifications of key project participants, as well as the terms established and enforced under contractual arrangements pertaining to project operation. Such terms include, but are not limited to, customer acquisition, subscriber management and administration, billing and collections, and operations and maintenance.

RFP 10 also highlights how medium to long-term, efficiently priced debt financing arrangements may be available to project sponsors who seek to enroll a wide-ranging group of customers (including customer acquisition approaches where FICO scores are not required) as project subscribers, as well as monetize long-term cashflows to be generated from subscriber payment obligations established and enforced under subscription agreements. These may include indexed rate structures, no termination fees and/or short-term durations. NYGB has already executed and continues to originate financing arrangements for CDG projects that include LMI participation and/or where FICO scores are not required for a portion of the subscription base.

To manage its exposure to price risk, NYGB applies a borrowing base methodology, whereby on a periodic basis it compares the net present value of the forecasted cash available to debt service - determined through the application of forecasts generated by an independent third party on NYGB's behalf - to the then outstanding loan balance. In cases where the loan-to-value ratio ("**LTV**") is outside required levels, distributions at the borrower level will be blocked and excess cash may be used to pay down the loan until the required LTV is achieved.

Information regarding RFP 10, as well as NYGB's engagement process with project sponsors pursuing CDG projects, is available on NYGB's website.³

3. RFI Objectives

As outlined above, NYSERDA and NYGB seek to build upon ongoing efforts and provide increased opportunities for LMI customers to participate in, and directly benefit from, New York State's growing distributed energy resource market. Specifically, NYSERDA and NYGB seek to: (i) identify LMI-focused CDG projects that may benefit from, and be eligible to receive, NYGB debt capital and/or NYSERDA incentives; (ii) inform prospective borrowers about NYGB's CDG financing approach, and the applicability of this approach to LMI-focused projects and market strategies; (iii) determine market interest in NYGB's CDG-related product offerings; and (iv) introduce product refinements, as necessary, to better serve LMI market segment needs and further accomplish NYGB's investment objectives.

Additionally, NYGB seeks to connect with private-sector lenders who may require a form of credit enhancement (such as a loan loss reserve) to participate in the financing of LMI-focused CDG projects. In this regard, NYGB wishes to: (i) more fully understand how such lenders are determining the amount and source of potential losses associated with LMI participation in a CDG project or portfolio; (ii) identify the amount and type of credit support deemed necessary; and (iii) identify the terms under which such lenders would provide debt capital to LMI-focused projects assuming an appropriately priced credit enhancement were in place.

Finally, NYGB and NYSERDA seek to identify barriers (for example, increased customer acquisition and management costs) to LMI-focused CDG projects that are outside the scope of the financing considerations described above and may be better addressed by NYSERDA incentives or other direct assistance.

³ See <u>https://portal.greenbank.ny.gov/servlet/servlet.FileDownload?file=00Pt0000005HfpNEAS.</u>

Respondents are encouraged to provide written feedback and participate in conversations with NYGB and NYSERDA in the form of one-on-one meetings and broader convenings, one of which is a **webinar scheduled for November 9, 2018**. In addition to prospective borrowers and lenders, other CDG market participants and stakeholders including, but not limited to, subscriber management and administration service providers, community-based organizations, and philanthropic organizations are encouraged to respond.

4. Content & Due Date of Responses

To respond to this RFI, please complete the questionnaire in Attachment A.

Responses are due to NYGB and NYSERDA by **3:00 p.m. EST** on **December 31, 2018** and should be submitted by email to <u>solicitations@greenbank.ny.gov</u>. Please include "RFI No. 5" in the subject line.

Respondents should contact info@greenbank.ny.gov with any questions about the RFI.

5. NYGB Background

NYGB is a division of 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 being self-sustaining, covering its own costs of operation and entering transactions on market terms. NYGB is a key component of New York's Clean Energy Fund ("**CEF**").⁴ 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.⁵

The key elements of NYGB's mission are collaborating with private sector participants, implementing structures that overcome market barriers and address 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.

NYGB can be flexible in terms of transaction roles. NYGB can participate as a lender (e.g., senior, subordinated or mezzanine for term or revolving facilities) through many types of facilities. Examples of the types of facilities NYGB provides include: project equity, warehousing/aggregation facilities (with an expectation of being taken out by private sector third parties within prescribed time periods and upon certain events – e.g., the aggregation of an agreed upon amount of assets fitting certain credit and other parameters), construction and post-construction finance and a variety of credit enhancement products (e.g., guarantees of third party capital, letters of credit, etc.).

NYGB operates as a self-sustaining entity, pricing investments to cover its operating expenses and portfolio default risk, and to preserve its capital base. NYGB intends to serve as both a prudent custodian of ratepayer and other investor funds and an agent for greater private investment in the clean energy and sustainable infrastructure sector in NYS. Pricing will reflect the underlying transaction credit quality, risk, position in the capital structure, and the level of standardization and scale NYGB seeks to facilitate, with the goal of creating

⁴ Created pursuant to the "Order Authorizing the Clean Energy Fund Framework", issued and effective January 21, 2016, Cases 14-M-0094 et al. (the "**CEF Order**"). See <u>https://www.nyserda.ny.gov/About/Clean-Energy-Fund</u>.

⁵ See <u>https://rev.ny.gov/</u>.

investments that private sector lenders will ultimately be willing to participate in at the agreed pricing levels. NYGB investment terms will be determined by credit risk and exposure assumed by NYGB and other investment participants. For NYGB products, upfront and ongoing fees generally apply.

More information about NYGB can be found at https://greenbank.ny.gov/.

6. General Conditions

6.1 Proprietary Information

Among NYGB's goals is the promotion of standardization of material contract terms and structures, and the collection of project performance data across NYGB transactions. NYGB is keenly aware that commercial markets and their incumbents value non-disclosure extremely highly to protect confidential transaction terms and other competitive information and NYGB remains highly sensitized to usual and customary confidentiality practices. Nevertheless, as a division of NYSERDA, certain State laws specifically apply to NYGB and it is recommended that careful consideration be given before confidential information is submitted to NYGB.

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 any party 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.

6.2 Limitation

This RFI 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 response or to procure or contract for services or supplies. NYGB reserves the right to cancel in part or in its entirety this RFI when it is in NYGB's best interest.



NY Green Bank

On-Lease Commercial Tenant Energy Efficiency Financing

Request for Information

Responses Due: May 17, 2019 by 3.00 p.m. EST

RFI No. 6

Version 1.0 – March 27, 2019

Executive Summary

NY Green Bank ("**NYGB**") seeks to provide funding to commercial property owners/managers ("**Owner/Manager**" or "**Owners/Managers**") that enables Owners/Managers to offer commercial tenants an innovative financing option to make energy efficiency ("**EE**") upgrades to their tenant spaces.

For Owners/Managers, this creates an opportunity to offer a valuable benefit to their tenants and prospective tenants, lowers building operating costs (thus increasing net operating income) and increases building property value. In addition, this financing product improves whole-building performance for purposes of: (a) New York City's existing energy consumption benchmarking law; (b), the energy efficiency mandate legislation currently pending in the New York City Council (Intro. 1253) and affecting all commercial buildings larger than 25,000 sq. ft.; and (c) Local Law 33, the soon-to-become effective energy consumption/efficiency letter-grade law.

For commercial tenants, access to on-lease commercial tenant energy efficiency financing provides an opportunity to reduce energy consumption, utility costs and environmental impacts as well as address the sustainability concerns of customers, employees and investors. All these benefits may be achieved without upfront investment and with the potential to generate positive cash flow as soon as efficiency improvements are placed in service.

1. Introduction

Energy efficiency is a significant part of New York State's clean energy economy. On-Lease Commercial Tenant Energy Efficiency Financing will help New York reach Governor Andrew M. Cuomo's goal of a 600 TBtu increase in statewide energy efficiency from 2012 levels and overall greenhouse gas emissions reduction by 40 percent by 2030.

Since Earth Day 2018, when Governor Cuomo announced the energy efficiency target of 600 TBtu, NYGB has been working with the Real Estate Board of New York ("**REBNY**"), Environmental Defense Fund ("**EDF**") as a principal advisor, and the Mayor's Office of Sustainability ("**MOS**") to evaluate opportunities to capitalize on these recently launched targets. NYGB seeks to play an essential role in advancing energy efficiency initiatives in New York's commercial building stock by providing financing products to the market that can unlock value to the energy system and enable greater market adoption of energy efficiency.

NYGB recognizes a large market opportunity in financing the buildout and retrofit of efficiency improvements in commercial buildings and has been engaged in ongoing conversations with NYC property owners and management companies on: (a) the existing needs for tenant energy efficiency financing; and (b) how a NYGB financing product would be ideally structured to meet Owner/Manager, tenant and NYGB accounting and legal requirements.

NYGB is pleased to offer this <u>Request for Information 6: On-Lease Commercial Tenant Energy Efficiency</u> <u>Financing</u> ("**RFI 6**") to solicit feedback from key stakeholders on its proposed financing product, identify prospective opportunities and collaborate with potential end-users on their efficiency upgrade financing needs.

2. RFI Objective & Approach

The objective of this Request for Information ("**RFI**") is to connect with and solicit feedback on NYGB's proposed commercial tenant energy efficiency financing product from Owners/Managers, commercial tenants, architects, brokers, engineers, energy consultants, contractors, developers, financiers, and other service providers or market participants.

Such market feedback will enable NYGB to consider refinements to the proposed financing product that most effectively advances the buildout and retrofit of efficiency improvements in commercial buildings and is optimized to meet key stakeholder considerations and requirements.

To ensure that all ideas are canvassed, and the views and recommendations of all interested parties considered in future financial product structuring and implementation, responses to this RFI 6 are actively encouraged. Respondents are invited to both provide written feedback and participate in conversations with NYGB in the form of one-on-one meetings and/or broader convenings.

2.1 Key Objectives

- (a) Provide a scalable and replicable product offering;
- (b) Create efficiency and standardization;
- (c) Finance up to 100% of hard and soft costs of tenant energy efficiency upgrades;
- (d) Structure tenant's monthly debt service payments on efficiency improvements to be less than anticipated monthly energy savings, resulting in positive cash flow for tenant as soon as improvements are in place;
- (e) Owner/Manager will continue to manage all aspects of the landlord-tenant relationship including those related to the proposed financing arrangements (i.e., billing, servicing, etc.);
- (f) Maximize energy efficiency impacts and greenhouse gas ("GHG") emissions reductions; and
- (g) Maximize benefits to Owners/Managers and tenants.

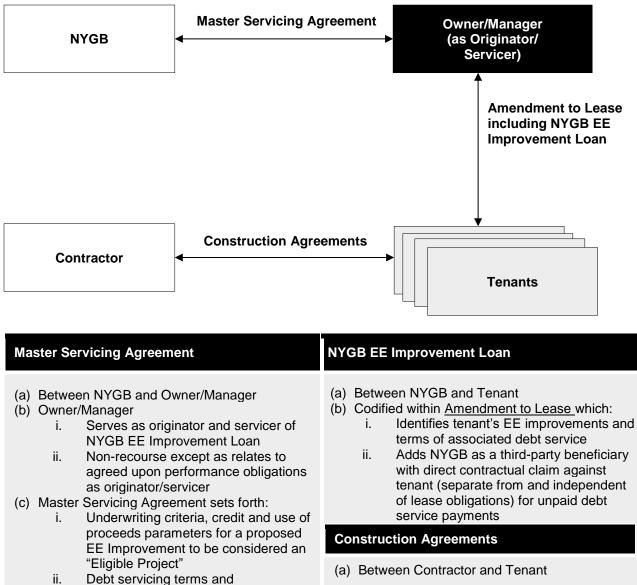
2.2 Proposed Approach to Commercial Tenant Financings

- (a) Master Servicing Agreement between NYGB and Owner/Manager to enable Owner/Manager to offer commercial tenants an innovative financing option to make energy efficiency upgrades to their tenant spaces;
- (b) Owner/Manager serves as originator and servicer of NYGB energy efficiency loan to commercial tenant ("**NYGB EE Improvement Loan**");
- (c) Tenant's monthly debt service associated with the NYGB EE Improvement Loan is added to tenant's monthly rent payment as "Additional Rent" and is collected by Owner/Manager for remittance to NYGB;
- (d) Amendment to tenant lease at time of the closing of the NYGB EE Improvement Loan that:
 - i. Identifies tenant's energy efficiency improvements and terms of associated debt service;
 - ii. Adds NYGB as a third-party beneficiary with direct contractual claim against tenant (separate from and independent of lease obligations) for unpaid debt service payments;
- (e) The transaction is non-recourse to Owner/Manager except as relates to agreed upon performance obligations as originator/servicer of NYGB EE Improvement Loan;
- (f) Owner/Manager eligible to receive loan origination and performance-based servicing fees from NYGB; and
- (g) Events of nonpayment or partial payment of rent and/or debt service to be negotiated between NYGB and Owner/Manager within the Master Servicing Agreement.¹

Further structural detail is included in the following <u>Sections 2.3 (Contractual Relationship)</u>, <u>Section 2.4</u> (Construction Phase Flow of Funds) and <u>Section 2.5 (Ongoing Flow of Funds)</u>.

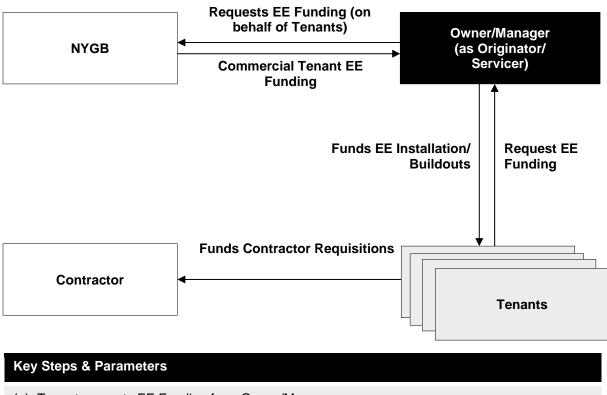
¹ *Pari passu* is preferred to align interests between NYGB and Owner/Manager; however, NYGB is prepared to consider a first loss position priced at a commensurate premium to *pari passu* treatment.

2.3 Contractual Relationships



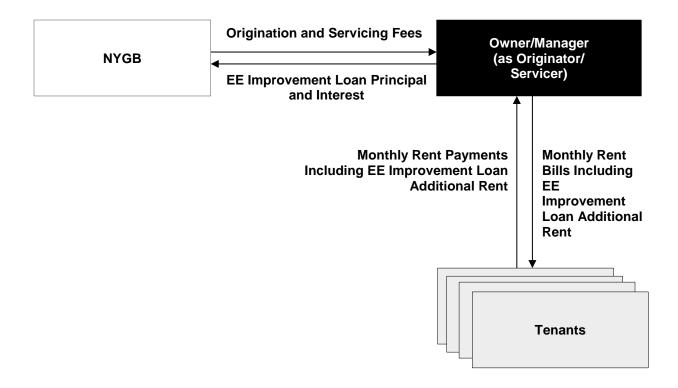
 Debt servicing terms and responsibilities (e.g., billing, remittance, events of notification and in arrears/non-payment protocols)

2.4 Construction Phase Flow of Funds



- (a) Tenant requests EE Funding from Owner/Manager
- (b) Owner/Manager determines whether the request meets definition of "Eligible Project" as agreed within Master Servicing Agreement
- (c) Owner/Manager and Tenant amend lease to codify proposed EE improvements, terms of associated debt service, and add NYGB as a third-party beneficiary
- (d) Owner/Manager requests EE Funding from NYGB for "Eligible Projects"
- (e) NYGB provides Commercial Tenant EE Funding to Owner/Manager which transfers such funding to Tenant
- (f) Tenant funds Contractor Requisitions for the EE improvements

2.5 Ongoing Flow of Funds



Key Steps & Parameters

- (a) Owner/Manager issues monthly rent bill to tenants which includes EE Improvement Loan debt service as Additional Rent
- (b) Tenant pays monthly rent bill to Owner/Manager
- (c) Owner/Manager retains monthly rent received from Tenant and remits to NYGB the EE Improvement Loan debt service Additional Rent
- (d) Owner/Manager is eligible for loan origination and performance-based servicing fees from NYGB as set forth in the Master Servicing Agreement
- (e) Events of non-payment or partial payment of monthly rent and/or Additional Rent to be negotiated between NYGB and Owner/Manager within the Master Servicing Agreement⁽¹⁾

Please see Appendix A for an indicative list of eligible improvements.

3. Content of Responses

To respond to this RFI, please complete the RFI 6 Questionnaire.

Responses are due to NYGB by **3.00 pm EST** on May 17, 2019 and should be submitted by email to <u>solicitations@greenbank.ny.gov</u>. Please include "**RFI 6**" in the subject line.

NYGB expects to engage in one-on-one conversations and broader convenings with industry participants to further the financing of this energy efficiency asset class in New York State. Respondents should contact info@greenbank.ny.gov with any questions about this RFI.

4. NYGB Background

NYGB, a division of NYSERDA, is 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 being self-sustaining, covering its own costs of operation and entering transactions on market terms. NYGB is a key component of New York's Clean Energy Fund ("**CEF**").² 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 https://www.nyserda.ny.gov/About/Clean-Energy-Fund and https://w

The key elements of NYGB's mission are collaborating with private sector participants, implementing structures that overcome market barriers and address 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 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.

NYGB can participate as a lender (e.g., senior, subordinated or mezzanine for term or revolving facilities) through many types of facilities.

NYGB intends to serve as both a prudent custodian of ratepayer and other investor funds and an agent for greater private investment in the clean energy and sustainable infrastructure sector in NYS. Pricing will reflect the underlying transaction credit quality, risk, position in the capital structure and the level of standardization and scale NYGB seeks to facilitate, with the goal of creating investments that private sector lenders will ultimately be willing to participate in at scale and at the agreed pricing levels. NYGB investment terms will be determined by credit risk and exposure assumed by NYGB and other investment participants.

More information about NYGB can be found at https://greenbank.ny.gov/.

5. General Conditions

Proprietary Information. Among NYGB's goals is the promotion of standardization of material contract terms and structures and the collection of project performance data across NYGB transactions. NYGB is keenly aware that commercial markets and their incumbents value non-disclosure extremely highly to protect confidential transaction terms and other competitive information, and NYGB remains highly sensitized to usual and customary confidentiality practices. As a division of NYSERDA, NYGB is subject to New York's Freedom of Information Law ("FOIL"), with exceptions that may be available to commercial enterprises, as detailed below.

² Created pursuant to the "Order Authorizing the Clean Energy Fund Framework", issued and effective January 21, 2016, Cases 14-M-0094 et al.

FOIL, 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 any party 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.

Limitation. This RFI 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 response or procure or contract for services or supplies. NYGB reserves the right to cancel in part or in its entirety this RFI when it is in NYGB's best interest.

Appendix A Indicative Eligible Improvements

Discipline	ltem	Description
Mechanical	Premium Efficiency Motors	Specify high efficiency equipment and motors.
	Minimize Duct Leakage	Specify duct leakage testing in major runs of ductwork to ensure duct construction is tight and seal ducts if leaking.
	Variable Frequency Drive (" VFD ") Installation	Install VFDs on fans and pumps serving tenant spaces.
	Steam Trap and Steam Control Valve Repair/Replacement	Test existing traps and steam radiator control valves and repair/replace any faulty equipment.
Building Automation &	Install Building Management System	Install Building Management System responsible for HVAC and lighting control, scheduling, and zoning.
Temperature Controls	Zone Occupancy Scheduling	Control equipment through occupancy schedules. Include schedules for specific spaces such as office rooms, bathrooms, and data centers for standard weekly hours, late night/weekend hours, and special event scheduling.
	Night Setback	Specify a night setback program to reset terminal unit operation after hours.
	Supply Air Temperature/Duct Static Pressure Reset	Specify a supply air temperature or duct static pressure reset program to minimize cooling or heating in unoccupied times.
	Variable Air Volume (" VAV ") Pressure and Flow Control	Specify zone temperature control to be achieved through a variable air volume system with fan static pressure control.
	Demand Controlled Ventilation (" DCV ")	Specify a DCV program to set outside air levels back when occupancy is light.
	Economizer Control	Specify equipment with economizer capabilities and implement economizer control.
	Fresh air rates	Specify cubic feet per minute ("CFM") rates.
	Load Shedding	Specify a load shed program to shut down non-essential equipment when electrical demand exceeds an approved level or in unoccupied times.
	Staggered Start of Equipment	Specify that equipment start-up sequences be staggered to avoid spikes in electrical demand.
Electrical	Electrical Metering	Install electrical submeters for major system components i.e., lighting, HVAC, plug loads, etc.
	Data Centers	Improve the energy efficiency of data centers through server virtualization or system design.

	Switched Plug Loads	Specify certain areas utilize switched plugs to automatically shut down plug loads in unoccupied times.
	Power Factor Correction	Specify equipment as required to correct power factor.
	Kitchen Appliances	Install Energy Star equipment and refrigerators without freezers.
	Computer Sleep Settings	Install software to automatically shut off computers not in use after set time.
	Vending Misers	Install occupancy based controls for vending equipment.
Lighting	Task Lighting Design with Delamping	Lighting levels should be tailored to the type of task being performed and the function of the illuminated space, and should not exceeed recommended illuminance standards.
	LEDs	Specify high efficiency LED fixtures.
	LED Exit Signs	Specify high efficiency LED exit signs.
	Lighting Controls	Specify occupancy, vacancy, and time clock lighting controls.
	Daylighting/Dimming Controls	Specify daylight sensors and dim lights when daylight is adequate to meet code-required light levels.
Plumbing	Low Flow Fixtures	Specify low flow fixtures for sinks and showers.
	High Efficiency Toilets and Urinals	Specify high efficiency toilets and urinals.
	Automatic Flushers and Faucets	Specify automatic flushers and faucets with options for more/less water.
Building Envelope	Increase Wall Insulation	Add additional insulation along exterior wall.
Livelope	Replace or Glaze Existing Windows	Retrofit/replace old windows or install glazing film.
	Reduce Air Infiltration	Seal any penetrations through exterior walls.
	Window Treatments	Specify operable interior window treatments.
Waste	Recycling	Implement a 3-stream recycling program consistent with New York City requirements.
Soft Costs	Architect, Engineering & Permitting Fees, etc.	Soft costs related to the build of such items detailed above.



Buildings of Excellence Competition Request for Proposal (RFP) 3928 Up to \$10,000,000 NYSERDA reserves the right to extend or add funding at its sole discretion.

Proposals Due: June 4, 2019 by 3:00 p.m. Eastern Time (ET)*

The Buildings of Excellence Competition (the Competition) aims to accelerate the design, development, construction, and operation of very low or zero carbon emitting buildings. NYSERDA seeks proposals for projects that reduce their energy consumption and per capita carbon emissions in a manner which can be replicated at scale. Selected projects are eligible to receive up to \$1,000,000 in direct funding as well as support for initiatives focused on broad marketing and public awareness. Technical and performance validation support services are also provided. Proposers must demonstrate (1) how the project will generate interest in and demand for the construction of advanced clean energy buildings, (2) their commitment to share information related to the project's design, costs, and performance, which is expected to support decision-making processes employed to achieve the desired outcomes, and (3) architectural and urban design quality and innovation. The Competition intends to identify and select proposals for projects that demonstrate the greatest potential for success and replication. This first issuance of the Competition focuses on multifamily projects and is currently approved for three rounds of funding.

Proposal Submission: Electronic submission is preferable. Proposers may submit Word, Excel, or pdf files (file formats include the following: csv, doc, docx, gif, jpeg, jpg, pdf, png, ppt, pptx, pps, ppsx, tif, txt, xls, xlsx, and zip). Individual files should be 100 MB 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 also accepts 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), go to NYSERDA's Funding and Opportunities web page and follow the <u>Application Instructions and Portal Training Guide</u> [PDF] link located in the <u>Current Opportunities</u> section.

Informational webinar: NYSERDA will host an informational webinar on Wednesday March 20, 2019 starting at 10 am. <u>Register to participate in advance</u> or join the webinar by signing in prior to 10 am. Additionally, <u>fill out this</u> form to be notified when each round of the Competition is launched, are about to close, and when the winners of each round are announced.

Contact Information: For technical questions, contact Patrick Fitzgerald (designated contact) at <u>PatrickNC@nyserda.ny.gov</u> or (518) 862-1090, ext. 3385; or Matt Brown (designated contact) at <u>MathewNC@nyserda.ny.gov</u> or (518) 862-1090, ext. 3336. For contractual questions concerning this solicitation, contact Tara Mae Tobler (designated contact) at <u>TaraMaeSolicitations@nyserda.ny.gov or (</u>518) 862-1090, ext. 3444.

No communication with NYSERDA staff intended to influence this procurement is permitted. Contacting anyone other than the designated personnel (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 disqualify the proposer from consideration.

* All proposals must be received by 3 p.m. (ET) 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 submission requirements have been met. Please note the following: for electronic submissions, there are required questions that need to be answered in addition to uploading attachments. Be sure to allot at least 60 minutes to enter and submit proposals. The electronic proposal system closes promptly, and files in process or attempted edits or submission after 3 p.m. (ET) on the date above will not be accepted.

If changes are made to this solicitation before the due date, notification specific to this solicitation will be posted on NYSERDA's <u>Current Opportunities</u> section.

I. Introduction

The purpose of the Competition is to stimulate the design, construction, and operation of very low or zero carbon emitting buildings. Burning fossil fuels such as natural gas, oil, and coal releases carbon dioxide into the atmosphere. Reductions in the amount of fossil fuels burned to support building operations can result in decreased carbon emissions. Buildings designed to use low-carbon fuels or electrification, renewable energy systems, higher density occupancy, or transit-oriented development can further result in reduced per capita carbon emissions.

NYSERDA seeks proposals for building projects with very low energy consumption as compared to a code compliant building as well as very low per capita carbon emissions. Proposers must demonstrate that the design and construction strategies are replicable and have the potential to achieve broad-based adoption by both developers and consumers. Proposers must also demonstrate how their projects provide superior financial benefits for owners and attractive, healthy, safe, and otherwise outstanding living environments for occupants. The Competition accepts proposals for projects that are in any one of the four following statuses: early design, late design, under construction, and post-completion performance optimization. NYSERDA intends to offer the Competition for at least two more competitive rounds, following this first issuance. The funding provided through the Competition may be used in conjunction with other funding offered by NYSERDA and utilities service providers. However, proposers must review the rules of the other programs to determine if those funds are accessible in combination with funds offered by this Competition.

II. Eligibility

NYSERDA, at its sole discretion, determines a proposal's eligibility for the Competition.

General Eligibility

For a submission to be eligible, the project identified in the proposal must incorporate multifamily occupancy as the primary use. The project must be, or intend to be, located in one of the six investor-owned New York State electricity distribution companies and pay into the System Benefits Charge (SBC) at that site. Project eligibility is fuel-neutral; however, projects must demonstrate low-carbon attributes. The proposer must be the owner or developer and have the authority to select and direct all other members of the project team. The proposer must demonstrate their project team has the capabilities to perform and successfully complete the proposer may elect to submit more than one proposal to the Competition.

A project can encompass one multifamily building or a portfolio of similar or related multifamily buildings of any height located on the same site, as defined in the following:

- a. New Construction: A new building, buildings, or an addition, where a licensed professional architect or engineer has prepared and certified the building plans.
- b. Gut Rehabilitation: Substantial renovation for 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, buildings, or space within.
 - Construction work of a nature requiring that the building, buildings, or space(s) within to be out of service.
 - Reconstruction of a vacant structure, or structures, or space within.
 - The addition to or expansion of a building, in combination with any of the above.

Projects may contain non-residential space; however, the non-residential space must consist of less than 50% of the occupiable square footage of the entire project.

All proposers must submit the Attachment A-Data Collection Form, including the modeled, predictive and actual energy use, fuel types, benchmarking data, and project costs, design or as-built drawings. Proposals must include wall sections of the building envelope and related design details, and detailed descriptions of the energy systems utilized, when available.

Proposers selected through this Competition must agree to:

- 1. Update the information initially provided in the Data Collection Form; and assist NYSERDA in promoting their project and to sharing information that will help the industry accelerate the design, construction, and operation of high-performance buildings. All of which may be shared publicly unless otherwise noted.
- 2. Provide NYSERDA with actual monthly energy use and generation by fuel type for all fuels and from all meters for sixty months after project completion, for the residential portion of the building as well as for the whole building. Directly metered tenant use may be aggregated by fuel type.
- 3. Populate the U.S. Environmental Protection Agency (EPA) Portfolio Manager or equivalent, for a minimum of sixty months post-occupancy and as directed by NYSERDA, submitting the benchmarking tool's output data to NYSERDA. Disclosure of the benchmarking data on websites, in publications, in presentations or other venues may occur, in whole or in part, in a form attributable to their project.
- 4. Provide or secure Data Release Authorization Forms from both building owners and a representative sample of tenants, as required for benchmarking of the whole building's energy use, generation, and related utility consumption, as well as to provide additional performance information obtained through monitoring and controls systems, utility metering or submetering systems, or Smart Buildings systems.
- 5. Provide updated information related to the project's as-built design, costs, and price, as per the Data Collection Form.
- 6. Allow their projects to be part of NYSERDA's promotional efforts and to cooperate with NYSERDA in the creation and implementation of those efforts, including but not limited to exhibitions, articles, books, electronic media including a Competition website, and lectures promoting the Buildings of Excellence Competition and its outcomes.

Project Construction Status [The proposer must choose one of the four statuses listed ("Project Status")]

- 1. Early Design: Projects in the schematic design or design development phase are considered in early design status. The proposer may be eligible for an award of \$20 per gross square foot up to \$1,000,000. Proposers must commit to designing and constructing a project that will achieve a minimum modeled source (primary) energy savings¹ of 20% when compared with a project design that complies with the relevant Energy Conservation Construction Code of New York State (ECCC of NYS). Proposers must identify strategies to achieve low per capita carbon impacts including, but not limited to, cutting edge architectural and design approaches, the use of renewable energy solutions, advanced clean energy technologies integration, or other essential characteristics to ensure the Competition's goals are met. Proposers must demonstrate the replicability of the project by detailing its financial viability as well as reveal how the resulting building will provide an enhanced living environment.
- 2. Late Design: If the project's design development phase is complete and the construction documents are in development, but the building permit has not yet been issued, the project is considered in late design status. The proposer may be eligible for an award of \$15 per gross square foot up to \$750,000. Proposers must commit to completing the design and constructing a project that achieves a minimum modeled source (primary) energy savings¹ of 20% when compared with a project design that complies with the relevant ECCC of NYS. Proposers must identify strategies to achieve low per occupant carbon impacts to meet the Competition's goals including, but not limited to, cutting edge architectural and design approaches, the use of renewable energy solutions, advanced clean energy technologies integration, or other essential characteristics. Proposers must demonstrate the replicability of the project by detailing its financial viability and how the resulting building will provide an enhanced living environment.
- 3. Under Construction: If the building permit has been issued but the first Certificate of Occupancy, whether temporary or permanent, has not yet been issued, the project is considered in the category of under construction. The proposer may be eligible for an award of up to \$500,000 or \$10 per gross square foot, whichever amount is lower. The proposed project, including the additional enhancements, must be designed to achieve a minimum modeled source (primary) energy savings¹ of 20% when compared with a project design which complies with the relevant ECCC of NYS. The proposer must identify, describe, and commit to completing additional enhancements capable of reducing the project's modeled source energy¹ use by a minimum of 5% when compared to the project design as detailed in the construction documents submitted to the Department of Buildings or other authorities that have jurisdiction to secure the project's building permit. Proposers must demonstrate the replicability of the project by detailing its financial viability and how the resulting building will provide an enhanced living environment.
- 4. Post-Completion Performance Optimization: If the first Certificate of Occupancy has been issued, whether temporary or permanent, no more than 36 months prior to the Competition's publication date, the project is considered in the post-completion performance optimization category. The proposer may be eligible for an award of up to \$250,000 or \$5 per gross square foot, whichever amount is lower; however, the award may not exceed the costs of completing the additionally proposed enhancements. The proposed project, including its additional proposed enhancements, must have been originally designed to achieve a minimum modeled source (primary) energy savings¹ of 20% when compared with a project design that complies with the relevant ECCC of NYS. The proposer must identify, describe, and commit to completing additional enhancements capable of reducing the building(s)' modeled source energy¹ use by an additional minimum of 5% when compared with the completed building(s)' as-built condition, based on verified energy consumption if the data is available. Proposers must demonstrate the replicability of the project by detailing its financial viability and how the building upgrades and optimizations will provide an enhanced living environment. The proposer must justify the requested funding based on eligible costs associated with the proposed improvement(s), including but not limited to the following:
 - Targeted commissioning, upgrades, or repairs to key systems or equipment which are predicted to reduce energy consumption or achieve lower per capita carbon impacts.
 - Smart/intelligent building systems or equipment controls and monitoring that actively manage energy consumption and improve occupant comfort, health, or productivity.

Modeled Energy Performance

The proposer must rely on one of the following Standards to establish that the minimum modeled source (primary) energy savings for the project's residential associated space¹ will be met:

- Appendix G of ASHRAE Standard 90.1. Projects permitted under ECCC of NYS (2014) should follow Appendix G of ASHRAE 90.1-2010 to determine the modeled energy performance1; and projects that were or will be permitted under ECCC of NYS (2016) should follow Appendix G of ASHRAE 90.1-2013 with Addenda, in accordance with ECCC of NYS (2016). Modeled energy performance must first be calculated without the inclusion of any renewable or distributed energy generation to confirm the energy performance threshold has been met, and then again calculated after renewable or distributed energy generation has been included in the energy model and submitted by the proposer for comparison with other proposals. Comprehensive energy performance will be compared against other proposers.
- The Passive House Standard as published by the Passive House Institute (PHI), or PHIUS+ for Multifamily Buildings as published by the Passive House Institute U.S. (PHIUS). Projects intending to meet PHIUS+ certification requirements must identify the building(s)' modeled source (primary) energy use¹ in terms of kWh/person/year; and projects intending to meet PHI certification requirements must identify the building(s)' modeled source (primary) energy use in terms of kBtu/total-floor-area/year. Proposers committing to achieving certification to either passive house standard are deemed as meeting the minimum modeled source energy savings¹ requirements. Modeled energy performance must be calculated both with and without use of renewable energy generation and submitted by the proposer for comparison with other proposals. Comprehensive energy performance will be compared against other proposers based on the <u>Comparison Evaluation of ASHRAE 90.1 Appendix G vs. Passive House published by NYSERDA</u>.
- The average Energy Rating Index (ERI) for all residential dwelling units, calculated in accordance with the 2014 edition of Standard ANSI / RESNET / ICC 301, entitled "Standard for the Calculation and Labeling of the Energy-Efficiency of Low-Rise Residential Buildings Using an Energy Rating Index" or as updated in accordance with the ANSI/RESNET protocols. To meet the minimum energy performance¹ threshold of 20% source energy savings, the average ERI must, at minimum, meet the U.S. Environmental Protection Agency (EPA) ENERGY STAR® Certified Homes Program v3.1 requirement and achieve an ERI of less than 60 without inclusion of renewable energy generation. The proposers should also submit the average ERI calculated with the inclusion of on-site renewable energy generation to allow for comparison with other proposals.

¹ For projects that include mixed use space, only the energy use associated with the project's residential square footage should be included when determining the modeled energy performance of the residential portion of the project. The modeled energy performance shall incorporate the square footage used for residential occupancy, inclusive of all residential-associated space such as hallways, stairwells, elevators, trash, utility and exercise rooms, entrance lobbies, as well as shared laundry facilities exclusively available to the building's residential occupants.

III. Proposal Requirements and Format

The proposer must identify the status of their project as of the date of submission in accordance with one of the four Project Statuses as detailed Section II. The proposer's name, the RFP number, and page number are recorded on every page of the proposal, including attachments. The proposer must submit the following:

1. Executive Summary

The proposer must submit brief description (~400 words) summarizing how the proposer's approach will stimulate interest in and a demand for the construction of advanced clean energy buildings, identifying the intended strategies to reduce energy use and carbon emissions—both on a per gross square foot and per capita basis. Proposers must demonstrate the replicability of the project by addressing the project's financial viability and how the resulting building will provide an enhanced living environment. In addition, proposals should include an abbreviated description (~100 words) for use in the presentation and promotion of selected projects.

2. Project Description

Proposers should provide a clear and concise description of the project, addressing each category detailed in the scoring tables and associated with the Project Construction Status. The quality and rigor of the proposal impact its evaluation and scoring and reflect the likelihood of success in reaching the proposer's stated goals. The description should address:

- a. Energy efficiency and building performance.
- b. Low per capita carbon emissions reduction strategies including densification, electrification of HVAC, or other non-fossil fuel-based heating and cooling, renewable energy generation; advanced clean energy technologies.
- c. Design features to address occupant comfort and health and safety; resiliency, durability, and sustainability.
- d. Architectural and urban design quality.
- e. How energy efficiency solutions and other characteristics of the project are expected to impact total costs, strategies to reduce total costs, the trade-offs and avoidance of cost increases, and how the overall costs of the project compare with similar projects (e.g., low- to moderate-income, mixed-income, market-rate, or luxury homes) in the same basic locale.
- f. How costs associated with improvements can be recouped in terms of higher rents or sales prices, the drivers for those increased values, and whether energy savings and benefits will accrue to the project's owner, each apartment's owner, or tenants.
- g. The project's viability and replicability, as demonstrated by expected ease or efficiency of construction, economic viability for the market served, unique financing solutions, or other factors that would make the project a model for future projects.
- h. Why and how the high-performance features of the building provide both enhanced financial benefits to the owner/developer as well as attributes that lead to an improved or optimal living environment (e.g., thermal comfort, indoor air and environmental qualities, improved acoustics).
- i. The business model intended to achieve their goals and their approach for following an integrated project delivery process.
- j. To establish the project's viability, the known or expected sources of capital should be identified and described, including whether those sources have been secured or are anticipated. If access to the necessary capital has not yet been secured, the proposer must identify the underwriting being sought and explain why the project's proposed underwriting approach is likely to be successful. Any financial support that has been secured or is

expected to be secured from regulatory or other funding agencies for low- to moderate-income (LMI) occupancies must be identified. Proposers must identify the public to private funding leverage ratio.

- k. How lower operating costs related to the improvements to the building(s)' energy and ongoing operational performance will be leveraged as part of the underwriting; or if any unique utility metering arrangements are expected to contribute to the underwriting approach; and how the proposed approach can ensure the project's ultimate success and replicability.
- I. How the project, as constructed, will meet the intent of the design, including the intent to secure third-party progress inspections and performance testing during the construction process.
- m. Whether the commissioning of energy using systems, including the envelope, will be executed and relied on to create as-built drawings and energy model(s) to reflect changes in design, including those made during construction.

3. Collaboration with NYSERDA, Transparency, and Promotion of Projects

The proposer should describe how they intend to market and promote the project, including the sharing of information that could be useful to the industry. Additional and relevant information may include but should not be limited to information about the project design, the construction and operational processes, strategies to reduce costs, project costs that are either absolute or comparative, financing strategies, additional construction details, or lessons learned. In accordance with the Proprietary provisions located in Section VIII General Provisions, the proposer should indicate which aspects of this additional information can be publicly shared by NYSERDA in its promotional activities and should stipulate if any portion or portions of the information should be reserved for NYSERDA's internal use and/or for anonymized analysis, and not publicly shared as project-specific information. The extent to which the proposer commits to sharing additional data, as well as the quality of the proposer's marketing plan intended to showcase the project's low-energy and low-carbon strategies, are considered during evaluation of the proposal.

Proposers are encouraged to identify any additional information not requested in the Attachment A-Data Collection Form that they intend to share with NYSERDA, including but not limited to the strategies that ultimately proved most effective, comparative costs or savings, how marketability was impacted, and the decision-making approach during the design process to ensure the intended and successful outcome. NYSERDA may elect to disclose unprotected information, in whole or in part, on websites, in publications, in presentations, or other venues. In addition, applicants should outline their proposed methods or mechanisms for sharing this information through their marketing plan.

Proposers should submit a marketing plan that will be implemented by the proposer, if selected, and explain how the plan will generate public interest in and demand for advanced clean energy buildings beyond and in addition to NYSERDA's promotional activities. Selected proposers are expected to cooperate with NYSERDA in the development of other promotional materials, such as but not limited to website, magazine articles, books, blogs, or videos. NYSERDA credits the project name, developer, and design team lead in all promotional material. Awardees are expected to participate in presentations. NYSERDA reserves the right to brand and market the winning projects as NYS Buildings of Excellence projects or a similar reference.

4. Supplementary Documents

- Attachment A-Data Collection Form, with all data required of the proposer populated in submitted form.
- Energy modeling files and report(s) summarizing energy performance-related design strategies should be submitted for all projects, if available. Additionally:
 - Projects proposing to the Project Status of Under Construction should submit the energy modeling file used to demonstrate the initial source energy savings, as well as the energy model developed to reflect the proposed energy performance enhancements.

- Projects proposing to the Project Status of Post-completion Performance Optimization should submit the energy models to reflect the initial building design and as-built condition, as well as the energy model to reflect the proposed energy performance enhancements.
- Project rendering(s), at least one and up to three.
- Architectural plans, including at least one section and elevation, with the completion of each architectural plan or detail appropriate in relation to the Project Status.
- Design details that address energy efficient design, based on Project Status.
- Site plan (encouraged).
- Diagram of building showing or explaining low-energy/low-carbon features.
- Diagram(s) of quality of building characteristics and design features are encouraged.
- Scorecard(s) or checklist(s) for proposed, submitted, or achieved certifications.
- Photographs (at least two and up to 10) during construction, for projects currently being constructed and for proposers in the post-completion Project Status.
- Photographs (at least one and up to 10) of any completed project proposing to the postcompletion Project Status.

Notes:

- 1) Submitted materials may be used for the presentation of winning projects in various forums.
- Projects already in construction, or with a post-completion Project Status, should represent both the initial high-performance design and the proposed amendments to that design in their submissions.
- 3) Photographs and other images must be high-resolution image files at 24 inches wide and 300 dpi.
- 4) Updates to the initially submitted materials may be requested for projects selected by the Competition.

IV. Proposal Evaluation

Prior to review by a scoring committee, proposals will be reviewed for completeness and to ensure they meet General Eligibility requirements as detailed in Section II of this RFP. Proposals that do not meet the listed requirements will not be reviewed by the scoring committee.

The General Eligibility requirements to be considered prior to review by a scoring committee include the following:

- The project is a current or future distribution customer of a participating electric utility company that pays into the System Benefits Charge.
- The project identified in the proposal reflects multifamily occupancy as the primary use. The project may contain non-residential space; however, the non-residential space must consist of less than 50% of the occupiable square footage of the entire project.
- The project must demonstrate it aligns with a Project Construction Status listed in Section II of this RFP.
- The project meets the minimum source energy savings¹ requirements as detailed in Section II of this RFP.
- Proposals to either the Under Construction or the Post-Completion Performance Optimization Project Status must meet the secondary minimum source energy savings¹ requirement for the additionally proposed enhancements as detailed in Section II of this RFP.

Following the initial review, proposals to the Competition will be evaluated based on their overall response and specifically based on the Categories and Category Descriptions as detailed in the Scoring Criteria table. Evaluation and scoring of each proposal will ultimately be determined in comparison with and relative to the other proposals submitted to the Competition.

Scoring Criteria

Category	Category Description	Points Available
Building(s) Energy Performance	Predicted building energy performance ¹ , with points only awarded for performance improvement above the minimum threshold.	25
Low Carbon and Renewable Energy	Strategies to achieve low-carbon emissions per occupant, including but not limited to densification, electrification, low- carbon fuels, on-site electric vehicle charging, transit-oriented development, and renewable energy systems, either on site or through a durable contractual relationship between the project's owner(s) and the generation systems' owner(s).	20
Advanced Clean Energy Technologies	Proposed use of advanced clean energy technologies, including but not limited to high-performance building envelopes, advanced space conditioning and domestic hot water systems, energy recovery ventilation systems, smart building technologies or advanced controls systems, tenant metering or submetering, demand response, energy storage systems, or other innovative solutions.	15
Replicability, Transparency, and Marketing	Replicability is considered based on ease of construction, construction cost savings, lower operation and maintenance costs, economic viability for the market served, including financing structure, incorporating savings into the cost structure, integrated project delivery, or other factors that would make the project an economically viable model for future projects. Replicability must also demonstrate how the resulting building will provide an enhanced living environment. Transparency is also a consideration as demonstrated by a plan to share with NYSERDA and/or to share with the public any information beyond the minimum required by NYSERDA, including but not limited to design and construction details, granular data on energy use, financial information, and lessons learned. Marketing considerations are demonstrated by a plan to validate performance above the prescribed threshold and an advertising plan to showcase and promote the project's low-energy and low- carbon emissions strategies to the market served and/or to a broader audience.	20
Quality of Building Characteristics and Design	Resiliency, sustainability, durability; occupant comfort, health, and safety; architectural and urban design quality.	20
Bonus Category	Available to projects located in a Clean Energy Community, or in a NYS DEC potential environmental justice area, or in a jurisdiction that has committed to adopting NYStretch Energy Code 2019; or for projects committed to having a majority of low- to moderate-income (LMI) households based on household income of no more than 80% of the State or Area Median Income (whichever is greater).	5 points for any category, up to 15 point maximum.

Program Policy Factors

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

- Diversity of building typology, geography, proposed solutions, or other critical elements.
- Geographic, demographic, economic, or population distribution or diversity.
- Contractual commitment to low- to moderate-income (LMI) occupancy, post-completion.

V. Selected Projects, Subsequent Submissions, and Required Updates

Selected proposers are required to execute an agreement (see Attachment B – Sample Agreement) with NYSERDA and deliver completed projects that meet the requirements detailed in this solicitation. The project deliverables and associated payments will be as detailed in this solicitation and the agreement executed between the selected proposer and NYSERDA.

At any point during the design or construction process, NYSERDA must be notified and provided associated details if significant deviation from the original proposal is expected, including whether the project is expected to fall short of the building performance and related goals as detailed in the original proposal, including the proposer's commitment to achieving the source energy savings in their original proposal to NYSERDA. Projects selected through this Competition must ensure that the cumulative changes during design or construction won't increase the predicted source energy use or carbon emissions in comparison to the project as originally submitted. Continuation of any project that deviates from the original proposal will be subject to NYSERDA's discretion. NYSERDA reserves the right to terminate any project should it fall below the originally committed source energy savings, regardless of whether the revised energy savings are above the 20% source energy savings minimum.

Additionally, the following submissions and updates are required:

Immediately following selection and award:

- One-page summary of major changes from initial proposal
- Schedule of construction

At receipt of building permit or at completion of design of modifications for projects already in construction:

- Updates to original proposal descriptions and related documents, including Attachment A– Data Collection Form
- One-page summary of major changes from initial proposal
- One- to two-page discussion of any reduction in projected performance in comparison to the initial proposal
- Copy of valid building permit, including all aspects of design
- Updated schedule of construction

At 50% completion of construction:

- Updates to original proposal descriptions and related documents, including Attachment A– Data Collection Form
- One-page summary of major changes from initial proposal
- One- to two-page discussion of any reduction in projected performance in comparison to the initial proposal
- Updated schedule of construction

Following completion of construction:

- Copy of Certificate of Occupancy (C of O) or Temporary C of O for newly constructed projects, or documentation that confirms completion of construction for projects proposing to the postcompletion Project Status
- Any updates to original proposal descriptions and related documents, including Attachment A– Data Collection Form, to reflect any changes not yet documented to NYSERDA
- As-built drawings and as-built energy models
- Construction photos, suitable for presentation (minimum of 5)
- Photographs of final project, suitable for presentation (minimum of 5)
- One- to two-page discussion of any reduction in projected performance from initial submission,
- One-page summary of lessons learned

After year one and year two of building occupancy:

- Document the energy data and related information:
 - Energy use following one year and again following two years of building occupancy, reflecting all energy used or produced on site, with energy use provided upon request for up to sixty months following building occupancy

- o Whole building benchmarking through use of the EPA Portfolio Manager
- Additional data or updates to the original proposal to the Competition, including Attachment A–Data Collection Form, to reflect the as-built condition of the project
- Comparison between actual and predicted energy data
- One-page narrative discussing why project did or did not achieve predicted performance
- One-page summary of lessons learned

VI. Schedule of Payments

	Milestone	% of Total Award
1	At Approval of Building Permit for projects proposing as Project Status 1	15% to developer
	or 2, At Completion of Amended Design for projects proposing as Project Status 3 or 4 as detailed in Section II – Eligibility Based on Project Status	10% to design team lead
2	 At 50% Completion of Construction overall construction for Project Status 1 and 2 projects construction of amended portion of the project for Project Status 3 and 4 projects 	25% to developer
3	 At Completion of Construction overall construction for Project Status 1 and 2 projects 	35% to developer
	 construction of amended portion of the project for Project Status 3 and 4 projects 	5% to design team lead
4	One and Two Years after Occupancy	10% to developer after second submission, with two years of occupancy and energy use data

NYSERDA anticipates executing two separate agreements associated with each selected proposal, one each with the developer and the design team lead. NYSERDA reserves the right to negotiate the amount or schedule of payments for a selected project. At its sole discretion, NYSERDA may reduce or withhold payments for a project that falls short of the proposed level of performance, or that has not met this solicitation's minimum submission requirements.

VII. NYSERDA Responsibilities

NYSERDA provides funding and support to projects in accordance with the Competition, as detailed in this solicitation.

VIII. GENERAL CONDITIONS

Proprietary Information: Careful consideration should be given before confidential information is submitted to NYSERDA as part of the proposal. Review should include whether the information is critical for evaluation and whether general, non-confidential information, would suffice 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 of 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 excluding 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 <u>21 NYCRR Part 501</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 State subcontractors and suppliers is available from the following:

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 the following:

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 on the <u>Office of General Services' website</u>. Proposers are required to answer questions during proposal submission, make required certification under the State Finance Law, and 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 with a monetary value in excess of \$100,000, prior to entering an agreement with NYSERDA, to certify to the Department of Taxation and Finance (DTF) whether the contractor, its affiliates, its subcontractors and the affiliates of its subcontractors have registered with the DTF to collect New York State and local sales and compensating use taxes. The DTF has created <u>ST-220-TD</u> to allow a prospective contractor to readily make such certification. Prior to contracting with NYSERDA, the prospective contractor must also certify to NYSERDA that such certification with the DTF has been filed. The DTF has created a second form, <u>ST-220-CA</u>, that must be completed by a prospective contractor and filed with NYSERDA, prior to contracting. <u>Guidance for contractors</u> can found on the <u>DTF's website</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 following 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 uses 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 Attachment B–Sample Agreement to those specifically identified in the checklist questions. Proposers should keep in mind that acceptance of all standard terms and conditions generally results in a more expedited contracting process. NYSERDA expects to notify proposers in approximately 12 weeks from the proposal due date whether the 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 post anything on the web, or if the awardee produces a final report that NYSERDA posts 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 the award.

Disclosure Requirement: The proposer will 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 will 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.

IX. Attachments:

Attachment A–Data Collection Form Attachment B–Sample Agreement

NYSERDA

Public Authority Law Report

October 1, 2018 to March 31, 2019

Section Break

REDC Region	County	Electric Utility	Total Funded Amount
Capital Region	Albany	Central Hudson Gas and Electric	1,440,863
		National Grid	18,128,126
	Columbia	Central Hudson Gas and Electric	80,000
		National Grid	49,587
		NYS Electric and Gas	41,300
	Greene	Central Hudson Gas and Electric	1,944,416
		NYS Electric and Gas	40,600
	Rensselaer	National Grid	1,063,551
		NYS Electric and Gas	8,359
	Saratoga	National Grid	5,995,424
		NYS Electric and Gas	92,694
	Schenectady	National Grid	6,371,731
	Warren	National Grid	819,541
	Washington	National Grid	162,342
	Total		36,238,533
Central New York	Cayuga	NYS Electric and Gas	2,541,562
		Rochester Gas and Electric	43,198
	Cortland	National Grid	574,271
	Madison	National Grid	2,828,825
		NYS Electric and Gas	5,115
	Onondaga	National Grid	1,597,672
		NYS Electric and Gas	2,025
	Oswego	National Grid	1,090,082
	Total		8,682,750
Finger Lakes	Genesee	National Grid	242,741,861
0	Livingston	National Grid	174,457,948
	0	NYS Electric and Gas	6,227
		Rochester Gas and Electric	99,364,518
	Monroe	National Grid	1,634,385
		Rochester Gas and Electric	7,736,358
	Ontario	National Grid	4,525
		NYS Electric and Gas	3,438,855
		Rochester Gas and Electric	1,782,068
	Orleans	National Grid	201,015,240
	Seneca	NYS Electric and Gas	63,758,997
	Wayne	NYS Electric and Gas	45,592
	Wayno	Rochester Gas and Electric	1,498,174
	Wyoming	National Grid	11,481
		NYS Electric and Gas	9,626
		Rochester Gas and Electric	2,500
	Yates	NYS Electric and Gas	23,630
	Total		797,531,985
Long Island	Nassau	Long Island Power Authority	1,169,791
Long Island	1103300	Long Island Fower Authonity	1,109,791

REDC Region	County	Electric Utility	Total Funded Amount
Long Island	Suffolk	Long Island Power Authority	5,176,028
	Total		6,427,622
Mid-Hudson	Dutchess	Central Hudson Gas and Electric	3,479,589
		NYS Electric and Gas	5,313
	Orange	Central Hudson Gas and Electric	798,493
		NYS Electric and Gas	1,508,513
		Orange and Rockland Utilities	10,890,666
	Putnam	NYS Electric and Gas	412,143
	Rockland	Orange and Rockland Utilities	188,817
	Sullivan	Central Hudson Gas and Electric	31,000
		NYS Electric and Gas	3,943,802
		Orange and Rockland Utilities	5,837
	Ulster	Central Hudson Gas and Electric	4,381,623
		NYS Electric and Gas	145,942
	Westchester Consolidated Edison		3,704,722
		NYS Electric and Gas	4,326,247
	Total		33,822,707
Mohawk Valley	Fulton	National Grid	5,094,477
	Herkimer	Municipal Utilities	100,000
		National Grid	809,286
		NYS Electric and Gas	55,000
	Montgomery	National Grid	99,355,185
	Oneida Municipal Utilities		66,129
		National Grid	1,000,574
		NYS Electric and Gas	103,556
		SHERRILL	50,000
	Otsego	NYS Electric and Gas	1,442,505
	Schoharie	National Grid	35,905
		NYS Electric and Gas	855,563
	Total		108,968,181
New York City	Bronx	Consolidated Edison	6,870,856
	Kings	Consolidated Edison	4,277,253
	New York		14,452
		Consolidated Edison	9,446,985
	Queens	Consolidated Edison	2,095,056
		Long Island Power Authority	458
	Richmond	Consolidated Edison	454,692
	Total		23,159,752
North Country	Clinton	NYS Electric and Gas	2,167,479
2	Essex	National Grid	2,886,691
		NYS Electric and Gas	390,335
	Franklin	National Grid	2,004,689
		NYS Electric and Gas	1,875,000
	Hamilton	National Grid	53,400

REDC Region	County	Electric Utility	Total Funded Amount
North Country	Jefferson	National Grid	8,192,133
	Lewis	National Grid	127,609,287
	St. Lawrence	Municipal Utilities	21,000
		National Grid	737,908
	Total		145,937,924
Southern Tier	Broome	NYS Electric and Gas	1,241,471
	Chemung	NYS Electric and Gas	2,591,939
	Chenango	NYS Electric and Gas	57,556
	Delaware	NYS Electric and Gas	2,537,130
	Schuyler	NYS Electric and Gas	43,595,343
	Steuben	NYS Electric and Gas	583,206
	Tioga	NYS Electric and Gas	5,227,197
	Tompkins	NYS Electric and Gas	380,437
	Total		56,214,278
Statewide	STATEWIDE	Statewide	1,263,326,547
	Total		1,263,326,547
Western New York	Allegany	National Grid	5,978
		NYS Electric and Gas	426,700
		Rochester Gas and Electric	23,387
	Cattaraugus	National Grid	14,441,079
	Chautauqua	National Grid	241,425
	Erie	Municipal Utilities	5,985
		National Grid	5,201,916
		NYS Electric and Gas	630,236
	Niagara	National Grid	6,548,784
	Total		27,525,489
Grand Total			2,574,085,768

NYSERDA

Public Authority Law Report

October 1, 2018 to March 31, 2019

Section Break

REDC Region	Contractor	County	Electric Utility	Contract Description	Total Funded Amount
Capital	Adam C. Boese	Rensselaer	NYS Electric and Gas	Agriculture Energy Eff Pgm, RFP3628FlexTechC.	2,500
Region		Schenectady	National Grid	Technical Services, RFP3628FlexTechConsultU	2,500
		Warren	National Grid	Technical Services, RFP3628FlexTechConsultU	7,500
		Washington	National Grid	Technical Services, RFP3628FlexTechConsultU	5,080
	Albany, City of,	Albany	National Grid	Clean Energy Communities, City of Albany	180,000
	American Energy Care, Inc.	Greene	Central Hudson Gas a.	. <200KW PV, NY-Sun	67
		Rensselaer	National Grid	<200KW PV, NY-Sun	67
		Saratoga	National Grid	<200KW PV, NY Sun	5,994
		Schenectady	National Grid	<200KW PV, NY-Sun	6,844
	AmTrust North America Inc.	Albany	National Grid	NYSERDA ADMINISTRATION, Human Resourc	42,000
	Apex Capital LLC	Warren	National Grid	Industrial Process Effic, Industrial Process Efficie.	300,000
	Apex Solar Power LLC	Warren	National Grid	<200KW PV, NY Sun	13,633
				Talent Pipeline:CE and OJT, OJT HIRE	11,520
		Washington	National Grid	<200KW PV, NY-Sun	9,945
	Arcadis of New York, Inc.	Albany	National Grid	Commercial New Construc, Staff Augmentation S.	
				Commercial Real Estate Ten, SA.046 TWO #4	
				EXISTING FACILITIES, Staff Augmentation Servi.	
				Low Rise New Construction, Staff Augmentation	
				Multifam New Construction, Staff Augmentation	23,660
				New Construction- Commercial, Staff Augmentation.	,
				New Construction- Housing, Staff Augmentation	
				Real Time Enrgy Management, Staff Augmentati	318,405
				REV Campus Challenge, SA.046_TWO #4 - EPE	84,184
				Technical Services, SA.046_TWO #4 - EPE	84,184
		Schenectady	National Grid	Technical Services, RFP3628FlexTechConsultU	5,978
	Arcadis U.S., Inc.	Albany	National Grid	EXISTING FACILITIES, Tech Review & Program.	
	Argus Media Inc.	Albany	National Grid	ENERGY ANALYSIS, Data & Markets	8,770
	Association of Energy Engineers	Albany	National Grid	EVALUATION, Performance Management	9,792
	gco.io			NY-SUN, Standards & Quality Assurance	2,060
				NYSERDA ADMINISTRATION, Standards & Qua	
				On-Site Energy Manager, Industrial & Agriculture	2,577
				Workforce Industry Partnership, Workforce Dev &	. 2,060
	Atlantic Data Security, LLC	Albany	National Grid	NYSERDA ADMINISTRATION, Checkpoint Fire	203,916
				NYSERDA ADMINISTRATION, Checkpoint Man	55,164
	Autonomous Energies LLC	Columbia	National Grid	<200KW PV, NY-Sun	5,766
	Aztech Geothermal, LLC	Saratoga	National Grid	Talent Pipeline:CE and OJT, OJT Hire	5,440
				Talent Pipeline:CE and OJT, OJT PON 3982	9,600
	Barbera Homes and Develop	Saratoga	National Grid	Low Rise New Construction, New Construction	19,000
	Bearpen Mountain Sports	Greene	NYS Electric and Gas	Industrial Process Effic, Industrial Process Efficie.	28,000
	Bishop House Consulting, Inc.	Albany	National Grid	NYSERDA ADMINISTRATION, Human Resourc	32,000
	Bizodo Inc	Albany	National Grid	NYSERDA ADMINISTRATION, Seamless Docs	29,950
	Bond, Schoeneck & King, PLL	Albany	National Grid	OTHER PROGRAM AREA, RFP 3300 Outside C.	. 20,000
	Borrego Solar Systems, Inc.	Saratoga	National Grid	>200KW PV, NY Sun	3,931,740
	Cairo NY 1, LLC	Greene	Central Hudson Gas a.	>200KW PV, NY-Sun C&I	701,663
	Callanan Industries	Saratoga	National Grid	Industrial Process Effic, Industrial Process Efficie.	82,874
	Carahsoft Technology Corpor	Albany	National Grid	Salesforces	1,326,217
	CARES of NY, Inc	Albany	National Grid	Low Rise New Construction, 2019 LRNCP	25,500
	CHA Consulting Inc.	Albany	National Grid	EXISTING FACILITIES, Technical Review and Pr.	
	-	-		Flexible Tech Assistance, Staff Augmentation Se.	
				FLEXIBLE TECHNICAL ASSISTANCE, Staff Aug.	
				Industrial Process Effic, Staff Augmentation Servi.	
				INDUSTRIAL PROCESS EFFICIENCY, Staff Au	451,959

REDC Region		County	Electric Utility	Contract Description	Total Funded Amoun
Capital Region	CHA Consulting Inc.	Albany	National Grid	Strategic Energy Manager, Staff Augmentation S	75,000
0		Schenectady	National Grid	Flexible Tech Assistance, RFP3628FlexTechCon.	. 24,750
		Warren	National Grid	Industrial Process Effic, Technical Review and Pr.	34,057
	City of Glens Falls	Warren	National Grid	Clean Energy Communities, CEC400008 - City of.	
	City of Troy	Rensselaer	National Grid	CEC410003 - City of Troy	30,000
				Clean Energy Communities, CEC410003 - City of.	
	City of Watervliet	Albany	National Grid	Clean Energy Communities, CEC400002 - City of.	. 80,000
	CLEAResult Consulting, Inc.	Albany	National Grid	>200KW PV, Centralized Services & Support	108,249
				Air Source Heat Pumps, Centralized Services &	138,398
				ASSISTED HOME PERFORMANCE WITH ENE	2,236
				Centralized Services & Support	380,185
				Commercial New Construc, Centralized Services .	. 39,576
				EMPOWER NY, Centralized Services & Support	109,583
				EXISTING FACILITIES, Centralized Services & S.	. 11,544
				Geothermal Incentive Program, Centralized Servi.	125,971
				Home Perf w Energy Star, Centralized Services	1,063,176
				HOME PERFORMANCE WITH ENERGY STAR, .	. 2,236
				K-12 SCHOOLS, Centralized Services & Support	34,631
				Low Rise New Construction, Centralized Service	93,119
				Multifam New Construction, Centralized Services	53,544
				New Construction- Commercial, Centralized Serv.	13,968
				New Construction- Housing, Centralized Services.	. 32,592
				Renewable Heat NY, Centralized Services & Sup.	60,649
				Rmve Barriers Dist Enrgy Storg, Centralized Serv.	. 20,000
	Complete Cabling Solutions L	Albany	National Grid	NYSERDA ADMINISTRATION, Cabling Solution	18,357
	Computer Aid, Inc.	Albany	National Grid	NYSERDA ADMINISTRATION, RFP3143 Umbre	C
	Conductors Court NY TC, LP	Rensselaer	National Grid	Multifam Performance Pgm, Multifamily	68,600
	Earth Sensitive Solutions, LLC	Rensselaer	National Grid	Geothermal Incentive Program, Large-Scale GS.	178,944
	EC Infosystems, Inc.	Albany	National Grid	EVALUATION, EC Infosystems for EDI	185,850
	EME Consulting Engineering	Albany	National Grid	Commercial Real Estate Ten, Staff Augmentation.	
	Group, LLC			Flexible Tech Assistance, Staff Augmentation Se	89,566
				Industrial Process Effic, Staff Augmentation Servi.	,
				INDUSTRIAL PROCESS EFFICIENCY, Staff Au	290,571
				New Construction- Commercial, SA.038A_TWO	89,500
				New Construction- Housing, SA.038A TWO #7	
				REV Campus Challenge, Staff Augmentation Ser	
				Strategic Energy Manager, Staff Augmentation S	
	Employee Leasing of Greater	Albany	National Grid	NYSERDA ADMINISTRATION, Temp Employee	
	Executive Information System		National Grid	NYSERDA ADMINISTRATION, Statistics and An	
	FFP NY Guilderland Project1,		National Grid	>200KW PV, NY-Sun C&I	439,294
	FFP NY Schagticoke Project1,	-	National Grid	>200KW PV, NY-Sun C&I Payee Assignment	459,736
	FFP NY Schenectady Project.		National Grid	>200KW PV, NY-Sun C&I Assignment	459,736
				, .	
	Fried, Frank, Harris, Shriver, J	-	National Grid	NYSERDA ADMINISTRATION, Legal Services	15,323
	Gartner Inc.	Albany	National Grid	NYSERDA ADMINISTRATION, Gartner Services	
	GCOM Software LLC	Albany	National Grid	NYSERDA ADMINISTRATION, Salesforce	1,440,000
	Conorol Electric latere d'art	Cohoracte	Notices O 11	NYSERDA ADMINISTRATION, Staff Aug Umbrel.	
	General Electric International Inc	Schenectady	National Grid	<200KW PV, PON 2112 NY SUN	334,152
				>200KW PV, NY Sun	5,282,304
	Harris Wiltshire & Grannis LLP	Albany	National Grid	ENERGY ANALYSIS, RFP3776 Outside Counsel.	
	Hodgson Russ LLP	Albany	National Grid	Home Perf w Energy Star, RFP 3300 & RFP 377	
	Holland & Knight LLP	Albany	National Grid	OTHER PROGRAM AREA, Data & Markets	35,000
	Hudson Valley Clean Energy I	Columbia	National Grid	<200KW PV, NY Sun	6,867

REDC Region	Contractor	County	Electric Utility	Contract Description	Total Funded Amount
Capital Region	Hunter Mountain Ski Bowl Inc.	Greene	Central Hudson Gas a	Industrial Process Effic, Industrial Process Efficie	128,318
	Interface Performance Material	Rensselaer	National Grid	Industrial Process Effic, Industrial Process Efficie	36,096
	ITS-NY	Albany	National Grid	NYSERDA ADMINISTRATION, Office 365 2018	96,970
				NYSERDA ADMINISTRATION, pay SLMS invoic	11,280
	Kasselman Solar LLC	Columbia	NYS Electric and Gas	<200KW PV, NY Sun	6,300
		Greene	Central Hudson Gas	<200KW PV, NY Sun	10,863
			and Electric	<200KW PV, NY-Sun	5,745
			NYS Electric and Gas	<200KW PV, NY Sun	12,600
		Schenectady	National Grid	<200KW PV, NY Sun	27,405
	L&S Energy Services, Inc.	Greene	Central Hudson Gas a	Industrial Process Effic, Umbrella Contract	11,004
		Washington	National Grid	Agriculture Energy Eff Pgm, RFP3628FlexTechC	2,500
				Technical Services, RFP3628FlexTechConsultU	2,500
	Lafarge Building Materials	Greene	Central Hudson Gas a	INDUSTRIAL PROCESS EFFICIENCY, Industria	244,681
	Lincoln Life & Annuity Compa	Albany	National Grid	NYSERDA ADMINISTRATION, Long Term Disab.	95,000
	Lotus Energy, Inc.	Schenectady	National Grid	<200KW PV, NY Sun	5,040
	Low-Level Radioactive Waste	Albany	National Grid	NYSERDA ADMINISTRATION, Data & Markets	5,000
	Lumsden & McCormick, LLP	Albany	National Grid	NYSERDA ADMINISTRATION, Tax Compliance	20,200
	Medusa NY 1, LLC	Albany	Central Hudson Gas a	>200KW PV, NY-Sun C&I	718,200
	Metropolitan Life Insurance C	Albany	National Grid	NYSERDA ADMINISTRATION, Human Resourc	300,000
	Michaels Group	Albany	National Grid	Low Rise New Construction, New Construction	18,000
	Michaels Group Homes, LLC	Albany	National Grid	Low Rise New Construction, LR NCP New Const	
	mindSHIFT Technologies, Inc.	Albany	National Grid	NYSERDA ADMINISTRATION, RFP 3919-Siteco	
	Monolith Solar Associates, LLC		National Grid	<200KW PV, PON 2112 NY SUN	14,990
	Netsparker Limited	Albany	National Grid	NYSERDA ADMINISTRATION, Vulnerability Sca	
	Network Experts of New York,		National Grid	NYSERDA ADMINISTRATION, Helpdesk Techni	
	North River Meadows NY TC		National Grid	Multifam Performance Pgm, Multifamily	74,900
	NYS Office for Technology	Albany	National Grid	NYSERDA ADMINISTRATION, Office 365 2018	96,697
	NYS Office of General Services		NYS Electric and Gas	SARATOGA TECHNOLOGY & ENERGY PARK,	
	NYS Office of Information Tec		National Grid	Industrial Process Effic, Industrial Process Efficie	
	NYS Olympic Regional Devel		National Grid	Industrial Process Effic, Industrial Process Efficie	
	O'Brien & Gere Engineers, Inc.		National Grid	Commercial New Construc, RFP3771 Umbrella	38,555
	Oracle America, Inc.	Albany	National Grid	NYSERDA ADMINISTRATION, Peoplesoft -Orac	
	OwnBackup Inc.	Albany	National Grid	NYSERDA ADMINISTRATION, Teopleson Forac.	14.573
	Paradise Energy Solutions, LL	,	National Grid	<200KW PV, PON 2112 NY SUN	28,080
		-			
	Penda Aiken Inc.	Albany Rensselaer	National Grid	NYSERDA ADMINISTRATION, Temporary Rece	
	PlugPV, LLC	Relisseldel	National Grid	<200KW PV, NY Sun	5,425
)A/aabiaataa	NYS Electric and Gas	<200KW PV, NY Sun	5,859
	Daviashavias Durassias las	Washington	National Grid	<200KW PV, NY Sun	5,317
	Powerhouse Dynamics, Inc	Rensselaer	National Grid	Real Time Enrgy Management, Powerhouse - M	1,822
	Due Orieland Alberta	Schenectady	National Grid	Real Time Enrgy Management, Powerhouse - M	1,822
	Pro Custom Solar LLC	Columbia	National Grid	<200KW PV, PON 2112 NY SUN	5,954
	Provantage, LLC	Albany	National Grid	NYSERDA ADMINISTRATION, Provantage Moni	,
	Randstad North America Inc	Albany	National Grid	NYSERDA ADMINISTRATION, Temp Services -	104,442
				NYSERDA ADMINISTRATION, Temporary mail r	,
	Randstad North America, Inc.	Albany	National Grid	ENERGY ANALYSIS, Temp Services Contract.	32,500
				Environmental Research, Temp Services Contra	25,306
				NYSERDA ADMINISTRATION, Temp Services C.	
				NYSERDA ADMINISTRATION, Temporary NYS	112,476
				Residential-Engaging New Mkts, Temp Services	26,000
	Red Hook Solar Corp	Albany	National Grid	<200KW PV, NY Sun	91,476
	Regan Development Corp	Albany	National Grid	Low Rise New Construction, New Construction	64,400
	Seed Renewables Inc.	Albany	National Grid	<200KW PV, PON 2112 NY SUN	6,178

Capital	on Contractor	County	Electric Utility		Total Funded Amount
Region	SHI, Inc.	Albany	National Grid	NYSERDA ADMINISTRATION, ADA-Compliance.	,
				NYSERDA ADMINISTRATION, Adobe Acrobat P.	
				NYSERDA ADMINISTRATION, Adobe Creative	12,312
				NYSERDA ADMINISTRATION, Embarcadero En	
	Skylands Renewable Energy,		National Grid	Small Wind, Wind Turbine Incentive Program	31,000
	Solar Liberty Energy Systems, Inc	Saratoga	National Grid	<200KW PV, PON 2112 NY SUN	306,000
		Warren	National Grid	<200KW PV, NY Sun	24,831
	Solitude Solar LLC	Greene	Central Hudson Gas a.	. >200KW PV, NY Sun	842,076
		Saratoga	National Grid	>200KW PV, NY Sun	1,627,920
	St Peters Health Partners	Albany	National Grid	Technical Services, OsEM11-C - St. Peter's Heal	210,669
	St. Catherine's Center for Chil	Albany	National Grid	Low Rise New Construction, 2019 LRNCP	20,000
	Systems Management	Albany	National Grid	NYSERDA ADMINISTRATION, AeroHive Subscr	5,414
	Planning, Inc.			NYSERDA ADMINISTRATION, NetApp 2240 20	6,642
				NYSERDA ADMINISTRATION, VMWare Airwatc	6,439
				NYSERDA ADMINISTRATION, Webex Services	19,011
	Tech Valley Talent, LLC	Albany	National Grid	EVALUATION, RFP3143 Umbrella Agreement	208,650
				NYSERDA ADMINISTRATION, RFP3143 Umbre	104,438
				NYSERDA ADMINISTRATION, SecureAuth 2 ne	26,851
				NYSERDA ADMINISTRATION, TWO26 Server	185,250
	TEKSYSTEMS Global Service.	Albany	National Grid	NYSERDA ADMINISTRATION, Agile Team Train.	. 17,743
	TEKsystems Inc	Albany	National Grid	NYSERDA ADMINISTRATION, Agile Team Train.	. 17,743
				NYSERDA ADMINISTRATION, TWO EVConsult	6,800
	The Community Builders, Inc.	Albany	National Grid	Low Rise New Construction, New Construction	75,000
		Schenectady	National Grid	Low Rise New Construction, New Construction	33,800
				Multifam New Construction, New Construction	187,400
	The Radiant Store	Albany	Central Hudson Gas a.	Renewable Heat NY, Radiant Store - Yelich Part 2	21,000
		Rensselaer	National Grid	Renewable Heat NY, Radiant - Cominole	7,000
		Renosciaci		Renewable Heat NY, Radiant Store - Polak	12,000
				Talent Pipeline:CE and OJT, OJT HIRE	6,000
				Talent Pipeline:CE and OJT, OJT PON 3982	5,760
		Washington	National Grid	Renewable Heat NY, Radiant Store - Sievers	12,000
	ThunderCat Technology LLC	Albany	National Grid	NYSERDA ADMINISTRATION, Atlassian (Jira)	
	mandor out roomology 220	, 110 Ch 19		NYSERDA ADMINISTRATION, Circuit for NYC	34,689
				NYSERDA ADMINISTRATION, Docusign - Subs	84,516
				NYSERDA ADMINISTRATION, Jira Plug-in Licen.	
				NYSERDA ADMINISTRATION, Jira Software Us	18,338
				NYSERDA ADMINISTRATION, Precise Peoples	15,120
				NYSERDA ADMINISTRATION, Precise Peoples	66,842
	Town of Ancram	Columbia	Control Hudson Cos		
	TOWN OF ANCIAM	Columbia	Central Hudson Gas and Electric	CEC400050 - Town of Ancram	30,000
	Tana (Ohaa)	Ocharabia		Clean Energy Communities, CEC400050 - Town	
	Town of Ghent	Columbia	NYS Electric and Gas	CEC400048 - Town of Ghent	5,000
	T ()) 0 1 1			Clean Energy Communities, CEC400048 - Town	
	Town of New Scotland	Albany	National Grid	Clean Energy Communities, Communities & Loc	50,000
				Communities & Local Government	30,000
	Town of Queensbury	Warren	National Grid	Clean Energy Communities, CEC400080 - Town	
	Trane	Albany	National Grid	Real Time Enrgy Management, Trane Us Inc-Mul.	
		Rensselaer	National Grid	Real Time Enrgy Management, Trane Us Inc-Mul.	
		Saratoga	National Grid	Real Time Enrgy Management, Trane Us Inc-Mul.	
	TRC Energy Services	Albany	National Grid	>200KW PV, Staff Augmentation Services	345,462
				Commercial New Construc, Staff Augmentation S.	95,224
				Commercial Real Estate Ten, SA.047_TWO #19	89,726
				Flexible Tech Assistance, Staff Augmentation Se	100,461

-	Contractor	County	Electric Utility	Contract Description	Total Funded Amount
Capital Region	TRC Energy Services	Albany	National Grid	FLEXIBLE TECHNICAL ASSISTANCE, Staff Aug.	
				K-12 SCHOOLS, Staff Augmentation Services	199,342
				Low Rise New Construction, Staff Augmentation	114,268
				Multifam New Construction, Staff Augmentation	107,920
				New Construction- Commercial, Staff Augmentati	
				New Construction- Housing, Staff Augmentation	222,188
				REC:CES REC System Dev Costs, Staff Augme	48,019
				REV Campus Challenge, SA.047_TWO #19 - EPE	
				Technical Services, SA.047_TWO #19 - EPE	89,726
	Troy Web Consulting, LLC	Albany	National Grid	NYSERDA ADMINISTRATION, Troy Web Hostin	7,380
	TurnKey Internet, Inc.	Albany	National Grid	Industrial Process Effic, Industrial Process Efficie	571,275
	Unique Comp Inc.	Albany	National Grid	NYSERDA ADMINISTRATION, RFP3143 Umbre	519,610
				NYSERDA ADMINISTRATION, TWO 1 Server O	203,775
				NYSERDA ADMINISTRATION, TWO SQL ETL	176,800
				NYSERDA ADMINISTRATION, TWO Sr. System.	176,800
	Unique Electric Solutions LLC	Albany	National Grid	Electric Vehicles - Innovation, Clean Transportati	400,000
	W & E Phillips Locksmith, Inc	Albany	National Grid	17CC Card Readers Reception	13,820
	Warren Washington Associati	Warren	National Grid	Low Rise New Construction, New Construction	29,000
	Westerlo NY 1, LLC	Albany	Central Hudson Gas a	>200KW PV, NY-Sun C&I	701,663
	Westville Associates of New Y	Albany	National Grid	Multifam Performance Pgm, Multifamily	168,000
	Willard Mountain Inc.	Washington	National Grid	Industrial Process Effic, Industrial Process Efficie	125,000
	Willdan Energy Solutions	Albany	National Grid	Campus/Technical Assistance, Staff Augmentatio.	30,046
				Community RH&C, Staff Augmentation Services	30,046
				Geothermal Incentive Program, Staff Augmentati	30,046
				Renewable Heat NY, Staff Augmentation Services	60,092
	Wiltshire Renewable Energy	Albany	National Grid	<200KW PV, NY Sun	7,650
	Systems, LLC	Rensselaer	National Grid	<200KW PV, NY Sun	5,355
	Zones LLC	Albany	National Grid	RFP 3670 VOIP	319,735
	Total	,			36,238,533
Central New	Adam C. Boese	Madison	National Grid	Technical Services, RFP3628FlexTechConsultU	8,500
rork		Onondaga	National Grid	Agriculture Energy Eff Pgm, RFP3628FlexTechC	
		ononaugu		Technical Services, RFP3628FlexTechConsultU.	5,520
			NYS Electric and Gas	Agriculture Energy Eff Pgm, RFP3628FlexTechC	
	Albany Solar Solutions L.L.C.	Madison	National Grid	<200KW PV, NY Sun	5,623
	All-Temperature Systems of S		National Grid	Talent Pipeline:CE and OJT, OJT HIRE	11,520
	Alternative Power Solutions of	0	National Grid	<200KW PV, NY Sun	6,132
	Antares Group, Inc.	Cayuga	NYS Electric and Gas	Flexible Tech Assistance, RFP3628FlexTechCon.	
	Antales Gloup, Inc.				
		Madison	National Grid	Industrial Process Effic, Technical Review and Pr.	
	An ave Calar Davies I.I.C.	Onondaga	National Grid	Industrial Process Effic, Technical Review and Pr.	
	Apex Solar Power LLC	Madison	NYS Electric and Gas	<200KW PV, NY-Sun	5,115
	Bergmann Associates	Onondaga	National Grid	Industrial Process Effic, Tech Review_Support_U.	
	Byrne Dairy, Inc.	Onondaga	National Grid	On-Site Energy Manager, OsEM2-I - Byrne Dairy	
	CH4 Generate Cayuga, LLC	Cayuga	NYS Electric and Gas	Anaerobic Digesters, ADG-to-Electricity Project	2,000,000
	CHA Consulting Inc.	Onondaga	National Grid	Industrial Process Effic, Technical Review and Pr.	
	CNY Solar, Inc.	Onondaga	National Grid	<200KW PV, NY-Sun	6,228
	Currier Plastics	Cayuga	NYS Electric and Gas	Industrial Process Effic, Industrial Process Efficie	
	Earth Sensitive Solutions, LLC	Cayuga	Rochester Gas and El.	Geothermal Incentive Program, Large-Scale GS	16,356
	Ecovis, Inc.	Onondaga	National Grid	<200KW PV, NY-Sun	5,357
	EME Consulting Engineering	Madison	National Grid	Technical Services, RFP3628FlexTechConsultU	2,500
	Extraterrestrial Materials Inc.	Onondaga	National Grid	<200KW PV, PON 2112 NY SUN	5,082
	ForeFront Power, LLC	Oswego	National Grid	>200KW PV, NY-Sun C&I	992,984
	Frontier Energy, Inc.	Cayuga	NYS Electric and Gas	Industrial Process Effic, Technical Review_Prgm	19,920

REDC Region	Contractor	County	Electric Utility	Contract Description	Total Funded Amount
Central New York	G.W. Ehrhart, Inc.	Cortland	National Grid	Renewable Heat NY, Ehrhart Energy - Ligas	21,000
TOIR	Greek Peak Holdings Inc	Cortland	National Grid	Industrial Process Effic, Industrial Process Efficie	186,500
	Gutchess Lumber Company	Cortland	National Grid	Industrial Process Effic, Industrial Process Efficie	131,427
	Helios Lenox 1 LLC	Madison	National Grid	>200KW PV, NY Sun	1,728,000
	High Peaks Solar	Madison	National Grid	>200KW PV, NY Sun	826,848
	Intermountain Management In	Cortland	National Grid	Industrial Process Effic, Industrial Process Efficie	82,320
	John C Goodfellow Ent Ltd	Onondaga	National Grid	Industrial Process Effic, Industrial Process Efficie	15,000
	Kasselman Solar LLC	Onondaga	National Grid	<200KW PV, NY-Sun	5,836
	L&S Energy Services, Inc.	Cortland	National Grid	Technical Services, RFP3628FlexTechConsultU	5,000
		Madison	National Grid	Agriculture Energy Eff Pgm, RFP3628FlexTechC	2,500
				Technical Services, RFP3628FlexTechConsultU	2,500
	Madison County	Madison	National Grid	CLEANER GREENER COMMUNITIES, Madison	250,000
	Melone Village II Limited Part	Cayuga	NYS Electric and Gas	Low Rise New Construction, 2019 LRNCP	57,200
	New York Power Authority	Cayuga	NYS Electric and Gas	Flexible Tech Assistance, FlexTech MOU NYSE	382,293
	Nickels Energy Solutions LLC	Cayuga	Rochester Gas and El.	<200KW PV, NY Sun	6,174
		Oswego	National Grid	<200KW PV, PON 2112 NY SUN	7,508
	Nutrition Bar Confectioners	Cayuga	Rochester Gas and El	Industrial Process Effic, Industrial Process Efficie	6,661
	O'Connell Electric Company	Onondaga	National Grid	<200KW PV, NY Sun	55,584
	Onondaga Community College	Onondaga	National Grid	Technical Services, OsEM19-C Onondaga Com	90,432
	Powerhouse Dynamics, Inc	Onondaga	National Grid	Real Time Enrgy Management, Powerhouse - M	1,989
	Renovus Energy, Inc.	Cayuga	Rochester Gas and	<200KW PV, NY Sun	5,313
			Electric	<200KW PV, PON 2112 NY SUN	8,694
		Cortland	National Grid	<200KW PV, NY Sun	98,550
				<200KW PV, PON 2112 NY SUN	7,245
		Onondaga	National Grid	<200KW PV, NY Sun	5,313
	RER Energy Group LLC	Onondaga	National Grid	>200KW PV, NY Sun	932,432
	Rural Generation & Wind (Ro	Oswego	National Grid	<200KW PV, NY-Sun	5,640
	Siemens Industry, Inc.	Oswego	National Grid	Real Time Enrgy Management, Siemens - 510 S	25,200
	Skyline Solar Inc.	Oswego	National Grid	<200KW PV, NY Sun	8,750
	South Slope Development Cor	Onondaga	National Grid	Industrial Process Effic, Industrial Process Efficie	67,200
	Specialized Packaging Group,	Onondaga	National Grid	Industrial Process Effic, Industrial Process Efficie	55,451
	Storke, LLC	Onondaga	National Grid	Small Wind, Wind Turbine Incentive	84,000
	Supervisor Town of Clay	Onondaga	National Grid	Clean Energy Communities, CEC210199 - Town	150,000
	Taitem Engineering, P.C.	Cortland	National Grid	Industrial Process Effic, Technical Review and Pr.	8,453
				Technical Services, RFP3628FlexTechConsultU	2,500
		Onondaga	National Grid	<200KW PV, NY Sun	12,461
	Toggenburg Mountain	Onondaga	National Grid	Industrial Process Effic, Industrial Process Efficie	35,200
	Town of Richland	Oswego	National Grid	Clean Energy Communities, Town of Richland	50,000
	Trane	Cortland	National Grid	Real Time Enrgy Management, Trane Us - 41 S	31,276
	Total				8,682,750
Finger Lakes	Adam C. Boese	Livingston	NYS Electric and Gas	Technical Services, RFP3628FlexTechConsultU	2,500
		Ontario	National Grid	Agriculture Energy Eff Pgm, RFP3628FlexTechC	2,025
				Technical Services, RFP3628FlexTechConsultU	2,500
			NYS Electric and Gas	Agriculture Energy Eff Pgm, RFP3628FlexTechC	3,970
		Seneca	NYS Electric and Gas	Technical Services, RFP3628FlexTechConsultU	2,500
		Wayne	Rochester Gas and El.	Technical Services, RFP3628FlexTechConsultU	2,500
		Wyoming	National Grid	Technical Services, RFP3628FlexTechConsultU	2,500
			Rochester Gas and El.	Technical Services, RFP3628FlexTechConsultU	2,500
		Yates	NYS Electric and Gas	Technical Services, RFP3628FlexTechConsultU	2,500
	Aegis Solar, LLC	Ontario	Rochester Gas and El.	>200KW PV, NY-Sun C&I	1,109,185
	Alternative Power Solutions of	Wayne	Rochester Gas and El.	<200KW PV, NY Sun	6,641
	American Solar Partners, LLC	Monroe	Rochester Gas and El.	<200KW PV, NY-Sun	6,606

REDC Region		County	Electric Utility	•	Total Funded Amount
Finger Lakes	Apex Clean Energy Holdings,		National Grid	REC:CES REC Contracts, Heritage Wind, LLC	197,839,368
	Bergmann Associates	Genesee	National Grid	Flexible Tech Assistance, FlexTech Umbrella Agr	28,000
		Monroe	National Grid	Flexible Tech Assistance, FlexTech Umbrella Agr	5,000
			Rochester Gas and Electric	Commercial Real Estate Ten, Bergmann 1 Clinto	5,000
			LIECUIC	Commercial Real Estate Ten, Bergmann - 900 Je	5,000
				Commercial Real Estate Ten, Bergmann - One E	5,000
				Commercial Real Estate Ten, Bergmann Associa	5,000
				Commercial Real Estate Ten, Bergmann-1 Clinto	5,000
				Commercial Real Estate Ten, BergmannAssociat	5,000
				Industrial Process Effic, Tech Review_Support_U	1,200
	Borrego Solar Systems, Inc.	Monroe	National Grid	>200KW PV, NY Sun	1,626,885
			Rochester Gas and El	>200KW PV, NY Sun	4,599,281
		Orleans	National Grid	>200KW PV, NY Sun	3,151,845
	Bristol Mountain	Ontario	Rochester Gas and El	Industrial Process Effic, Industrial Process Efficie	300,000
	Buffalo Renewables, Inc.	Genesee	National Grid	Small Wind, Wind Turbine Incentive	22,500
	Buffalo Solar Solutions Inc	Wyoming	National Grid	<200KW PV, PON 2112 NY SUN	7,056
			NYS Electric and Gas	<200KW PV, NY Sun	9,626
	C.J. Brown Energy, P.C.	Monroe	Rochester Gas and El	Commercial New Construc, RFP3771 Umbrella c	52,125
	CDG Huron Solar 1 LLC	Wayne	Rochester Gas and El	>200KW PV. NY Sun	437.805
	CHA Consulting Inc.	Livingston	NYS Electric and Gas	Flexible Tech Assistance, RFP3628FlexTechCon	
	<u> </u>	Monroe	Rochester Gas and	Flexible Tech Assistance, RFP3628FlexTechCon	
			Electric	Industrial Process Effic, Technical Review and Pr	5,000 5,000 5,000 5,000 5,000 5,000 5,000 1,5000 1,000 1,200 1,626,885 4,599,281 3,151,845 3,151,845 3,00,000 22,500 7,056 437,805 3,727 28,800 17,200 1,7200 1,7200 1,7200 1,7200 1,7200 1,7200 1,7200 1,7200 1,7200 1,17,200 1,17,200 1,17,200 1,1,01,01,01 1,02,01 1,02,01 1,02,01 1,0350 21,286 1,0350 21,286 1,045,976 1,045,976 1,045,976 1,045,976 1,045,970 1,045,970 </td
		Ontario	Rochester Gas and FL	Industrial Process Effic, Technical Review and Pr	
	City of Canandaigua	Ontario		Clean Energy Communities, CEC300331 - City of	
	DePaul Properties, Inc.	Genesee	National Grid	Low Rise New Construction, New Construction	
	Dolomite Products Group, Inc.	Monroe	Rochester Gas and	Industrial Process Effic, Industrial & Agriculture	
		Wohroe	Electric	Industrial Process Effic, Industrial Process Effice	71,682
	East House Corporation	Monroe	Pochester Gas and Fl	Multifam New Construction, New Construction	
	Ecovis, Inc.	Ontario	NYS Electric and Gas	<200KW PV, NY Sun	
	Energy & Resource Solutions,		National Grid	Technical Services, RFP3628FlexTechConsultU.	
	Erdman Anthony & Associates,		National Grid	Industrial Process Effic, Technical Review and Pr	
	Inc.	Monroe			
	Evenleier Energy Conter 11.C		National Grid	Industrial Process Effic, Technical Review and Pr	
	Excelsior Energy Center, LLC	Genesee		REC:CES REC Contracts, Excelsior Energy Cent	
	Fusion Energy Services LLC	Ontario		<200KW PV, NY Sun	
		Quitaria	Rochester Gas and El.		
	Green Eagle Solar IV, LLC Series I	Ontario	NYS Electric and Gas		5,000 5,000 5,000 5,000 1,200 1,200 1,200 1,200 1,626,88 3,151,84 3,300,000 22,500 2,2500 7,051 3,3151,84 3,300,000 2,2500 3,3151,84 3,300,000 2,2500 3,3151,84 3,300,000 3,22,500 3,3172 3,372
				>200KW PV, NY-Sun C&I Assignment	
				LMI Community Solar, RFP3802 Low Income Co	
	Halcyon, Inc.	Ontario	NYS Electric and Gas	Talent Pipeline:CE and OJT, OJT HIRE	
	High Falls Operating Co, LLC	Monroe		Industrial Process Effic, Industrial Process Efficie	
	Hollygrove Solar, LLC	Wayne	Rochester Gas and El.	>200KW PV, NY-Sun C&I	1,045,803
	Home Leasing, LLC	Monroe		Low Rise New Construction, New Construction	9,500
	Hunt Hollow Development Cor	Ontario	NYS Electric and Gas	Industrial Process Effic, Industrial Process Efficie	38,400
	Imperial Manor Associates LLC	Monroe	Rochester Gas and El	Multifam Performance Pgm, Multifamily	247,800
	Invenergy Solar Development	Livingston	National Grid	REC:CES REC Contracts, Horseshoe Solar	174,449,410
	Jones Lang LaSalle Americas,	Monroe	Rochester Gas and El	Real Time Enrgy Management, JLL - 800 Phillips	162,840
	L&S Energy Services, Inc.	Monroe	National Grid	Technical Services, RFP3628FlexTechConsultU	2,500
		Yates	NYS Electric and Gas	Technical Services, RFP3628FlexTechConsultU	2,500
	M/E Engineering, P.C.	Monroe	Rochester Gas and El	Industrial Process Effic, Technical Review and Pr	5,400
	Morris Ridge Solar Energy Ce	Livingston	Rochester Gas and El	REC:CES REC Contracts, Morris Ridge Solar	99,364,518
	North American Breweries	Monroe	Rochester Gas and El	Industrial Process Effic, Industrial Process Efficie	26,325
	NY RNM Project2, LLC	Genesee	National Grid	NY Sun C/I	966,061

REDC Region	Contractor	County	Electric Utility	Contract Description	Total Funded Amount
Finger Lakes	O'Connell Electric Company	Ontario	Rochester Gas and El	<200KW PV, NY Sun	8,750
	OLEDWorks LLC	Monroe	Rochester Gas and El	ADVANCED BUILDINGS, Advanced Buildings T	100,645
	Paradise Energy Solutions,	Monroe	Rochester Gas and El	<200KW PV, PON 2112 NY SUN	12,301
	LLC	Ontario	NYS Electric and Gas	<200KW PV, PON 2112 NY SUN	100,683
	Pearl Solar II, LLC	Genesee	National Grid	>200KW PV, NY-Sun C&I	845,093
	Pearl Solar, LLC	Genesee	National Grid	>200KW PV, NY-Sun C&I	845,093
	Pintail Crossing, LLC	Ontario	Rochester Gas and El	Low Rise New Construction, New Construction	58,400
	Powerhouse Dynamics, Inc	Monroe	Rochester Gas and El	Real Time Enrgy Management, Powerhouse - M	7,164
	QwikSolar, LLC	Ontario	Rochester Gas and El	<200KW PV, PON 2112 NY SUN	7,182
	RED Rochester	Monroe	Rochester Gas and El	Industrial Process Effic, Industrial Process Efficie	518,120
	Renovus Energy, Inc.	Yates	NYS Electric and Gas	<200KW PV, NY Sun	18,630
	Rochester District Heating Co	Monroe	Rochester Gas and El	On-Site Energy Manager, OsEM20-I-Rochester	211,358
	Rochester General Hospital	Monroe	Rochester Gas and El	Commercial New Construc, NCP15042-CriticalC	369,200
	Rochester Institute of Technol	Monroe		REV Campus Challenge, RM23 - RIT	143,504
	Ryan Homes (Virginia)	Ontario	Rochester Gas and	Low Rise New Construction, 2019 LRNCP	19,000
	, , , , , , , , , , , , , , , , , , , ,		Electric	Low Rise New Construction, New Construction	169,100
	Siemens Industry, Inc.	Monroe	Rochester Gas and El.	Real Time Enrgy Management, Siemens - 45 Co	· · · · · · · · · · · · · · · · · · ·
	Skylands Renewable Energy,		NYS Electric and Gas	Small Wind, Wind Turbine Incentive	31.000
	Solar Liberty Energy Systems,		National Grid	<200KW PV, NY Sun	5,150
	Solar Village Company LLC	Ontario	NYS Electric and Gas	Low Rise New Construction, 2019 LRNCP	28,000
	Southview Towers, L.P.	Monroe		Multifam Performance Pgm, Multifamily	135,100
	St. John Fisher College	Monroe		REV Campus Challenge, RM22 - St. John Fisher	
				Industrial Process Effic, Technical Review and Pr.	
	Stantec Consulting Services, I Sustainable Energy Developments Inc.		Rochester Gas and El Rochester Gas and Electric	<200KW PV, NY-Sun	5,413
		Monroe			
		Ontorio	Dechaster Coo and El	<200KW PV, PON 2112 NY SUN	12,695
		Ontario		<200KW PV, PON 2112 NY SUN	7,394
		Wayne		<200KW PV, PON 2112 NY SUN	5,425
	Taitem Engineering, P.C.	Livingston	National Grid	Technical Services, RFP3628FlexTechConsultU.	2,500
	Tulia Oda Essen Osalad	Seneca	NYS Electric and Gas	Agriculture Energy Eff Pgm, RFP3628FlexTechC	
	Trelina Solar Energy Center L		NYS Electric and Gas	REC:CES REC Contracts, North Light Energy Ce.	
	True Energy Solutions	Monroe	Rochester Gas and Electric	Talent Pipeline:CE and OJT, OJJT HIRE	5,760
				Talent Pipeline:CE and OJT, OJT HIRE	12,800
	Urban League of Rochester, NY, Inc	Monroe	Rochester Gas and Electric	Low Rise New Construction, New Construction	19,000
				Multifam New Construction, New Construction	22,000
	US Ceiling CORP	Monroe		Talent Pipeline:CE and OJT, OJT HIRE	15,469
	Viola Homes Inc.	Genesee	National Grid	<200KW PV, NY Sun	5,434
				<200KW PV, PON 2112 NY SUN	8,663
		Livingston	National Grid	<200KW PV, NY Sun	6,038
		Ontario	Rochester Gas and El	<200KW PV, NY Sun	6,279
	Wayne County Action Program	Wayne	NYS Electric and Gas	Talent Pipeline:CE and OJT, OJT HIRE	14,592
	Wendel Energy Services, LLC	Orleans	National Grid	Flexible Tech Assistance, FT12078OrleansCount.	. 24,027
	WexEnergy LLC	Monroe	Rochester Gas and El	Cleantech Ignition, PON 3871 Ignition Grants	100,000
	Wise Home Energy, LLC	Monroe	Rochester Gas and El	Talent Pipeline:CE and OJT, OJT HIRE	5,120
	Woodstone Custom Homes, I	Ontario	Rochester Gas and El	Low Rise New Construction, New Construction	21,850
	Xerox Corp	Monroe	Rochester Gas and El	Industrial Process Effic, Industrial Process Efficie	26,681
	Total				797,531,985
Long Island	575 Fuel Inc	Nassau	Long Island Power	FUEL NY, PGI00299 - 575 Fuel Inc.	11,406
			Authority	OTHER PROGRAM AREA, PGI00299 - 575 Fuel.	79,228
	1020 Route 109 Corp.	Suffolk	Long Island Power Au	FUEL NY, PGI00239 - 1020 Route 109 Corp	16,065
	Albanese Development Corpo	Suffolk	Long Island Power Au	CLEANER GREENER COMMUNITIES, CGC403.	3,229,752
	Anjon of Bridgehampton Inc	Suffolk	Long Island Power Au	FUEL NY, PGI00009 - Anjon of Bridgehamp	6,986
	Chris's Service Center	Nassau	Long Joland Dowar Au	FUEL NY, PGI00276 - Chris's Service Cen	22,650

REDC Region		County	Electric Utility	Contract Description	Total Funded Amount
Long Island	City of Long Beach	Nassau	Long Island Power Au	CLEANER GREENER COMMUNITIES, City of L	99,975
	Deer Hills Service, LLC	Suffolk	Ū.	FUEL NY, PGI00118 - Deer Hills Service	
	Duplex Inc	Suffolk	Long Island Power Au	FUEL NY, PGI00301 - Duplex Inc.	84,479
	Empower CES, LLC	Suffolk	Long Island Power	<200KW PV, NY Sun	118,350
			Authority	<200KW PV, PON 2112 NY SUN	11,696
	EnterSolar LLC	Nassau	Long Island Power	<200KW PV, NY Sun	187,968
			Authority	<200KW PV, PON 2112 NY SUN	38,347 84,479 118,350
	Farmingdale, Village of	Nassau	Long Island Power Au	CLEANER GREENER COMMUNITIES, Village o	50,000
	Genesis Petroleum Inc.	Nassau	Long Island Power Au	FUEL NY, PGI00253 - Genesis Petroleum	77,371
			Municipal Utilities	FUEL NY, PGI00252 - Genesis Petroleum	81,803
		Suffolk	Long Island Power	FUEL NY, PGI00254 - Genesis Petroleum	80,719
			Authority	FUEL NY, PGI00255 - Genesis Petroleum	96,992
	GreenLogic, LLC	Suffolk	Long Island Power Au	<200KW PV, NY Sun	30,132
	Harvest Power, LLC	Nassau	Long Island Power Au	<200KW PV, NY Sun	5,850
		Suffolk	Long Island Power Au	<200KW PV, NY Sun	28,769
	Hill Enterprises Inc.	Nassau	Long Island Power Au	FUEL NY, PGI00262 - Hill Enterprises In	21,850
	Lakegrove Mart Inc	Suffolk	Long Island Power Au	FUEL NY, PGI00298 - Lakegrove Mart Inc	87,767
	Malverne Gas Inc.	Suffolk		FUEL NY, PGI00247 - Malverne Gas Inc.	
	Melville Fuel Inc.	Suffolk	-	FUEL NY, PGI00302 - Melville Fuel Inc.	
	Northwell Health, Inc.	Nassau		Technical Services, OsEM21-C Northwell Health	
	PMG Northeast LLC	Nassau	-	FUEL NY, PGI00230 - PMG Northeast LLC	
	T MO NORTICAST LEO	Suffolk	<u> </u>	FUEL NY, PGI00186 - PMG Northeast LLC	
	Prime Petro Inc	Nassau		FUEL NY, PGI00300 - Prime Petro Inc.	
		Suffolk			
	R & A Petroleum Corp			FUEL NY, PGI00214 - R & A Petroleum Cor	
	Second Street Enterprise Inc.	Nassau	<u> </u>	FUEL NY, PGI00265 - Second Street Enter	
	Solar Energy Systems, LLC	Suffolk	Long Island Power Au		
	SPJ LLC	Suffolk	-	FUEL NY, PGI00284 - SPJ LLC	
	SuNation Solar Systems, Inc.	Nassau	ç	<200KW PV, PON 2112 NY SUN	
		Suffolk	Long Island Power Authority	<200KW PV, NY Sun	
				<200KW PV, PON 2112 NY SUN	
	SunPower SolarProgram 1, L		-	<200KW PV, PON 2112 NY SUN	
	SUNRISE ELECTRICAL SERVICES	Nassau	Long Island Power Au	<200KW PV, PON 2112 NY SUN	62,689
		Suffolk	Long Island Power Au		
	Target Corporation	Suffolk	Long Island Power Au	<200KW PV, NY-Sun	71,260
	The Source Service Station, I	Nassau	Long Island Power Au	FUEL NY, PGI00259 - The Source Service	39,850
	Town of Huntington	Suffolk	Long Island Power Au	CLEANER GREENER COMMUNITIES, Town of	250,000
	Town of Smithtown	Suffolk	Long Island Power Au	CLEANER GREENER COMMUNITIES, Town of	249,300
	TROPICANA MART INC	Suffolk	Long Island Power Au	OTHER PROGRAM AREA, PGI00249 - Tropican.	97,606
	Village of Amityville	Suffolk	Long Island Power Au	CLEANER GREENER COMMUNITIES, Village o	50,000
	Village of Mill Neck	Nassau	Long Island Power Au	CLEANER GREENER COMMUNITIES, Village o	50,000
	Total				6,427,622
Mid-Hudson	103 Gleneida Avenue LLC	Putnam	NYS Electric and Gas	Industrial Process Effic, Industrial Process Efficie	86,000
	Adam C. Boese	Orange	Orange and Rockland	Commercial New Construc, RFP3771 Umbrella	3,000
		Putnam	NYS Electric and Gas	Technical Services, RFP3628FlexTechConsultU.	7,500
		Sullivan	NYS Electric and Gas	Commercial New Construc, RFP3771 Umbrella	16,000
	AMERESCO, Inc.	Ulster	Central Hudson Gas a	EXISTING FACILITIES, EFP2624 - AMERESCO	45,148
	American Energy Care, Inc.	Sullivan	NYS Electric and Gas	<200KW PV, NY Sun	6,696
	Antares Group, Inc.	Orange	Orange and Rockland	EXISTING FACILITIES, Technical Review and Pr.	3,596
	Apex Roofing, LLC	Westchester	Consolidated Edison	NY Sun	
		Ulster	Central Hudson Gas a		
	Apex Solar Power LLC				
	Apex Solar Power LLC Arcadis of New York, Inc.	Ulster		Flexible Tech Assistance, RFP3628FlexTechCon.	

Mid-Hudson	Contractor Arcadis U.S., Inc.	County	Electric Utility	Contract Description	Total Funded Amount 29,579
ind-InduSoff	,	Orange Putnam	NYS Electric and Gas	Industrial Process Effic, Tech Review & Program .	,
	Artis Energy Intelligence, LLC Aurelius Development LLC	Westchester	Consolidated Edison	Real Time Enrgy Management, Artis Energy- 2 P Multifam New Construction, New Construction	51,200
	Borrego Solar Systems, Inc.	Orange	NYS Electric and Gas	>200KW PV, NY Sun	1,503,158
	Borrego Solar Systems, Inc.	Orange		>200KW PV, NY Sun	802,913
			Orange and Rockland Utilities		1,536,500
		Ulster	Central Hudson Gas a	Solar Plus Energy Storage, NY Sun	909,609
	City of Poppon Housing Autho			. Multifam Performance Pgm, Multifamily	49,700
	City of Beacon Housing Autho			, , , , , , , , , , , , , , , , , , ,	
	Columcille Properties LLC	Rockland		INDUSTRIAL PROCESS EFFICIENCY, Industria	
	CON EDISON SOLUTIONS, I		NYS Electric and Gas	<200KW PV, NY Sun	140,301
	Continental Buchanan, LLC	Westchester	Consolidated Edison	NY-Sun	1,440,093
	Cream Street Solar, LLC	Dutchess	Central Hudson Gas a.		709,560
	Croton Energy Group, Inc.	Westchester	Consolidated Edison	NY Sun	24,966
	D.L. English Consulting, Inc.	Westchester	Consolidated Edison	OTHER PROGRAM AREA, Indian Point Consult.	2,470
	Danfoss Holding Security Cor			EXISTING FACILITIES, EFP2307 - Danfoss LLC	19,336
	Eiger 3970 Consultants Inc.	Ulster	Central Hudson Gas a.		22,545
			NYS Electric and Gas	<200KW PV, NY Sun	5,670
	ELP Saugerties Solar LLC	Ulster	Central Hudson Gas a.	. >200KW PV, NY Sun	899,262
	Empire Solar Solutions LLC	Dutchess	Central Hudson Gas and Electric	<200KW PV, NY Sun	6,619
				<200KW PV, PON 2112 NY SUN	6,160
		Orange	NYS Electric and Gas	<200KW PV, NY Sun	5,355
			Orange and Rockland	<200KW PV, NY Sun	8,064
		Rockland	Orange and Rockland	<200KW PV, PON 2112 NY SUN	5,591
	Empower CES, LLC	Westchester	Consolidated Edison	<200KW PV, NY Sun	5,400
	Energy & Resource Solutions,	Dutchess	Central Hudson Gas a.	Agriculture Energy Eff Pgm, RFP3628FlexTechC	2,500
	Inc.	Rockland	Orange and Rockland	Industrial Process Effic, Technical Review and Pr.	4,810
		Westchester	Consolidated Edison	Industrial Process Effic, Technical Review and Pr.	4,741
	FINCHVILLE TPKE LLC	Orange	Orange and Rockland	>200KW PV, NY Sun	749,700
	Florenton River LLC	Rockland	Orange and Rockland	<200KW PV, NY Sun	8,750
		Westchester	Consolidated Edison	<200KW PV, NY Sun	7,500
				NY Sun	3,400
				PON 2112 NY SUN	8,190
			NYS Electric and Gas	<200KW PV, PON 2112 NY SUN	13,797
	GIP III Zephyr Acquisition	Dutchess	Central Hudson Gas a.	LMI Community Solar, RFP3802 Low Income Co	1,419,977
	Partners L.P.	Orange	Orange and Rockland	LMI Community Solar, RFP3802 Low Income Co	1,693,210
	Hudson Solar	Dutchess	Central Hudson Gas a.	<200KW PV, NY Sun	19,613
	Hudson Valley Clean Energy	Dutchess	NYS Electric and Gas	<200KW PV, NY Sun	5,313
	Inc.	Ulster	Central Hudson Gas a.	<200KW PV, NY Sun	218,295
	Hudson Valley Wind Energy,	Dutchess	Central Hudson Gas	<200KW PV, NY Sun	29,160
	LLC		and Electric	Small Wind, Wind Turbine Incentive	52,178
	IBM - East Fishkill Site	Westchester	Consolidated Edison	Industrial Process Effic, Industrial Process Efficie	
	Infinity Solar Systems, LLC	Orange	Central Hudson Gas a.		7,623
	Integrity Solar Solutions, LLC	Rockland	Orange and Rockland		5,600
		Sullivan	NYS Electric and Gas	<200KW PV, NY Sun	5,040
	International Business Machin		Consolidated Edison	Industrial Process Effic, Industrial Process Efficie	
		Westchester	Consolidated Edison	NY Sun	292,500
	IPPsolar Integration LLC				
	JOGEE ROAD LLC	Orange	Orange and Rockland		749,700
	Joule Capital, LLC	Westchester	Consolidated Edison	Real Time Enrgy Management, Joule Capital-Mul.	
	Kanadman Oslavili O	Dutch	NYS Electric and Gas	Real Time Enrgy Management, Joule Capital-Mul.	
	Kasselman Solar LLC	Dutchess	Central Hudson Gas and Electric	<200KW PV, NY Sun	11,734
				<200KW PV, NY-Sun	5,640
		Orange	Orange and Rockland	<200KW PV, NY Sun	5,264

REDC Region Mid-Hudson		County	Electric Utility	Contract Description	Total Funded Amount
Mia-Huason	Kilowatt Engineering, Inc.	Orange		Industrial Process Effic, 2621 Umbrella Contract	9,741
		Westchester	Consolidated Edison	Industrial Process Effic, 2621 Umbrella Contract	6,062
	L&S Energy Services, Inc.	Dutchess		Technical Services, RFP3628FlexTechConsultU.	6,000
		Ulster		Flexible Tech Assistance, RFP3628FlexTechCon.	,
		Westchester	Consolidated Edison	Industrial Process Effic, Umbrella Contract	4,330
	LaBella Associates, P.C.	Dutchess		Geothermal Incentive Program, Large-Scale GS	273,000
	McMullen Road LLC	Orange	Orange and Rockland		599,760
	Middletown NY 1, LLC	Orange	-	>200KW PV, NY-Sun C&I	718,200
	Middletown NY 2, LLC	Orange	Orange and Rockland	>200KW PV, NY-Sun C&I	312,550
	Monolith Solar Associates, LLC	Rockland	Orange and Rockland	<200KW PV, NY Sun	3,000
	MS Management Associates,	Westchester	Consolidated Edison	NY-Sun	253,368
	MSAF Group LLC	Westchester	Consolidated Edison	NEW CONSTRUCTION PROGRAM, NCP12811 .	115,434
	New York Power Authority,	Dutchess	Central Hudson Gas a	EXISTING FACILITIES, EFP2592 - New York Po	812,965
	New York State Solar Farm Inc.	Dutchess	Central Hudson Gas	<200KW PV, NY Sun	18,664
			and Electric	<200KW PV, NY-Sun	6,820
		Orange	Orange and Rockland	<200KW PV, NY Sun	20,475
			Utilities	<200KW PV, PON 2112 NY SUN	8,012
		Ulster	Central Hudson Gas	<200KW PV, NY Sun	8,750
			and Electric	<200KW PV, PON 2112 NY SUN	165,038
	Nexamp Inc	Ulster	Central Hudson Gas a	LMI Community Solar, RFP3802 Low Income Co	1,355,724
	NextEra Energy Capital Holdi		Central Hudson Gas a	-	649,289
	Novel Approaches Solar Appli		Orange and Rockland		20,183
	NY Delaware II, LLC	Sullivan		>200KW PV, NY Sun C&I	1,281,677
	NY Liberty I, LLC	Sullivan		>200KW PV, NY-SUN C&I	1,281,677
	NY Thompson I, LLC	Sullivan	NYS Electric and Gas	LMI Community Solar, RFP3802 Low Income Co	1,155,112
	NYS Olympic Regional Devel		NYS Electric and Gas	Industrial Process Effic, Industrial Process Efficie	
	Paradise Energy Solutions, LL	Orange	Central Hudson Gas a	<200KW PV, NY Sun	55,913
	PlugPV, LLC	Ulster	Central Hudson Gas a	<200KW PV, NY Sun	5,263
		Westchester	Consolidated Edison	PON 2112 NY SUN	19,188
	Powerhouse Dynamics, Inc	Dutchess	Central Hudson Gas a	Real Time Enrgy Management, Powerhouse - M	1,989
	Pro Custom Solar LLC	Orange	Central Hudson Gas a	<200KW PV, PON 2112 NY SUN	5,054
	Safari Energy LLC	Westchester	NYS Electric and Gas	NY Sun	663,360
	Skylands Renewable Energy,	Sullivan	Central Hudson Gas a	Small Wind, Wind Turbine Incentive	31,000
	Solar Alchemy, Inc.	Ulster	Central Hudson Gas a	<200KW PV, PON 2112 NY SUN	6,154
	Solar Liberty Energy Systems,	Orange	Orange and Rockland	<200KW PV, PON 2112 NY SUN	82,944
	Inc	Putnam	NYS Electric and Gas	<200KW PV, NY Sun	45,360
				<200KW PV, NY-Sun	57,888
		Sullivan	Orange and Rockland		5,837
	Sparrowbush NY 1, LLC	Orange	Orange and Rockland		718,200
	Sparrowbush NY 2, LLC	Orange	Orange and Rockland		374,938
		-			
	Sullivan County	Sullivan	NYS Electric and Gas	Clean Energy Communities, CEC510672 - Count	
	Sun Source Technologies	Ulster Central Hudson and Electric	and Electric	<200KW PV, NY-Sun	5,983
				<200KW PV, PON 2112 NY SUN	7,035
	Sunnova Energy Corp	Orange	Orange and Rockland	<200KW PV, PON 2112 NY SUN	5,576
	SunPower Capital, LLC		Central Hudson Gas and Electric	<200KW PV, NY Sun	11,095
		and Elect		<200KW PV, PON 2112 NY SUN	5,594
		Litilities	<200KW PV, NY Sun	5,040	
			<200KW PV, PON 2112 NY SUN	25,938	
		Rockland	Rockland Orange and Rockland <	<200KW PV, NY Sun	10,332
			Utilities	<200KW PV, PON 2112 NY SUN	30,234
	Sunrise Solar Solutions, LLC	Westchester	Consolidated Edison	Consolidated Edison NY Sun	856,492
				PON 2112 NY SUN	23,280

REDC Region		County	Electric Utility	Contract Description	Total Funded Amount
Mid-Hudson	Sunrise Solar Solutions, LLC	Westchester	NYS Electric and Gas	 <200KW PV, NY Sun <200KW PV, PON 2112 NY SUN <200KW PV, NY Sun <200KW PV, NY-Sun C&I Assignment >200KW PV, NY-Sun C&I Low Rise New Construction, New Construction Industrial Process Effic, Industrial Process Efficie Clean Energy Communities, PON 3298 CEC Clean Energy Communities, PON 3298 CEC Clean Energy Communities, CEC500636 - Town <200KW PV, NY-Sun <200KW PV, NY Sun <200KW PV, NY Sun <200KW PV, NY Sun <td>6,048</td>	6,048
	SunRun, Inc	Dutchess	Central Hudson Gas a	<200KW PV, PON 2112 NY SUN	6,324
		Orange	Central Hudson Gas a	<200KW PV, PON 2112 NY SUN	5,989
			Orange and Rockland	<200KW PV, NY Sun	8,526
			Utilities	<200KW PV, PON 2112 NY SUN	5,627
		Rockland	Orange and Rockland	<200KW PV, NY Sun	5,862
			Utilities	<200KW PV, PON 2112 NY SUN	5,645
	SUNSTARTER SOLAR XL LLC	Orange	Orange and Rockland	>200KW PV, NY-Sun C&I Assignment	1,348,883
	SUNSTARTER SOLAR XXXII	Orange	Orange and Rockland	>200KW PV, NY-Sun C&I	274,679
	Tern Construction & Develop	Dutchess	Central Hudson Gas a	Low Rise New Construction, New Construction	11,250
	Tilcon NY, Inc.	Orange	Orange and Rockland	Industrial Process Effic, Industrial Process Efficie	32,334
		Rockland	Orange and Rockland	Industrial Process Effic, Industrial Process Efficie	30,912
	Town of Rosendale	Ulster	Central Hudson Gas a	Clean Energy Communities, PON 3298 CEC	50,000
	Town of Somers	Westchester	NYS Electric and Gas	Clean Energy Communities, CEC500636 - Town	50,000
	Trinity Heating & Air, Inc.	Westchester	Consolidated Edison	<200KW PV, NY-Sun	5,511
	US Energy Concierge Inc	Dutchess	Central Hudson Gas a	<200KW PV, NY Sun	7,655
	Verizon Communications Inc	Westchester	Consolidated Edison	Industrial Process Effic, Industrial Process Efficie	17,468
	Vivint Solar	Dutchess	Central Hudson Gas a		5,392
		Orange			5,714
		Rockland		,	8,157
	Walden NY 1, LLC	Orange	-		718,200
	Wartburg Home of the Evange.		Consolidated Edison		109,986
	Westtown NY 2, LLC	Orange			718,200
	Whole Foods Market Group, I	•	Consolidated Edison		
	Wilder Balter Partners, Inc.	Putnam	NYS Electric and Gas		64,400
	Wilden Energy Solutions	Rockland	Orange and Rockland		,
	Wildan Energy Solutions	Westchester	Consolidated Edison		
		Westeriester	Consolidated Edison	-	
	Woodlanda Villago Dovolonm	Sullivan	NYS Electric and Gas		47,600
	Woodlands Village Developm	Westchester	NYS Electric and Gas		
	Yorktown NY 1, LLC			·	1,776,190
	Yorktown NY 2, LLC	Westchester	NYS Electric and Gas	2200KW PV, NT-Sull Cal	1,766,682
Mahauda	Total	Oneide	National Orid	Compute/Technical Assistance LMI Color There	33,822,707
Mohawk Valley	Active Solar Development, LLC		National Grid	•	200,000
-	Adam C. Boese	Fulton	National Grid		2,500
		Herkimer	National Grid		7,500
			NYS Electric and Gas	0KW PV, PON 2112 NY SUN0KW PV, NY Sun0KW PV, NY Sun C&I Assignment0KW PV, NY-Sun C&I Assignment0KW PV, NY Sun0KW PV, NY Sun0KW PV, NY Sun0KW PV, PON 2112 NY SUN0KW PV, NY-Sun C&I0KW PV, NY Sun0KW PV, NY Sun	2,500
		Montgomery	National Grid		2,500
		Oneida	National Grid		2,500
					2,500
			NYS Electric and Gas		2,500
	Ampersand Kayuta Lake Hydr	Oneida	Municipal Utilities	, 0	,
	Antares Group, Inc.	Oneida	National Grid	Industrial Process Effic, Technical Review and Pr	9,607
	Borrego Solar Systems, Inc.	Fulton	National Grid	>200KW PV, NY Sun	1,174,095
	City of Sherrill	Oneida	SHERRILL	CLEANER GREENER COMMUNITIES, CEC600	50,000
	City of Utica	Oneida	National Grid	Clean Energy Communities, CEC610836 - City of.	250,000
	CNY Solar, Inc.	Herkimer	National Grid	<200KW PV, NY Sun	11,306
		Oneida	National Grid	<200KW PV, NY Sun	12,313
	Common Energy LLC	Fulton	National Grid	LMI Community Solar, RFP3802 Low Income Co	2,590,452
	ConMed Corporation	Oneida	National Grid	Industrial Process Effic, Industrial Process Efficie	144,445
	Delaware River Solar, LLC	Otsego	NYS Electric and Gas	>200KW PV, NY-Sun C&I	1,068,064
	DePaul Properties, Inc.	Oneida	National Grid	Low Rise New Construction, New Construction	68,000
	Doherty Electric, LLC	Schoharie	National Grid	<200KW PV, NY Sun	7,161

REDC Region	Contractor	County	Electric Utility	Contract Description	Total Funded Amount
Mohawk Valley	Earth Sensitive Solutions, LLC	Oneida	National Grid	Geothermal Incentive Program, Large-Scale GS	129,396
valley	Erdman Anthony & Associates,	Oneida	NYS Electric and Gas	Technical Services, RFP3628FlexTechConsultU	2,500
	Inc.	Otsego	NYS Electric and Gas	Commercial New Construc, RFP3771 Umbrella	44,752
	Fulton County	Fulton	National Grid	Clean Energy Communities, CEC610872 - Fulton.	150,000
	Hales Mills Solar, LLC	Fulton	National Grid	>200KW PV, NY Sun	1,156,680
	Hudson Valley Clean Energy I	Schoharie	National Grid	<200KW PV, PON 2112 NY SUN	5,544
	Kasselman Solar LLC	Schoharie	National Grid	<200KW PV, NY Sun	5,600
				<200KW PV, PON 2112 NY SUN	5,600
	L&S Energy Services, Inc.	Herkimer	National Grid	Agriculture Energy Eff Pgm, RFP3628FlexTechC	5,000
			NYS Electric and Gas	Technical Services, RFP3628FlexTechConsultU	2,500
		Montgomery	National Grid	Technical Services, RFP3628FlexTechConsultU.	2,500
	Lewis Custom Homes, Inc.	Oneida	National Grid	Low Rise New Construction, 2019 LRNCP	6,750
	Little Falls Solar I, LLC	Herkimer	National Grid	>200KW PV, NY Sun	719,280
	Meadows Senior Living L.P.	Oneida	National Grid	RENEWABLE THERMAL, Solar Thermal Incentive	
	Mohawk Solar LLC	Montgomery	National Grid	REC:CES REC Contracts, Large-Scale Renewab.	
		,			
	NP Environmental LLC	Oneida	NYS Electric and Gas	Geothermal Incentive Program, Large-Scale GS	32,796
				Talent Pipeline:CE and OJT, OJT HIRE	15,760
	NY RNM Project1A, LLC	Montgomery	National Grid	>200KW PV, NY-Sun	961,842
	PlugPV, LLC	Montgomery	National Grid	<200KW PV, NY Sun	5,534
	Potentia Management Group	Oneida	National Grid	Talent Pipeline:CE and OJT, OJT HIRE	19,904
	Powerhouse Dynamics, Inc	Oneida	National Grid	Real Time Enrgy Management, Powerhouse - M	4,311
	Renovus Energy, Inc.	Otsego	NYS Electric and Gas	<200KW PV, NY Sun	5,072
	Solar 88, LLC	Otsego	NYS Electric and Gas	<200KW PV, NY-Sun	299,012
	Solar Energy LLC	Schoharie	NYS Electric and Gas	<200KW PV, PON 2112 NY SUN	855,563
	Standard Insulating Company	Oneida	National Grid	Talent Pipeline:CE and OJT, OJT PON 3982	6,720
	SUNY Oneonta	Otsego	NYS Electric and Gas	NEW CONSTRUCTION PROGRAM, NCP12946	25,605
	The Radiant Store	Schoharie	National Grid	Renewable Heat NY, Radiant - Monastery	12,000
	Town of Charleston	Montgomery	National Grid	Clean Energy Communities, PON 3298 CEC	50,000
	Town of Webb	Herkimer	National Grid	Industrial Process Effic, Industrial Process Efficie	66,200
	Village of Ilion	Herkimer	Municipal Utilities	CLEANER GREENER COMMUNITIES, CEC600	100,000
	Village of Waterville	Oneida	NYS Electric and Gas	Clean Energy Communities, CEC600897 Village	50,000
	Village of West Winfield	Herkimer	NYS Electric and Gas	Clean Energy Communities, CEC600914 - Villag	50,000
	Vincents Heating and Fuel Se	Fulton	National Grid	Renewable Heat NY, Vincents Heating - Ostrand	20,750
	Total			······································	108,968,181
New York City		Kings	Consolidated Edison	NY Sun	105,300
New York City	8-11 & 13 43rd Road LLC	Queens	Consolidated Edison	Commercial New Construc, SF106887 - 8-11 43r	
	10th Ave Petroleum LLC	New York	Consolidated Edison	OTHER PROGRAM AREA, PGI00296 - 10th Ave	
			Consolidated Edison	Multifam New Construction, MFNC_Clarke Place .	
	112 East Clarke Housing Dev				
	233 West 125th Street Danfort		Consolidated Edison	NEW CONSTRUCTION PROGRAM, NCP11259	
	770 Electric Corp.	New York	Consolidated Edison	NY-Sun	59,760
	AC Woodhaven Realty Corp.	Queens	Consolidated Edison	FUEL NY, PGI00113 - AC Woodhaven Realty	118,645
	Accord Power, Inc.	Kings	Consolidated Edison	NY-Sun	18,900
		Queens	Consolidated Edison	PON 2112 NY SUN	24,640
	Adam C. Boese	New York	Consolidated Edison	Commercial Real Estate Ten, Daylight Savings	5,000
				Flexible Tech Assistance, RFP3628FlexTechCon.	14,640
	Aegis Energy Services Inc.	Kings	Consolidated Edison	Combined Heat and Power, CHPA - 2425 Nostra	94,500
				Combined Heat and Power, CHPA - 2501 Nostra	42,000
		New York	Consolidated Edison	Combined Heat and Power, CHPA - 300 Central	122,719
	Aeonsolar	Kings	Consolidated Edison	NY Sun	22,032
	Albireo Energy, LLC	New York	Consolidated Edison	Real Time Enrgy Management, Alberio Energy-5	238,544
	Allegis Group Holdings Inc	New York	Consolidated Edison	NEW YORK GREEN BANK, Staff Augmentation	27,943
	Alliance Energy LLC	Queens	Consolidated Edison	FUEL NY, PGI00013 - Alliance Energy LLC	58,649

-	Contractor	County	Electric Utility	Contract Description	Total Funded Amount
New York City		Queens	Consolidated Edison	Commercial Real Estate Ten, Altanova - Multisite	47,894
	American Solar Partners, LLC	Bronx	Consolidated Edison	PON 2112 NY SUN	8,760
		Queens	Consolidated Edison	NY-SUN, Solar for Electchester Housing	140,000
	Antares Group, Inc.	Queens	Consolidated Edison	Flexible Tech Assistance, RFP3628FlexTechCon	
	Astoria Fuel & Convenience S		Consolidated Edison	OTHER PROGRAM AREA, PGI00238 - Astoria F.	
	Baldor Specialty Foods	Bronx	Consolidated Edison	NEW CONSTRUCTION PROGRAM, NCP11949	
	Barnard College	New York	Consolidated Edison	Technical Services, OsEM26-C Barnard College	
	Bay Plaza Hospitality Investor		Consolidated Edison	Commercial New Construc, NCP16030 - Hampto	
	Best Energy Power	Bronx	Consolidated Edison	NY-Sun	416,830
	Bolla Operating Corp.	Kings	Consolidated Edison	FUEL NY, PGI00015 - Bolla Operating Cor	66,367
				FUEL NY, PGI00040 - Bolla Operating Cor	55,048
	BP/CGCENTER AQUISITION		Consolidated Edison	NEW CONSTRUCTION PROGRAM, NCP14055	
	Breaking Ground II Housing	Bronx	Consolidated Edison	Multifam New Construction, New Construction	300,000
	Bright Power, Inc.	Bronx	Consolidated Edison	NY-SUN, Melrose Court LMI Solar	35,500
				NY-SUN, NYCHA Baychester Houses	35,500
				Real Time Enrgy Management, Bright Power-300	
		New York	Consolidated Edison	Flexible Tech Assistance, RFP3628FlexTechCon	
				Real Time Enrgy Management, Bright Power - 22	74,861
		Queens	Consolidated Edison	Flexible Tech Assistance, RFP3628FlexTechCon	
	Bronx Pro Group, LLC	Bronx	Consolidated Edison	Multifam New Construction, New Construction	589,300
	Brooklyn SolarWorks LLC	Bronx	Consolidated Edison	PON 2112 NY SUN	6,804
		Kings	Consolidated Edison	NY Sun	27,540
				NY-Sun	9,720
		New York	Consolidated Edison	NY Sun	12,960
				PON 2112 NY SUN	8,748
	BUILDING 36 LLC	Queens	Consolidated Edison	>200KW PV, NY-Sun Assignment	181,460
	CEC Stuyvesant Cove, Inc.	Bronx	Consolidated Edison	NY-SUN, Solar for Co-op City	140,848
	CES Danbury Solar, LLC	Kings	Consolidated Edison	PON 2112 NY SUN	79,920
	Charter Communications, Inc.	New York	Consolidated Edison	Industrial Process Effic, Industrial Process Efficie	391,502
	Chestnut Commons Apartmen	Kings	Consolidated Edison	Multifam New Construction, New Construction	300,000
	Citigroup Technology, Inc.	New York	Consolidated Edison	Industrial Process Effic, Industrial Process Efficie	220,097
	City Fuels LLC	New York	Consolidated Edison	FUEL NY, PGI00072 - City Fuels LLC	19,253
	City Parks Foundation	Bronx	Consolidated Edison	GREENING THE BRONX, Efficiency Planning &	861,871
	Climate Change &	Queens	Consolidated Edison	Commercial Real Estate Ten, CCES - Multisite	27,132
	Environmental			Commercial Real Estate Ten, Climate Change	7,000
	Code Green Solutions, Inc.	Kings	Consolidated Edison	Flexible Tech Assistance, RFP3628FlexTechCon	17,500
		New York	Consolidated Edison	Commercial Real Estate Ten, CodeGreen - 1211	15,000
				Flexible Tech Assistance, FT12064-ABS-915 Bro	11,625
				Flexible Tech Assistance, FT12065 - Fraglow-8W	14,250
				Flexible Tech Assistance, FT12066-Silk&Halpern	17,100
				Flexible Tech Assistance, RFP3628FlexTechCon	178,761
		Queens	Consolidated Edison	Flexible Tech Assistance, RFP3628FlexTechCon	19,128
		Richmond	Consolidated Edison	Flexible Tech Assistance, RFP3628FlexTechCon	48,000
	Cogeneration Contractors, Inc.	Bronx	Consolidated Edison	Combined Heat and Power, CHPA - Compass V	111,150
				Combined Heat and Power, CHPA - Morris Apart	111,150
		New York	Consolidated Edison	Combined Heat and Power, CHPA - Village East	232,050
	Concern for Independent Livin	Kings	Consolidated Edison	MULTIFAMILY PERFORMANCE PROGRAM, M	14,400
	Concourse Village, Inc.	Bronx	Consolidated Edison	Multifam Performance Pgm, Multifamily	1,310,400
	Cortex Building Intelligence, In	New York	Consolidated Edison	Real Time Enrgy Management, Cortex-350 5th A	140,400
	CPG Distribution Corp	Kings	Consolidated Edison	FUEL NY, PGI00295 - CPG Distribution Co	10,000
	Credit Suisse USA	New York	Consolidated Edison	Industrial Process Effic, Industrial Process Efficie	49,002
				NEW CONSTRUCTION PROGRAM, NCP12333	

Digital Realty Trust New York Consolidate Efision Real Time Engy Management, Dual Fuel-306 Str. 2 Dual Fuel Corp New York Consolidate Efision Real Time Engy Management, Dual Fuel-406 E. 2 Ebenezer Plaza Ower LLC Kings Consolidate Efision Multifiem New Consolution, New Construction, New York Consolidate Efision Consolidate Efision New York Consolidate Efision New York Consolidate Efision New York New York Consolidate Efision New York New York Consolidate Efision New York New Yor	REDC Region		County	Electric Utility	Contract Description	Total Funded Amount
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Ebenezer Plaza Duner LLC Kings Consolidated Elision Multifum Near Construction, New Construction 9 Ecosavo, Inc. Bronx Consolidated Elision Real Time Enroy Management, Ecosavo, 5001 P. 15 Energy & Resource Solution, Inc. Now York Consolidated Elision Industrial Process Effic, Technical Revew and Pr. 1 Inc. Ouccome Consolidated Elision Real Time Enroy Management, ETS - 353 Chest. 1 Inc. New York Consolidated Elision Real Time Enroy Management, ETS - 266-276 3 Inc. New York Consolidated Elision Real Time Enroy Management, Enrotiv - 100 Will. 1 Energy/Phot Insulation, LLC Richmond Consolidated Elision Real Time Enroy Management, Enrotiv - 100 Will. 1 Energiv/Phot Insulation, LLC Richmond Consolidated Elision Real Time Enroy Management, Enrotiv - 100 Will. 1 Energiv/Phot Insulation, LLC New York Consolidated Elision Real Time Enroy Management, Enrotiv - 400 W 2		Dual Fuel Corp	Kings	Consolidated Edison	Real Time Enrgy Management, Dual Fuel-304 St .	. 23,700
Ecosave, Inc. Brow Consolidated Edition Real Time Enrgy Management, Ecosave-Si01 P., 15 Employee Leasing of Greater. New York Consolidated Edition NVSERDA ADMINISTRATION, Temp Enrgy, Management, Efosave-Si01 P., 2 Energy Pathology Saving, Inc. Gueens Consolidated Edition Relat Time Enrgy Management, Efos-935 Chest. 2 EnergyPath Insulation, LLC Ringa Consolidated Edition Real Time Enrgy Management, Efos-935 Chest. 3 EnergyPath Insulation, LLC Ringa Consolidated Edition Real Time Enrgy Management, Efosave Sev. 4 EnergyPath Insulation, LLC Ringa Consolidated Edition Real Time Enrgy Management, Enretiv -100 Wil. 4 EnergyPath Insulation, LLC Ringa Consolidated Edition Real Time Enrgy Management, Enretiv -100 Wil. 4 Enterprise Community Partner. New York Consolidated Edition NY-SUN, Enterprise Solar Community 20 Enterprise Community Partner. New York Consolidated Edition NY Sun 72 Forothan Kire LLC New York Consolidated Edition NY Sun 72 Goodana/Genen NY, LLC <t< td=""><td></td><td>New York</td><td>Consolidated Edison</td><td>Real Time Enrgy Management, Dual Fuel-409 E</td><td>23,700</td></t<>			New York	Consolidated Edison	Real Time Enrgy Management, Dual Fuel-409 E	23,700
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Energy & Resource Solution, Inc. Kings Consolidated Edition Insulatial Process Effic, Technical Review and Pr. Queens Insulatial Process Effic, Technical Review and Pr. Energy Technology Saving, Inc. Kings Consolidated Edition Real Time Enrgy Management, ETS-353 Chess. 2 Real Time Enrgy Management, ETS-353 Chess. Real Time Enrgy Management, ETS-353 Chess. 3 Real Time Enrgy Management, ETS-353 Chess. Real Time Enrgy Management, ETS-353 Chess. 3 Energy Pro Insulation, LLC Richmend Consolidated Edition Real Time Enrgy Management, Enerthy - 401 W 2. 9 Energy Fro Insulation, LLC Richmend Consolidated Edition Real Time Enrgy Management, Enerthy - 401 W 2. 9 Real Time Enrgy Management, Enerthy - 401 W 2. New York Consolidated Edition Real Time Enrgy Management, Enerthy - 401 W 2. 9 Fordham University Brow York Consolidated Edition Real Time Enrgy Management, Enerthy - 401 W 2. 9 Fordham University Brow York Consolidated Edition Router, StribeB33 - Resolution. 92 Fordham University Brow York Consolidated Edition Router, StribeB33 - Resolution. 92		Ecosave, Inc.	Bronx	Consolidated Edison	Real Time Enrgy Management, Ecosave-5901 P	155,000
Inc. Oueons Consolidated Edison Pexible Tech Assistance. RFP3828PlexTechCon. 2 Energy Technology Savings, Knps Consolidated Edison Real Time Erroy Management, Errs - 363 Chest. Inc. Knps Consolidated Edison Real Time Erroy Management, Errs - 266-275 C. Real Time Erroy Management, Error - 200 Consolidated Edison Real Time Erroy Management, Error - 200 Chemerical Real Estate Time, Control Net Consolidated Edison Commercial Real Estate Time, Conduman Copelan. Proc New York Consolidated Edison Commercial Real Estate Time, Columnan Copelan. Proc New York Consolidated Edison Commercial Real Estate Time, Columnan Copelan. Proc New York Consolidated Edison Pon 2112 NF SUN Consolidated Edison Pon 2112 NF SUN Consolidated Edison Pon		Employee Leasing of Greater	New York	Consolidated Edison	NYSERDA ADMINISTRATION, Temp Employee	2,700
Lubers Consolidated Edison Persone Iren Assistance, RP-9302e Fixed Ford. 2014 Inc. Lubers Vork Consolidated Edison Real Time Enroy Management, ETS - 353 Chest, New York Consolidated Edison Real Time Enroy Management, ETS - 100 Volk Real Time Enroy Management, Enrot - 400 W 2 . 1 Energy Pro Insulation, LLC Richmond Consolidated Edison Real Time Enroy Management, Enrot - 400 W 2 . 1 Energy Pro Insulation, LLC Richmond Consolidated Edison Real Time Enroy Management, Enrot - 400 W 2 . 1 Real Time Enroy Management, Enrot - 400 W			Kings	Consolidated Edison	Industrial Process Effic, Technical Review and Pr.	3,837
Inc. Inc. New York Consolidated Edison Real Time Enrgy Management, Energy Tech-757, Real Time Enrgy Management, Energi - 262-275 C. Solidated Edison Energy/Pro Insulation, LLC Rintmond Consolidated Edison -2000K VP, NY-Sun Imagement, Energi - 767 Jr. 6 Energy/Pro Insulation, LLC Rintmond Consolidated Edison -2000K VP, NY-Sun 1 Energy Management, Energi - 401 W 2. Real Time Enrgy Management, Energi - 401 W 2. 1 Real Time Enrgy Management, Energi - 401 W 2. Real Time Enrgy Management, Energi - 401 W 2. 1 Financi - 100 Will. Real Time Enrgy Management, Energi - 401 W 2. 1 Financi - 100 Will. Real Time Enrgy Management, Energi - 401 W 2. 1 Financi - 100 Will. Real Time Enrgy Management, Energi - 401 W 2. 1 Financi - 100 Will. Real Time Enrgy Management, Energi - 401 W 2. 1 Financi - 100 Will. Real Time Enrgy Management, Energi - 401 W 2. 1 Enterprise Community Partner. New York Consolidated Edison NY Sun 1 Enterprise Community Partner. New York Consolidated Edison Commercial Real Estate Tim, Coldman Copelan 1		IIIC.	Queens	Consolidated Edison	Flexible Tech Assistance, RFP3628FlexTechCon.	23,248
Real Time Enrgy Management, ETS - 262 SC Real Time Enrgy Management, ETS - 262 SC Real Time Enrgy Management, ETS - 262 SC EnergyPro Insulation, LLC Richmond Consolidated Ediaon <200KW PV, NY-Sun			Kings	Consolidated Edison	Real Time Enrgy Management, ETS - 353 Chest	8,100
Real Time Enry Management, ETS, Inc757 3r 6 EnergyPro Insulation, LLC Richmond Consolidated Edison Real Time Enry Management, Enriv100 VIII. 1 Energiv Inc. New York Consolidated Edison Real Time Enry Management, Enriv100 VIII. 1 Enterprise Community Partner. New York Consolidated Edison NY-SUN, Entergy Management, Enriv100 VIII. 1 Enterprise Community Partner. New York Consolidated Edison NY-SUN, Entergy Management, Conrad NY-102. 1 Finetion River LLC New York Consolidated Edison NY SUN 1 Foreham University Branx Consolidated Edison NY SUN 1 Goldman Copeland Associates, Fuer Consolidated Edison Commercial Real Estate Ten, Goldman Copelan. 1 P.C. New York Consolidated Edison Commercial Real Estate Ten, Goldman Copelan. 1 P.C. New York Consolidated Edison Commercial Real Estate Ten, Goldman Copelan. 1 P.C. New York Consolidated Edison Commercial Real Estate Ten, Goldman Copelan. 1 P.C. New York Consolida		IIIC.	New York	Consolidated Edison	Real Time Enrgy Management, Energy Tech-757	36,126
EnergyPro Insulation, LLC Richmond Consolidated Edison Read Time Enrgy Management, Enertiv - 100 Will. Enertiv Inc. Kings Consolidated Edison Read Time Enrgy Management, Enertiv - 401 W 2. 1 New York Consolidated Edison Read Time Enrgy Management, Enertiv - 401 W 2. 1 Enterprise Community Partner. New York Consolidated Edison Nr-SUR, Entryprise Solar Community 20 Enterprise Community Partner. New York Consolidated Edison Nr-SUR, Entryprise Solar Community 20 Fortham University Brox Consolidated Edison Nr-SUR, Entryprise Solar Community 22 Go Solar/Tcleen NY, LLC Queens Consolidated Edison Commercial Nee Editor 1 Fortham University Brox Consolidated Edison Commercial Real Editate Ten, Goldman Copelan 1 Go Solar/Tcleen NY, LLC Queens Consolidated Edison Commercial Real Editate Ten, Goldman Copelan 1 FloxIble Tech Assistance, RFP3828FloxTechCon 22 Commercial Real Editate Ten, Goldman Copelan 1 FloxIble Tech Assistance, RFP3828FloxTechCon 1 FloxIble Tech Assistance, FIT2031					Real Time Enrgy Management, ETS - 266-275 C	6,840
Energiv Inc. Kings Consolidated Edison Real Time Enrgy Management, Enertiv - 100 Will. Image of the Enrgy Management, Enertiv - 101 W Z. 1 Enterprise Community Partine*. New York Consolidated Edison NY-SUN, Enterprise Solid Community 20 Enterprise Community Partine*. New York Consolidated Edison NY-SUN, Enterprise Solid Community 20 Enterprise Community Partine*. New York Consolidated Edison NY Sun 1 Fordham University Bronx Consolidated Edison NY Gun 1 22 Goldman Copeland Associates, File New York Consolidated Edison NY Sun 1 1 Goldman Copeland Associates, F.C. Queens Consolidated Edison Commercial Real Estate Tem, Goldman Copelan. 1 F.C. New York Consolidated Edison Commercial Real Estate Tem, Goldman Copelan. 1 Goldman Copeland Associates, Kings Consolidated Edison Commercial Real Estate Tem, Goldman Copelan. 1 Gommercial Real Estate Tem, Goldman Copelan. 1 Commercial Real Estate Tem, Goldman Copelan. 1 Reat Time Enrgy Management, Enretry Sulfanco C					Real Time Enrgy Management, ETS, Inc - 757 3r	65,597
New York Consolidated Edison Real Time Errgy Management, Enertiv - 401 W 2 1 Real Time Errgy Management, Enertiv - 401 W 2 4 Real Time Errgy Management, Enertiv - 401 W 2 4 Real Time Errgy Management, Enertiv - 401 W 2 4 Real Time Errgy Management, Enertiv - 401 W 2 4 Entic, Inc. New York Consolidated Edison NY SUN. Enterprise Solar Community 20 Florenton River LLC New York Consolidated Edison YSUN. Enterprise Solar Community 22 Go Solar/Green NY, LLC Queens Consolidated Edison Commercial Real Estate Ten, Goldman Copelan 1 Godiman Copeland Associates, Kings Consolidated Edison Commercial Real Estate Ten, Goldman Copelan 1 Godiman Copeland Associates, Kings Consolidated Edison Commercial Real Estate Ten, Goldman Copelan 1 Green 486 Owner LLC New York Consolidated Edison Commercial Real Estate Ten, Goldman Copelan 1 Green 486 Owner LLC New York Consolidated Edison PON 2112 NY SUN 4 Green 486 Owner LLC New York Consolidated Edison PON 2112 N		EnergyPro Insulation, LLC	Richmond	Consolidated Edison	<200KW PV, NY-Sun	6,003
Real Time Erroy Management, Enertiv - Multisite 4 Real Time Erroy Management, Enertiv - Multisite 4 Real Time Erroy Management, Enertiv - Multisite 20 Enterprise Community Partner. New York Real Time Erroy Management, Enertiv - Multisite 20 Entic, Inc. New York Real Time Erroy Management, Enertiv - Multisite 20 Fordham University Bronx Consolidated Edison NY Sun 1 Fordham University Bronx Consolidated Edison Commercial Real Estate Ten, Goldman Copelan 22 Goldman Copeland Associates, Kings Consolidated Edison Commercial Real Estate Ten, Goldman Copelan 1 Commercial Real Estate Ten, Goldman Copelan 1 Commercial Real Estate Ten, Goldman Copelan 1 Commercial Real Estate Ten, Goldman Copelan 1 Commercial Real Estate Ten, Goldman Copelan 1 Commercial Real Estate Ten, Goldman Copelan 1 Commercial Real Estate Ten, Goldman Copelan 1 Commercial Real Estate Ten, Goldman Copelan 1 Commercial Real Estate Ten, Goldman Copelan 1 Coreen Strep Sover Partnes Bronx		Enertiv Inc.	Kings	Consolidated Edison	Real Time Enrgy Management, Enertiv - 100 Will.	9,447
Real Time Enry Management, Enertiv-146 E 561. Enterprise Community Partner. New York Consolidated Edison NY-SUN, Enterprise Solar Community 20 Enter, Inc. New York Consolidated Edison NY-SUN, Enterprise Solar Community 20 Forcham University Bronx Consolidated Edison Fuel Cells, Fuel Cell Incentive - FC-013 28 Genting New York LLC Queens Consolidated Edison Commercial Real Estate Ten, Goldman Copelan. 1 Goldman Copeland Associates, Kings Consolidated Edison Commercial Real Estate Ten, Goldman & Copelan. 1 P.C. New York Consolidated Edison Commercial Real Estate Ten, Goldman & Copelan. 1 Commercial Real Estate Ten, Goldman Copelan. 1 1 1 1 P.C. New York Consolidated Edison Commercial Real Estate Ten, Goldman Copelan 1 Commercial Real Estate Ten, Goldman Copelan 1 1 1 1 Ferent Assistance, FFP3628FlexTechCon. 1 1 1 1 Gorder 465 Owner LLC New York Consolidated Edison 1 1			New York	Consolidated Edison	Real Time Enrgy Management, Enertiv - 401 W 2.	. 10,797
Enterprise Community Partner: New York Consolidated Edison NY-SUN, Enterprise Solar Community 20 Entic, Inc. New York Real Time Enrgy Management, Conrad NY-102. 1 Florenton River LLC New York Consolidated Edison NY Sun 1 Gortham University Bronx Consolidated Edison Consolidated Edison Consolidated Edison 200KW PV, NY Sun 1 Goldman Copeland Associates, Kings Consolidated Edison Commercial Real Estate Ten, Goldman Copelan. 1 F.C. New York Consolidated Edison Commercial Real Estate Ten, Goldman Copelan. 1 F.C. New York Consolidated Edison Commercial Real Estate Ten, Goldman Copelan. 1 Commercial Real Estate Ten, Goldman Copelan. 1 1 1 1 Commercial Real Estate Ten, Goldman Copelan. 1 1 1 1 Green 465 Owner LLC New York Consolidated Edison Forekite Tech Assistance, FF73628FiexTechCon. 2 Green Hybrid Energy Solution. Queens Consolidated Edison PON 2112 NY SUN 3 Green Hybrid Energy Solution. Queens Consolidated Edison <					Real Time Enrgy Management, Enertiv - Multisite	45,761
Entic, Inc. New York Real Time Enryy Management, Conad NY-102 1 Florenton River LLC New York Consolidated Edison Fuel Cells, Fuel Cell Incentive - FC-013 28 Genting New York LLC Queens Consolidated Edison Commercial New Construc, SF106883 - Resorts 22 Go Solar/Green NY, LLC Queens Consolidated Edison Commercial Real Estate Ten, Goldman Copelan 1 Goldman Copeland Associates, Kings Consolidated Edison Commercial Real Estate Ten, Goldman & Copelan 1 Florenton View York Consolidated Edison Commercial Real Estate Ten, Goldman & Copelan 1 Commercial Real Estate Ten, Goldman Copelan 1 Commercial Real Estate Ten, Goldman Copelan 1 Commercial Real Estate Ten, Goldman Copelan 1 Commercial Real Estate Ten, Goldman Copelan 1 Green Hybrid Energy Solution. Queens Consolidated Edison Flexible Tech Assistance, FT93628FlexTechCon 1 Green Hybrid Energy Solution. Queens Consolidated Edison Flexible Tech Assistance, FT12031 - Green 485 2 Green Hybrid Energy Solution. Queens Consolidated Edison NY Sun 2 ILC New					Real Time Enrgy Management, Enertiv-146 E 56t.	5,033
Florenton River LLC New York Consolidated Edison FV Sun 1 Fordham University Bronx Consolidated Edison Fuel Cells, Fuel Cell Incentive - FC-013 28 Genting New York LLC Queens Consolidated Edison Commercial New Construct, SF106883 - Resorts 222 Go Solar/Green NY, LLC Queens Consolidated Edison Commercial Real Estate Ten, Goldman Copelan. 1 Goldman Copeland Associates, Kings Consolidated Edison Commercial Real Estate Ten, Goldman Copelan. 1 P.C. New York Consolidated Edison Commercial Real Estate Ten, Goldman Copelan. 1 Ommercial Real Estate Ten, Goldman Copelan. 1 Commercial Real Estate Ten, Goldman Copelan. 1 Consolidated Edison Commercial Real Estate Ten, Goldman Copelan. 1 1 Green 485 Owner LLC New York Consolidated Edison Flexible Tech Assistance, FT12031 - Green 485 2 Green 485 Owner LLC New York Consolidated Edison PON 2112 NY SUN 3 Queens Consolidated Edison PON 2112 NY SUN 3 Green Hybrid Energy Solution. Queens Consolidated Edison NY-Sun 3		Enterprise Community Partner	New York	Consolidated Edison	NY-SUN, Enterprise Solar Community	200,000
Fordham UniversityBronxConsolidated EdisonFuel Cells, Fuel Cell Incentive - FC-01328Genting New York LLCQueensConsolidated EdisonCommercial New Construct, SF 106883 - Resorts22Go Solar/Green NY, LLCQueensConsolidated EdisonCommercial New Construct, SF 106883 - Resorts22Go Solar/Green NY, LLCQueensConsolidated EdisonCommercial Real Estate Ten, Goldman Copelan1Godman Copeland AssociatesKingsConsolidated EdisonCommercial Real Estate Ten, Goldman Copelan1P.C.New YorkConsolidated EdisonCommercial Real Estate Ten, Goldman Copelan1Commercial Real Estate Ten, Goldman Copelan1Commercial Real Estate Ten, Goldman Copelan1Green 485 Owner LLCNew YorkConsolidated EdisonFlexible Tech Assistance, FFP3628/FlexTechCon1Green 485 Owner LLCNew YorkConsolidated EdisonFlexible Tech Assistance, FF12031 - Green 485		Entic, Inc.	New York		Real Time Enrgy Management, Conrad NY-102	14,452
Genting New York LLCQueensConsolidated EdisonCommercial New Construc, SF 106883 - Resorts222Go Solar/Green NY, LLCQueensConsolidated Edison<200KW PV, NY Sun		Florenton River LLC	New York	Consolidated Edison	NY Sun	12,870
Go Solar/Green NY, LLC Queens Consolidated Edison <200KW PV, NY Sun		Fordham University	Bronx	Consolidated Edison	Fuel Cells, Fuel Cell Incentive - FC-013	288,750
Goldman Copeland Associates, Kings Consolidated Edison Commercial Real Estate Ten, Goldman Copelan 1 P.C. New York Consolidated Edison Commercial Real Estate Ten, Goldman & Copelan 1 New York Consolidated Edison Commercial Real Estate Ten, Goldman Copelan 1 Commercial Real Estate Ten, Goldman Copelan 1 Commercial Real Estate Ten, Goldman Copelan 1 Commercial Real Estate Ten, Goldman Copelan 1 Commercial Real Estate Ten, Goldman Copelan 1 Green 485 Owner LLC New York Consolidated Edison Commercial Real Estate Ten, Goldman Copelan 1 Green Street Power Partners Bronx Consolidated Edison PON 2112 NY SUN 4 Green Street Power Partners Kings Consolidated Edison PON 2112 NY SUN 3 Grid City Electric Corp New York Consolidated Edison NY-Sun 4 Group-S LLC New York Consolidated Edison NY-Sun 4 Green Street Power Partners Kings Consolidated Edison NY-Sun 4 Group-S LLC New York Consolidated Edison<		Genting New York LLC	Queens	Consolidated Edison	Commercial New Construc, SF106883 - Resorts	223,436
P.C. Flexible Tech Assistance, RFP3628FlexTechCon 2 New York Consolidated Edison Commercial Real Estate Ten, Goldman Copelan 1 Green 485 Owner LLC New York Consolidated Edison Commercial Real Estate Ten, Goldman Copelan 1 Green 485 Owner LLC New York Consolidated Edison Flexible Tech Assistance, FFP3628FlexTechCon 1 Green 485 Owner LLC New York Consolidated Edison PON 2112 NY SUN 4 Green Street Power Partners Bronx Consolidated Edison PON 2112 NY SUN 3 GRID Alternatives Tri-State, Inc. Kings Consolidated Edison PON 2112 NY SUN 3 Group-S LLC New York Consolidated Edison NY-Sun 4 Group-S LLC New York Consolidated Edison NY-Sun 4 Gueens Long Island Power Au <200KW PV, NY Sun		Go Solar/Green NY, LLC	Queens	Consolidated Edison	<200KW PV, NY Sun	15,000
New York Consolidated Edison Commercial Real Estate Ten, Goldman & Copela 1 Commercial Real Estate Ten, Goldman Copelan 1 Green 485 Owner LLC New York Consolidated Edison Flexible Tech Assistance, FT12031 - Green 485 2 Green Hybrid Energy Solution Queens Consolidated Edison NY Sun 2 Green Street Power Partnerg Bronx Consolidated Edison NY Sun 2 LLC Kings Consolidated Edison NY Sun 2 Grid City Electric Corp Kings Consolidated Edison NY-Sun 2 Group-S LLC New York Consolidated Edison NY-Sun 3 Guth Deconzo Consulting Eng Kings Consolidated Edison NY-Sun 1 Guth Deconzo Consulting Eng Kings Consolidated Edison NY-Sun 1 G			Kings	Consolidated Edison	Commercial Real Estate Ten, Goldman Copelan	10,997
Richmond Consolidated Edison Commercial Real Estate Ten, Goldman Copelan 1 Richmond Consolidated Edison Commercial Real Estate Ten, Goldman Copelan 1 Green 485 Owner LLC New York Consolidated Edison Commercial Real Estate Ten, Goldman Copelan 1 Green 485 Owner LLC New York Consolidated Edison PON 2112 NY SUN 2 Green Street Power Partner Bronx Consolidated Edison PON 2112 NY SUN 2 LLC Kings Consolidated Edison PON 2112 NY SUN 2 Green Street Power Partner, Inc. Kings Consolidated Edison PON 2112 NY SUN 3 Grid City Electric Corp New York Consolidated Edison NY-Sun 2 Group-S LLC New York Consolidated Edison NY-Sun 2 Group-S LLC New York Consolidated Edison NY-Sun 3 Group-S LLC New York Consolidated Edison NY-Sun 3 Grud Deconzo Consulting Eng. Kings Consolidated Edison NY-Sun 3 Grut Deconzo Con		P.G.			Flexible Tech Assistance, RFP3628FlexTechCon	26,271
Provide			New York	Consolidated Edison	Commercial Real Estate Ten, Goldman & Copela	10,997
Commercial Real Estate Ten, Goldman Copelan.1Flexible Tech Assistance, RFP3628FlexTechCon.1Green 485 Owner LLCNew YorkConsolidated EdisonFlexible Tech Assistance, FT12031 - Green 4852Green 485 Owner LLCNew YorkConsolidated EdisonFlexible Tech Assistance, FT12031 - Green 4852Green Hybrid Energy Solution.QueensConsolidated EdisonPON 2112 NY SUN4Green Street Power Partmer LLCBronxConsolidated EdisonPON 2112 NY SUN2QueensConsolidated EdisonPON 2112 NY SUN3QueensConsolidated EdisonPON 2112 NY SUN3GRID Alternatives Tri-State, Inc.KingsConsolidated EdisonNY-Sun2Grid City Electric Corp QueensNew YorkConsolidated EdisonNY-Sun4QueensLong Island Power Au. Queens<200KW PV, NY Sun					Commercial Real Estate Ten, Goldman Copelan	19,997
IncludingFiexible Tech Assistance, RFP3628FlexTechCon.1RichmondConsolidated EdisonCommercial Real Estate Ten, GoldmanCopelane.1Green 485 Owner LLCNew YorkConsolidated EdisonFlexible Tech Assistance, FT12031 - Green 4852Green Hybrid Energy Solution.QueensConsolidated EdisonPON 2112 NY SUN4Green Street Power Partners LLCBronxConsolidated EdisonPON 2112 NY SUN3Green Street Power Partners LLCKingsConsolidated EdisonPON 2112 NY SUN3Green Street Power Partners LLCKingsConsolidated EdisonPON 2112 NY SUN3Green Street Power Partners LLCKingsConsolidated EdisonNY-Sun3Grein City Electric CorpNew YorkConsolidated EdisonNY-Sun4QueensLonsolidated EdisonNY-Sun4QueensLonsolidated EdisonNY-Sun4QueensLonsolidated EdisonNY-Sun1Group-S LLCNew YorkConsolidated EdisonNY-Sun1Guth Deconzo Consulting Eng.KingsConsolidated EdisonREV Campus Challenge, RFP3628FlexTechCon.1Habitat Queens Phase II HDFCQueensConsolidated EdisonMultifam New Construction, New Construction7Home for Hartem Dowling IncNew YorkConsolidated EdisonMULTIFAMILY PERFORMANCE PROGRAM, M7Howe for Hartem Dowling IncNew YorkConsolidated EdisonMultifam New Construction, New Construction15					Commercial Real Estate Ten, Goldman Copelan	10,997
RichmondConsolidated EdisonCommercial Real Estate Ten, GoldmanCopelane1Green 485 Owner LLCNew YorkConsolidated EdisonFlexible Tech Assistance, FT12031 - Green 4852Green Hybrid Energy Solution.QueensConsolidated EdisonPON 2112 NY SUN4Green Street Power Partners LLCBronxConsolidated EdisonNY Sun2KingsConsolidated EdisonPON 2112 NY SUN3QueensConsolidated EdisonPON 2112 NY SUN3GRID Alternatives Tri-State, Inc.KingsConsolidated EdisonNY-Sun3Grid City Electric CorpNew YorkConsolidated EdisonNY-Sun4QueensLong Island Power Au<200KW PV, NY Sun					Commercial Real Estate Ten, Goldman Copelan	10,997
Green 485 Owner LLCNew YorkConsolidated EdisonFlexible Tech Assistance, FT12031 - Green 4852Green Hybrid Energy Solution.QueensConsolidated EdisonPON 2112 NY SUN4Green Street Power Partners LLCBronxConsolidated EdisonNY Sun2KingsConsolidated EdisonPON 2112 NY SUN3QueensConsolidated EdisonPON 2112 NY SUN3GRID Alternatives Tri-State, Inc.KingsConsolidated EdisonNY-Sun2Grid City Electric CorpNew YorkConsolidated EdisonNY-Sun4QueensLong Island Power Au.<200KW PV, NY Sun					Flexible Tech Assistance, RFP3628FlexTechCon	14,984
Green Hybrid Energy Solution.QueensConsolidated EdisonPON 2112 NY SUN4Green Street Power Partners LLCBronxConsolidated EdisonNY Sun2KingsConsolidated EdisonPON 2112 NY SUN3QueensConsolidated EdisonPON 2112 NY SUN3GRID Alternatives Tri-State, Inc.KingsConsolidated EdisonNY-Sun3Grid City Electric CorpNew YorkConsolidated EdisonNY-Sun4QueensLong Island Power Au<20KW PV, NY Sun			Richmond	Consolidated Edison	Commercial Real Estate Ten, GoldmanCopelane	10,997
Green Street Power Partners LLCBronxConsolidated EdisonNY Sun2KingsConsolidated EdisonPON 2112 NY SUN3QueensConsolidated EdisonPON 2112 NY SUN3GRID Alternatives Tri-State, Inc.KingsConsolidated EdisonNY-Sun3Grid City Electric CorpNew YorkConsolidated EdisonNY-Sun4QueensLong Island Power Au.<200KW PV, NY Sun		Green 485 Owner LLC	New York	Consolidated Edison	Flexible Tech Assistance, FT12031 - Green 485	. 23,750
LLCKingsConsolidated EdisonPON 2112 NY SUN3QueensConsolidated EdisonPON 2112 NY SUN3QueensConsolidated EdisonPON 2112 NY SUN3Pinc.KingsConsolidated EdisonNY-Sun2QueensNew YorkConsolidated EdisonNY-Sun4QueensLong Island Power Au.<200KW PV, NY Sun		Green Hybrid Energy Solution	Queens	Consolidated Edison	PON 2112 NY SUN	44,082
KingsConsolidated EdisonPON 2112 NY SUN3QueensConsolidated EdisonPON 2112 NY SUN3GRID Alternatives Tri-State, Inc.KingsConsolidated EdisonNY-Sun2Mew YorkConsolidated EdisonNY-Sun4Grid City Electric Corp CompositionNew YorkConsolidated EdisonNY-Sun4QueensLong Island Power Au.<200KW PV, NY Sun			Bronx	Consolidated Edison	NY Sun	21,000
GRID Alternatives Tri-State, Inc.KingsConsolidated EdisonNY-Sun2Grid City Electric CorpNew YorkConsolidated EdisonNY-Sun4QueensLong Island Power Au.<200KW PV, NY Sun		LLC	Kings	Consolidated Edison	PON 2112 NY SUN	38,455
Inc.New YorkConsolidated EdisonNY-SunGrid City Electric CorpNew YorkConsolidated EdisonNY-Sun4QueensLong Island Power Au<200KW PV, NY Sun			Queens	Consolidated Edison	PON 2112 NY SUN	38,880
Grid City Electric Corp New York Consolidated Edison NY-Sun 4 Queens Long Island Power Au <200KW PV, NY Sun			Kings	Consolidated Edison	NY-Sun	24,360
QueensLong Island Power Au.<200KW PV, NY SunGroup-S LLCNew YorkConsolidated EdisonFlexible Tech Assistance, FlexTech Consultant S1Guth Deconzo Consulting EngKingsConsolidated EdisonREV Campus Challenge, RFP3628FlexTechCon13H.E.L.P Development Corp.BronxConsolidated EdisonMultifam New Construction, MFNCP PPES T2-Cr13Habitat Queens Phase II HDFCQueensConsolidated EdisonLow Rise New Construction, New Construction14Harvest Power, LLCBronxConsolidated EdisonMULTIFAMILY PERFORMANCE PROGRAM, M14HP Woodycrest HousingBronxConsolidated EdisonMultifam New Construction, New Construction15HSBC Bank USA, N.A.New YorkConsolidated EdisonIndustrial Process Efficie4		Inc.	New York	Consolidated Edison	NY-Sun	7,848
Group-S LLC New York Consolidated Edison Flexible Tech Assistance, FlexTech Consultant S 1 Guth Deconzo Consulting Eng Kings Consolidated Edison REV Campus Challenge, RFP3628FlexTechCon 13 H.E.L.P Development Corp. Bronx Consolidated Edison Multifam New Construction, MFNCP PPES T2-Cr 13 Habitat Queens Phase II HDFC Queens Consolidated Edison Low Rise New Construction, New Construction 14 Home for Harlem Dowling Inc New York Consolidated Edison MULTIFAMILY PERFORMANCE PROGRAM, M 14 HSBC Bank USA, N.A. New York Consolidated Edison Industrial Process Efficie 44		Grid City Electric Corp	New York	Consolidated Edison	NY-Sun	40,320
Real Time Enrgy Management, Group S - 308 W1Guth Deconzo Consulting Eng KingsConsolidated EdisonREV Campus Challenge, RFP3628FlexTechCon13H.E.L.P Development Corp.BronxConsolidated EdisonMultifam New Construction, MFNCP PPES T2-Cr14Habitat Queens Phase II HDFCQueensConsolidated EdisonLow Rise New Construction, New Construction14Harvest Power, LLCBronxConsolidated EdisonNY-Sun7Home for Harlem Dowling IncNew YorkConsolidated EdisonMULTIFAMILY PERFORMANCE PROGRAM, M15HSBC Bank USA, N.A.New YorkConsolidated EdisonIndustrial Process Efficie4			Queens	Long Island Power Au	<200KW PV, NY Sun	458
Guth Deconzo Consulting EngKingsConsolidated EdisonREV Campus Challenge, RFP3628FlexTechCon13H.E.L.P Development Corp.BronxConsolidated EdisonMultifam New Construction, MFNCP PPES T2-Cr13Habitat Queens Phase II HDFCQueensConsolidated EdisonLow Rise New Construction, New Construction14Harvest Power, LLCBronxConsolidated EdisonNY-Sun7Home for Harlem Dowling IncNew YorkConsolidated EdisonMULTIFAMILY PERFORMANCE PROGRAM, M15HSBC Bank USA, N.A.New YorkConsolidated EdisonIndustrial Process Effic, Industrial Process Efficie4		Group-S LLC	New York	Consolidated Edison	Flexible Tech Assistance, FlexTech Consultant S	11,000
H.E.L.P Development Corp.BronxConsolidated EdisonMultifam New Construction, MFNCP PPES T2-CrHabitat Queens Phase II HDFCQueensConsolidated EdisonLow Rise New Construction, New ConstructionHarvest Power, LLCBronxConsolidated EdisonNY-SunHome for Harlem Dowling IncNew YorkConsolidated EdisonMULTIFAMILY PERFORMANCE PROGRAM, MHP Woodycrest HousingBronxConsolidated EdisonMultifam New Construction, New Construction15HSBC Bank USA, N.A.New YorkConsolidated EdisonIndustrial Process Effici, Industrial Process Efficie4					Real Time Enrgy Management, Group S - 308 W .	16,903
Habitat Queens Phase II HDFCQueensConsolidated EdisonLow Rise New Construction, New ConstructionHarvest Power, LLCBronxConsolidated EdisonNY-Sun7Home for Harlem Dowling IncNew YorkConsolidated EdisonMULTIFAMILY PERFORMANCE PROGRAM, M7HP Woodycrest HousingBronxConsolidated EdisonMultifam New Construction, New Construction15HSBC Bank USA, N.A.New YorkConsolidated EdisonIndustrial Process Efficie4		Guth Deconzo Consulting Eng	Kings	Consolidated Edison	REV Campus Challenge, RFP3628FlexTechCon	134,126
Harvest Power, LLCBronxConsolidated EdisonNY-Sun7Home for Harlem Dowling IncNew YorkConsolidated EdisonMULTIFAMILY PERFORMANCE PROGRAM, M7HP Woodycrest HousingBronxConsolidated EdisonMultifam New Construction, New Construction15HSBC Bank USA, N.A.New YorkConsolidated EdisonIndustrial Process Effici, Industrial Process Efficie4		H.E.L.P Development Corp.	Bronx	Consolidated Edison	Multifam New Construction, MFNCP PPES T2-Cr.	600
Home for Harlem Dowling IncNew YorkConsolidated EdisonMULTIFAMILY PERFORMANCE PROGRAM, MHP Woodycrest HousingBronxConsolidated EdisonMultifam New Construction, New Construction15HSBC Bank USA, N.A.New YorkConsolidated EdisonIndustrial Process Effic, Industrial Process Efficie4		Habitat Queens Phase II HDFC	Queens	Consolidated Edison	Low Rise New Construction, New Construction	5,100
HP Woodycrest Housing Bronx Consolidated Edison Multifam New Construction, New Construction 15 HSBC Bank USA, N.A. New York Consolidated Edison Industrial Process Effic, Industrial Process Efficie 4		Harvest Power, LLC	Bronx	Consolidated Edison	NY-Sun	72,963
HSBC Bank USA, N.A. New York Consolidated Edison Industrial Process Effic, Industrial Process Efficie 4		Home for Harlem Dowling Inc	New York	Consolidated Edison	MULTIFAMILY PERFORMANCE PROGRAM, M	3,611
		HP Woodycrest Housing	Bronx	Consolidated Edison	Multifam New Construction, New Construction	157,500
INF Associates LLC Kings Consolidated Edison Commercial Real Estate Ten, INF Associates LL 2		HSBC Bank USA, N.A.	New York	Consolidated Edison	Industrial Process Effic, Industrial Process Efficie	45,174
		INF Associates LLC	Kings	Consolidated Edison	Commercial Real Estate Ten, INF Associates LL	20,000
New York Consolidated Edison Commercial Real Estate Ten, INF Associates - 1			New York	Consolidated Edison	Commercial Real Estate Ten, INF Associates - 1	5,000

- 	INF Associates LLC	County New York	Electric Utility Consolidated Edison	Commercial Peol Estate Ten INE Associates I	Total Funded Amount 59,744
				Commercial Real Estate Ten, INF Associates LL	93,720
	InTech Energy, Inc. IntelliGen Power Systems, LLC	Bronx New York	Consolidated Edison Consolidated Edison	Real Time Enrgy Management, InTech-890 Was Combined Heat and Power, CHPA - 402 East 10	432,640
	Jaros, Baum & Bolles	New York	Consolidated Edison	Technical Services, AGG1002-Jaros, Baum & Bo	
	Jones Lang LaSalle Americas,		Consolidated Edison	Commercial Real Estate Ten, JLL Americas - Mul	
	Kamtech Restoration Corp	New York	Consolidated Edison	NY Sun	39,744
	· · ·				
	Kilowatt Engineering, Inc.	New York	Consolidated Edison	Industrial Process Effic, 2621 Umbrella Contract INDUSTRIAL PROCESS EFFICIENCY, 2621 U	31,950 10,484
	185 Energy Services Inc	New York	Consolidated Edison		6,000
	L&S Energy Services, Inc.	Queens	Consolidated Edison	Industrial Process Effic, Umbrella Contract Commercial New Construc, RFP3771 Umbrella	22,260
	L+M Workforce Housing Fund		Consolidated Edison	Multifam Performance Pgm, Multifamily	127,400
	Lincoln Center for the Perform.		Consolidated Edison	· · ·	
				Technical Services, OsEM10-Lincoln Center Perf	
	Local 32BJ Thomas Shortman		Consolidated Edison	Workforce Industry Partnership, PON 3715 Workf.	
	Manhattan College	Bronx	Consolidated Edison	Commercial New Construc, NCP16014 - Enginee	
	Martin Energy Group Services	-	Consolidated Edison	Combined Heat and Power, CHPA-CCMH Times	1,550,250
	Memorial Sloan Kettering Can		Consolidated Edison	Industrial Process Effic, Industrial Process Efficie	83,843
	MHANY 2004 HDFC	New York	Consolidated Edison	Multifam Performance Pgm, Multifamily	11,100
	MHSP Walton Owner LLC	Bronx	Consolidated Edison	Multifam New Construction, New Construction	83,600
	MLG 904 Development MM L	New York	Consolidated Edison	Multifam New Construction, New Construction	122,200
	Montefiore Medical Center	Bronx	Consolidated Edison	Workforce Industry Partnership, PON 3442	174,709
	Mount Sinai Medical Center	New York	Consolidated Edison	Flexible Tech Assistance, FT12053 - Mount Sinai	17,400
				Technical Services, OsEM-Icahn School of Medic.	214,000
	Mukti E 163rd Petroleum Inc	Bronx	Consolidated Edison	FUEL NY, PGI00290 - Mukti E 163rd Petro	13,250
	New York Methodist Hospital	Kings	Consolidated Edison	NEW CONSTRUCTION PROGRAM, NCP11889	360,359
	New York Presbyterian Hospit	New York	Consolidated Edison	Industrial Process Effic, Industrial Process Efficie	240,699
	NYU Langone Hospitals	New York	Consolidated Edison	Technical Services, OsEM13-C - NYU Langone	214,000
	OnForce Solar	Bronx	Consolidated Edison	NY Sun	454,896
		Richmond	Consolidated Edison	NY Sun	252,288
	Ove Arup & Partners Consulti	New York	Consolidated Edison	Commercial Real Estate Ten, ARUP - 40 West 2	50,000
	PGREF V 1301 Participating,	Kings	Consolidated Edison	Flexible Tech Assistance, FT12071-Paramount 1	39,400
	Pratt Institute Center for Com	Kings	Consolidated Edison	REV Campus Challenge, RM24 - Pratt Institute	19,874
	Premier Solar Solutions LLC	Queens	Consolidated Edison	NY Sun	221,526
				PON 2112 NY SUN	23,112
	Prescriptive Data	New York	Consolidated Edison	Real Time Enrgy Management, Prescriptive-1540	300,000
				Real Time Enrgy Management, PrescriptiveData	119,213
	Project Renewal, Inc.	Bronx	Consolidated Edison	NEW CONSTRUCTION PROGRAM, NCP12137	82,909
	Promesa Housing Developme	New York	Consolidated Edison	Multifam New Construction, MFNCP - Virginia Ho	54,200
	Quest Energy Group	New York	Consolidated Edison	Commercial Real Estate Ten, Quest - 111 West	15,000
	Randstad North America, Inc.	Kings	Consolidated Edison	CI Engy Siting & Soft Cost Red, Temp Services	21,000
				NYSERDA ADMINISTRATION, Temp Services C	4,000
	RE-Nuble, Inc.	New York	Consolidated Edison	Cleantech Ignition, PON 3871 Ignition Grants	98,982
	re: Charge-e, Inc.	New York	Consolidated Edison	CLEAN TRANSPORTATION, Inductive charging	
	Riseboro Community	Bronx	Consolidated Edison	Multifam New Construction, New Construction	268,000
	Partnership, Inc.	New York	Consolidated Edison	Multifam New Construction, New Construction	600,000
	Robert Derector Associates	Kings	Consolidated Edison	Commercial Real Estate Ten, Robert Derector - 1	
		New York	Consolidated Edison	Commercial Real Estate Ten, Robert Derector - 3	
	Safari Energy LLC	Queens	Consolidated Edison	NY Sun	39,600
	Salah Ehorgy EEO	Guorio		NY-Sun	33,000
			Concolidate d Edia	PON 2112 NY SUN	205,200
	Cohnoider Electric D. 1919				
	Schneider Electric Buildings Americas, I	New York	Consolidated Edison	Real Time Enrgy Management, Schneider - 1045 Real Time Enrgy Management, Schneider-225 Li	

REDC Region		County	Electric Utility	Contract Description	Total Funded Amount
New York City	Solar Energy Systems, LLC	Bronx	Consolidated Edison	PON 2112 NY SUN	99,360
		Queens	Consolidated Edison	NY Sun	41,400
	Solar Liberty Energy Systems,	Queens	Consolidated Edison	PON 2112 NY SUN	37,206
	Solar Plumbing Design Inc	Kings	Consolidated Edison	NY Sun	22,140
	Southside United HDFC - Los	Kings	Consolidated Edison	Multifam New Construction, New Construction	300,000
	St. Nicks Alliance	Kings	Consolidated Edison	Multifam New Construction, New Construction	287,000
	Steven Winter Associates, Inc.	Kings	Consolidated Edison	Real Time Enrgy Management, SWA - Multisite	. 10,100
		New York	Consolidated Edison	Flexible Tech Assistance, RFP3628FlexTechCon.	230,662
	SunPower Capital, LLC	Kings	Consolidated Edison	<200KW PV, NY Sun	5,940
				<200KW PV, NY-Sun	5,160
				<200KW PV, PON 2112 NY SUN	5,550
		Queens	Consolidated Edison	<200KW PV, NY Sun	5,132
				<200KW PV, PON 2112 NY SUN	10,552
		Richmond	Consolidated Edison	<200KW PV, NY Sun	13,284
	Tecogen	New York	Consolidated Edison	Combined Heat and Power, CHPA - 315 East 68th	189,922
	Tishman Speyer	Kings	Consolidated Edison	NEW CONSTRUCTION PROGRAM, NCP14019.	. 248,313
	Transit Wireless	New York	Consolidated Edison	Industrial Process Effic, Industrial Process Efficie	30,000
	TRC Energy Services	New York	Consolidated Edison	>200KW PV, Staff Augmentation Services	146,250
				CI Engy Siting & Soft Cost Red, Staff Augmentati	48,750
				Commercial New Construc, Staff Augmentation S.	46,174
				Industrial Process Effic, Technical Review and Pr.	3,867
				Low Rise New Construction, Staff Augmentation	55,409
				Multifam New Construction, Staff Augmentation	52,330
				New Construction- Commercial, Staff Augmentati.	
				New Construction- Housing, Staff Augmentation	107,739
				Rmve Barriers Dist Enrgy Storg, Staff Augmentati.	
	Trees New York	Bronx	Consolidated Edison	GREENING THE BRONX, Efficiency Planning &	
	TW NY Properties LLC	New York	Consolidated Edison	NEW CONSTRUCTION PROGRAM, NCP14049	
	U.S. Green Building Council,	New York	Consolidated Edison	Workforce Industry Partnership, PON 3715 Workf.	
	USE ACQUISITION LLC	New York	Consolidated Edison	Real Time Enrgy Management, USE - 120 W 97t.	
	Van Blarcom Closures, Inc.	Kings	Consolidated Edison	INDUSTRIAL PROCESS EFFICIENCY, Industria PON 2112 NY SUN	
	Venture Home Solar LLC	Queens	Consolidated Edison		16,481
		Richmond	Consolidated Edison	<200KW PV, PON 2112 NY SUN	5,175
	Verizon Communications Inc	New York	Consolidated Edison	Industrial Process Effic, Industrial Process Efficie	
	Vertiv Services, Inc.	New York	Consolidated Edison	Industrial Process Effic, Industrial Process Efficie	,
	Wagner College	Richmond	Consolidated Edison	REV Campus Challenge, RM27 - Wagner College	
	Warex Terminals Corporation	Queens	Consolidated Edison	FUEL NY, PGI00064 - Warex Terminals Cor	8,295
	Wenat Realty Associates	New York	Consolidated Edison	NEW CONSTRUCTION PROGRAM, NCP13208 .	
	Willdan Energy Solutions	New York	Consolidated Edison	Commercial Real Estate Ten, Willdan-425 West	9,950
	William Reynolds	Queens	Consolidated Edison	NY Sun	66
	WSP USA Corp.	New York	Consolidated Edison	Commercial New Construc, RFP3771 Umbrella	135,470
	Yardi Systems, Inc.	New York	Consolidated Edison	Real Time Enrgy Management, Yardi - 810 7th A	44,611
	YMCA of Greater New York	Bronx	Consolidated Edison	Commercial New Construc, NCP16038- Edenwal.	179,587
	Total				23,159,752
North Country	Adam C. Boese	Clinton	NYS Electric and Gas	Agriculture Energy Eff Pgm, RFP3628FlexTechC	2,500
		Lewis	National Grid	Technical Services, RFP3628FlexTechConsultU	2,500
		St. Lawrence	National Grid	Technical Services, RFP3628FlexTechConsultU	2,500
	Adirondack Battery & Solar, L	Jefferson	National Grid	<200KW PV, NY Sun	8,750
	ADK Solar	Essex	NYS Electric and Gas	<200KW PV, NY Sun	5,208
	Aeonsolar	St. Lawrence	National Grid	RENEWABLE HEAT NY, Aeon Heating - Baillarg	21,000
	Alternative Power Solutions of	Jefferson	National Grid	<200KW PV, NY Sun	6,038
	Antares Group, Inc.	Clinton	NYS Electric and Gas	Industrial Process Effic, Technical Review and Pr.	4,961

-		County	Electric Utility	Contract Description	Total Funded Amount
REDC Region North Country	Apex Solar Power LLC	Essex	National Grid	<200KW PV, PON 2112 NY SUN	31,500
	Bergmann Associates	Jefferson	National Grid	Agriculture Energy Eff Pgm, FlexTech Umbrella	2,500
				Flexible Tech Assistance, FlexTech Umbrella Agr	11,000
		Lewis	National Grid	Agriculture Energy Eff Pgm, FlexTech Umbrella	2,500
		St. Lawrence	National Grid	Flexible Tech Assistance, FlexTech Umbrella Agr	
				Renewable Heat NY, Tech Review_Support_Um	5,000
	CHA Consulting Inc.	St. Lawrence	National Grid	INDUSTRIAL PROCESS EFFICIENCY, Technic	22,600
	Cornerstone Energy Services	Essex	National Grid	RENEWABLE HEAT NY, Cornerstone - North Co	
		Franklin	National Grid	Renewable Heat NY, Cornerstone - Haney	15,975
		St. Lawrence	National Grid	Renewable Heat NY, Cornerstone - Bullard	19,503
				Renewable Heat NY, Cornerstone - Willard	12,000
	Croton Energy Group, Inc.	Essex	NYS Electric and Gas	<200KW PV, PON 2112 NY SUN	10,512
		Franklin	National Grid	<200KW PV, PON 2112 NY SUN	15,111
	DeChantal Apartments, Inc.	Franklin	National Grid	Multifam Performance Pgm, Multifamily	40,000
	Earth Sensitive Solutions, LLC	Lewis	National Grid	Geothermal Incentive Program, Large scale GSH.	22,800
	FFP NY Watertown Project1,	Jefferson	National Grid	>200KW PV, NY-Sun C&I Assignment	459,736
	Fourth Coast, Inc.	Jefferson	National Grid	<200KW PV, NY-Sun	7,705
	Frederick A Proven	Lewis	National Grid	<200KW PV, NY Sun	8,750
		St. Lawrence	National Grid	<200KW PV, NY Sun	19,632
	GWE Project HoldCo 4, LLC	St. Lawrence	National Grid	>200KW PV, NY-Sun C&I	559,837
	Helios NY I, LLC	Franklin	National Grid	>200KW PV, NY-Sun C&I	591,074
				NY-Sun	546,615
	International Paper	Essex	National Grid	CI Carbon Challenge, CI Carb. Chalenge: Intl. Pa	2,800,000
	Jefferson Community College	Jefferson	National Grid	Technical Services, OsEM17-C Jefferson Comm	58,615
	L&S Energy Services, Inc.	Franklin	National Grid	Renewable Heat NY, Umbrella Contract	2,904
		Jefferson	National Grid	Industrial Process Effic, Umbrella Contract	15,200
				Technical Services, RFP3628FlexTechConsultU	2,500
		St. Lawrence	National Grid	Flexible Tech Assistance, RFP3628FlexTechCon	4,443
				Renewable Heat NY, Umbrella Contract	2,938
	M/E Engineering, P.C.	St. Lawrence	National Grid	Commercial New Construc, RFP3771 Umbrella	37,150
	Max Solar Inc	Jefferson	National Grid	<200KW PV, NY Sun	23,828
				<200KW PV, PON 2112 NY SUN	6,993
		Lewis	National Grid	<200KW PV, NY Sun	5,180
	Northbrook Lyons Falls, LLC	Lewis	National Grid	REC:CES REC Contracts, CESRFP1_Tier 1 RE	8,618,492
	NY Mooers IV, LLC	Clinton	NYS Electric and Gas	>200KW PV, NY-Sun C&I	1,105,119
				LMI Community Solar, RFP3802 Low Income Co	1,004,900
	NYS Office of Parks, Recreati	Jefferson	National Grid	<200KW PV, PON 2112 NY SUN	10,044
	NYS Olympic Regional	Essex	National Grid	Industrial Process Effic, Industrial Process Efficie	32,228
	Development Auth.		NYS Electric and Gas	Industrial Process Effic, Industrial Process Efficie	324,615
	Oak Mountain	Hamilton	National Grid	Industrial Process Effic, Industrial Process Efficie	53,400
	OYA BLANCHARD ROAD 2 L	Jefferson	National Grid	>200KW PV, NY Sun	1,875,000
	OYA BLANCHARD ROAD LLC	Jefferson	National Grid	>200KW PV, NY-Sun	1,875,000
	OYA GREAT LAKES SEAWA	Jefferson	National Grid	>200KW PV, NY Sun	1,875,000
	OYA NYS RTE 12 LLC	Jefferson	National Grid	>200KW PV, NY Sun	1,875,000
	OYA State Route 122 LLC	Franklin	NYS Electric and Gas	>200KW PV, NY Sun	1,875,000
	Paradise Energy Solutions, LL	Jefferson	National Grid	<200KW PV, NY Sun	79,225
	PPM Roaring Brook, LLC	Lewis	National Grid	REC:CES REC Contracts, Large-Scale Renewab	118,949,065
	RHM Inc.	St. Lawrence	Municipal Utilities	RENEWABLE HEAT NY, Aeon Heating - Baillarg	21,000
			National Grid	Renewable Heat NY, Aeon - Coots	21,000
	Sunvestment Group LLC	Franklin	National Grid	>200KW PV, NY Sun	503,010
	Titus Mountain Family Ski Ce	Franklin	National Grid	Industrial Process Effic, Industrial Process Efficie	240,000

REDC Region		County	Electric Utility	Contract Description	Total Funded Amoun
North Country	Village of Champlain	Clinton	NYS Electric and Gas	Clean Energy Communities, CEC701104 - Villag.	50,000
	Village of Saranac Lake	Franklin	National Grid	Clean Energy Communities, CEC701022 - Villag.	50,000
	Total				145,937,924
Southern Tier	237 State Route 96 Site 1, LLC	Tioga	NYS Electric and Gas	>200KW PV, NY Sun	1,580,800
	237 State Route 96 Site 2, LLC	Tioga	NYS Electric and Gas	>200KW PV, NY Sun	1,501,760
	602 Partners LLC	Broome	NYS Electric and Gas	Multifam Performance Pgm, Multifamily	201,600
	Adam C. Boese	Broome	NYS Electric and Gas	Technical Services, RFP3628FlexTechConsultU	5,000
		Chenango	NYS Electric and Gas	Technical Services, RFP3628FlexTechConsultU.	2,500
		Schuyler	NYS Electric and Gas	Technical Services, RFP3628FlexTechConsultU	2,500
		Tioga	NYS Electric and Gas	Technical Services, RFP3628FlexTechConsultU.	2,500
		Tompkins	NYS Electric and Gas	Technical Services, RFP3628FlexTechConsultU	2,500
	Alternative Power Solutions of	Schuyler	NYS Electric and Gas	<200KW PV, NY Sun	8,750
	Amphenol Corporation	Delaware	NYS Electric and Gas	>200KW PV, NY Sun	2,216,970
	Antares Group, Inc.	Broome	NYS Electric and Gas	INDUSTRIAL PROCESS EFFICIENCY, Technic	2,251
		Tompkins	NYS Electric and Gas	INDUSTRIAL PROCESS EFFICIENCY, Technic	1,918
	Arcadis of New York, Inc.	Tioga	NYS Electric and Gas	Technical Services, RFP3628FlexTechConsultU	2,500
	Bergmann Associates	Chenango	NYS Electric and Gas	Commercial Real Estate Ten, Bergmann - Eaton	5,000
				Commercial Real Estate Ten, Bergmann - Eaton	5,000
				Commercial Real Estate Ten, Bergmann - Eaton	5,000
				Commercial Real Estate Ten, Bergmann - Tenan	5,000
				Commercial Real Estate Ten, Bergmann - The E	5,000
				Commercial Real Estate Ten, Bergmann- Eaton	5,000
				Commercial Real Estate Ten, Bergmann- Eaton	5,000
				Commercial Real Estate Ten, Bergmann- Eaton	5,000
		Steuben	NYS Electric and Gas	Flexible Tech Assistance, FlexTech Umbrella Agr.	. 10,000
	Binghamton Northside LP	Broome	NYS Electric and Gas	Multifam New Construction, New Construction	48,000
	Corning Inc.	Steuben	NYS Electric and Gas	Industrial Process Effic, Industrial Process Efficie	179,010
				On-Site Energy Manager, OsEM14-I-Erwin Manu	213,498
	Eiger 3970 Consultants Inc.	Delaware	NYS Electric and Gas	<200KW PV, NY Sun	6,300
	EME Consulting Engineering	Delaware	NYS Electric and Gas	Agriculture Energy Eff Pgm, RFP3628FlexTechC	2,500
	Extraterrestrial Materials Inc.	Broome	NYS Electric and Gas	<200KW PV, NY Sun	31,019
				<200KW PV, PON 2112 NY SUN	8,540
	Finger Lakes Energy Corp	Tompkins	NYS Electric and Gas	REC:CES REC Contracts, Large-Scale Renewab.	. 23,700
	G.W. Ehrhart, Inc.	Tioga	NYS Electric and Gas	Renewable Heat NY, Ehrhart Energy - Hammond	21,000
				Renewable Heat NY, Ehrhart Energy - Mandeville	12,000
	George E Denmark II	Chemung	NYS Electric and Gas	<200KW PV, NY Sun	15,552
		Steuben	NYS Electric and Gas	<200KW PV, NY Sun	5,119
	Ithaca College	Tompkins	NYS Electric and Gas	Flexible Tech Assistance, FT12024 - Ithaca Colle.	14,428
	L&S Energy Services, Inc.	Delaware	NYS Electric and Gas	Industrial Process Effic, Umbrella Contract	2,200
		Schuyler	NYS Electric and Gas	Technical Services, RFP3628FlexTechConsultU	2,500
	NY Baldwin I, LLC	Chemung	NYS Electric and Gas	>200KW PV, NY-Sun C&I	1,105,119
	NY Baldwin II, LLC	Chemung	NYS Electric and Gas	>200KW PV, NY-Sun C&I	1,281,677
	O'Brien & Gere Engineers, Inc.	Broome	NYS Electric and Gas	Commercial New Construc, RFP3771 Umbrella	21,039
	Opportunities for Broome, Inc.	Broome	NYS Electric and Gas	Low Rise New Construction, New Construction	50,000
	Paradise Energy Solutions, LL	Steuben	NYS Electric and Gas	<200KW PV, NY Sun	5,082
	PlugPV, LLC	Chenango	NYS Electric and Gas	<200KW PV, PON 2112 NY SUN	6,836
	Renovus Energy, Inc.	Chemung	NYS Electric and Gas	<200KW PV, NY Sun	6,038
		Chenango	NYS Electric and Gas	<200KW PV, NY Sun	8,220
		Schuyler	NYS Electric and Gas	<200KW PV, PON 2112 NY SUN	167,761
		Steuben	NYS Electric and Gas	<200KW PV, PON 2112 NY SUN	153,698
		Tioga	NYS Electric and Gas	<200KW PV, NY Sun	352,338

REDC Region		County	Electric Utility	Contract Description	Total Funded Amount
Southern Her	Renovus Energy, Inc.	Tompkins	NYS Electric and Gas	<200KW PV, NY Sun	17,389
				<200KW PV, PON 2112 NY SUN	6,038
	Sepac Incorporated	Chemung	NYS Electric and Gas	<200KW PV, NY-Sun	183,553
	Ski Plattekill, Inc.	Delaware	NYS Electric and Gas	Industrial Process Effic, Industrial Process Efficie.	
	Taitem Engineering, P.C.	Broome	NYS Electric and Gas	<200KW PV, NY Sun	5,265
		Tompkins	NYS Electric and Gas	<200KW PV, NY Sun	12,627
				<200KW PV, NY-Sun	5,218
				Commercial New Construc, RFP3771 Umbrella	21,100
	Tesla Energy Operations Inc	Broome	NYS Electric and Gas	>200KW PV, NY Sun	868,756
	Tompkins Cortland Communit	Tompkins	NYS Electric and Gas	Technical Services, OsEM18-C - Tompkins Cortl	83,705
	Town of Danby	Tompkins	NYS Electric and Gas	Clean Energy Communities, CEC001242 - Town .	. 99,814
	Town of Hamden	Delaware	NYS Electric and Gas	Clean Energy Communities, CEC001382 - Town .	. 50,000
	Town of Middletown	Delaware	NYS Electric and Gas	Clean Energy Communities, CEC001299 - Town .	. 50,000
	Vecino Group New York, LLC	Tompkins	NYS Electric and Gas	Multifam New Construction, New Construction	92,000
	Watkins Glen Solar Energy C	Schuyler	NYS Electric and Gas	REC:CES REC Contracts, Watkins Glen Solar E	43,413,832
	WNY Rural Preservation, LP	Steuben	NYS Electric and Gas	Multifam Performance Pgm, Multifamily	16,800
	Xzerta Energy Group LLC	Tioga	NYS Electric and Gas	>200KW PV, NY Sun	1,594,080
	Total				56,214,278
Statewide	Null	STATEWIDE	Statewide	NY Green Bank, CCR - Upsize #2	20,000,000
				NY Green Bank, Delaware River Solar	25,000,000
				NY Green Bank, DRS Construction Revolver	25,000,000
				NY Green Bank, Valcour Wind OpCo	33,750,000
	Abakama LLC	STATEWIDE	Statewide	OTHER PROGRAM AREA, Innovation Advisory	75,000
	ABB, Incorporated	STATEWIDE	Statewide	OREC: Technical Support, RFQL3685 Round 1	236,500
	Abt Associates Inc.	STATEWIDE	Statewide	Environmental Research, Community Flood Risk	35,854
	ACEEE	STATEWIDE	Statewide	Prof & Expert Engagement, 2019 ACEEE Memb	10,000
	Adirondack Area Network	STATEWIDE	Statewide	NYSERDA ADMINISTRATION, Video Recording	
	AFP 108 Corp	STATEWIDE	Statewide	Low-Income Forum on Energy, Life 2019 Reg Mt.	
	Alberto Aceves Cornejo	STATEWIDE	Statewide	Agbotic - Tech. Due Diligence	10,000
	Alliance for Sustainable	STATEWIDE	Statewide	Nat'l OffShWind R&D Consortium, NREL for OS.	79,672
	Energy, LLC	ONALEMBE	otatomao	NREL for OSW Consortium	40,328
	Alliance to Save Energy	STATEWIDE	Statewide	Prof & Expert Engagement, 2019 ASE Members	25,000
	Amer Assoc for the Advance o		Statewide	Environmental Research, Tech Peer Review/Man.	
	American Council for an Ener		Statewide	Subscription/Data Access, Research Support for .	,
	Apprise, Incorporated			Advancing Ag Enrgy Technologie, RFQ3183 Um.	
	Apprise, incorporated	STATEWIDE	Statewide		
				Affordable Housing Build & Dev, Research and a	
				Greenhouse Light & Systems Eng, RFQ3183 Um.	
	Arreadia of New York, Inc.		Otatawida	Technical Services, RFQ3183 Umbrella Agreeme.	
	Arcadis of New York, Inc.	STATEWIDE	Statewide	Commercial New Construct, Staff Augmentation S.	
				Low Rise New Construction, Staff Augmentation	
				Multifam New Construction, Staff Augmentation	24,665
				New Construction- Commercial, Staff Augmentati.	
				New Construction- Housing, Staff Augmentation	
				OREC: Technical Support, Large Scales Renewa.	
	Associated Power Analysts Inc.		Statewide	Rmve Barriers Dist Enrgy Storg, Energy Storage	48,000
	Association for Energy Afforda		Statewide	Workforce Industry Partnership, PON 3715 Workf.	
	Atlas Public Policy	STATEWIDE	Statewide	Electric Vehicles - Innovation, Clean Transportati	
				Electric Vehicles - Innovation, EVaulateNY suppor	1 9,401
	B & W Sound Services, Inc.	STATEWIDE	Statewide	OTHER PROGRAM AREA, 2018 76West Finals	12,950
	BDO USA LLP	STATEWIDE	Statewide	NEW YORK GREEN BANK, Background Investig.	. 2,500
	Benchemark Printing, Inc.	STATEWIDE	Statewide	OTHER PROGRAM AREA, Printing Services - E	5,000
	Bergmann Associates	STATEWIDE	Statewide	EXISTING FACILITIES, TWO_EFP/DMP_QA/QC	17,600

-	Contractor	County	Electric Utility	Contract Description	Total Funded Amount
atewide	Bergmann Associates	STATEWIDE	Statewide	Flexible Tech Assistance, Tech Review_Support	35,000
				FLEXIBLE TECHNICAL ASSISTANCE, Tech Re	35,000
				Renewable Heat NY, Tech Review_Support_Um	2,600
				REV Campus Challenge, Tech Review_Support	30,000
				Technical Services, Tech Review_Program Supp	140,000
	BioDiversity Research Institute	STATEWIDE	Statewide	Off-Shore Wind Pre-Dev Act, BRI: TWO umbrella.	340,682
	Bloomberg Finance LP	STATEWIDE	Statewide	ENERGY ANALYSIS, Bloomberg Datafeed Acce	22,500
				NEW YORK GREEN BANK, Bloomberg Datafee	15,224
				Subscription/Data Access, Bloomberg Datafeed	22,500
	Bloomberg, L.P.	STATEWIDE	Statewide	ENERGY ANALYSIS, Bloomberg Datafeed Acce	22,500
				NEW YORK GREEN BANK, Bloomberg Datafee	22,500
				Subscription/Data Access, Bloomberg Datafeed	22,500
	Boecker Consulting Services	STATEWIDE	Statewide	Environmental Research, Facilitate DevIpmt Proc.	12,400
	Borrego Solar Systems, Inc.	STATEWIDE	Statewide	Rmve Barriers Dist Enrgy Storg, Energy Storage	3,716,899
	Buckeye Terminals, LLC	STATEWIDE	Statewide	FUEL NY, Upstate NY Strategic Fuels Res	1,343,000
	Build Edison LLC	STATEWIDE	Statewide	OTHER PROGRAM AREA, Innovation Advisors	125,000
	Business Network for Maryland	STATEWIDE	Statewide	Off-Shore Wind Master Plan, 2019 IPF Conferen	48,800
	Offshore W			Prof & Expert Engagement, 2019 IPF Conference	1,200
	Carbon Trust Advisory Limited	STATEWIDE	Statewide	Carbon Trust OSW Consortium	20,164
				Nat'l OffShWind R&D Consortium, Carbon Trust	39,836
	Center for Sustainable Energy	STATEWIDE	Statewide	Electric Vehicles - Rebate, TWO #3 - Drive Clean.	1,331,278
				Residential-Engaging New Mkts, RFP3945 Home.	499,060
	CHA Consulting Inc.	STATEWIDE	Statewide	Commercial Imp Assist, Outreach Support	9,500
	-			Flexible Tech Assistance, Outreach Support	9,500
	Channel Capital LLC	STATEWIDE	Statewide	OTHER PROGRAM AREA, Innovation Advisor	125,000
	Chloe Capital SPV Manager L	STATEWIDE	Statewide	M-Corps, Technology to Market	15,000
	City and State	STATEWIDE	Statewide	NYSERDA ADMINISTRATION, City and State A	5,900
	City of Amsterdam	STATEWIDE	Statewide	Clean Energy Communities, CEC600876 City of	
	Clarkson University	STATEWIDE	Statewide	Energy Storage Tech/Prod Dev, PON 3585 Roun.	
				OTHER PROGRAM AREA, PON3249 Additive M.	
	Clean Power Research	STATEWIDE	Statewide	Electric Vehicles - Innovation, PO for 2019 WattP.	
	CMC Energy Services, Inc	STATEWIDE	Statewide	Intervention Effectiv Training, Community Blitz Pil.	
	Cohen Ventures Inc	STATEWIDE	Statewide	Product Standards, FlexTech Consultant Selection	
	Combined Energies LLC	STATEWIDE	Statewide	Energy Storage Tech/Prod Dev, PON 3585 Ener	50,000
	Consortium for Energy Efficie		Statewide	Prof & Expert Engagement, Industrial Process Eff.	
	Constellation Energy Nuclear		Statewide	ZEC:CES ZEC Payments, ZEC - Nuclear Facilities	
	Continental Automated Buildin.		Statewide	Subscription/Data Access, market research for N	, ,
	Cornell University	STATEWIDE	Statewide	OTHER PROGRAM AREA, 76West Building a Cl.	
	Comen Oniversity	STATEWIDE	Slalewide		
	CTOULLO		Statowida	OTHER PROGRAM AREA, Sponsor Cornell Ene	
	CTG:I LLC	STATEWIDE	Statewide	OTHER PROGRAM AREA, Online subscription t	
	Dagmy Motors Inc.	STATEWIDE	Statewide	Energy Storage Tech/Prod Dev, PON 3585 R2	497,873
	Darling Advertising Agency Inc.	STATEWIDE	Statewide	New Construction- Housing, Marketing Support f	75,000
				NYSERDA ADMINISTRATION, Marketing Suppo.	
				NYSERDA ADMINISTRATION, TWO #7 Strat Co.	
	Dimien Inc.	STATEWIDE	Statewide	Cleantech Ignition, PON 3871 Ignition Grants	100,000
	DNV GL Energy Insights USA Inc.	STATEWIDE	Statewide	ADVANCED BUILDINGS, Evaluation Oversight	229,844
				Campus/Technical Assistance, RFQ 3183 KEMA	
				Community RH&C, RFQ 3183 KEMA, Inc	39,079
				EVALUATION, RFQ 3183 KEMA, Inc	1,004,029
				Flexible Tech Assistance, RFQ 3183 KEMA, Inc	37,760
				Geothermal Incentive Program, RFQ 3183 KEMA.	288,438
				NEW YORK GREEN BANK, RFQ 3183 KEMA, Ind	903,307

REDC Region		County	Electric Utility	Contract Description	Total Funded Amount
Statewide	DNV GL Energy Insights USA Inc.	STATEWIDE	Statewide	Off-Shore Wind Pre-Dev Act, RFP3855 Cat2 DM	363,700
				Renewable Heat NY, RFQ 3183 KEMA, Inc	313,438
	DNV KEMA Renewables Inc.	STATEWIDE	Statewide	Off-Shore Wind Pre-Dev Act, RFP3855 Cat2 DM	363,700
	E Source Companies LLC	STATEWIDE	Statewide	Subscription/Data Access, Market Insights	39,000
	Earth Environmental Group,	STATEWIDE	Statewide	RENEWABLE THERMAL, Clean Heating & Cooli	23,994
	LLC			RENEWABLE THERMAL, Solar Thermal	19,627
				RENEWABLE THERMAL, Solar Thermal Incentiv	106,340
				RENEWABLE THERMAL, ST Incentive Program	13,916
	Ecology and Environment	STATEWIDE	Statewide	Commercial Imp Assist, Commercial Market Eng	44,814
	Engineering, PC			Flexible Tech Assistance, Commercial Market En	88,661
				Off-Shore Wind Pre-Dev Act, RFP3462 Umbrella	186,600
				Off-Shore Wind Pre-Dev Act, TWO#17 Fishing L	97,600
				Off-Shore Wind Pre-Dev Act, TWO#18 G&G surv	84,700
				REV Campus Challenge, Commercial Market En	133,475
	Efficiency Forward, Inc.	STATEWIDE	Statewide	Prof & Expert Engagement, 2019 DesignLights S	25,000
				Prof & Expert Engagement, DesignLights 2018 S	25,000
	Ekostinger, Inc.	STATEWIDE	Statewide	76 West, 76 West Energy Bus Competition	1,000,000
	Electric Power Research	STATEWIDE	Statewide	Electric Vehicles - Innovation, PON 3578 R1 CAT1	74,500
	Institute			High Performing Grid, RFP3265 Umbrella Contra	470,000
	Electrification Coalition Found.	STATEWIDE	Statewide	Electric Vehicles - Innovation, EV Awareness Ca	50,000
	Elisa Miller-Out	STATEWIDE	Statewide	OTHER PROGRAM AREA, RFP 3859	150,000
	EME Consulting Engineering	STATEWIDE	Statewide	EXISTING FACILITIES, RFP3628FlexTechCons	37,500
	Group, LLC	ONTEMBE	olatomao	Flexible Tech Assistance, RFP3628FlexTechCon.	9,375
				FLEXIBLE TECHNICAL ASSISTANCE, RFP362	28,125
	Energetics, Incorporated	STATEWIDE	Statewide	Electric Vehicles - Innovation, Planning Board EV.	40,000
	Energetics, incorporated	STATEWIDE	Olalewide	EVALUATION, RFQL3685 Round 1	7,605
	Energy & Environmental Rese.	STATEWIDE	Statewide	OTHER PROGRAM AREA, Blockchain study	45,000
	Energy & Resource Solutions,		Statewide		10,000
	Energy and Environmental	STATEWIDE	Statewide	Commercial New Construct, New Construction	48,201
	Economics Inc.	STATEWIDE	Statewide	Community RH&C, Tech Assist, REV Pool.	
				Electric Vehicles - Innovation, BCA of EV grid im	15,277
				ENERGY ANALYSIS, 101127 TWO#14	800,000
				ENERGY ANALYSIS, TWO#15 Solar PV Adoptio	75,000
				Mkt Char: Tech Assist, TWO 13 - VDER Phase 2	350,000
				Mkt Char: Tech Assist, TWO# 14 - Grid Value Mo	100,000
				Rmve Barriers Dist Enrgy Storg, Tech Assist, RE	277,815
	Energy Improvement Corporation	STATEWIDE	Statewide	CLEANER GREENER COMMUNITIES, CGC398	286,645
				GJGNY REVOLVING LOAN FUND, EIC PACE fi	500,000
	Ensave, Inc.	STATEWIDE	Statewide	Technical Services, AEEP Implementation Contr	1,092,660
	Environmental Defense Fund	STATEWIDE	Statewide	Commercial Real Estate Ten, LargeCommRE_M	50,000
				Commercial Real Estate Ten, Support_NYC Car	50,000
	Eonix LLC	STATEWIDE	Statewide	Energy Storage Tech/Prod Dev, PON 3585 R2	200,000
	Essense Partners Inc.	STATEWIDE	Statewide	Electric Vehicles - Innovation, PON 3578 R1 CAT4	118,130
				OTHER PROGRAM AREA, Marketing Support fo	247,500
	Exelon Generation Company,	STATEWIDE	Statewide	ZEC:CES ZEC Payments, ZEC Nuclear Facilities	269,655,753
	First Colonie Company	STATEWIDE	Statewide	Environmental Research, AQHE Research Work	30,000
	Four Points Group, Inc.	STATEWIDE	Statewide	ENERGY ANALYSIS, TWO #2 - NPP 60+	75,000
				OTHER PROGRAM AREA, RFQL 3685 R2	86,039
	Frontier Energy, Inc.	STATEWIDE	Statewide	Air Source Heat Pumps, Develop ASHP Pro For	4,980
				Geothermal Incentive Program, 3695 TWO Umbr	400,000
	Fugro Marine GeoServices, In	STATEWIDE	Statewide	Off-Shore Wind Pre-Dev Act, TWO 1 Agreement	27,860
	Fugro USA Marine, Inc.	STATEWIDE	Statewide	Off-Shore Wind Pre-Dev Act, TWO 1 Agreement	27,860
	Gas Technology Institute	STATEWIDE	Statewide	NextGen HVAC, PON3519 Round 1.	230,943

REDC Region	Contractor	County	Electric Utility	Contract Description	Total Funded Amount
Statewide	General Electric International I	STATEWIDE	Statewide	GE MAPS Software	391,500
	Global Change Associates Inc.	STATEWIDE	Statewide	Cleantech ICC Engage, 18th Annual WSGS Spo	5,000
	Green Light New York, Inc.	STATEWIDE	Statewide	New Construction- Housing, New Construction	50,000
	Greentech Media Inc.	STATEWIDE	Statewide	NY-SUN, GTM Solar Subscription	25,000
				Subscription/Data Access, Market Insights	57,500
	Grid Strategies, LLC	STATEWIDE	Statewide	Mkt Char: Tech Assist, Bulk Power System Reso	200,000
	Harris Beach PLLC	STATEWIDE	Statewide	Code to Zero, Codes, Products and Standards	20,000
	Holland & Knight LLP	STATEWIDE	Statewide	NEW YORK GREEN BANK, Green Bank Outside.	. 186,384
	Honeywell International Inc.	STATEWIDE	Statewide	3695 TWO Umbrella Agreement	75,000
				ASSISTED HOME PERFORMANCE WITH ENE	18,170
				EMPOWER NY, 3695 TWO Umbrella Agreement	143,661
				Home Perf w Energy Star, 3695 TWO Umbrella	674,039
				HOME PERFORMANCE WITH ENERGY STAR, .	9,130
	Hyatt Corporation as agent for	STATEWIDE	Statewide	Off-Shore Wind Master Plan, Reception at IPF C	17,032
	Hyatt Equ			Off-Shore Wind Pre-Dev Act, Reception at IPF C	1,568
	ICF Resources, LLC	STATEWIDE	Statewide	Combined Heat and Power, Task Work Order #3	49,958
				ENERGY ANALYSIS, RFQL 3685 - Flexergy 3.0	291,483
				ENERGY ANALYSIS, Tech Assist, REV Pool	269,783
				OTHER PROGRAM AREA, Tech Assist, REV Po	5,217
	IHS Global Inc.	STATEWIDE	Statewide	ENERGY ANALYSIS, IHS/CERA Subscription	32,750
				FUEL NY, OPIS Rack Price Subscription	8,736
	Industrial Economics,	STATEWIDE	Statewide	ENERGY ANALYSIS, EE Supply Curve Analysis	159,788
	Incorporated			Mkt Char: Tech Assist, EE Supply Curve Analysis	89,881
	Institute for Building	STATEWIDE	Statewide	Air Source Heat Pumps, 3695 TWO Umbrella Ag	125,000
	Technology and Sa			SQA - LS50 Direct Contract	25,000
	Institute for Market Transform	STATEWIDE	Statewide	Intervention Effectiv Training, Market Insights	50,000
	Interstate Renewable Energy	STATEWIDE	Statewide	Workforce Industry Partnership, PON 3715 Workf.	249,007
	Jason Salfi	STATEWIDE	Statewide	OTHER PROGRAM AREA, Innovation Advisory	150,000
	JCB Specialties, Inc.	STATEWIDE	Statewide	POLICY DEVELOPMENT, DPS NYS Fair giveaw.	10,130
	John Siegenthaler	STATEWIDE	Statewide	Renewable Heat NY, RFP 3165 Hydronic Syste	118,000
	Johnson Associates, Inc	STATEWIDE	Statewide	NEW YORK GREEN BANK, JAI NYSERDA Con	50,000
	Kearns & West, Inc.	STATEWIDE	Statewide	OREC: Technical Support, OSW RFP Facilitation.	36,433
	Kelliher Samets Volk	STATEWIDE	Statewide	Code to Zero, TWO 26 Codes Marketing	225,000
				Commercial Real Estate Ten, TWO 24: CI Aware	50,000
				Flexible Tech Assistance, TWO 24: CI Awarenes	200,000
				Industrial Process Effic, TWO 23: Industrial Mktg	150,000
				Industrial Process Effic, TWO 24: CI Awareness	350,000
				Intervention Effectiv Training, TWO 22 Building L	98,190
				New Construction- Housing, Marketing Support f	200,000
				NYSERDA ADMINISTRATION, TWO 25 KSV Pr	23,300
				On-Site Energy Manager, TWO 23: Industrial Mktg	300,000
				On-Site Energy Manager, TWO 24: CI Awarenes	100,000
				Real Time Enrgy Management, TWO 23: Industri	100,000
				Real Time Enrgy Management, TWO 24: CI Awa	300,000
				Retrofit NY, Marketing Support for NYSERDA	164,070
				Strategic Energy Manager, TWO 23: Industrial M	400,000
				Talent Pipeline:CE and OJT, TWO 21 WFD Tale	500,000
				Talent Pipeline:Internship Pgm, TWO 21 WFD Ta.	
	L&S Energy Services, Inc.	STATEWIDE	Statewide	Flexible Tech Assistance, L&S Year 1 GJGNY E	605,650
	<u>,</u>			Geothermal Incentive Program, 3695 TWO Umbr	
				GJGNY REVOLVING LOAN FUND, L&S Year 1	
				Industrial Process Effic, Umbrella Contract	7,500

REDC Region		County	Electric Utility	Contract Description	Total Funded Amount
Statewide	L&S Energy Services, Inc.	STATEWIDE	Statewide	INDUSTRIAL PROCESS EFFICIENCY, Umbrella.	. 17,500
				Renewable Heat NY, Umbrella Contract	3,816
				Technical Services, Tech Review - OsEM	100,522
	Latham & Watkins LLP	STATEWIDE	Statewide	NEW YORK GREEN BANK, Green Bank	25,000
	Launch New York, Inc.	STATEWIDE	Statewide	Cleantech Incubator, Launch NY ECO Incubator	300,000
	LC DRives	STATEWIDE	Statewide	OTHER PROGRAM AREA, PON 3249 Advanced.	. 500,000
	Loeb & Loeb LLP	STATEWIDE	Statewide	NEW YORK GREEN BANK, Green Bank Outside	. 4,851
	Long Island Power Authority	STATEWIDE	Statewide	OREC: Technical Support, Large-Scale Renewa	50,000
	M.J. Beck Consulting LLC	STATEWIDE	Statewide	OREC: Technical Support, RFQL3926 Umbrella	65,000
	M.J. Bradley & Associates	STATEWIDE	Statewide	Electric Vehicles - Innovation, BCA of EV grid im	15,005
	Maalka Inc	STATEWIDE	Statewide	Cleantech Ignition, PON 3871 Ignition Grants	100,000
	Marriott Hotel Services	STATEWIDE	Statewide	Combined Heat and Power, Onsite Resilient Pow	. 85,000
				NY-SUN, Solar + Storage Tech Conf	50,372
	MCCK Syracuse Hotel No 2 LP	STATEWIDE	Statewide	Home Perf w Energy Star, 2018 RES Training	60
	Meister Consultants Group, Inc.	STATEWIDE	Statewide	Commercial Market Mapping, NYSERDA-Utility	200,000
				Commercial Real Estate Ten, Efficiency Planning	36,265
	Merrimack Energy Group, Inc.	STATEWIDE	Statewide	OREC: Technical Support, RFQL3926 Umbrella	65,000
	Micatu, Inc.	STATEWIDE	Statewide	High Performing Grid, 69kV OPTICAL SENSOR	1,250,000
	Michael Farrell	STATEWIDE	Statewide	NEW YORK GREEN BANK, Due Diligence Assis	50,000
	Micro Nano Technologies	STATEWIDE	Statewide	NextGen HVAC, PON3519 Round 1	430,000
	National Oilheat Research Alli	STATEWIDE	Statewide	NextGen HVAC, NextGen HVAC Innovation	75,000
	National Renewable Energy L		Statewide	Cleantech ICC Engage, NREL's Industry Growth	
	Navigant Consulting Inc.	STATEWIDE	Statewide	Mkt Char: Tech Assist, Tech Assist, REV Pool	500,000
				NEW YORK GREEN BANK, Outside Technical a	
				REV Connect, REV Connect	473,445
	NECEC Institute	STATEWIDE	Statewide	Cleantech ICC Engage, Inv/Corp Partner Webina	
	NESCAUM	STATEWIDE	Statewide	Electric Vehicles - Innovation, Year 2 EV marketi	475,000
				ENVIRONMENTAL RESEARCH, 123059 TWO#5	115,000
				ENVIRONMENTAL RESEARCH, Tech Assist, R.	900,000
				Renewable Heat NY, 123059 TWO#5	70,000
	NESEA	STATEWIDE	Statewide	New Construction- Housing, 2019 NESEA ProTo	
	New Buildings Institute, Inc.	STATEWIDE	Statewide	Code to Zero, TWO#1 Roadmap Zero Carbon Bl.	250,000
	New Venture Advisors LLC	STATEWIDE	Statewide	Agbotic - Market DD	35,000
	New York Academy of	STATEWIDE	Statewide	Cleantech ICC Engage, 2018 NY Green Innovati	35,000
	Sciences	STATEWIDE	Oldlewide		35,000
	New York Potton, and Energy		Statewide	Cleantech ICC Engage, 2019 NY Green Innovati Rmve Barriers Dist Enrgy Storg, Task Work Orde	
	New York Battery and Energy		Statewide		
	New York Geothermal Energy New York State Smart Grid C			Geothermal Incentive Program, 2019 NY-Geo Co	
	New York University		Statewide	High Performing Grid, NYS Smart Grid Consortiu	
		STATEWIDE	Statewide	Cleantech Incubator, PON3413 Clean Energy Inc	
	Nixon Peabody LLP	STATEWIDE	Statewide	NEW YORK GREEN BANK, Green Bank Outside.	
	NMR Group, Inc.	STATEWIDE	Statewide	EVALUATION, RFQ 3183 NMR Group, Inc.	134,463
			Otatawida	Home Perf w Energy Star, RFQ 3183 NMR Grou.	
	NOHMs Technologies, Inc.	STATEWIDE	Statewide	Energy Storage Tech/Prod Dev, PON 3585 Roun.	
	Northeast Energy Efficiency Partnerships	STATEWIDE	Statewide	Air Source Heat Pumps, NEEP 2018 Sponsorship	
	·			Campus/Technical Assistance, NEEP 2018 Spon	
				Clean Energy Communities, NEEP 2018 Sponso	
				Code to Zero, NEEP 2018 Sponsorship	10,000
				Commercial Imp Assist, NEEP 2018 Sponsorship	8,500
				EVALUATION, NEEP 2018 Sponsorship	5,000
				Home Perf w Energy Star, NEEP 2018 Sponsors	
				K-12 SCHOOLS, NEEP 2018 Sponsorship	10,000
				NYSERDA ADMINISTRATION, NEEP 2018 Spo	10,000

REDC Region	Contractor	County	Electric Utility	Contract Description	Total Funded Amount
Statewide	Northeast Energy Efficiency Partnerships	STATEWIDE	Statewide	On-Site Energy Manager, NEEP 2018 Sponsorsh	10,000
	Farmerships			Prof & Expert Engagement, NEEP 2018 Sponsor	25,000
	NRG Energy Inc	STATEWIDE	Statewide	Reimbursement to Clearway for	5,000
	Ocean Tech Services LLC	STATEWIDE	Statewide	Off-Shore Wind Pre-Dev Act, RFP 3855 Metocea	4,244,099
	Open Energy Efficiency Inc.	STATEWIDE	Statewide	Pay for Performance, RFP 3901 P4P-AMV Platfo	1,935,220
	Opus One Solutions USA Corp	STATEWIDE	Statewide	Cleantech Ignition, PON 3871 Ignition Grants	100,000
	Passive Buildings Canada	STATEWIDE	Statewide	Retrofit NY, Multifamily	50,000
	PassiveLogic Inc.	STATEWIDE	Statewide	76 West, 76 West Energy Bus Competition	250,000
	Performance Systems Develo	STATEWIDE	Statewide	Pay for Performance, Task #1 contract 113650	26,663
	Petrecky Consulting LLC	STATEWIDE	Statewide	OTHER PROGRAM AREA, RFP 3859	125,000
	Phase Innovations LLC	STATEWIDE	Statewide	NextGen HVAC, Modular Membrane Dehumidifyi	342,500
	PitchBook Data, Inc.	STATEWIDE	Statewide	OTHER PROGRAM AREA, Online Subscription	22,500
	PLS Inc	STATEWIDE	Statewide	Residential-Engaging New Mkts, Pearl Pilot Supp	199,133
	Power Advisory LLC	STATEWIDE	Statewide	OREC: Technical Support, RFQL3926 Umbrella	65,000
	Praveen Amar	STATEWIDE	Statewide	Environmental Research, Amar ENV Rsch Scien	45,000
	REACH Strategies	STATEWIDE	Statewide	Electric Vehicles - Innovation, EV recognition pro	50,000
	Regional Greenhouse Gas Init	. STATEWIDE	Statewide	ENERGY ANALYSIS, RGGI Funding Agreement	829,256
	Research Foundation of CUNY	STATEWIDE	Statewide	High Performing Grid, PON 3397 Round 2 - Cate	278,675
	Research Into Action, Inc.	STATEWIDE	Statewide	EVALUATION, RFQ3183 Umbrella Agreement	139,647
	Resource Refocus LLC	STATEWIDE	Statewide	Code to Zero, TWO 2 NYStretch Res CE	67,226
				Code to Zero, TWO#1 Res Rulemaking Support	42,232
	RHC Operating LLC	STATEWIDE	Statewide	Off-Shore Wind Master Plan, 2018 OSW Supplier.	107,034
	Scotto Brothers Woodbury Re	STATEWIDE	Statewide	Environmental Research, 2018 State of the Scien.	5,812
	Seek More LLC	STATEWIDE	Statewide	Residential-Engaging New Mkts, Consultant for S.	5,380
	Sive Paget & Riesel PC	STATEWIDE	Statewide	Off-Shore Wind Pre-Dev Act, RFP 3300 & RFP 3.	50,000
				OREC: Technical Support, RFP 3300 & RFP 377	100,000
	Skadden, Arps, Slate, Meagh	STATEWIDE	Statewide	NEW YORK GREEN BANK, Green Bank Outside	22,288
	SMG Partners	STATEWIDE	Statewide	Low-Income Forum on Energy, LIFE 2020 State	5,975
	Solas Energy Consulting U.S		Statewide	CI Engy Siting & Soft Cost Red, Wind Energy Siti	50,000
	Southern Tier Technologies L		Statewide	76 West, 76 West Energy Bus Competition	250,000
	Steel Sun 2 LLC	STATEWIDE	Statewide	NY Green Bank, BQ Energy - Steel Sun 2	12,500,000
	Steven Winter Associates, Inc.		Statewide	Low Rise New Construction, SWA TWO #1 - RE	30,000
	,,			Multifam New Construction, SWA TWO #1 - RES	30,000
				NextGen HVAC, BAS for small & medium bldgs	216,518
				NextGen HVAC, PON3519 Round 1	632,196
				Workforce Industry Partnership, PON 3715 Workf.	90,448
	Stichting Energiesprong	STATEWIDE	Statewide	Retrofit NY, Multifamily	200,000
	StorEn Technologies Inc.	STATEWIDE	Statewide	Energy Storage Tech/Prod Dev, PON 3585 R2	199,866
	Sustainable Energy Advantag		Statewide	REC:CES REC System Dev Costs, Large Scales	16,000
	Sustainable Hudson Valley, In		Statewide	Electric Vehicles - Innovation, Dealer engagemen	
	Sustainable Westchester	STATEWIDE	Statewide	Clean Energy Communities, Westchester HS EV	2,500
		ONTEMBE	Oldiewide	Electric Vehicles - Innovation, Westchester HS E.	2,500
				Rmve Barriers Dist Enrgy Storg, Feasibility of sto	15,000
	Switched Source LLC	STATEWIDE	Statewide	76 West, 76 West Energy Bus Competition	250,000
	Switched Source PB LLC	STATEWIDE	Statewide	High Performing Grid, PON 3770 CATB - Phase	2,000,000
	Syracuse University	STATEWIDE	Statewide	NextGen HVAC, PON3519 Round 1	273,167
	Taitem Engineering, P.C.	STATEWIDE	Statewide	Multifam Performance Pgm, 3695 TWO Umbrella	141,073
	The Business Council of NYS,	STATEWIDE	Statewide	Prof & Expert Engagement, Membership Busines	6,081
	The Cadmus Group, LLC	STATEWIDE	SIGIEWIUE	>200KW PV, RFQL3434 Cat1 NYSUN C/I	100,000
				Air Source Heat Pumps, NYC ASHP Supply Chai	50,000
				Code to Zero, RFQ3183 Umbrella Agreement	491,512

REDC Region		County	Electric Utility	Contract Description	Total Funded Amoun
Statewide	The Cadmus Group, LLC	STATEWIDE	Statewide	ENERGY ANALYSIS, TWO#3 -Supply Curve An	45,000
				Environmental Research, TWO 3 - RegionalFund.	. 104,092
				Eval MCDC Cross Cutting, TWO#2-Top_Down	49,995
				Eval MCDC EE Master Soft Cost, TWO#4 Soft C	332,038
				EVALUATION, Performance Management	50,000
				EVALUATION, RFP3916 Res Bldg Stock Assess.	109,662
				EVALUATION, TWO#2-Top_Down_Analysis	188,513
				EVALUATION, TWO#4 Soft Cost study	282,848
				LMI On Bill Tariff Study, Analysis of On-Bill Finan	49,000
				Mkt Char: Tech Assist, RFQL 3685 R2 Umbrella	30,000
				Off-Shore Wind Pre-Dev Act, RFP 3462 Umbrella.	. 150,000
				On-Site Energy Manager, Task Order #3 from 10	139,971
				OREC: Technical Support, RFP 3462 Umbrella A	250,000
				Rmve Barriers Dist Enrgy Storg, TWO # 3	173,000
	The Levy Partnership, Inc.	STATEWIDE	Statewide	Air Source Heat Pumps, NextGen HVAC Innovati	424,700
				NextGen HVAC, Downstate gas fired heat pump	700,303
				NextGen HVAC, NextGen HVAC Innovation	5,157
	The Radiant Store	STATEWIDE	Statewide	Renewable Heat NY, Radiant Store - Triumpho	7,000
	The Real Estate Board of New	STATEWIDE	Statewide	Commercial Real Estate Ten, 2018 PropTech Ch	12,500
	The Renewables Consulting	STATEWIDE	Statewide	Nat'l OffShWind R&D Consortium, RCG work for	159,344
	Group, LLC			Off-Shore Wind Pre-Dev Act, RFP 3462	159,677
				RCG work for OSW Consortium	80,656
	The Research Foundation for	STATEWIDE	Statewide	Multifam Performance Pgm, 2019 NYS Green Bu	
	the State			New Construction- Housing, 2019 NYS Green Bu.	
				Retrofit NY, 2019 NYS Green Buildings Conf	1,313
	The RF of SUNY Binghamton	STATEWIDE	Statewide	Energy Storage Tech/Prod Dev, PON 3585 R2	1,000,000
	The Trustees of Columbia Uni		Statewide	Cleantech EIR, PON 3819	4,000,000
	Thornton Tomasetti, Inc.	STATEWIDE	Statewide	Retrofit NY, Multifamily	18,000
	TRC Energy Services	STATEWIDE	Statewide	Renewable Heat NY, Technical Review and Prog.	
	TRC Engineers, Inc.	STATEWIDE	Statewide	Informat. Products & Brokering, TWO #1	49,933
	The Engineere, me.	OWNER	olatomao	NextGen HVAC, PON3519 Round 1.	343,946
	Trinity NY Development LLC	STATEWIDE	Statewide	Multifam New Construction, New Construction	97,400
	TYTHEdesign Inc	STATEWIDE	Statewide	Multifam Performance Pgm, Multifamily	6,600
	U.S. Green Building Council,		Statewide	Campus/Technical Assistance, Urban Green Cou.	
	Unique Comp Inc.	STATEWIDE	Statewide	Pay for Performance, RFP3143 Umbrella Agree	
	· · ·				
	Unique Electric Solutions of N Upstate Capital Association of		Statewide	Electric Vehicles - Innovation, Clean Transportati	
	New York	STATEWIDE	Statewide	OTHER PROGRAM AREA, NY Business Plan C.	25,000
	Linetata Mantura Compost		Chatawida	Prof & Expert Engagement, UCANY 2019 Spons	
	Upstate Venture Connect	STATEWIDE	Statewide	Prof & Expert Engagement, UVC 2019 Sponsors	
	Vermont Energy Investment Corporation	STATEWIDE	Statewide	Air Source Heat Pumps, Umbrella Contract	25,000
	·	0747514//05	01.1.1	Pay for Performance, Umbrella Contract	272,382
	Vidaris, Inc.	STATEWIDE	Statewide	Code to Zero, TWO#1-DOS Rulemaking Support	102,660
	West Hill Energy & Computing.		Statewide	EVALUATION, RFQ3183 Umbrella Agreement	67,150
	Willdan Energy Solutions	STATEWIDE	Statewide	Commercial Real Estate Ten, Efficiency Planning.	
				K-12 SCHOOLS, RFP 3788 P-12 Benchmarking	480,000
	Yale University	STATEWIDE	Statewide	Campus/Technical Assistance, Clean Heating &	150,000
	Total				1,263,326,547
lestern New ork	201 Ellicott, LLC	Erie	National Grid	Multifam New Construction, New Construction	300,000
VIN	Adam C. Boese	Chautauqua	National Grid	Agriculture Energy Eff Pgm, RFP3628FlexTechC	2,500
		Erie	National Grid	Technical Services, RFP3628FlexTechConsultU	2,500
			NYS Electric and Gas	Technical Services, RFP3628FlexTechConsultU	2,500
		Niagara	National Grid	Agriculture Energy Eff Pgm, RFP3628FlexTechC	2,500

REDC Region		County	Electric Utility	Contract Description	Total Funded Amount
Western New York	Adam C. Boese	Niagara	National Grid	Technical Services, RFP3628FlexTechConsultU	3,195
	AECOM Technical Services In	Cattaraugus	National Grid	WEST VALLEY DEVELOPMENT PROGRAM, E	581,116
	Allegany County Society for th	Allegany	Rochester Gas and El.	NEW CONSTRUCTION PROGRAM, NCP12291	11,553
	Arcadis of New York, Inc.	Chautauqua	National Grid	Technical Services, RFP3628FlexTechConsultU	5,978
	Benchmark Lancaster Towers	Erie	NYS Electric and Gas	Multifam Performance Pgm, Multifamily	109,900
	Bergmann Associates	Niagara	National Grid	Industrial Process Effic, Tech Review_Support_U	51,720
	Borrego Solar Systems, Inc.	Cattaraugus	National Grid	>200KW PV, NY Sun	1,611,090
		Niagara	National Grid	>200KW PV, NY Sun	3,201,120
	Buffalo Federation of Neighbo	Erie	National Grid	Low Rise New Construction, New Construction	70,400
	Buffalo Renewables, Inc.	Chautauqua	National Grid	Small Wind, Wind Turbine Incentive	52,000
		Erie	National Grid	Small Wind, Wind Turbine Incentive	182,700
		Niagara	National Grid	Small Wind, Wind Turbine Incentive	196,600
	Buffalo Solar Solutions Inc	Allegany	Rochester Gas and	<200KW PV, NY Sun	6,038
			Electric	<200KW PV, PON 2112 NY SUN	5,796
		Erie	NYS Electric and Gas	<200KW PV, NY Sun	5,072
				<200KW PV, PON 2112 NY SUN	8,694
		Niagara	National Grid	<200KW PV, NY Sun	16,222
	C.J. Brown Energy, P.C.	Erie	National Grid	Flexible Tech Assistance, RFP3628FlexTechCon	4,490
				Technical Services, RFP3628FlexTechConsultU	5,000
	C&R Housing Inc.	Erie	National Grid	Talent Pipeline:CE and OJT, OJT HIRE	13,680
	Chenango Contracting, Inc.	Cattaraugus	National Grid	WEST VALLEY DEVELOPMENT PROGRAM, R	100,000
	CIR ELECTRICAL	Erie	National Grid	<200KW PV, NY Sun	5,086
	CONSTRUCTION CORP.	Life	NYS Electric and Gas	<200KW PV, PON 2112 NY SUN	13,426
		Niagara	National Grid	<200KW PV, NY Sun	7,455
		Magara	National Gliu		
	Dash Markets Inc	Erie	National Grid	<200KW PV, PON 2112 NY SUN	7,738
				Commercial New Construct, SF106913 - Dashs M.	
	David Homebuilders, Inc.	Erie	NYS Electric and Gas	Low Rise New Construction, New Construction	19,150
	David Homes, Inc.	Erie	NYS Electric and Gas	Low Rise New Construction, New Construction	39,900
	Denton Hill Family & Ski Reso.		NYS Electric and Gas	Industrial Process Effic, Industrial Process Efficie	124,200
	Dunkirk Renovation and Own		National Grid	Low Rise New Construction, New Construction	63,700
	Enercon Services Inc	Cattaraugus	National Grid	WEST VALLEY DEVELOPMENT PROGRAM, R	19,483
	Forbes-Capretto Homes	Erie	NYS Electric and Gas	Low Rise New Construction, LR NCP New Const	23,750
				Low Rise New Construction, New Construction	39,900
		Niagara	National Grid	Low Rise New Construction, 2019 LRNCP	5,700
	Ford Motor Company	Erie	National Grid	Industrial Process Effic, Industrial Process Efficie	43,355
	Fusion Energy Services LLC	Erie	National Grid	<200KW PV, NY Sun	5,796
	George J. Martin & Son	Erie	National Grid	<200KW PV, NY Sun	336,312
	Grand Island Solar, LLC	Erie	National Grid	LMI Community Solar, SFA - BlueRock Grand Isl	1,354,668
	Greenpac Mill, LLC	Niagara	National Grid	Industrial Process Effic, Industrial Process Efficie	477,000
				On-Site Energy Manager, OsEM15 - Greenpac M.	132,875
	Harris Beach PLLC	Cattaraugus	National Grid	WEST VALLEY DEVELOPMENT PROGRAM, R	10,000
	Holiday Valley Tubing, LLC	Cattaraugus	National Grid	Industrial Process Effic, Industrial Process Efficie	64,200
	Holimont	Cattaraugus	National Grid	Industrial Process Effic, Industrial Process Efficie	298,319
	Kissing Bridge Corp	Erie	NYS Electric and Gas	Industrial Process Effic, Industrial Process Efficie	128,000
	L&S Energy Services, Inc.	Erie	National Grid	Agriculture Energy Eff Pgm, RFP3628FlexTechC	2,500
				Industrial Process Effic, Umbrella Contract	10,800
	LaBella Associates, P.C.	Allegany	NYS Electric and Gas	Technical Services, RFP3628FlexTechConsultU	2,500
	Linde, LLC	Erie	National Grid	Industrial Process Effic, Industrial Process Efficie	197,100
	M/E Engineering, P.C.	Erie	National Grid	Industrial Process Effic, Technical Review and Pr	7,995
	- •		NYS Electric and Gas	Industrial Process Effic, Technical Review and Pr	
	Norampac, Ind., Inc.	Niagara	National Grid	Industrial Process Effic, Industrial Process Efficie	122,416
	NYS Office of Parks, Recreati	-	National Grid	<200KW PV, PON 2112 NY SUN	40,986

REDC Region	Contractor	County	Electric Utility	Contract Description	Total Funded Amoun
Vestern New York	NYSDEC	Cattaraugus	National Grid	WEST VALLEY DEVELOPMENT PROGRAM, W	350,000
IOIR	OYA 2643 Moore Road LLC	Niagara	National Grid	>200KW PV, NY Sun	1,875,000
	Powerhouse Dynamics, Inc	Erie	National Grid	Real Time Enrgy Management, Powerhouse - M	7,955
			NYS Electric and Gas	Real Time Enrgy Management, Powerhouse - M	7,497
	RM & PSG, LLC	Erie	National Grid	Multifam Performance Pgm, Multifamily	147,000
	Ryan Homes (Virginia)	Erie	NYS Electric and Gas	Low Rise New Construction, 2019 LRNCP	16,150
	Scotts Peekn Peak LLC	Chautauqua	National Grid	Industrial Process Effic, Industrial Process Efficie	80,000
	Seven Springs West LLC	Cattaraugus	National Grid	WEST VALLEY DEVELOPMENT PROGRAM, O	700,000
	Solar Liberty Energy Systems,	Chautauqua	National Grid	<200KW PV, NY Sun	30,452
	Inc			<200KW PV, NY-Sun	6,795
		Erie	Municipal Utilities	<200KW PV, NY Sun	5,985
			National Grid	<200KW PV, NY Sun	11,549
				<200KW PV, PON 2112 NY SUN	76,775
				>200KW PV, NY Sun	875,336
			NYS Electric and Gas	<200KW PV, NY Sun	12,744
		Niagara	National Grid	<200KW PV, NY Sun	6,683
	Solcius, LLC	Erie	National Grid	<200KW PV, NY Sun	15,733
				<200KW PV, PON 2112 NY SUN	5,124
	SRS Holdings LLC	Allegany	NYS Electric and Gas	Energy Storage Tech/Prod Dev, PON 3585 R2 P	300,000
	SSA Solar of NY 4 LLC	Erie	National Grid	>200KW PV, NY-Sun C/I	292,117
	Sterling and Wilson Cogen So	Niagara	National Grid	Combined Heat and Power, CHPA - 340 KW Wh	442,560
	Sumitomo Rubber USA, LLC	Erie	National Grid	Industrial Process Effic, Industrial Process Efficie	776,248
	SunPower Capital, LLC	Erie	NYS Electric and Gas	<200KW PV, NY Sun	8,694
	SUNY Buffalo	Erie	National Grid	Industrial Process Effic, Industrial Process Efficie	119,048
	Sustainable Energy Developm	Allegany	National Grid	<200KW PV, NY Sun	5,978
	The Garrick Co., LLC	Cattaraugus	National Grid	WEST VALLEY DEVELOPMENT PROGRAM, Pr	44,270
	TM Montante Solar	Erie	National Grid	<200KW PV, NY Sun	9,720
	Developments, LLC		NYS Electric and Gas	<200KW PV, NY Sun	90,882
				<200KW PV, PON 2112 NY SUN	88,209
	Town of Ashford	Cattaraugus	National Grid	Clean Energy Communities, CEC101538 - Town	50,000
	Town of Humphrey	Cattaraugus	National Grid	Clean Energy Communities, CEC101529 - Town	50,000
	Town of Tonawanda	Erie	National Grid	Clean Energy Communities, Town of Tonawanda	150,000
	U.S. Department of Energy/Wv	Cattaraugus	National Grid	FFY 2019 WVDP Cost Share	10,200,000
	Viola Homes Inc.	Erie	National Grid	<200KW PV, NY Sun	8,694
			NYS Electric and Gas	<200KW PV, NY Sun	10,460
	West Seneca Central School	Erie	NYS Electric and Gas	Industrial Process Effic, Industrial Process Efficie	828
	Whole Foods Market Group, I	Erie	National Grid	NEW CONSTRUCTION PROGRAM, NCP14010	87,834
	Win Sum Ski Corporation	Cattaraugus	National Grid	Industrial Process Effic, Industrial Process Efficie	299,600
	WNY Rural Preservation, LP	Cattaraugus	National Grid	Multifam Performance Pgm, Multifamily	63,000
	Total	-			27,525,489
Frand Total					2,574,085,768

NYSERDA

Public Authority Law Report

October 1, 2018 to March 31, 2019

Section Break

Contractor	Contract Description	Total Expended Amount
1st Light Energy, Inc.	<200KW PV, NY Sun	56,200
5 Hanover Square NY Owner LLC	Flexible Tech Assistance, FlexTech Program - PON 1746	28,200
10th Ave Petroleum LLC	FUEL NY, PGI00296 - 10th Avenue Petrole	57,893
	OTHER PROGRAM AREA, PGI00296 - 10th Avenue Petrole	68,703
22nd Century Technologies, Inc.	NYSERDA ADMINISTRATION, Staff Augmentation	171,109
28th and 10th Associates LLC	NEW CONSTRUCTION PROGRAM, NCP11469 - 28th Street	74,517
33-00 Northern Boulevard LLC	FLEXIBLE TECHNICAL ASSISTANCE, FlexTech Program - PON1746	12,000
40 Tiemann Place H.D.F.C.	MULTIFAMILY PERFORMANCE PROGRAM, Multifamily	10,500
81 Prospect Owner LLC	NEW CONSTRUCTION PROGRAM, NCP11961 - 81 Prospect Street	116,252
103 Gleneida Avenue LLC	Industrial Process Effic, Industrial Process Efficiency	86,000
112 East Clarke Housing Development	Multifam New Construction, MFNC_Clarke Place Sr. Res.	23,300
401 West Shore Blvd Holdings	NEW CONSTRUCTION PROGRAM, NCP12498 - NewCut Facility	8,387
575 Fuel Inc	FUEL NY, PGI00299 - 575 Fuel Inc.	30,098
	OTHER PROGRAM AREA, PGI00299 - 575 Fuel Inc.	79,228
770 Electric Corp.	NY-Sun	57,660
1020 Route 109 Corp.	FUEL NY, PGI00239 - 1020 Route 109 Corp	50,554
1157 LLC	NEW CONSTRUCTION PROGRAM, NCP98372 - 1135 Fairport Road	1,496
2015 ESA Project Company, LLC	FUEL CELLS, RPS FC - Home Depot #8456	542,228
Abakama LLC	OTHER PROGRAM AREA, Innovation Advisory Services	33,987
Abt Associates Inc.	Combined Heat and Power, Flex Energy Tech Analysis 2	76,718
	ENVIRONMENTAL RESEARCH, Community Flood Risk	26,109
	Environmental Research, Environmental Res. Outreach	705
	Environmental Research, Flex Energy Tech Analysis 2	137,245
AC Woodhaven Realty Corp.	FUEL NY, PGI00113 - AC Woodhaven Realty	135,376
Access Supports for Living Inc.	Low Rise New Construction, New Construction	22,800
Accord Power, Inc.	<200KW PV, NY Sun	4,844
	NY-Sun	18,900
ACM Medical Laboratory, Inc.	>200KW PV, NY Sun	38,330
Action Research Inc.	ADVANCED BUILDINGS, Behavior Integrated Clean Ener	15,576
Active Solar Development, LLC	<200KW PV, NY Sun	223,467
	RENEWABLE THERMAL, Solar Thermal Incentive	5,453
Adam C. Boese	Agriculture Energy Eff Pgm, RFP3628FlexTechConsultUmbrella	63,020
	Commercial New Construc, RFP3771 Umbrella Contract	17,336
	Technical Services, RFP3628FlexTechConsultUmbrella	79,795
Adelphi Hotel Partners LLC	NEW CONSTRUCTION PROGRAM, NCP11419 - Adelphi Hotel	27,850
Adirondack Battery & Solar, LLC	<200KW PV, NY Sun	8,750
Adirondack Center for Loon	ENVIRONMENTAL RESEARCH, Loons: monitor biotic mercury	34,000
Adirondack Farms LLC	ANAEROBIC DIGESTER, RPS ADG - Adirondack	319,230
Adirondack Lakes Survey Corporation	Environmental Research, RFP 3702 Stream Sampling	46,256
Adirondack North Country Association		66,662
· · · · · · · · · · · · · · · · · · ·	OTHER PROGRAM AREA, CEEP North Country Region-ANCA	28,701
Adirondack Solar, LLC	>200KW PV, NY-SUN C&I	161,131
ADK Solar	<200KW PV, NY Sun	5,208
AE Solar Energy Inc.	NY-SUN, NY-Sun Comp. Liberty Distribut	88,816
AECOM Technical Services Inc.	WEST VALLEY DEVELOPMENT PROGRAM, Environmental Monitoring S	131,264
Aegis Energy Services Inc.	Combined Heat and Power, CHPA - 300 Central Park West B	36,815
tegte Enorgy contrast inter	Combined Heat and Power, CHPA - 2425 Nostrand Ave.	31,185
		120,928

Contractor	Contract Description	Total Expended Amount
Aegis Solar, LLC	>200KW PV, NY-Sun C&I	554,592
AES Broadalbin Solar, LLC	>200KW PV, NY Sun C/I	271,437
AES Holland Solar, LLC	NY-Sun C&I	16,883
Affordable Housing Partnership	CLEANER GREENER COMMUNITIES, CGC54941 - AHP	12,000
	Community Energy Engagement, CEEP Capital Region (AHP)	87,487
Akoustis, Inc.	INDUSTRIAL PROCESS EFFICIENCY, Industrial Process Efficiency	101,484
Albany County Dept. of General Servi	Clean Energy Communities, Albany County	66,250
Albany Energy, LLC	LARGE SCALE RENEWABLES, Albany 2	112,469
	LARGE SCALE RENEWABLES, Albany Energy LLC	30,193
Albany Engineering Corp.	LARGE SCALE RENEWABLES, Mechanicville Hydro	157,290
	LARGE SCALE RENEWABLES, Stuyvesant Falls Hydroelectric	170,859
Albany Management	NEW YORK ENERGY STAR HOMES, New Construction	50,000
Albany Medical Center	Technical Services, OsEM3-C Albany Medical Center	25,000
Albany Solar Solutions L.L.C.	<200KW PV, NY-Sun	6,113
Albany, City of,	CLEANER GREENER COMMUNITIES, CGC28993 - City of Albany	10,000
Albireo Energy, LLC	Real Time Enrgy Management, 1 Dag Hammarskjold Plaza-RTEM	66,870
	Real Time Enrgy Management, 1700 LH - 1700 Broadway - RTEM	3,750
	Real Time Enrgy Management, Albireo-48 Wall Street-RTEM	78,000
	Real Time Enrgy Management, Cushman/Wakefield-RTEM	75,000
	Real Time Enrgy Management, Signature Theatre - RTEM	4,965
All-Temperature Systems of Syracuse	Talent Pipeline:CE and OJT, OJT HIRE	3,120
Allegis Group Holdings Inc	Campus/Technical Assistance, Staff Augmentation Services	10,864
	Community RH&C, Staff Augmentation Services	32,591
	ENERGY ANALYSIS, Staff Augmentation Services	60,496
	K-12 SCHOOLS, Staff Augmentation Services	0
	New Construction- Commercial, Staff Augmentation Services	12,515
	NEW YORK GREEN BANK, Staff Augmentation Services	24,725
	NY-SUN, Staff Augmentation Services	34,871
	Real Time Enrgy Management, Staff Augmentation Services	78,375
	Renewable Heat NY, Staff Augmentation Services	14,485
	Solar Thermal, Staff Augmentation Services	14,485
Allen Power, Inc.	SMART GRID SYSTEMS, RFP 3044 R2	359,000
Alliance Energy LLC	FUEL NY, PGI00013 - Alliance Energy LLC	130,231
Alliance for Green Heat	RENEWABLE HEAT NY, Energy and Environmental Perfo	14,250
Alliance for Housing Inc.	MULTIFAMILY PERFORMANCE PROGRAM, Multifamily	53,400
Alliance for Sustainable Energy, LLC	ADVANCED BUILDINGS, Advanced Buildings Technology	16,777
	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
Altanova LLC	Commercial New Construc, Altanova - Energy Modeling Par	7,890
	Commercial Real Estate Ten, Altanova - Multisite	14,984
	Commercial Real Estate Ten, Altanova - NY Post_Multi Site	9,994
	Commercial Real Estate Ten, Altanova-60 E 42nd St-CT	5,993
Alteris Renewables Inc.		97,919
Alternative Power Solutions of NY, LLC	NY-SUN, RPS CST Regional Program	33,441
Ambrosino, DePinto & Schmieder	NEW CONSTRUCTION PROGRAM, Technical Assistance Services	6,437
•		
AMERESCO, Inc.	EXISTING FACILITIES, EFP2624 - AMERESCO	45,148
American Energy Care, Inc.	<200KW PV, NY Sun	18,272

Contractor	Contract Description	Total Expended Amount
American Energy Care, Inc.	<200KW PV, NY-Sun	18,282
American Packaging Corp.	Commercial New Construc, NCP15059 - American Packaging	118,425
	Industrial Process Effic, Industrial Process Efficiency	44,075
American Solar Partners, LLC	<200KW PV, NY Sun	29,178
	<200KW PV, NY-Sun	5,012
	NY-Sun	34,720
Ampersand Tannery Island Hydro, LLC	REC:CES REC Contracts, 11th Main Tier Solicitation	2,157
Anjon of Bridgehampton Inc	FUEL NY, PGI00009 - Anjon of Bridgehamp	81,186
Antares Group, Inc.	AGRICULTURE ENERGY EFFICIENCY, FlexTech Consultant Selection	1,264
	CI Engy Siting & Soft Cost Red, Technical Review and Program S	60,215
	COMBINED HEAT AND POWER, Technical Review and Program S	19,740
	EXISTING FACILITIES, Technical Review and Program S	4,340
	Flexible Tech Assistance, RFP3628FlexTechConsultUmbrella	32,755
	Geothermal Incentive Program, Technical Review and Program S	3,318
	Industrial Process Effic, Technical Review and Program S	6,063
	INDUSTRIAL PROCESS EFFICIENCY, Industrial Process Efficiency	934
	INDUSTRIAL PROCESS EFFICIENCY, Technical Review and Program S	44,093
Apex Capital LLC	Industrial Process Effic, Industrial Process Efficiency	300,000
Apex Solar Power LLC	<200KW PV, NY Sun	35,567
	<200KW PV, NY-Sun	32,157
APX Inc.	LARGE SCALE RENEWABLES, NYGATS	199,718
	REC:CES REC System Dev Costs, NYGATS	55,900
	ZEC:CES ZEC System Dev Costs, NYGATS	20,450
Arcadis of New York, Inc.	Agriculture Energy Eff Pgm, RFP3628FlexTechConsultUmbrella	2,400
	ANAEROBIC DIGESTER, RPS-CST Quality Assurance/Qual	8,400
	Commercial New Construc, Staff Augmentation Services	3,347
	EXISTING FACILITIES, Staff Augmentation Services	31,550
	Flexible Tech Assistance, RFP3628FlexTechConsultUmbrella	2,255
	Industrial Process Effic, RFP3628FlexTechConsultUmbrella	109,239
	Low Rise New Construction, Staff Augmentation Services	4,016
	Multifam New Construction, Staff Augmentation Services	3,793
	New Construction- Commercial, Staff Augmentation Services	3,347
	New Construction- Housing, Staff Augmentation Services	7,810
	OREC: Technical Support, Large Scales Renewables Techni	9,304
	Real Time Enrgy Management, Staff Augmentation Services	0,004
	Technical Services, RFP3628FlexTechConsultUmbrella	11,727
Arcadis II S. Inc.		8,676
Arcadis U.S., Inc.	COMBINED HEAT AND POWER, Tech Review & Program Staff	
	Commercial Imp Assist, Tech Review & Program Staff	16,652
	Commercial New Construct, Tech Review & Program Staff	8,705
	EXISTING FACILITIES, Tech Review & Program Staff	108,144
	FUEL NY, Tech Review & Program Staff	503,219
	Industrial Process Effic, Tech Review & Program Staff	15,091
	INDUSTRIAL PROCESS EFFICIENCY, Tech Review & Program Staff	1,198
	NEW CONSTRUCTION PROGRAM, Tech Review & Program Staff	49,329
	NY-SUN, Tech Review & Program Staff	0
	OTHER PROGRAM AREA, Tech Review & Program Staff	165,734
	Real Time Enrgy Management, Tech Review & Program Staff	11,471
	Solar Thermal, Tech Review & Program Staff	10,158

Contractor	Contract Description	Total Expended Amount
Arch Street Communications, Inc.	Clean Energy Communities, Marketing Support for NYSERDA	83,635
ARJ Gas N Mart Inc.	FUEL NY, PGI00241 - ARJ Gas N Mart Inc.	12,585
Arnold & Porter Kaye Scholer LLP	WEST VALLEY DEVELOPMENT PROGRAM, RFP 3300 Outside Counsel	8,320
ARTEMIS SOLAR LLC	Cornell - Musgrave	868,716
Aspden Assets, Inc	Assignee/Vendor 37085	55,492
Astoria Fuel & Convenience Store Inc	FUEL NY, PGI00238 - Astoria Fuel & Conv	74,000
	OTHER PROGRAM AREA, PGI00238 - Astoria Fuel & Conv	17,544
Atelier Ten	Commercial New Construc, ATEN - EMP	23,691
Atlantis Management Group II LLC	FUEL NY, GSP00355 - Atlantis Management	6,463
	FUEL NY, GSP00643 - Atlantis Management	10,000
	FUEL NY, GSP00652 - Atlantis Management	7,673
	FUEL NY, GSP00786 - Atlantis Management	10,000
	FUEL NY, GSP00795 - Atlantis Management	2,190
Autonomous Energies LLC	<200KW PV, NY-Sun	5,766
Autronic Plastics, Inc.	ADVANCED BUILDINGS, Advanced Transportation Techno	1,914
	CLEAN TRANSPORTATION, Advanced Transportation Techno	9,586
	Pub Transit & Elect Rail, Wireless Transit Lighting	135,000
Avangrid Renewables, LLC	LARGE SCALE RENEWABLES, Hardscrabble Wind Energy	675,702
	LARGE SCALE RENEWABLES, Hardscrabble Wind Power LLC	798,374
Aztech Geothermal, LLC	Talent Pipeline:CE and OJT, OJT Hire	3,982
	Talent Pipeline:CE and OJT, OJT PON 3982	8,764
Banks II Quan Associates, Inc.	Industrial Process Effic, Technical Review and Program S	1,994
•	Low Rise New Construction, New Construction	25,250
	NEW YORK ENERGY STAR HOMES, New Construction	3,000
Bard College	REV CAMPUS CHALLENGE, RFP 3214 REV Campus Challenge	105,002
BDO USA LLP	NEW YORK GREEN BANK, Background Investigation Servi	2,500
Bearpen Mountain Sports	Industrial Process Effic, Industrial Process Efficiency	28,000
Belmonte Builders	Low Rise New Construction, New Construction	8,550
	NEW YORK ENERGY STAR HOMES, RES-NewConst(no longer in use)	3,000
Bergmann Associates	Commercial Imp Assist, Tech Review_Support_Umbrella	2,582
	EXISTING FACILITIES, Tech Review Support Umbrella	259
	Flexible Tech Assistance, FlexTech Umbrella Agreement	11,567
	Flexible Tech Assistance, Tech Review_Support_Umbrella	18,070
	FLEXIBLE TECHNICAL ASSISTANCE, Tech Review Support Umbrella	64,743
		19,563
	Industrial Process Effic, Tech Review_Support_Umbrella	
	INDUSTRIAL PROCESS EFFICIENCY, Tech Review_Support_Umbrella	48,154 3,004
	On-Site Energy Manager, FlexTech Consultant Selection	
	Renewable Heat NY, Tech Review_Support_Umbrella	6,398
	REV Campus Challenge, Tech Review_Support_Umbrella	7,503
	Technical Services, Tech Review_Program Support	674
Bergmann Associates, P.C.	CLEAN TRANSPORTATION, Mkt Trn (no longer in use)	12,459
Best Energy Power	<200KW PV, NY Sun	806,454
Betlem Service Corporation	INDUSTRIAL PROCESS EFFICIENCY, Industrial Process Efficiency	237,512
Better Cities & Towns, Inc.	CLEANER GREENER COMMUNITIES, CGC31774 - Better Cities Towns	6,000
Bhavishya Gas Inc	FUEL NY, PGI00268 - Bhavishya Gas Inc.	50,829
BHP Energy LLC	Combined Heat and Power, CHPA - Bouck Pool Building - S	63,707
	Combined Heat and Power, CHPA - Corning Innovation Supp	339,150
Bigwood Systems Inc	SMART GRID SYSTEMS, EPTD Smart Grid	193,000

Contractor	Contract Description	Total Expended Amount
Binghamton City School District	NEW CONSTRUCTION PROGRAM, NCP11437 - MacArthur School	58,163
Binghamton Regional	Community RH&C, PON3723 RH&C Campaigns	44,000
Binghamton University	NEW CONSTRUCTION PROGRAM, NCP11870 - Energy Rd Building	144,245
	NEW CONSTRUCTION PROGRAM, NCP13089 - School of Pharmacy	149,510
BioDiversity Research Institute	Environmental Research, BRI: TWO umbrella agreement	46,392
	ENVIRONMENTAL RESEARCH, Monitoring Birds and Loons- Hg	41,440
	Off-Shore Wind Master Plan, BRI: TWO umbrella agreement	29,830
	Off-Shore Wind Pre-Dev Act, BRI: TWO umbrella agreement	80,692
Black Cherry Services Group, Inc.	<200KW PV, NY Sun	7,128
Black River Hydroelectric, LLC	REC:CES REC Contracts, 11th Main Tier Solicitation	236,430
Blaise Enterprises Inc	Industrial Process Effic, Industrial Process Efficiency	90,000
Bloom Energy Corporation	FUEL CELLS, CST FC Home Depot 1223	674,686
	FUEL CELLS, HD #1235-Cicero, NY	547,063
	FUEL CELLS, HD #1239-Schenectady, NY	618,283
	FUEL CELLS, HD #1241-Albany, NY	630,607
	FUEL CELLS, HD #1254-Utica, NY	660,750
	FUEL CELLS, HD #1262-Albany, NY	537,273
	FUEL CELLS, HD #1263-North Greenbush, NY	699,172
	FUEL CELLS, HD #1269-Clifton Park, NY	664,000
	FUEL CELLS, HD #1289-Amsterdam, NY	651,103
	REC:CES REC Contracts, 11th Main Tier Solicitation	16,141
Board of Fire Commissioners Nanuet	NEW CONSTRUCTION PROGRAM, NCP11834 - Nanuet Firehouse	13,893
Bolla EM Realty LLC	FUEL NY, GSP00283 - Bolla EM Realty LLC	10,000
-	FUEL NY, GSP00291 - Bolla EM Realty LLC	10,000
Bolla Operating Corp.	FUEL NY, GSP00246 - Bolla Operating Cor	10,000
	FUEL NY, GSP00251 - Bolla Operating Cor	10,000
	FUEL NY, GSP00302 - Bolla Operating Cor	10,000
	FUEL NY, GSP00303 - Bolla Operating Cor	10,000
	FUEL NY, GSP00304 - Bolla Operating Cor	10,000
	FUEL NY, GSP00305 - Bolla Operating Cor	10,000
	FUEL NY, GSP00312 - Bolla Operating Cor	10,000
	FUEL NY, PGI00015 - Bolla Operating Cor	125,955
	FUEL NY, PGI00040 - Bolla Operating Cor	112,657
Bond, Schoeneck & King, PLLC	Clean Energy Communities, RFP 3300 Outside Counsel Servi	3,439
	NYSERDA ADMINISTRATION, Outside Legal Services	3,658
	OREC: Technical Support, RFP 3300 Outside Counsel Servi	51,917
	OTHER PROGRAM AREA, RFP 3300 Outside Counsel Servi	59,940
Deer Allen Hemilten Inc		
Booz Allen Hamilton, Inc.	High Performing Grid, PON 3397 CAT D	250,000
DOD Wast 24st Street LLC	OTHER PROGRAM AREA, RFP 3044 R2	200,000
BOP West 31st Street LLC	NEW CONSTRUCTION PROGRAM, NCP12078 - Manhattan West	173,104
Borg Warner-Morse TEC	INDUSTRIAL PROCESS EFFICIENCY, Industrial Process Efficiency	14,299
Boro Park Village - Phase II		3,300
Bowery Residents' Committee, Inc	MULTIFAMILY PERFORMANCE PROGRAM, Multifamily	81,600
Brattle Group Inc.	REC:CES REC System Dev Costs, Large Scales Renewables Techni	41,697
Bridge Land West LLC	NEW CONSTRUCTION PROGRAM, NCP11129 - Washington Street	85,284
Bright Power, Inc.	<200KW PV, NY Sun	196,425
	>200KW PV, Commerical/IndustrialPV	66,121
	Flexible Tech Assistance, FlexTech Consultant Selection	31,635

Contractor	Contract Description	Total Expended Amount
Bright Power, Inc.	NY-Sun	96,342
	NY-SUN, Melrose Court LMI Solar	10,650
	Real Time Enrgy Management, Bright Power-255E149thSt-RTEM	25,818
	Real Time Enrgy Management, Selfhelp Comm-Multisite-RTEM	28,286
	Retrofit NY, Multifamily	18,750
Bronx River Art Center, Inc.	NEW CONSTRUCTION PROGRAM, NCP98026 - Bronx River Art Cen	28,355
Brooklyn Navy Yard Development Cor	NEW CONSTRUCTION PROGRAM, NCP11765 - Building 77	104,390
Brooklyn Solar One LLC	>200KW PV, NY Sun	151,605
Brooklyn Solar Two LLC	>200KW PV, NY Sun	273,785
Brooklyn SolarWorks LLC	NY Sun	40,500
	PON 2112 NY SUN	8,748
Broome Community College	REV CAMPUS CHALLENGE, RFP 3214 REV Campus Challenge	318,000
BSREP UA River Crossing LLC	MULTIFAMILY PERFORMANCE PROGRAM, Multifamily	494,650
BTMI Engineering, PC	Off-Shore Wind Pre-Dev Act, RFP3462 Umbrella Agreement	156,708
Buckeye Terminals, LLC	FUEL NY, Upstate NY Strategic Fuels Res	664,593
Buckhurst, Fish, Jacquemart, Inc.	CLEAN TRANSPORTATION, Institutionalizing Integrated	699
	CLEAN TRANSPORTATION, Mobile New Rochelle Feasibilit	4,864
Buckley Road East Solar 1, LLC	>200KW PV, NY-Sun C&I	296,358
Buckley Road West Solar 1, LLC	>200KW PV, NY-Sun C&I	296,358
Buena Vista Associates	MULTIFAMILY PERFORMANCE PROGRAM, Multifamily	431,300
Buffalo Geothermal Heating	Geothermal Incentive Program, Large-Scale GSHP Rebate	116,048
Buffalo Niagara Medical Campus, Inc.	SMART GRID SYSTEMS, RFP 3044 R2	90,000
Buffalo Renewables, Inc.	Small Wind, Wind Turbine Incentive	555,090
Buffalo Solar Solutions Inc	<200KW PV, NY Sun	68,463
	<200KW PV, PON 2112 NY SUN	14,490
Buffalo State College	NEW CONSTRUCTION PROGRAM, NCP9006 - Science Bldg Phase 2	112,593
Build Edison LLC	OTHER PROGRAM AREA, Innovation Advisors	48,510
Building Media, Inc.	ADVANCED ENERGY CODES, Energy Code Training and Suppo	25,155
Buselli Plumbing & Heating	<200KW PV, NY Sun	5,670
Byrne Dairy, Inc.	On-Site Energy Manager, OsEM2-I - Byrne Dairy-Ultra	81,049
C Speed, LLC	INNOVATION CAPACITY & BUSINESS DEVELOPMENT, Wind Turbine Cl	0
C.J. Brown Energy, P.C.	Agriculture Energy Eff Pgm, RFP3628FlexTechConsultUmbrella	3,785
	Commercial New Construc, RFP3771 Umbrella contract	25,113
	Flexible Tech Assistance, RFP3628FlexTechConsultUmbrella	13,860
	Technical Services, RFP3628FlexTechConsultUmbrella	8,352
C.T. Male Associates Engineering,	Flexible Tech Assistance, FlexTech Consultant Selection	0
	Industrial Process Effic, Technical Review and Program S	2,672
C&S Engineers, Inc.	Flexible Tech Assistance, FlexTech Consultant Selection	1,774
	Flexible Tech Assistance, RFP3628FlexTechConsultUmbrella	17,063
Cadenza Innovation, Inc.	Energy Storage Tech/Prod Dev, PON3249 ACE	135,000
Callanan Industries	Industrial Process Effic, Industrial Process Efficiency	12,302
Calstart	CLEAN TRANSPORTATION, Implementation contractor for	50,000
	CLEANER GREENER COMMUNITIES, CGC54612 - CALSTART	83,040
Candor Central School	>200KW PV, NY Sun	4,711
Capital District Regional Planning	CGC53356 - CDRPC	19,629
Comm.	CLEANER GREENER COMMUNITIES, CGC53356 - CDRPC	471,096
Capital Region Gaming LLC	NEW CONSTRUCTION PROGRAM, NCP13190 - Mohawk Casino-OFLT	79,067
Carbon Trust Advisory Limited	Carbon Trust OSW Consortium	10,082

Contractor Carbon Trust Advisory Limited	Contract Description	Total Expended Amount
	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
Catamount Ski Area	Industrial Process Effic, Industrial Process Efficiency	299,400
Catskill Mountainkeeper, Inc	Community RH&C, PON3723 RH&C Campaigns	13,500
CDM Smith, Inc.	Industrial Process Effic, Technical Review and Program S	3,948
CDS Monarch Inc	Low Rise New Construction, New Construction	128,600
CEC Stuyvesant Cove, Inc.	CLEANER GREENER COMMUNITIES, CGC55294 - Solar One	207,373
	NY-SUN, Solar for Co-op City	22,698
Center for Sustainable Energy	Electric Vehicles - Rebate, ChargeNY ZEV Rebate Imp Contra	185,507
	OTHER PROGRAM AREA, Centralized Services & Support	18,618
	Residential-Engaging New Mkts, RFP3945 Home Energy Rating Pil	3,205
Centerstate Corporation for	Cleantech Incubator, PON3413 Clean Energy Incubator	330,000
Central New York Regional Planning	CLEANER GREENER COMMUNITIES, CGC57053 - CNY RPDB	331,753
and	Community RH&C, PON3723 RH&C Campaigns	50,500
	SMART GRID SYSTEMS, RFP 3044 R2	445,000
CH4 Generate Cayuga, LLC	Anaerobic Digesters, ADG-to-Electricity Project	121,723
CHA Consulting Inc.	Commercial Imp Assist, Outreach Support	9,479
	EXISTING FACILITIES, Technical Review and Program S	6,911
	Flexible Tech Assistance, FlexTech Consultant CHA	15,923
	Flexible Tech Assistance, Outreach Support	9,479
	Flexible Tech Assistance, RFP3628FlexTechConsultUmbrella	22,903
	Flexible Tech Assistance, Staff Augmentation Services	12,297
	Flexible Tech Assistance, Technical Review and Program S	43,676
	FLEXIBLE TECHNICAL ASSISTANCE, Technical Review and Program S	67,929
	Industrial Process Effic, Outreach Support	281,196
	Industrial Process Effic, Staff Augmentation Services	12,049
	Industrial Process Effic, Technical Review and Program S	140,582
	INDUSTRIAL PROCESS EFFICIENCY, Staff Augmentation Services	74,190
	INDUSTRIAL PROCESS EFFICIENCY, Technical Review and Program S	63,674
	On-Site Energy Manager, FlexTech Consultant CHA	29,199
	On-Site Energy Manager, Outreach Support	31,285
	OTHER PROGRAM AREA, FlexTech Consultant CHA	3,265
	Strategic Energy Manager, Outreach Support	27,933
	Strategic Energy Manager, Staff Augmentation Services	0
Channel Capital LLC	OTHER PROGRAM AREA. Innovation Advisor	29,544
Charge CCCV, LLC	OTHER PROGRAM AREA, RFQL3101 76W Clean Energy Comp	125,000
Chautauqua County	LARGE SCALE RENEWABLES, Chautauqua LFGE	141.775
Cheektowaga, Town of	Clean Energy Communities, PON 3298 CEC	62,500
Chenango Contracting, Inc.	WEST VALLEY DEVELOPMENT PROGRAM, RFP 3456	16,233
Chris Benedict	Retrofit NY, Multifamily	18,750
Chris's Service Center	FUEL NY, PGI00276 - Chris's Service Cen	89,125
ChromaNanoTech LLC		25,000
	OTHER PROGRAM AREA, RFQL3101 76W Clean Energy Comp	
Cicero Volunteer Fire Department	NEW CONSTRUCTION PROGRAM, NCP12941 - Cicero Fire Station	4,930
CIR ELECTRICAL CONSTRUCTION C		17,583
Citigroup Technology, Inc.	COMBINED HEAT AND POWER, CHPA - 390 Greenwich St	825,000
City Centre Assoicates, LLC	Multifam New Construction, MFNCP - City Centre	126,090
City Fuels LLC	FUEL NY, PGI00072 - City Fuels LLC	86,597

Contractor	Contract Description	Total Expended Amount
City of Amsterdam	Clean Energy Communities, CEC600876 City of Amsterdam	12,500
City of Cohoes	Clean Energy Communities, City of Cohoes	22,500
City of Cortland	Clean Energy Communities, PON 3298 CEC	12,500
	CLEANER GREENER COMMUNITIES, CGC29757 - City of Cortland	46,569
City of Poughkeepsie	EXISTING FACILITIES, EFP2429-City of Poughkeepsie -	263,091
City of Rochester	Community RH&C, PON3723 RH&C Campaigns	36,500
City of Rome	CLEANER GREENER COMMUNITIES, CGC30797 - City of Rome	75,000
City of Utica	Clean Energy Communities, CEC610836 - City of Utica	62,500
	REVitalize, RFP 3584 Revitialize	39,000
CJ Solar 1, LLC	C&I PV Project City of Utica	196,307
CJL Engineering	Flexible Tech Assistance, FlexTech Consultant Selection	2,865
Clarkson Univ., Research Div.	ENVIRONMENTAL RESEARCH, Energy Related Air Quality	5,447
Clarkson University	RENEWABLE HEAT NY, CO off-gassing pellet storage	C
Clean Technologies A LLC	LARGE SCALE RENEWABLES, 8th RPS Main Tier Solicitation	24,170
CLEAResult Consulting, Inc.	>200KW PV, Centralized Services & Support	47,580
	Air Source Heat Pumps, Centralized Services & Support	42,312
	ASSISTED HOME PERFORMANCE WITH ENERGY STAR, Centralized S	2,385
	ASSISTED HOME PERFORMANCE WITH ENERGY STAR, Technical Sup	25,108
	Centralized Services & Support	(
	Commercial New Construc, Centralized Services & Support	19,447
	EMPOWER NY, Centralized Services & Support	31,788
	EMPOWER NY, Technical Support SFR	12,35
	EXISTING FACILITIES, Centralized Services & Support	14,164
	Geothermal Incentive Program, Centralized Services & Support	46,770
	Home Perf w Energy Star, Centralized Services & Support	769,572
	Home Perf w Energy Star, Technical Support SFR	1,235,58
	HOME PERFORMANCE WITH ENERGY STAR, Centralized Services & Su	2,809
	HOME PERFORMANCE WITH ENERGY STAR, Technical Support SFR	37,840
	Industrial Process Effic, Centralized Services & Support	31,54
	K-12 SCHOOLS, Centralized Services & Support	16,44
	LMI Community Solar, Centralized Services & Support	35,564
	Low Rise New Construction, Centralized Services & Support	26,523
	Multifam New Construction, Centralized Services & Support	21,219
	Multifam Performance Pgm, Centralized Services & Support	57,709
	New Construction- Commercial, Centralized Services & Support	(
	New Construction- Housing, Centralized Services & Support)
	NEW YORK ENERGY STAR HOMES, Centralized Services & Support	10,600
	NYSERDA ADMINISTRATION, Phone Email & Web Support	68,240
	Renewable Heat NY, Centralized Services & Support	28,394
	Rmve Barriers Dist Enrgy Storg, Centralized Services & Support	2,167
	Technical Services, Centralized Services & Support	26,371
	Technical Support SFR	(
ClearStak LLC	RENEWABLE HEAT NY, Round-Robin Testing Program	9,000
Clifton Park LF Solar LLC	PV System @ Town of Clifton Pa	138,457
Climate Action Associates LLC	OTHER PROGRAM AREA, DOE grant - UER - CAA Admin	164,504
Climate Change & Environmental	Commercial Real Estate Ten, CCES - Multisite	27,132
	Commercial Real Estate Ten, Climate Change - Multisite	6,970
Clinton County Chapter NYSARC, In	c. Low Rise New Construction, New Construction	41,000

Contractor	CLEAN TRANSPORTATION Proventio Waste Transfer Study	Total Expended Amount
ClosedLoops, LLC	CLEAN TRANSPORTATION, Pneumatic Waste Transfer Study	0
Clough, Harbour & Associates, LLP	INDUSTRIAL PROCESS EFFICIENCY, EFP Task Work Order	1,465
CNY Solar, Inc.	<200KW PV, NY Sun	113,505
	<200KW PV, NY-Sun	6,228
Code Green Solutions, Inc.	Commercial Real Estate Ten, Code Green-1290 AoA-CT	10,000
	Commercial Real Estate Ten, CodeGreen - 1211 6th Ave	9,000
	Commercial Real Estate Ten, CodeGreen-420 Lexington Ave-CT	5,000
	Commercial Real Estate Ten, CodeGreen-1515 Broadway-CT	5,000
	Commercial Real Estate Ten, CodeGreen-1515 Bway Floor10-CT	5,000
	Commercial Real Estate Ten, CodeGreen-Multisite-CT	10,000
	Flexible Tech Assistance, RFP3628FlexTechConsultUmbrella	41,934
	FLEXIBLE TECHNICAL ASSISTANCE, FlexTech Consultant Selection	10,300
Cogeneration Contractors, Inc.	Combined Heat and Power, CHPA - Compass V	36,680
	COMBINED HEAT AND POWER, CHPA - Fresh Direct	445,500
	COMBINED HEAT AND POWER, CHPA - La Casa Del Mundo	38,610
	COMBINED HEAT AND POWER, CHPA - Memorial Sloan Ketterin	445,500
	Combined Heat and Power, CHPA - Morris Apartments II	36,680
	COMBINED HEAT AND POWER, CHPA - POD Hotel	76,577
Cohen Ventures Inc	Air Source Heat Pumps, FlexTech Consultant Selection	-117,535
	EMERGING TECHNOLOGY / ACCELERATED COMMERCIALIZATION, C.	4,045
	Product Standards, FlexTech Consultant Selection	123,327
Collegiate School Inc	NEW CONSTRUCTION PROGRAM, NCP11512 - Collegiate School r	124,263
Columbia University	INNOVATION CAPACITY & BUSINESS DEVELOPMENT, Proof-of-Concep	5,000
Columbia University Medical Center	NEW CONSTRUCTION PROGRAM, NCP12434 - Columbia School of	93,500
	NEW CONSTRUCTION PROGRAM, NCP98431 - Central Energy Cent	900,608
Columcille Properties LLC	INDUSTRIAL PROCESS EFFICIENCY, Industrial Process Efficiency	96,391
Combined Energies LLC	Energy Storage Tech/Prod Dev, PON 3585 Energy Storage Cat B	105,319
Comunilife, Inc	MULTIFAMILY PERFORMANCE PROGRAM, Multifamily	11,700
CON EDISON SOLUTIONS, INC.	>200KW PV, NY Sun	12,776
	Commercial/Industrial	117,272
Concern for Independent Living, Inc.	MULTIFAMILY PERFORMANCE PROGRAM, Multifamily	60,750
Concertio Inc.	OTHER PROGRAM AREA, RFQL3101 76W Clean Energy Comp	150,000
Concord Servicing Corporation	GJGNY REVOLVING LOAN FUND, Codes, Products and Standards	1,465
	GJGNY REVOLVING LOAN FUND, Multifamily	291
Congregation Ohav Sholom HDFC	MULTIFAMILY PERFORMANCE PROGRAM, Multifamily	31,650
Continental Buchanan, LLC	NY-Sun	1,440,093
Cooper Friedman Electric Supply Co. I	<200KW PV, NY Sun	86,160
Cooper Union	REV Campus Challenge, RM7 - Cooper Union University	75,000
COR Rensselaer Company III Inc	CLEANER GREENER COMMUNITIES, CGC31256 - COR Inner Harbor	1,029,000
Cornell Cooperative Ext. Dutchess Co.	. Community Energy Engagement, CEEP Mid-Hudson Region (CCEDC)	32,748
Cornell Cooperative Extension -	Community Energy Engagement, CEEP Southern Tier Region (CCE	53,292
Tompkins	ENVIRONMENTAL RESEARCH, Residential Biomass Heating	0
Cornell University	>200KW PV, NY Sun	258,208
	ENVIRONMENTAL RESEARCH, Energy Related Air Quality	31,480
	ENVIRONMENTAL RESEARCH, NY climate clearinghouse	51,698
	NEW CONSTRUCTION PROGRAM, NCP11138 - Cornell NYC Tech	45,014
	NEW CONSTRUCTION PROGRAM, NCP12382 - College of Veterina	106,786
	OTHER PROGRAM AREA, 76West Building a Clean Energy	775,307

Contractor	Contract Description	Total Expended Amount
	ENERGY ANALYSIS, Accelerated Recovery	13,602
P	ENVIRONMENTAL RESEARCH, Building Downwash Effect	29,167
	RENEWABLE HEAT NY, Biomass-Fired Emission Sources	58,326
	SMART GRID SYSTEMS, Anaerobic Digestion Assistance	10,547
Cornerstone Energy Services	Renewable Heat NY, Cornerstone - Town of Bellmont	23,000
	Renewable Heat NY, Cornerstone - Willard	12,000
	Renewable Heat NY, Cornerstone/Lennox	19,400
Corning Inc.	Industrial Process Effic, Industrial Process Efficiency	295,322
	INDUSTRIAL PROCESS EFFICIENCY, Industrial Process Efficiency	52,338
Courtney-Strong Inc.	CLEANER GREENER COMMUNITIES, CGC53012 - Courtney Strong	73,842
Covanta Energy	INDUSTRIAL PROCESS EFFICIENCY, Industrial Process Efficiency	700,000
CPG Distribution Corp	FUEL NY, PGI00295 - CPG Distribution Co	88,600
Craig Street Limited Partnership	Low Rise New Construction, New Construction	15,000
Creativa LLC	NEW CONSTRUCTION PROGRAM, NCP13106 - DeCicco & Sons	24,268
Credit Suisse USA	NEW CONSTRUCTION PROGRAM, NCP12010 - Eleven Madison Aven	37,153
	NEW CONSTRUCTION PROGRAM, NCP12333 - Eleven Madison Aven	164,247
	NEW CONSTRUCTION PROGRAM, NCP12339 - Eleven Madison Aven	70,089
CSA Parma Solar 1, LLC	>200KW PV, NY Sun C/I	523,554
Cubit Power One Inc.	COMBINED HEAT AND POWER, CHP Performance Program	200,000
Cummins, Inc.	INDUSTRIAL PROCESS EFFICIENCY, Industrial Process Efficiency	55,580
,	ADVANCED BUILDINGS, Assist operators of BAS	12,981
Currier Plastics	Industrial Process Effic, Industrial Process Efficiency	79,874
Cutone & Company Consultants, LLC	Commercial Real Estate Ten, LCA - 28 Liberty Street - CT	4,895
outone & company consultants, EEC	Commercial Real Estate Ten, LCA - 79 Walker Street - CT	1,850
	Commercial Real Estate Ten, LCA - 120 Bloomingdale Rd - CT	1,981
	-	6,046
	Commercial Real Estate Ten, LCA - 200 Lexington Ave - CT	
	Commercial Real Estate Ten, LCA - 629 5th Ave - CT	1,920
	Commercial Real Estate Ten, LCA-2488 Grand Concourse-CT	1,721
	Commercial Real Estate Ten, LCAssociates-60 LincolnCent-CT	4,203
	EXISTING FACILITIES, EFP2632 - Cutone & Company	60,680
	EXISTING FACILITIES, EFP3014 - Cutone Company Consu	123,648
D. F. Brandt, Inc.	Industrial Process Effic, Industrial Process Efficiency	5,641
D.L. English Consulting, Inc.	OTHER PROGRAM AREA, Indian Point Consultant	1,900
Danfoss Holding Security Corporation	EXISTING FACILITIES, EFP2307 - Danfoss LLC	93,735
Darling Advertising Agency Inc.	New Construction- Housing, Marketing Support for NYSERDA	56,716
	NYSERDA ADMINISTRATION, Marketing Support for NYSERDA	45,048
	NYSERDA ADMINISTRATION, TWO #7 Strat Comm Renewables R	9,798
	Off-Shore Wind Master Plan, Marketing Support for NYSERDA	66,026
Deer Hills Service, LLC	FUEL NY, PGI00118 - Deer Hills Service	96,995
DePaul Properties, Inc.	Low Rise New Construction, New Construction	56,000
Dewberry Engineers Inc	ENVIRONMENTAL RESEARCH, Transportation Climate ADP	21,101
DeWitt Community Library	NEW CONSTRUCTION PROGRAM, NCP13183-DeWittCommunityLibrar	18,994
DNV GL Energy Insights USA Inc.	ADVANCED BUILDINGS, Evaluation Oversight Services	221
	Campus/Technical Assistance, RFQ 3183 KEMA, Inc	1,686
	Community RH&C, RFQ 3183 KEMA, Inc	1,288
	EVALUATION, RFQ 3183 KEMA, Inc	97,632
	Flexible Tech Assistance, RFQ 3183 KEMA, Inc	183
	Geothermal Incentive Program, RFQ 3183 KEMA, Inc	9,506

Contractor	Contract Description	Total Expended Amount
DNV GL Energy Insights USA Inc.	NEW YORK GREEN BANK, RFQ 3183 KEMA, Inc	147,693
	Off-Shore Wind Pre-Dev Act, RFP3855 Cat2 DMAC Float. LiDar	5,800
	Renewable Heat NY, RFQ 3183 KEMA, Inc	31,560
DNV GL Energy Services USA Inc.	ENVIRONMENTAL RESEARCH, Building-Resiliency Assessment	68,427
Dock Street Rental, LLC	NEW CONSTRUCTION PROGRAM, NCP11275 - 60 Water Street	30,745
Dolomite Products Group, Inc.	Industrial Process Effic, Industrial Process Efficiency	11,597
Downtown Ithaca Alliance	CLEAN TRANSPORTATION, Ithaca TDM/TMA Demonstration	42,242
Draper Homes Housing Development	MULTIFAMILY PERFORMANCE PROGRAM, Multifamily	121,800
Dual Fuel Corp	Real Time Enrgy Management, Dual Fuel Corp-800 Grand-RTEM	27,900
	Real Time Enrgy Management, Dual Fuel-100 Lawn Terr-RTEM	20,400
	Real Time Enrgy Management, Dual Fuel-215 E 59th St-RTEM	10,800
	Real Time Enrgy Management, Dual Fuel-220 E 27th St-RTEM	20,400
	Real Time Enrgy Management, Dual Fuel-447 Fort Washin-RTEM	22,500
	Real Time Enrgy Management, Dual Fuel-Multisite-RTEM	135,900
Dunn Paper	Industrial Process Effic, Industrial Process Efficiency	99,936
Duplex Inc	FUEL NY, PGI00301 - Duplex Inc.	103,170
Dynamic Energy Solutions, LLC	>200KW PV, NY Sun	956,433
	>200KW PV, NY-Sun C&I	41,073
Eagle Creek Hydro Power LLC	LARGE SCALE RENEWABLES, 8th RPS Main Tier Solicitation	143,800
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	47,190
East Main Associates LLC	Low Rise New Construction, New Construction	67,400
Eastern Research Group, Inc.	Environmental Research, Environmental Outreach	12,600
P,	Environmental Research, RFP3622 Env Res & Monitoring	66,166
Ecolectro Inc	OTHER PROGRAM AREA, PON3249 ACE-Exploratory resear	50,000
	CLEANER GREENER COMMUNITIES, CGC Implementation Contractor	332,796
PC	Environmental Research, RFP3462 Umbrella Agreement	0
	Off-Shore Wind Master Plan, RFP3462 Umbrella Agreement	1,524,200
	Off-Shore Wind Pre-Dev Act, RFP3462 Umbrella Agreement	-1,235,154
EcoMarkets LLC	FUEL CELLS, RPS Customer Sited Tier Fuel C	184,611
	LARGE SCALE RENEWABLES, 8th RPS Main Tier Solicitation	28,080
Ecovis, Inc.	<200KW PV, NY Sun	17,218
Eiger 3970 Consultants Inc.	<200KW PV, NY Sun	34,740
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Ekostinger, Inc.	76 West, 76 West Energy Bus Competition	400,000
	OTHER PROGRAM AREA, 76 West Energy Bus Competition	0
Eldor Contracting Corporation	<200KW PV, NY Sun	179,824
Electric Power Research Institute	DER Integration(Intrcnect), PON 3404 DER Integration	200,000
	ENVIRONMENTAL RESEARCH, Climate & future electric syst	48,920
	Environmental Research, Energy Related Air Quality	23,202
	High Performing Grid, PON 3397 CAT B	15,000
	OTHER PROGRAM AREA, FS to evaluate MFC/UF	3,085
	SMART GRID SYSTEMS, Clean DER Interconnection	25,000
	SMART GRID SYSTEMS, EPTD Smart Grid	101,043
Electron Coil Inc.	CLEAN TRANSPORTATION, Lightweight Inductor	22,426
Elisa Miller-Out	OTHER PROGRAM AREA, RFP 3859	37,866
Elmwood East Solar 1, LLC	>200KW PV, NY-Sun C&I	217,385
Elmwood West Solar 1, LLC	>200KW PV, NY-Sun C&I	296,349

Emblem Health Inc	FLEXIBLE TECHNICAL ASSISTANCE, Flex Tech - PON1746	14,958
EMCOR Services Betlem		
	On-Site Energy Manager, FlexTech Consultant Selection	18,582
EME Consulting Engineering Group, LLC	Agriculture Energy Eff Pgm, FlexTech Consultant Selection	2,500
	Commercial New Construc, EME - EMP	7,367
	Commercial Real Estate Ten, FlexTech Consultant Selection	10,014
	Commercial Real Estate Ten, Staff Augmentation Services	6,769
	EXISTING FACILITIES, RFP3628FlexTechConsultUmbrella	12,231
	EXISTING FACILITIES, Staff Augmentation Services	93,781
	EXISTING FACILITIES, Tech Review and Program Staff	65,758
	Flexible Tech Assistance, FlexTech Consultant Selection	7,500
	Flexible Tech Assistance, RFP3628FlexTechConsultUmbrella	3,058
	Flexible Tech Assistance, Staff Augmentation Services	3,535
	Flexible Tech Assistance, Tech Review and Program Staff	4,903
	FLEXIBLE TECHNICAL ASSISTANCE, FlexTech Consultant Selection	56,904
	FLEXIBLE TECHNICAL ASSISTANCE, RFP3628FlexTechConsultUmbrella	9,173
	FLEXIBLE TECHNICAL ASSISTANCE, Tech Review and Program Staff	4,903
	Home Perf w Energy Star, Staff Augmentation Services	96,568
	Industrial Process Effic, Staff Augmentation Services	(
	INDUSTRIAL PROCESS EFFICIENCY, Staff Augmentation Services	17,914
	MARKET PATHWAYS, FlexTech Consultant Selection	14,856
	NEW CONSTRUCTION PROGRAM, NCP TA Contract - ST10130	(
	NEW CONSTRUCTION PROGRAM, Tech Review and Program Staff	6,848
	NEW CONSTRUCTION PROGRAM, Technical Assistance Services	5,81
	NY-SUN, Staff Augmentation Services	48,89
	NYSERDA ADMINISTRATION, Staff Augmentation Services	-71,819
	NYSERDA ADMINISTRATION, Tech Review and Program Staff	-56,563
	Renewable Heat NY, Staff Augmentation Services	24,142
	REV Campus Challenge, Staff Augmentation Services	3,535
	Strategic Energy Manager, Staff Augmentation Services	(
Empire Solar Solutions LLC	<200KW PV, NY Sun	20,037
	<200KW PV, PON 2112 NY SUN	11,75
Empower CES, LLC	<200KW PV, NY Sun	5,850
Empower Equity Inc	Cleantech Ignition, PON 3871 Ignition Grants	35,000
Encompass Energy LLC	Commercial New Construc, EncompassEnergy-RFP3036Service	14,575
ENER-G Rudox, LLC	Combined Heat and Power, CHPA - 685 1st Avenue	142,686
	Combined Heat and Power, CHPA - Calvary Hospital	274,445
	COMBINED HEAT AND POWER, CHPA - Westport	96,288
Eneractive Solutions	K-12 SCHOOLS, FlexTech Consultant Selection	55,890
Enercon Services Inc		,
Energetics, Incorporated	WEST VALLEY DEVELOPMENT PROGRAM, RFP 3305 Licence Consultat	9,013
Energetics, incorporated	CLEAN TRANSPORTATION, Battery LCA for Lev 3 EVSE	
	CLEAN TRANSPORTATION, Oneida County ITS Study	33,479
	CLEAN TRANSPORTATION, Strategies for reducing EVSE I	64,991
	CLEAN TRANSPORTATION, Truck Platooning Workshops	19,500
	CLEANER GREENER COMMUNITIES, Animating the EV market in NYS	261,311
	EVALUATION, RFQL3685 Round 1	50,309
Energy & Resource Solutions, Inc.	ADVANCED BUILDINGS, Technical Review and Program S	245
	Combined Heat and Power, RFP 3643 Tech To Market	544,712
	Commercial New Construc, New Construction	C

Contractor Energy & Resource Solutions, Inc.	Contract Description Commercial Real Estate Ten, Efficiency Planning & Engineer	Total Expended Amount 113,561
	EMERGING TECHNOLOGY / ACCELERATED COMMERCIALIZATION, T	3,513
	ENERGY ANALYSIS, Renewable Heating Cooling TA	37,563
	EVALUATION, Energy & Resource Sol. TWO	26,707
	EXISTING FACILITIES, Technical Review and Program S	32,978
	Flexible Tech Assistance, Efficiency Planning & Engineer	29,634
	Flexible Tech Assistance, FlexTech Consultant Selection	29,034
	FLEXIBLE TECHNICAL ASSISTANCE, FlexTech Consultant ERS	11,908
		5,087
	Industrial Process Effic, Energy & Resource Sol. TWO Industrial Process Effic, Industrial & Agriculture	70,398
	Industrial Process Effic, Technical Review and Program S	51,795
	INDUSTRIAL PROCESS EFFICIENCY, Technical Review and Program S	173,373
	K-12 SCHOOLS, Efficiency Planning & Engineer	0
		4,108
	NEW CONSTRUCTION PROGRAM, Technical Assistance Services	
	On-Site Energy Manager, Industrial & Agriculture	10,233
	Real Time Enrgy Management, Efficiency Planning & Engineer	72,849
	REV Campus Challenge, Efficiency Planning & Engineer	113,916
	Rmve Barriers Dist Enrgy Storg, RFP 3407 Categories 2 & 3A	930,857
	Strategic Energy Manager, Industrial & Agriculture	9,137
	Technical Services, Efficiency Planning & Engineer	0
Energy and Environmental Economics	>200KW PV, Tech Assist, REV Pool.	6,707
	Community RH&C, Tech Assist, REV Pool.	48,201
	ENERGY ANALYSIS, Renewable Heating Cooling TA	31,197
	ENERGY ANALYSIS, Tech Assist, REV Pool.	106,892
	INNOVATION CAPACITY & BUSINESS DEVELOPMENT, Renewable Hea	103
	Mkt Char: Tech Assist, Tech Assist, REV Pool.	219,760
	Mkt Char: Tech Assist, TWO 13 - VDER Phase 2	45,662
	Mkt Char: Tech Assist, TWO# 14 - Grid Value Model	37,343
	OTHER PROGRAM AREA, Tech Assist, REV Pool.	4,232
	Rmve Barriers Dist Enrgy Storg, Tech Assist, REV Pool.	250,192
Energy Futures Group, Inc.	EMERGING TECHNOLOGY / ACCELERATED COMMERCIALIZATION, P	116,460
Energy Improvement Corporation	CLEANER GREENER COMMUNITIES, CGC39896 - EIC	709,756
	Community RH&C, PON3723 RH&C Campaigns	10,250
	MARKET PATHWAYS, Behavioral Demonstrations Prog	33,492
	LARGE SCALE RENEWABLES, Large-Scale Renewables	292,410
Energy Technology Savings, Inc.	Real Time Enrgy Management, Edison Prop-5020 Broadway-RTEM	3,360
EnergySage, Inc.	OTHER PROGRAM AREA, Photovoltaic Balance-of-System	0
	WORKFORCE DEVELOPMENT, Photovoltaic Balance-of-System	0
EnergySavvy Inc	ASSISTED HOME PERFORMANCE WITH ENERGY STAR, Residential Pr	224
	EMPOWER NY, Residential Program MgtRFP3545	224
	Home Perf w Energy Star, Residential Program MgtRFP3545	32,961
	HOME PERFORMANCE WITH ENERGY STAR, Residential Program Mgt	224
Enermat Technologies, Inc.	Energy Storage Tech/Prod Dev, PON 3585 Energy Storage Cat A	22,800
Enertiv Inc.	Real Time Enrgy Management, Enertiv - 100 Willoughby -RTEM	6,711
	Real Time Enrgy Management, Enertiv-415 W 13th St-RTEM	2,390
Ensave, Inc.	Agriculture Energy Eff Pgm, AEEP Implementation Contractor	193,448
	AGRICULTURE ENERGY EFFICIENCY, AEEP Implementation Contractor	8,289
	Technical Services, AEEP Implementation Contractor	10,275

Contractor	Contract Description	Total Expended Amount
EnterSolar LLC	<200KW PV, NY Sun	71,260
	<200KW PV, NY-Sun	62,500
	>200KW PV, NY Sun	176,556
	>200KW PV, NY-Sun C/I	79,591
Entic, Inc.	Real Time Enrgy Management, ShopsAtSkyVi-4024College-RTEM	20,769
Environmental Defense Fund	Commercial Real Estate Ten, Support_NYC Carbon Challenge	5,258
Equinix Inc.	LARGE SCALE RENEWABLES, 8th RPS Main Tier Solicitation	57,191
Erdman Anthony & Associates, Inc.	Agriculture Energy Eff Pgm, RFP3628FlexTechConsultUmbrella	1,745
	CLEANER GREENER COMMUNITIES, RFP3628FlexTechConsultUmbrella	9,892
	Commercial New Construc, EAA - EMP	2,755
	Commercial New Construc, RFP3771 Umbrella Contract	12,985
	Flexible Tech Assistance, RFP3628FlexTechConsultUmbrella	7,098
	Industrial Process Effic, Technical Review and Program S	22,370
	INDUSTRIAL PROCESS EFFICIENCY, Technical Review and Program S	3,775
	NEW CONSTRUCTION PROGRAM, Technical Assistance Services	2,166
Erie Boulevard Hydropower LP	LARGE SCALE RENEWABLES, RPS Program Purchase of Renewa	2,675
	LARGE SCALE RENEWABLES, School Street Hydro Project	38,900
	LARGE SCALE RENEWABLES, Stewarts Bridge Hydro Project	85,618
	REC:CES REC Contracts, 10th RPS Main Tier Solicitatio	21,025
	REC:CES REC Contracts, 11th Main Tier Solicitation	46,652
Erie County	CLEANER GREENER COMMUNITIES, CGC40859 - Erie County	109,234
Essense Partners Inc.	Cleantech ICC Engage, Marketing Support for NYSERDA	132,878
	OTHER PROGRAM AREA, Marketing Support for NYSERDA	159,310
	REV Connect, Marketing Support for NYSERDA	7,203
Essex County Government Center	CLEANER GREENER COMMUNITIES, CGC31777 - Essex County	82,051
EthosGen, LLC	OTHER PROGRAM AREA, Technology to Market	50,000
EV Connect Inc.	CLEANER GREENER COMMUNITIES, CGC55811 - EV Connect	579,360
Extraterrestrial Materials Inc.	<200KW PV, NY Sun	90,949
EYP Architecture & Engineering, PC	NEW CONSTRUCTION PROGRAM, Technical Assistance Services	0
Facility Solutions Group	INDUSTRIAL PROCESS EFFICIENCY, Industrial Process Efficiency	56,082
Fairway Bakery LLC	NEW CONSTRUCTION PROGRAM, NCP11689 - Fairway Production	32,912
Faraday, Inc.	Air Source Heat Pumps, RFP3761 Customer Targeting Too	22,000
	Community RH&C, RFP3761 Customer Targeting Too	44,000
FFP NY Guilderland Project1, LLC	>200KW PV, NY-Sun C&I	219,647
FFP NY Schagticoke Project1, LLC	>200KW PV, NY-Sun C&I Payee Assignment	229,868
FFP NY Schenectady Project1, LLC	>200KW PV, NY-Sun C&I Assignment	229,868
FFP NY Watertown Project1, LLC	>200KW PV, NY-Sun C&I Assignment	229,868
Finch Paper, LLC	Industrial Process Effic, Industrial Process Efficiency	272,572
Finger Lakes Community College	REV Campus Challenge, RM3 - Finger Lakes Community C	54,307
Fingerlakes Renewables	<200KW PV, NY Sun	5,376
First Columbia Property Services, LLC	NYSERDA ADMINISTRATION, Property Management	128,865
Fitzpatrick Holdings, Inc.	NEW CONSTRUCTION PROGRAM, NCP11762 - The INN at Corning	41,151
Flexo Transparent Inc.	Industrial Process Effic, Industrial Process Efficiency	53,525
Florenton River LLC	<200KW PV, NY Sun	120,123
	<200KW PV, PON 2112 NY SUN	13,797
Forbes-Capretto Homes	Low Rise New Construction, New Construction	19,900
Fordham University	Flexible Tech Assistance, Efficiency Planning & Engineer	32,378
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-	Total Expended Amount
OTHER PROGRAM AREA, RFQL 3685 R2	41,378
<200KW PV, NY Sun	31,677
<200KW PV, NY Sun	28,382
NEW CONSTRUCTION PROGRAM, NCP11095 - Harlem River Yards	475,257
INDUSTRIAL PROCESS EFFICIENCY, Industrial Process Efficiency	42,354
ANAEROBIC DIGESTER, RPS CST QA/QC Support	2,500
COMBINED HEAT AND POWER, CHP System Inspection and ReCo	40,780
COMBINED HEAT AND POWER, DG Integrated Data System	279,925
COMBINED HEAT AND POWER, Technical Advisors to CHP	2,636
COMBINED HEAT AND POWER, Technical Review_Prgm Support	20,812
Community RH&C, Technical Review_Prgm Support	0
EMERGING TECHNOLOGY / ACCELERATED COMMERCIALIZATION, T	171
EVALUATION, Technical Review_Prgm Support	71,123
EXISTING FACILITIES, EFP Task Work Order	6,345
Geothermal Incentive Program, 3695 TWO Umbrella Agreement	70,430
Geothermal Incentive Program, Technical Review_Prgm Support	22,460
Industrial Process Effic, Technical Review_Prgm Support	15,967
INDUSTRIAL PROCESS EFFICIENCY, Technical Review_Prgm Support	400
Workforce Industry Partnership, PON 3442 Workforce Training	60,806
MULTIFAMILY PERFORMANCE PROGRAM, Multifamily	36,960
NY-SUN, Affordable Solar NYCHA ACCESSo	27,523
<200KW PV, NY Sun	13,524
Renewable Heat NY, Ehrhart Energy - Hammond	21,000
Renewable Heat NY, Ehrhart Energy - Mandeville	12,000
MULTIFAMILY PERFORMANCE PROGRAM, Multifamily	44,700
Industrial Process Effic, Industrial Process Efficiency	94,643
FUEL NY, Fuel NY Portable Emergency Gen	20,497
>200KW PV, Commercial/Industrial PV	379,310
Low Rise New Construction, New Construction	9,000
NYSERDA ADMINISTRATION, Salesforce	1,044,243
NYSERDA ADMINISTRATION. Staff Aug Umbrella Agreement	159,648
	213,787
	225,366
	78,783
	145,000
	135,397
	56,000
	104,964
	100,532
	97,909
	120,742
	20,671
	568,857
	89,801
-	
	5,336
ZUUINWEV, INT JUII	342,092
SMART GRID SYSTEMS, RFP 3044 R2	510,000
	<200KW PV, NY Sun <200KW PV, NY Sun NEW CONSTRUCTION PROGRAM, NCP11095 - Harlem River Yards INDUSTRIAL PROCESS EFFICIENCY, Industrial Process Efficiency ANAEROBIC DIGESTER, RPS CST QA/QC Support COMBINED HEAT AND POWER, CHP System Inspection and ReCo COMBINED HEAT AND POWER, DG Integrated Data System COMBINED HEAT AND POWER, Technical Advisors to CHP COMBINED HEAT AND POWER, Technical Review_Prgm Support COMBINED HEAT AND POWER, Technical Review_Prgm Support Community RH&C, Technical Review_Prgm Support EMERGING TECHNOLOGY / ACCELERATED COMMERCIALIZATION, T EVALUATION, Technical Review_Prgm Support EXISTING FACILITIES, EFP Task Work Order Geothermal Incentive Program, 3695 TWO Umbrella Agreement Geothermal Incentive Program, Technical Review_Prgm Support INDUSTRIAL PROCESS EFFICIENCY, Technical Review_Prgm Support INDUSTRIAL PROCESS EFFICIENCY, Technical Review_Prgm Support Workforce Industry Partnership, PON 3442 Workforce Training MULTIFAMILY PERFORMANCE PROGRAM, Multifamily NY-SUN, Affordable Solar NYCHA ACCESSO <200KW PV, NY Sun Renewable Heat NY, Ehrhart Energy - Hammond Renewable Heat NY, Ehrhart Energy - Mandeville MULTIFAMILY PERFORMANCE PROGRAM, Multifamily Industrial Process Effic, Industrial Process Efficiency FUEL NY, Fuel NY Portable Emergency Gen >200KW PV, Commercial/Industrial PV Low Rise New Construction, New Construction

Contractor	Contract Description	Total Expended Amount
Global Resource Funding Partners LLC	>200KW PV, NY-Sun	76,821
	NY-Sun	109,416
	NY-SUN, Codes, Products and Standards	369,398
	NY-SUN, NTP 2 JFK Bloomberg	87,458
	NY-SUN, NY-Sun	197,650
Gloversville Public Library	NEW CONSTRUCTION PROGRAM, NCP12672 - Gloversville Public	10,480
Gloversville-Johnstown Joint	ANAEROBIC DIGESTER, Gloversville-Johnstown Joint W	134,850
Wastewater	INDUSTRIAL PROCESS EFFICIENCY, Industrial Process Efficiency	127,881
Goldman Copeland Associates, P.C.	Commercial Real Estate Ten, Goldman Copelan-689 5th Ave-CT	10,997
	Commercial Real Estate Ten, Goldman Copeland-1211 AoA-CT	19,997
	Commercial Real Estate Ten, Goldman Copeland-1251-CommTen	13,465
	Commercial Real Estate Ten, Goldman-2000 Westchester Av-CT	9,899
	Commercial Real Estate Ten, GoldmanCopelane - 230 Park Ave	10,997
	Flexible Tech Assistance, FlexTech Consultant Selection	6,204
	Flexible Tech Assistance, RFP3628FlexTechConsultUmbrella	53,272
	Technical Services, RFP3628FlexTechConsultUmbrella	5,000
Gotham 360 LLC	Remote Energy Management, RFP 3683 REM Program	18,750
Goya Foods, Inc.	>200KW PV, NY Sun	151,993
Grand Manor Nursing and Rehabilitati	FLEXIBLE TECHNICAL ASSISTANCE, FlexTech Program - PON 1746	10,463
GRE Fund II Holdco LLC	>200KW PV, NY Sun C&I	26,695
	>200KW PV, NY-Sun	152,856
	>200KW PV, NY-Sun CI Assignment	32,751
	>200KW PV, NY-Sun Payment assignee	36,203
	NY-Sun	78,272
GRE Fund III Holdco LLC	>200KW PV, NY Sun C/I	409,939
Greater Hudson Bank	NY-SUN, Manhattan Beer Suffern1	62,466
Greater Johnstown School District	NEW CONSTRUCTION PROGRAM, NCP13117 - JohnstownHighSchool	34,052
	NEW CONSTRUCTION PROGRAM, NCP13118 - Glebe Street School	5,048
	NEW CONSTRUCTION PROGRAM, NCP13119 - Warren Street Schoo	5,160
Greek Peak Holdings Inc	Industrial Process Effic, Industrial Process Efficiency	186,500
Green Eagle Solar II, LLC	>200KW PV, NY-Sun C/I	1,106,927
	>200KW PV. NY-Sun C&I	553,464
Green Hybrid Energy Solutions Inc.	<200KW PV, NY Sun	74,498
Green Street Power Partners LLC	<200KW PV, NY Sun	28,384
	>200KW PV, NY Sun	75,859
	NY Sun	21,000
Green Sulfcrete LLC	INNOVATION CAPACITY & BUSINESS DEVELOPMENT, Sulfcrete Pilot-S	20,000
GreenLogic, LLC	<200KW PV, NY Sun	30,132
Greenmount Lane Solar 1, LLC	>200KW PV, NY-Sun C&I	271,277
Greenwood Dairy Farm, LLC	ANAEROBIC DIGESTER, RPS CST ADG to Electricity Pro	30,775
0.001.1000 Daily Fallin, 220	NEW CONSTRUCTION PROGRAM, RPS CST ADG to Electricity Pro	30,775
Grid City Electric Corp	<200KW PV, NY Sun	12,528
	NY-Sun	40,320
Group-S LLC	COMBINED HEAT AND POWER, Luna Park CHP Demonstration	300,000
Group-O LEO		
Guardian Industries Corporation	Flexible Tech Assistance, FlexTech Consultant Selection Industrial Process Effic, Industrial Process Efficiency	32,500 255,534
•	PV System @ Ithaca College	517,877
GWE Project HoldCo 3, LLC		

Contractor	Contract Description	Total Expended Amount
H.E.L.P Development Corp.	Multifam New Construction, MFNCP PPES T2-Crotona	17,350
HARBORcenter Development LLC	NEW CONSTRUCTION PROGRAM, NCP11384 - HARBORcenter	47,101
Harris Beach PLLC	GJGNY REVOLVING LOAN FUND, RFP 3300 Outside Counsel Servi	507
	NYSERDA ADMINISTRATION, RFP 3300 Outside Counsel Servi	6,104
	SARATOGA TECHNOLOGY & ENERGY PARK, RFP 3300 Outside Couns	10,159
	WEST VALLEY DEVELOPMENT PROGRAM, RFP 3300 Outside Counsel	1,904
Harris Wiltshire & Grannis LLP	ENERGY ANALYSIS, RFP3776 Outside Counsel Servic	5,850
	OREC: Technical Support, RFP3776 Outside Counsel Servic	115,200
	OTHER PROGRAM AREA, RFP3776 Outside Counsel Servic	4,803
Harrison Solar, LLC	NY-SUN, LTF Westchester Solar	107,755
Harvest Power, LLC	<200KW PV, NY Sun	58,402
	<200KW PV, NY-Sun	62,500
Hazen & Sawyer, P.C.	ENVIRONMENTAL RESEARCH, Climate & algal blooms	10,601
Health Research, Inc.	ENVIRONMENTAL RESEARCH, Heat Vulnerability to Climate	0
	RENEWABLE HEAT NY, Ultrafine Particle Emissions	27,196
Healthy Home Energy & Consulting, I	<200KW PV, NY Sun	6,160
HEVO Inc.	CLEAN TRANSPORTATION, PON 3198 HEVO	130,000
High Peaks Solar	Commercial/Industrial Program	51,950
0	MULTIFAMILY PERFORMANCE PROGRAM, Multifamily	27,404
Hill Enterprises Inc.	FUEL NY, PGI00262 - Hill Enterprises In	100,600
Hobart and William Smith Colleges	>200KW PV, commercial/industrial pv	164,948
Hodgson Russ LLP	>200KW PV, RFP 3300 & RFP 3776 Outside Co	994
	Home Perf w Energy Star, RFP 3300 & RFP 3776 Outside Co	31,662
Holiday Valley Tubing, LLC	Industrial Process Effic, Industrial Process Efficiency	64,200
Holimont	Industrial Process Effic, Industrial Process Efficiency	298,319
Holland & Knight LLP	NEW YORK GREEN BANK, Green Bank Outside Legal Serv.	186,384
	Off-Shore Wind Master Plan, RFP 3300 & RFP 3776 Outside Co	24,539
	Off-Shore Wind Master Han, KIT 5500 & KIT 5776 Outside Co	-24,539
Home for Harlem Dowling Inc	MULTIFAMILY PERFORMANCE PROGRAM, Multifamily	31,288
Home HeadQuarters, Inc.	CLEANER GREENER COMMUNITIES, CGC38740 - Home Headquarters	30,748
nome neauquarters, mc.	•	23,326
Home Lessing LLC	Community Energy Engagement, CEEP Central New York Region	
Home Leasing, LLC	Low Rise New Construction, New Construction	9,500
Honeywell International Inc.	3695 TWO Umbrella Agreement	35,210
	Air Source Heat Pumps, 3695 TWO Umbrella Agreement	3,466
	ASSISTED HOME PERFORMANCE WITH ENERGY STAR, 3695 TWO U	338
	EMPOWER NY, 3695 TWO Umbrella Agreement	31,719
	Home Perf w Energy Star, 3695 TWO Umbrella Agreement	175,753
	Home Perf w Energy Star, RFQL 3434 Cat1 Res SF	10,811
	HOME PERFORMANCE WITH ENERGY STAR, 3695 TWO Umbrella Agre	338
	RENEWABLE HEAT NY, RHNY Pellet Stove QA Services	2,799
Hope Community, Inc.	MULTIFAMILY PERFORMANCE PROGRAM, Multifamily	21,900
Howard Wind LLC	LARGE SCALE RENEWABLES, 8th RPS Main Tier Solicitation	121,619
	LARGE SCALE RENEWABLES, Howard Wind Farm	1,042,650
	LARGE SCALE RENEWABLES, Howard Wind Farm - Expansion	145,179
Howland Solar, LLC	>200KW PV, NY Sun	496,492
HSF New York, Inc.	NEW CONSTRUCTION PROGRAM, NCP11354 - RIU Hotel New York	22,232
Hudson Solar	<200KW PV, NY Sun	66,836
Hudson Valley Clean Energy Inc.	<200KW PV, NY Sun	223,608

Contractor	Contract Description	Total Expended Amount
Hudson Valley Lighting LLC	NEW CONSTRUCTION PROGRAM, NCP14051-HV Lighting HQ	6,309
Hunt Hollow Development Corporation	Industrial Process Effic, Industrial Process Efficiency	38,400
Hunter Mountain Ski Bowl Inc.	Industrial Process Effic, Industrial Process Efficiency	323,966
Hydronic Specialty Supply	RENEWABLE HEAT NY, Smart Pre-Assembly for Boilers	50,000
Hyland Facility Associates	LARGE SCALE RENEWABLES, RFP 2226-RPS Purchase of RE At	138,779
IBM - East Fishkill Site	Industrial Process Effic, Industrial Process Efficiency	90,321
	INDUSTRIAL PROCESS EFFICIENCY, Industrial Process Efficiency	109,709
ICF Jones & Stokes	ENVIRONMENTAL RESEARCH, NYS Energy Research and Develo	22,402
ICF Resources, LLC	ADVANCED ENERGY CODES, ECode Microsite	23,107
	ENERGY ANALYSIS, Flex Energy Tech Analysis 2	53,849
	ENERGY ANALYSIS, Tech Assist, REV Pool	119,897
	EXISTING FACILITIES, Technical Review and Program S	8,397
	NY-SUN, Affordable Solar Saratoga Spri	41,000
	OTHER PROGRAM AREA, Tech Assist, REV Pool	0
iCone Products, LLC	CLEAN TRANSPORTATION, Connecting WNY Work Zones	27,600
IGS Ventures, Inc.	>200KW PV, NY Sun C/I	94,907
Inc.Village of Williston Park	CLEANER GREENER COMMUNITIES, Village of Williston Park	12,500
Incorporated Village of Laurel Hollow	CLEANER GREENER COMMUNITIES, Laurel Hollow	29,160
Incorporated Village of Upper Brookvi	CLEANER GREENER COMMUNITIES, Upper Brookville	22,049
Independent Network Operations Con	INDUSTRIAL PROCESS EFFICIENCY, Industrial Process Efficiency	16,411
Industrial Economics, Incorporated	ENERGY ANALYSIS, EE Supply Curve Analysis	13,301
	Large Scale Renewables, RFQ3183 Umbrella Agreement	15,232
	Mkt Char: Tech Assist, EE Supply Curve Analysis	7,482
	Mkt Char: Tech Assist, Tech Assist, REV Pool	5,688
	SMART GRID SYSTEMS, Flex Energy Tech Analysis 2	9,870
INF Associates LLC	Commercial Real Estate Ten, INF - 201 E 42nd St - CT	57,048
	Commercial Real Estate Ten, INF - 205 East 42nd St - CT	30,000
	Commercial Real Estate Ten, INF Associate-250 Hudson St-CT	5,000
	Commercial Real Estate Ten, INF Associates - 100 Church St	5,000
	Commercial Real Estate Ten, INF Associates-605 3rd Ave-CT	5,000
	Commercial Real Estate Ten, INF Associates-1133 6th Ave-CT	4,051
Infinity Solar Systems, LLC	<200KW PV, NY Sun	15,183
Infosys International Inc	NYSERDA ADMINISTRATION, RFP3365 Private Cloud Hosting	161,734
Innovative Energy Systems, LLC	LARGE SCALE RENEWABLES, DANC LFGE	263,224
Institute for Building Technology and	<200KW PV, RFQL 3434 IBTS Standards & QA	35,358
Sa	ADVANCED ENERGY CODES, Energy Code Training: EPros	16,632
	Air Source Heat Pumps, 3695 TWO Umbrella Agreement	23,317
	Air Source Heat Pumps, RFQL 3434 IBTS Standards & QA	19,805
	ASSISTED HOME PERFORMANCE WITH ENERGY STAR, 3695 TWO U	0
	ASSISTED HOME PERFORMANCE WITH ENERGY STAR, RFQL 3434 IB.	0
	COMMUNITY SOLAR, RFQL 3434 IBTS Standards & QA	8,857
	EMPOWER NY, 3695 TWO Umbrella Agreement	490
	EMPOWER NY, RFQL 3434 IBTS Standards & QA	490 8,961
	Home Perf w Energy Star, 3695 TWO Umbrella Agreement	91,465
	Home Perf w Energy Star, RFQL 3434 IBTS Standards & QA	58,409
	HOME PERFORMANCE WITH ENERGY STAR, 3695 TWO Umbrella Agre	0
		^
	HOME PERFORMANCE WITH ENERGY STAR, RFQL 3434 IBTS Standar NY-SUN, RFQL 3434 IBTS Standards & QA	0 270,213

Contractor	Contract Description	Total Expended Amount
institute for Building Technology and Sa	RFQL 3434 IBTS Standards & QA	0
Integrated Solar Technology, LLC	OTHER PROGRAM AREA, Technology to Market	75,000
Integrity Solar Solutions, LLC	<200KW PV, NY Sun	10,640
IntelliGen Power Systems, LLC	COMBINED HEAT AND POWER, CHPA - Bay Park 1	237,952
	COMBINED HEAT AND POWER, CHPA - Bay Park 2	237,952
	COMBINED HEAT AND POWER, CHPA - London Terrace	277,216
nternational Electronic Machines	CLEAN TRANSPORTATION, Noncontact Elect. Wheel Gauge	18,625
Corp.,	CLEAN TRANSPORTATION, Optical Wheel Flaw Detection	64,791
nterstate Renewable Energy Council	, Workforce Industry Partnership, PON 3715 Workforce Training	9,717
ntertek Testing Services NA Inc.	CLEAN TRANSPORTATION, Wind Test Center	142,564
PPsolar Integration LLC	<200KW PV, NY-Sun	15,052
slip Resource Recovery Agency	CLEANER GREENER COMMUNITIES, CGC31134 - IRRA	250,000
J. Ranck Electric, Inc.	>200KW PV, Commercial/Industrial	65,273
Janus Solar Fund LP	NY-SUN, PV System at Janus Solar Fund	443,984
Jason Salfi	OTHER PROGRAM AREA, Innovation Advisory Services	33,469
Jasper Van den Munckhof	Retrofit NY, Multifamily	22,873
IEM ENGINEERING SERVICES	High Performing Grid, PON 3397 Round 2 - Category A	3,000
Jericho Rise Wind Farm, LLC	REC:CES REC Contracts, 9th RPS Main Tier Solicitation	494,043
John C Goodfellow Ent Ltd	Industrial Process Effic, Industrial Process Efficiency	15,000
John Siegenthaler	Renewable Heat NY, RFP 3165 Hydronic System Desig	0
	WORKFORCE DEVELOPMENT, RFP 3165 Hydronic System Desig	29,102
Johnson Controls Inc.	Flexible Tech Assistance, FlexTech Consultant Selection	31,084
Jones Lang LaSalle Americas, Inc.	Commercial Real Estate Ten, JLL - Multisite 48 sites - CT	240,000
Joseph P Day Realty Corporation	FLEXIBLE TECHNICAL ASSISTANCE, FlexTech Program - PON 1746	142,753
Joule Assets Inc	CLEANER GREENER COMMUNITIES, CGC57954 - Joule Assets	46,000
Kapsch TrafficCom Transportation N	A CLEAN TRANSPORTATION, Corporate Name Change	0
Kasselman Solar LLC	<200KW PV, NY Sun	130,174
	<200KW PV, NY-Sun	11,476
Kearsarge Oppenheim LLC	>200KW PV, NY-Sun C/I	338,618
Kelliher Samets Volk	Air Source Heat Pumps, Marketing Support for NYSERDA	191,399
	Commercial Imp Assist, Marketing Support for NYSERDA	1,013
	Commercial Real Estate Ten, Marketing Support for NYSERDA	43,572
	Commercial Real Estate Ten, TWO 24: CI Awareness Pilot MKT	20,070
	Community RH&C, Marketing Support for NYSERDA	89,772
	Flexible Tech Assistance, Marketing Support for NYSERDA	43,657
	Flexible Tech Assistance, TWO 24: CI Awareness Pilot MKT	80,280
	Geothermal Incentive Program, Marketing Support for NYSERDA	43,791
	Home Perf w Energy Star, Marketing Support for NYSERDA	58,337
	Industrial Process Effic, TWO 23: Industrial Mktg	5,753
	Industrial Process Effic, TWO 24: CI Awareness Pilot MKT	140,489
	Intervention Effectiv Training, TWO 22 Building Labeling Mkt	65,881
	LMI Community Solar, Marketing Support for NYSERDA	17,328
	Multifam Performance Pgm, Marketing Support for NYSERDA	175,765
	New Construction- Housing, Marketing Support for NYSERDA	147,813
	NY-SUN, Marketing Support for NYSERDA	90,827
	NYSERDA ADMINISTRATION, TWO 25 KSV Program Linkages	23,290
	On-Site Energy Manager, Marketing Support for NYSERDA	2,074
	On-Site Energy Manager, TWO 23: Industrial Mktg	11,505

Contractor	Contract Description	Total Expended Amount
Kelliher Samets Volk	On-Site Energy Manager, TWO 24: CI Awareness Pilot MKT	40,140
	Real Time Enrgy Management, Marketing Support for NYSERDA	61,426
	Real Time Enrgy Management, TWO 23: Industrial Mktg	3,835
	Real Time Enrgy Management, TWO 24: CI Awareness Pilot MKT	120,419
	Renewable Heat NY, Marketing Support for NYSERDA	32,843
	Residential-Engaging New Mkts, Marketing Support for NYSERDA	116,996
	Retrofit NY, Marketing Support for NYSERDA	36,338
	REV Campus Challenge, Marketing Support for NYSERDA	2,168
	Strategic Energy Manager, Marketing Support for NYSERDA	35,704
	Strategic Energy Manager, TWO 23: Industrial Mktg	15,340
	Workforce Industry Partnership, Marketing Support for NYSERDA	150,474
KEMA Incorporated	Campus/Technical Assistance, RFQ 3183 KEMA, Inc	1,266
	Community RH&C, RFQ 3183 KEMA, Inc	967
	EVALUATION, RFQ 3183 KEMA, Inc	28,570
	Flexible Tech Assistance, RFQ 3183 KEMA, Inc	1,786
	Geothermal Incentive Program, RFQ 3183 KEMA, Inc	7,139
	Renewable Heat NY, RFQ 3183 KEMA, Inc	20,652
Kema Services, Inc.	ADVANCED BUILDINGS, Evaluation Oversight Services	3,226
Kilfrost, Inc.	NextGen HVAC, PON3519 Round 1	43,284
Kilowatt Engineering, Inc.	Commercial Real Estate Ten, FlexTech Consultant Selection	22,083
	EXISTING FACILITIES, 2621 Umbrella Contract	10,796
	Industrial Process Effic, 2621 Umbrella Contract	26,324
King & King Architects, LLP	Retrofit NY, Multifamily	18,750
Kingston, City of	CLEANER GREENER COMMUNITIES, CGC29936 - City of Kingston	76,591
Kissing Bridge Corp	Industrial Process Effic, Industrial Process Efficiency	128,000
KLD Engineering, P.C.	CLEAN TRANSPORTATION, Connected Eco-Driving Tech	0
	CLEAN TRANSPORTATION, Transportation Resiliency	34,336
Kraft Power Corporation	COMBINED HEAT AND POWER, CHPA - Mount Vernon High Schoo	90,525
	COMBINED HEAT AND POWER, CHPA - South Hill Business Cam	255,934
L&S Energy Services, Inc.	>200KW PV, Umbrella Contract	2,870
	Agriculture Energy Eff Pgm, RFP3628FlexTechConsultUmbrella	20,000
	ANAEROBIC DIGESTER, RPS-CST Quality Assurance/Qual	2,500
	Campus/Technical Assistance, Umbrella Contract	1,103
	CLEANER GREENER COMMUNITIES, RFP3628FlexTechConsultUmbrella	2,330
	Combined Heat and Power, Umbrella Contract	17,306
	Commercial Real Estate Ten, FlexTech Consultant Selection	23,925
	Flexible Tech Assistance, FlexTech Consultant Selection	12,133
	Flexible Tech Assistance, Umbrella Contract	35,012
	FLEXIBLE TECHNICAL ASSISTANCE, Umbrella Contract	68,296
	Geothermal Incentive Program, 3695 TWO Umbrella Agreement	3,281
	Geothermal Incentive Program, Umbrella Contract	19,677
	GREENING THE BRONX, Greening the Bronx	72,525
	Industrial Process Effic, Umbrella Contract	56,017
	INDUSTRIAL PROCESS EFFICIENCY, .	5,225
	INDUSTRIAL PROCESS EFFICIENCY, Umbrella Contract	25,468
	NEW CONSTRUCTION PROGRAM, Umbrella Contract	703
	On-Site Energy Manager, Umbrella Contract	15,470
	Renewable Heat NY, Umbrella Contract	19,010

Contractor	Contract Description	Total Expended Amount
L&S Energy Services, Inc.	REV Campus Challenge, Umbrella Contract	1,632
	Technical Services, RFP3628FlexTechConsultUmbrella	7,500
LaBella Associates, P.C.	Agriculture Energy Eff Pgm, RFP3628FlexTechConsultUmbrella	4,079
	EMERGING TECHNOLOGY / ACCELERATED COMMERCIALIZATION, T	20,846
	Flexible Tech Assistance, RFP3628FlexTechConsultUmbrella	39,542
	NEW CONSTRUCTION PROGRAM, New Construction	1,559
	Technical Services, RFP3628FlexTechConsultUmbrella	2,254
Laertes Solar, LLC	Cornell - Harford	406,023
Lafarge Building Materials	INDUSTRIAL PROCESS EFFICIENCY, Industrial Process Efficiency	2,031,095
Lafayette Development LLC	NEW CONSTRUCTION PROGRAM, NCP11520 - Lafayette	38,642
Lake Beverage Corporation	Commercial/Industrial	41,150
Lakegrove Mart Inc	FUEL NY, PGI00298 - Lakegrove Mart Inc	106,543
Lakeside Manor Home For Adults Inc	ADVANCED BUILDINGS, EFP2382 - Lakeside Manor Home	19,388
	EXISTING FACILITIES, EFP2382 - Lakeside Manor Home	58,164
Lamb Farms Inc.	ANAEROBIC DIGESTER, RPS ADG - Lamb Lakeshore Dairy	176,755
Lantern Organization Inc.	Multifam New Construction, New Construction	15,950
Launch New York, Inc.	Cleantech ICC Engage, Launch NY ECO Incubator	434,500
,, _,, _	Cleantech Incubator, Launch NY ECO Incubator	0
LC DRives	OTHER PROGRAM AREA, PON 3249 Advanced Clean Energy	398,953
LED Specialists Inc	ADVANCED BUILDINGS, Advanced Buildings Technology	13,844
Levitan & Associates, Inc.	OREC: Technical Support, RFP3462 Umbrella Agreement	653,797
Liberty Affordable Housing, Inc.	Multifam Performance Pgm, Multifamily	72,600
	EMERGING TECHNOLOGY / ACCELERATED COMMERCIALIZATION, E	62,500
Line Energy		
¥	Technical Services, OsEM10-Lincoln Center Perform	26,535
Linde, LLC	Industrial Process Effic, Industrial Process Efficiency	38,268
Liverpool Central School Dist	NEW CONSTRUCTION PROGRAM, NCP13198 - Chestnut Hill Eleme	28,163
	NEW CONSTRUCTION PROGRAM, NCP13199 - Chestnut Hill Middl	63,327
•	MULTIFAMILY PERFORMANCE PROGRAM, Multifamily	32,400
Loeb & Loeb LLP	NEW YORK GREEN BANK, Green Bank Outside Legal Couns	4,851
0 0 0	Cleantech Incubator, PON3413 Clean Energy Incubator	255,000
Long Island Power Authority	NY-SUN, LIPA MOU RGGI Compliance Progr	17,300,000
Long Island Power Solutions	<200KW PV, NY Sun	7,875
Lotus Energy, Inc.	<200KW PV, NY Sun	11,970
Lukoil North America LLC	FUEL NY, GSP00490-005 - LUKOIL North Am	8,766
Lumalon LLC	Commercial Imp Assist, CIAP008 - Lumalon; RRHH	150,000
M/E Engineering, P.C.	Commercial New Construc, M/E - EMP	14,852
	Commercial New Construc, RFP3771 Umbrella Contract	22,953
	Flexible Tech Assistance, FlexTech Consultant Selection	54
	Flexible Tech Assistance, RFP3628FlexTechConsultUmbrella	74,184
	Industrial Process Effic, Technical Review and Program S	12,819
Maalka Inc	Cleantech Ignition, PON 3871 Ignition Grants	75,000
Madison County	CLEANER GREENER COMMUNITIES, Madison County	62,500
Malcolm Pirnie, Inc.	COMBINED HEAT AND POWER, EFP Task Work Orders	4,462
	INDUSTRIAL PROCESS EFFICIENCY, EFP Task Work Orders	4,583
Malverne Gas Inc.	FUEL NY, PGI00247 - Malverne Gas Inc.	92,637
Marble River Wind Farm LLC	LARGE SCALE RENEWABLES, Marble River Wind Farm	4,530,281
Marlo Towers Owners, Inc.	MULTIFAMILY PERFORMANCE PROGRAM, Multifamily	137,200
Marsh Hill Energy, LLC	LARGE SCALE RENEWABLES, 8th RPS Main Tier Solicitation	889,165
	,	,

Martin Energy Group Services, LLC	Combined Heat and Power, CHPA - VAMC Albany Samual	343,929
Martin Energy Group Services, LLC Mastercard International		,
	>200KW PV, NY Sun	39,517
Max Solar Inc	<200KW PV, NY Sun	29,008
	<200KW PV, PON 2112 NY SUN	6,993
	WEST VALLEY DEVELOPMENT PROGRAM, Engineering Services WV	104,440
Meadows Senior Living L.P.	NEW YORK ENERGY STAR HOMES, New Construction	145,000
Meister Consultants Group, Inc.	ENERGY ANALYSIS, Renewable Heating Cooling TA	16,117
	Real Time Enrgy Management, Efficiency Planning & Engineer	80,027
	REV Campus Challenge, Efficiency Planning & Engineer	49,017
	REV Campus Challenge, REV CC - Meister CG	15,772
Melville Fuel Inc.	FUEL NY, PGI00302 - Melville Fuel Inc.	93,415
Memorial Sloan Kettering Cancer Center	EXISTING FACILITIES, EFP2108 - Memorial Sloan Kette	72,839
Genter	Workforce Industry Partnership, PON 3442 Workforce Training	108,000
MEP Geothermal Engineering, PLLC	Geothermal Incentive Program, GSHP Incentve	284,400
MEPT/Cove Two Rector REIT LLC	Commercial New Construc, NCP15011 - 2 Rector St	232,470
Mesa Bioenergy Supply, LLC	CLEANER GREENER COMMUNITIES, CGC32404 Reassignment to MESA	41,065
Metropolitan Washington Council	OTHER PROGRAM AREA, DOE UER - MWCOG	40,672
Micatu, Inc.	High Performing Grid, 69kV OPTICAL SENSOR	900,000
	OTHER PROGRAM AREA, RFQL3101 76W Clean Energy Comp	100,000
Michaels Energy, Inc.	Industrial Process Effic, RFQ 3183 Michaels Energy	16,242
Michaels Group	Low Rise New Construction, New Construction	18,000
Michaels Group Homes, LLC	Low Rise New Construction, New Construction	22,800
Michelangelo Preservation LLC	Multifam Performance Pgm, Multifamily	172,900
Micro Nano Technologies	NextGen HVAC, PON3519 Round 1	15,000
mindSHIFT Technologies, Inc.	NYSERDA ADMINISTRATION, RFP 3919-Sitecore CMS Admin	16,683
	NYSERDA ADMINISTRATION, Website Development	87,192
Minisink Solar 1, LLC	>200KW PV, NY-Sun C&I	450,304
Minisink Solar 2, LLC	>200KW PV, NY-Sun C/I	546,328
MJW Technical Services, Inc.	WEST VALLEY DEVELOPMENT PROGRAM, Radiation Protection Support	121,373
MLG 904 Development MM LLC	Multifam New Construction, New Construction	9,000
Moelis & Company Group LP	NEW YORK GREEN BANK, 3PC raise advisory Services	526,321
Moffat Library	NEW CONSTRUCTION PROGRAM, NCP12436 - Moffat Library-OFLT	7,620
Mohawk Valley Economic Developme	Community Energy Engagement, CEEP Mohawk Valley Region (MVE	69,131
Mohawk Valley Solar Partners, LLC	PV System @ Mohawk Valley Comm	346,394
Mohonasen Central School District	NEW CONSTRUCTION PROGRAM, NCP12897 - Mohonasen High Scho	20,690
Moise Safra Community Center Inc	NEW CONSTRUCTION PROGRAM, NCP12117 - Moise Safra Communi	40,982
Molecular Glasses, Inc.	OTHER PROGRAM AREA, Technology to Market	30,000
Molloy College	CLEANER GREENER COMMUNITIES, CGC42044 - Molloy College	127,671
Momentive Performance Materials	INDUSTRIAL PROCESS EFFICIENCY, Industrial Process Efficiency	116,340
Monolith Solar Associates, LLC	<200KW PV, NY Sun	138,421
	<200KW PV, NY-Sun	-50,319
Moore Energy, LLC	<200KW PV, NY Sun	58,960
	REC:CES REC Contracts, 10th RPS Main Tier Solicitatio	61,420
Mount Sinai Medical Center	Flexible Tech Assistance, FT11621 - Mount Sinai Medical	82,984
Mount Singi Ousens	Technical Services, OsEM - Mount Sinai Hospital	50,000
Mount Sinai Queens	NEW CONSTRUCTION PROGRAM, NCP11594 - New Building and Cl	5,221
Move Systems, Inc.	CLEAN TRANSPORTATION, food truck charging pedestal	32,803

Contractor	Contract Description	Total Expended Amount
Mukti E 163rd Petroleum Inc	FUEL NY, PGI00290 - Mukti E 163rd Petro	118,378
Nare Farms	AGRICULTURE ENERGY EFFICIENCY, Agriculture Energy Efficiency	15,664
National Economic Research	Mkt Char: Tech Assist, Tech Assist, REV Pool	21,487
National Oilheat Research Alliance	ADVANCED BUILDINGS, Tankless Coil Boilers	8,360
National Pipe Inc	INDUSTRIAL PROCESS EFFICIENCY, Industrial and Process Efficie	513,732
Natural History Museum of the Adirondack	ADVANCED BUILDINGS, Retrofit Hi-Eff Wood Heat Sys	38,638
Adirondack	ENVIRONMENTAL RESEARCH, Retrofit Hi-Eff Wood Heat Sys	6,979
	Environmental Research, Wild Ctr Clim Change Outreach	16,500
Navigant Consulting Inc.	Advancing Ag Enrgy Technologie, RFQ3183 Umbrella Agreement	44,671
	Energy Storage Tech/Prod Dev, RFQ3183 Umbrella Agreement	36,643
	Greenhouse Light & Systems Eng, RFQ3183 Umbrella Agreement	44,671
	NEW YORK GREEN BANK, Outside Technical and Eng. Srv	60,307
	REV Connect, REV Connect	254,560
	Rmve Barriers Dist Enrgy Storg, RFQ3183 Umbrella Agreement	35,319
	Technical Services, RFQ3183 Umbrella Agreement	44,671
Nazareth Regional High School	Flexible Tech Assistance, FlexTech Program - PON 1746	13,866
	Flexible Tech Assistance, FT11614 - Nazareth High School	15,276
NBC Universal LLC	INDUSTRIAL PROCESS EFFICIENCY, Industrial Process Efficiency	46,382
NESCAUM	ENVIRONMENTAL RESEARCH, RFQL3685 Round 1	197,821
	ENVIRONMENTAL RESEARCH, Tech Assist, REV Pool	157,807
	OTHER PROGRAM AREA, Tech Assist, REV Pool	0
	RENEWABLE HEAT NY, Mobile Woodsmoke PM Monitoring	13,714
	RENEWABLE HEAT NY, Next Gen Test Methods Research	36,474
	Renewable Heat NY, RFQL3685 Round 1	54,263
	RENEWABLE HEAT NY, Tech Assist, REV Pool	22,641
	RENEWABLE HEAT NY, Wood Pellet Standard	41,376
Netzero NRG LLC	NEW YORK ENERGY STAR HOMES, New Construction	52,000
New Buildings Institute, Inc.	Code to Zero, Codes	45,484
	New Construction- Commercial, New Construction	64,975
	New Construction- Housing, New Construction	51,259
New Destiny Housing Corp	MULTIFAMILY PERFORMANCE PROGRAM, Multifamily	9,450
	. LARGE SCALE RENEWABLES, Clinton Co. Landfill	61,750
New Hope View Farm	ANAEROBIC DIGESTER, PON 2684 - RPS CST ADG-to-Elec	53,844
New York Academy of Sciences	EVALUATION, Innovation and Business Develo	18,959
	OTHER PROGRAM AREA. Innovation and Business Develo	31,345
New York Battery and Energy Storage	Rmve Barriers Dist Enrgy Storg, RFP 3407 Category 3B	172,949
New York City DOT	CLEANER GREENER COMMUNITIES, CGC29967 - NYCDOT - Category 3	477,866
New York City Energy Efficiency Corp	CLEANER GREENER COMMUNITIES, CGC32252 - NYCEEC	206,254
New York City Housing Authority	CLEANER GREENER COMMUNITIES, CGC56950 - NYC DEP	19,000
New York Power Authority	FLEXIBLE TECHNICAL ASSISTANCE, FlexTech MOU NYSERDA-NYPA	176,760
New York Presbyterian Hospital	NEW CONSTRUCTION PROGRAM, NCP11494 - Ambulatory Care Cen	604,536
New Tork Fresbytenan Hospital	NEW CONSTRUCTION PROGRAM, NCP12440 - NYP CHONY Bundle	5,240
New York Proton Management		
New York Proton Management	NEW CONSTRUCTION PROGRAM, PON1601-R3	139,766
New York Restoration Project	GREENING THE BRONX, Greening The Bronx	67,666
New York State Marine	CLEAN TRANSPORTATION, NYS Canal Marine Freight	678
New York State Police	NEW CONSTRUCTION PROGRAM, NCP12387-NYS Police-OFLT	19,353
New York State Solar Farm Inc.	<200KW PV, NY Sun	105,026
	<200KW PV, NY-Sun	6,820

Contractor	Contract Description	Total Expended Amount
New York University	Cleantech Incubator, PON3413 Clean Energy Incubator	335,000
	INNOVATION CAPACITY & BUSINESS DEVELOPMENT, Clean Tech Tra	61,000
	NEW CONSTRUCTION PROGRAM, NCP11464 - Center for Urban Sc	984,583
Newport Ventures, Inc.	ADVANCED ENERGY CODES, Energy Code Training	4,543
	Code to Zero, Energy Code Training	168,602
	New Construction- Housing, New Construction	112,273
Nexant, Incorporated	ADVANCED BUILDINGS, Technical Review and Program S	1,508
	EXISTING FACILITIES, Technical Review and Program S	4,524
NextCorps Inc	INNOVATION CAPACITY & BUSINESS DEVELOPMENT, Proof-of-Concep	255,625
	M-Corps, ACT Prototypes to Mass Prod NY	386,000
	OTHER PROGRAM AREA, NYSERDA Entrepreneurs-in-Resid	101,537
Nextera Energy Capital Holdings Inc	General Electric 1	436,187
	General Electric 2	356,141
	General Electric 3	357,710
	General Electric 4	327,672
	NY-SUN, NY Sun	406,519
	SUNY Poly Hoosick 1	346,759
	SUNY Poly Hoosick Falls 2	333,984
	SUNY Poly Selkirk 1	421,586
	SUNY Poly Selkirk 2	308,433
	SUNY Poly Selkirk 3	315,733
	SUNY Poly Selkirk 4	324,859
NextEra Energy Capital Holdings, Inc.	NY-Sun C&I	324,645
Niagara Frontier Transportation	CLEAN TRANSPORTATION, Buffalo Niagara TMA	40,908
Authorit	CLEAN TRANSPORTATION, Integrated Corridor Management	649
NIC Holding Corp	FUEL NY, NYS Strategic Gasoline Reserve	261,829
Nickels Energy Solutions LLC	<200KW PV, NY Sun	5,434
Nixon Peabody LLP	NEW YORK GREEN BANK, Green Bank Outside Legal Serv.	56,464
NJP Consulting Inc.	<200KW PV, NY Sun	21,696
NMR Group, Inc.	EVALUATION, RFQ 3183 NMR Group, Inc.	51,978
NMR Group, me.	Home Perf w Energy Star, RFQ 3183 NMR Group, Inc.	4,516
	Standardized Approach to EEfic, RFQ 3183 NMR Group, Inc.	31,119
Noble Wethersfield Windpark, LLC	LARGE SCALE RENEWABLES, Smart Grid Syst & Dist Eng Int	1,733,391
Nor Crest Service Station Inc.	FUEL NY, PGI00285 - Nor Crest Service S	94,500
Norampac, Ind., Inc.	Industrial Process Effic, Industrial Process Efficiency	57,953
Normandeau Associates, Inc.	Environmental Research, Digital Aerial Baseline Survey	426,451
Norstar Solar LLC	>200KW PV, NY-SUN C&I (Assignment)	499,797
Northeast States for Coordinated Air	Environmental Research, NY climate clearinghouse	31,102
Northeast Wind Partners II LLC	LARGE SCALE RENEWABLES, Smart Grid Syst & Dist Eng Int	335,132
	LARGE SCALE RENEWABLES, Steel Winds II	385,140
Northwell Health, Inc.	Commercial New Construc, NCP15045-5925 Little Neck-OFLT	33,349
	NEW CONSTRUCTION PROGRAM, NCP10696 - Lenox Hill Center f	39,607
Novel Approaches Solar Applications,.	. <200KW PV, NY Sun	13,056
Novus Engineering, P.C.	NEW CONSTRUCTION PROGRAM, NCP TA Contract - ST10140	C
NP Environmental LLC	Geothermal Incentive Program, Large-Scale GSHP Rebate	55,022
	Talent Pipeline:CE and OJT, OJT HIRE	5,760
NY Baldwin II, LLC	>200KW PV, NY-Sun C&I	640,839
NY Delaware I, LLC	>200KW PV, NY-Sun C/I	283,613

Contractor	Contract Description	Total Expended Amount
NY RNM Project1A, LLC	>200KW PV, NY-Sun	480,921
NY RNM Project2, LLC	NY Sun C/I	483,030
NYC Climate Action Alliance Inc.	Commercial Real Estate Ten, NYC Climate Alliance - CT	13,550
NYC Department of Environmental Pr		10,325
NYC Partnership Housing Dev. Fund	MULTIFAMILY PERFORMANCE PROGRAM, Multifamily	176,850
NYCHA III Parent Housing Developme	MULTIFAMILY PERFORMANCE PROGRAM, Multifamily	362,200
NYS Office of General Services	NEW CONSTRUCTION PROGRAM, NCP98179 - Mohawk Correctional	15,683
NYS Office of Information Technology	Industrial Process Effic, Industrial Process Efficiency	21,321
NYS Office of Mental Health	NEW CONSTRUCTION PROGRAM, NCP12785 - OMH Hutchings Ph3	48,411
NYS Office of Parks, Recreation and	<200KW PV, NY Sun	8,649
NYS Olympic Regional Development	Industrial Process Effic, Industrial Process Efficiency	299,000
	Workforce Industry Partnership, PON 3442 Workforce Training	17,001
NYU Langone Hospitals	Technical Services, OsEM13-C - NYU Langone Health	22,472
O'Brien & Gere Engineers, Inc.	DER Integration(Intrcnect), PON 3404 DER Integration	41,952
,,,,,,,	Flexible Tech Assistance, RFP3628FlexTechConsultUmbrella	5,968
	FLEXIBLE TECHNICAL ASSISTANCE, FlexTech Consultant Selection	10,759
	Industrial Process Effic, RFP3628FlexTechConsultUmbrella	40,498
O'Connell Electric Company	<200KW PV, NY Sun	114,990
Oak Mountain	Industrial Process Effic, Industrial Process Efficiency	53,400
Oakvale Construction Co. Ltd.	LARGE SCALE RENEWABLES, Black Brook Hydro	16,450
Ocean Tech Services LLC	Off-Shore Wind Pre-Dev Act, RFP 3855 Metocean Cat. 1: FLSS	923,546
OLA Consulting Engineers, P.C.	Flexible Tech Assistance, RFP3628FlexTechConsultUmbrella	13,121
Olatokumbo Shobowale	Low Rise New Construction, New Construction	2,900
Old Stage Road Solar 1, LLC	>200KW PV, NY-Sun C&I	298,850
Olin Corporation	INDUSTRIAL PROCESS EFFICIENCY, Industrial Process Efficiency	344,109
OnForce Solar	>200KW PV, NY Sun	321,578
Onyx Renewable Partners, LP	<200KW PV, NY Sun	830,835
Open Energy Efficiency Inc.	Pay for Performance, RFP 3901 P4P-AMV Platform	28,794
Opinion Dynamics Corporation	Commercial Real Estate Ten, RFQ3183 Umbrella Agreement	142,111
Opinion Dynamics Corporation	EVALUATION, Commercial Statewide Baseline	2,661,889
	Real Time Enrgy Management, RFQ3183 Umbrella Agreement	132,100
Orange and Deckland Utilities Inc.	Remote Energy Management, RFQ3183 Umbrella Agreement	0
Orange and Rockland Utilities, Inc.	SMART GRID SYSTEMS, EPTD Smart Grid	229,442
Orange Regional Medical Center	NEW CONSTRUCTION PROGRAM, NCP12977 - ORMC Physicians Off	10,428
Orient Overseas Associates	FLEXIBLE TECHNICAL ASSISTANCE, FlexTech Program	28,260
	Community RH&C, PON3723 RH&C Campaigns	32,500
Owego Apalachin CSD	NEW CONSTRUCTION PROGRAM, NCP11320 - Owego School	15,813
OwnSolar, LLC	>200KW PV, Commercial/Industrial PV	62,845
Pace University	CLEANER GREENER COMMUNITIES, CGC39147 - Pace Sustainability	250,000
Pace University School of Law	>200KW PV, CGC31911 - Pace Law School	3,412
	CLEANER GREENER COMMUNITIES, CGC31911 - Pace Law School	111,084
Packer Collegiate Institute	NEW CONSTRUCTION PROGRAM, NCP13181 - Packer Early Learni	4,906
Paradise Energy Solutions, LLC	<200KW PV, NY Sun	184,863
	MULTIFAMILY PERFORMANCE PROGRAM, Multifamily	66,950
PassiveLogic Inc.	76 West, 76 West Energy Bus Competition	125,000
Pathstone Corporation	Community Energy Engagement, CEEP Finger Lakes Region (PATH	66,309
Pattersun 1.3 LLC	NY-SUN, PV System @ Watchtower Bible T	327,576
Paul Hastings LLP	MARKET PATHWAYS, CRETP - Paul Hastings - 200 Pa	140,000

Contractor	Contract Description	Total Expended Amount
Pearl Solar II, LLC	>200KW PV, NY-Sun C&I	422,546
Peconic Crossing, LLC	NEW YORK ENERGY STAR HOMES, New Construction	67,500
People United for Sustainable Housin	Community Energy Engagement, CEEP Western New York Region	51,800
Pepsi-Cola of the Hudson Valley	Commercial/Industrial	76,220
Performance Systems Development	Pay for Performance, Task #1 contract 113650	20,700
Petrecky Consulting LLC	OTHER PROGRAM AREA, RFP 3859	12,900
PFNY LLC	FLEXIBLE TECHNICAL ASSISTANCE, FlexTech Program - PON 1746	51,450
PlugPV, LLC	<200KW PV, NY Sun	34,376
PMG Northeast LLC	FUEL NY, PGI00186 - PMG Northeast LLC	113,401
	FUEL NY, PGI00230 - PMG Northeast LLC	101,624
Poseidon Systems, LLC	CLEAN TRANSPORTATION, Renewable, Clean Energy and En	435,919
Powerhouse Dynamics, Inc	Real Time Enrgy Management, Powerhouse - Multisite - RTEM	20,095
	Real Time Enrgy Management, Powerhouse-Five Below-RTEM	28,644
Prime Petro Inc	FUEL NY, PGI00300 - Prime Petro Inc.	131,291
Promesa Housing Development Fund	Multifam New Construction, MFNCP - Virginia House	13,550
Prospect Equities Operating, LLC	MULTIFAMILY PERFORMANCE PROGRAM, Multifamily	16,741
Providence Housing Development Cor	Low Rise New Construction, New Construction	63,000
PS21, Inc	NEW CONSTRUCTION PROGRAM, NCP13176 - Black Box Theater	8,476
Pterra, LLC	DER Integration(Intrcnect), FlexTech Consultant Selection	12,660
	DER Integration(Intrcnect), PON 3404 DER Integration	40,000
Pulsar Properties LLC	MULTIFAMILY PERFORMANCE PROGRAM, Multifamily	4,800
Pyramid Energy Engineering Services	Renewable Heat NY, FlexTech Consultant Selection	55,244
Quanta Technology LLC	High Performing Grid, PON 3397 Round 2 - Category A	121,172
	Off-Shore Wind Pre-Dev Act, RFP3462 Umbrella Agreement	1,400
Queens Center REIT, LLC	FUEL CELLS, RPS FC - Macerich Mall meter #	630,000
Quixotic Systems, Inc.	<200KW PV, NY Sun	16,540
QwikSolar, LLC	<200KW PV, NY Sun	14,962
R & A Petroleum Corp	FUEL NY, PGI00214 - R & A Petroleum Cor	85,000
R3 Energy Management Audit &	Real Time Enrgy Management, P Clabby-110 East 59th St-RTEM	3,960
Review, LLC	Real Time Enrgy Management, Resnick&Sons-485MadisonAv-RTEM	3,960
R-Display and Lighting LLC	ADVANCED BUILDINGS, Advanced Buildings Technology	13,541
RD & Associates Consulting LLC	OTHER PROGRAM AREA, RFP3267 Innovation Advis Pilot	41,225
RED Rochester	Industrial Process Effic, Industrial Process Efficiency	54,325
Redocs Inc	Commercial Real Estate Ten, REDOCS-250 Greenpoint Ave-CT	18,966
ReEnergy Black River LLC	LARGE SCALE RENEWABLES, Black River Facility	5,681,445
Regents of the University of Michigan	ENVIRONMENTAL RESEARCH, Cloudwater Chemistry	3,879
Related Management Company LP	Workforce Industry Partnership, PON 3442 BOM Training Program	134,135
Renovus Energy, Inc.	<200KW PV, NY Sun	240,617
	>200KW PV, Commercial/industrial PV	31,614
	>200KW PV, NY Sun	157,859
Rensselaer Polytechnic Institute	CLEAN TRANSPORTATION, Off Hour Delivery Trusted Vend	51,756
	CLEAN TRANSPORTATION, RPI - PON 3198	42,749
	High Performing Grid, PON 3397 CAT A	53,000
	INNOVATION CAPACITY & BUSINESS DEVELOPMENT, Advanced Clean	82,760
	INNOVATION CAPACITY & BUSINESS DEVELOPMENT, Utraviolet and E	120,000
	RENEWABLES & DER INTEGRATION, Electrompolymeric Dynamic Disp	54,800
Rensselaer Polytechnic Institute-LRC	ADVANCED BUILDINGS, Desktop Lighting Control	38,972
teneselaer i orytechnic institute-LRC	A STATED DOLDARGO, DESKIOP EIGHTING CONTO	50,972

Contract Description	Total Expended Amount
CLEAN TRANSPORTATION, CAVs Impacts Study	68,543
CLEAN TRANSPORTATION, Freight in Complete Streets	0
CLEAN TRANSPORTATION, Virtual TMA Demo	117,044
ENVIRONMENTAL RESEARCH, Integrated Air Quality Monitor	24,141
ENVIRONMENTAL RESEARCH, Optical Assessment of CMAQ	10,000
High Performing Grid, PON 3397 Round 2 - Category A	40,000
Rmve Barriers Dist Enrgy Storg, RFP 3407 Category 1	302,545
ADVANCED BUILDINGS, Warm-Water Server Cooling	135,601
ENERGY ANALYSIS, Accelerated Recovery	0
ENVIRONMENTAL RESEARCH, Accelerated Recovery	6,107
ENVIRONMENTAL RESEARCH, Combining Measurements and Mod	58,405
ENVIRONMENTAL RESEARCH, IDEA-NYS air quality forecast	77,903
ENVIRONMENTAL RESEARCH, Seiche in Eastern Lake Erie	73,322
FUEL CELLS, CNSE Fuji Fuel Cell	221,907
RENEWABLE HEAT NY, College woodstove design team	23,862
RENEWABLE HEAT NY, College Woodstove design team	14,237
ENVIRONMENTAL RESEARCH, Coastal monitoring framework	113,288
INNOVATION CAPACITY & BUSINESS DEVELOPMENT, Birnessite for Gr	22,810
Clean Energy Communities, RFQ3183 Umbrella Agreement	54,477
EVALUATION, RFQ3183 Umbrella Agreement	17,901
	5,992
	85,891
	21,000
	18,250
	21,000
	1,021
	60,000
-	223,631
	13,909
	20,773
	5,681
	2,194
	11,423
· -	19,750
	1,750
	22,149
	4,890
	4,090
	9,053
· ·	
	21,672
	395,493
	76,122
	8,614
	109,164
	350,033
>200KW PV, NYSUN C&I	531,113
NEW CONSTRUCTION PROGRAM, NCP10585 - Rudin West Village	334,847
	CLEAN TRANSPORTATION, Freight in Complete Streets CLEAN TRANSPORTATION, Virtual TMA Demo ENVIRONMENTAL RESEARCH, Integrated Air Quality Monitor ENVIRONMENTAL RESEARCH, Optical Assessment of CMAQ High Performing Grid, PON 3397 Round 2 - Category A Rmve Barriers Dist Enrgy Storg, RFP 3407 Category 1 ADVANCED BUILDINGS, Warm-Water Server Cooling ENERGY ANALYSIS, Accelerated Recovery ENVIRONMENTAL RESEARCH, Accelerated Recovery ENVIRONMENTAL RESEARCH, Combining Measurements and Mod ENVIRONMENTAL RESEARCH, DEA-NYS air quality forecast ENVIRONMENTAL RESEARCH, DEA-NYS air quality forecast ENVIRONMENTAL RESEARCH, Seiche in Eastern Lake Erie FUEL CELLS, CNSE Fuji Fuel Cell RENEWABLE HEAT NY, College woodstove design team RENEWABLE HEAT NY, College Woodstove design team RENEWABLE HEAT NY, College Woodstove design team ENVIRONMENTAL RESEARCH, Coastal monitoring framework INNOVATION CAPACITY & BUSINESS DEVELOPMENT, Birnessite for Gr. Clean Energy Communities, RFQ3183 Umbrella Agreement EVALUATION, RFQ3183 Umbrella Agreement Workforce Industry Partnership, RFQ3183 Umbrella Agreement CLEAN TRANSPORTATION, PON 3345 Renewable Heat NY, Aeon Heating - Baillargeon NEW CONSTRUCTION PROGRAM, NCP11581 - Richardson Olmsted NY-SUN, Affordable Solar Predevelopmen >200KW PV, NY Sun C/l Commercial New Construc, RFP3711 Umbrella Contract NEW CONSTRUCTION PROGRAM, NCP11581 - Richardson Olmsted NY-SUN, Affordable Solar Predevelopmen >200KW PV, NY Sun C/l Commercial Real Estate Ten, Robert Derector-305W 393HSI-CT Commercial Real Estate Ten, Robert Derector-305W 393HSI-CT Commercial Real Estate Ten, Robert Derector-315HudsonSI-CT Commercial Real Estate Ten

Contractor	Contract Description	Total Expended Amount
RXR Atlas LLC	NEW CONSTRUCTION PROGRAM, NCP11905 - 75 Rockefeller Plaz	91,637
Ryan Homes (Virginia)	Low Rise New Construction, New Construction	214,700
	New Construction- Housing, New Construction	0
Safari Energy LLC	NY-SUN, New York Sun Competitive PV Pr	17,350
	PV System @ SE.DMNC.333 Ph 2.1	56,110
Samaritan Hospital of Troy Inc	NEW CONSTRUCTION PROGRAM, NCP12281-SamaritanHospitalOFLT	243,887
SAP America Inc	NEW CONSTRUCTION PROGRAM, NCP12768-SAP Office	35,817
SAVD Solar, Inc.	INNOVATION CAPACITY & BUSINESS DEVELOPMENT, Self-Aligning Ve	14,744
Schodack Central School District	NEW CONSTRUCTION PROGRAM, NCP12924 - High School Renovat	25,216
Scott Shipley	<200KW PV, NY-Sun	6,223
Scotts Peekn Peak LLC	Industrial Process Effic, Industrial Process Efficiency	70,400
Second Street Enterprise Inc.	FUEL NY, PGI00265 - Second Street Enter	115,770
SecondMuse LLC	M-Corps, Technology to Market	240,500
Seed Renewables Inc.	<200KW PV, NY Sun	5,582
Seneca Energy II, LLC	LARGE SCALE RENEWABLES, Ontario LFGE	240,292
	LARGE SCALE RENEWABLES, Seneca Energy	0
Seneca Nation	>200KW PV, NY Sun	145,662
Seneca Strategic Consulting, LLC	CLEANER GREENER COMMUNITIES, CGC43425 - Ithaca 2030 District	6,000
Seven Springs West LLC	WEST VALLEY DEVELOPMENT PROGRAM, Operations and Maintenanc	102,133
Shared Mobility, Inc.	CLEAN TRANSPORTATION, Shared Mobility Network	1,890
Sheldon Energy, LLC	LARGE SCALE RENEWABLES, High Sheldon Wind Farm	2,318,124
Silver Lining Solar	<200KW PV, NY Sun	23,010
Sive Paget & Riesel PC	Off-Shore Wind Master Plan, RFP 3300 & RFP 3776 Outside Co	8,342
	Off-Shore Wind Pre-Dev Act, RFP 3300 & RFP 3776 Outside Co	50,000
	OREC: Technical Support, RFP 3300 & RFP 3776 Outside Co	34,176
	WEST VALLEY DEVELOPMENT PROGRAM, RFP 3300 & RFP 3776 Outs	16,272
Skadden, Arps, Slate, Meagher & Flo	NEW YORK GREEN BANK, Green Bank Outside Legal Couns	22,288
Ski Plattekill, Inc.	Industrial Process Effic, Industrial Process Efficiency	207,000
Ski Windham Operating Corp.	Industrial Process Effic, Industrial Process Efficiency	299,800
Skyline Solar Inc.	<200KW PV, NY Sun	8,750
Skyven Technologies, LLC	OTHER PROGRAM AREA, Technology to Market	200,000
SmartCloud Inc.	ADVANCED BUILDINGS, FastDR from Comm Bldgs	42,000
	Commercial Real Estate Ten, Smith Enignee-1330 AoA-CommTen	9,800
Smith Engineering PLLC	Flexible Tech Assistance, RFP3628FlexTechConsultUmbrella	6,286
Spudar Manufacturing Inc		
Snyder Manufacturing, Inc	Geothermal Incentive Program, Large-Scale GSHP Rebate	16,682
Solar Alchemy, Inc.	<200KW PV, NY Sun	38,654
Solar and Wind FX, Inc. (Chris Schaef		10,000
Solar Energy Systems, LLC	>200KW PV, NY Sun	80,550
Solar Liberty Energy Systems, Inc	<200KW PV, NY Sun	153,773
	<200KW PV, NY-Sun	16,463
Solar Mission II LLC	NY-Sun C&I Saratoga Springs	453,698
Solar Plumbing Design Inc	<200KW PV, NY Sun	5,204
Solar Tompkins Inc.	Community RH&C, PON3723 RH&C Campaigns	38,400
South Colonie Central Schools	NEW CONSTRUCTION PROGRAM, NCP11976 - Colonie 2020 Capita	10,690
South Columbus Realty LLC	FUEL NY, GSP00310 - South Columbus Real	6,239
Southern Tier Central Regional Planni	CLEANER GREENER COMMUNITIES, CGC40255 - Cooperative Compreh	10,732
Southern Tier Technologies LLC	76 West, 76 West Energy Bus Competition	125,000
Southport, LLC	>200KW PV, Commercial/Industrial	23,117

Contractor	Contract Description	Total Expended Amount
SPJ LLC	FUEL NY, PGI00284 - SPJ LLC	97,100
SRI International	OTHER PROGRAM AREA, NYS Clean Technologies Innovat	40,000
	Subscription/Data Access, NYS Clean Technologies Innovat	40,000
SS&C Technologies, Inc.	NEW YORK GREEN BANK, Fund Administration/Loan Inves	176,332
SSA Solar of NY 2 LLC	NY-Sun	158,810
St Regis Mohawk Tribe	NEW CONSTRUCTION PROGRAM, NCP11807 - Tribal Administrati	105,745
Standard Insulating Company	Talent Pipeline:CE and OJT, OJT PON 3982	3,882
Stantec Consulting Services, Inc.	Industrial Process Effic, Technical Review and Program S	2,978
	Off-Shore Wind Master Plan, RFP3462 Umbrella Agreement	169,196
	Off-Shore Wind Pre-Dev Act, RFP3462 Umbrella Agreement	-162,495
State University of NY @ New Platz	NEW CONSTRUCTION PROGRAM, NCP10072 - Wooster Building (S	23,710
Steel Sun LLC	NY-SUN, PV System @ Steel Sun #1	347,313
	NY-SUN, PV System @ Steel Sun #2	375,619
Stem Inc	EMERGING TECHNOLOGY / ACCELERATED COMMERCIALIZATION, E	51,528
Sterling and Wilson Cogen Solutions,	Combined Heat and Power, CHPA - 340 KW Wheatfield Garde	146,045
Steven Winter Associates, Inc.	CLEANER GREENER COMMUNITIES, RFP3628FlexTechConsultUmbrella	3,514
	EMERGING TECHNOLOGY / ACCELERATED COMMERCIALIZATION, O	12,000
	EXISTING FACILITIES, Technical Review and Program S	1,696
	Flexible Tech Assistance, RFP3628FlexTechConsultUmbrella	143,701
	Low Rise New Construction, SWA TWO #1 - RESNET	3,002
	Low Rise New Construction, Technical Review and Program S	1,338
	Multifam New Construction, SWA TWO #1 - RESNET	3,002
	Multifam New Construction, Technical Review and Program S	1,338
	NEW CONSTRUCTION PROGRAM, Technical Assistance Services	954
	NEW CONSTRUCTION PROGRAM, Technical Review and Program S	9,396
	Real Time Enrgy Management, FS Energy-220 E 54th St-RTEM	4,420
	Real Time Enrgy Management, Kibel-300 East 51st St-RTEM	3,000
	Real Time Enrgy Management, KibelCompanies-90 West St-RTEM	39,596
	Real Time Enrgy Management, SWA-85 Riverdale Ave-RTEM	151,867
	Workforce Industry Partnership, PON 3715 Workforce Training	76,974
Stonework Capital LLC	OTHER PROGRAM AREA, RFP3267 Innovation Advis Pilot	45,244
Stony Creek Energy LLC	LARGE SCALE RENEWABLES, Stony Creek Wind Farm	2,844,362
Sullivan County	Clean Energy Communities, CEC510672 - County of Sullivan	37,500
Sun Source Technologies	<200KW PV, NY Sun	57,409
SuNation Solar Systems, Inc.	<200KW PV, NY Sun	196,114
Sundog Solar, Inc.	<200KW PV, NY Sun	10,301
SunE Solar XVI Lessor, LLC	NY-SUN, Competitive PV Program - RIT	306,827
Sunnova Energy Corp	<200KW PV, NY Sun	10,305
SunPower Capital, LLC	<200KW PV, NY Sun	87,889
	<200KW PV, NY-Sun	5,160
	<200KW PV, PON 2112 NY SUN	23,820
Sunrise Solar Solutions, LLC	<200KW PV, NY Sun	21,640
/	NY Sun	58,468
	PON 2112 NY SUN	23,280
SunRun, Inc	<200KW PV, NY Sun	30,856
	<200KW PV, PON 2112 NY SUN	5,645
Sunstream Hudson I	PV System @ St. Peter's Hospit	327,802
		021,002

Contractor	Contract Description	Total Expended Amount
Sunthru LLC	ADVANCED BUILDINGS, Advanced Buildings Technology	9,000
SUNY - ESF	ENVIRONMENTAL RESEARCH, Biofiltration drainage media	40,541
SUNY at Albany	ENVIRONMENTAL RESEARCH, Climate Change & Renewables	114,284
SUNY Buffalo	Environmental Research, Climate Impacts on Buildings	46,633
SUNY Cobleskill	NEW CONSTRUCTION PROGRAM, NCP13043 - Prentice Hall	7,791
SUNY Cortland	NEW CONSTRUCTION PROGRAM, NCP10532 - Student Life Center	58,879
SUNY Fredonia	NEW CONSTRUCTION PROGRAM, NCP11079 - Rockefeller Arts Ce	53,084
SUNY Oneonta	NEW CONSTRUCTION PROGRAM, NCP12786 - Bugbee Hall	8,986
SUNY Upstate Medical University	NEW CONSTRUCTION PROGRAM, NCP12574-UpstateSimulation-OFL	7,947
Supervisor Town of Clay	Clean Energy Communities, CEC210199 - Town of Clay	150,000
Sustainable Energy Advantage, LLC	LARGE SCALE RENEWABLES, Large Scales Renewables Techni	1,076
	NYSERDA ADMINISTRATION, Large Scales Renewables Techni	9,526
	Off-Shore Wind Master Plan, Large Scales Renewables Techni	120,111
	Off-Shore Wind Pre-Dev Act, Large Scales Renewables Techni	-113,113
	REC:CES REC System Dev Costs, Large Scales Renewables Techni	149,635
	ZEC:CES ZEC System Dev Costs, Large Scales Renewables Techni	3,971
Sustainable Energy Developments Inc.	<200KW PV, NY Sun	24,110
	<200KW PV, PON 2112 NY SUN	18,119
	NY-Sun	60,821
Sustainable Westchester	Community RH&C, PON3723 RH&C Campaigns	28,500
	Rmve Barriers Dist Enrgy Storg, Feasibility of storage w PV	13,000
SWBR Architecture, Engineering & La	Retrofit NY, Multifamily	18,750
Sweetwater Energy, Inc.	INNOVATION CAPACITY & BUSINESS DEVELOPMENT, Cellulosic Sugar	35,000
Swiss Re Management (US) Corporati	>200KW PV, NY Sun	426,995
Switched Source LLC	76 West, 76 West Energy Bus Competition	137,500
	High Performing Grid, PON 3397 Round 2 - Category D	20,000
Switched Source PB LLC	High Performing Grid, PON 3770 CATB - Phase Balance	115,710
Syncarpha Whitehall LLC	>200KW PV, NY-Sun	180,099
	NY-Sun	194,012
Syracuse Label & Surround Printing	Industrial Process Effic, Industrial Process Efficiency	19,803
Tagup Inc.	High Performing Grid, PON 3397 CAT C	29,415
Taitem Engineering, P.C.	<200KW PV, NY Sun	17,892
	<200KW PV, NY-Sun	5,218
	Agriculture Energy Eff Pgm, RFP3628FlexTechConsultUmbrella	5,000
	Commercial New Construct, Taitem - EMP	10,000
	Community RH&C, Technical Review and Program S	13,955
		57,233
	EMERGING TECHNOLOGY / ACCELERATED COMMERCIALIZATION, L.	
	EMERGING TECHNOLOGY / ACCELERATED COMMERCIALIZATION, P.	62,415
	EVALUATION, Technical Review and Program S	39,498
	EXISTING FACILITIES, Technical Review and Program S	17,360
	Flexible Tech Assistance, RFP3628FlexTechConsultUmbrella	11,836
	Geothermal Incentive Program, Technical Review and Program S	60,146
	GJGNY REVOLVING LOAN FUND, Technical Review and Program S	5,708
	Industrial Process Effic, Technical Review and Program S	4,217
	INDUSTRIAL PROCESS EFFICIENCY, Technical Review and Program S	2,723
	Multifam Performance Pgm, 3695 TWO Umbrella Agreement	44,464
	Multifam Performance Pgm, RFQL3434 Cat1 Biomass Boilers	223,059
	On-Site Energy Manager, FlexTech Consultant Selection	56,066

Technical Services REP3628ElexTechConsultI Imbrella	3,47
	609,463
	5,000
	455,293
· ·	21,043
	160,160
	7,599
	62,674
	118,800
	119,000
	154,000
	66,361
Combined Heat and Power, CHPA - Metropolitan Detention	103,950
COMBINED HEAT AND POWER, CHPA - Rivercross Tenants Corp	251,213
Combined Heat and Power, CHPA - Transcontinental Ultra	120,966
NYSERDA ADMINISTRATION, TWO EVConsultant	1,445
INDUSTRIAL PROCESS EFFICIENCY, Industrial Process Efficiency	24,38
Low Rise New Construction, New Construction	50,600
<200KW PV, NY Sun	23,948
>200KW PV, Commerical/IndustrialPV	62,356
>200KW PV, NY Sun	68,154
Commercial/Industrial	437,03
MARKET PATHWAYS, PV System @ Oswego County - Fu	(
NY-Sun	27,404
NY-SUN, New York Sun Competitive PV Pr	507,868
NY-SUN, PV System at Onondaga County -	208,123
PV System @ Halfmoon Water Tre	119,204
PV System @ Onondaga County Cl	296,804
PV System @ Oswego County - Fu	388,783
PV System @ Otsego County Grav	103,931
PV System @ Sullivan County Ad	192,764
INDUSTRIAL PROCESS EFFICIENCY, Industrial Process Efficiency	197,510
NY-Sun	192,822
MULTIFAMILY PERFORMANCE PROGRAM, Multifamily	35,400
>200KW PV, RFQL3434 Cat1 NYSUN C/I	9,440
Community RH&C, RFP3751 Clean Heating & Coolin	97,333
COMMUNITY SOLAR, RFP 3764Solarize TA Provider	32,679
ENERGY ANALYSIS, RFQL 3685 R2 Umbrella	38,920
Eval MCDC Cross Cutting, RFQ3183 Umbrella Agreement	9,175
EVALUATION, RFP3916 Res Bldg Stock Assessm	1,716,47
-	12,928
	3,004
	168,762
-	13,190
	55,854
	55,654
NESIGENTIALENYAYINY IVEW IVINIS, NEWS 103 UNDENIA AYREENTENI	35,530
	Combined Heat and Power, CHPA - Transcontinental Ultra NYSERDA ADMINISTRATION, TWO EVConsultant INDUSTRIAL PROCESS EFFICIENCY, Industrial Process Efficiency Low Rise New Construction, New Construction <200KW PV, NY Sun >200KW PV, Commerical/IndustrialPV >200KW PV, Commerical/IndustrialPV >200KW PV, NY Sun Commercial/Industrial MARKET PATHWAYS, PV System @ Oswego County - Fu NY-Sun NY-SUN, New York Sun Competitive PV Pr NY-SUN, New York Sun Competitive PV Pr NY-SUN, PV System at Onondaga County - PV System @ Halfmoon Water Tre PV System @ Onondaga County Cl PV System @ Onondaga County Cl PV System @ Otsego County - Fu PV System @ Otsego County Ad PV System @ Sullivan County Ad INDUSTRIAL PROCESS EFFICIENCY, Industrial Process Efficiency NY-Sun MULTIFAMILY PERFORMANCE PROGRAM, Multifamily >200KW PV, RFQL3434 Cat1 NYSUN C/I Community RH&C, RFP3751 Clean Heating & Coolin COMMUNITY SOLAR, RFP 3764Solarize TA Provider

Contractor	Contract Description	Total Expended Amount
The Cadmus Group, LLC	Rmve Barriers Dist Enrgy Storg, TWO # 3	9,479
	Strategic Energy Manager, RFQ3183 Umbrella Agreement	13,190
The Center for New York City	Community Energy Engagement, CEEP New York City Region (CNY	141,228
The Cooper Union for the Advanceme	Workforce Industry Partnership, Workforce Dev & Train	78,860
The Flea Theater	NEW CONSTRUCTION PROGRAM, NCP10839 - The Flea Theater	13,696
The Gap, Inc.	EXISTING FACILITIES, EFP2553-The Gap Inc The Gap	470,799
The Garrick Co., LLC	WEST VALLEY DEVELOPMENT PROGRAM, Probabilistic Evaluation	6,460
The Levy Partnership, Inc.	ADVANCED BUILDINGS, Building Zero Energy readyhome	109,913
	EMERGING TECHNOLOGY / ACCELERATED COMMERCIALIZATION, D	72,454
	EMERGING TECHNOLOGY / ACCELERATED COMMERCIALIZATION, P	92,806
	NextGen HVAC, Downstate gas fired heat pump	6,968
	Retrofit NY, Multifamily	18,750
The Logue Group	WEST VALLEY DEVELOPMENT PROGRAM, WV- Demonstration Project	16,271
The Point Community Development C	NY-SUN, Hunts Point Comm Solar Project	12,000
The Radiant Store	Renewable Heat NY, Radiant - Cominole	7,000
	Renewable Heat NY, Radiant - Monastery	12,000
	Renewable Heat NY, Radiant Store - Chatham Hwy	2,800
	Renewable Heat NY, Radiant Store - Sievers	12,000
	Renewable Heat NY, Radiant Store - Triumpho	7,000
	Renewable Heat NY, Radiant Store - Yelich Part 2	8,400
	Talent Pipeline:CE and OJT, OJT PON 3982	5,760
The Renewables Consulting Group,	Nat'l OffShWind R&D Consortium, RCG work for OSW Consortium	117,915
LLC	Off-Shore Wind Master Plan, RFP 3462	1,126,384
	Off-Shore Wind Pre-Dev Act, RFP 3462	-988,010
	OTHER PROGRAM AREA, RCG work for OSW Consortium	0
	RCG work for OSW Consortium	59,685
The Research Foundation for SUNY	CLEAN TRANSPORTATION, Autonomous EV Campus Demo	33,750
The Research Foundation for the State	ENVIRONMENTAL RESEARCH, Wood Pellet Heating System Dem	12,340
	RENEWABLE HEAT NY, Lignocellulosic pellets	18,151
The Research Foundation of SUNY (U	REV CAMPUS CHALLENGE, RFP 3214 REV Campus Challenge	239,200
The Research Foundation of SUNY at	Cleantech Geo Coverage, PON3413 Clean Energy Incubator	0
Bing	Cleantech Incubator, PON3413 Clean Energy Incubator	279,200
The Residences At Worldwide Plaza	MULTIFAMILY PERFORMANCE PROGRAM, Multifamily	327,000
The RF of SUNY Binghamton Universi		80,000
The Source Service Station, Inc.	FUEL NY, PGI00259 - The Source Service	111,100
The Trustees of Columbia University	Cleantech EIR, PON 3819	257,500
	ENVIRONMENTAL RESEARCH, GIS flood mapping tool	1,137
	ENVIRONMENTAL RESEARCH, Tropical Cyclone Risk Model	44,797
	OTHER PROGRAM AREA, PON 3249 ACE Electrofuels	115,703
The Uniland Partnership of Delaware	NEW CONSTRUCTION PROGRAM, NCP11757 - 250 Delaware	23,458
Theatre for A New Audience		15,946
	NEW CONSTRUCTION PROGRAM, NCP9056 - Theatre for a New Au	
ThinkEco, Inc.	MARKET PATHWAYS, Behavioral Demonstrations Prog	10,625
Tilcon NY , Inc.	Industrial Process Effic, Industrial Process Efficiency	32,334
Time Warner	Industrial Process Effic, Industrial Process Efficiency	84,215
Titus Mountain Family Ski Center	Industrial Process Effic, Industrial Process Efficiency	240,000
TM Montante Solar Developments, LLC		9,720
Toggenburg Mountain	Industrial Process Effic, Industrial Process Efficiency	35,200
Tompkins Community Action	Multifam New Construction, MFNCP - Amici House	11,500

Contractor	Contract Description	Total Expended Amount
Tompkins County	Clean Energy Communities, CEC011216 - Tompkins County	15,000
Town of Ancram	CEC400050 - Town of Ancram	7,500
	Clean Energy Communities, CEC400050 - Town of Ancram	12,500
Town of Ashford	Clean Energy Communities, CEC101538 - Town of Ashford	12,500
Town of Avon	Clean Energy Communities, Town of Avon	37,500
Town of Babylon	CLEANER GREENER COMMUNITIES, CGC32035 - Town of Babylon	19,229
Town of Brighton	CLEANER GREENER COMMUNITIES, CGC28762 - Town of Brighton	150,000
Town of Brookhaven	CLEANER GREENER COMMUNITIES, Town of Brookhaven	37,500
Town of Busti	Clean Energy Communities, CEC101460 - Town of Busti	58,750
Town of Charleston	Clean Energy Communities, PON 3298 CEC	50,000
Town of Franklin	Clean Energy Communities, CEC Town of Franklin	30,000
Town of Greece	NEW CONSTRUCTION PROGRAM, NCP13128 - Greece Police Build	28,102
Town of Hillsdale	Clean Energy Communities, Town of Hillsdale	20,000
Town of Huntington	OTHER PROGRAM AREA, RFP 3044 R2	110,000
Town of Keene	Clean Energy Communities, CEC701169 - Town of Keene	16,250
Town of Niskayuna	Clean Energy Communities, Town of Niskayuna	24,875
Town of Ossining	CLEANER GREENER COMMUNITIES, Town of Ossining	12,500
Town of Plattsburgh	Clean Energy Communities, Town of Plattsburgh	26,250
Town of Queensbury	Clean Energy Communities, CEC400080 - Town of Queensbury	12,500
Town of Smithtown	CLEANER GREENER COMMUNITIES, Town of Smithtown	62,325
Town of Southold	CLEANER GREENER COMMUNITIES, Town of Southold	15,000
Town of Starkey	Clean Energy Communities, Town of Starkey	100,000
Town of Webb	Industrial Process Effic, Industrial Process Efficiency	66,200
Traco Manufacturing, Inc.	Industrial Process Effic, Industrial Process Efficiency	9,328
Trane	Real Time Enrgy Management, CtrSynagogue-652Lexington-RTEM	9,204
	Real Time Enrgy Management, Mosholu-3450 Dekalb Ave-RTEM	75,000
	Real Time Enrgy Management, Remsen CSD-9733 Main St-RTEM	70,805
	Real Time Enrgy Management, SimonePropDev-3010West-RTEM	8,533
	Real Time Enrgy Management, Trane Us - 41 S Main St - RTEM	29,303
	Real Time Enrgy Management, Trane-180 Amsterdam Ave-RTEM	28,596
	Real Time Enrgy Management, YaleClub-50Vanderbilt Ave-RTEM	75,000
	Remote Energy Management, RFP 3683 REM Program	14,000
TransCore ITS LLC	CLEAN TRANSPORTATION, Green Traffic Control Cabinet	11,850
Transit Wireless	Industrial Process Effic, Industrial Process Efficiency	24,063
Transportation Power, Inc.	INNOVATION CAPACITY & BUSINESS DEVELOPMENT, Advanced Clean	84,497
TRC Energy Services	>200KW PV, Staff Augmentation Services	105,652
Into Energy bervices	ADVANCED BUILDINGS, Technical Review and Program S	9,535
		9,000
	CI Engy Siting & Soft Cost Red, Staff Augmentation Services	
	Commercial New Construc, Staff Augmentation Services	5,053
	Commercial New Construc, Technical Review and Program S	12,349
	ENERGY ANALYSIS, Staff Augmentation Services	84,403
	ENVIRONMENTAL RESEARCH, Technical Review and Program S	47,264
	Flexible Tech Assistance, Staff Augmentation Services	25,503
	Flexible Tech Assistance, Technical Review and Program S	37,381
	FLEXIBLE TECHNICAL ASSISTANCE, FlexTech Consultant Selection	42,878
	FLEXIBLE TECHNICAL ASSISTANCE, Technical Review and Program S	37,381
	Industrial Process Effic, Technical Review and Program S	1,838
	INDUSTRIAL PROCESS EFFICIENCY, Technical Review and Program S	853

Contractor	Contract Description	Total Expended Amount
TRC Energy Services	K-12 SCHOOLS, RFP3628FlexTechConsultUmbrella	40,436
	K-12 SCHOOLS, Staff Augmentation Services	85,943
	Low Rise New Construction, Staff Augmentation Services	6,063
	Low-Income Forum on Energy, LIFE Implementation Services	39,784
	Multifam New Construction, MF Energy Perf Portfolio Imple	79,154
	Multifam New Construction, Staff Augmentation Services	5,727
	Multifam Performance Pgm, MF Energy Perf Portfolio Imple	3,599
	Multifam Performance Pgm, Staff Augmentation Services	322,375
	MULTIFAMILY PERFORMANCE PROGRAM, MF Energy Perf Portfolio Im	0
	NEW CONSTRUCTION PROGRAM, Technical Review and Program S	69,980
	New Construction- Commercial, Staff Augmentation Services	5,053
	New Construction- Housing, Staff Augmentation Services	11,790
	Real Time Enrgy Management, Staff Augmentation Services	78,243
	REC:CES REC System Dev Costs, Staff Augmentation Services	38,911
	Rmve Barriers Dist Enrgy Storg, Staff Augmentation Services	0
	Workforce Industry Partnership, Technical Review and Program S	40,705
Trees New York	GREENING THE BRONX, Efficiency Planning & Engineer	60,017
Trinity Episcopal School Corporation	NEW CONSTRUCTION PROGRAM, NCP13195 - Trinity School	140,232
Trinity Heating & Air, Inc.	<200KW PV, NY Sun	10,000
	NY Sun	31,506
TROPICANA MART INC	FUEL NY, PGI00249 - Tropicana Mart Inc.	21,015
	OTHER PROGRAM AREA, PGI00249 - Tropicana Mart Inc.	97,606
True Energy Solutions	Talent Pipeline:CE and OJT, OJJT HIRE	1,586
TTcogen, LLC	Combined Heat and Power, CHPA - Savoy Park II Building	13,860
Tudor Heights Apartments LLC	MULTIFAMILY PERFORMANCE PROGRAM, Multifamily	8,000
Two Plus Four Construction Co., Inc.	Low Rise New Construction, New Construction	32,000
U.S. Geological Survey (Troy).	ENERGY ANALYSIS, Accelerated Recovery	17,016
	ENVIRONMENTAL RESEARCH, Accelerated Recovery	17,839
	ENVIRONMENTAL RESEARCH, Acid Deposition and Mercury	37,529
U.S. Green Building Council, NY	ADVANCED BUILDINGS, Improving Steam Distribution	32,500
Chapter	ADVANCED ENERGY CODES, Energy Code Training: A/Es	86,945
	Workforce Industry Partnership, PON 3715 Workforce Training	129,091
Ultra Dairy, LLC	Industrial Process Effic, Industrial Process Efficiency	27,993
Unchained Properties, LLC	CLEANER GREENER COMMUNITIES, CGC43235 - Chain Works	26,500
Union College	COMBINED HEAT AND POWER, PON2701 - CHP Program	700,000
omon oonege	NEW CONSTRUCTION PROGRAM, NCP13115-Visual Arts Bldg-OFLT	6,952
Unique Comp Inc.		908,425
omque comp me.	NYSERDA ADMINISTRATION, RFP3143 Umbrella Agreement	
	NYSERDA ADMINISTRATION, TWO SQL ETL Dev.	12,750
	NYSERDA ADMINISTRATION, TWO Sr. Systems Admin Bhanu	4,080
	Pay for Performance, RFP3143 Umbrella Agreement	93,513
Unique Electric Solutions of NYS LLC	CLEAN TRANSPORTATION, UPS All-Electric Vehicle Demo	12,276
Unique Technical Services, LLC	CLEAN TRANSPORTATION, Advanced Transportation Tech	90,803
	Pub Transit & Elect Rail, Advanced Transportation Tech	11,635
Unison Enterprises	Low Rise New Construction, New Construction	5,500
•	NEW CONSTRUCTION PROGRAM, NCP11770 - Edgewater Rebuildin	6,251
United Talmudical Academy	NEW CONSTRUCTION PROGRAM, NCP9257 - Bais Ruchel High Sch	1,386
United Way of Long Island	OTHER PROGRAM AREA, CEEP Long Island (UWLI)	85,244
United Wind Project I, LLC	Small Wind, Wind Turbine Incentive	14,123

Contractor	Contract Description	Total Expended Amount
University at Albany	NEW CONSTRUCTION PROGRAM, NCP11221 - Campus Center Expan	62,901
	NEW CONSTRUCTION PROGRAM, NCP11874 - Building 25 Gut Reh	9,106
	NEW CONSTRUCTION PROGRAM, NCP12868 - UAlbany Onondaga Re	9,859
University of Maryland	OTHER PROGRAM AREA, DOE UER - Maryland	12,519
University of Rochester	ENVIRONMENTAL RESEARCH, Air Quality & HIth Effects	65,214
	Environmental Research, Energy Related Air Quality	20,666
	ENVIRONMENTAL RESEARCH, Impact of environmental polici	178,329
University of Wisconsin System	Environmental Research, NADP LTM Ecosystems in NYS	66,129
Urban Electric Power, LLC	ADVANCED BUILDINGS, Optimization of Battery and DR	37,500
Urban Homesteading Assistance Inc	NY-SUN, Affordable Solar Predev UHAB	71,963
US Ceiling CORP	Talent Pipeline:CE and OJT, OJT HIRE	5,654
USGS National Center MS270	ENVIRONMENTAL RESEARCH, Monitoring Fish Assemblage/Hg	28,000
Utilities Program & Metering, Inc.	Real Time Enrgy Management, Hines - 1251 6th Ave - RTEM	41,820
	Real Time Enrgy Management, Josie Robinson Surgery - RTEM	7,920
	Real Time Enrgy Management, NYU Medical Center - MS - RTEM	13,680
	Real Time Enrgy Management, Tom Damsell - 1 Liberty - RTEM	17,201
	Real Time Enrgy Management, Utilities-160 E 53rd St-RTEM	27,930
	Real Time Enrgy Management, Utilivisor-327 E 64th St-RTEM	9,358
Venture Home Solar LLC	<200KW PV, NY Sun	6,624
Verdant Power, Inc.	RENEWABLES & DER INTEGRATION, Environmentally Preferred Powe	100,000
Verizon Communications Inc	Industrial Process Effic, Industrial Process Efficiency	41,478
Vermont Energy Investment	Air Source Heat Pumps, Umbrella Contract	25,000
Corporation	CLEAN TRANSPORTATION, EV Dealer Incentive Program	36,225
	Commercial Imp Assist, Umbrella Contract	71,999
	Industrial Process Effic, Umbrella Contract	149,664
	INDUSTRIAL PROCESS EFFICIENCY, Umbrella Contract	1,051
	MARKET PATHWAYS, Res Upstream HVAC Initiative	57,302
	Pay for Performance, Umbrella Contract	26,394
	Strategic Energy Manager, RFP 3352	732,305
Vertiv Services, Inc.	Industrial Process Effic, Industrial Process Efficiency	20,754
Viacom International, Inc.	EXISTING FACILITIES, EFP2311 - Viacom - 1515 Broadw	43,974
Vidaris, Inc.	ADVANCED ENERGY CODES, Code Manual for Design Pros	109,233
	Code to Zero, TWO#1-DOS Rulemaking Support	92,679
	Commercial New Construc, Vidaris - EMP	27,177
	FLEXIBLE TECHNICAL ASSISTANCE, FlexTech Consultant Selection	8,711
	NEW CONSTRUCTION PROGRAM, Technical Assistant Services	26,663
	NEW CONSTRUCTION PROGRAM, Vidaris - EMP	45,767
VIII Hotel II Tribeca Holdings LLC	NEW CONSTRUCTION PROGRAM, NCP10660 - Baccarat Hotel & R	12,606
Village of Canton	Clean Energy Communities, Village of Canton	100,000
Village of Cazenovia	Clean Energy Communities, Village of Cazenovia	37,500
Village of Centre Island	CLEANER GREENER COMMUNITIES, Village of Centre Island	12,500
Village of Croton-on-Hudson	CLEANER GREENER COMMUNITIES, CEC500633 - Croton-on-Hudson	37,500
Village of Fair Haven	Clean Energy Communities, CEC200265 - Village of Fair Ha	39,500
Village of Fayetteville	Clean Energy Communities, PON 3298 CEC	50,000
Village of Livonia	Clean Energy Communities, CEC300387 - Village of Livonia	12,500
Village of Marcellus	Clean Energy Communities, PON 3298 CEC	25,000
Village of Minoa	Clean Energy Communities, CEC200170-Village of Minoa	77,500
•		
Village of Rockville Centre	SMART GRID SYSTEMS, RFP 3044 R2	140,000

Contractor	Contract Description	Total Expended Amount
Village of Skaneateles	OTHER PROGRAM AREA, Skaneateles Village Hall NZEB	44,214
Village of West Winfield	Clean Energy Communities, CEC600914 - Village of West Wi	12,500
Vincents Heating and Fuel Service, LL	Renewable Heat NY, Vincents Heating - Diorios	17,475
Viola Homes Inc.	<200KW PV, NY Sun	88,707
Vivint Solar	<200KW PV, PON 2112 NY SUN	5,392
Voltaic Solaire LLC	NY Sun	28,224
Wappingers Falls Hydroelectric, LLC	LARGE SCALE RENEWABLES, RPS Program Purchase of Renewa	6,800
Warex Terminals Corporation	FUEL NY, PGI00064 - Warex Terminals Cor	105,142
Watertown, City of	OTHER PROGRAM AREA, Sludge permitting and design	87,900
Weaver Wind Energy, LLC	INNOVATION CAPACITY & BUSINESS DEVELOPMENT, Weaver Wind 1	144,004
Wendel Energy Services, LLC	Flexible Tech Assistance, RFP3628FlexTechConsultUmbrella	52,620
	Industrial Process Effic, RFP3628FlexTechConsultUmbrella	105,318
	Industrial Process Effic, Technical Review and Program S	5,813
	K-12 SCHOOLS, RFP3628FlexTechConsultUmbrella	39,779
Wendel WD Architecture, Engineering,	ANAEROBIC DIGESTER, RPS-CST Quality Assurance/Qual	1,025
West 30th HL LLC	NEW CONSTRUCTION PROGRAM, NCP11468 - West 30th HL LLC	99,328
West 37th Street Partners LLC	NEW CONSTRUCTION PROGRAM, NCP10558 - Homewood Suites	25,000
West 39th Street LLC	NEW CONSTRUCTION PROGRAM, NCP9032 - West 39th Street LLC	49,546
West 62nd Street LLC	NEW CONSTRUCTION PROGRAM, NCP10172 - 49 Amsterdam Avenue	6,794
West Harlem Environmental Action, In	REVitalize, RFP 3584 Revitialize	26,000
West Hill Energy & Computing, Inc.	EVALUATION, RFQ3183 Umbrella Agreement	9,943
West Seneca Central School	Industrial Process Effic, Industrial Process Efficiency	16,540
West Seneca Fire District 2	NEW CONSTRUCTION PROGRAM, NCP12903-WestSenecaFireStation	13,176
Westchester Chamber Educational	CLEANER GREENER COMMUNITIES, CGC26702 - WGBC	12,100
WexEnergy LLC	Cleantech Ignition, PON 3871 Ignition Grants	20,000
WGL Energy Systems, Inc.	NY-Sun	180,718
	NY-SUN, New York Sun Competitive PV Pr	331,326
	PV System @ Hamilton-Fulton	108,514
White Plains Hospital Center	NEW CONSTRUCTION PROGRAM, NCP12086 - Dickstein Cancer Tr	560
	NEW CONSTRUCTION PROGRAM, NCP98601 - White Plains Hospit	1,201
Whole Foods Market Group, Inc.	Commercial New Construct, NCP16016 - Whole Foods 365 For	59,605
whole roous market oroup, me.	NEW CONSTRUCTION PROGRAM, NCP12343 - Whole Foods Harlem	39,363
	NEW CONSTRUCTION PROGRAM, NOT 12545 - While Foods Handhin	41,671
Wilfrid Developers, LLC		25,000
Willard Mountain Inc.	Multifam New Construction, MFNCP - The Wilfrid Industrial Process Effic, Industrial Process Efficiency	
		125,000
Willdan Energy Solutions	Campus/Technical Assistance, Staff Augmentation Services	11,643
	Commercial Real Estate Ten, Efficiency Planning & Engineer	118,196
	Commercial Real Estate Ten, Willdan - MultiSite - CommTen	10,000
	Commercial Real Estate Ten, Willdan-1 Wartburg Place-CT	41,904
	Commercial Real Estate Ten, Willdan-Multisite Verizon-CT	41,716
	Community RH&C, Staff Augmentation Services	11,643
	Flexible Tech Assistance, FlexTech Consultant Selection	17,193
	Geothermal Incentive Program, Staff Augmentation Services	11,643
	Industrial Process Effic, Industrial & Agriculture	117,438
	Industrial Process Effic, Technical Review and Program S	42,793
	INDUSTRIAL PROCESS EFFICIENCY, Technical Review and Program S	49,148
	Multifam Performance Pgm, Staff Augmentation Services	71,285
	Real Time Enrgy Management, Technical Review and Program S	299,317

Contractor	Contract Description	Total Expended Amount
Willdan Energy Solutions	Renewable Heat NY, Staff Augmentation Services	11,643
	Solar Thermal, Staff Augmentation Services	11,643
William Reynolds	<200KW PV, NY Sun	103,948
	NY Sun	66
Wiltshire Renewable Energy Systems,	<200KW PV, NY Sun	70,355
Win Sum Ski Corporation	Industrial Process Effic, Industrial Process Efficiency	299,600
Woods Valley Ski Area	Industrial Process Effic, Industrial Process Efficiency	250,000
Woodstone Custom Homes, Inc.	Low Rise New Construction, New Construction	13,300
Workforce Housing Advisors MM II, L	MULTIFAMILY PERFORMANCE PROGRAM, Multifamily	34,750
WSP USA Corp.	Commercial New Construc, RFP3771 Umbrella Contract	12,795
	Commercial New Construc, WSP-Energy Modeling Partner	2,590
	Flexible Tech Assistance, FlexTech Consultant Selection	15,000
	NEW CONSTRUCTION PROGRAM, Technical Assistance NCP	0
Wyoming County	Clean Energy Communities, PON 3298 CEC	48,750
XC Associates, Inc.	INNOVATION CAPACITY & BUSINESS DEVELOPMENT, Smart Wind Tur	16,697
Xerox Corp	Industrial Process Effic, Industrial Process Efficiency	185,501
	INDUSTRIAL PROCESS EFFICIENCY, Industrial Process Efficiency	91,989
You Save Green Incorporated	<200KW PV, NY Sun	11,285
Yung-Sam Ski, Ltd	Industrial Process Effic, Industrial Process Efficiency	165,000
ZBF Geothermal LLC	Geothermal Incentive Program, Large-Scale GSHP Rebate	143,503
Zotos International, Inc.	LARGE SCALE RENEWABLES, 8th RPS Main Tier Solicitation	18,432
Grand Total		197,628,896

Contractor	Contract Description	Total Expended Amount
1 Stop Electronics Center, Inc.	Home Perf w Energy Star, Single Family Residential	148,483
	Single Family Residential	26,564
440 Jericho Turnpike Auto Sales, LLC	Clean Transportation	11,000
	Electric Vehicles - Rebate, Clean Transportation	1,100
1135 Millersport HWY LLC	Electric Vehicles - Rebate, Clean Transportation	19,800
1591 Hylan Blvd Auto LLC	Clean Transportation	1,100
	Electric Vehicles - Rebate, Clean Transportation	11,000
2277 NFB, LLC	Electric Vehicles - Rebate, Clean Transportation	39,100
2679bhwl llc	Electric Vehicles - Rebate, Clean Transportation	22,000
3955 WH Road, LLC	Electric Vehicles - Rebate, Clean Transportation	34,100
ABCO Refrigeration Supply Corp.	Air Source Heat Pumps, Codes, Products and Standards	45,000
Active Cooling & Heating LLC	Air Source Heat Pumps, Codes, Products and Standards	32,000
Adee Motocars LLC	Clean Transportation	1,700
	Electric Vehicles - Rebate, Clean Transportation	22,100
Adirondack Chevrolet Buick	Electric Vehicles - Rebate, Clean Transportation	7,700
Adirondack Community Action	Home Perf w Energy Star, Single Family Residential	11,186
-	Single Family Residential	1,256
ADR Home Energy Solutions LLC.	Home Perf w Energy Star, Single Family Residential	136,595
	Single Family Residential	13,698
Advanced Comfort Systems NY Inc.	Air Source Heat Pumps, Codes, Products and Standards	21,450
Advanced Radiant Design, Inc.	Geothermal Incentive Program, Clean Heating & Cooling	12,135
Advantage Suzuki LLC	Electric Vehicles - Rebate, Clean Transportation	12,100
Advantage Title Agency, Inc.	GJGNY REVOLVING LOAN FUND, Efficiency Planning & Engineer	122
,	GJGNY REVOLVING LOAN FUND, Single Family Residential	257,208
Air Source, LLC	Air Source Heat Pumps, Codes, Products and Standards	5,000
Airtight Services, Inc.	EMPOWER NY, Single Family Residential	7,169
, intight controod, incl	Home Perf w Energy Star, Single Family Residential	65,896
	Single Family Residential	13,586
Alan Buick Inc	Electric Vehicles - Rebate, Clean Transportation	12,100
Albanese Plumbing, LLC	Air Source Heat Pumps, Codes, Products and Standards	15,500
Albany Auto Managment	Electric Vehicles - Rebate, Clean Transportation	25,300
All Star Energy, Inc.	ASSISTED HOME PERFORMANCE WITH ENERGY STAR, Single Family	500
All Star Ellergy, Inc.	EMPOWER NY, Single Family Residential	162,083
		393.675
	Home Perf w Energy Star, Single Family Residential	,
	HOME PERFORMANCE WITH ENERGY STAR, Single Family Residential	500
	Single Family Residential	13,163
Alternative Carbon Energy Systems Inc	Campus/Technical Assistance, Clean Heating & Cooling	14,568
	Geothermal Incentive Program, Clean Heating & Cooling	47,685
Alternative Power Solutions of NY, LLC	Geothermal Incentive Program, Clean Heating & Cooling	6,195
Altren Energy, LLC	Geothermal Incentive Program, Clean Heating & Cooling	6,180
American AWS Corp.	Single Family Residential	46,563
Appliance Recycling, Inc.	Home Perf w Energy Star, Single Family Residential	84,949
	Single Family Residential	13,918
Arnica Heating & Air Conditioning Inc.	Air Source Heat Pumps, Codes, Products and Standards	12,500
Arnold Chevrolet LLC	Clean Transportation	9,100
Arthur C. Pakatar	Home Perf w Energy Star, Single Family Residential	173,391
	Single Family Residential	34,213
Association for Energy Affordability, In	Home Perf w Energy Star, Single Family Residential	12,932
	Single Family Residential	6,817
Association of Energy Engineers	Prof & Expert Engagement, On-Site Power	250
Automall Imports LLC	Clean Transportation	19,600

Contractor	Contract Description	Total Expended Amount
Automall Imports LLC	Electric Vehicles - Rebate, Clean Transportation	3,700
Aztech Geothermal, LLC	Campus/Technical Assistance, Clean Heating & Cooling	11,966
	Geothermal Incentive Program, Clean Heating & Cooling	156,405
B&D Stoves Inc.	Renewable Heat NY, Clean Heating & Cooling	13,000
Babylon Car Inc	Clean Transportation	34,000
	Electric Vehicles - Rebate, Clean Transportation	5,100
Baron Brothers Auto Group Inc	Clean Transportation	74,800
	Electric Vehicles - Rebate, Clean Transportation	6,800
Barton Chevrolet Inc	Electric Vehicles - Rebate, Clean Transportation	14,500
Bay Ridge Volvo American Inc	Electric Vehicles - Rebate, Clean Transportation	11,900
BELL HEATING AND AIR CONDITIONING	Geothermal Incentive Program, Clean Heating & Cooling	12,360
Benchemark Printing, Inc.	GJGNY REVOLVING LOAN FUND, Financing Solutions	2,914
Bensol Tech LLC	Home Perf w Energy Star, Single Family Residential	169,532
Berg Family Enterprises LLC	Clean Transportation	4,000
	Electric Vehicles - Rebate, Clean Transportation	5,100
Best Fire	Renewable Heat NY, Clean Heating & Cooling	51,500
Betlem Service Corporation	Air Source Heat Pumps, Codes, Products and Standards	32,729
-	Home Perf w Energy Star, Single Family Residential	34,918
	HOME PERFORMANCE WITH ENERGY STAR, Single Family Residential	775
	Single Family Residential	1,072
Better Energy Solutions Inc.	Home Perf w Energy Star, Single Family Residential	471,419
	OTHER PROGRAM AREA, Single Family Residential	8,011
	Single Family Residential	45,692
BFC 3 LLC	Electric Vehicles - Rebate, Clean Transportation	6,800
Bical Chevrolet Corp	Clean Transportation	5,100
Bill Volz Westchester	Electric Vehicles - Rebate, Clean Transportation	5,500
Black Cherry Services Group, Inc.	Home Perf w Energy Star, Single Family Residential	10,075
	Renewable Heat NY, Clean Heating & Cooling	1,500
	Single Family Residential	2,933
Black Cloud Chimney Sweeps LLC	Renewable Heat NY, Clean Heating & Cooling	17,500
BMW of Manhattan Inc.	Clean Transportation	2,000
Dimini of mannattan inc.	Electric Vehicles - Rebate, Clean Transportation	11,200
Botchev LLC	Electric Vehicles - Rebate, Clean Transportation	
		5,100
BPTC	EMPOWER NY, Single Family Residential	75,720
	Home Perf w Energy Star, Single Family Residential	7,634
	Low Rise New Construction, New Construction	4,500
	Single Family Residential	957
Breathe Easy of CNY Inc.	EMPOWER NY, Single Family Residential	4,674
	Home Perf w Energy Star, Single Family Residential	58,894
	Single Family Residential	28,361
Bruni & Campisi Energy &	Home Perf w Energy Star, Single Family Residential	88,722
Buffalo Energy, Inc.	EMPOWER NY, Single Family Residential	291,636
	Home Perf w Energy Star, Single Family Residential	442,149
	HOME PERFORMANCE WITH ENERGY STAR, Single Family Residential	500
	Single Family Residential	43,835
Buffalo Geothermal Heating	Campus/Technical Assistance, Clean Heating & Cooling	13,859
	Geothermal Incentive Program, Clean Heating & Cooling	169,995
Building Efficiency Resources	Low Rise New Construction, New Construction	16,100
	NEW YORK ENERGY STAR HOMES, New Construction	20,600
Burdick Motors Inc.	Electric Vehicles - Rebate, Clean Transportation	34,100
Buzz Chew Chevrolet Cadillac Inc	Clean Transportation	9,100

Contractor	Contract Description	Total Expended Amount
Buzz Chew Chevrolet Cadillac Inc	Electric Vehicles - Rebate, Clean Transportation	1,700
C&H Cooling and Heating Inc.	Geothermal Incentive Program, Clean Heating & Cooling	6,000
C&R Housing Inc.	EMPOWER NY, Single Family Residential	78,760
	Home Perf w Energy Star, Single Family Residential	10,376
Camillus, Town of	Clean Energy Communities, Communities & Local Government	5,000
Capital Heat	Geothermal Incentive Program, Clean Heating & Cooling	28,680
Cars Unlimited of Suffolk LLC	Clean Transportation	15,000
Cavallaro Neubauer Chevrolet Buick Inc	Electric Vehicles - Rebate, Clean Transportation	5,100
Cayuga/Seneca Community Action Agency, I	Home Perf w Energy Star, Single Family Residential	9,647
Central Heating & Cooling, Inc.	Home Perf w Energy Star, Single Family Residential	12,334
Central Nissan, LTD	Electric Vehicles - Rebate, Clean Transportation	14,000
Century Motors, Inc	Clean Transportation	54,400
	Electric Vehicles - Rebate, Clean Transportation	3,400
Chandler Atkins	CLEAN TRANSPORTATION, Clean Transportation	8,000
Charles Graves Inc.	Home Perf w Energy Star, Single Family Residential	589,987
	Single Family Residential	2,030
Charles P Lamacchia Inc.	Electric Vehicles - Rebate, Clean Transportation	15,300
Charlotte Appliances	Home Perf w Energy Star, Single Family Residential	34,484
	OTHER PROGRAM AREA, Single Family Residential	695
	Single Family Residential	1,319
Chautauqua Opportunities, Inc.	EMPOWER NY, Single Family Residential	3,507
	Home Perf w Energy Star, Single Family Residential	7,687
	Single Family Residential	2,612
City of Oneonta	Clean Energy Communities, Communities & Local Government	5,000
City of Rye	CLEANER GREENER COMMUNITIES, Communities & Local Government	5,000
City Suburban Environmental Systems, Inc	Geothermal Incentive Program, Clean Heating & Cooling	7,005
Clarkson Univ., Research Div.	Environmental Research, Environmental Research	1,400
Clarkstown Heating & Air Conditioning Co	Air Source Heat Pumps, Codes, Products and Standards	9,850
Clifton Park Heating & Cooling LLC	Air Source Heat Pumps, Codes, Products and Standards	1,500
	Geothermal Incentive Program, Clean Heating & Cooling	26,505
Clifton Park Imports, Inc.	Electric Vehicles - Rebate, Clean Transportation	29,700
CMS Mechanical, Inc.	Air Source Heat Pumps, Codes, Products and Standards	134,000
CNY Home Tech Services	Home Perf w Energy Star, Single Family Residential	30,521
	Single Family Residential	6,704
CNY Insulation Plus, Inc	Home Perf w Energy Star, Single Family Residential	74,831
CNY PIPEWORX LLC	Geothermal Incentive Program, Clean Heating & Cooling	14,490
Colonie Import Distributors LTD	Electric Vehicles - Rebate, Clean Transportation	84,700
Columbia Opportunities Inc.	Home Perf w Energy Star, Single Family Residential	30,556
Columbia Opportunities inc.	Single Family Residential	11,455
Columbia University	OTHER PROGRAM AREA, Consumer Serv & Events Managem	2,000
Commission on Economic Opportunity	Home Perf w Energy Star, Single Family Residential	53,922
commission on Economic opportunity	Single Family Residential	11,702
Community Action Planning Council of Jef	EMPOWER NY, Single Family Residential	2,269
Community Action Planning Council of Ser		
Competition Imports Inc	Home Perf w Energy Star, Single Family Residential	45,390
Competition Imports Inc	Clean Transportation	2,700
Concord Sorvicing Corneration	Electric Vehicles - Rebate, Clean Transportation	
Concord Servicing Corporation	GJGNY REVOLVING LOAN FUND, Single Family Residential	616,112
Conder Mount Kiese LLC	OTHER PROGRAM AREA, Single Family Residential	4,450
Condor Mount Kisco LLC	Electric Vehicles - Rebate, Clean Transportation	27,000
Consolidated Edison Company	GJGNY REVOLVING LOAN FUND, Codes, Products and Standards	1,147
	GJGNY REVOLVING LOAN FUND, Single Family Residential	1,793

Contractor	Contract Description	Total Expended Amount
Cool N Heat Inc	Air Source Heat Pumps, Codes, Products and Standards	290,500
Cornell Cooperative Extension of Albany	Home Perf w Energy Star, Single Family Residential	13,753
	Single Family Residential	9,309
Cornerstone Energy Services	EMPOWER NY, Single Family Residential	3,597
	Home Perf w Energy Star, Single Family Residential	24,449
	HOME PERFORMANCE WITH ENERGY STAR, Single Family Residential	250
Cortese Chrysler Dodge Jeep Inc	Electric Vehicles - Rebate, Clean Transportation	9,900
Cortland County Community Action Program	Home Perf w Energy Star, Single Family Residential	73,847
Country Club Chevrolet, Inc	Electric Vehicles - Rebate, Clean Transportation	5,400
Cowles Company of Northern New York, Inc	Home Perf w Energy Star, Single Family Residential	267,798
	HOME PERFORMANCE WITH ENERGY STAR, Single Family Residential	300
	OTHER PROGRAM AREA, Single Family Residential	7,917
	Single Family Residential	22,928
Crossfield Home Energy Solutions	Air Source Heat Pumps, Codes, Products and Standards	8,000
	EMPOWER NY, Single Family Residential	3,944
	Home Perf w Energy Star, Single Family Residential	129,171
	HOME PERFORMANCE WITH ENERGY STAR, Single Family Residential	2,426
Curry Motor Cars LLC	Electric Vehicles - Rebate, Clean Transportation	28,200
Dachnowicz Automotive Inc	Electric Vehicles - Rebate, Clean Transportation	28,900
Dailey Electric Inc	Campus/Technical Assistance, Clean Heating & Cooling	8,900
	Geothermal Incentive Program, Clean Heating & Cooling	126,255
Dana Motors, Ltd.	Clean Transportation	1,100
	Electric Vehicles - Rebate, Clean Transportation	14,300
Dandelion Energy Inc	Campus/Technical Assistance, Clean Heating & Cooling	47,833
	Geothermal Incentive Program, Clean Heating & Cooling	62,265
Dave Feldman Heating & Cooling, Inc.	Home Perf w Energy Star, Single Family Residential	7,275
Dave Hayes Appliance Center Inc.	Home Perf w Energy Star, Single Family Residential	14,146
	Single Family Residential	2,114
David L. Johnson	Air Source Heat Pumps, Codes, Products and Standards	16,500
David M Scott	Home Perf w Energy Star, Single Family Residential	81,155
Dazong HVAC & R, Inc.	Air Source Heat Pumps, Codes, Products and Standards	98,500
DCH Mamaroneck LLC	Electric Vehicles - Rebate, Clean Transportation	19,800
DCH Nanuet LLC	Electric Vehicles - Rebate, Clean Transportation	18,700
DCH NY Motors LLC	Electric Vehicles - Rebate, Clean Transportation	41,800
Delaware Opportunities, Inc.	Home Perf w Energy Star, Single Family Residential	6,516
	Single Family Residential	2,920
Della Auto Group, Inc.	Electric Vehicles - Rebate, Clean Transportation	33,000
Delmar Auto Plaza	Electric Vehicles - Rebate, Clean Transportation	28,900
DeNooyer Chevrolet, Inc.	Electric Vehicles - Rebate, Clean Transportation	20,800
Depaula Chevrolet Inc.	Electric Vehicles - Rebate, Clean Transportation	16,200
Destination 770 Auto Inc	Clean Transportation	2,000
	Electric Vehicles - Rebate, Clean Transportation	6,000
DH Berry Inc.	Air Source Heat Pumps, Codes, Products and Standards	500
-	EMPOWER NY, Single Family Residential	11,231
	Home Perf w Energy Star, Single Family Residential	21,698
Dowd-Witbeck Printing Corp.	Low-Income Forum on Energy, Low/Moderate Income	2,876
Doyle Chevrolet Inc	Electric Vehicles - Rebate, Clean Transportation	12,200
Driver's Village, Inc	Electric Vehicles - Rebate, Clean Transportation	5,700
Driver's Village, Inc.	Electric Vehicles - Rebate, Clean Transportation	12,500
		9,900
Dutchess Cars LLC	Clean Transportation	1,700
		.,100

Contractor	Contract Description	Total Expended Amount
Dutchess Cars LLC	Electric Vehicles - Rebate, Clean Transportation	59,500
E&S Environmental Chemistry Inc.	Environmental Research, Environmental Research	4,981
Eagle Auto Mall Sales Inc	Clean Transportation	5,700
Earth Sensitive Solutions, LLC	Geothermal Incentive Program, Clean Heating & Cooling	229,830
East Syracuse Sales Co Inc	Electric Vehicles - Rebate, Clean Transportation	11,700
Easthills Chevrolet Oldsmobile Inc.	Clean Transportation	14,500
	Electric Vehicles - Rebate, Clean Transportation	16,500
Eco Heating & Cooling Inc	EMPOWER NY, Single Family Residential	6,928
	Home Perf w Energy Star, Single Family Residential	34,638
	HOME PERFORMANCE WITH ENERGY STAR, Single Family Residential	300
	Single Family Residential	5,455
Economic Opportunity Program	Home Perf w Energy Star, Single Family Residential	26,999
	Single Family Residential	3,320
EMCOR Services Betlem	Air Source Heat Pumps, Codes, Products and Standards	7,000
En-Tech Associates	Home Perf w Energy Star, Single Family Residential	15,919
	Single Family Residential	2,157
Energy Answers	Home Perf w Energy Star, Single Family Residential	71,934
	Single Family Residential	17,964
Energy Conservation Specialists LLC	Home Perf w Energy Star, Single Family Residential	25,550
	Single Family Residential	4,405
Energy Efficiency Solutions NY LLC	Home Perf w Energy Star, Single Family Residential	11,698
Energy Evolution Inc	Home Perf w Energy Star, Single Family Residential	79,137
Energy Management Solutions, LLC	Home Perf w Energy Star, Single Family Residential	122,449
	Single Family Residential	6,884
Energy Savers Inc	EMPOWER NY, Single Family Residential	137
	Home Perf w Energy Star, Single Family Residential	420,202
	OTHER PROGRAM AREA, Single Family Residential	23,217
	Single Family Residential	35,531
Energy Saving Solutions, LLC	ASSISTED HOME PERFORMANCE WITH ENERGY STAR, Single Family	300
	EMPOWER NY, Single Family Residential	137,611
	Home Perf w Energy Star, Single Family Residential	16,820
	Single Family Residential	28,006
Energy Service Technologies, LLC	Home Perf w Energy Star, Single Family Residential	31,841
ENERGYSTARDAVE LLC	Air Source Heat Pumps, Codes, Products and Standards	6,000
Environmental Contracting LLC	ASSISTED HOME PERFORMANCE WITH ENERGY STAR, Single Family	110
	Home Perf w Energy Star, Single Family Residential	44,782
	Single Family Residential	37,128
Eric Maskell		52,365
Euro and American Contracting	Geothermal Incentive Program, Clean Heating & Cooling EMPOWER NY, Single Family Residential	5,000
	Home Perf w Energy Star, Single Family Residential	72,405
	HOME PERFORMANCE WITH ENERGY STAR, Single Family Residential	250
	Single Family Residential	28,924
F.G. Downing Development, Inc.	Electric Vehicles - Rebate, Clean Transportation	6,900
Family Danz Heating and Cooling LLC	Air Source Heat Pumps, Codes, Products and Standards	47,169
Farnsworth Chevrolet, Inc.	Electric Vehicles - Rebate, Clean Transportation	10,500
Foam It Insulation, LLC	EMPOWER NY, Single Family Residential	12,496
	Home Perf w Energy Star, Single Family Residential	302,280
	HOME PERFORMANCE WITH ENERGY STAR, Single Family Residential	250
	Single Family Residential	39,431
Foothills MotorCar Corp	Electric Vehicles - Rebate, Clean Transportation	25,300
Fourth Coast, Inc.	Air Source Heat Pumps, Codes, Products and Standards	500

Contractor	Contract Description	Total Expended Amount
Fox Associates of Auburn, Inc	Electric Vehicles - Rebate, Clean Transportation	8,500
Fox Imports, Inc	Electric Vehicles - Rebate, Clean Transportation	13,200
Franzoso Energy Solutions, Inc.	Home Perf w Energy Star, Single Family Residential	6,740
Fred F. Collis & Sons, Inc.	Air Source Heat Pumps, Codes, Products and Standards	2,500
	Home Perf w Energy Star, Single Family Residential	59,641
	Single Family Residential	663
Frederick A Proven	Geothermal Incentive Program, Clean Heating & Cooling	14,790
Frederick J Goris, Jr.	EMPOWER NY, Single Family Residential	54,785
	Home Perf w Energy Star, Single Family Residential	9,086
Friello and Sons Home Performance	Home Perf w Energy Star, Single Family Residential	9,540
	Single Family Residential	4,816
Fuccillo Enterprises, Inc.	Electric Vehicles - Rebate, Clean Transportation	11,000
Fuccillo Nissan Inc.	Electric Vehicles - Rebate, Clean Transportation	10,000
Fuccillo Ventures Inc	Electric Vehicles - Rebate, Clean Transportation	10,600
Fulmont Community Action Agency Inc.	Home Perf w Energy Star, Single Family Residential	5,922
	Single Family Residential	8,767
G.W. Ehrhart, Inc.	Renewable Heat NY, Clean Heating & Cooling	36,500
GAE, LLC	Electric Vehicles - Rebate, Clean Transportation	10,000
Gaia Sharbel Energy Contracting	Home Perf w Energy Star, Single Family Residential	10,376
	Renewable Heat NY, Clean Heating & Cooling	6,000
Gallagher Electrical Services Heat & Air	Home Perf w Energy Star, Single Family Residential	215,920
	Single Family Residential	624
Garber H Inc	Electric Vehicles - Rebate, Clean Transportation	66,300
Garsten Motors Inc	Clean Transportation	30,600
	Electric Vehicles - Rebate, Clean Transportation	1,700
Gary Boyd	Home Perf w Energy Star, Single Family Residential	15,520
	Single Family Residential	21,872
Gault Auto Mall Co. Inc.	Electric Vehicles - Rebate, Clean Transportation	18,700
Gault Chevrolet Co. Inc.	Electric Vehicles - Rebate, Clean Transportation	10,800
Geotherm Inc.	Campus/Technical Assistance, Clean Heating & Cooling	8,900
	Geothermal Incentive Program, Clean Heating & Cooling	279.645
Geothermal Energy Options	Geothermal Incentive Program, Clean Heating & Cooling Geothermal Incentive Program, Clean Heating & Cooling	99,000
	Home Perf w Energy Star, Single Family Residential	14,450
Get Green Home Improvements LLC		
Global Dwelling, LLC	Home Perf w Energy Star, Single Family Residential	407,202
0	Single Family Residential	80,432
Gomez Comfort Systems, LLC	Home Perf w Energy Star, Single Family Residential	6,118
Great Neck Ford LLC	Clean Transportation	6,600
	Electric Vehicles - Rebate, Clean Transportation	2,200
Green Audit USA, Inc.	Single Family Residential	64,374
Green City Force	Home Perf w Energy Star, Single Family Residential	162,494
Green Home Innovations, Inc	EMPOWER NY, Single Family Residential	132,679
	Home Perf w Energy Star, Single Family Residential	36,235
	Single Family Residential	32,608
Green Home Logic, Inc.	Home Perf w Energy Star, Single Family Residential	4,002
	HOME PERFORMANCE WITH ENERGY STAR, Single Family Residential	500
	Single Family Residential	126,573
H & K VanValkenburgh, Inc.	Renewable Heat NY, Clean Heating & Cooling	255,000
H2O Concept Plumbing & Heating Corp.	Air Source Heat Pumps, Codes, Products and Standards	40,500
Habberstad Motorsport Inc.	Clean Transportation	15,100
		5,000
	Electric Vehicles - Rebate, Clean Transportation	500

Contractor	Contract Description	Total Expended Amount
Halcyon Inc.	ASSISTED HOME PERFORMANCE WITH ENERGY STAR, Single Family	291
	EMPOWER NY, Single Family Residential	49,708
	Home Perf w Energy Star, Single Family Residential	2,227,154
	HOME PERFORMANCE WITH ENERGY STAR, Single Family Residential	2,000
	Single Family Residential	203,380
Halcyon, Inc.	Air Source Heat Pumps, Codes, Products and Standards	500
	Campus/Technical Assistance, Clean Heating & Cooling	7,768
	Geothermal Incentive Program, Clean Heating & Cooling	201,330
Hanover, Town of	Clean Energy Communities, Communities & Local Government	5,000
Haraden Motorcar Corp	Electric Vehicles - Rebate, Clean Transportation	56,100
Harvey Bloch Ortiz Bailer Inc	Geothermal Incentive Program, Clean Heating & Cooling	84,930
Harvey, Bloch, Ortiz & Bailer Inc.	Geothermal Incentive Program, Clean Heating & Cooling	27,945
Hawn Heating & Energy Services LLC	Home Perf w Energy Star, Single Family Residential	20,862
	HOME PERFORMANCE WITH ENERGY STAR, Single Family Residential	688
Healey Chevrolet Inc.	Electric Vehicles - Rebate, Clean Transportation	22,500
Healthy Home Energy & Consulting, Inc.	Air Source Heat Pumps, Codes, Products and Standards	2,000
	Home Perf w Energy Star, Single Family Residential	123,175
Heart Volkswagen LLC	Clean Transportation	2,000
	Electric Vehicles - Rebate, Clean Transportation	16,000
Hearths A Fire Inc.	Renewable Heat NY, Clean Heating & Cooling	237,500
Heinrich Chevrolet Corp	Electric Vehicles - Rebate, Clean Transportation	7,100
Hempstead Auto Sales LLC	Clean Transportation	42,500
	Electric Vehicles - Rebate, Clean Transportation	11,900
Hempstead Lincoln Mercury Motors Corp.	Clean Transportation	11,000
·	Electric Vehicles - Rebate, Clean Transportation	2,200
Henry Interior, Inc.	Air Source Heat Pumps, Codes, Products and Standards	12,000
Hepler Geothermal Inc.	Geothermal Incentive Program, Clean Heating & Cooling	7,245
Home Energy Consultants Inc.	Home Perf w Energy Star, Single Family Residential	121,185
	Single Family Residential	37,184
Home Performance Professionals, Inc.	EMPOWER NY, Single Family Residential	51,394
· · · · · · · · · · · · · · · · · · ·	Home Perf w Energy Star, Single Family Residential	26,540
	NEW YORK ENERGY STAR HOMES, New Construction	4,500
	Single Family Residential	10,322
HomeWorks Energy, Inc.	Home Perf w Energy Star, Single Family Residential	180,726
noneworks Energy, ne.	OTHER PROGRAM AREA, Single Family Residential	7,368
Hoselton Chevrolet, Inc.	Electric Vehicles - Rebate, Clean Transportation	124,500
Hoselton Imports, Inc	Electric Vehicles - Rebate, Clean Transportation	79,000
Hoselton Nissan Inc	Electric Vehicles - Rebate, Clean Transportation	79,000
Iceberg Mechanical Corp		101,550
Ide Pontiac Inc	Air Source Heat Pumps, Codes, Products and Standards	39,100
	Electric Vehicles - Rebate, Clean Transportation	
Ideal Energy Solutions LLC	EMPOWER NY, Single Family Residential	218,278
	Home Perf w Energy Star, Single Family Residential	51,187
	OTHER PROGRAM AREA, Single Family Residential	33
	Single Family Residential	71,583
IGM Holdings, Inc.	Home Perf w Energy Star, Single Family Residential	679,083
	OTHER PROGRAM AREA, Single Family Residential	21,638
Ingersoll Auto of Pawling LLC	Electric Vehicles - Rebate, Clean Transportation	5,400
Innovation Now, LLC	Home Perf w Energy Star, Single Family Residential	17,844
	Single Family Residential	296
Installed Building Products LLC	EMPOWER NY, Single Family Residential	83,916
	Home Perf w Energy Star, Single Family Residential	31,212

Contractor	Contract Description	Total Expended Amount
Installed Building Products LLC	Single Family Residential	34,593
Isaac Heating and Air Conditioning, Inc.	Air Source Heat Pumps, Codes, Products and Standards	13,000
	ASSISTED HOME PERFORMANCE WITH ENERGY STAR, Single Family	1,833
	EMPOWER NY, Single Family Residential	9,434
	Home Perf w Energy Star, Single Family Residential	1,410,157
	HOME PERFORMANCE WITH ENERGY STAR, Single Family Residential	25,449
Island Design and Contracting, LLC	Single Family Residential	34,587
Ivy Lea Construction	EMPOWER NY, Single Family Residential	280,029
	Home Perf w Energy Star, Single Family Residential	20,904
	Single Family Residential	1,590
J and C Autoworld LLC d/b/a Advantage To	Clean Transportation	7,700
	Electric Vehicles - Rebate, Clean Transportation	5,500
J Synergy Green Inc	Home Perf w Energy Star, Single Family Residential	14,691
J.A.B & Co. Inc.	Clean Transportation	61,200
	Electric Vehicles - Rebate, Clean Transportation	6,800
J&M Motors Of Hempstead LLC	Clean Transportation	5,400
·	Electric Vehicles - Rebate, Clean Transportation	1,700
Jack Hall Plumbing and Heating, Inc.	Home Perf w Energy Star, Single Family Residential	5,419
Jack Sherman Inc.	Electric Vehicles - Rebate, Clean Transportation	16,500
James Cars of Hamburg LLC	Electric Vehicles - Rebate, Clean Transportation	6,600
James Cars of Rome LLC	Electric Vehicles - Rebate, Clean Transportation	8,800
James Chevrolet of Johnstown LLC	Electric Vehicles - Rebate, Clean Transportation	10,200
James Richard Meehan III	Home Perf w Energy Star, Single Family Residential	29,412
Jamestown Imports LLC	Electric Vehicles - Rebate, Clean Transportation	6,800
Jardine Inc	Electric Vehicles - Rebate, Clean Transportation	27,500
Jim Barnard Chevrolet Inc		6,000
	Electric Vehicles - Rebate, Clean Transportation	
JM Huntington Motors LLC	Clean Transportation	8,200
Joe Basil Chevrolet, Inc.	Electric Vehicles - Rebate, Clean Transportation	18,700
John Betlem Heating & Cooling Inc	Home Perf w Energy Star, Single Family Residential	191,632
	HOME PERFORMANCE WITH ENERGY STAR, Single Family Residential	1,250
John D. Marcella Appliances, Inc	Home Perf w Energy Star, Single Family Residential	15,648
	Single Family Residential	7,301
Joint Council of Economic Opportunity	Home Perf w Energy Star, Single Family Residential	39,158
	Single Family Residential	17,281
JPK Imports of Oneonta	Electric Vehicles - Rebate, Clean Transportation	7,700
JS Autoworld, LLC	Clean Transportation	17,600
JS Huntington Auto Sales LLC	Clean Transportation	17,600
	Electric Vehicles - Rebate, Clean Transportation	2,200
JS Huntington Motors LLC	Clean Transportation	31,800
	Electric Vehicles - Rebate, Clean Transportation	3,700
JS North Shore Motors LLC	Clean Transportation	13,600
	Electric Vehicles - Rebate, Clean Transportation	32,300
Karp Automotive, Inc	Clean Transportation	5,600
	Electric Vehicles - Rebate, Clean Transportation	1,100
Keeler Motor Car Co Inc	Electric Vehicles - Rebate, Clean Transportation	17,000
Keller Chevrolet Inc	Electric Vehicles - Rebate, Clean Transportation	5,700
KI-PO Motors Chevrolet Inc	Electric Vehicles - Rebate, Clean Transportation	15,300
Kinderhook Sales Inc	Electric Vehicles - Rebate, Clean Transportation	8,800
Kingston Automotive LLC	Electric Vehicles - Rebate, Clean Transportation	32,000
Knoth Heating & Mechanical	Air Source Heat Pumps, Codes, Products and Standards	7,000
	Home Perf w Energy Star, Single Family Residential	2,924

Contractor	Contract Description	Total Expended Amount
Knoth Heating & Mechanical	Single Family Residential	4,059
Kool-Temp Heating & Cooling	Air Source Heat Pumps, Codes, Products and Standards	500
	Geothermal Incentive Program, Clean Heating & Cooling	13,590
	Home Perf w Energy Star, Single Family Residential	4,200
L & S Motors Inc	Clean Transportation	74,800
	Electric Vehicles - Rebate, Clean Transportation	47,600
L2 Automotive, Inc.	Clean Transportation	3,700
	Electric Vehicles - Rebate, Clean Transportation	25,000
L.B. Auto of 112 LLC	Clean Transportation	18,700
Lake Country Geothermal, Inc.	Geothermal Incentive Program, Clean Heating & Cooling	87,750
Laks Motor Inc.	Electric Vehicles - Rebate, Clean Transportation	20,400
LeBrun LLC	Electric Vehicles - Rebate, Clean Transportation	6,600
Levittown Ford LLC	Clean Transportation	6,600
	Electric Vehicles - Rebate, Clean Transportation	1,100
Lia Automotive, LLC	Electric Vehicles - Rebate, Clean Transportation	16,500
Lia Brewster Automotive LLC	Electric Vehicles - Rebate, Clean Transportation	39,100
Lia Kingston LLC	Electric Vehicles - Rebate, Clean Transportation	11,900
LIC Motor Group	Clean Transportation	2,200
	Electric Vehicles - Rebate, Clean Transportation	5,500
LinLi HVAC Inc	Air Source Heat Pumps, Codes, Products and Standards	14,500
	Electric Vehicles - Rebate, Clean Transportation	5,500
Lithia Armory Garage, LLC.		
Liverpool World Corp	Electric Vehicles - Rebate, Clean Transportation	62,900
Lloyd Hamilton	Geothermal Incentive Program, Clean Heating & Cooling	25,860
Long Island Power Authority	GJGNY REVOLVING LOAN FUND, Single Family Residential	60,836
Lotze Insulation Design, Inc.	EMPOWER NY, Single Family Residential	5,511
	Home Perf w Energy Star, Single Family Residential	232,251
	Single Family Residential	28,474
Lyford Motors	Electric Vehicles - Rebate, Clean Transportation	19,800
Mack Markowitz Inc	Clean Transportation	27,500
	Electric Vehicles - Rebate, Clean Transportation	7,700
Maguire Automotive LLC	Electric Vehicles - Rebate, Clean Transportation	30,200
Maguire CDJR LLC	Electric Vehicles - Rebate, Clean Transportation	7,700
Maguire Chevrolet LLC	Electric Vehicles - Rebate, Clean Transportation	51,000
Maguire Honda of Ithaca	Electric Vehicles - Rebate, Clean Transportation	39,100
Maguire Motors LLC	Clean Transportation	1,700
	Electric Vehicles - Rebate, Clean Transportation	96,500
Malcarne Contracting, Inc.	Air Source Heat Pumps, Codes, Products and Standards	1,500
	Home Perf w Energy Star, Single Family Residential	11,498
Mangino Chevrolet Inc	Electric Vehicles - Rebate, Clean Transportation	19,100
Mangino Value Center Inc.	Electric Vehicles - Rebate, Clean Transportation	9,900
Margert Community Corporation	Home Perf w Energy Star, Single Family Residential	65,842
Martin B Devit	Geothermal Incentive Program, Clean Heating & Cooling	80,040
Massapequa Motors LLC	Clean Transportation	22,000
	Electric Vehicles - Rebate, Clean Transportation	2,200
Mercedes-Benz Manhattan, Inc.	Clean Transportation	3,400
	Electric Vehicles - Rebate, Clean Transportation	35,700
Metro Ford Sales Inc	Electric Vehicles - Rebate, Clean Transportation	5,500
Metro NY Insulation LLC	Home Perf w Energy Star, Single Family Residential	76,940
	OTHER PROGRAM AREA, Single Family Residential	3,078
	Single Family Residential	10,022
Michael B Kearney	EMPOWER NY, Single Family Residential	3,648
		0,040

Contractor	Contract Description	Total Expended Amount
Michael B Kearney	Home Perf w Energy Star, Single Family Residential	6,176
	HOME PERFORMANCE WITH ENERGY STAR, Single Family Residential	250
	Single Family Residential	6,557
Mid-York Chimney and Stove LLC	Renewable Heat NY, Clean Heating & Cooling	12,000
Mike Basil Motors Inc.	Electric Vehicles - Rebate, Clean Transportation	20,900
Millennium Super Store, LLC	Clean Transportation	44,000
	Electric Vehicles - Rebate, Clean Transportation	7,700
Miller Motor Car Corp.	Electric Vehicles - Rebate, Clean Transportation	8,500
MINISPLITCOMFORT CORP	Air Source Heat Pumps, Codes, Products and Standards	282,500
Mohawk Valley Community Action Agency	EMPOWER NY, Single Family Residential	4,198
	Home Perf w Energy Star, Single Family Residential	79,228
	Single Family Residential	4,402
Morehead Auto Sales INC	Electric Vehicles - Rebate, Clean Transportation	11,900
MR. AIR NYC Corp.	Air Source Heat Pumps, Codes, Products and Standards	16,000
Mt Kisco Import Cars Ltd	Clean Transportation	8,500
	Electric Vehicles - Rebate, Clean Transportation	32,300
Mullarney's Garden Center	Renewable Heat NY, Clean Heating & Cooling	135,500
Nassau Community College	CLEAN TRANSPORTATION, Clean Transportation	40,000
Nebrasky Plumbing & Heating	Air Source Heat Pumps, Codes, Products and Standards	3,500
	Home Perf w Energy Star, Single Family Residential	5,666
Neighborhood Housing Services	EMPOWER NY, Single Family Residential	4,889
Neighborhood housing bervices	Home Perf w Energy Star, Single Family Residential	254,039
	HOME PERFORMANCE WITH ENERGY STAR, Single Family Residential	204,000
		11,734
Naighborhood Housing Somicos (N H S) of	Single Family Residential	,
Neighborhood Housing Services (N.H.S) of	EMPOWER NY, Single Family Residential	24,231
	Home Perf w Energy Star, Single Family Residential	2,375
NEW UTRECHT AC WHOLESALER CORP	Air Source Heat Pumps, Codes, Products and Standards	198,500
New York Conservation Services Corp	Home Perf w Energy Star, Single Family Residential	230,103
New York Energy Consumers Council, Inc.	Commercial Real Estate Ten, Consumer Serv & Events Managem	2,850
	Prof & Expert Engagement, Market Insights	2,500
New York Geothermal Energy Organization	POLICY DEVELOPMENT, Consumer Serv & Events Managem	1,250
NEW YORK HOME APPLIANCES CORP	Air Source Heat Pumps, Codes, Products and Standards	5,000
	Home Perf w Energy Star, Single Family Residential	34,223
Newins Bay Shore Ford Inc	Clean Transportation	3,300
	Electric Vehicles - Rebate, Clean Transportation	2,200
NextCorps Inc	M-Corps, Consumer Serv & Events Managem	4,500
Niagara Mohawk Power Corporation	GJGNY REVOLVING LOAN FUND, Codes, Products and Standards	600
	GJGNY REVOLVING LOAN FUND, Single Family Residential	1,799
Nispen Building Performance, Inc.	Home Perf w Energy Star, Single Family Residential	103,525
	Renewable Heat NY, Clean Heating & Cooling	13,500
	Single Family Residential	69,431
Nissan 112 Sales Corp	Clean Transportation	6,000
	Electric Vehicles - Rebate, Clean Transportation	2,000
Nissan of Webster	Electric Vehicles - Rebate, Clean Transportation	8,000
North Country Windows	Home Perf w Energy Star, Single Family Residential	6,088
North East Underlayments LLC	Home Perf w Energy Star, Single Family Residential	14,072
North Shore Chevrolet of Smithtown	Clean Transportation	25,600
Northeast Home Improvement, LLC	Home Perf w Energy Star, Single Family Residential	94,252
	Single Family Residential	24,956
Northeastern Fireplace and Design	Renewable Heat NY, Clean Heating & Cooling	66,500

Contractor	Contract Description	Total Expended Amount
Northstar Chevrolet Inc	Electric Vehicles - Rebate, Clean Transportation	8,500
NP Environmental LLC	Geothermal Incentive Program, Clean Heating & Cooling	287,550
NS Auto Sales Inc.	Clean Transportation	32,300
	Electric Vehicles - Rebate, Clean Transportation	5,100
Nunda Farm Service Inc.	Renewable Heat NY, Clean Heating & Cooling	47,904
	Renewable Heat NY, Codes, Products and Standards	1,500
NY Greentop	Home Perf w Energy Star, Single Family Residential	157,144
Nye Automotive Group, Inc	Electric Vehicles - Rebate, Clean Transportation	18,700
NYLSI, INC	Clean Transportation	52,800
	Electric Vehicles - Rebate, Clean Transportation	3,300
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.	Home Perf w Energy Star, Single Family Residential	662,072
	OTHER PROGRAM AREA, Single Family Residential	3,900
	Single Family Residential	23,664
NYS Weatherization Directors Association	Home Perf w Energy Star, Single Family Residential	4,969
	Single Family Residential	8,323
NYSEG	Admin-General Charges	3,633,111
	GJGNY REVOLVING LOAN FUND, Single Family Residential	404
O'Connor Chevrolet, Inc.	Electric Vehicles - Rebate, Clean Transportation	54,700
ODA Community Development Corp.	Home Perf w Energy Star, Single Family Residential	62,214
Olum's of Binghamton, Inc.	Home Perf w Energy Star, Single Family Residential	74,800
	Single Family Residential	21,410
Opportunities for Chenango, Inc.	EMPOWER NY, Single Family Residential	6,266
	Home Perf w Energy Star, Single Family Residential	26,130
	Single Family Residential	3,669
Opportunities for Otsego, Inc.	EMPOWER NY, Single Family Residential	1,987
	Home Perf w Energy Star, Single Family Residential	94,266
	Single Family Residential	21,609
Orange and Rockland Utilities, Inc.	Admin-General Charges	978,688
orange and Rookand offices, inc.	GJGNY REVOLVING LOAN FUND, Single Family Residential	1,302
Paddock Chevrolet, Inc.	Electric Vehicles - Rebate, Clean Transportation	38,000
Pana Nissan, LLC	Clean Transportation	4,000
	Electric Vehicles - Rebate, Clean Transportation	56,000
Devergen Metern of Mendoide Inc	, 1	
Paragon Motors of Woodside Inc	Clean Transportation	18,700
Destructure IIIII C	Electric Vehicles - Rebate, Clean Transportation	78,200
Parkway II LLC	Electric Vehicles - Rebate, Clean Transportation	30,800
Pathstone Corporation	Home Perf w Energy Star, Single Family Residential	13,321
Patriot Energy Solutions Corp	Home Perf w Energy Star, Single Family Residential	210,547
	Single Family Residential	4,986
PBL Equipment & Service Inc	Renewable Heat NY, Clean Heating & Cooling	12,000
PEG	Low Rise New Construction, New Construction	19,900
Penns Worldwide Auto Superstore LTD	Clean Transportation	28,600
	Electric Vehicles - Rebate, Clean Transportation	6,600
People's Equal Action & Community Effort	Home Perf w Energy Star, Single Family Residential	77,105
	Single Family Residential	8,089
Perfect Comfort	Air Source Heat Pumps, Codes, Products and Standards	8,000
Perfection Contracting Inc	Geothermal Incentive Program, Clean Heating & Cooling	16,185
Performance Systems Development, Inc.	Low Rise New Construction, New Construction	8,500
	NEW YORK ENERGY STAR HOMES, New Construction	3,600

Contractor	Contract Description	Total Expended Amount
Pete Faber	Renewable Heat NY, Clean Heating & Cooling	5,000
Peter Tavino PE PC	Campus/Technical Assistance, Clean Heating & Cooling	3,641
	Campus/Technical Assistance, Codes, Products and Standards	10,904
Phoenix Mechanical	Air Source Heat Pumps, Codes, Products and Standards	5,500
	Geothermal Incentive Program, Clean Heating & Cooling	11,040
	Home Perf w Energy Star, Single Family Residential	22,827
PJDT LLC	Electric Vehicles - Rebate, Clean Transportation	6,600
Plaza Automotive, Ltd.	Clean Transportation	59,500
	Electric Vehicles - Rebate, Clean Transportation	102,000
Plaza Motors of Brooklyn, Inc.	Clean Transportation	3,400
	Electric Vehicles - Rebate, Clean Transportation	48,700
Poughkeepsie Nissan, Inc	Electric Vehicles - Rebate, Clean Transportation	14,000
Prestige Automobiles Inc.	Electric Vehicles - Rebate, Clean Transportation	38,500
Prime Time Energy Services, Inc.	EMPOWER NY, Single Family Residential	350,802
	Home Perf w Energy Star, Single Family Residential	56,390
	Single Family Residential	1,248
Pro Action of Steuben & Yates, Inc.	Home Perf w Energy Star, Single Family Residential	17,246
	Single Family Residential	6,008
Pro-Services Plumbing & Heating Inc	Air Source Heat Pumps, Codes, Products and Standards	6,500
R. McLagan, Inc.	Home Perf w Energy Star, Single Family Residential	8,369
Rallye Westbury, LLC	Clean Transportation	23,100
2 2/	Electric Vehicles - Rebate, Clean Transportation	1,000
Ralph Automotive Inc.	Electric Vehicles - Rebate, Clean Transportation	40,800
Ramp Motors Inc	Clean Transportation	17,600
Ray Catena of Westchester, LLC	Electric Vehicles - Rebate, Clean Transportation	14,100
Regional Economic Community Action	Home Perf w Energy Star, Single Family Residential	13,631
Renes Repair Inc	Renewable Heat NY, Clean Heating & Cooling	15,000
Rensselaer Honda	Electric Vehicles - Rebate, Clean Transportation	27,200
Reynolds Group Enterprises, Inc.	Renewable Heat NY, Clean Heating & Cooling	72,650
RHC Operating LLC	Off-Shore Wind Master Plan, Consumer Serv & Events Managem	10,000
RHM Inc.	ASSISTED HOME PERFORMANCE WITH ENERGY STAR, Single Family	500
Kriw mc.	Home Perf w Energy Star, Single Family Residential	12,321
	HOME PERFORMANCE WITH ENERGY STAR, Single Family Residential	500
		358
Richair Mechanical Inc.	Single Family Residential	
	Air Source Heat Pumps, Codes, Products and Standards	25,500
Rivera Auto Group Inc	Electric Vehicles - Rebate, Clean Transportation	23,100
Riverhead Auto Mall LTD	Clean Transportation	6,000
-	Electric Vehicles - Rebate, Clean Transportation	4,000
Riverhead Motors, Inc.	Clean Transportation	11,000
RJ Chevrolet Inc	Electric Vehicles - Rebate, Clean Transportation	162,700
Robert Chevrolet Inc	Clean Transportation	12,500
Robert Green Auto and Truck	Electric Vehicles - Rebate, Clean Transportation	5,700
Roberto R Romano	Geothermal Incentive Program, Clean Heating & Cooling	14,250
Rochester Gas & Electric Corp.	Admin-General Charges	2,419,844
Rodney Lind	EMPOWER NY, Single Family Residential	16,070
	Home Perf w Energy Star, Single Family Residential	112,586
	Single Family Residential	23,481
Romano Toyota	Electric Vehicles - Rebate, Clean Transportation	72,600
Romeo Chevrolet Buick GMC	Electric Vehicles - Rebate, Clean Transportation	32,500
Ruge's Automotive, Inc.	Electric Vehicles - Rebate, Clean Transportation	9,100
Ryan Plumbing Heating Air Conditioning	Home Perf w Energy Star, Single Family Residential	13,537

		9,900
Steet Ponte Inc	Electric Vehicles - Rebate, Clean Transportation	15,400
Stateside Auto Sales Inc.	Electric Vehicles - Rebate, Clean Transportation	11,000
	Electric Vehicles - Rebate, Clean Transportation	6,600
Star Nissan Inc	Clean Transportation	3,300
o	Single Family Residential	26,918
	OTHER PROGRAM AREA, Single Family Residential	7,661
	Home Perf w Energy Star, Single Family Residential	1,427,761
	EMPOWER NY, Single Family Residential	79,080
Standard Insulating Company	ASSISTED HOME PERFORMANCE WITH ENERGY STAR, Single Family	876
	Single Family Residential	924
Stallmer & Sun Energy Efficiency Special	Home Perf w Energy Star, Single Family Residential	10,226
Stacey Bennett	Renewable Heat NY, Clean Heating & Cooling	21,000
	Single Family Residential	4,255
St. Lawrence County Development Program	Home Perf w Energy Star, Single Family Residential	1,304
	Electric Vehicles - Rebate, Clean Transportation	1,100
South Shore Motors Corp	Clean Transportation	24,200
Solomon Apartment Management, LLC	CLEAN TRANSPORTATION, Clean Transportation	8,000
Solar Energy Haus, Inc.	Single Family Residential	76,088
Snyder Manufacturing, Inc	Geothermal Incentive Program, Clean Heating & Cooling	47,640
	HOME PERFORMANCE WITH ENERGY STAR, Single Family Residential	436
	Home Perf w Energy Star, Single Family Residential	156,381
Snug Planet, LLC	Air Source Heat Pumps, Codes, Products and Standards	11,000
	Electric Vehicles - Rebate, Clean Transportation	2,000
Smithtown Nissan Inc	Clean Transportation	16,000
	Single Family Residential	16,685
Simply Home Performance	Home Perf w Energy Star, Single Family Residential	501,525
Sigma Tremblay, LLC	Home Perf w Energy Star, Single Family Residential	7,415
Sharp's Bulk Food Store	Renewable Heat NY, Clean Heating & Cooling	283,500
	Electric Vehicles - Rebate, Clean Transportation	110,500
SG Hylan Motors Corp	Clean Transportation	8,500
Seneca County Weatherization	Home Perf w Energy Star, Single Family Residential	53,011
	Electric Vehicles - Rebate, Clean Transportation	7,700
SC Auto Corp	Clean Transportation	94,600
Sawyer Chevrolet Inc.	Electric Vehicles - Rebate, Clean Transportation	7,100
	Electric Vehicles - Rebate, Clean Transportation	2,200
Sassville LLC	Clean Transportation	12,100
Saratoga Motors Inc.	Electric Vehicles - Rebate, Clean Transportation	35,700
Saratoga Imports Inc	Electric Vehicles - Rebate, Clean Transportation	33,000
Saratoga County EOC	Home Perf w Energy Star, Single Family Residential	11,605
	Single Family Residential	25,837
	HOME PERFORMANCE WITH ENERGY STAR, Single Family Residential	2,240
	Home Perf w Energy Star, Single Family Residential	40,502
	EMPOWER NY, Single Family Residential	88,353
SANFILIPPO SOLUTIONS INC.	ASSISTED HOME PERFORMANCE WITH ENERGY STAR, Single Family	1,000
	Electric Vehicles - Rebate, Clean Transportation	11,400
S & H Associates LLC	Clean Transportation	2,000
Rycor LLC	Air Source Heat Pumps, Codes, Products and Standards	262,233
Ryan Plumbing Heating Air Conditioning	Single Family Residential	516
Contractor	Contract Description	Total Expended Amount

Contractor	Contract Description	Total Expended Amount
Stewart Title Insurance Company	GJGNY REVOLVING LOAN FUND, Single Family Residential	30,121
STNO, LLC	Clean Transportation	45,100
	Electric Vehicles - Rebate, Clean Transportation	2,200
Stoler of Westbury	Clean Transportation	23,100
	Electric Vehicles - Rebate, Clean Transportation	7,700
Sun Dance Pool N Patio Inc.	Renewable Heat NY, Clean Heating & Cooling	128,361
Sundog Solar, Inc.	Geothermal Incentive Program, Clean Heating & Cooling	110,250
Sunrise Automall LLC	Clean Transportation	73,100
	Electric Vehicles - Rebate, Clean Transportation	10,200
Sunset Park Redevelopment Comm	Home Perf w Energy Star, Single Family Residential	31,275
Superior Energy Innovations, LLC	EMPOWER NY, Single Family Residential	155,580
	Home Perf w Energy Star, Single Family Residential	125,177
	HOME PERFORMANCE WITH ENERGY STAR, Single Family Residential	700
	Single Family Residential	6,431
Superior Insulation Co., LLC	EMPOWER NY, Single Family Residential	4,424
	Home Perf w Energy Star, Single Family Residential	493,790
	OTHER PROGRAM AREA, Single Family Residential	703
	Single Family Residential	43,032
Supportive Services Corporation	EMPOWER NY, Single Family Residential	7,053
	Home Perf w Energy Star, Single Family Residential	286
	Single Family Residential	5,829
Sustainable Comfort, Inc	Low Rise New Construction, New Construction	38,600
T & C Sales & Service Inc.	Electric Vehicles - Rebate, Clean Transportation	5,500
T.A.S. Consulting International LLC	Renewable Heat NY, Clean Heating & Cooling	24,500
T.J.Nik Corp	Clean Transportation	19,900
	Electric Vehicles - Rebate, Clean Transportation	3,900
T' F' Obrien	Air Source Heat Pumps, Codes, Products and Standards	18,141
Tall Pines Farm Inc.	Renewable Heat NY, Clean Heating & Cooling	18,000
Taylor Group LTD	New Construction- Housing, New Construction	1,492
	NextGen HVAC, Consumer Serv & Events Managem	364
	Off-Shore Wind Master Plan, Corporate Marketing	2,494
Taylor Heating Inc.	Air Source Heat Pumps, Codes, Products and Standards	3,000
	ASSISTED HOME PERFORMANCE WITH ENERGY STAR, Single Family	624
	Home Perf w Energy Star, Single Family Residential	138,481
	HOME PERFORMANCE WITH ENERGY STAR, Single Family Residential	928
TBS Acquisition Corp	Clean Transportation	17,600
	Electric Vehicles - Rebate, Clean Transportation	2,000
Tesla Motors New York LLC	Clean Transportation	393,500
	Electric Vehicles - Rebate, Clean Transportation	796,500
The Bicknell Corporation	Renewable Heat NY, Clean Heating & Cooling	75,250
The Dorschel Group	Electric Vehicles - Rebate, Clean Transportation	40,500
		50,000
		6,000
		11,600
The Energy Doctors	Home Perf w Energy Star, Single Family Residential	37,425
The Energy Boolors	Single Family Residential	1,764
The Fireplace Company Inc.	Renewable Heat NY, Clean Heating & Cooling	18,000
The Insulation Man LLC	Home Perf w Energy Star, Single Family Residential	73,472
	HOME PERFORMANCE WITH ENERGY STAR, Single Family Residential	1,450
	Single Family Residential	
		5,607

Contractor	Contract Description	Total Expended Amount
The Radiant Store	Home Perf w Energy Star, Single Family Residential	4,502
Three Peaks Energy Corp.	Home Perf w Energy Star, Single Family Residential	17,963
	Single Family Residential	510
Tioga Opportunities Inc.	EMPOWER NY, Single Family Residential	4,635
	Home Perf w Energy Star, Single Family Residential	127,257
	Single Family Residential	18,202
TLL Motors Inc	Clean Transportation	106,700
	Electric Vehicles - Rebate, Clean Transportation	9,900
Tompkins Community Action	Home Perf w Energy Star, Single Family Residential	18,472
	Single Family Residential	12,489
Total Comfort Heating and Air Conditioni	Home Perf w Energy Star, Single Family Residential	210,798
Town of Amity	Clean Energy Communities, Communities & Local Government	5,000
Town of Colchester	Clean Energy Communities, Communities & Local Government	5,000
Town of Dryden	Clean Energy Communities, Communities & Local Government	5,000
Town of Ellington	Clean Energy Communities, Communities & Local Government	5,000
Town of Fabius	Clean Energy Communities, Communities & Local Government	5,000
Town of Grand Island	Clean Energy Communities, Communities & Local Government	5,000
Town of Groton	Clean Energy Communities, Communities & Local Government	5,000
Town of Hannibal	Clean Energy Communities, Communities & Local Government	5,000
Town of Poland	Clean Energy Communities, Communities & Local Government	5,000
Town of Saugerties	Clean Energy Communities, Communities & Local Government	5,000
Transitowne Williamsville LLC	Electric Vehicles - Rebate, Clean Transportation	15,400
TRS Heating and Air Conditioning Co., In	EMPOWER NY, Single Family Residential	1,003,735
	Single Family Residential	39,145
True Building Performance LLC	Home Perf w Energy Star, Single Family Residential	104,097
U U	HOME PERFORMANCE WITH ENERGY STAR, Single Family Residential	80
	Single Family Residential	1,503
True Energy Solutions	EMPOWER NY, Single Family Residential	3,144
	Home Perf w Energy Star, Single Family Residential	94,811
	HOME PERFORMANCE WITH ENERGY STAR, Single Family Residential	320
	Single Family Residential	409
True North Albany Extended Stay, LLC	CLEAN TRANSPORTATION, Clean Transportation	8,000
TT of Freeport Inc	Clean Transportation	4,200
	Electric Vehicles - Rebate, Clean Transportation	2,200
U.S. Geological Survey (Troy).	Environmental Research, Environmental Research	6,400
Ulster Construction Co. Inc.	Home Perf w Energy Star, Single Family Residential	22,445
	Single Family Residential	6,878
Ulster County Community Action, Inc.	Home Perf w Energy Star, Single Family Residential	129,154
	Single Family Residential	10,347
University of Rochester	Environmental Research, Environmental Research	4,759
Upstate Imports Inc	Electric Vehicles - Rebate, Clean Transportation	7,700
Upstate Spray Foam Insulation, LLC	EMPOWER NY, Single Family Residential	11,831
	Home Perf w Energy Star, Single Family Residential	74,438
		14,315
Valley Stream Foreign Care Inc.	Single Family Residential	13,600
Valley Stream Foreign Cars Inc	Clean Transportation	6,800
Van Bortol Chovrolat Inc	Electric Vehicles - Rebate, Clean Transportation	
Van Bortel Chevrolet, Inc.	Electric Vehicles - Rebate, Clean Transportation	58,700
Van Bortel Ford Inc.	Electric Vehicles - Rebate, Clean Transportation	7,700
Van Hee Mechanical	Air Source Heat Pumps, Codes, Products and Standards	24,000
	Campus/Technical Assistance, Clean Heating & Cooling	9,220
	Geothermal Incentive Program, Clean Heating & Cooling	128,595

Contractor	Contract Description	Total Expended Amount
Vanderstyne Motor Sales Inc	Electric Vehicles - Rebate, Clean Transportation	22,000
VanWie Chevrolet Inc	Electric Vehicles - Rebate, Clean Transportation	8,500
Victor Auto Group LLC	Electric Vehicles - Rebate, Clean Transportation	10,800
Village of Avon	Clean Energy Communities, Communities & Local Government	5,000
Village of Cherry Valley	Clean Energy Communities, Communities & Local Government	5,000
Village of Fort Plain	Clean Energy Communities, Communities & Local Government	5,000
Village of Hobart	Clean Energy Communities, Communities & Local Government	5,000
Village of Jordan	Clean Energy Communities, Communities & Local Government	5,000
Village of Lima	Clean Energy Communities, Communities & Local Government	5,000
Village of Mamaroneck	CLEANER GREENER COMMUNITIES, Communities & Local Government	5,000
Village of Manlius	Clean Energy Communities, Communities & Local Government	5,000
Village of Margaretville	Clean Energy Communities, Communities & Local Government	5,000
Village of North Syracuse	Clean Energy Communities, Communities & Local Government	5,000
	CLEAN TRANSPORTATION, Clean Transportation	8,000
Village of Solvay	CLEANER GREENER COMMUNITIES, Communities & Local Government	5,000
Village of Tully	Clean Energy Communities, Communities & Local Government	5,000
Village of Webster	Clean Energy Communities, Communities & Local Government	5,000
Vulcan Enterprises LLC	Renewable Heat NY, Clean Heating & Cooling	14,000
Warren/Hamilton Counties ACEO	Home Perf w Energy Star, Single Family Residential	34,210
	Single Family Residential	3,834
Watertown Appliance and TV Center, Inc.	Home Perf w Energy Star, Single Family Residential	8,509
······	Single Family Residential	6,122
Wayne County Action Program	EMPOWER NY, Single Family Residential	1,454
Trayno ocurry Action Program	Home Perf w Energy Star, Single Family Residential	146,624
	Single Family Residential	1,161
West Herr Ford of Amherst LLC	Electric Vehicles - Rebate, Clean Transportation	5,500
West Herr Honda	Electric Vehicles - Rebate, Clean Transportation	129,200
West Herr Imports LLC	Electric Vehicles - Rebate, Clean Transportation	26,400
West Herr Oldsmobile Inc	Electric Vehicles - Rebate, Clean Transportation	14,000
West Nyack Motor Cars LLC	Clean Transportation	14,000
West Nyack Motor Cars LLC	Electric Vehicles - Rebate, Clean Transportation	•
Westshester Auto Disy	· · ·	8,500
Westchester Auto Plex	Clean Transportation	3,400
	Electric Vehicles - Rebate, Clean Transportation	11,900
Western New York Exteriors, LLC	Home Perf w Energy Star, Single Family Residential	7,750
Weston Bros.	Air Source Heat Pumps, Codes, Products and Standards	13,500
WHAC LLC	Electric Vehicles - Rebate, Clean Transportation	7,900
Wheatfield Village Motors	Clean Transportation	1,700
	Electric Vehicles - Rebate, Clean Transportation	61,200
Whiteman Chevrolet Inc	Electric Vehicles - Rebate, Clean Transportation	16,800
Williams Auto Plaza IV, LLC	Electric Vehicles - Rebate, Clean Transportation	5,100
Williams Toyota Elmira	Electric Vehicles - Rebate, Clean Transportation	18,700
Willie Oxendine	Home Perf w Energy Star, Single Family Residential	54,180
	Single Family Residential	12,105
Wilson Appliance	Home Perf w Energy Star, Single Family Residential	6,841
	Single Family Residential	3,355
Wisconsin Energy Conservation Corp	>200KW PV, NY-Sun	50,970
	ASSISTED HOME PERFORMANCE WITH ENERGY STAR, Low/Moderate	62,978
	ASSISTED HOME PERFORMANCE WITH ENERGY STAR, Single Family	4,711
	Geothermal Incentive Program, Clean Heating & Cooling	1,620
	GJGNY REVOLVING LOAN FUND, Clean Heating & Cooling	4,190

Contractor	Contract Description	Total Expended Amount
Wisconsin Energy Conservation Corp	Home Perf w Energy Star, Low/Moderate Income	3,783,743
	Home Perf w Energy Star, Single Family Residential	269,178
	HOME PERFORMANCE WITH ENERGY STAR, Low/Moderate Income	7,340
	Solar Thermal, Clean Heating & Cooling	42,481
Wise Home Energy, LLC	Air Source Heat Pumps, Codes, Products and Standards	1,000
	EMPOWER NY, Single Family Residential	1,115
	Home Perf w Energy Star, Single Family Residential	441,593
	HOME PERFORMANCE WITH ENERGY STAR, Single Family Residential	600
	Single Family Residential	17,279
WK Mechanical	Air Source Heat Pumps, Codes, Products and Standards	8,875
Wood 'N Things	Renewable Heat NY, Clean Heating & Cooling	42,971
WS Healey Chevrolet Buick Inc.	Electric Vehicles - Rebate, Clean Transportation	9,400
XL Hybrids, Inc	CLEAN TRANSPORTATION, Clean Transportation	30,848
Yonkers Auto Outlet Inc	Electric Vehicles - Rebate, Clean Transportation	5,100
Yonkers Motors Corp	Clean Transportation	3,400
	Electric Vehicles - Rebate, Clean Transportation	44,200
Zenner and Ritter Inc.	EMPOWER NY, Single Family Residential	16,630
	Home Perf w Energy Star, Single Family Residential	13,322
	Single Family Residential	134
Zerodraft of CNY - Syracuse	EMPOWER NY, Single Family Residential	6,940
	Home Perf w Energy Star, Single Family Residential	603,316
	HOME PERFORMANCE WITH ENERGY STAR, Single Family Residential	250
	Single Family Residential	142,773
Grand Total		75,325,900

NYSERDA

Public Authority Law Report

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Contractor	Date Encumbered	Contract Description	Total Contract Amount
NYGB-CCRD Borrower, LLC	12/4/2018	NY Green Bank, CCR - Upsize #2	20,000,000
NY DRS Finco I, LLC	12/31/2018	NY Green Bank, Delaware River Solar	25,000,000
		NY Green Bank, DRS Construction Revolver	25,000,000
Valcour Wind Energy, LLC	2/28/2019	NY Green Bank, Valcour Wind OpCo	33,750,000
1st Light Energy, Inc.	10/24/2018	NY Sun	44,070
	12/10/2018	NY Sun	61,230
8-11 & 13 43rd Road LLC	2/28/2019	Commercial New Construc, SF106887 - 8-11 43rd Rd-OFLT	64,137
10th Ave Petroleum LLC	11/20/2018	OTHER PROGRAM AREA, PGI00296 - 10th Avenue Petrole	68,703
103 Gleneida Avenue LLC	10/3/2018	Industrial Process Effic, Industrial Process Efficiency	86,000
112 East Clarke Housing Development		Multifam New Construction, MFNC Clarke Place Sr. Res.	93,200
201 Ellicott, LLC	1/3/2019	Multifam New Construction, New Construction	300,000
233 West 125th Street Danforth, LLC	2/19/2019	NEW CONSTRUCTION PROGRAM, NCP11259 - Victoria Thea.	140,874
237 State Route 96 Site 1, LLC	1/3/2019	>200KW PV, NY Sun	1,580,800
237 State Route 96 Site 2, LLC	1/3/2019	>200KW PV, NY Sun	1,501,760
575 Fuel Inc	11/19/2018	FUEL NY, PGI00299 - 575 Fuel Inc.	11,406
575 Tuernic	11/19/2010	OTHER PROGRAM AREA, PGI00299 - 575 Fuel Inc.	79,228
602 Partners LLC	2/19/2019	Multifam Performance Pgm, Multifamily	201,600
		NY-Sun	201,000
770 Electric Corp.	12/4/2018	NY-Sun	
	12/13/2018		3,960
	12/17/2018	NY-Sun	32,040
	1/7/2019	NY-Sun	1,440
1020 Route 109 Corp.	11/15/2018	FUEL NY, PGI00239 - 1020 Route 109 Corp	16,065
Abakama LLC	11/14/2018	OTHER PROGRAM AREA, Innovation Advisory Services	75,000
ABB, Incorporated	2/8/2019	OREC: Technical Support, RFQL3685 Round 1	236,500
Abt Associates Inc.	12/27/2018	Environmental Research, Community Flood Risk	35,854
AC Woodhaven Realty Corp.	11/8/2018	FUEL NY, PGI00113 - AC Woodhaven Realty	118,645
Accord Power, Inc.	2/15/2019	NY-Sun	18,900
	3/29/2019	PON 2112 NY SUN	24,640
ACEEE	3/25/2019	Prof & Expert Engagement, 2019 ACEEE Membership	10,000
Active Solar Development, LLC	3/1/2019	Campus/Technical Assistance, LMI Solar Thermal Beacon	200,000
Adam C. Boese	10/1/2018	Technical Services, RFP3628FlexTechConsultUmbrella	7,500
	10/12/2018	Agriculture Energy Eff Pgm, RFP3628FlexTechConsultUmbrella	5,995
		Technical Services, RFP3628FlexTechConsultUmbrella	10,000
	10/24/2018	Agriculture Energy Eff Pgm, RFP3628FlexTechConsultUmbrella	2,025
		Technical Services, RFP3628FlexTechConsultUmbrella	3,020
	10/29/2018	Commercial New Construc, RFP3771 Umbrella Contract	3,000
	10/30/2018	Technical Services, RFP3628FlexTechConsultUmbrella	2,500
	11/1/2018	Commercial New Construc, RFP3771 Umbrella Contract	16,000
		Technical Services, RFP3628FlexTechConsultUmbrella	12,500
	11/9/2018	Technical Services, RFP3628FlexTechConsultUmbrella	3,195
	11/16/2018	Technical Services, RFP3628FlexTechConsultUmbrella	10,000
	11/27/2018	Technical Services, RFP3628FlexTechConsultUmbrella	5,000
	12/14/2018	Technical Services, RFP3628FlexTechConsultUmbrella	5,000
	1/22/2019	Agriculture Energy Eff Pgm, RFP3628FlexTechConsultUmbrella	5,000
	1/25/2019	Agriculture Energy Eff Pgm, RFP3628FlexTechConsultUmbrella	2,500
	2/7/2019	Agriculture Energy Eff Pgm, RFP3628FlexTechConsultUmbrella	7,500
	2/14/2019	Agriculture Energy Eff Pgm, RFP3628FlexTechConsultUmbrella	2,500
		Flexible Tech Assistance, RFP3628FlexTechConsultUmbrella	14,640
	2/22/2019	Technical Services, RFP3628FlexTechConsultUmbrella	5,000
	3/5/2019	Technical Services, RFP3628FlexTechConsultUmbrella	2,580
	3/14/2019	Technical Services, RFP3628FlexTechConsultUmbrella	2,500
	3/19/2019	Commercial Real Estate Ten, Daylight Savings - 64 Fulton	5,000
	3/22/2019	Technical Services, RFP3628FlexTechConsultUmbrella	17,500
	3/26/2019	Technical Services, RFP3628FlexTechConsultUmbrella	2,500
	3/29/2019	Technical Services, RFP3628FlexTechConsultUmbrella	13,500
Adirondack Area Network	11/29/2018	NYSERDA ADMINISTRATION, Video Recording Services	405

Contractor	Date Encumbered	Contract Description	Total Contract Amount
Adirondack Battery & Solar, LLC	12/4/2018	<200KW PV, NY Sun	8,750
ADK Solar	10/16/2018	<200KW PV, NY Sun	5,208
AECOM Technical Services Inc.	10/22/2018	WEST VALLEY DEVELOPMENT PROGRAM, Environmental M.	581,116
Aegis Energy Services Inc.	10/17/2018	Combined Heat and Power, CHPA - 300 Central Park West B	122,719
	12/19/2018	Combined Heat and Power, CHPA - 2425 Nostrand Ave.	94,500
		Combined Heat and Power, CHPA - 2501 Nostrand Ave.	42,000
Aegis Solar, LLC	1/31/2019	>200KW PV, NY-Sun C&I	1,109,185
Aeonsolar	10/5/2018	NY Sun	22,032
	10/24/2018	RENEWABLE HEAT NY, Aeon Heating - Baillargeon	21,000
AFP 108 Corp	3/28/2019	Low-Income Forum on Energy, Llfe 2019 Reg Mtg - Western NY	6,000
Albanese Development Corporation	11/1/2018	CLEANER GREENER COMMUNITIES, CGC40329 - Albanese	3,229,752
Albany Solar Solutions L.L.C.	10/11/2018	<200KW PV, NY Sun	5,623
Albany, City of,	12/17/2018	Clean Energy Communities, City of Albany	180,000
Alberto Aceves Cornejo	1/17/2019	Agbotic - Tech. Due Diligence	10,000
Albireo Energy, LLC	12/4/2018	Real Time Enrgy Management, Alberio Energy-500 W 33rd-RT.	155,000
	3/12/2019	Real Time Enrgy Management, Alberio Energy-500 W 33rd-RT.	83,544
All-Temperature Systems of Syracuse, I		Talent Pipeline:CE and OJT, OJT HIRE	11,520
Allegany County Society for the Preventi		NEW CONSTRUCTION PROGRAM, NCP12291 - Allegany Cou.	11,553
Allegis Group Holdings Inc	10/3/2018	NEW YORK GREEN BANK, Staff Augmentation Services	13,305
Allegis Group Holdings Inc	1/22/2019	NEW YORK GREEN BANK, Staff Augmentation Services	14,638
Alliance Energy LLC		FUEL NY, PGI00013 - Alliance Energy LLC	
	10/22/2018		58,649
Alliance for Sustainable Energy, LLC	11/13/2018	Nat'l OffShWind R&D Consortium, NREL for OSW Consortium	79,672
		NREL for OSW Consortium	40,328
Alliance to Save Energy	1/23/2019	Prof & Expert Engagement, 2019 ASE Membership	25,000
Altanova LLC	1/10/2019	Commercial Real Estate Ten, Altanova - Multisite	47,894
Alternative Power Solutions of NY, LLC	10/3/2018	<200KW PV, NY Sun	6,038
	10/29/2018	<200KW PV, NY Sun	6,641
	11/21/2018	<200KW PV, NY Sun	6,132
	12/6/2018	<200KW PV, NY Sun	8,750
Amer Assoc for the Advance of Science	3/28/2019	Environmental Research, Tech Peer Review/Manuscripts	40,000
AMERESCO, Inc.	10/25/2018	EXISTING FACILITIES, EFP2624 - AMERESCO	45,148
American Council for an Energy Efficient	2/11/2019	Subscription/Data Access, Research Support for NYSERDA	50,000
American Energy Care, Inc.	10/3/2018	<200KW PV, NY Sun	5,994
	10/12/2018	<200KW PV, NY-Sun	67
	11/15/2018	<200KW PV, NY-Sun	67
	1/2/2019	<200KW PV, NY Sun	6,696
	1/28/2019	<200KW PV, NY-Sun	6,844
American Solar Partners, LLC	3/1/2019	<200KW PV, NY-Sun	6,606
	3/18/2019	NY-SUN, Solar for Electchester Housing	140,000
	3/29/2019	PON 2112 NY SUN	8,760
Ampersand Kayuta Lake Hydro LLC	11/27/2018	REC:CES REC Contracts, Large-Scale Renewables	66,129
Amphenol Corporation	2/8/2019	>200KW PV, NY Sun	978,075
	3/5/2019	>200KW PV, NY Sun	1,238,895
AmTrust North America Inc.	3/14/2019	NYSERDA ADMINISTRATION, Human Resources	42,000
			6,986
Anjon of Bridgehampton Inc	11/15/2018	FUEL NY, PGI00009 - Anjon of Bridgehamp	
Antares Group, Inc.	10/9/2018	Industrial Process Effic, Technical Review and Program S	4,961
	10/11/2018	EXISTING FACILITIES, Technical Review and Program S	3,596
	11/26/2018	Industrial Process Effic, Technical Review and Program S	10,596
	12/26/2018	Flexible Tech Assistance, RFP3628FlexTechConsultUmbrella	8,352
	1/10/2019	Industrial Process Effic, Technical Review and Program S	9,607
	1/24/2019	Flexible Tech Assistance, RFP3628FlexTechConsultUmbrella	2,274
	1/25/2019	INDUSTRIAL PROCESS EFFICIENCY, Technical Review and	2,251
	1/28/2019	INDUSTRIAL PROCESS EFFICIENCY, Technical Review and	1,918
	2/22/2019	Industrial Process Effic, Technical Review and Program S	2,354
Apex Capital LLC	11/14/2018	Industrial Process Effic, Industrial Process Efficiency	300,000
Apex Clean Energy Holdings, LLC	3/8/2019	REC:CES REC Contracts, Heritage Wind, LLC	197,839,368

Contractor	Date Encumbered	Contract Description	Total Contract Amoun
Apex Roofing, LLC	1/2/2019	NY Sun	15,70
Apex Solar Power LLC	10/10/2018	<200KW PV, NY-Sun	5,11
	10/24/2018	<200KW PV, NY Sun	6,38
	11/8/2018	<200KW PV, NY Sun	7,24
	11/27/2018	<200KW PV, NY-Sun	9,94
	12/7/2018	<200KW PV, NY Sun	5,040
	1/24/2019	Talent Pipeline:CE and OJT, OJT HIRE	5,760
	1/29/2019	Talent Pipeline:CE and OJT, OJT HIRE	5,760
	3/6/2019	<200KW PV, PON 2112 NY SUN	31,50
Apprise, Incorporated	10/16/2018	Affordable Housing Build & Dev, Research and analytic support	50,000
	11/30/2018	Advancing Ag Enrgy Technologie, RFQ3183 Umbrella Agreeme	63,218
		Greenhouse Light & Systems Eng, RFQ3183 Umbrella Agreem	63,218
		Technical Services, RFQ3183 Umbrella Agreement	63,218
Arcadis of New York, Inc.	10/24/2018	Technical Services, RFP3628FlexTechConsultUmbrella	5,978
	11/1/2018	Technical Services, RFP3628FlexTechConsultUmbrella	2,500
	12/20/2018	Agriculture Energy Eff Pgm, RFP3628FlexTechConsultUmbrella	5,978
	12/21/2018	EXISTING FACILITIES, Staff Augmentation Services	44,12
		Real Time Enrgy Management, Staff Augmentation Services	318,40
	1/15/2019	Commercial New Construc, Staff Augmentation Services	20,87
		Low Rise New Construction, Staff Augmentation Services	25,052
		Multifam New Construction, Staff Augmentation Services	23,660
		New Construction- Commercial, Staff Augmentation Services	20,87
		New Construction- Housing, Staff Augmentation Services	48,712
	1/16/2019	Commercial New Construc, Staff Augmentation Services	21,763
		Low Rise New Construction, Staff Augmentation Services	26,110
		Multifam New Construction, Staff Augmentation Services	24,66
		New Construction- Commercial, Staff Augmentation Services	21,763
		New Construction- Housing, Staff Augmentation Services	50,78
	1/24/2019	Flexible Tech Assistance, RFP3628FlexTechConsultUmbrella	5,350
	2/5/2019	OREC: Technical Support, Large Scales Renewables Techni	43,500
	2/27/2019	Commercial Real Estate Ten, SA.046 TWO #4 - EPE	84,184
	2.2.1.2010	REV Campus Challenge, SA.046_TWO #4 - EPE	84,18
		Technical Services, SA.046 TWO #4 - EPE	84,184
	3/14/2019	Technical Services, RFP3628FlexTechConsultUmbrella	5,978
Arcadis U.S., Inc.	11/28/2018	EXISTING FACILITIES, Tech Review & Program Staff	95,00
Arcauls 0.5., mc.	3/26/2019	Industrial Process Effic, Tech Review & Program Staff	
Averse Media Inc			29,57
Argus Media Inc.	3/20/2019	ENERGY ANALYSIS, Data & Markets	8,770
Artis Energy Intelligence, LLC	1/9/2019	Real Time Enrgy Management, Artis Energy- 2 Powers- RTEM	10,694
Associated Power Analysts Inc.	11/29/2018	Rmve Barriers Dist Enrgy Storg, Energy Storage	48,000
Association for Energy Affordability, In	10/15/2018	Workforce Industry Partnership, PON 3715 Workforce Training	400,000
Association of Energy Engineers	1/30/2019	EVALUATION, Performance Management	9,792
		NY-SUN, Standards & Quality Assurance	2,060
		NYSERDA ADMINISTRATION, Standards & Quality Assurance	2,060
		On-Site Energy Manager, Industrial & Agriculture	2,57
		Workforce Industry Partnership, Workforce Dev & Train	2,060
Astoria Fuel & Convenience Store Inc	11/16/2018	OTHER PROGRAM AREA, PGI00238 - Astoria Fuel & Conv	17,544
Atlantic Data Security, LLC	10/10/2018	NYSERDA ADMINISTRATION, Checkpoint Management Server	55,164
	2/22/2019	NYSERDA ADMINISTRATION, Checkpoint Firewall - 3 yrs	203,910
Atlas Public Policy	10/16/2018	Electric Vehicles - Innovation, Clean Transportation	35,232
	11/26/2018	Electric Vehicles - Innovation, EVaulateNY support	9,40
Aurelius Development LLC	3/12/2019	Multifam New Construction, New Construction	51,20
Autonomous Energies LLC	10/23/2018	<200KW PV, NY-Sun	5,760
Aztech Geothermal, LLC	11/13/2018	Talent Pipeline:CE and OJT, OJT PON 3982	9,600
	12/4/2018	Talent Pipeline:CE and OJT, OJT Hire	5,440
B & W Sound Services, Inc.	10/19/2018	OTHER PROGRAM AREA, 2018 76West Finals A/V Service	12,950

Contractor	Date Encumbered	Contract Description	Total Contract Amoun
Barbera Homes and Development, Inc.	2/28/2019	Low Rise New Construction, New Construction	19,000
Barnard College	3/27/2019	Technical Services, OsEM26-C Barnard College Mult	214,000
Bay Plaza Hospitality Investors, LLC	12/19/2018	Commercial New Construc, NCP16030 - Hampton at Bay Plaz	37,380
BDO USA LLP	11/7/2018	NEW YORK GREEN BANK, Background Investigation Servi	2,500
Bearpen Mountain Sports	10/19/2018	Industrial Process Effic, Industrial Process Efficiency	28,000
Benchemark Printing, Inc.	1/30/2019	OTHER PROGRAM AREA, Printing Services - EV Rebate	5,000
Benchmark Lancaster Towers, LP	2/19/2019	Multifam Performance Pgm, Multifamily	109,900
Bergmann Associates	10/2/2018	Commercial Real Estate Ten, Bergmann Associates-1 E Ave-CT	5,000
		Commercial Real Estate Ten, Bergmann-1 Clinton Ave Sout-CT	5,000
	10/9/2018	Flexible Tech Assistance, Tech Review_Support_Umbrella	35,000
		FLEXIBLE TECHNICAL ASSISTANCE, Tech Review_Support	35,000
		REV Campus Challenge, Tech Review_Support_Umbrella	30,000
	10/17/2018	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, BergmannAssociates-One EastAve	5,000
	10/18/2018	Flexible Tech Assistance, FlexTech Umbrella Agreement	10,305
	10/26/2018	Commercial Real Estate Ten, Bergmann - One East Avenue TBG	5,000
	11/14/2018	Renewable Heat NY, Tech Review_Support_Umbrella	2,400
	12/14/2018	Industrial Process Effic, Tech Review_Support_Umbrella	1,200
	12/19/2018	Renewable Heat NY, Tech Review Support Umbrella	2,600
	12/20/2018	Commercial Real Estate Ten, Bergmann - Eaton Center Blg 28	5,000
		Commercial Real Estate Ten, Bergmann - Eaton Center Blg 31	5,000
		Commercial Real Estate Ten, Bergmann - Tenant Bldout	5,000
		Commercial Real Estate Ten, Bergmann - The Eaton Center	5,000
		Commercial Real Estate Ten, Bergmann- Eaton Center Blg 2	5,000
		Commercial Real Estate Ten, Bergmann- Eaton Center Big 27	5,000
		Commercial Real Estate Ten, Bergmann- Eaton Center Big 27	5,000
			8,165
		Industrial Process Effic, Tech Review_Support_Umbrella	140,000
	40/04/0040	Technical Services, Tech Review_Program Support	
	12/21/2018	Commercial Real Estate Ten, Bergmann - Eaton Center Bldg 5	5,000
	12/28/2018	Flexible Tech Assistance, FlexTech Umbrella Agreement	10,000
	1/4/2019	Flexible Tech Assistance, FlexTech Umbrella Agreement	11,000
		Industrial Process Effic, Tech Review_Support_Umbrella	19,800
	1/24/2019	EXISTING FACILITIES, TWO_EFP/DMP_QA/QC	17,600
	1/25/2019	Industrial Process Effic, Tech Review_Support_Umbrella	15,960
	1/29/2019	Flexible Tech Assistance, FlexTech Umbrella Agreement	5,000
	2/5/2019	Agriculture Energy Eff Pgm, FlexTech Umbrella Agreement	2,500
	2/26/2019	Flexible Tech Assistance, FlexTech Umbrella Agreement	28,000
	3/5/2019	Agriculture Energy Eff Pgm, FlexTech Umbrella Agreement	2,500
	3/6/2019	Renewable Heat NY, Tech Review_Support_Umbrella	2,600
	3/15/2019	Industrial Process Effic, Tech Review_Support_Umbrella	15,960
Best Energy Power	1/8/2019	NY-Sun	23,800
	2/1/2019	NY-Sun	91,410
	2/5/2019	NY-Sun	301,620
Binghamton Northside LP	12/27/2018	Multifam New Construction, New Construction	48,000
BioDiversity Research Institute	11/19/2018	Off-Shore Wind Pre-Dev Act, BRI: TWO umbrella agreement	340,682
Bishop House Consulting, Inc.	10/25/2018	NYSERDA ADMINISTRATION, Human Resources	32,000
Bizodo Inc	3/4/2019	NYSERDA ADMINISTRATION, Seamless Docs 2019 - 2020	29,950
Bloomberg Finance LP	1/11/2019	ENERGY ANALYSIS, Bloomberg Datafeed Access	22,500
-	-	NEW YORK GREEN BANK, Bloomberg Datafeed Access	15,224
		Subscription/Data Access, Bloomberg Datafeed Access	22,500
Bloomborg I P	10/12/2018	ENERGY ANALYSIS, Bloomberg Datafeed Access	22,500
Bloomberg, L.P.			
Bloomberg, L.F.	10/15/2018	NEW YORK GREEN BANK BIOOMDEID DATATEED ACCESS	
Stoomberg, L.F.	10/15/2018	NEW YORK GREEN BANK, Bloomberg Datafeed Access	22,500
Boecker Consulting Services	10/15/2018	Subscription/Data Access, Bloomberg Datafeed Access	22,500 22,500 12,400

Bolla Operating Corp.	10/29/2018	Contract Description FUEL NY, PGI00015 - Bolla Operating Cor	66,367
Bond, Schoeneck & King, PLLC	10/4/2018	OTHER PROGRAM AREA, RFP 3300 Outside Counsel Servi	20,000
	10/25/2018	Rmve Barriers Dist Enrgy Storg, Energy Storage +CommunityS	3,716,899
Borrego Solar Systems, Inc.	11/19/2018	>200KW PV, NY Sun	2,636,550
	1/17/2019	>200KW PV, NY Sun	6,633,282
	2/8/2019		747,630
	3/5/2019	>200KW PV, NY Sun	3,485,430
	3/6/2019	>200KW PV, NY Sun	454,804
		>200KW PV, NY Sun	
	3/12/2019	>200KW PV, NY Sun	802,913
	3/15/2019	>200KW PV, NY Sun	1,301,198
	3/21/2019	>200KW PV, NY Sun	6,449,929
	3/29/2019	Solar Plus Energy Storage, NY Sun	1,536,500
3P/CGCENTER AQUISITION CO., LLC	2/28/2019	NEW CONSTRUCTION PROGRAM, NCP14055 - 601 Lexington	105,111
Breaking Ground II Housing	10/3/2018	Multifam New Construction, New Construction	300,000
Bright Power, Inc.	1/3/2019	NY-SUN, Melrose Court LMI Solar	35,500
	1/15/2019	Flexible Tech Assistance, RFP3628FlexTechConsultUmbrella	27,900
	2/20/2019	Real Time Enrgy Management, Bright Power - 221 E 71st-RTEM	74,861
		Real Time Enrgy Management, Bright Power-3000 Bronx - RTEM	43,861
	2/27/2019	NY-SUN, NYCHA Baychester Houses	35,500
	3/5/2019	Flexible Tech Assistance, RFP3628FlexTechConsultUmbrella	12,000
	3/18/2019	Flexible Tech Assistance, RFP3628FlexTechConsultUmbrella	12,500
Bristol Mountain	10/2/2018	Industrial Process Effic, Industrial Process Efficiency	300,000
Bronx Pro Group, LLC	11/9/2018	Multifam New Construction, New Construction	184,300
	11/21/2018	Multifam New Construction, New Construction	300,000
	3/5/2019	Multifam New Construction, New Construction	105,000
Brooklyn SolarWorks LLC	12/17/2018	NY Sun	5,832
	1/2/2019	NY Sun	15,876
	1/3/2019	NY Sun	12,960
	1/28/2019	NY Sun	5,832
		PON 2112 NY SUN	8,748
	2/20/2019	PON 2112 NY SUN	6,804
	3/11/2019	NY-Sun	9,720
Buckeye Terminals, LLC	11/29/2018	FUEL NY, Upstate NY Strategic Fuels Res	1,343,000
Buffalo Federation of Neighborhood Ce	10/11/2018	Low Rise New Construction, New Construction	70,400
Buffalo Renewables, Inc.	10/16/2018	Small Wind, Wind Turbine Incentive	196,600
	10/24/2018	Small Wind, Wind Turbine Incentive	23,500
	11/9/2018	Small Wind, Wind Turbine Incentive	28,500
	1/28/2019	Small Wind, Wind Turbine Incentive	182,700
	2/14/2019	Small Wind, Wind Turbine Incentive	22,500
Buffalo Solar Solutions Inc	10/3/2018	<200KW PV, NY Sun	6,038
	10/9/2018	<200KW PV, NY Sun	8,750
	10/22/2018	<200KW PV, NY Sun	7,472
	11/27/2018	<200KW PV, NY Sun	5,072
	12/10/2018	<200KW PV, NY Sun	9,626
			5,796
	1/24/2019	<200KW PV, PON 2112 NY SUN	
	1/28/2019	<200KW PV, PON 2112 NY SUN	8,694
Ruild Edison LLC	3/29/2019	<200KW PV, PON 2112 NY SUN	7,056
Build Edison LLC	11/13/2018	OTHER PROGRAM AREA, Innovation Advisors	125,000
BUILDING 36 LLC	11/7/2018	>200KW PV, NY-Sun Assignment	181,460
Business Network for Maryland Offshore W	2/6/2019	Off-Shore Wind Master Plan, 2019 IPF Conference	48,800
		Prof & Expert Engagement, 2019 IPF Conference	1,200
Byrne Dairy, Inc.	3/29/2019	On-Site Energy Manager, OsEM2-I - Byrne Dairy-Ultra	17,175
C.J. Brown Energy, P.C.	10/16/2018	Commercial New Construc, RFP3771 Umbrella contract	52,125
	11/16/2018	Technical Services, RFP3628FlexTechConsultUmbrella	2,500
	11/28/2018	Technical Services, RFP3628FlexTechConsultUmbrella	2,500
	1/22/2019	Flexible Tech Assistance, RFP3628FlexTechConsultUmbrella	4,490

Contractor	Date Encumbered	Contract Description	Total Contract Amoun
C&R Housing Inc.	2/28/2019	Talent Pipeline:CE and OJT, OJT HIRE	7,200
	3/18/2019	Talent Pipeline:CE and OJT, OJT HIRE	6,480
Cairo NY 1, LLC	12/14/2018	>200KW PV, NY-Sun C&I	701,663
Callanan Industries	2/4/2019	Industrial Process Effic, Industrial Process Efficiency	82,874
Carahsoft Technology Corporation	1/17/2019	Salesforces	1,326,21
Carbon Trust Advisory Limited	1/15/2019	Carbon Trust OSW Consortium	20,164
		Nat'l OffShWind R&D Consortium, Carbon Trust OSW Consorti	39,836
CARES of NY, Inc	3/25/2019	Low Rise New Construction, 2019 LRNCP	10,200
	3/28/2019	Low Rise New Construction, 2019 LRNCP	15,300
CDG Huron Solar 1 LLC	2/25/2019	>200KW PV, NY Sun	437,805
CEC Stuyvesant Cove, Inc.	11/14/2018	NY-SUN, Solar for Co-op City	140,848
Center for Sustainable Energy	2/12/2019	Residential-Engaging New Mkts, RFP3945 Home Energy Ratin	499,060
	3/21/2019	Electric Vehicles - Rebate, TWO #3 - Drive Clean Program	1,331,278
CES Danbury Solar, LLC	2/20/2019	PON 2112 NY SUN	79,920
CH4 Generate Cayuga, LLC	11/20/2018	Anaerobic Digesters, ADG-to-Electricity Project	2,000,000
CHA Consulting Inc.	10/25/2018	Industrial Process Effic, Technical Review and Program S	12,800
	11/26/2018	EXISTING FACILITIES, Technical Review and Program S	95,000
	11/27/2018	Flexible Tech Assistance, RFP3628FlexTechConsultUmbrella	24,750
	11/28/2018	Flexible Tech Assistance, RFP3628FlexTechConsultUmbrella	3,727
	12/14/2018	Industrial Process Effic, Staff Augmentation Services	19,32
		INDUSTRIAL PROCESS EFFICIENCY, Staff Augmentation Ser	277,286
		Strategic Energy Manager, Staff Augmentation Services	50,000
	12/21/2018	Flexible Tech Assistance, Staff Augmentation Services	150,992
		FLEXIBLE TECHNICAL ASSISTANCE, Staff Augmentation Ser	22,500
		Industrial Process Effic, Staff Augmentation Services	18,66
		INDUSTRIAL PROCESS EFFICIENCY, Staff Augmentation Ser	174,673
		Strategic Energy Manager, Staff Augmentation Services	25,000
	1/7/2019	Industrial Process Effic, Technical Review and Program S	34,057
	1/24/2019	Industrial Process Effic, Technical Review and Program S	4,400
	1/28/2019	Industrial Process Effic, Technical Review and Program S	50,000
	1/29/2019	Flexible Tech Assistance, RFP3628FlexTechConsultUmbrella	2,100
	2/5/2019	INDUSTRIAL PROCESS EFFICIENCY, Technical Review and	22,600
	2/13/2019	Commercial Imp Assist, Outreach Support	9,500
		Flexible Tech Assistance, Outreach Support	9,500
	2/15/2019	Industrial Process Effic, Technical Review and Program S	6,000
	3/5/2019	Flexible Tech Assistance, RFP3628FlexTechConsultUmbrella	24,000
		Flexible Tech Assistance, RFP3628FlexTechConsultUmbrella	
Channel Capital LLC	3/29/2019		2,700
Channel Capital LLC	11/27/2018	OTHER PROGRAM AREA, Innovation Advisor	125,000
Charter Communications, Inc.	1/31/2019	Industrial Process Effic, Industrial Process Efficiency	391,502
Chenango Contracting, Inc.	11/20/2018	WEST VALLEY DEVELOPMENT PROGRAM, RFP 3456	100,000
Chestnut Commons Apartments LLC	11/6/2018	Multifam New Construction, New Construction	300,000
Chloe Capital SPV Manager LLC	2/28/2019	M-Corps, Technology to Market	15,000
Chris's Service Center	11/15/2018	FUEL NY, PGI00276 - Chris's Service Cen	22,650
CIR ELECTRICAL CONSTRUCTION	10/23/2018	<200KW PV, NY Sun	5,086
	10/29/2018	<200KW PV, NY Sun	7,455
	1/29/2019	<200KW PV, PON 2112 NY SUN	8,190
	3/20/2019	<200KW PV, PON 2112 NY SUN	5,236
	3/28/2019	<200KW PV, PON 2112 NY SUN	7,738
itigroup Technology, Inc.	2/15/2019	Industrial Process Effic, Industrial Process Efficiency	220,09
ity and State	12/10/2018	NYSERDA ADMINISTRATION, City and State Advertisement	5,900
City Fuels LLC	11/8/2018	FUEL NY, PGI00072 - City Fuels LLC	19,253
City of Amsterdam	2/28/2019	Clean Energy Communities, CEC600876 City of Amsterdam	50,000
City of Beacon Housing Authority	2/19/2019	Multifam Performance Pgm, Multifamily	49,700
City of Canandaigua	1/8/2019	Clean Energy Communities, CEC300331 - City of Canandaigu	50,000
City of Glens Falls	12/4/2018	Clean Energy Communities, CEC400008 - City of Glens Fall	50,000

Contractor City of Sherrill	3/14/2019	Contract Description CLEANER GREENER COMMUNITIES, CEC600925 - City of S	Total Contract Amoun 50,000
-	2/11/2019	CEC410003 - City of Troy	30,000
City of Troy	2/11/2019	Clean Energy Communities, CEC410003 - City of Troy	150,000
City of Utica	3/22/2019	Clean Energy Communities, CEC610836 - City of Utica	250,000
City of Watervliet	1/24/2019	Clean Energy Communities, CEC400002 - City of Watervliet	80,000
City Parks Foundation	1/16/2019	GREENING THE BRONX, Efficiency Planning & Engineer	861,87
Clarkson University	1/30/2019	Energy Storage Tech/Prod Dev, PON 3585 Round 3	67,83
,	3/8/2019	OTHER PROGRAM AREA, PON3249 Additive Manufacturing	250,00
Clean Power Research	1/7/2019	Electric Vehicles - Innovation, PO for 2019 WattPlan EV	18,000
CLEAResult Consulting, Inc.	10/12/2018	EXISTING FACILITIES, Centralized Services & Support	11,544
-		K-12 SCHOOLS, Centralized Services & Support	34,63
	1/7/2019	Renewable Heat NY, Centralized Services & Support	60,649
	1/25/2019	Air Source Heat Pumps, Centralized Services & Support	138,39
		Commercial New Construc, Centralized Services & Support	39,57
		Low Rise New Construction, Centralized Services & Support	93,119
		Multifam New Construction, Centralized Services & Support	53,54
		New Construction- Commercial, Centralized Services & Support	13,968
		New Construction- Housing, Centralized Services & Support	32,592
	1/28/2019	>200KW PV, Centralized Services & Support	108,24
		Geothermal Incentive Program, Centralized Services & Support	125,97
	2/4/2019	Rmve Barriers Dist Enrgy Storg, Centralized Services & Support	20,000
	2/19/2019	ASSISTED HOME PERFORMANCE WITH ENERGY STAR, Ce	2,230
		Centralized Services & Support	380,18
		EMPOWER NY, Centralized Services & Support	109,58
		Home Perf w Energy Star, Centralized Services & Support	1,063,17
		HOME PERFORMANCE WITH ENERGY STAR, Centralized Se	2,23
Climate Change & Environmental	1/18/2019	Commercial Real Estate Ten, Climate Change - Multisite	7,00
	2/27/2019	Commercial Real Estate Ten, CCES - Multisite	27,132
CMC Energy Services, Inc	1/9/2019	Intervention Effectiv Training, Community Blitz Pilot Project	225,000
CNY Solar, Inc.	10/10/2018	<200KW PV, NY Sun	7,004
	10/29/2018	<200KW PV, NY-Sun	5,724
	11/2/2018	<200KW PV, NY Sun	10
	12/6/2018	<200KW PV, NY Sun	11,30
	12/10/2018	<200KW PV, NY Sun	5,208
	1/14/2019	<200KW PV, NY-Sun	504
Code Green Solutions, Inc.	11/9/2018	Flexible Tech Assistance, RFP3628FlexTechConsultUmbrella	28,900
	11/21/2018	Flexible Tech Assistance, RFP3628FlexTechConsultUmbrella	48,000
	12/17/2018	Commercial Real Estate Ten, CodeGreen - 1211 6th Ave	15,000
	12/26/2018	Flexible Tech Assistance, RFP3628FlexTechConsultUmbrella	25,31
	1/4/2019	Flexible Tech Assistance, RFP3628FlexTechConsultUmbrella	27,300
	1/14/2019	Flexible Tech Assistance, RFP3628FlexTechConsultUmbrella	14,340
	1/15/2019	Flexible Tech Assistance, RFP3628FlexTechConsultUmbrella	4,78
	2/26/2019	Flexible Tech Assistance, RFP3628FlexTechConsultUmbrella	114,75
	3/5/2019 3/27/2019	Flexible Tech Assistance, FT12066-Silk&HalpernRealty-FTC Flexible Tech Assistance, FT12064-ABS-915 Broadway-FTC	17,10
	3/2//2019		11,62
Cogeneration Contractors, Inc.	11/5/2018	Flexible Tech Assistance, FT12065 - Fraglow-8W 38th-FTC Combined Heat and Power, CHPA - Village East Towers	14,250
Sogeneration contractors, inc.	3/5/2019	Combined Heat and Power, CHPA - Compass V	111,150
	3/12/2019	Combined Heat and Power, CHPA - Morris Apartments II	111,15
Cohen Ventures Inc	12/26/2018	Product Standards, FlexTech Consultant Selection	25,000
Columcille Properties LLC	10/19/2018	INDUSTRIAL PROCESS EFFICIENCY, Industrial Process Effici	9,524
Combined Energies LLC	1/25/2019	Energy Storage Tech/Prod Dev, PON 3585 Energy Storage Cat	50,00
Common Energy LLC	11/13/2018	LMI Community Solar, RFP3802 Low Income Comm Solar	1,292,95
Source Chergy LLO	11/26/2018	LMI Community Solar, RFP3802 Low Income Comm Solar	1,292,953
Complete Cabling Solutions LLC	10/3/2018	NYSERDA ADMINISTRATION, Cabling Solutions - NYC Office	18,35
Somplete Gabining Solutions LEG	10/0/2010	AT CELES ADDIVING TRATION, Cabiling Colutions - NTO Onice	18,55

Contractor	Date Encumbered	Contract Description	Total Contract Amount
CON EDISON SOLUTIONS, INC.	10/12/2018	<200KW PV, NY Sun	140,301
Concern for Independent Living, Inc.	10/30/2018	MULTIFAMILY PERFORMANCE PROGRAM, Multifamily	14,400
Concourse Village, Inc.	2/19/2019	Multifam Performance Pgm, Multifamily	1,310,400
Conductors Court NY TC, LP	11/26/2018	Multifam Performance Pgm, Multifamily	68,600
ConMed Corporation	12/28/2018	Industrial Process Effic, Industrial Process Efficiency	144,445
Consortium for Energy Efficiency, Inc.	3/28/2019	Prof & Expert Engagement, Industrial Process Efficiency	48,000
Constellation Energy Nuclear Group, L	3/12/2019	ZEC:CES ZEC Payments, ZEC - Nuclear Facilities	812,417,487
Continental Automated Buildings	3/7/2019	Subscription/Data Access, market research for NYSERDA	6,900
Continental Buchanan, LLC	1/4/2019	NY-Sun	1,440,093
Cornell University	10/3/2018	OTHER PROGRAM AREA, 76West Building a Clean Energy	43,566
	10/12/2018	OTHER PROGRAM AREA, Sponsor Cornell Energy Connect	25,000
Cornerstone Energy Services	11/26/2018	Renewable Heat NY, Cornerstone - Bullard	19,503
	12/12/2018	RENEWABLE HEAT NY, Cornerstone - North Country Sc	22,963
	12/28/2018	Renewable Heat NY, Cornerstone - Willard	12,000
	1/23/2019	Renewable Heat NY, Cornerstone - Haney	15,975
Corning Inc.	10/5/2018	Industrial Process Effic, Industrial Process Efficiency	179,010
	2/15/2019	On-Site Energy Manager, OsEM14-I-Erwin Manufacturing	213,498
Cortex Building Intelligence, Inc.	10/4/2018	Real Time Enrgy Management, Cortex-350 5th Ave-RTEM	140,400
CPG Distribution Corp	11/15/2018	FUEL NY, PGI00295 - CPG Distribution Co	10,000
Cream Street Solar, LLC	2/25/2019	>200KW PV, NY Sun	709,560
Credit Suisse USA	1/24/2019	Industrial Process Effic, Industrial Process Efficiency	49,002
	2/19/2019	NEW CONSTRUCTION PROGRAM, NCP12333 - Eleven Madis	173,802
Croton Energy Group, Inc.	12/17/2018	NY Sun	24,966
	3/6/2019	<200KW PV, PON 2112 NY SUN	10,512
	3/28/2019	<200KW PV, PON 2112 NY SUN	15,111
Crotona Terrace Building A LLC	2/27/2019	MULTIFAMILY PERFORMANCE PROGRAM, Multifamily	48,000
CTG:I LLC	12/5/2018	OTHER PROGRAM AREA, Online subscription to CTG i3	8,500
Currier Plastics	1/7/2019	Industrial Process Effic, Industrial Process Efficiency	79,875
D.L. English Consulting, Inc.	10/17/2018	OTHER PROGRAM AREA, Indian Point Consultant	2,470
Dagmy Motors Inc.	3/15/2019	Energy Storage Tech/Prod Dev, PON 3585 R2	497,873
Danfoss Holding Security Corporation	10/18/2018	EXISTING FACILITIES, EFP2307 - Danfoss LLC	19,336
Darling Advertising Agency Inc.	10/5/2018	NYSERDA ADMINISTRATION, Marketing Support for NYSERDA	45,072
	10/17/2018	NYSERDA ADMINISTRATION, TWO #7 Strat Comm Renewabl	12,000
	11/27/2018	New Construction- Housing, Marketing Support for NYSERDA	75,000
Dash Markets Inc	12/19/2018	Commercial New Construc, SF106913 - Dashs Market	35,413
David Homebuilders, Inc.	11/1/2018	Low Rise New Construction, New Construction	19,150
David Homes, Inc.	3/19/2019	Low Rise New Construction, New Construction	39,900
DeChantal Apartments, Inc.	10/22/2018	Multifam Performance Pgm, Multifamily	40,000
Deer Hills Service, LLC	11/14/2018	FUEL NY, PGI00118 - Deer Hills Service	38,347
Delaware River Solar, LLC	1/2/2019	>200KW PV, NY-Sun C&I	1,068,064
Denton Hill Family & Ski Resort, Inc.	10/17/2018	Industrial Process Effic, Industrial Process Efficiency	124,200
DePaul Properties, Inc.	11/1/2018	Low Rise New Construction, New Construction	68,000
	2/4/2019	Low Rise New Construction, New Construction	56,000
Digital Realty Trust	11/1/2018	Industrial Process Effic, Industrial Process Efficiency	210,981
Dimien Inc.	3/4/2019	Cleantech Ignition, PON 3871 Ignition Grants	100,000
DNV GL Energy Insights USA Inc.	1/18/2019	Off-Shore Wind Pre-Dev Act, RFP3855 Cat2 DMAC Float. LiDar	363,700
	1/22/2019	ADVANCED BUILDINGS, Evaluation Oversight Services	229,844
	1/23/2019	Campus/Technical Assistance, RFQ 3183 KEMA, Inc	51,159
		Community RH&C, RFQ 3183 KEMA, Inc	39,079
		EVALUATION, RFQ 3183 KEMA, Inc	746,746
		Flexible Tech Assistance, RFQ 3183 KEMA, Inc	37,760
		Geothermal Incentive Program, RFQ 3183 KEMA, Inc	288,438
		NEW YORK GREEN BANK, RFQ 3183 KEMA, Inc	739,307
		Renewable Heat NY, RFQ 3183 KEMA, Inc	313,438
	3/29/2019	EVALUATION, RFQ 3183 KEMA, Inc	257,283
		NEW YORK GREEN BANK, RFQ 3183 KEMA, Inc	164,000

Contractor	Date Encumbered	Contract Description	Total Contract Amoun
DNV KEMA Renewables Inc.	11/9/2018	Off-Shore Wind Pre-Dev Act, RFP3855 Cat2 DMAC Float. LiDar	363,700
Doherty Electric, LLC	10/25/2018	<200KW PV, NY Sun	7,161
Dolomite Products Group, Inc.	1/8/2019	Industrial Process Effic, Industrial Process Efficency	21,286
	3/25/2019	Industrial Process Effic, Industrial & Agriculture	71,682
Dual Fuel Corp	10/12/2018	Real Time Enrgy Management, Dual Fuel-409 E 84th St-RTEM	23,700
	10/24/2018	Real Time Enrgy Management, Dual Fuel-304 St Johns PI-RTEM	23,700
Dunkirk Renovation and Ownership, L.P.	10/11/2018	Low Rise New Construction, New Construction	63,700
Duplex Inc	10/31/2018	FUEL NY, PGI00301 - Duplex Inc.	84,479
E Source Companies LLC	1/15/2019	Subscription/Data Access, Market Insights	39,000
Earth Environmental Group, LLC	10/10/2018	RENEWABLE THERMAL, Clean Heating & Cooling	11,997
		RENEWABLE THERMAL, Solar Thermal	19,627
		RENEWABLE THERMAL, Solar Thermal Incentives	53,170
		RENEWABLE THERMAL, ST Incentive Program	13,916
	10/11/2018	RENEWABLE THERMAL, Solar Thermal Incentives	39,254
	10/12/2018	RENEWABLE THERMAL, Clean Heating & Cooling	11,997
	10/23/2018	RENEWABLE THERMAL, Solar Thermal Incentives	13,916
Earth Sensitive Solutions, LLC	12/19/2018	Geothermal Incentive Program, Large-Scale GSHP Rebate	16,356
	3/1/2019	Geothermal Incentive Program, Large-Scale GSHP Rebate	308,340
	3/19/2019	Geothermal Incentive Program, Large scale GSHP rebate	22,800
East House Corporation	12/10/2018	Multifam New Construction, New Construction	87,800
Ebenezer Plaza Owner LLC	3/13/2019	Multifam New Construction, New Construction	90,400
EC Infosystems, Inc.	12/13/2018	EVALUATION, EC Infosystems for EDI	185,850
Ecology and Environment Engineering,	11/1/2018	Off-Shore Wind Pre-Dev Act, RFP3462 Umbrella Agreement	186,600
PC	1/22/2019	Commercial Imp Assist, Commercial Market Engagement	44,814
	1722/2013	Flexible Tech Assistance, Commercial Market Engagement	88,66
		REV Campus Challenge, Commercial Market Engagement	133,475
	2/14/2019		
	2/14/2019	Off-Shore Wind Pre-Dev Act, TWO#17 Fishing Lanes	97,600
	10/10/2010	Off-Shore Wind Pre-Dev Act, TWO#18 G&G surveys	84,700
Ecosave, Inc.	10/18/2018	Real Time Enrgy Management, Ecosave-5901 Palisade Ave-RT	155,000
Ecovis, Inc.	10/3/2018	<200KW PV, NY Sun	7,290
	3/29/2019	<200KW PV, NY-Sun	5,357
Efficiency Forward, Inc.	11/29/2018	Prof & Expert Engagement, DesignLights 2018 Sponsorship	25,000
	1/8/2019	Prof & Expert Engagement, 2019 DesignLights Sponsorship	25,000
Eiger 3970 Consultants Inc.	10/29/2018	<200KW PV, NY Sun	11,970
	12/4/2018	<200KW PV, NY Sun	16,065
	12/26/2018	<200KW PV, NY Sun	6,480
Ekostinger, Inc.	10/12/2018	76 West, 76 West Energy Bus Competition	1,000,000
Electric Power Research Institute	11/20/2018	High Performing Grid, RFP3265 Umbrella Contract	30,000
	12/12/2018	Electric Vehicles - Innovation, PON 3578 R1 CAT1	74,500
	1/10/2019	High Performing Grid, RFP3265 Umbrella Contract	440,000
Electrification Coalition Foundation	3/28/2019	Electric Vehicles - Innovation, EV Awareness Campaign Design	50,000
Elisa Miller-Out	11/14/2018	OTHER PROGRAM AREA, RFP 3859	150,000
ELP Saugerties Solar LLC	3/25/2019	>200KW PV, NY Sun	899,262
EME Consulting Engineering Group, LLC	11/1/2018	Technical Services, RFP3628FlexTechConsultUmbrella	2,500
	12/20/2018	Agriculture Energy Eff Pgm, RFP3628FlexTechConsultUmbrella	2,500
	12/21/2018	Industrial Process Effic, Staff Augmentation Services	22,643
		INDUSTRIAL PROCESS EFFICIENCY, Staff Augmentation Ser	290,571
		Strategic Energy Manager, Staff Augmentation Services	50,000
	12/26/2018	EXISTING FACILITIES, RFP3628FlexTechConsultUmbrella	37,500
	-	Flexible Tech Assistance, RFP3628FlexTechConsultUmbrella	9,375
		FLEXIBLE TECHNICAL ASSISTANCE, RFP3628FlexTechCons	28,125
	2/14/2019	Commercial Real Estate Ten, Staff Augmentation Services	377,058
	211712013	-	
		Flexible Tech Assistance, Staff Augmentation Services	89,566
	0///0010	REV Campus Challenge, Staff Augmentation Services	89,566
	3/4/2019	New Construction- Commercial, SA.038A_TWO #7 - New Con	89,500
		New Construction- Housing, SA.038A_TWO #7 - New Con	179,000

Contractor Empire Solar Solutions LLC	Date Encumbered	Contract Description <200KW PV, NY Sun	Total Contract Amoun 8.064
			•
	10/30/2018	<200KW PV, NY Sun	5,355
	1/2/2019	<200KW PV, NY Sun	6,619
	2/5/2019	<200KW PV, PON 2112 NY SUN	5,591
	3/5/2019	<200KW PV, PON 2112 NY SUN	6,160
Employee Leasing of Greater NY	10/15/2018	NYSERDA ADMINISTRATION, Temp Employee Services	17,550
	12/3/2018	NYSERDA ADMINISTRATION, Temp Employee Services	25,636
	1/30/2019	NYSERDA ADMINISTRATION, Temp Employee Services	28,000
	3/12/2019	NYSERDA ADMINISTRATION, Temp Employee Services	2,700
Empower CES, LLC	12/4/2018	<200KW PV, NY Sun	5,850
	12/10/2018	<200KW PV, NY Sun	5,400
	1/22/2019	<200KW PV, NY Sun	112,500
	2/15/2019	<200KW PV, PON 2112 NY SUN	11,696
Enercon Services Inc	2/14/2019	WEST VALLEY DEVELOPMENT PROGRAM, RFP 3305 Licenc.	19,483
Energetics, Incorporated	10/19/2018	Electric Vehicles - Innovation, Planning Board EVSE Promotion	40,000
	2/19/2019	EVALUATION, RFQL3685 Round 1	7,605
Energy & Environmental Research	11/21/2018	OTHER PROGRAM AREA, Blockchain study	45,000
Energy & Resource Solutions, Inc.	10/24/2018	Industrial Process Effic, Technical Review and Program S	3,837
	10/29/2018	Technical Services, RFP3628FlexTechConsultUmbrella	1,925
	11/13/2018	Flexible Tech Assistance, RFP3628FlexTechConsultUmbrella	23,248
	1/25/2019	Industrial Process Effic, Technical Review and Program S	4,810
	2/5/2019	Agriculture Energy Eff Pgm, RFP3628FlexTechConsultUmbrella	2,500
	2/7/2019	Commercial New Construc, New Construction	10,000
	3/13/2019	Industrial Process Effic, Technical Review and Program S	4,741
Energy and Environmental Economics Inc.	10/10/2018	Community RH&C, Tech Assist, REV Pool.	48,201
	12/6/2018	Rmve Barriers Dist Enrgy Storg, Tech Assist, REV Pool.	277,815
	1/9/2019	Mkt Char: Tech Assist, TWO 13 - VDER Phase 2	350,000
	2/6/2019	Mkt Char: Tech Assist, TWO# 14 - Grid Value Model	100,000
	2/13/2019	ENERGY ANALYSIS, TWO#15 Solar PV Adoption Forec	75,000
	2/20/2019	ENERGY ANALYSIS, 101127 TWO#14	800,000
	3/1/2019	Electric Vehicles - Innovation, BCA of EV grid impacts	15,277
Energy Improvement Corporation	1/25/2019	GJGNY REVOLVING LOAN FUND, EIC PACE financing progra	500,000
	3/29/2019	CLEANER GREENER COMMUNITIES, CGC39896 - EIC	286,645
Energy Technology Savings, Inc.	11/29/2018	Real Time Enrgy Management, Energy Tech-757 3rd Ave RTEM	36,126
	12/13/2018	Real Time Enrgy Management, ETS, Inc - 757 3rd Ave - RTEM	65,597
	2/27/2019	Real Time Enrgy Management, ETS - 266-275 Cherry St - RTEM	6,840
	3/7/2019	Real Time Enrgy Management, ETS - 353 Chester St - RTEM	8,100
EnergyPro Insulation, LLC	1/8/2019	<200KW PV, NY-Sun	6,003
Enertiv Inc.	11/15/2018	Real Time Enrgy Management, Enertiv - 100 Willoughby -RTEM	9,447
	12/12/2018	Real Time Enrgy Management, Enertiv-146 E 56th Street-RTEM	5,033
	12/20/2018	Real Time Enrgy Management, Enertiv - Multisite - RTEM	45,761
	3/25/2019	Real Time Enrgy Management, Enertiv - 401 W 25th St - RTEM	10,797
Ensave, Inc.	1/24/2019	Technical Services, AEEP Implementation Contractor	1,092,660
Enterprise Community Partners, Inc.	3/28/2019	NY-SUN, Enterprise Solar Community	200,000
EnterSolar LLC	10/17/2018	<200KW PV, NY Sun	71,260
	10/23/2018	<200KW PV, NY Sun	116,708
	1/30/2019	<200KW PV, PON 2112 NY SUN	45,981
Entic, Inc.	11/30/2018	Real Time Enrgy Management, Conrad NY-102 N End Ave-RTE	14,452
Environmental Defense Fund	10/18/2018	Commercial Real Estate Ten, LargeCommRE_MarketEngagem	50,000
		Commercial Real Estate Ten, Support_NYC Carbon Challenge	50,000
Eonix LLC	3/22/2019	Energy Storage Tech/Prod Dev, PON 3585 R2	200,000
Erdman Anthony & Associates, Inc.	10/25/2018	Technical Services, RFP3628FlexTechConsultUmbrella	2,500
	11/29/2018	Commercial New Construc, RFP3771 Umbrella Contract	44,752
	12/6/2018	Industrial Process Effic, Technical Review and Program S	824
	3/27/2019	Industrial Process Effic, Technical Review and Program S	10,350
			. 0,000

		Total Contract Amount
12/13/2018	Electric Vehicles - Innovation, PON 3578 R1 CAT4	118,130
3/21/2019	REC:CES REC Contracts, Excelsior Energy Center	239,959,044
11/16/2018	NYSERDA ADMINISTRATION, Statistics and Analytics	810
3/12/2019	ZEC:CES ZEC Payments, ZEC Nuclear Facilities	269,655,753
11/6/2018	<200KW PV, NY Sun	5,216
2/5/2019	<200KW PV, NY Sun	25,803
2/6/2019	<200KW PV, PON 2112 NY SUN	8,540
3/27/2019	<200KW PV, PON 2112 NY SUN	5,082
10/3/2018	CLEANER GREENER COMMUNITIES, Village of Farmingdale	50,000
1/29/2019	>200KW PV, NY-Sun C&I	439,294
1/23/2019	>200KW PV, NY-Sun C&I Payee Assignment	459,736
1/23/2019	>200KW PV, NY-Sun C&I Assignment	459,736
1/23/2019	>200KW PV, NY-Sun C&I Assignment	459,736
1/22/2019	>200KW PV, NY Sun	749,700
3/5/2019	REC:CES REC Contracts, Large-Scale Renewables	23,700
12/14/2018	Environmental Research, AQHE Research Workshop	30,000
10/5/2018	<200KW PV, NY Sun	8,750
10/12/2018	<200KW PV, NY Sun	7,500
10/23/2018		12,870
		1,920
		1,480
		13,797
		8,190
		11,400
		28,500
		23,750
		5,700
		43,355
		288,750
		992,984
11/1/2018	OTHER PROGRAM AREA, RFQL 3685 R2	86,039
3/25/2019	ENERGY ANALYSIS, TWO #2 - NPP 60+	75,000
11/5/2018	<200KW PV, NY-Sun	7,705
10/12/2018	<200KW PV, NY Sun	7,021
10/24/2018	<200KW PV, NY Sun	8,750
12/4/2018	<200KW PV, NY Sun	5,177
12/12/2018	<200KW PV, NY Sun	7,434
12/3/2018	NYSERDA ADMINISTRATION, Legal Services	6,055
2/26/2019	NYSERDA ADMINISTRATION, Legal Services	9,268
10/15/2018	Geothermal Incentive Program, 3695 TWO Umbrella Agreement	400,000
10/18/2018	Industrial Process Effic, Technical Review_Prgm Support	19,920
12/7/2018	Air Source Heat Pumps, Develop ASHP Pro Forma Tool	4,980
1/7/2019	Off-Shore Wind Pre-Dev Act, TWO 1 Agreement 111941	27,860
3/8/2019	Off-Shore Wind Pre-Dev Act, TWO 1 Agreement 111941	27,860
3/15/2019	Clean Energy Communities, CEC610872 - Fulton County	150,000
12/4/2018	<200KW PV, NY Sun	5,796
		13,524
		21,000
		21,000
		12,000
3/21/2010		55,356
11/15/2018	NextGen HVAC, PON3519 Round 1.	230,943
40/00/0040		
10/22/2018	NYSERDA ADMINISTRATION, Salesforce	
10/22/2018 11/1/2018 11/30/2018	NYSERDA ADMINISTRATION, Salesforce NYSERDA ADMINISTRATION, Staff Aug Umbrella Agreement NYSERDA ADMINISTRATION, Staff Aug Umbrella Agreement	1,440,000 185,250 185,250
	3/21/2019 11/16/2018 3/12/2019 11/6/2018 2/5/2019 2/6/2019 3/27/2019 1/29/2019 1/23/2019 1/23/2019 1/23/2019 1/23/2019 1/22/2019 3/5/2019 1/22/2019 3/5/2019 1/22/2018 10/12/2018 10/23/2018 11/27/2018 11/27/2018 11/27/2019 3/12/2019 3/13/2019 3/13/2019 3/13/2019 3/13/2019 2/1/2019 3/13/2019 2/1/2018 10/12/2018 10/12/2018 10/12/2018 10/21/2018 10/22/2018 11/5/2018 10/22/2018 12/4/2018 12/4/2018 12/2/2018 12/2/2018 12/2/2018 12/2/2018 12/2/2018 12/2/2018 12/2/2018 12/2/2018 12/2/2018 12/2/2018 12/2/2018 12/2/2018 12/2/2018 12/2/2018 12/2/2018	12/13/2018 Electric Vehicles - Innovation, PON 3578 R1 CAT4 3/21/2019 REC:CES REC Contracts, Excelsior Energy Center 11/16/2018 NYSERDA ADMINISTRATION, Statistics and Analytics 12/2019 ZEC:CES ZEC Payments, ZEC Nuclear Facilities 11/6/2018 <200KW PV, NY Sun

Contractor General Electric International Inc	Date Encumbered	Contract Description	Total Contract Amoun
	2/15/2019	<200KW PV, PON 2112 NY SUN	334,152
	3/5/2019	>200KW PV, NY Sun	3,850,224
	3/27/2019	GE MAPS Software	391,50
Genesis Petroleum Inc.	10/22/2018	FUEL NY, PGI00255 - Genesis Petroleum	96,992
	11/8/2018	FUEL NY, PGI00252 - Genesis Petroleum	81,80
		FUEL NY, PGI00253 - Genesis Petroleum	77,37
	11/16/2018	FUEL NY, PGI00254 - Genesis Petroleum	80,719
Genting New York LLC	2/4/2019	Commercial New Construc, SF106883 - Resorts World -OFLT	223,436
George E Denmark II	10/5/2018	<200KW PV, NY Sun	15,553
	11/6/2018	<200KW PV, NY Sun	5,119
George J. Martin & Son	10/29/2018	<200KW PV, NY Sun	336,312
GIP III Zephyr Acquisition Partners L.P.	11/13/2018	LMI Community Solar, RFP3802 Low Income Comm Solar	1,693,210
	11/14/2018	LMI Community Solar, RFP3802 Low Income Comm Solar	1,419,97
Global Change Associates Inc.	2/22/2019	Cleantech ICC Engage, 18th Annual WSGS Sponsorship	5,000
Go Solar/Green NY, LLC	10/11/2018	<200KW PV, NY Sun	7,500
	12/4/2018	<200KW PV, NY Sun	7,500
Goldman Copeland Associates, P.C.	10/3/2018	Flexible Tech Assistance, RFP3628FlexTechConsultUmbrella	16,990
	10/12/2018	Commercial Real Estate Ten, Goldman Copeland - 909 3rd Ave	10,997
		Commercial Real Estate Ten, Goldman Copeland-330MadisonA	10,997
	10/18/2018	Flexible Tech Assistance, RFP3628FlexTechConsultUmbrella	14,984
	11/7/2018	Commercial Real Estate Ten, GoldmanCopelane - 230 Park Ave	10,99
	11/9/2018	Flexible Tech Assistance, RFP3628FlexTechConsultUmbrella	9,28
	11/29/2018	Commercial Real Estate Ten, Goldman & Copeland - 55 E 52nd	10,99
	1/18/2019	Commercial Real Estate Ten, Goldman Copeland - 401 9th Ave	19,99
	1/25/2019	Commercial Real Estate Ten, Goldman Copeland-1251-CommT	10,99
Grand Island Solar, LLC	11/13/2018	LMI Community Solar, SFA - BlueRock Grand Island	1,354,66
Greek Peak Holdings Inc	10/3/2018	Industrial Process Effic, Industrial Process Efficiency	186,50
Green 485 Owner LLC	12/11/2018	Flexible Tech Assistance, FT12031 - Green 485 - PON	23,75
	11/16/2018	>200KW PV, NY-Sun	1,045,97
Green Eagle Solar IV, LLC Series I	11/10/2010		
	44/40/0040	>200KW PV, NY-Sun C&I Assignment	1,045,97
	11/19/2018	LMI Community Solar, RFP3802 Low Income Comm Solar	1,065,32
Green Hybrid Energy Solutions Inc.	2/21/2019	PON 2112 NY SUN	44,082
Green Light New York, Inc.	3/6/2019	New Construction- Housing, New Construction	50,00
Green Street Power Partners LLC	1/14/2019	NY Sun	21,00
	2/11/2019	PON 2112 NY SUN	38,45
	2/20/2019	PON 2112 NY SUN	38,880
GreenLogic, LLC	10/12/2018	<200KW PV, NY Sun	30,132
Greenpac Mill, LLC	12/18/2018	On-Site Energy Manager, OsEM15 - Greenpac Mill	132,87
	3/13/2019	Industrial Process Effic, Industrial Process Efficiency	477,000
Greentech Media Inc.	10/17/2018	NY-SUN, GTM Solar Subscription	25,00
	11/29/2018	Subscription/Data Access, Market Insights	57,50
GRID Alternatives Tri-State, Inc.	2/20/2019	NY-Sun	7,84
	3/28/2019	NY-Sun	24,36
Grid City Electric Corp	11/15/2018	<200KW PV, NY Sun	45
	12/13/2018	NY-Sun	40,32
Grid Strategies, LLC	11/20/2018	Mkt Char: Tech Assist, Bulk Power System Resource Ad.	200,00
Group-S LLC	2/26/2019	Flexible Tech Assistance, FlexTech Consultant Selection	11,00
	3/27/2019	Real Time Enrgy Management, Group S - 308 W 103 St - RTEM	16,90
Gutchess Lumber Company	1/11/2019	Industrial Process Effic, Industrial Process Efficiency	131,42
Buth Deconzo Consulting Engineers	10/19/2018	REV Campus Challenge, RFP3628FlexTechConsultUmbrella	134,12
GWE Project HoldCo 4, LLC	12/4/2018	>200KW PV, NY-Sun C&I	559,83
H.E.L.P Development Corp.	12/12/2018	Multifam New Construction, MFNCP PPES T2-Crotona	60
	10/22/2018	Low Rise New Construction, New Construction	5,100
labitat Queens Phase II HDFC			5,100
Habitat Queens Phase II HDFC	12/5/2018	Talent Pineline:CE and O.IT. O.IT HIRE	20.760
Habitat Queens Phase II HDFC Halcyon, Inc.	12/5/2018	Talent Pipeline:CE and OJT, OJT HIRE Talent Pipeline:CE and OJT, OJT HIRE	29,760

Contractor Halcyon, Inc.	Date Encumbered	Contract Description	Total Contract Amoun
haloyon, me.	1/29/2019	Talent Pipeline:CE and OJT, OJT HIRE	8,64
	2/4/2019	Talent Pipeline:CE and OJT, OJT HIRE	8,64
	2/22/2019	Talent Pipeline:CE and OJT, OJT HIRE	8,640
	3/7/2019	Talent Pipeline:CE and OJT, OJT hire	20,640
Hales Mills Solar, LLC	3/21/2019	>200KW PV, NY Sun	1,156,680
Harris Beach PLLC	12/18/2018	WEST VALLEY DEVELOPMENT PROGRAM, RFP 3300 Outsid	10,000
	2/21/2019	Code to Zero, Codes, Products and Standards	20,000
Harris Wiltshire & Grannis LLP	3/29/2019	ENERGY ANALYSIS, RFP3776 Outside Counsel Servic	7,550
Harvest Power, LLC	10/3/2018	NY-Sun	27,625
	10/5/2018	NY-Sun	16,575
	10/16/2018	<200KW PV, NY Sun	7,000
	10/17/2018	<200KW PV, NY Sun	5,850
	10/29/2018	<200KW PV, NY Sun	14,869
	2/5/2019	<200KW PV, NY Sun	6,900
	2/15/2019	NY-Sun	28,763
Helios Lenox 1 LLC	2/25/2019	>200KW PV, NY Sun	604,800
	3/5/2019	>200KW PV, NY Sun	1,123,200
Helios NY I, LLC	1/16/2019	>200KW PV, NY-Sun C&I	591,074
		NY-Sun	546,615
High Falls Operating Co, LLC	1/11/2019	Industrial Process Effic, Industrial Process Efficiency	433,849
High Peaks Solar	3/27/2019	>200KW PV, NY Sun	826,848
Hill Enterprises Inc.	11/16/2018	FUEL NY, PGI00262 - Hill Enterprises In	21,850
Hodgson Russ LLP	1/17/2019	Home Perf w Energy Star, RFP 3300 & RFP 3776 Outside Co	50,000
Holiday Valley Tubing, LLC	10/17/2018	Industrial Process Effic, Industrial Process Efficiency	64,200
Holimont	10/3/2018	Industrial Process Effic, Industrial Process Efficiency	298,319
Holland & Knight LLP	12/9/2018	NEW YORK GREEN BANK, Green Bank Outside Legal Serv.	186,384
-	2/21/2019	OTHER PROGRAM AREA, Data & Markets	35,000
Hollygrove Solar, LLC	3/25/2019	>200KW PV, NY-Sun C&I	1,045,803
Home for Harlem Dowling Inc	11/2/2018	MULTIFAMILY PERFORMANCE PROGRAM, Multifamily	3,611
Home Leasing, LLC	11/15/2018	Low Rise New Construction, New Construction	9,500
Honeywell International Inc.	10/5/2018	3695 TWO Umbrella Agreement	75,000
····,		ASSISTED HOME PERFORMANCE WITH ENERGY STAR, 36	18,170
		EMPOWER NY, 3695 TWO Umbrella Agreement	143,661
		Home Perf w Energy Star, 3695 TWO Umbrella Agreement	674,039
		HOME PERFORMANCE WITH ENERGY STAR, 3695 TWO U	9,130
HP Woodycrest Housing	11/6/2018	Multifam New Construction, New Construction	
			157,500
HSBC Bank USA, N.A.	1/15/2019	Industrial Process Effic, Industrial Process Efficiency	45,174
Hudson Solar	10/17/2018	<200KW PV, NY Sun	8,750
	10/29/2018	<200KW PV, NY Sun	10,863
Hudson Valley Clean Energy Inc.	11/21/2018	<200KW PV, NY Sun	5,313
	12/17/2018	<200KW PV, NY Sun	218,295
	12/20/2018	<200KW PV, NY Sun	6,867
	3/26/2019	<200KW PV, PON 2112 NY SUN	5,544
Hudson Valley Wind Energy, LLC	1/3/2019	<200KW PV, NY Sun	14,580
	1/8/2019	<200KW PV, NY Sun	14,580
	1/25/2019	Small Wind, Wind Turbine Incentive	52,178
Hunt Hollow Development Corporation	11/14/2018	Industrial Process Effic, Industrial Process Efficiency	38,400
Hunter Mountain Ski Bowl Inc.	1/30/2019	Industrial Process Effic, Industrial Process Efficiency	128,318
Hyatt Corporation as agent for Hyatt Equ	3/21/2019	Off-Shore Wind Master Plan, Reception at IPF Conference	17,032
		Off-Shore Wind Pre-Dev Act, Reception at IPF Conference	1,568
IBM - East Fishkill Site	1/15/2019	Industrial Process Effic, Industrial Process Efficiency	92,029
ICF Resources, LLC	10/30/2018	ENERGY ANALYSIS, RFQL 3685 - Flexergy 3.0	41,600
	11/30/2018	ENERGY ANALYSIS, RFQL 3685 - Flexergy 3.0	249,883
	12/6/2018	ENERGY ANALYSIS, Tech Assist, REV Pool	269,783
		OTHER PROGRAM AREA, Tech Assist, REV Pool	5,217
	2/4/2019	Combined Heat and Power, Task Work Order #3	49,958

Contractor	Date Encumbered	Contract Description	Total Contract Amount
IHS Global Inc.	3/26/2019	ENERGY ANALYSIS, IHS/CERA Subscription	32,750
	3/28/2019	FUEL NY, OPIS Rack Price Subscription	8,736
mperial Manor Associates LLC	2/19/2019	Multifam Performance Pgm, Multifamily	247,800
Industrial Economics, Incorporated	1/10/2019	ENERGY ANALYSIS, EE Supply Curve Analysis	159,788
	4/40/0040	Mkt Char: Tech Assist, EE Supply Curve Analysis	89,881
INF Associates LLC	1/18/2019	Commercial Real Estate Ten, INF Associates - 100 Church St	5,000
	1/29/2019	Commercial Real Estate Ten, INF Associates LLC - Multisite	29,744
Infinity Solar Systems 110		Commercial Real Estate Ten, INF Associates LLC - Multisite	50,000
Infinity Solar Systems, LLC	10/30/2018	<200KW PV, NY Sun	7,623
Institute for Building Technology and Sa	3/29/2019	Air Source Heat Pumps, 3695 TWO Umbrella Agreement SQA - LS50 Direct Contract	125,000 25,000
Institute for Market Transformation	10/10/2018		
	3/28/2019	Intervention Effectiv Training, Market Insights	50,000 93,720
nTech Energy, Inc. ntegrity Solar Solutions, LLC	11/27/2018	Real Time Enrgy Management, InTech-890 Washington Ave-RT	10,640
		Combined Heat and Power, CHPA - 402 East 102nd Street	432,640
IntelliGen Power Systems, LLC	12/10/2018 3/12/2019	Industrial Process Effic, Industrial Process Efficiency	36,096
Intermountain Management Inc.	10/17/2018	Industrial Process Effic, Industrial Process Efficiency	82,320
International Business Machines,	1/25/2019	Industrial Process Effic, Industrial Process Efficiency	51,664
International Paper	3/21/2019	CI Carbon Challenge, CI Carb. Chalenge: Intl. Paper	2,800,000
Interstate Renewable Energy Council, I		Workforce Industry Partnership, PON 3715 Workforce Training	2,800,000
Invenergy Solar Development North Am		REC:CES REC Contracts, Horseshoe Solar	174,449,410
PPsolar Integration LLC	10/11/2018	NY Sun	292,500
Ithaca College	11/6/2018	Flexible Tech Assistance, FT12024 - Ithaca College - PON	14,428
TS-NY	10/10/2018	NYSERDA ADMINISTRATION, Office 365 2018-2019	96,970
13-N1	1/15/2019	NYSERDA ADMINISTRATION, pay SLMS invoices	11,280
Jaros, Baum & Bolles	3/27/2019	Technical Services, AGG1002-Jaros, Baum & Bolles	50,000
Jason Salfi	11/27/2018	OTHER PROGRAM AREA, Innovation Advisory Services	150,000
JCB Specialties, Inc.	1/25/2019	POLICY DEVELOPMENT, DPS NYS Fair giveaways	10,130
Jefferson Community College	3/5/2019	Technical Services, OsEM17-C Jefferson Community	58,615
JOGEE ROAD LLC	3/12/2019	>200KW PV, NY Sun	749,700
John C Goodfellow Ent Ltd	10/3/2018	Industrial Process Effic, Industrial Process Efficiency	15,000
John Siegenthaler	1/28/2019	Renewable Heat NY, RFP 3165 Hydronic System Desig	118,000
Johnson Associates, Inc	1/14/2019	NEW YORK GREEN BANK, JAI NYSERDA Consulting Cnt,	50,000
Jones Lang LaSalle Americas, Inc.	11/6/2018	Real Time Enrgy Management, JLL - 800 Phillips Rd - RTEM	155,000
	3/18/2019	Real Time Enrgy Management, JLL - 800 Phillips Rd - RTEM	7,840
	3/28/2019	Commercial Real Estate Ten, JLL Americas - Multisite	150,000
Joule Capital, LLC	12/20/2018	Real Time Enrgy Management, Joule Capital-Multisite-RTEM	177,709
Kamtech Restoration Corp	11/14/2018	NY Sun	39,744
Kasselman Solar LLC	10/5/2018	<200KW PV, NY Sun	5,670
	10/16/2018	<200KW PV, NY Sun	5,264
	10/23/2018	<200KW PV, NY Sun	10,863
	10/24/2018	<200KW PV, NY-Sun	5,745
	10/29/2018	<200KW PV, NY Sun	22,365
	10/30/2018	<200KW PV, NY Sun	11,734
	10/31/2018	<200KW PV, NY Sun	5,040
		<200KW PV, NY-Sun	5,640
	11/20/2018	<200KW PV, NY Sun	5,600
	12/7/2018	<200KW PV, NY Sun	6,930
	12/13/2018	<200KW PV, NY-Sun	5,836
	1/4/2019	<200KW PV, NY Sun	6,300
	2/20/2019	<200KW PV, PON 2112 NY SUN	5,600
Kearns & West, Inc.	2/11/2019	OREC: Technical Support, OSW RFP Facilitation Support	36,433
Kelliher Samets Volk	10/18/2018	Intervention Effectiv Training, TWO 22 Building Labeling Mkt	29,040
	11/6/2018	Industrial Process Effic, TWO 23: Industrial Mktg	150,000
		On-Site Energy Manager, TWO 23: Industrial Mktg	300,000
		Real Time Enrgy Management, TWO 23: Industrial Mktg	100,000

Contractor	Date Encumbered	Contract Description	Total Contract Amoun
Kelliher Samets Volk	11/6/2018	Strategic Energy Manager, TWO 23: Industrial Mktg	400,000
	11/14/2018	Commercial Real Estate Ten, TWO 24: CI Awareness Pilot MKT	50,000
		Flexible Tech Assistance, TWO 24: CI Awareness Pilot MKT	200,000
		Industrial Process Effic, TWO 24: CI Awareness Pilot MKT	350,000
		On-Site Energy Manager, TWO 24: CI Awareness Pilot MKT	100,000
		Real Time Enrgy Management, TWO 24: CI Awareness Pilot M	300,000
	11/26/2018	New Construction- Housing, Marketing Support for NYSERDA	200,000
	11/27/2018	Retrofit NY, Marketing Support for NYSERDA	164,070
	12/6/2018	Talent Pipeline:CE and OJT, TWO 21 WFD Talent Pipeline Mkt	500,000
		Talent Pipeline:Internship Pgm, TWO 21 WFD Talent Pipeline M	100,000
	12/7/2018	NYSERDA ADMINISTRATION, TWO 25 KSV Program Linkages	23,300
	1/30/2019	Intervention Effectiv Training, TWO 22 Building Labeling Mkt	69,150
	2/20/2019	Code to Zero, TWO 26 Codes Marketing	225,000
Kilowatt Engineering, Inc.	11/2/2018	Industrial Process Effic, 2621 Umbrella Contract	6,051
	12/12/2018	Industrial Process Effic, 2621 Umbrella Contract	4,871
	1/24/2019	Industrial Process Effic, 2621 Umbrella Contract	22,634
	2/14/2019	Industrial Process Effic, 2621 Umbrella Contract	9,327
	2/22/2019	INDUSTRIAL PROCESS EFFICIENCY, 2621 Umbrella Contract	10,484
	3/6/2019	Industrial Process Effic, 2621 Umbrella Contract	4,871
Kissing Bridge Corp	10/3/2018	Industrial Process Effic, Industrial Process Efficiency	128,000
-&S Energy Services, Inc.	10/9/2018	Industrial Process Effic, Umbrella Contract	10,800
	11/2/2018	Renewable Heat NY, Umbrella Contract	2,938
	11/21/2018	Renewable Heat NY, Umbrella Contract	2,904
	11/27/2018	Industrial Process Effic, Umbrella Contract	6,000
	12/3/2018	Flexible Tech Assistance, RFP3628FlexTechConsultUmbrella	23,137
	12/4/2018	Industrial Process Effic, Umbrella Contract	11,004
	12/5/2018	Industrial Process Effic, Umbrella Contract	15,200
	12/10/2018	Geothermal Incentive Program, 3695 TWO Umbrella Agreement	400,000
	12/19/2018	Agriculture Energy Eff Pgm, RFP3628FlexTechConsultUmbrella	2,500
	12/20/2018	Flexible Tech Assistance, RFP3628FlexTechConsultUmbrella	4,443
	1/7/2019	Agriculture Energy Eff Pgm, RFP3628FlexTechConsultUmbrella	2,500
	1/1/2010	Industrial Process Effic, Umbrella Contract	11,830
		INDUSTRIAL PROCESS EFFICIENCY, Umbrella Contract	17,500
	1/8/2019	Commercial New Construc, RFP3771 Umbrella Contract	22,260
	1/0/2013	Renewable Heat NY, Umbrella Contract	2,189
	1/10/2010	Flexible Tech Assistance, L&S Year 1 GJGNY Energy Audits	605,650
	1/10/2019		
	1/25/2010	GJGNY REVOLVING LOAN FUND, L&S Year 1 GJGNY Energy.	300,000
	1/25/2019	Agriculture Energy Eff Pgm, RFP3628FlexTechConsultUmbrella	2,500
	0/00/00 10	Industrial Process Effic, Umbrella Contract	2,200
	2/22/2019	Renewable Heat NY, Umbrella Contract	1,627
	3/1/2019	Technical Services, RFP3628FlexTechConsultUmbrella	2,500
	3/5/2019	Agriculture Energy Eff Pgm, RFP3628FlexTechConsultUmbrella	5,000
	3/7/2019	Technical Services, RFP3628FlexTechConsultUmbrella	7,500
	3/12/2019	Technical Services, Tech Review - OsEM	100,522
	3/14/2019	Technical Services, RFP3628FlexTechConsultUmbrella	16,000
	3/22/2019	Technical Services, RFP3628FlexTechConsultUmbrella	5,000
+M Workforce Housing Fund Holdco,	2/19/2019	Multifam Performance Pgm, Multifamily	127,400
aBella Associates, P.C.	11/28/2018	Technical Services, RFP3628FlexTechConsultUmbrella	2,500
	1/10/2019	Geothermal Incentive Program, Large-Scale GSHP Rebate	273,000
afarge Building Materials	12/11/2018	INDUSTRIAL PROCESS EFFICIENCY, Industrial Process Effici	244,681
_akegrove Mart Inc	10/31/2018	FUEL NY, PGI00298 - Lakegrove Mart Inc	87,767
atham & Watkins LLP	10/24/2018	NEW YORK GREEN BANK, Green Bank	25,000
Launch New York, Inc.	3/6/2019	Cleantech Incubator, Launch NY ECO Incubator	300,000
LC DRives	12/27/2018	OTHER PROGRAM AREA, PON 3249 Advanced Clean Energy	500,000
Lewis Custom Homes, Inc.	2/28/2019	Low Rise New Construction, 2019 LRNCP	6,750
Lincoln Center for the Performing Arts	11/7/2018	Technical Services, OsEM10-Lincoln Center Perform	84,173

Contractor	Date Encumbered	Contract Description	Total Contract Amount
Lincoln Life & Annuity Company of NY	2/12/2019	NYSERDA ADMINISTRATION, Long Term Disability Premium	95,000
Linde, LLC	1/23/2019	Industrial Process Effic, Industrial Process Efficiency	197,100
Little Falls Solar I, LLC	1/22/2019	>200KW PV, NY Sun	719,280
Local 32BJ Thomas Shortman Training	10/15/2018	Workforce Industry Partnership, PON 3715 Workforce Training	199,607
Loeb & Loeb LLP	2/12/2019	NEW YORK GREEN BANK, Green Bank Outside Legal Couns	4,851
Long Island Power Authority	3/28/2019	OREC: Technical Support, Large-Scale Renewables	50,000
Lotus Energy, Inc.	11/21/2018	<200KW PV, NY Sun	5,040
Low-Level Radioactive Waste Forum, In	11/16/2018	NYSERDA ADMINISTRATION, Data & Markets	5,000
Lumsden & McCormick, LLP	1/16/2019	NYSERDA ADMINISTRATION, Tax Compliance 2018- 3yr cycle	20,200
M.J. Beck Consulting LLC	1/24/2019	OREC: Technical Support, RFQL3926 Umbrella Contract	65,000
M.J. Bradley & Associates	2/21/2019	Electric Vehicles - Innovation, BCA of EV grid impacts	15,005
M/E Engineering, P.C.	10/16/2018	Commercial New Construc, RFP3771 Umbrella Contract	37,150
	12/13/2018	Industrial Process Effic, Technical Review and Program S	7,995
	1/25/2019	Industrial Process Effic, Technical Review and Program S	4,480
	2/4/2019	Industrial Process Effic, Technical Review and Program S	5,400
Maalka Inc	2/1/2019	Cleantech Ignition, PON 3871 Ignition Grants	100,000
Madison County	11/14/2018	CLEANER GREENER COMMUNITIES, Madison County	250,000
Malverne Gas Inc.	10/31/2018	FUEL NY, PGI00247 - Malverne Gas Inc.	71,404
Manhattan College	1/8/2019	Commercial New Construc, NCP16014 - Engineering and Sci	63,261
Marriott Hotel Services	10/24/2018	NY-SUN, Solar + Storage Tech Conf	40,000
	12/4/2018	NY-SUN, Solar + Storage Tech Conf	10,372
	1/25/2019	Combined Heat and Power, Onsite Resilient Power Conf	85,000
Martin Energy Group Services, LLC	3/21/2019	Combined Heat and Power, CHPA-CCMH Times Square LLC	1,550,250
Max Solar Inc	10/3/2018	<200KW PV, NY Sun	5,180
	10/15/2018	<200KW PV, NY Sun	5,180
	10/16/2018	<200KW PV, NY Sun	8,288
	11/6/2018	<200KW PV, NY Sun	5,180
	12/12/2018	<200KW PV, NY Sun	5,180
	2/21/2019	<200KW PV, PON 2112 NY SUN	6,993
MCCK Syracuse Hotel No 2 LP	10/4/2018	Home Perf w Energy Star, 2018 RES Training - Central	60
McMullen Road LLC	3/25/2019	>200KW PV, NY Sun	599,760
Meadows Senior Living L.P.	2/13/2019	RENEWABLE THERMAL, Solar Thermal Incentive	144,129
Medusa NY 1, LLC	12/14/2018	>200KW PV, NY-Sun C&I	718,200
Meister Consultants Group, Inc.	12/21/2018	Commercial Real Estate Ten, Efficiency Planning & Engineer	36,265
	1/22/2019	Commercial Market Mapping, NYSERDA-Utility Collaboration	200,000
Melone Village II Limited Partnership	3/28/2019	Low Rise New Construction, 2019 LRNCP	57,200
Melville Fuel Inc.	10/31/2018	FUEL NY, PGI00302 - Melville Fuel Inc.	75,707
Memorial Sloan Kettering Cancer Center	12/3/2018	Industrial Process Effic, Industrial Process Efficiency	83,843
Merrimack Energy Group, Inc.	2/1/2019	OREC: Technical Support, RFQL3926 Umbrella Contract	65,000
Metropolitan Life Insurance Company	2/13/2019	NYSERDA ADMINISTRATION, Human Resources	300,000
MHANY 2004 HDFC	3/5/2019	Multifam Performance Pgm, Multifamily	11,100
MHSP Walton Owner LLC	11/1/2018	Multifam New Construction, New Construction	83,600
Micatu, Inc.	1/3/2019	High Performing Grid, 69kV OPTICAL SENSOR	1,250,000
Michael Farrell	10/25/2018	NEW YORK GREEN BANK, Due Diligence Assistance	50,000
Michaels Group	11/6/2018	Low Rise New Construction, New Construction	18,000
Michaels Group Homes, LLC	1/10/2019	Low Rise New Construction, LR NCP New Construction	12,350
Micro Nano Technologies	10/25/2018	NextGen HVAC, PON3519 Round 1	430,000
Middletown NY 1, LLC	12/14/2018	>200KW PV, NY-Sun C&I	718,200
Middletown NY 2, LLC	12/31/2018	>200KW PV, NY-Sun C&I	312,550
mindSHIFT Technologies, Inc.	12/13/2018	NYSERDA ADMINISTRATION, RFP 3919-Sitecore CMS Admin	800,000
MLG 904 Development MM LLC	11/8/2018	Multifam New Construction, New Construction	104,200
	11/9/2018	Multifam New Construction, New Construction	18,000
Mohawk Solar LLC	1/8/2019	REC:CES REC Contracts, Large-Scale Renewables	98,332,809
Monolith Solar Associates, LLC	2/8/2019	<200KW PV, NY Sun	3,000
	3/28/2019	<200KW PV, PON 2112 NY SUN	14,990
Montefiore Medical Center	10/9/2018	Workforce Industry Partnership, PON 3442	174,709

Contractor	Date Encumbered	Contract Description	Total Contract Amount
Morris Ridge Solar Energy Center, LLC	1/3/2019	REC:CES REC Contracts, Morris Ridge Solar	99,364,518
Mount Sinai Medical Center	12/24/2018	Technical Services, OsEM-Icahn School of Medicine	214,000
	2/14/2019	Flexible Tech Assistance, FT12053 - Mount Sinai - PON	17,400
MS Management Associates, Inc.	2/15/2019	NY-Sun	253,368
MSAF Group LLC	2/28/2019	NEW CONSTRUCTION PROGRAM, NCP12811 - Sunshine Chi	115,434
Mukti E 163rd Petroleum Inc	11/8/2018	FUEL NY, PGI00290 - Mukti E 163rd Petro	13,250
National Oilheat Research Alliance	1/23/2019	NextGen HVAC, NextGen HVAC Innovation	75,000
National Renewable Energy Laboratory	3/20/2019	Cleantech ICC Engage, NREL's Industry Growth Forum	20,000
Navigant Consulting Inc.	11/19/2018	Mkt Char: Tech Assist, Tech Assist, REV Pool	500,000
	2/14/2019	REV Connect, REV Connect	473,445
	2/22/2019	NEW YORK GREEN BANK, Outside Technical and Eng. Srv	91,258
	2/25/2019	NEW YORK GREEN BANK, Outside Technical and Eng. Srv	84,516
NECEC Institute	10/1/2018	Cleantech ICC Engage, Inv/Corp Partner Webinar Pilot	40,000
NESCAUM	10/2/2018	ENVIRONMENTAL RESEARCH, Tech Assist, REV Pool	900,000
	3/15/2019	Electric Vehicles - Innovation, Year 2 EV marketing campaign	475,000
	3/21/2019	ENVIRONMENTAL RESEARCH, 123059 TWO#5	115,000
		Renewable Heat NY, 123059 TWO#5	70,000
NESEA	1/22/2019	New Construction- Housing, 2019 NESEA ProTour Series	12,000
Netsparker Limited	10/5/2018	NYSERDA ADMINISTRATION, Vulnerability Scanning Softwar	6,000
Network Experts of New York, Inc.	10/9/2018	NYSERDA ADMINISTRATION, Helpdesk Technician	130,000
	2/13/2019	NYSERDA ADMINISTRATION, Helpdesk Technician	12,000
New Buildings Institute, Inc.	3/5/2019	Code to Zero, TWO#1 Roadmap Zero Carbon Blds	250,000
New Venture Advisors LLC	1/24/2019	Agbotic - Market DD	35,000
New York Academy of Sciences	10/11/2018	Cleantech ICC Engage, 2018 NY Green Innovation Showc	35,000
	2/27/2019	Cleantech ICC Engage, 2019 NY Green Innovation Showc	35,000
New York Battery and Energy Storage	3/18/2019	Rmve Barriers Dist Enrgy Storg, Task Work Order No. 3	423,570
New York Geothermal Energy Organizat.	. 1/28/2019	Geothermal Incentive Program, 2019 NY-Geo Conference	8,900
New York Methodist Hospital	2/19/2019	NEW CONSTRUCTION PROGRAM, NCP11889 - New York Me	360,359
New York Power Authority	11/16/2018	Flexible Tech Assistance, FlexTech MOU NYSERDA-NYPA	382,293
New York Power Authority,	3/21/2019	EXISTING FACILITIES, EFP2592 - New York Power Autho	812,965
New York Presbyterian Hospital	2/15/2019	Industrial Process Effic, Industrial Process Efficiency	240,699
New York State Smart Grid Consortium .		High Performing Grid, NYS Smart Grid Consortium Dues	30,000
New York State Solar Farm Inc.	10/3/2018	<200KW PV, NY-Sun	6,820
	10/11/2018	<200KW PV, NY Sun	8,750
	10/25/2018	<200KW PV, NY Sun	6,867
	1/2/2019	<200KW PV, NY Sun	18,664
	1/3/2019	<200KW PV, NY Sun	13,608
	3/5/2019	<200KW PV, PON 2112 NY SUN	8,012
	3/11/2019	<200KW PV, PON 2112 NY SUN	152,280
Marca Marcha Hastana an Ita	3/29/2019	<200KW PV, PON 2112 NY SUN	12,758
New York University	10/15/2018	Cleantech Incubator, PON3413 Clean Energy Incubator	500,000
Nexamp Inc	11/20/2018	LMI Community Solar, RFP3802 Low Income Comm Solar	1,355,724
NextEra Energy Capital Holdings, Inc.	1/3/2019	NY-Sun C&I	649,289
Nickels Energy Solutions LLC	11/5/2018	<200KW PV, NY Sun	6,174
Niver Deckedy LLD	3/25/2019	<200KW PV, PON 2112 NY SUN	7,508
Nixon Peabody LLP	10/12/2018	NEW YORK GREEN BANK, Green Bank Outside Legal Serv.	6,672
	11/13/2018	NEW YORK GREEN BANK, Green Bank Outside Legal Serv.	11,500
	12/9/2018	NEW YORK GREEN BANK, Green Bank Outside Legal Serv.	1,997
	1/10/2019	NEW YORK GREEN BANK, Green Bank Outside Legal Serv.	1,068
	2/12/2019	NEW YORK GREEN BANK, Green Bank Outside Legal Serv.	16,149
NMR Group, Inc.	3/7/2019	NEW YORK GREEN BANK, Green Bank Outside Legal Serv.	3,889
NMR Group, Inc.	10/11/2018	EVALUATION, RFQ 3183 NMR Group, Inc.	134,463
NOHMs Technologies, Inc.	2/20/2019	Home Perf w Energy Star, RFQ 3183 NMR Group, Inc.	11,683
•		Energy Storage Tech/Prod Dev, PON 3585 Round 3 Cat B	
Norampac, Ind., Inc.	12/28/2018	Industrial Process Effic, Industrial Process Efficiency	122,416
North American Breweries	1/11/2019	Industrial Process Effic, Industrial Process Efficiency	26,325

Contractor	Date Encumbered	Contract Description	Total Contract Amount
North River Meadows NY TC LP	12/12/2018	Multifam Performance Pgm, Multifamily	74,900
Northbrook Lyons Falls, LLC	10/5/2018	REC:CES REC Contracts, CESRFP1_Tier 1 RECS	8,618,492
Northeast Energy Efficiency Partnerships	11/2/2018	Air Source Heat Pumps, NEEP 2018 Sponsorship	46,500
		Campus/Technical Assistance, NEEP 2018 Sponsorship	10,000
		Clean Energy Communities, NEEP 2018 Sponsorship	15,000
		Code to Zero, NEEP 2018 Sponsorship	10,000
		Commercial Imp Assist, NEEP 2018 Sponsorship	8,500
		EVALUATION, NEEP 2018 Sponsorship	5,000
		Home Perf w Energy Star, NEEP 2018 Sponsorship	5,000
		K-12 SCHOOLS, NEEP 2018 Sponsorship	10,000
		NYSERDA ADMINISTRATION, NEEP 2018 Sponsorship	10,000
		On-Site Energy Manager, NEEP 2018 Sponsorship	10,000
		Prof & Expert Engagement, NEEP 2018 Sponsorship	25,000
Northwell Health, Inc.	2/28/2019	Technical Services, OsEM21-C Northwell Health	179,953
Novel Approaches Solar Applications,	11/5/2018	<200KW PV, NY Sun	20,183
NP Environmental LLC	11/29/2018	Talent Pipeline:CE and OJT, OJT HIRE	5,760
	3/4/2019	Geothermal Incentive Program, Large-Scale GSHP Rebate	32,796
	3/26/2019	Talent Pipeline:CE and OJT, OJT HIRE	10,000
IRG Energy Inc	1/17/2019	Reimbursement to Clearway for	5,000
Autrition Bar Confectioners	1/11/2019	Industrial Process Effic, Industrial Process Efficiency	6,661
NY Baldwin I, LLC	3/13/2019	>200KW PV, NY-Sun C&I	1,105,119
NY Baldwin II, LLC	11/26/2018	>200KW PV, NY-Sun C&I	1,281,677
IY Delaware II, LLC	3/13/2019	>200KW PV, NY Sun C&I	1,281,677
IY Liberty I, LLC	1/11/2019	>200KW PV, NY-SUN C&I	1,281,677
IY Mooers IV, LLC	11/13/2018	LMI Community Solar, RFP3802 Low Income Comm Solar	1,004,900
	12/20/2018	>200KW PV, NY-Sun C&I	1,105,119
IY RNM Project1A, LLC	1/16/2019	>200KW PV, NY-Sun	961,842
IY RNM Project2, LLC	10/4/2018	NY Sun C/I	966,061
IY Thompson I, LLC	11/19/2018	LMI Community Solar, RFP3802 Low Income Comm Solar	1,155,112
IYS Office for Technology	12/12/2018	NYSERDA ADMINISTRATION, Office 365 2018-2019	96,697
IYS Office of General Services	12/14/2018	SARATOGA TECHNOLOGY & ENERGY PARK, STEP	48,066
	2/14/2019	SARATOGA TECHNOLOGY & ENERGY PARK, STEP	44,628
IYS Office of Information Technology	1/8/2019	Industrial Process Effic, Industrial Process Efficiency	35,534
VYS Office of Parks, Recreation and	2/15/2019	<200KW PV, PON 2112 NY SUN	51,030
NYS Olympic Regional Development	10/19/2018	Industrial Process Effic, Industrial Process Efficiency	297,600
Auth.	11/14/2018	Industrial Process Effic, Industrial Process Efficiency	299,000
	11/26/2018	Industrial Process Effic, Industrial Process Efficiency	172,500
	1/23/2019	Industrial Process Effic, Industrial Process Efficiency	27,015
IYSDEC	3/20/2019	WEST VALLEY DEVELOPMENT PROGRAM, WV-State Lics'd	350,000
YU Langone Hospitals	11/28/2018	Technical Services, OsEM13-C - NYU Langone Health	214,000
)'Brien & Gere Engineers, Inc.	1/8/2019	Commercial New Construc, RFP3771 Umbrella Contract	38,555
Dhen a Gere Engineers, me.	2/21/2019	Commercial New Construc, RFP3771 Umbrella Contract	21,039
D'Connell Electric Company	10/3/2018	<200KW PV, NY Sun	8,750
	12/13/2018	<200KW PV, NY Sun	55,584
Dak Mountain			
	10/3/2018	Industrial Process Effic, Industrial Process Efficiency	53,400
Dcean Tech Services LLC	11/6/2018	Off-Shore Wind Pre-Dev Act, RFP 3855 Metocean Cat. 1: FLSS	4,244,099
DLEDWorks LLC	11/2/2018	ADVANCED BUILDINGS, Advanced Buildings Technology	100,645
DnForce Solar	12/4/2018	NY Sun	252,288
)	3/1/2019	NY Sun	454,896
Dnondaga Community College	3/7/2019	Technical Services, OsEM19-C Onondaga Com College	90,432
Open Energy Efficiency Inc.	1/25/2019	Pay for Performance, RFP 3901 P4P-AMV Platform	1,935,220
Opportunities for Broome, Inc.	1/10/2019	Low Rise New Construction, New Construction	50,000
Opus One Solutions USA Corp	1/18/2019	Cleantech Ignition, PON 3871 Ignition Grants	100,000
Dracle America, Inc.	1/15/2019	NYSERDA ADMINISTRATION, Peoplesoft -Oracle 2019 - 2020	53,598
Ove Arup & Partners Consulting Engine	. 1/18/2019	Commercial Real Estate Ten, ARUP - 40 West 20th St	50,000
OwnBackup Inc.	10/22/2018	NYSERDA ADMINISTRATION, Salesforce Backup Solutions	14,573

Contractor	Date Encumbered	Contract Description	Total Contract Amount
OYA 2643 Moore Road LLC	3/5/2019	>200KW PV, NY Sun	1,875,000
OYA BLANCHARD ROAD 2 LLC	2/14/2019	>200KW PV, NY Sun	1,875,000
OYA BLANCHARD ROAD LLC	2/14/2019	>200KW PV, NY-Sun	1,875,000
OYA GREAT LAKES SEAWAY LLC	2/14/2019	>200KW PV, NY Sun	1,875,000
OYA NYS RTE 12 LLC	2/14/2019	>200KW PV, NY Sun	1,875,000
OYA State Route 122 LLC	3/5/2019	>200KW PV, NY Sun	1,875,000
Paradise Energy Solutions, LLC	10/11/2018	<200KW PV, NY Sun	55,913
	10/29/2018	<200KW PV, NY Sun	5,082
	12/4/2018	<200KW PV, NY Sun	32,029
	12/13/2018	<200KW PV, NY Sun	47,196
	2/20/2019	<200KW PV, PON 2112 NY SUN	100,683
	2/21/2019	<200KW PV, PON 2112 NY SUN	12,301
	2/25/2019	<200KW PV, PON 2112 NY SUN	28,080
Passive Buildings Canada	1/15/2019	Retrofit NY, Multifamily	50,000
PassiveLogic Inc.	2/20/2019	76 West, 76 West Energy Bus Competition	250,000
Pearl Solar II, LLC	1/31/2019	>200KW PV, NY-Sun C&I	845,093
Pearl Solar, LLC	3/13/2019	>200KW PV, NY-Sun C&I	845,093
Penda Aiken Inc.	11/2/2018	NYSERDA ADMINISTRATION, Temporary Receptionist	2,535
Performance Systems Development	2/5/2019	Pay for Performance, Task #1 contract 113650	26,663
Petrecky Consulting LLC	1/31/2019	OTHER PROGRAM AREA, RFP 3859	125,000
PGREF V 1301 Participating, LP	3/25/2019	Flexible Tech Assistance, FT12071-Paramount 1301 AOA-PON	39,400
Phase Innovations LLC	2/11/2019	NextGen HVAC, Modular Membrane Dehumidifying	342,500
Pintail Crossing, LLC	1/11/2019	Low Rise New Construction, New Construction	58,400
PitchBook Data, Inc.	10/31/2018	OTHER PROGRAM AREA, Online Subscription	22,500
PLS Inc	1/4/2019	Residential-Engaging New Mkts, Pearl Pilot Support: NYSERDA	199,133
PlugPV, LLC	10/11/2018	<200KW PV, NY Sun	5,859
	10/29/2018	<200KW PV, NY Sun	5,425
	10/30/2018	<200KW PV, NY Sun	5,534
	11/21/2018	<200KW PV, NY Sun	5,317
	1/8/2019	<200KW PV, NY Sun	5,263
	1/30/2019	<200KW PV, PON 2112 NY SUN	6,836
	2/25/2019	PON 2112 NY SUN	19,188
PMG Northeast LLC	11/8/2018	FUEL NY, PGI00230 - PMG Northeast LLC	27,624
Find Northeast LLC			
Potontia Management Crown LLC	11/15/2018	FUEL NY, PGI00186 - PMG Northeast LLC	39,336
Potentia Management Group LLC		Talent Pipeline:CE and OJT, OJT HIRE	5,760
	3/18/2019	Talent Pipeline:CE and OJT, OJT HIRE	6,464
	3/20/2019	Talent Pipeline:CE and OJT, OJT HIRE	7,680
Power Advisory LLC	2/1/2019	OREC: Technical Support, RFQL3926 Umbrella Contract	65,000
Powerhouse Dynamics, Inc	10/29/2018	Real Time Enrgy Management, Powerhouse - Multisite - RTEM	34,549
PPM Roaring Brook, LLC	1/8/2019	REC:CES REC Contracts, Large-Scale Renewables	118,949,065
Pratt Institute Center for Community & E		REV Campus Challenge, RM24 - Pratt Institute	19,874
Praveen Amar	12/19/2018	Environmental Research, Amar ENV Rsch Science Advisor	45,000
Premier Solar Solutions LLC	11/5/2018	NY Sun	50,112
	11/20/2018	NY Sun	21,384
	12/4/2018	NY Sun	83,421
	1/8/2019	NY Sun	13,176
	1/24/2019	NY Sun	53,433
	3/25/2019	PON 2112 NY SUN	14,040
	3/29/2019	PON 2112 NY SUN	9,072
Prescriptive Data	12/12/2018	Real Time Enrgy Management, Prescriptive-1540Broadway-RT	200,000
	2/27/2019	Real Time Enrgy Management, PrescriptiveData-383MadAv-RT	119,213
	3/18/2019	Real Time Enrgy Management, Prescriptive-1540Broadway-RT	100,000
Prime Petro Inc	10/31/2018	FUEL NY, PGI00300 - Prime Petro Inc.	112,600
Pro Custom Solar LLC	1/30/2019	<200KW PV, PON 2112 NY SUN	5,954
	3/6/2019	<200KW PV, PON 2112 NY SUN	5,054
	-		2,001

Promesa Housing Development Fund C	11/15/2018	Multifam New Construction, MFNCP - Virginia House	54,20
	2/4/2019	NYSERDA ADMINISTRATION, Provantage Monitors - 52	10,07
Provantage, LLC			
Quest Energy Group	1/8/2019 3/29/2019	Commercial Real Estate Ten, Quest - 111 West 33rd Street	15,00
QwikSolar, LLC		<200KW PV, PON 2112 NY SUN	7,18
R & A Petroleum Corp	11/15/2018	FUEL NY, PGI00214 - R & A Petroleum Cor	15,00
Randstad North America Inc	12/4/2018	NYSERDA ADMINISTRATION, Temp Services -	104,44
	2/15/2019	NYSERDA ADMINISTRATION, Temporary mail room clerk	22,42
Randstad North America, Inc.	10/3/2018	NYSERDA ADMINISTRATION, Temp Services Contract.	20,00
	10/4/2018	CI Engy Siting & Soft Cost Red, Temp Services Contract.	21,00
	10/29/2018	ENERGY ANALYSIS, Temp Services Contract.	9,50
	10/31/2018	NYSERDA ADMINISTRATION, Temp Services Contract.	4,0
	12/19/2018	Residential-Engaging New Mkts, Temp Services Contract.	26,0
	12/20/2018	NYSERDA ADMINISTRATION, Temp Services Contract.	21,00
	12/21/2018	Environmental Research, Temp Services Contract.	25,30
		NYSERDA ADMINISTRATION, Temp Services Contract.	2,69
	2/20/2019	NYSERDA ADMINISTRATION, Temp Services Contract.	80,00
	3/4/2019	ENERGY ANALYSIS, Temp Services Contract.	23,00
	3/6/2019	NYSERDA ADMINISTRATION, Temp Services Contract.	23,0
	3/15/2019	NYSERDA ADMINISTRATION, Temporary NYSUN Coordinator	112,4
RE-Nuble, Inc.	2/13/2019	Cleantech Ignition, PON 3871 Ignition Grants	98,9
re: Charge-e, Inc.	2/26/2019	CLEAN TRANSPORTATION, Inductive charging for e-bikes	250,0
REACH Strategies	1/16/2019	Electric Vehicles - Innovation, EV recognition program design	50,00
Red Hook Solar Corp	12/4/2018	<200KW PV, NY Sun	91,4
RED Rochester	12/10/2018	Industrial Process Effic, Industrial Process Efficiency	518,1
Regan Development Corp	1/4/2019	Low Rise New Construction, New Construction	64,4
Regional Greenhouse Gas Initiative, Inc.	1/4/2019	ENERGY ANALYSIS, RGGI Funding Agreement 2019	829,2
Renovus Energy, Inc.	10/3/2018	<200KW PV, NY Sun	98,5
	10/17/2018	<200KW PV, NY Sun	5,0
	10/29/2018	<200KW PV, NY Sun	206,4
	10/31/2018	<200KW PV, NY Sun	6,0
	11/1/2018	<200KW PV, NY Sun	6,0
	11/7/2018	<200KW PV, NY Sun	10,3
	11/9/2018	<200KW PV, NY Sun	8,2
	11/15/2018	<200KW PV, NY Sun	5,4
	11/21/2018	<200KW PV, NY Sun	5,3
	11/29/2018		5,3
		<200KW PV, NY Sun	
	12/13/2018	<200KW PV, NY Sun	153,6
	12/17/2018	<200KW PV, NY Sun	6,2
	1/28/2019	<200KW PV, PON 2112 NY SUN	7,2
	2/5/2019	<200KW PV, PON 2112 NY SUN	6,5
	2/12/2019	<200KW PV, PON 2112 NY SUN	5,3
	2/21/2019	<200KW PV, PON 2112 NY SUN	307,3
	2/25/2019	<200KW PV, PON 2112 NY SUN	8,6
	3/28/2019	<200KW PV, PON 2112 NY SUN	153,6
	3/29/2019	<200KW PV, PON 2112 NY SUN	14,7
RER Energy Group LLC	12/11/2018	>200KW PV, NY Sun	932,4
Research Foundation of CUNY	10/25/2018	High Performing Grid, PON 3397 Round 2 - Category A	278,6
Research Into Action, Inc.	12/27/2018	EVALUATION, RFQ3183 Umbrella Agreement	139,6
Resource Refocus LLC	1/28/2019	Code to Zero, TWO#1 Res Rulemaking Support	42,2
	3/20/2019	Code to Zero, TWO 2 NYStretch Res CE	67,2
RHC Operating LLC	10/11/2018	Off-Shore Wind Master Plan, 2018 OSW Supplier Forum	75,0
	12/18/2018	Off-Shore Wind Master Plan, 2018 OSW Supplier Forum	32,0
RHM Inc.	12/24/2018	Renewable Heat NY, Aeon - Coots	21,0
	1/9/2019	RENEWABLE HEAT NY, Aeon Heating - Baillargeon	21,0
Riseboro Community Partnership, Inc.	10/5/2018	Multifam New Construction, New Construction	268,00
	10/25/2018	Multifam New Construction, New Construction	300,00

Riseboro Community Partnership, Inc.	12/27/2018	Multifam New Construction, New Construction	300,000
RM & PSG, LLC	11/26/2018	Multifam Performance Pgm, Multifamily	147,000
Robert Derector Associates	12/12/2018	Commercial Real Estate Ten, Robert Derector - 33 W 44th St	5,000
	3/28/2019	Commercial Real Estate Ten, Robert Derector - 1271 AOA	23,000
Pachastar District Heating Cooperative	3/8/2019		211,35
Rochester District Heating Cooperative		On-Site Energy Manager, OSEM20-I-Rochester District	
Rochester General Hospital	10/26/2018	Commercial New Construc, NCP15042-CriticalCarePav-OFLT	369,20
Rochester Institute of Technology	11/8/2018	REV Campus Challenge, RM23 - RIT	143,50
Rural Generation & Wind (Rodney Wea		<200KW PV, NY-Sun	5,640
Ryan Homes (Virginia)	10/19/2018	Low Rise New Construction, New Construction	33,250
	11/29/2018	Low Rise New Construction, New Construction	39,900
	11/30/2018	Low Rise New Construction, New Construction	32,300
	1/10/2019	Low Rise New Construction, New Construction	29,450
	2/1/2019	Low Rise New Construction, New Construction	34,20
	3/1/2019	Low Rise New Construction, 2019 LRNCP	19,000
	3/18/2019	Low Rise New Construction, 2019 LRNCP	16,150
Safari Energy LLC	10/11/2018	NY Sun	39,60
	12/13/2018	NY Sun	663,36
	2/20/2019	NY-Sun	372,000
		PON 2112 NY SUN	205,200
Schneider Electric Buildings Americas, I	1/29/2019	Real Time Enrgy Management, Schneider-225 Liberty St-RTEM	61,61
	3/18/2019	Real Time Enrgy Management, Schneider - 1045 6th Ave -RTEM	53,705
Scotto Brothers Woodbury Restaurant,	12/3/2018	Environmental Research, 2018 State of the Science Wksp	1,642
LLC	1/22/2019	Environmental Research, 2018 State of the Science Wksp	4,170
Scotts Peekn Peak LLC	10/29/2018	Industrial Process Effic, Industrial Process Efficiency	80,000
Second Street Enterprise Inc.	10/24/2018	FUEL NY, PGI00265 - Second Street Enter	32,820
Seed Renewables Inc.	2/15/2019	<200KW PV, PON 2112 NY SUN	6,178
Seek More LLC	1/23/2019	Residential-Engaging New Mkts, Consultant for SFR Upstream	5,380
Sepac Incorporated	2/11/2019	<200KW PV, NY-Sun	183,553
Seven Springs West LLC	3/8/2019	WEST VALLEY DEVELOPMENT PROGRAM, Operations and	700,000
SHI, Inc.	12/19/2018	NYSERDA ADMINISTRATION, ADA-Compliance Subscription	15,54
	2/4/2019	NYSERDA ADMINISTRATION, Embarcadero Enterprise Support	16,82
	3/21/2019	NYSERDA ADMINISTRATION, Adobe Acrobat Pro DC - 1 yr.	48,06
	0/21/2010	NYSERDA ADMINISTRATION, Adobe Creative Cloud Licenses	12,31
Siemens Industry, Inc.	3/11/2019		238,272
Siemens muusuy, mc.	3/12/2019	Real Time Enrgy Management, Siemens - 10 Columbus Cir-RT	
		Real Time Enrgy Management, Siemens - 510 S 4th St - RTEM	25,200
	3/22/2019	Real Time Enrgy Management, Siemens - 45 Cooper Rd - RTEM	11,058
Sive Paget & Riesel PC	1/7/2019	Off-Shore Wind Pre-Dev Act, RFP 3300 & RFP 3776 Outside Co	50,000
	1/22/2019	OREC: Technical Support, RFP 3300 & RFP 3776 Outside Co	100,000
Skadden, Arps, Slate, Meagher & Flom		NEW YORK GREEN BANK, Green Bank Outside Legal Couns	22,288
Ski Plattekill, Inc.	12/3/2018	Industrial Process Effic, Industrial Process Efficiency	209,16
Skylands Renewable Energy, LLC	10/24/2018	Small Wind, Wind Turbine Incentive	31,000
	1/11/2019	Small Wind, Wind Turbine Incentive	31,000
		Small Wind, Wind Turbine Incentive Program	31,000
Skyline Solar Inc.	11/29/2018	<200KW PV, NY Sun	8,750
SMG Partners	1/4/2019	Low-Income Forum on Energy, LIFE 2020 Statewide Confernece	5,975
Solar 88, LLC	2/1/2019	<200KW PV, NY-Sun	299,012
Solar Alchemy, Inc.	1/30/2019	<200KW PV, PON 2112 NY SUN	6,154
Solar Energy LLC	3/13/2019	<200KW PV, PON 2112 NY SUN	855,563
Solar Energy Systems, LLC	1/14/2019	<200KW PV, NY Sun	15,33
	1/22/2019	NY Sun	41,40
	3/28/2019	PON 2112 NY SUN	99,36
Solar Liberty Energy Systems, Inc	10/3/2018	<200KW PV, NY Sun	5,79
	10/11/2018	<200KW PV, NY Sun	7,452
	10/12/2018	<200KW PV, NY Sun	14,580
	10/18/2018		5,837
		<200KW PV, NY Sun	
	10/24/2018	<200KW PV, NY Sun	5,494

Contractor Solar Liberty Energy Systems, Inc	Date Encumbered	Contract Description	Total Contract Amoun
Solar Liberty Energy Systems, Inc	10/29/2018	<200KW PV, NY Sun	10,080
	10/30/2018	<200KW PV, NY Sun	23,828
	11/2/2018	<200KW PV, NY Sun	5,150
	11/13/2018	<200KW PV, NY Sun	5,775
	11/16/2018	<200KW PV, NY Sun	7,560
	11/20/2018	<200KW PV, NY Sun	45,640
	11/21/2018	<200KW PV, NY Sun	4,158
		<200KW PV, NY-Sun	6,795
	11/26/2018	<200KW PV, NY Sun	5,985
	1/14/2019	<200KW PV, NY Sun	1,134
	2/8/2019	>200KW PV, NY Sun	875,336
	3/5/2019	PON 2112 NY SUN	14,876
	3/6/2019	<200KW PV, PON 2112 NY SUN	82,944
	3/7/2019	PON 2112 NY SUN	22,330
	3/27/2019	<200KW PV, NY Sun	126
	3/28/2019	<200KW PV, PON 2112 NY SUN	382,775
	3/29/2019	<200KW PV, NY-Sun	57,888
Solar Plumbing Design Inc	12/21/2018	NY Sun	22,140
Solar Village Company LLC	2/27/2019	Low Rise New Construction, 2019 LRNCP	28,000
Solas Energy Consulting U.S. Inc.	12/28/2018	CI Engy Siting & Soft Cost Red, Wind Energy Siting TA	50,000
Solcius, LLC	10/3/2018	<200KW PV, NY Sun	5,278
	11/9/2018	<200KW PV, NY Sun	5,075
	11/13/2018	<200KW PV, NY Sun	5,380
	1/28/2019	<200KW PV, PON 2112 NY SUN	5,124
Solitude Solar LLC	3/8/2019	>200KW PV, NY Sun	1,627,920
	3/12/2019	>200KW PV, NY Sun	842,076
South Slope Development Corporation	10/17/2018	Industrial Process Effic, Industrial Process Efficiency	67,200
Southern Tier Technologies LLC	12/17/2018	76 West, 76 West Energy Bus Competition	250,000
Southside United HDFC - Los Sures	12/27/2018	Multifam New Construction, New Construction	300,000
Southview Towers, L.P.	2/7/2019	Multifam Performance Pgm, Multifamily	135,100
Sparrowbush NY 1, LLC	2/25/2019	>200KW PV, NY Sun	718,200
Sparrowbush NY 2, LLC	2/25/2019	>200KW PV, NY Sun	374,938
Specialized Packaging Group, Inc	2/4/2019	Industrial Process Effic, Industrial Process Efficiency	55,451
SPJ LLC	11/15/2018	FUEL NY, PGI00284 - SPJ LLC	22,500
SRS Holdings LLC	3/28/2019	Energy Storage Tech/Prod Dev, PON 3585 R2 Polymer-Clay se	300,000
SSA Solar of NY 4 LLC	10/9/2018	>200KW PV, NY-Sun C/I	292,117
St Peters Health Partners	10/12/2018	Technical Services, OsEM11-C - St. Peter's Health	210,669
St. Catherine's Center for Children	3/12/2019	Low Rise New Construction, 2019 LRNCP	20,000
St. John Fisher College	2/6/2019	REV Campus Challenge, RM22 - St. John Fisher College	153,988
St. Nicks Alliance	10/9/2018	Multifam New Construction, New Construction	157,500
	1/8/2019	Multifam New Construction, New Construction	129,500
Standard Insulating Company	11/6/2018	Talent Pipeline:CE and OJT, OJT PON 3982	6,720
Stantec Consulting Services, Inc.	1/8/2019	Industrial Process Effic, Technical Review and Program S	4,138
Steel Sun 2 LLC	10/19/2018	NY Green Bank, BQ Energy - Steel Sun 2	12,500,000
Sterling and Wilson Cogen Solutions, L	11/21/2018	Combined Heat and Power, CHPA - 340 KW Wheatfield Garde	442,560
Steven Winter Associates, Inc.	10/30/2018	Workforce Industry Partnership, PON 3715 Workforce Training	90,448
	11/21/2018	Flexible Tech Assistance, RFP3628FlexTechConsultUmbrella	230,662
	12/13/2018	NextGen HVAC, PON3519 Round 1	632,196
	1/25/2019	Real Time Enrgy Management, SWA - Multisite - RTEM	10,100
	2/7/2019	Low Rise New Construction, SWA TWO #1 - RESNET	30,000
		Multifam New Construction, SWA TWO #1 - RESNET	30,000
	2/27/2019	NextGen HVAC, BAS for small & medium bldgs	216,518
Stichting Energiesprong	10/30/2018	Retrofit NY, Multifamily	200,000
StorEn Technologies Inc.	3/27/2019	Energy Storage Tech/Prod Dev, PON 3585 R2	199,866
Storke, LLC	12/19/2018	Small Wind, Wind Turbine Incentive	84,000
			0,000

Contractor	Date Encumbered	Contract Description	Total Contract Amoun
Sumitomo Rubber USA, LLC	2/4/2019	Industrial Process Effic, Industrial Process Efficiency	776,24
Sun Source Technologies	2/5/2019	<200KW PV, NY-Sun	5,98
	2/11/2019	<200KW PV, PON 2112 NY SUN	7,03
SuNation Solar Systems, Inc.	10/5/2018	<200KW PV, NY Sun	14,28
	10/15/2018	<200KW PV, NY Sun	66,00
	10/22/2018	<200KW PV, NY Sun	32,36
	12/6/2018	<200KW PV, NY Sun	14,61
	1/30/2019	<200KW PV, PON 2112 NY SUN	61,97
	2/15/2019	<200KW PV, PON 2112 NY SUN	49,980
	3/25/2019	<200KW PV, PON 2112 NY SUN	71,64
Sunnova Energy Corp	1/22/2019	<200KW PV, PON 2112 NY SUN	5,57
SunPower Capital, LLC	10/5/2018	<200KW PV, NY Sun	5,42
	10/23/2018	<200KW PV, NY Sun	10,71
	10/24/2018	<200KW PV, NY Sun	6,48
	10/29/2018	<200KW PV, NY Sun	5,13
	11/7/2018	<200KW PV, NY Sun	8,69
	11/13/2018	<200KW PV, NY Sun	6,804
	12/17/2018	<200KW PV, NY Sun	5,04
	12/21/2018	<200KW PV, NY Sun	5,94
	1/2/2019	<200KW PV, NY Sun	5,29
	1/7/2019	<200KW PV, PON 2112 NY SUN	5,29
	1/14/2019	<200KW PV, PON 2112 NY SUN	7,30
	1/16/2019	<200KW PV, PON 2112 NY SUN	11,78
	1/17/2019	<200KW PV, PON 2112 NY SUN	5,55
	1/28/2019	<200KW PV, NY-Sun	5,16
	1/31/2019	<200KW PV, PON 2112 NY SUN	5,47
	2/14/2019	<200KW PV, PON 2112 NY SUN	7,68
	2/20/2019		10,63
		<200KW PV, PON 2112 NY SUN	
	2/22/2019	<200KW PV, PON 2112 NY SUN	5,39
	2/28/2019	<200KW PV, PON 2112 NY SUN	7,66
	3/11/2019	<200KW PV, PON 2112 NY SUN	5,07
	3/27/2019	<200KW PV, PON 2112 NY SUN	6,00
SunPower SolarProgram 1, LLC	2/20/2019	<200KW PV, PON 2112 NY SUN	112,50
SUNRISE ELECTRICAL SERVICES	1/23/2019	<200KW PV, NY Sun	27,15
	3/5/2019	<200KW PV, PON 2112 NY SUN	31,70
	3/28/2019	<200KW PV, PON 2112 NY SUN	30,989
Sunrise Solar Solutions, LLC	10/29/2018	NY Sun	781,92
	11/1/2018	<200KW PV, NY Sun	6,04
		NY Sun	22,56
	12/4/2018	NY Sun	28,00
	1/4/2019	NY Sun	16,10
	2/15/2019	PON 2112 NY SUN	23,280
	2/27/2019	NY Sun	7,89
SunRun, Inc	10/25/2018	<200KW PV, NY Sun	5,86
	11/9/2018	<200KW PV, NY Sun	8,52
	1/7/2019	<200KW PV, PON 2112 NY SUN	5,64
	1/23/2019	<200KW PV, PON 2112 NY SUN	6,32
	1/28/2019	<200KW PV, PON 2112 NY SUN	5,62
		<200KW PV, PON 2112 NY SUN	5,98
	3/29/2019		-)
			1 348 88
	12/19/2018	>200KW PV, NY-Sun C&I Assignment	
SUNSTARTER SOLAR XXXII LLC	12/19/2018 3/13/2019	>200KW PV, NY-Sun C&I Assignment >200KW PV, NY-Sun C&I	274,67
SUNSTARTER SOLAR XXXII LLC Sunvestment Group LLC	12/19/2018 3/13/2019 3/12/2019	>200KW PV, NY-Sun C&I Assignment >200KW PV, NY-Sun C&I >200KW PV, NY Sun	274,67 503,01
SUNSTARTER SOLAR XXXII LLC Sunvestment Group LLC SUNY Buffalo	12/19/2018 3/13/2019 3/12/2019 11/26/2018	>200KW PV, NY-Sun C&I Assignment >200KW PV, NY-Sun C&I >200KW PV, NY Sun Industrial Process Effic, Industrial Process Efficiency	274,67 503,01 119,04
SUNSTARTER SOLAR XL LLC SUNSTARTER SOLAR XXXII LLC Sunvestment Group LLC SUNY Buffalo SUNY Oneonta Supervisor Town of Clay	12/19/2018 3/13/2019 3/12/2019	>200KW PV, NY-Sun C&I Assignment >200KW PV, NY-Sun C&I >200KW PV, NY Sun	1,348,88 274,67 503,01 119,04 25,60 150,00

Sustainable Energy Developments Inc. 109/2018 -200KW PV, NY Sun 1011/2019 -200KW PV, NY Sun 2/11/2019 -200KW PV, PON 2112 NY SUN 2/15/2019 -200KW PV, PON 2112 NY SUN Sustainable Hudson Valley, Inc. 11/92018 Electric Vehicles - Innovation, Dealer engagement - easter Sustainable Westchester 104/2018 Rmve Bartes Dist Engy Story, Feasibility of storage v P Switched Source LLC 11/15/2019 76 West, 76 West Energy Communities, Westchester HS EV Video/Au Switched Source BB LLC 11/15/2019 76 West, 76 West Energy Bus Competition Systems Management Planning, Inc. 1023/2018 NYSERDA ADMINISTRATION, Net/op 2240 2018 - 2019 Systems Management Planning, Inc. 101/202018 NYSERDA ADMINISTRATION, Wethey Services - 2019 201 Taitem Engineering, P.C. 101/202018 4200KW PV, NY-Sun 101/20218 4200KW PV, NY-Sun 101/202018 101/20218 4200KW PV, NY Sun 101/20218 <	Total Contract Amoun
2/11/2019 <200KW PV, PON 2112 NY SUN	5,978
2/15/2019 <200KW PV, PON 2112 NY SUN	5,413
3ustanable Hudson Valley, Inc. 11/19/2018 Electic Vehicles - Innovation, Dealer engagement - easter Sustanable Westchester 3/28/2019 Clean Energy Communities, Westchester HS EV Video/A Switched Source LLC 1/15/2019 76 West, 76 West Energy Bus Competition Switched Source PB LLC 1/15/2019 76 West, 76 West Energy Bus Competition Systemes Management Planning, Inc. 1/15/2019 NYSERDA ADMINISTRATION, NetApe 2240 2018 - 2019 Systems Management Planning, Inc. 1/02/3/2018 NYSERDA ADMINISTRATION, NetApe 2240 2018 - 2019 Systems Management Planning, Inc. 1/02/3/2018 NYSERDA ADMINISTRATION, NetApe 2240 2018 - 2019 Systems Management Planning, Inc. 1/02/3/2018 NYSERDA ADMINISTRATION, NetApe 2240 2019 - 201 Systems Management Planning, Inc. 1/02/3/2018 NYSERDA ADMINISTRATION, NetApe 2240 2019 - 201 1/02/2019 NYSERDA ADMINISTRATION, NetApe 2240 2019 - 201 2017/2018 1/02/3/2018 Hultifan Performance Pgm, 3985 TWO Umbrelia Agreemet 1/02/2018 Technical Services, RFP3628FlexTechConsultUmbrelia 1/02/2018 Agriculture Energy Elf Pgm, RFP3628FlexTechConsultUmbrelia 1/02/2018 Agriculture Fenergy Elf Pgm, RFP3628FlexTechConsultUmbrelia	7,394
Sustainable Hudson Valley, Inc. 11/19/2018 Electric Vehicles - Innovation, Dealer engagement - easter Sustainable Westchester 10/4/2018 Rmve Barriers Dist Erngy Storg, Feasibility of storage v P) Switched Source LLC 1/15/2019 76 West, 76 West Energy Bus Competition Switched Source PB LLC 1/15/2019 76 West, 76 West Energy Bus Competition Syracuse University 1/15/2019 NextGen HVAC, PON3519 Round 1 Syracuse University 1/15/2019 NYSERDA ADMINISTRATION, NetApp 2240 2018 - 2019 Syracuse University 1/15/2019 NYSERDA ADMINISTRATION, NetApp 2240 2018 - 2019 Syracuse University 1/15/2019 NYSERDA ADMINISTRATION, NetApp 2240 2018 - 2019 Syracuse University 10/12/2018 <200KW PV, NY-Sun	12,69
Sustainable Westchester 10/4/2018 Rmve Barriers Dist Enrgy Storg, Feasibility of storage w P Switched Source LLC 1/15/2019 Clean Energy Communities, Westchester HS EV Vide/AV Switched Source PB LLC 1/15/2019 76 West, 76 West Energy Bus Competition Switched Source PB LLC 1/17/2019 High Performing Grid, PON 3770 CATB - Phase Balance Systems Management Planning, Inc. 3/4/2019 NYSERDA ADMINISTRATION, NetApp 2240 2018 - 2019 Systems Management Planning, Inc. 3/4/2019 NYSERDA ADMINISTRATION, NetApp 2240 2018 - 2019 Systems Management Planning, Inc. 3/4/2019 NYSERDA ADMINISTRATION, NetApp 2240 2018 - 2019 Systems Management Planning, Inc. 3/4/2019 NYSERDA ADMINISTRATION, NetApp 2240 2018 - 2019 Systems Management Planning, Inc. 3/4/2019 NYSERDA ADMINISTRATION, NetApp 2240 2018 - 2019 20 Taitem Engineering, P.C. 10/12/2018 <200KW PV, NY Sun	5,42
3/28/2019 Clean Energy Communities, Westchester HS EV Video/A Switched Source LLC 1/15/2019 76 West, 76 West, 76 West, 76 West, 70 ATB - Phase Balance Switched Source PB LLC 1/17/2019 High Performing Grid, PON 3770 CATB - Phase Balance Systems Management Planning, Inc. 10/23/2018 NYSERDA ADMINISTRATION, NexApp 2420 2018 - 2019 Systems Management Planning, Inc. 10/23/2018 NYSERDA ADMINISTRATION, NexApp 2420 2018 - 2019 3/27/2019 NYSERDA ADMINISTRATION, Webex Services - 2019 20 3/27/2019 Taitem Engineering, P.C. 10/12/2018 <200KW PV, NY-Sun	n NY 35,000
Electric Vehicles - Innovation, Westchester HS EV Video/A Switched Source LLC 1/15/2019 76 West, 76 West Energy Bus Competition Switched Source PB LLC 1/17/2019 High Performing Grid, PON 3770 CATE - Phase Balance Syracuse University 1/15/2019 NextGen HVAC, PON3519 Round 1 Systems Management Planning, Inc. 1/02/2018 NYSERDA ADMINISTRATION, AetApp 2240 2018 - 2019 3/4/2019 NYSERDA ADMINISTRATION, Webex Services - 2019 20 3/27/2019 Taitem Engineering, P.C. 1/01/2018 -200KW PV, NY-Sun 101/20218 -200KW PV, NY-Sun 1/01/2018 11/12/2018 -200KW PV, NY Sun 1/12/2018 11/12/2018 -200KW PV, NY Sun 1/12/2018 11/14/2018 Industrial Process Effic, Technical Review and Program S 1/12/2018 11/14/2018 Industrial Process Effic, Technical Review and Program S 1/12/2018 12/14/2018 Industrial Process Effic, Technical Review and Program S 1/12/2018 12/14/2018 Industrial Process Effic, Technical Review and Program S 1/12/2018 12/14/2018 Industrial Process Effic, Technical Review and Program S 1/12/2018 12/	15,000
Switched Source LLC 1/15/2019 76 West, 76 Wes	ards 2,500
Switched Source PB LLC 1/17/2019 High Performing Grid, PON 3770 CATB - Phase Balance Syracuse University 1/15/2019 NextGen HVAC, PON3519 Round 1 Systems Management Planning, Inc. 10/23/2018 NYSERDA ADMINISTRATION, NetApp 24/0 2018 - 2019 34/2019 NYSERDA ADMINISTRATION, Webex Services - 2019 20 3227/2019 NYSERDA ADMINISTRATION, Webex Services - 2019 20 327/2019 NYSERDA ADMINISTRATION, VMWare Airwatch 2019 - 2 3227/2019 NYSERDA ADMINISTRATION, Webex Services - 2019 20 Taitem Engineering, P.C. 10/15/2018 <200KW PV, NY-Sun	wards 2,500
Syracuse University 1/15/2019 NextGen HVAC, PON3619 Round 1 Systems Management Planning, Inc. 10/23/2018 NYSERDA ADMINISTRATION, NetApp 2240 2018 - 2019 3/4/2019 NYSERDA ADMINISTRATION, NetApp 2240 2018 - 2019 20 3/4/2019 NYSERDA ADMINISTRATION, Verbulls Subscription 1 y NYSERDA ADMINISTRATION, Webex Services - 2019 20 3/4/2019 Taitem Engineering, P.C. 10/12/2018 <200KW PV, NY-Sun	250,000
Systems Management Planning, Inc. 10/23/2018 NYSERDA ADMINISTRATION, NetApp 2240 2018 - 2019 3/4/2019 NYSERDA ADMINISTRATION, NetApp 2240 2018 - 2019 3/27/2019 NYSERDA ADMINISTRATION, Vebex Services - 2019 20 3/27/2019 C200KW PV, NY Sun 10/15/2018 Multifam Performance Pgm, 3695 TWO Umbrella Agreemed 10/25/2018 Technical Services, RFP3628FlexTechConsultUmbrella 10/29/2018 2200KW PV, NY Sun 11/14/2018 Industrial Process Effic, Technical Review and Program S 12/11/2018 2200KW PV, NY Sun Tech Valley Talent, LLC 11/2/2018 EVALUATION, RFP3143 Umbrella Agreement 1/10/2019 NYSERDA ADMINISTRATION, REP3143 Umbrella Agreement NYSERDA ADMINISTRATION, RFP3143 Umbrella Agreement 1/10/2019 NYSERDA ADMINISTRATION, RFP3143 Umbrella Agreement NYSERDA ADMINISTRATION, RFP3143 Umbrella Agreement	2,000,000
3/4/2019 NYSERDA ADMINISTRATION, AeroHive Subscription 1 y NYSERDA ADMINISTRATION, Mebex Services - 2019 20 3/27/2019 NYSERDA ADMINISTRATION, Webex Services - 2019 20 3/27/2019 NYSERDA ADMINISTRATION, Webex Services - 2019 20 3/27/2019 NYSERDA ADMINISTRATION, VMWare Alivasch 2019 - 2 Taitem Engineering, P.C. 10/12/2018 <200KW PV, NY-Sun	273,16
NYSERDA ADMINISTRATION, Webex Services - 2019 20 3/27/2019 NYSERDA ADMINISTRATION, Webex Services - 2019 20 Faitem Engineering, P.C. 10/12/2018 <200KW PV, NY-Sun	6,642
3/27/2019 NYSERDA ADMINISTRATION, VMWare Airwatch 2019 - 2 Taitem Engineering, P.C. 10/12/2018 <200KW PV, NY-Sun	ear 5,414
Taitem Engineering, P.C. 10/12/2018 <200KW PV, NY-Sun	20 19,01
Initial and the second secon	020 6,43
10/25/2018 Technical Services, RFP3628FlexTechConsultUmbrella 10/29/2018 <200KW PV, NY Sun	5,218
10/29/2018 <200KW PV, NY Sun	nt 141,073
11/14/2018 Industrial Process Effic, Technical Review and Program S 11/28/2018 Agriculture Energy Eff Pgm, RFP3628FlexTechConsultUm 12/11/2018 <200KW PV, NY Sun	2,500
11/28/2018 Agriculture Energy Eff Pgm, RFP3628FlexTechConsulture 12/11/2018 <200KW PV, NY Sun	12,46
12/11/2018 <200KW PV, NY Sun	8,453
12/11/2018 <200KW PV, NY Sun	prella 2,500
12/14/2018Technical Services, RFP3628FlexTechConsultUmbrella12/17/2018<200KW PV, NY Sun	12,62
12/17/2018<200KW PV, NY Sun3/20/2019Commercial New Construc, RFP3771 Umbrella ContractTarget Corporation2/5/2019Tech Valley Talent, LLC11/2/201811/2/2019NYSERDA ADMINISTRATION, SecureAuth 2 new + maint1/10/2019NYSERDA ADMINISTRATION, SecureAuth 2 new + maintNYSERDA ADMINISTRATION, RFP3143 Umbrella Agreem1/2/2019NYSERDA ADMINISTRATION, RFP3143 Umbrella Agreem3/25/2019NYSERDA ADMINISTRATION, RFP3143 Umbrella Agreem3/25/2019NYSERDA ADMINISTRATION, RFP3143 Umbrella Agreem1/22/2019NYSERDA ADMINISTRATION, RFP3143 Umbrella Agreem1/22/2019NYSERDA ADMINISTRATION, Agile Team Training CampTEKSYSTEMS Global Services, LLC12/31/20181/22/2019NYSERDA ADMINISTRATION, Agile Team Training CampTEKSystems Inc11/21/20181/12/2018NYSERDA ADMINISTRATION, Agile Team Training CampTern Construction & Development, LLC11/15/20181/10/2019Prof & Expert Engagement, Membership Business CouncilThe Business Council of NYS, Inc.11/10/20191/10/2018Air Source Heat Pumps, NYC ASHP Supply Chain Resear1/19/2018ENERGY ANALYSIS, RFQL 3685 R2 Umbrella1/19/2018On-Site Energy Manager, Task Order #3 from 1045421/24/2019Off-Shore Wind Pre-Dev Act, RFP 3462 Umbrella Agreem1/22/2019Rmve Barriers Dist Enrgy Storg, TWO # 31/22/2019Rmve Barriers Dist Enrgy Storg, TWO # 31/22/2019Rmve Barriers Dist Enrgy Storg, TWO # 31/20/2019Eval MCDC Cross Cutting, TWO#2-Top	2,500
3/20/2019 Commercial New Construc, RFP3771 Umbrella Contract Farget Corporation 2/5/2019 <200KW PV, NY-Sun	5,263
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Tech Valley Talent, LLC11/2/2018EVALUATION, RFP3143 Umbrella Agreement1/10/2019NYSERDA ADMINISTRATION, SecureAuth 2 new + maint NYSERDA ADMINISTRATION, TWO26 Server Ops2/26/2019NYSERDA ADMINISTRATION, RFP3143 Umbrella Agreement3/25/2019NYSERDA ADMINISTRATION, RFP3143 Umbrella Agreement3/25/2019NYSERDA ADMINISTRATION, RFP3143 Umbrella AgreementTecogen3/5/2019Combined Heat and Power, CHPA - 315 East 68thTEKSYSTEMS Global Services, LLC12/31/2018NYSERDA ADMINISTRATION, Agile Team Training CampTEKsystems Inc11/21/2018NYSERDA ADMINISTRATION, Agile Team Training CampTere Construction & Development, LLC11/15/2018Low Rise New Construction, New ConstructionTeres Construction & Development, LLC11/15/2018Low Rise New Construction, New ConstructionThe Business Council of NYS, Inc.11/0/2019Prof & Expert Engagement, Membership Business Council10/25/2018Air Source Heat Pumps, NYC ASHP Supply Chain Resear11/9/2018ENERGY ANALYSIS, RFQL 3685 R2 Umbrella12/13/2018On-Site Energy Manager, Task Order #3 from 1045421/24/2019Off-Shore Wind Pre-Dev Act, RFP 3462 Umbrella Agreement1/28/2019Rmve Barriers Dist Enrgy Storg, TWO # 31/28/2019Rmve Barriers Dist Enrgy Storg, TWO # 31/30/2019Eval MCDC Cross Cutting, TWO#2-Top_Down_Analysis	71,26
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1/22/2019 NYSERDA ADMINISTRATION, TWO EVConsultant Tern Construction & Development, LLC 11/15/2018 Low Rise New Construction, New Construction Tesla Energy Operations Inc 10/25/2018 >200KW PV, NY Sun The Business Council of NYS, Inc. 1/10/2019 Prof & Expert Engagement, Membership Business Council The Cadmus Group, LLC 10/22/2018 >200KW PV, RFQL3434 Cat1 NYSUN C/I 10/25/2018 Air Source Heat Pumps, NYC ASHP Supply Chain Resear 11/9/2018 ENERGY ANALYSIS, RFQL 3685 R2 Umbrella 12/13/2018 On-Site Energy Manager, Task Order #3 from 104542 1/24/2019 Off-Shore Wind Pre-Dev Act, RFP 3462 Umbrella Agreement 1/28/2019 Rmve Barriers Dist Enrgy Storg, TWO # 3 1/30/2019 Eval MCDC Cross Cutting, TWO#2-Top_Down_Analysis	
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The Business Council of NYS, Inc. 1/10/2019 Prof & Expert Engagement, Membership Business Council The Cadmus Group, LLC 10/22/2018 >200KW PV, RFQL3434 Cat1 NYSUN C/I 10/25/2018 Air Source Heat Pumps, NYC ASHP Supply Chain Resear 11/9/2018 ENERGY ANALYSIS, RFQL 3685 R2 Umbrella 12/13/2018 On-Site Energy Manager, Task Order #3 from 104542 1/24/2019 Off-Shore Wind Pre-Dev Act, RFP 3462 Umbrella Agreement 1/28/2019 Rmve Barriers Dist Enrgy Storg, TWO # 3 1/30/2019 Eval MCDC Cross Cutting, TWO#2-Top_Down_Analysis	11,250
The Cadmus Group, LLC 10/22/2018 >200KW PV, RFQL3434 Cat1 NYSUN C/I 10/25/2018 Air Source Heat Pumps, NYC ASHP Supply Chain Resear 11/9/2018 ENERGY ANALYSIS, RFQL 3685 R2 Umbrella 12/13/2018 On-Site Energy Manager, Task Order #3 from 104542 1/24/2019 Off-Shore Wind Pre-Dev Act, RFP 3462 Umbrella Agreement 1/28/2019 Rmve Barriers Dist Enrgy Storg, TWO # 3 1/30/2019 Eval MCDC Cross Cutting, TWO#2-Top_Down_Analysis	868,750
10/25/2018Air Source Heat Pumps, NYC ASHP Supply Chain Resear11/9/2018ENERGY ANALYSIS, RFQL 3685 R2 Umbrella12/13/2018On-Site Energy Manager, Task Order #3 from 1045421/24/2019Off-Shore Wind Pre-Dev Act, RFP 3462 Umbrella Agreement1/28/2019Rmve Barriers Dist Enrgy Storg, TWO # 31/30/2019Eval MCDC Cross Cutting, TWO#2-Top_Down_Analysis	6,08
11/9/2018ENERGY ANALYSIS, RFQL 3685 R2 Umbrella Mkt Char: Tech Assist, RFQL 3685 R2 Umbrella12/13/2018On-Site Energy Manager, Task Order #3 from 1045421/24/2019Off-Shore Wind Pre-Dev Act, RFP 3462 Umbrella Agreement1/28/2019Rmve Barriers Dist Enrgy Storg, TWO # 31/30/2019Eval MCDC Cross Cutting, TWO#2-Top_Down_Analysis	100,000
Mkt Char: Tech Assist, RFQL 3685 R2 Umbrella12/13/2018On-Site Energy Manager, Task Order #3 from 1045421/24/2019Off-Shore Wind Pre-Dev Act, RFP 3462 Umbrella Agreement1/28/2019Rmve Barriers Dist Enrgy Storg, TWO # 31/30/2019Eval MCDC Cross Cutting, TWO#2-Top_Down_Analysis	sh 50,000
12/13/2018On-Site Energy Manager, Task Order #3 from 1045421/24/2019Off-Shore Wind Pre-Dev Act, RFP 3462 Umbrella Agreement1/28/2019Rmve Barriers Dist Enrgy Storg, TWO # 31/30/2019Eval MCDC Cross Cutting, TWO#2-Top_Down_Analysis	90,333
1/24/2019Off-Shore Wind Pre-Dev Act, RFP 3462 Umbrella Agreeme1/28/2019Rmve Barriers Dist Enrgy Storg, TWO # 31/30/2019Eval MCDC Cross Cutting, TWO#2-Top_Down_Analysis	30,000
1/28/2019Rmve Barriers Dist Enrgy Storg, TWO # 31/30/2019Eval MCDC Cross Cutting, TWO#2-Top_Down_Analysis	139,97
1/30/2019 Eval MCDC Cross Cutting, TWO#2-Top_Down_Analysis	nt 150,000
	173,000
EVALUATION TWO#2 Ten Down Applying	49,99
EVALUATION, TWO#2-Top_Down_Analysis	175,00
2/8/2019 EVALUATION, Performance Management	50,000
2/22/2019 Eval MCDC EE Master Soft Cost, TWO#4 Soft Cost study	332,03
EVALUATION, TWO#4 Soft Cost study	282,84
2/26/2019 Code to Zero, RFQ3183 Umbrella Agreement	491,512
3/4/2019 ENERGY ANALYSIS, TWO#3 -Supply Curve Analysis	45,00
3/12/2019 LMI On Bill Tariff Study, Analysis of On-Bill Financing	49,000
3/20/2019 Environmental Research, TWO 3 - RegionalFundingEntity 3/28/2019 EVALUATION, RFP3916 Res Bldg Stock Assessm	104,092

The Cadmus Group, LLC	3/29/2019	EVALUATION, TWO#2-Top_Down_Analysis	13,508
	0/20/2010	OREC: Technical Support, RFP 3462 Umbrella Agreement	250,00
The Community Builders, Inc.	10/30/2018	Low Rise New Construction, New Construction	33,80
·····, ·····	12/4/2018	Low Rise New Construction, New Construction	75,00
	12/27/2018	Multifam New Construction, New Construction	187,40
The Garrick Co., LLC	2/6/2019	WEST VALLEY DEVELOPMENT PROGRAM, Probabilistic Eval.	44,27
The Levy Partnership, Inc.	10/9/2018	NextGen HVAC, Downstate gas fired heat pump	700,30
	3/8/2019	Air Source Heat Pumps, NextGen HVAC Innovation	424,70
		NextGen HVAC, NextGen HVAC Innovation	5,15
The Radiant Store	10/24/2018	Renewable Heat NY, Radiant Store - Sievers	12,00
		Renewable Heat NY, Radiant Store - Triumpho	7,00
	11/16/2018	Talent Pipeline:CE and OJT, OJT PON 3982	5,76
	11/19/2018	Renewable Heat NY, Radiant Store - Polak	12,00
	11/30/2018	Renewable Heat NY, Radiant - Monastery	12,00
	12/4/2018	Renewable Heat NY, Radiant - Cominole	7,00
	2/13/2019	Renewable Heat NY, Radiant Store - Yelich Part 2	21,00
	2/14/2019	Talent Pipeline:CE and OJT, OJT HIRE	6,00
The Real Estate Board of New York, Inc.	12/3/2018	Commercial Real Estate Ten, 2018 PropTech Challenge	12,50
The Renewables Consulting Group, LLC	11/5/2018	Nat'l OffShWind R&D Consortium, RCG work for OSW Consorti	159,34
		RCG work for OSW Consortium	80,65
	11/21/2018	Off-Shore Wind Pre-Dev Act, RFP 3462	99,69
	1/9/2019	Off-Shore Wind Pre-Dev Act, RFP 3462	59,98
The Research Foundation for the State	3/28/2019	Multifam Performance Pgm, 2019 NYS Green Buildings Conf	1,31
		New Construction- Housing, 2019 NYS Green Buildings Conf	2,62
		Retrofit NY, 2019 NYS Green Buildings Conf	1,31
The RF of SUNY Binghamton University	2/15/2019	Energy Storage Tech/Prod Dev, PON 3585 R2	1,000,00
The Source Service Station, Inc.	11/15/2018	FUEL NY, PGI00259 - The Source Service	39,85
The Trustees of Columbia University	11/19/2018	Cleantech EIR, PON 3819	4,000,00
Thornton Tomasetti, Inc.	10/9/2018	Retrofit NY, Multifamily	18,00
ThunderCat Technology LLC	12/3/2018	NYSERDA ADMINISTRATION, Atlassian (Jira) - Phase 1	105,30
	1/14/2019	NYSERDA ADMINISTRATION, Jira Software User Count	18,33
	2/6/2019	NYSERDA ADMINISTRATION, Jira Plug-in Licenses	5,06
	2/11/2019	NYSERDA ADMINISTRATION, Precise Peoplesoft - Remote	15,12
	2/13/2019	NYSERDA ADMINISTRATION, Circuit for NYC Office	34,68
		NYSERDA ADMINISTRATION, Docusign - Subscription 19-20	84,51
	3/4/2019	NYSERDA ADMINISTRATION, Precise Peoplesoft Software	66,84
Filcon NY , Inc.	12/3/2018	Industrial Process Effic, Industrial Process Efficiency	32,33
	1/11/2019	Industrial Process Effic, Industrial Process Efficiency	30,91
Tishman Speyer	2/25/2019	NEW CONSTRUCTION PROGRAM, NCP14019 - Gotham Cent	248,31
Titus Mountain Family Ski Center	10/3/2018	Industrial Process Effic, Industrial Process Efficiency	240,00
Montante Solar Developments, LLC	10/3/2018	<200KW PV, NY Sun	9,72
	10/5/2018	<200KW PV, NY Sun	90,88
	2/21/2019	<200KW PV, PON 2112 NY SUN	88,20
Toggenburg Mountain	10/3/2018	Industrial Process Effic, Industrial Process Efficiency	35,20
Fompkins Cortland Community College	3/5/2019	Technical Services, OsEM18-C - Tompkins Cortland	83,70
Fown of Ancram	11/2/2018	CEC400050 - Town of Ancram	30,00
		Clean Energy Communities, CEC400050 - Town of Ancram	50,00
Town of Ashford	10/12/2018	Clean Energy Communities, CEC101538 - Town of Ashford	50,00
Fown of Charleston	10/16/2018	Clean Energy Communities, PON 3298 CEC	50,00
Γown of Danby	12/20/2018	Clean Energy Communities, CEC001242 - Town of Danby	99,81
Town of Ghent	3/13/2019	CEC400048 - Town of Ghent	5,00
		Clean Energy Communities, CEC400048 - Town of Ghent	30,00
Town of Hamden	3/4/2019	Clean Energy Communities, CEC001382 - Town of Hamden	50,00
Town of Humphrey	3/28/2019	Clean Energy Communities, CEC101529 - Town of Humphrey	50,00
Town of Huntington	11/15/2018	CLEANER GREENER COMMUNITIES, Town of Huntington	250,00
Town of Keene	10/12/2018	Clean Energy Communities, CEC701169 - Town of Keene	50,000

Contractor Town of Middletown	2/19/2019	Contract Description Clean Energy Communities, CEC001299 - Town of Middletown	Total Contract Amoun
	3/4/2019		
Town of New Scotland	3/4/2019	Clean Energy Communities, Communities & Local Government Communities & Local Government	50,00 30,00
Town of Queensbury	1/16/2019	Clean Energy Communities, CEC400080 - Town of Queensbury	50,00
Town of Richland	3/21/2019	Clean Energy Communities, CEC400000 - Town of Queensbury	50,00
Town of Rosendale			
Town of Smithtown	11/16/2018	Clean Energy Communities, PON 3298 CEC	50,00 249,30
Town of Somers	10/12/2018	CLEANER GREENER COMMUNITIES, Town of Smithtown	
	10/17/2018	Clean Energy Communities, CEC500636 - Town of Somers	50,00
Town of Tonawanda Town of Webb	12/20/2018	Clean Energy Communities, Town of Tonawanda	150,00
	11/15/2018	Industrial Process Effic, Industrial Process Efficiency	66,20
Trane		Real Time Enrgy Management, Trane Us - 41 S Main St - RTEM	
	1/7/2019	Real Time Enrgy Management, Trane Us Inc-Multisite-RTEM	27,42
Transit Wireless	2/19/2019	Industrial Process Effic, Industrial Process Efficiency	30,00
TRC Energy Services	11/7/2018	REC:CES REC System Dev Costs, Staff Augmentation Services	48,01
	11/21/2018	Flexible Tech Assistance, Staff Augmentation Services	100,46
		FLEXIBLE TECHNICAL ASSISTANCE, Staff Augmentation Ser	98,88
	1/15/0010	K-12 SCHOOLS, Staff Augmentation Services	199,34
	1/15/2019	>200KW PV, Staff Augmentation Services	345,46
		Commercial New Construc, Staff Augmentation Services	74,36
		Low Rise New Construction, Staff Augmentation Services	89,23
		Multifam New Construction, Staff Augmentation Services	84,27
		New Construction- Commercial, Staff Augmentation Services	74,36
		New Construction- Housing, Staff Augmentation Services	173,51
	1/16/2019	>200KW PV, Staff Augmentation Services	146,25
		CI Engy Siting & Soft Cost Red, Staff Augmentation Services	48,75
		Commercial New Construc, Staff Augmentation Services	20,86
		Low Rise New Construction, Staff Augmentation Services	25,03
		Multifam New Construction, Staff Augmentation Services	23,64
		New Construction- Commercial, Staff Augmentation Services	20,86
		New Construction- Housing, Staff Augmentation Services	48,67
1/17/2019		Rmve Barriers Dist Enrgy Storg, Staff Augmentation Services	48,75
	1/17/2019	Commercial New Construc, Staff Augmentation Services	46,17
		Low Rise New Construction, Staff Augmentation Services	55,40
	Multifam New Construction, Staff Augmentation Services	52,33	
		New Construction- Commercial, Staff Augmentation Services	46,17
		New Construction- Housing, Staff Augmentation Services	107,73
	1/22/2019	Industrial Process Effic, Technical Review and Program S	3,86
	2/27/2019	Commercial Real Estate Ten, SA.047_TWO #19 - EPE	89,72
		REV Campus Challenge, SA.047_TWO #19 - EPE	89,72
		Technical Services, SA.047_TWO #19 - EPE	89,72
	3/27/2019	Renewable Heat NY, Technical Review and Program S	298,80
TRC Engineers, Inc.	11/9/2018	NextGen HVAC, PON3519 Round 1.	343,94
	3/8/2019	Informat. Products & Brokering, TWO #1	49,93
Trees New York	10/22/2018	GREENING THE BRONX, Efficiency Planning & Engineer	330,67
Trelina Solar Energy Center LLC	3/21/2019	REC:CES REC Contracts, North Light Energy Center	63,753,99
Trinity Heating & Air, Inc.	3/5/2019	<200KW PV, NY-Sun	5,51
Trinity NY Development LLC	1/25/2019	Multifam New Construction, New Construction	97,40
FROPICANA MART INC	11/19/2018	OTHER PROGRAM AREA, PGI00249 - Tropicana Mart Inc.	97,60
Troy Web Consulting, LLC	11/19/2018	NYSERDA ADMINISTRATION, Troy Web Hosting - Cloud 1 yr	7,38
True Energy Solutions	1/24/2019	Talent Pipeline:CE and OJT, OJJT HIRE	5,76
	3/7/2019	Talent Pipeline:CE and OJT, OJT hire	6,40
	3/18/2019	Talent Pipeline:CE and OJT, OJT HIRE	6,40
TurnKey Internet, Inc.	12/31/2018	Industrial Process Effic, Industrial Process Efficiency	421,27
	1/7/2019	Industrial Process Effic, Industrial Process Efficiency	150,00
TW NY Properties LLC	2/27/2019	NEW CONSTRUCTION PROGRAM, NCP14049-TWI Hudson Y	368,850

U.S. Department of Energy/Wv	10/22/2018	Contract Description FFY 2019 WVDP Cost Share	Total Contract Amount 10,200,000
U.S. Green Building Council, NY Chapter		Workforce Industry Partnership, PON 3715 Workforce Training	198,856
0.3. Green Building Council, NT Chapter	2/21/2019	Campus/Technical Assistance, Urban Green Council Electrific	50,000
Unique Comp Inc.	10/22/2018	Pay for Performance, RFP3143 Umbrella Agreement	116,480
	11/19/2018	NYSERDA ADMINISTRATION, RFP3143 Umbrella Agreement	251,680
	1/10/2019	NYSERDA ADMINISTRATION, RFP3143 Umbrella Agreement	165,750
	2/11/2019	NYSERDA ADMINISTRATION, TWO SQL ETL Dev.	176,800
	2/15/2019	NYSERDA ADMINISTRATION, TWO Sr. Systems Admin Bha	176,800
	3/15/2019	NYSERDA ADMINISTRATION, TWO 1 Server Op's Support	203,775
	3/25/2019	NYSERDA ADMINISTRATION, RFP3143 Umbrella Agreement	102,180
Unique Electric Solutions LLC	11/2/2018	Electric Vehicles - Innovation, Clean Transportation	400,000
Unique Electric Solutions of NYS LLC	11/29/2018	Electric Vehicles - Innovation, Clean Transportation	400,000
Upstate Capital Association of New York	11/16/2018	OTHER PROGRAM AREA, NY Business Plan Comp Sponsor	25,000
	3/21/2019	Prof & Expert Engagement, UCANY 2019 Sponsorship	40,000
Upstate Venture Connect	3/22/2019	Prof & Expert Engagement, UVC 2019 Sponsorship	25,000
Urban League of Rochester, NY, Inc	10/19/2018	Low Rise New Construction, New Construction	19,000
-	12/10/2018	Multifam New Construction, New Construction	22,000
US Ceiling CORP	11/27/2018	Talent Pipeline:CE and OJT, OJT HIRE	9,229
-	3/26/2019	Talent Pipeline:CE and OJT, OJT HIRE	6,240
US Energy Concierge Inc	1/22/2019	<200KW PV, NY Sun	7,655
USE ACQUISITION LLC	12/6/2018	Real Time Enrgy Management, USE - 120 W 97th St - RTEM	68,668
Van Blarcom Closures, Inc.	1/28/2019	INDUSTRIAL PROCESS EFFICIENCY, Industrial Process Effici	122,249
Vecino Group New York, LLC	1/25/2019	Multifam New Construction, New Construction	92,000
Venture Home Solar LLC	1/23/2019	<200KW PV, PON 2112 NY SUN	5,175
		PON 2112 NY SUN	16,481
Verizon Communications Inc	1/15/2019	Industrial Process Effic, Industrial Process Efficiency	144,925
	3/11/2019	Industrial Process Effic, Industrial Process Efficiency	17,468
Vermont Energy Investment Corporation	11/19/2018	Air Source Heat Pumps, Umbrella Contract	25,000
	1/10/2019	Pay for Performance, Umbrella Contract	272,382
Vertiv Services, Inc.	1/15/2019	Industrial Process Effic, Industrial Process Efficiency	38,151
Vidaris, Inc.	12/13/2018	Code to Zero, TWO#1-DOS Rulemaking Support	102,660
Village of Amityville	10/3/2018	CLEANER GREENER COMMUNITIES, Village of Amityville	50,000
Village of Champlain	1/24/2019	Clean Energy Communities, CEC701104 - Village of Champla	50,000
Village of Ilion	10/22/2018	CLEANER GREENER COMMUNITIES, CEC600840 - Village of	100,000
Village of Mill Neck	10/15/2018	CLEANER GREENER COMMUNITIES, Village of Mill Neck	50,000
Village of Saranac Lake	10/31/2018	Clean Energy Communities, CEC701022 - Village of Saranac	50,000
Village of Waterville	3/25/2019	Clean Energy Communities, CEC600897 Village of Watervill	50,000
Village of West Winfield	3/25/2019	Clean Energy Communities, CEC600914 - Village of West Wi	50,000
Vincents Heating and Fuel Service, LLC	1/7/2019	Renewable Heat NY, Vincents Heating - Ostrander	20,750
Viola Homes Inc.	10/3/2018	<200KW PV, NY Sun	5,434
	10/22/2018	<200KW PV, NY Sun	6,038
	10/23/2018	<200KW PV, NY Sun	8,694
	11/6/2018	<200KW PV, NY Sun	6,279
	11/21/2018	<200KW PV, NY Sun	5,317
	12/11/2018	<200KW PV, NY Sun	5,143
	3/27/2019	<200KW PV, PON 2112 NY SUN	8,663
Vivint Solar	10/30/2018	<200KW PV, NY Sun	8,157
	1/23/2019	<200KW PV, PON 2112 NY SUN	5,392
	3/20/2019	<200KW PV, PON 2112 NY SUN	5,714
W & E Phillips Locksmith, Inc	1/11/2019	17CC Card Readers Reception	13,820
Wagner College	1/15/2019	REV Campus Challenge, RM27 - Wagner College	118,945
Walden NY 1, LLC	12/14/2018	>200KW PV, NY-Sun C&I	718,200
Warex Terminals Corporation	11/14/2018	FUEL NY, PGI00064 - Warex Terminals Cor	8,295
Warren Washington Association for Me	2/27/2019	Low Rise New Construction, New Construction	29,000
Wartburg Home of the Evangelical Luth	10/29/2018	Technical Services, OsEM12-C - Wartburg	109,986
Watkins Glen Solar Energy Center, LLC	3/21/2019	REC:CES REC Contracts, Watkins Glen Solar Energy Cntr	43,413,832

	Total Contract Amount
	7,296
	7,296
3 - 534 West 25t	67,321
nty Water-FTC	24,027
	67,150
ency	828
	701,663
	718,200
	168,000
	100,000
) - Whole Foods	87,834
1 - Whole Foods	97,738
	64,400
ency	125,000
47th St-CT	9,950
Program S	60,401
g Place-CT	6,091
g & Engineer	228,891
echConsultUmb	56,400
on Services	30,046
i i i i i i i i i i i i i i i i i i i	30,046
ion Services	30,046
es	60,092
	480,000
	66
	5,355
	7,650
ency	299,600
	5,120
	79,800
	47,600
	21,850
Contract	135,470
ency	16,281
ency	10,400
-	1,594,080
Cooling	150,000
Ave - RTEM	44,611
ald YMCA	179,587
	1,776,190
	1,766,682
	319,735
	2,574,085,768
	31,250,000

Contractor	Contract Description	Total Contract Amount
1st Light Energy, Inc.	<200KW PV, NY Sun	56,200
	<200KW PV, NY-Sun	102,500
BM Company	Industrial Process Effic, Industrial Process Efficiency	148,578
5 Hanover Square NY Owner LLC	Flexible Tech Assistance, FlexTech Program - PON 1746	28,200
10th Ave Petroleum LLC	FUEL NY, PGI00296 - 10th Avenue Petrole	57,893
	OTHER PROGRAM AREA, PGI00296 - 10th Avenue Petrole	68,703
33-00 Northern Boulevard LLC	FLEXIBLE TECHNICAL ASSISTANCE, FlexTech Program - PON1746	12,260
38 Astoria Owners Corp	MULTIFAMILY PERFORMANCE PROGRAM, Multifamily	81,000
46 Nevins Street Associates LLC	NEW CONSTRUCTION PROGRAM, NCP12450 - EVEN Hotel Brookl	41,287
31 Prospect Owner LLC	NEW CONSTRUCTION PROGRAM, NCP11961 - 81 Prospect Street	156,782
03 Gleneida Avenue LLC	Industrial Process Effic, Industrial Process Efficiency	86,000
155 East Main LLC	NEW CONSTRUCTION PROGRAM, NCP12398 - Hilton Garden Inn R	10,700
401 West Shore Blvd Holdings	NEW CONSTRUCTION PROGRAM, NCP12498 - NewCut Facility	9,187
75 Fuel Inc	FUEL NY, PGI00299 - 575 Fuel Inc.	30,098
	OTHER PROGRAM AREA, PGI00299 - 575 Fuel Inc.	79,228
75 Ownership, LLC	Flexible Tech Assistance, FlexTech Program	17,500
70 Electric Corp.	NY-Sun	57,660
007 Driggs Avenue Associates L.P.	MULTIFAMILY PERFORMANCE PROGRAM, Multifamily	25,200
020 Route 109 Corp.	FUEL NY, PGI00239 - 1020 Route 109 Corp	50,890
133 Manhattan Avenue, LLC	MULTIFAMILY PERFORMANCE PROGRAM, Multifamily	347,664
AC Woodhaven Realty Corp.	FUEL NY, PGI00113 - AC Woodhaven Realty	135,376
Access Supports for Living Inc.	Low Rise New Construction, New Construction	72,800
Accord Power, Inc.	<200KW PV, NY Sun	57,959
	NY-Sun	18,900
corda Therapeutics Inc	Industrial Process Effic, Industrial Process Efficiency	9,280
Active Solar Development, LLC	<200KW PV, NY Sun	135,999
	RENEWABLE THERMAL, Solar Thermal Incentive	122,527
Adam C. Boese	Agriculture Energy Eff Pgm, RFP3628FlexTechConsultUmbrella	83,020
	Commercial New Construc, RFP3771 Umbrella Contract	3,000
	Technical Services, RFP3628FlexTechConsultUmbrella	89,795
Adelphi Hotel Partners LLC	NEW CONSTRUCTION PROGRAM, NCP11419 - Adelphi Hotel	28,450
dirondack Area Network	NYSERDA ADMINISTRATION, Video Recording Services	17,40
Adirondack Battery & Solar, LLC	<200KW PV, NY Sun	8,750
• • • • •	<200KW PV, NY Sun	5,208
ADK Solar		
	NY-SUN, NY-Sun Comp. Liberty Distribut	
AE Solar Energy Inc.		456,120
AE Solar Energy Inc. Aeonsolar	NY-SUN, NY-Sun Comp. Liberty Distribut	456,120 21,000
AE Solar Energy Inc. Aeonsolar AeroFarms	NY-SUN, NY-Sun Comp. Liberty Distribut RENEWABLE HEAT NY, Aeon Heating - Baillargeon	456,120 21,000 2,309,750
AE Solar Energy Inc. Aeonsolar AeroFarms Akoustis, Inc.	NY-SUN, NY-Sun Comp. Liberty Distribut RENEWABLE HEAT NY, Aeon Heating - Baillargeon INDUSTRIAL PROCESS EFFICIENCY, Industrial Process Efficiency	456,120 21,000 2,309,750 98,039
AE Solar Energy Inc. Aeonsolar AeroFarms Akoustis, Inc. Albany Housing Authority	NY-SUN, NY-Sun Comp. Liberty Distribut RENEWABLE HEAT NY, Aeon Heating - Baillargeon INDUSTRIAL PROCESS EFFICIENCY, Industrial Process Efficiency INDUSTRIAL PROCESS EFFICIENCY, Industrial Process Efficiency	456,120 21,000 2,309,750 98,039 157,000
AE Solar Energy Inc. Aeonsolar AeroFarms Akoustis, Inc. Albany Housing Authority Albany Management	NY-SUN, NY-Sun Comp. Liberty Distribut RENEWABLE HEAT NY, Aeon Heating - Baillargeon INDUSTRIAL PROCESS EFFICIENCY, Industrial Process Efficiency INDUSTRIAL PROCESS EFFICIENCY, Industrial Process Efficiency NEW YORK ENERGY STAR HOMES, New Construction NEW YORK ENERGY STAR HOMES, New Construction	456,126 21,000 2,309,756 98,038 157,000 101,000
AE Solar Energy Inc. Aeonsolar AeroFarms Akoustis, Inc. Albany Housing Authority Albany Management Albany Solar Solutions L.L.C.	NY-SUN, NY-Sun Comp. Liberty Distribut RENEWABLE HEAT NY, Aeon Heating - Baillargeon INDUSTRIAL PROCESS EFFICIENCY, Industrial Process Efficiency INDUSTRIAL PROCESS EFFICIENCY, Industrial Process Efficiency NEW YORK ENERGY STAR HOMES, New Construction NEW YORK ENERGY STAR HOMES, New Construction <200KW PV, NY-Sun	456,126 21,000 2,309,756 98,039 157,000 101,000 6,113
AE Solar Energy Inc. Aeonsolar AeroFarms Akoustis, Inc. Albany Housing Authority Albany Management Albany Solar Solutions L.L.C. Albany, City of,	NY-SUN, NY-Sun Comp. Liberty Distribut RENEWABLE HEAT NY, Aeon Heating - Baillargeon INDUSTRIAL PROCESS EFFICIENCY, Industrial Process Efficiency INDUSTRIAL PROCESS EFFICIENCY, Industrial Process Efficiency NEW YORK ENERGY STAR HOMES, New Construction NEW YORK ENERGY STAR HOMES, New Construction <200KW PV, NY-Sun	456,126 21,000 2,309,756 98,039 157,000 101,000 6,113 300,000
AE Solar Energy Inc. Aeonsolar AeroFarms Akoustis, Inc. Albany Housing Authority Albany Management Albany Solar Solutions L.L.C. Albany, City of, Albert V. Nurse	NY-SUN, NY-Sun Comp. Liberty Distribut RENEWABLE HEAT NY, Aeon Heating - Baillargeon INDUSTRIAL PROCESS EFFICIENCY, Industrial Process Efficiency INDUSTRIAL PROCESS EFFICIENCY, Industrial Process Efficiency NEW YORK ENERGY STAR HOMES, New Construction NEW YORK ENERGY STAR HOMES, New Construction <200KW PV, NY-Sun	456,126 21,000 2,309,756 98,039 157,000 101,000 6,113 300,000 9,999
ADK Solar AE Solar Energy Inc. Aeonsolar AeroFarms Akoustis, Inc. Albany Housing Authority Albany Management Albany Solar Solutions L.L.C. Albany, City of, Albert V. Nurse Alden Central School District Allegis Group Holdings Inc	NY-SUN, NY-Sun Comp. Liberty Distribut RENEWABLE HEAT NY, Aeon Heating - Baillargeon INDUSTRIAL PROCESS EFFICIENCY, Industrial Process Efficiency INDUSTRIAL PROCESS EFFICIENCY, Industrial Process Efficiency NEW YORK ENERGY STAR HOMES, New Construction NEW YORK ENERGY STAR HOMES, New Construction <200KW PV, NY-Sun	456,126 21,000 2,309,756 98,039 157,000 101,000 6,113 300,000 9,999 7,822 40,650

	Contract Description	Total Contract Amount
Contractor	Contract Description	Total Contract Amoun
Alliance for Green Heat	RENEWABLE HEAT NY, Energy and Environmental Perfo	232,350
Alliance for Housing Inc.	MULTIFAMILY PERFORMANCE PROGRAM, Multifamily	239,400
Alliance for Sustainable Energy, LLC	ADVANCED BUILDINGS, Advanced Buildings Technology	223,58
Alliant Techsystems Operations LLC	COMBINED HEAT AND POWER, Aero-thermodynamic CO2 separat	200,000
	RENEWABLES & DER INTEGRATION, Aero-thermodynamic CO2 se	200,000
Alta Planning + Design	CLEAN TRANSPORTATION, Advanced Transportation Techno	325,000
Altanova LLC	Commercial Real Estate Ten, Altanova - NY Post_Multi Site	9,994
	Commercial Real Estate Ten, Altanova-60 E 42nd St-CT	22,500
Alternative Power Solutions of NY, LLC	<200KW PV, NY Sun	33,44
Amberjack Solar LLC	>200KW PV, NY Sun	845,093
Ambrosino, DePinto & Schmieder	NEW CONSTRUCTION PROGRAM, Technical Assistance Services	91,402
AMERESCO, Inc.	EXISTING FACILITIES, EFP2624 - AMERESCO	45,148
American Energy Care, Inc.	<200KW PV, NY Sun	23,481
	<200KW PV, NY-Sun	23,657
American Solar Partners, LLC	<200KW PV, NY Sun	44,189
	<200KW PV, NY-Sun	5,012
	NY-Sun	34,720
Analysis Group, Inc.	Mkt Char: Tech Assist, Market Functions of DSP	50,000
Andrew Kessler	NEW YORK GREEN BANK, Transaction Support	50,000
Andrew T. Savaria	NEW CONSTRUCTION PROGRAM, PO9004-1 - NCP Plaques	20,00
Anjon of Bridgehampton Inc	FUEL NY, PGI00009 - Anjon of Bridgehamp	81,18
Anne Compton Savage	NEW YORK GREEN BANK, Metrics, Reporting & Evaluatio	50,000
Antares Group, Inc.	EXISTING FACILITIES, Technical Review and Program S	12,679
	Flexible Tech Assistance, RFP3628FlexTechConsultUmbrella	28,819
	INDUSTRIAL PROCESS EFFICIENCY, Industrial Process Efficiency	11,17
	INDUSTRIAL PROCESS EFFICIENCY, Technical Review and Progra	124,64
Apex Capital LLC	Industrial Process Effic, Industrial Process Efficiency	300,00
Apex Solar Power LLC	<200KW PV, NY Sun	41,59
	<200KW PV, NY-Sun	39,962
Applied Energy Group, Inc.	EMERGING TECHNOLOGY / ACCELERATED COMMERCIALIZATIO	223,672
Apprise, Incorporated	Affordable Housing Build & Dev, Research and analytic support	50,000
	Housing Analysis/Segmentation, Local coordination research	50,000
Arab Banking Corporation B.S.C.	Industrial Process Effic, Industrial Process Efficiency	16,83
Arcadis of New York, Inc.	Agriculture Energy Eff Pgm, FlexTech Consultant Selection	53,434
	Flexible Tech Assistance, FlexTech Consultant Selection	14,99
	Technical Services, RFP3628FlexTechConsultUmbrella	7,50
Arcadis U.S., Inc.	AGRICULTURE ENERGY EFFICIENCY, Tech Review & Program Staff	125,000
	Commercial New Construc, Tech Review & Program Staff	37,50
	EMERGING TECHNOLOGY / ACCELERATED COMMERCIALIZATIO	14,54
	EXISTING FACILITIES, Tech Review & Program Staff	29,77
	FUEL NY, Tech Review & Program Staff	168,474
	INDUSTRIAL PROCESS EFFICIENCY, Tech Review & Program Staff	25,86
	NEW CONSTRUCTION PROGRAM, Tech Review & Program Staff	212,50
	OTHER PROGRAM AREA Tech Review & Program Staff	113 848
Argus Media Inc.	OTHER PROGRAM AREA, Tech Review & Program Staff ENERGY ANALYSIS, Data & Markets	113,848

•	Total Contract Amount
, and the second s	1,042,437
NY-SUN, Cornell - Musgrave	1,687,833
FUEL NY, PGI00238 - Astoria Fuel & Conv	74,000
OTHER PROGRAM AREA, PGI00238 - Astoria Fuel & Conv	17,544
NYSERDA ADMINISTRATION, Checkpoint Firewall - 3 yrs	203,916
NYSERDA ADMINISTRATION, Checkpoint Management Server	55,164
FUEL NY, GSP00355 - Atlantis Management	10,000
FUEL NY, GSP00643 - Atlantis Management	10,000
FUEL NY, GSP00652 - Atlantis Management	10,000
FUEL NY, GSP00786 - Atlantis Management	10,000
FUEL NY, GSP00795 - Atlantis Management	10,000
<200KW PV, NY-Sun	5,766
ADVANCED BUILDINGS, Advanced Transportation Techno	48,500
CLEAN TRANSPORTATION, Advanced Transportation Techno	242,959
Small Wind, AWS Small Wind Explorer	36,000
OTHER PROGRAM AREA, 2018 76West Finals A/V Service	12,950
NEW CONSTRUCTION PROGRAM, NCP98324 - Curtiss Building	23,742
Industrial Process Effic, Technical Review and Program S	1,994
NEW YORK ENERGY STAR HOMES, New Construction	65,000
NEW CONSTRUCTION PROGRAM, NCP12987 - New Building aka Te	189,032
NEW CONSTRUCTION PROGRAM, NCP12154-Crtyrd Marriott-OFLT	48,275
NEW YORK GREEN BANK, Background Investigation Servi	2,500
Industrial Process Effic, Industrial Process Efficiency	28,000
NEW YORK ENERGY STAR HOMES, RES-NewConst(no longer in us	14,000
Agriculture Energy Eff Pgm, FlexTech Consultant Selection	13,200
Commercial Imp Assist, Tech Review_Support_Umbrella	5,000
Flexible Tech Assistance, FlexTech Consultant Selection	10,088
FLEXIBLE TECHNICAL ASSISTANCE, FlexTech Consultant Selection	23,400
FLEXIBLE TECHNICAL ASSISTANCE, Tech Review Support Umbre	459,000
Industrial Process Effic, Tech Review Support Umbrella	7,900
INDUSTRIAL PROCESS EFFICIENCY, FlexTech Consultant Selection	90,000
	27,996
	192,839
	6,900
	1,147,082
	496,497
	67,400
	6,000
	1,425,000
	225,000
	242,178
	157,159
LINTRONVIENTAL RESEARCH, WORKUNING BILOS and LOONS- Hg	540,040
Off Chara Wind Master Dian, DDI: TMO uncharally arrest and	00.000
Off-Shore Wind Master Plan, BRI: TWO umbrella agreement NYSERDA ADMINISTRATION, Seamless Docs 2019 - 2020	29,830
	FUEL NY, PGI00238 - Astoria Fuel & Conv OTHER PROGRAM AREA, PGI00238 - Astoria Fuel & Conv NYSERDA ADMINISTRATION, Checkpoint Firewall - 3 yrs NYSERDA ADMINISTRATION, Checkpoint Management Server FUEL NY, GSP00355 - Atlantis Management FUEL NY, GSP00643 - Atlantis Management FUEL NY, GSP00652 - Atlantis Management FUEL NY, GSP00786 - Atlantis Management FUEL NY, GSP00795 - Atlantis Management FUEL NY, GSP00795 - Atlantis Management FUEL NY, GSP00795 - Atlantis Management CLEAN TRANSPORTATION, Advanced Transportation Techno CLEAN TRANSPORTATION, Advanced Transportation Techno CLEAN TRANSPORTATION PROGRAM, NCP98324 - Curtiss Building Industrial Process Effic, Technical Review and Program S NEW YORK ENERGY STAR HOMES, New Construction NEW CONSTRUCTION PROGRAM, NCP12987 - New Building aka Te NEW CONSTRUCTION PROGRAM, NCP12987 - New Building aka Te NEW CONSTRUCTION PROGRAM, NCP1254-Crtyrd Marriot-OFLT NEW YORK GREEN BANK, Background Investigation Servi Industrial Process Effic, Industrial Process Efficiency NEW YORK GREEN BANK, Background Investigation Servi Industrial Process Effic, Industrial Process Efficiency NEW YORK ENERGY STAR HOMES, RES-NewConst(no longer in us Agriculture En

-	Total Contract Amour
Industrial Process Effic, Industrial Process Efficiency	90,00
Subscription/Data Access, Bloomberg Datafeed Access	22,50
ENERGY ANALYSIS, Bloomberg Datafeed Access	22,50
NEW YORK GREEN BANK, Bloomberg Datafeed Access	22,50
Subscription/Data Access, Bloomberg Datafeed Access	22,50
NEW CONSTRUCTION PROGRAM, NCP11834 - Nanuet Firehouse	13,89
FUEL NY, GSP00283 - Bolla EM Realty LLC	10,00
FUEL NY, GSP00287 - Bolla EM Realty LLC	10,00
FUEL NY, GSP00289 - Bolla EM Realty LLC	10,00
FUEL NY, GSP00291 - Bolla EM Realty LLC	10,00
FUEL NY, GSP00246 - Bolla Operating Cor	10,00
FUEL NY, GSP00247 - Bolla Operating Cor	10,00
FUEL NY, GSP00248 - Bolla Operating Cor	10,00
FUEL NY, GSP00249 - Bolla Operating Cor	10,00
FUEL NY, GSP00251 - Bolla Operating Cor	10,00
FUEL NY, GSP00281 - Bolla Operating Cor	10,00
FUEL NY, GSP00301 - Bolla Operating Cor	10,00
FUEL NY, GSP00302 - Bolla Operating Cor	10,00
FUEL NY, GSP00303 - Bolla Operating Cor	10,00
FUEL NY, GSP00304 - Bolla Operating Cor	10,00
FUEL NY, GSP00305 - Bolla Operating Cor	10,0
FUEL NY, GSP00312 - Bolla Operating Cor	10,0
FUEL NY, PGI00015 - Bolla Operating Cor	125,9
FUEL NY, PGI00040 - Bolla Operating Cor	112,6
FUEL NY, GSP00261 - Bolla Operating LI	10,00
	10,0
	10,00
	10,00
	10,00
	425,04
	21,50
	559,83
,	3,926,60
	163,20
	34
	41,12
	108,77
	146,5
	91,08
	153,95
	663,8
RENEWABLE THERMAL, RFQL and RFP 1224	1,08
	62,08
RENEWABLES & DER INTEGRATION, RFQL and RFP 1224	
RENEWABLES & DER INTEGRATION, REQL and REP 1224 REC:CES REC System Dev Costs, Large Scales Renewables Techni <200KW PV, NY Sun	45,50
	Subscription/Data Access, Bloomberg Datafeed Access ENERGY ANALYSIS, Bloomberg Datafeed Access NEW YORK GREEN BANK, Bloomberg Datafeed Access Subscription/Data Access, Bloomberg Datafeed Access NEW CONSTRUCTION PROGRAM, NCP11834 - Nanuet Firehouse FUEL NY, GSP00283 - Bolla EM Realty LLC FUEL NY, GSP00287 - Bolla EM Realty LLC FUEL NY, GSP00289 - Bolla EM Realty LLC FUEL NY, GSP00291 - Bolla EM Realty LLC FUEL NY, GSP00246 - Bolla Operating Cor FUEL NY, GSP00247 - Bolla Operating Cor FUEL NY, GSP00248 - Bolla Operating Cor FUEL NY, GSP00249 - Bolla Operating Cor FUEL NY, GSP00301 - Bolla Operating Cor FUEL NY, GSP00302 - Bolla Operating Cor FUEL NY, GSP00303 - Bolla Operating Cor FUEL NY, GSP00312 - Bolla Operating Cor FUEL NY, GSP00261 - Bolla Operating Cor FUEL NY, GSP00261 - Bolla Operating L FUEL NY, GSP00275 - Bolla Operating L FUEL NY, GSP00275 - Bolla Operating L FUEL NY, GSP00275 - Bolla Operating L FUEL NY, GSP00373 - Bolla Operating L FUEL NY, GSP00275 - Bolla Operating L

Contractor	Contract Description	Total Contract Amount
Bright Power, Inc.	Flexible Tech Assistance, FlexTech Consultant Selection	31,635
	NY-Sun	96,342
Brighton 50 LLC	NEW CONSTRUCTION PROGRAM, NCP11021 - Oceana Bld P	91,287
Broadway Housing Development Fund Compan	GREEN AFFORDABLE HOUSING, Multifamily	91,514
	MULTIFAMILY PERFORMANCE PROGRAM, Multifamily	254,867
Bronx Park Phase I Preservation LLC	MULTIFAMILY PERFORMANCE PROGRAM, Multifamily	489,600
Bronx Park Phase II Preservation LLC	MULTIFAMILY PERFORMANCE PROGRAM, Multifamily	669,500
Brooklyn Navy Yard Development Corp.	NEW CONSTRUCTION PROGRAM, NCP11765 - Building 77	104,390
Brooklyn SolarWorks LLC	NY Sun	40,500
	PON 2112 NY SUN	8,748
BRP Renny LLC	MULTIFAMILY PERFORMANCE PROGRAM, Multifamily	120,600
Bruce Harley Energy Consulting LLC	Air Source Heat Pumps, ASHP Consultant	22,500
BSREP UA River Crossing LLC	MULTIFAMILY PERFORMANCE PROGRAM, Multifamily	494,650
Buffalo and Fort Erie Public Bridge Auth	NEW CONSTRUCTION PROGRAM, NCP11160 - Peace Bridge Author	102,877
Buffalo Renewables, Inc.	Small Wind, Wind Turbine Incentive	337,600
Buffalo Solar Solutions Inc	<200KW PV, NY Sun	59,769
	<200KW PV, PON 2112 NY SUN	14,490
Buffalo State College	NEW CONSTRUCTION PROGRAM, NCP9006 - Science Bldg Phase 2	179,109
BuildingGreen, Inc.	Environmental Research, Malin: meeting facilitator	8,000
Buselli Plumbing & Heating	<200KW PV, NY Sun	5,670
Business Network for Maryland Offshore W	Off-Shore Wind Master Plan, 2019 IPF Conference	48,800
	Prof & Expert Engagement, 2019 IPF Conference	1,200
Bynder LLC	NYSERDA ADMINISTRATION, WebDAM Photo Library	8,975
C Speed, LLC	INNOVATION CAPACITY & BUSINESS DEVELOPMENT, Wind Turbi	1,000,000
C.J. Brown Energy, P.C.	Agriculture Energy Eff Pgm, FlexTech Consultant Selection	9,103
	Agriculture Energy Eff Pgm, RFP3628FlexTechConsultUmbrella	21,779
	Flexible Tech Assistance, RFP3628FlexTechConsultUmbrella	21,685
	NEW CONSTRUCTION PROGRAM, CJ Brown - EMP	14,163
	Technical Services, RFP3628FlexTechConsultUmbrella	5,997
C&S Engineers, Inc.	Flexible Tech Assistance, FlexTech Consultant Selection	13,281
Callanan Industries	Industrial Process Effic, Industrial Process Efficiency	12,302
Calm Energy Inc.	EXISTING FACILITIES, Low-cost building load controls	400,000
Candlewyck Associates LLC	Multifam Performance Pgm, Candlewyk Apartments	14,400
	Multifam Performance Pgm, Multifamily	14,400
Carahsoft Technology Corporation	EVALUATION, Performance Management	52,650
Carbon Trust Advisory Limited	ENVIRONMENTAL RESEARCH, MetOcean planning for OSW	50,000
Catamount Ski Area	Industrial Process Effic, Industrial Process Efficiency	299,400
Cayuga Meadows Housing Development Fund	NEW YORK ENERGY STAR HOMES, New Construction	180,000
CDH Energy Corporation	EXISTING FACILITIES, Existing Facilities Tech Assis	20,580
CDM Smith, Inc.	Industrial Process Effic, Technical Review and Program S	3,949
CDS Monarch Inc	Low Rise New Construction, New Construction	51,000
CDWG, Incorporated	NYSERDA ADMINISTRATION, SNOW - Endpoint Licenses 1 yr	18,450
•		
Center for Internet Security Inc	NYSERDA ADMINISTRATION, Information Security Malicious	7,400
CHA Consulting Inc.	Commercial Imp Assist, Outreach Support	9,500
	Flexible Tech Assistance, FlexTech Consultant CHA	32,500
	Flexible Tech Assistance, Outreach Support	9,500

Contractor	Contract Description	Total Contract Amoun
CHA Consulting Inc.	Flexible Tech Assistance, RFP3628FlexTechConsultUmbrella	114,254
	Flexible Tech Assistance, Technical Review and Program S	95,726
	FLEXIBLE TECHNICAL ASSISTANCE, Technical Review and Progra	379,638
	Industrial Process Effic, Technical Review and Program S	132,420
	INDUSTRIAL PROCESS EFFICIENCY, Technical Review and Progra	896,876
	On-Site Energy Manager, FlexTech Consultant CHA	234,375
Charge CCCV, LLC	OTHER PROGRAM AREA, RFQL3101 76W Clean Energy Comp	500,000
Chloe Capital SPV Manager LLC	M-Corps, Technology to Market	15,000
Chris's Service Center	FUEL NY, PGI00276 - Chris's Service Cen	89,550
ChromaNanoTech LLC	OTHER PROGRAM AREA, RFQL3101 76W Clean Energy Comp	250,000
CIR ELECTRICAL CONSTRUCTION CORP.	<200KW PV, NY Sun	23,023
City and State	NYSERDA ADMINISTRATION, City and State Advertisement	5,900
City Fuels LLC	FUEL NY, PGI00072 - City Fuels LLC	86,597
City of Cohoes	Clean Energy Communities, City of Cohoes	100,000
• • • • • • •	CLEANER GREENER COMMUNITIES, CGC42156 - City of Cohoes	51,500
City of Glens Falls	INDUSTRIAL PROCESS EFFICIENCY, Industrial Process Efficiency	321,63
City of Hudson	NEW CONSTRUCTION PROGRAM, NCP12651 - The Hudson City and	12,310
City of New York, Dept. of Citywide	EXISTING FACILITIES, EFP2353-Dept of Citywide Serv.	830,760
City of Poughkeepsie	EXISTING FACILITIES, EFP2429-City of Poughkeepsie -	272,358
City of Rome	CLEANER GREENER COMMUNITIES, CGC30797 - City of Rome	75,000
City of Utica	REVitalize, RFP 3584 Revitialize	65,000
CitySpire Inc.	FLEXIBLE TECHNICAL ASSISTANCE, FlexTech Program - PON 1746	20,000
CJL Engineering	Flexible Tech Assistance, FlexTech Consultant Selection	28,650
Clarkson University	RENEWABLE HEAT NY, CO off-gassing pellet storage	299,970
Clean Energy Collective, LLC	>200KW PV, NY Sun	7,413,34
Clifton Park LF Solar LLC	NY-SUN, PV System @ Town of Clifton Pa	150,638
	PV System @ Town of Clifton Pa	143,543
Climate Change & Environmental	Commercial Real Estate Ten, CCES - Multisite	27,132
Clinton County Chapter NYSARC, Inc.	Low Rise New Construction, New Construction	41,000
ClosedLoops, LLC	CLEAN TRANSPORTATION, Pneumatic Waste Transfer Study	150,000
Clough, Harbour & Associates, LLP	FLEXIBLE TECHNICAL ASSISTANCE, FlexTech Consultant Selection	50,000
	INDUSTRIAL PROCESS EFFICIENCY, EFP Task Work Order	10,100
CNY Solar, Inc.	<200KW PV, NY Sun	149,952
	<200KW PV, NY-Sun	6,228
Code Green Solutions, Inc.	Commercial Real Estate Ten, Code Green-1290 AoA-CT	10,000
	Commercial Real Estate Ten, CodeGreen-420 Lexington Ave-CT	5,000
	Commercial Real Estate Ten, CodeGreen-1515 Broadway-CT	5,000
	Commercial Real Estate Ten, CodeGreen-1515 Bway Floor10-CT	5,000
	Commercial Real Estate Ten, CodeGreen-Multisite-CT	50,000
	Flexible Tech Assistance, RFP3628FlexTechConsultUmbrella	53,100
	FLEXIBLE TECHNICAL ASSISTANCE, FlexTech Consultant Selection	62,090
Cohen Ventures Inc	EMERGING TECHNOLOGY / ACCELERATED COMMERCIALIZATIO	842,363
Columbia University Medical Center	NEW CONSTRUCTION PROGRAM, NCP12434 - Columbia School of	93,500
· · · · · · · · · · · · · · · · · · ·	NEW CONSTRUCTION PROGRAM, NCP98431 - Central Energy Cent	997,635
Columcille Properties LLC	INDUSTRIAL PROCESS EFFICIENCY, Industrial Process Efficiency	96,39
Complete Cabling Solutions LLC	NYSERDA ADMINISTRATION, Cabling Solutions - NYC Office	18,357

Contractor	Contract Description	Total Contract Amount
Computer Aid, Inc.	NYSERDA ADMINISTRATION, RFP3143 Umbrella Agreement	0
Concertio Inc.	OTHER PROGRAM AREA, RFQL3101 76W Clean Energy Comp	250,000
Congregation Ohav Sholom HDFC	MULTIFAMILY PERFORMANCE PROGRAM, Multifamily	274,300
Continental Buchanan, LLC	NY-Sun	1,440,093
Cooper Friedman Electric Supply Co. Inc.	<200KW PV, NY Sun	170,688
COR Inner Harbor Company LLC	NEW CONSTRUCTION PROGRAM, NCP11794 - Syracuse Inner Harb	10,488
Cornell Cooperative Extension - Tompkins	ENVIRONMENTAL RESEARCH, Residential Biomass Heating	80,293
Cornell University	Cleantech Geo Coverage, 2019 Entrepreneurship at Corne	30,000
	ENVIRONMENTAL RESEARCH, NY climate clearinghouse	354,752
	NEW CONSTRUCTION PROGRAM, NCP11138 - Cornell NYC Tech	161,868
	OTHER PROGRAM AREA, 76West Building a Clean Energy	629,108
	OTHER PROGRAM AREA, Sponsor Cornell Energy Connect	25,000
Cornerstone Energy Services	Renewable Heat NY, Cornerstone - Town of Bellmont	23,000
	Renewable Heat NY, Cornerstone - Willard	12,000
	Renewable Heat NY, Cornerstone/Lennox	49,900
Corning Inc.	Industrial Process Effic, Industrial Process Efficiency	96,940
	INDUSTRIAL PROCESS EFFICIENCY, Industrial Process Efficiency	118,697
Corporate Resolutions Inc	NYSERDA ADMINISTRATION, KYC Services	50,000
Couch White, LLP	WEST VALLEY DEVELOPMENT PROGRAM, RFP 3300 Outside Cou	5,000
Covanta Energy	INDUSTRIAL PROCESS EFFICIENCY, Industrial Process Efficiency	1,000,000
CPD NY Energy	FUEL NY, GSP00755 - CPD NY Energy Corp.	10,000
CPG Distribution Corp	FUEL NY, PGI00295 - CPG Distribution Co	88,600
Craig Street Limited Partnership	Low Rise New Construction, New Construction	15,000
Creativa LLC	NEW CONSTRUCTION PROGRAM, NCP13106 - DeCicco & Sons	284,246
Credit Suisse USA	NEW CONSTRUCTION PROGRAM, NCP12010 - Eleven Madison Av	317,436
Croton on the Hudson Gas Station Inc.	FUEL NY, PGI00042 - Croton on the Hudso	16,281
CTG:I LLC	OTHER PROGRAM AREA, Online subscription to CTG i3	8,500
Culver Company, LLC	POLICY DEVELOPMENT, DPS 2018 NYS Fair giveaways	18,113
Cummins, Inc.	INDUSTRIAL PROCESS EFFICIENCY, Industrial Process Efficiency	345,137
CUNY Institute for Urban Systems - CIUS	ADVANCED BUILDINGS, Assist operators of BAS	99,681
Currier Plastics	Industrial Process Effic, Industrial Process Efficiency	79,875
	Industrial Process Effic, Industrial Process Improvement	15,295
	INDUSTRIAL PROCESS EFFICIENCY, Pre-Enc	856,990
Cutone & Company Consultants, LLC	EXISTING FACILITIES, EFP2632 - Cutone & Company	105,015
	EXISTING FACILITIES, EFP3014 - Cutone Company Consu	159,787
Cypress Creek Renewables LLC	>200KW PV, Commercial/Industrial PV	2,611,337
	>200KW PV, NY Sun	1,045,803
	>200KW PV, NY-Sun	1,109,185
CyrusOne	Industrial Process Effic, Indutrial Process Efficiency	116,727
Dairyland USA Corporation	NEW CONSTRUCTION PROGRAM, NCP11123 - 240 Food Center Dri	80,971
Danfoss Holding Security Corporation	EXISTING FACILITIES, EFP2307 - Danfoss LLC	93,735
Darling Advertising Agency Inc.	NYSERDA ADMINISTRATION, Marketing Support for NYSERDA	45,072
	NYSERDA ADMINISTRATION, TWO #7 Strat Comm Renewables R	12,000
DCG Development Co.	NEW CONSTRUCTION PROGRAM, NCP12366 - Homewood Suites	139,400
De al Olavad Jaco	NEW YORK GREEN BANK, DealCloud Implementation	12,500
DealCloud Inc.	HEIT FOR CONCERNED WITH, BOUIOIOUU IMPIONIONUUION	

Contractor	Contract Description	Total Contract Amount
Deer Hills Service, LLC	FUEL NY, PGI00118 - Deer Hills Service	96,995
DEMCO New York Corp.	<200KW PV, NY Sun	23,480
DePaul Properties, Inc.	Low Rise New Construction, New Construction	56,000
DeWitt Community Library	NEW CONSTRUCTION PROGRAM, NCP13183-DeWittCommunityLib	19,294
Direct Packet Inc.	NYSERDA ADMINISTRATION, Video Service Renewal - Cisco	26,082
DNV KEMA Renewables Inc.	Off-Shore Wind Pre-Dev Act, RFP3855 Cat2 DMAC Float. LiDar	363,700
Dock Street Rental, LLC	NEW CONSTRUCTION PROGRAM, NCP11275 - 60 Water Street	378,086
Dodge Data & Analytics	EVALUATION, Dodge Data	41,425
Dolomite Products Group, Inc.	Industrial Process Effic, Industrial Process Efficiency	46,427
Double Lock Solar, LLC	REC:CES REC Contracts, CESRFP1_Tier 1 RECS	19,646,730
Downstream Construction, LLC	<200KW PV, NY Sun	9,928
Draper Homes Housing Development Fund Co	MULTIFAMILY PERFORMANCE PROGRAM, Multifamily	243,600
DRYDEN-TOMPKINS SOLAR II LLC	>200KW PV, NY-Sun C&I	1,255,061
Duplex Inc	FUEL NY, PGI00301 - Duplex Inc.	103,170
E Source Companies LLC	Subscription/Data Access, Market Insights	39,000
Earth Environmental Group, LLC	RENEWABLE THERMAL, Clean Heating & Cooling	91,793
	RENEWABLE THERMAL, NY-Sun	24,755
	RENEWABLE THERMAL, Solar Thermal Incentives	12,565
	Solar Thermal, Solar Thermal Incentives	82,248
Earth Sensitive Solutions, LLC	Geothermal Incentive Program, Large-Scale GSHP Rebate	16,356
East Main Associates LLC	Low Rise New Construction, New Construction	67,400
East Syracuse - Minoa Central Schools	NEW CONSTRUCTION PROGRAM, NCP11526 - Pine Grove Middle S	96,049
Eastern Energy Systems Inc.	<200KW PV, NY Sun	30,277
	<200KW PV, NY-Sun	8,645
Eastern Research Group, Inc.	Environmental Research, RFP3622 Env Res & Monitoring	199,967
Eastman Kodak Company	INDUSTRIAL PROCESS EFFICIENCY, Industrial Process Efficiency	501,825
Ecology and Environment Engineering, PC	Environmental Research, RFP3462 Umbrella Agreement	0
	Off-Shore Wind Master Plan, RFP3462 Umbrella Agreement	1,054,248
	Off-Shore Wind Pre-Dev Act, RFP3462 Umbrella Agreement	45,354
Ecova Inc	EMERGING TECHNOLOGY / ACCELERATED COMMERCIALIZATIO	480,778
Ecovis, Inc.	<200KW PV, NY Sun	25,786
Efficiency Forward, Inc.	Prof & Expert Engagement, 2019 DesignLights Sponsorship	25,000
• · ·	Prof & Expert Engagement, DesignLights 2018 Sponsorship	25,000
Eiger 3970 Consultants Inc.	<200KW PV, NY Sun	34,980
Eldor Contracting Corporation	<200KW PV, NY Sun	179,824
Electric Power Research Institute	OTHER PROGRAM AREA, FS to evaluate MFC/UF	25,000
	SMART GRID SYSTEMS, Clean DER Interconnection	275,000
	SMART GRID SYSTEMS, EPTD Smart Grid	364,000
Emacx Systems, Inc.	ADVANCED BUILDINGS, EFP2500 - Emacx - 28 Liberty	96,117
	EXISTING FACILITIES, EFP2500 - Emacx - 28 Liberty	427,112
Emblem Health Inc	FLEXIBLE TECHNICAL ASSISTANCE, Flex Tech - PON1746	14,958
EMCOR Services Betlem	Flexible Tech Assistance, FlexTech Consultant Selection	17,985
	On-Site Energy Manager, FlexTech Consultant Selection	152,610
EME Consulting Engineering Group, LLC	Agriculture Energy Eff Pgm, FlexTech Consultant Selection	2,500
Line Jonsunnig Engineering Group, LEG	Agriculture Energy Eff Pgm, RFP3628FlexTechConsultUmbrella	2,500
	Commercial New Construc, EME - EMP	18,750

Contractor	Contract Description	Total Contract Amount
EME Consulting Engineering Group, LLC	EXISTING FACILITIES, Tech Review and Program Staff	569,500
	Flexible Tech Assistance, FlexTech Consultant Selection	37,500
	Flexible Tech Assistance, Tech Review and Program Staff	93,500
	FLEXIBLE TECHNICAL ASSISTANCE, FlexTech Consultant Selection	725,000
	FLEXIBLE TECHNICAL ASSISTANCE, Tech Review and Program St	93,500
	Industrial Process Effic, Tech Review and Program Staff	3,800
	NEW CONSTRUCTION PROGRAM, EME - EMP	21,500
	NEW CONSTRUCTION PROGRAM, NCP TA Contract - ST10130	36,850
	NEW CONSTRUCTION PROGRAM, Tech Review and Program Staff	4,950
	NEW CONSTRUCTION PROGRAM, Technical Assistance Services	113,660
Empire Solar Solutions LLC	<200KW PV, NY Sun	20,038
	<200KW PV, PON 2112 NY SUN	11,751
Empire State Realty OP, LP	EXISTING FACILITIES, EFP2350 - Empire State Realty	657,017
Empower CES, LLC	<200KW PV, NY Sun	10,890
Encompass Energy LLC	Commercial New Construc, EncompassEnergy-RFP3036Service	14,588
ENER-G Rudox, LLC	COMBINED HEAT AND POWER, CHPA - Westport	96,288
Eneractive Solutions	FLEXIBLE TECHNICAL ASSISTANCE, FlexTech Consultant EnerActi	106,049
	FLEXIBLE TECHNICAL ASSISTANCE, FlexTech Consultant Selection	124,130
Energetics, Incorporated	CLEAN TRANSPORTATION, Battery LCA for Lev 3 EVSE	75,000
	CLEAN TRANSPORTATION, Strategies for reducing EVSE I	99,992
Energy & Resource Solutions, Inc.	EMERGING TECHNOLOGY / ACCELERATED COMMERCIALIZATIO	9,837
	EMERGING TECHNOLOGY / ACCELERATED COMMERCIALIZATIO	158,605
	ENERGY ANALYSIS, Renewable Heating Cooling TA	149,150
	EXISTING FACILITIES, EFP Task Work Orders	68,258
	EXISTING FACILITIES, Technical Review and Program S	229,807
	Flexible Tech Assistance, FlexTech Consultant Selection	30,000
	FLEXIBLE TECHNICAL ASSISTANCE, FlexTech Consultant ERS	24,045
	Industrial Process Effic, Technical Review and Program S	30,619
	INDUSTRIAL PROCESS EFFICIENCY, EFP Task Work Orders	11,839
	INDUSTRIAL PROCESS EFFICIENCY, Technical Review and Progra	125,780
	NEW CONSTRUCTION PROGRAM, Technical Assistance Services	18,721
Energy and Environmental Economics Inc.	Community RH&C, Tech Assist, REV Pool.	48,201
0,	ENERGY ANALYSIS, Renewable Heating Cooling TA	100,000
	INNOVATION CAPACITY & BUSINESS DEVELOPMENT, Renewable.	85,127
	Mkt Char: Tech Assist, Tech Assist, REV Pool.	510,361
	OTHER PROGRAM AREA, Renewable Heating Cooling TA	30,000
Energy Infotech NYC Inc.	CLEAN TRANSPORTATION, Energy Infotech NYC Cluster	45,000
EnergySage, Inc.	OTHER PROGRAM AREA, Photovoltaic Balance-of-System	196,836
	WORKFORCE DEVELOPMENT, Photovoltaic Balance-of-System	196,836
EnterSolar LLC	<200KW PV, NY Sun	71,260
	<200KW PV, NY-Sun	165,623
	NY-SUN, PV System @ Empire Merchants,	3,290,860
Environment & Energy Bublishing 110		
Environment & Energy Publishing, LLC	NYSERDA ADMINISTRATION, Annual subscription	12,330
Erdman Anthony & Associates, Inc.	Agriculture Energy Eff Pgm, FlexTech Consultant Selection	5,000
	Agriculture Energy Eff Pgm, RFP3628FlexTechConsultUmbrella	2,500
	Commercial New Construc, EAA - EMP	14,453

Contractor	Contract Description	Total Contract Amount
Erdman Anthony & Associates, Inc.	Industrial Process Effic, Technical Review and Program S	7,426
	NEW CONSTRUCTION PROGRAM, EAA - EMP	32,832
	NEW CONSTRUCTION PROGRAM, Technical Assistance Services	13,230
Eric Daniel Moses	NEW YORK ENERGY STAR HOMES, New Construction	155,000
ESRI, Incorporated	NYSERDA ADMINISTRATION, ArcGIS Desktop and Spatial	22,200
Essity Professional Hygiene	INDUSTRIAL PROCESS EFFICIENCY, Industrial Process Efficiency	1,136,312
EV-Box N.A. Inc.	CLEAN TRANSPORTATION, AC+DC charging with battery	15,050
Evergreen Foundation	NEW CONSTRUCTION PROGRAM, NCP13015 - Evergreen Health Se	13,851
Executive Information Systems, LLC	NYSERDA ADMINISTRATION, Statistics and Analytics	9,087
Extraterrestrial Materials Inc.	<200KW PV, NY Sun	103,445
EYP Architecture & Engineering, PC	NEW CONSTRUCTION PROGRAM, Technical Assistance Services	66,560
Facility Solutions Group	INDUSTRIAL PROCESS EFFICIENCY, Industrial Process Efficiency	58,042
Fairway Bakery LLC	NEW CONSTRUCTION PROGRAM, NCP11689 - Fairway Production	336,744
Finger Lakes Community College	REV Campus Challenge, RM3 - Finger Lakes Community C	54,307
Finger Lakes RC&D Inc.	ENVIRONMENTAL RESEARCH, Grass Combustion Emission Eval	98,250
Fingerlakes Renewables	<200KW PV, NY Sun	5,376
First Colonie Company	Environmental Research, 2018 Adapting Buildings Symp	14,000
FirstFuel Software, Inc.	EMERGING TECHNOLOGY / ACCELERATED COMMERCIALIZATIO	713,248
	EMERGING TECHNOLOGY / ACCELERATED COMMERCIALIZATIO	250,000
Fitzpatrick Holdings, Inc.	NEW CONSTRUCTION PROGRAM, NCP11762 - The INN at Corning	41,751
Floral Beauty Greenhouse	AGRICULTURE ENERGY EFFICIENCY, Agriculture Energy Efficiency	76,215
Florenton River LLC	<200KW PV, NY Sun	42,850
	<200KW PV, PON 2112 NY SUN	13,797
Forbes-Capretto Homes	Low Rise New Construction, New Construction	38,850
Fordham University	Flexible Tech Assistance, Efficiency Planning & Engineer	32,378
ForeFront Power, LLC	>200KW PV, NY Sun	1,379,208
	>200KW PV, NY-Sun C&I	992,984
Fort Schuyler Management Corporation	INDUSTRIAL PROCESS EFFICIENCY, Industrial Process Efficiency	440,330
Fourth Coast, Inc.	<200KW PV, NY Sun	31,677
Frederick A Proven	<200KW PV, NY Sun	28,382
Fried, Frank, Harris, Shriver, Jacobson	NYSERDA ADMINISTRATION, Legal Services	115,323
Frito Lay, Inc.	INDUSTRIAL PROCESS EFFICIENCY, Industrial Process Efficiency	105,346
Frontier Energy, Inc.	EMERGING TECHNOLOGY / ACCELERATED COMMERCIALIZATIO	263,982
	Industrial Process Effic, Technical Review_Prgm Support	28,374
	INDUSTRIAL PROCESS EFFICIENCY, Technical Review Prgm Supp	15,078
Fugro Marine GeoServices, Inc.	Off-Shore Wind Pre-Dev Act, TWO 1 Agreement 111941	27,860
Fusion Energy Services LLC	<200KW PV, NY Sun	13,524
G.W. Ehrhart, Inc.	Renewable Heat NY, Ehrhart Energy - Hammond	21,000
O.W. Elimart, inc.	Renewable Heat NY, Ehrhart Energy - Mandeville	12,000
G&M Realty I LLC	MULTIFAMILY PERFORMANCE PROGRAM, Multifamily	273,000
Garden Village Apartments LP	MULTIFAMILY PERFORMANCE PROGRAM, Multifamily	379,200
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Garlock Sealing Technologies, LLC	Industrial Process Effic, Industrial Process Efficiency	101,873
Gateway Owego LLC	Low Rise New Construction, New Construction	9,000
GCOM Software LLC	NYSERDA ADMINISTRATION, Staff Aug Umbrella Agreement	267,150
GE MDS, LLC	INDUSTRIAL PROCESS EFFICIENCY, Industrial Process Efficiency	9,275
General Electric Co. Gobal Research	NEW CONSTRUCTION PROGRAM, NCP11629 - MET Building	228,841

Contractor	Contract Description	Total Contract Amount
Genesee Valley Rural Preservation	Low Rise New Construction, New Construction	56,000
Genesis Petroleum Inc.	FUEL NY, PGI00252 - Genesis Petroleum	104,964
	FUEL NY, PGI00253 - Genesis Petroleum	100,532
	FUEL NY, PGI00254 - Genesis Petroleum	97,909
	FUEL NY, PGI00255 - Genesis Petroleum	120,742
George E Denmark II	<200KW PV, NY Sun	20,671
George J. Martin & Son	<200KW PV, NY Sun	568,857
Geotherm Inc.	<200KW PV, NY Sun	5,336
Gerster Sales & Service, Inc.	INDUSTRIAL PROCESS EFFICIENCY, Industrial Process Efficiency	240,000
Global Change Associates Inc.	Cleantech ICC Engage, 18th Annual WSGS Sponsorship	5,000
Global Foundries U.S. Inc.	INDUSTRIAL PROCESS EFFICIENCY, Industrial Process Efficiency	840,488
Global Resource Funding Partners LLC	NY-Sun	152,825
	NY-SUN, Codes, Products and Standards	1,504,955
	NY-SUN, NTP 2 JFK Bloomberg	574,529
	NY-SUN, NY-Sun	1,012,838
Globe Metallurgical	INDUSTRIAL PROCESS EFFICIENCY, Industrial Process Efficiency	1,655,615
Gloversville Public Library	NEW CONSTRUCTION PROGRAM, NCP12672 - Gloversville Public	13,813
Gloversville-Johnstown Joint Wastewater	INDUSTRIAL PROCESS EFFICIENCY, Industrial Process Efficiency	206,643
Goldman Copeland Associates, P.C.	Commercial Real Estate Ten, Goldman Copelan-689 5th Ave-CT	10,997
	Commercial Real Estate Ten, Goldman Copeland-1211 AoA-CT	19,997
	Commercial Real Estate Ten, Goldman Copeland-1251-CommTen	21,993
	Flexible Tech Assistance, FlexTech Consultant Selection	15,992
	Flexible Tech Assistance, RFP3628FlexTechConsultUmbrella	29,977
Goodfellow Construction Management, Ltd.	NEW YORK ENERGY STAR HOMES, New Construction	161,000
. .	NEW YORK ENERGY STAR HOMES, RES-NewConst(no longer in us	9,000
Goodyear Dunlop Tires North America LTD	INDUSTRIAL PROCESS EFFICIENCY, Industrial Process Efficiency	197,475
Grand Manor Nursing and Rehabilitation C	FLEXIBLE TECHNICAL ASSISTANCE, FlexTech Program - PON 1746	10,463
Greater Johnstown School District	NEW CONSTRUCTION PROGRAM, NCP13117 - JohnstownHighSch.	34,052
	NEW CONSTRUCTION PROGRAM, NCP13118 - Glebe Street School	5,048
	NEW CONSTRUCTION PROGRAM, NCP13119 - Warren Street Schoo	5,160
Greek Peak Holdings Inc	Industrial Process Effic, Industrial Process Efficiency	186,500
Green Hybrid Energy Solutions Inc.	<200KW PV, NY Sun	124,569
Green Street Power Partners LLC	<200KW PV, NY Sun	28,384
	NY Sun	21,000
GreenLogic, LLC	<200KW PV, NY Sun	30,132
Greenpac Mill, LLC	Flexible Tech Assistance, FlexTech Program - PON 1746	25,549
Greentech Media Inc.	NY-SUN, GTM Solar Subscription	25,000
	Subscription/Data Access, Market Insights	57,500
GRID Alternatives Tri-State, Inc.	<200KW PV, NY Sun	17,052
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Grid City Electric Corp	<200KW PV, NY Sun	19,248
	NY-Sun	40,320
Group-S LLC	Flexible Tech Assistance, FlexTech Consultant Selection	32,750
Guardian Industries Corporation	Industrial Process Effic, Industrial Process Efficiency	568,470
GWE Project HoldCo 3, LLC	NY-SUN, PV System @ Ithaca College	1,030,845
	PV System @ Ithaca College	589,524
Habitat for Humanity - New York City	NEW YORK ENERGY STAR HOMES, New Construction	21,000

Contractor	Contract Description	Total Contract Amount
HARBORcenter Development LLC	NEW CONSTRUCTION PROGRAM, NCP11384 - HARBORcenter	217,300
Harrison Solar, LLC	NY-SUN, LTF Westchester Solar	348,964
Harvest Power, LLC	<200KW PV, NY Sun	58,402
	<200KW PV, NY-Sun	70,529
Health Research, Inc.	ENVIRONMENTAL RESEARCH, Heat Vulnerability to Climate	300,000
Healthy Home Energy & Consulting, Inc.	<200KW PV, NY Sun	6,160
Heritage Village Apartments, LLC	MULTIFAMILY PERFORMANCE PROGRAM, Multifamily	38,400
HESP Solar, LLC	>200KW PV, Commercial/Industrial PV	591,074
	NY-Sun	546,615
Hewlett-Packard Enterprise Company	NYSERDA ADMINISTRATION, Support for NYSERDA HP Servers	5,204
Highbridge Community Housing Development	MULTIFAMILY PERFORMANCE PROGRAM, Multifamily	102,211
Hill Enterprises Inc.	FUEL NY, PGI00262 - Hill Enterprises In	100,600
Holiday Valley Tubing, LLC	Industrial Process Effic, Industrial Process Efficiency	64,200
Holimont	Industrial Process Effic, Industrial Process Efficiency	298,319
Holland & Knight LLP	NEW YORK GREEN BANK, Green Bank Outside Legal Serv.	186,384
	Off-Shore Wind Master Plan, RFP 3300 & RFP 3776 Outside Co	24,539
Home for Harlem Dowling Inc	MULTIFAMILY PERFORMANCE PROGRAM, Multifamily	106,642
Home Leasing, LLC	Low Rise New Construction, New Construction	9,500
Homes for New Yorkers, Inc	MULTIFAMILY PERFORMANCE PROGRAM, Multifamily	132,499
Honeywell International Inc.	ASSISTED HOME PERFORMANCE WITH ENERGY STAR, RFQL 34	1,843
	EMPOWER NY, RFQL 3434 Cat1 Res SF	340
	Home Perf w Energy Star, RFQL 3434 Cat1 Res SF	203,806
	HOME PERFORMANCE WITH ENERGY STAR, RFQL 3434 Cat1 Re	1,611
	RFQL 3434 Cat1 Res SF	32,400
Hope Community, Inc.	MULTIFAMILY PERFORMANCE PROGRAM, Multifamily	170,001
HSF New York, Inc.	NEW CONSTRUCTION PROGRAM, NCP11354 - RIU Hotel New York	161,118
	NEW CONSTRUCTION PROGRAM, NCP11439 - Hotel Times Square	86,38
Hudson Solar	<200KW PV, NY Sun	194,530
Hudson Valley Clean Energy Inc.	<200KW PV, NY Sun	223,608
Hudson Valley Hospital	NEW CONSTRUCTION PROGRAM, NCP13047 - NYP Hudson Valley.	52,539
Hudson Valley Lighting LLC	NEW CONSTRUCTION PROGRAM, NCP14051-HV Lighting HQ	69,400
Hunt Hollow Development Corporation	Industrial Process Effic, Industrial Process Efficiency	38,400
Hunter Mountain Ski Bowl Inc.	Industrial Process Effic, Industrial Process Efficiency	344,753
Hy-Light Farms	AGRICULTURE ENERGY EFFICIENCY, Agriculture Energy Efficiency	38,75
IBC Engineering PC	Flexible Tech Assistance, FlexTech Consultant Selection	17,125
	FLEXIBLE TECHNICAL ASSISTANCE, FlexTech Consultant Selection	427,295
IBM - East Fishkill Site	Industrial Process Effic, Industrial Process Efficiency	92,029
	INDUSTRIAL PROCESS EFFICIENCY, Industrial Process Efficiency	1,737,052
ICF Resources, LLC	ENERGY ANALYSIS, Tech Assist, REV Pool	47,289
·····,	EXISTING FACILITIES, Technical Review and Program S	23,568
	OTHER PROGRAM AREA, Tech Assist, REV Pool	47,289
IHS Global Inc.	ENERGY ANALYSIS, IHS Forecasting Service	31,060
Incorporated Village of Laurel Hollow	CLEANER GREENER COMMUNITIES, Laurel Hollow	50,000
Independent Network Operations Consortiu		
· · ·	INDUSTRIAL PROCESS EFFICIENCY, Industrial Process Efficiency	34,120
Indian River Central School District	NEW CONSTRUCTION PROGRAM, NCP12603 - Indian River CSD Im	
Industrial Economics, Incorporated	Mkt Char: Tech Assist, Tech Assist, REV Pool	192,691

Contractor	Contract Description	Total Contract Amount
INF Associates LLC	Commercial Real Estate Ten, INF - 201 E 42nd St - CT	57,048
	Commercial Real Estate Ten, INF - 205 East 42nd St - CT	30,000
	Commercial Real Estate Ten, INF Associate-250 Hudson St-CT	5,000
	Commercial Real Estate Ten, INF Associates - 100 Church St	5,000
	Commercial Real Estate Ten, INF Associates-605 3rd Ave-CT	5,000
	Commercial Real Estate Ten, INF Associates-1133 6th Ave-CT	40,509
Infinity Solar Systems, LLC	<200KW PV, NY Sun	15,291
Institute for Building Technology and Sa	Air Source Heat Pumps, RFQL 3434 IBTS Standards & QA	160,000
	ASSISTED HOME PERFORMANCE WITH ENERGY STAR, RFQL 34	8,000
	EMPOWER NY, RFQL 3434 IBTS Standards & QA	136,537
	Home Perf w Energy Star, RFQL 3434 IBTS Standards & QA	666,904
	HOME PERFORMANCE WITH ENERGY STAR, RFQL 3434 IBTS Sta	7,200
	RFQL 3434 IBTS Standards & QA	75,600
Institute for Market Transformation	Intervention Effectiv Training, Market Insights	50,000
Integrity Solar Solutions, LLC	<200KW PV, NY Sun	10,640
IntelliGen Power Systems, LLC	Combined Heat and Power, CHPA - Bay Park 1	648,96
	Combined Heat and Power, CHPA - Bay Park 2	648,960
Intelligent Green Solutions	RENEWABLE THERMAL, Clean Heating & Cooling	403,314
	RENEWABLE THERMAL, NY-Sun	174,40
International Business Machines	INDUSTRIAL PROCESS EFFICIENCY, Industrial Process Efficiency	525,29
	INDUSTRIAL PROCESS EFFICIENCY, Pre-Enc	152,64
International Imaging Materials, Inc.	INDUSTRIAL PROCESS EFFICIENCY, Industrial Process Efficiency	341,29
IPPsolar Integration LLC	<200KW PV, NY Sun	60,554
	<200KW PV, NY-Sun	84,76
	NY Sun	292,500
IRW Solar 1, LLC	PV System @ City of Utica 1	505,92
Islip Resource Recovery Agency	CLEANER GREENER COMMUNITIES, CGC31134 - IRRA	1,000,000
Ithaca Neighborhood Housing Services, In	NEW YORK ENERGY STAR HOMES, New Construction	13,500
ITS-NY	NYSERDA ADMINISTRATION, pay SLMS invoices	11,280
J. Feil and M. Bernstein Et Al	MULTIFAMILY PERFORMANCE PROGRAM, Multifamily	116,250
Jack M Reilly	Pub Transit & Elect Rail, Transit Bus Fuel Economy Study	24,900
James McCrea & Associates, LLC	NEW YORK GREEN BANK, James McCrea & Associates LLC	50,000
	NEW YORK GREEN BANK, NYGB Solar Energy RFP consulti	50,000
JCB Specialties, Inc.	POLICY DEVELOPMENT, DPS NYS Fair giveaways	44,269
Jewish Community Center	NEW CONSTRUCTION PROGRAM, NCP12455 - JCC Pool and Fitnes	7,86
John C Goodfellow Ent Ltd	Industrial Process Effic, Industrial Process Efficiency	15,000
John Siegenthaler	WORKFORCE DEVELOPMENT, RFP 3165 Hydronic System Desig	58,000
Johnson Controls Inc.	Flexible Tech Assistance, FlexTech Consultant Selection	31,084
Johnstown Renewables	Industrial Process Effic, Industrial Process Efficiency	104,289
Jones Lang LaSalle Americas, Inc.	Commercial Real Estate Ten, JLL - Multisite 48 sites - CT	240,000
Joseph P Day Realty Corporation	FLEXIBLE TECHNICAL ASSISTANCE, FlexTech Program - PON 1746	145,003
Kaleida Health	NEW CONSTRUCTION PROGRAM, NCP11426 - Kaleida Health	44,000
	NEW CONSTRUCTION PROGRAM, NCP13061 - Flint Lab Renovatio	27,593
Kapsch TrafficCom Transportation NA Inc.	CLEAN TRANSPORTATION, Corporate Name Change	499,179
Kasselman Solar LLC	<200KW PV, NY Sun	151,103
	<200KW PV, NY-Sun	21,220

Contractor	Contract Description	Total Contract Amount
Kearns & West, Inc.	Off-Shore Wind Master Plan, OWE InteragencyMeeting support	20,235
Kelliher Samets Volk	NYSERDA ADMINISTRATION, TWO 25 KSV Program Linkages	23,300
KEMA Incorporated	Campus/Technical Assistance, RFQ 3183 KEMA, Inc	52,425
	Community RH&C, RFQ 3183 KEMA, Inc	40,047
	EVALUATION, RFQ 3183 KEMA, Inc	1,148,325
	Flexible Tech Assistance, RFQ 3183 KEMA, Inc	44,466
	Geothermal Incentive Program, RFQ 3183 KEMA, Inc	295,577
	NEW YORK GREEN BANK, RFQ 3183 KEMA, Inc	767,131
	Renewable Heat NY, RFQ 3183 KEMA, Inc	334,090
Kema Services, Inc.	ADVANCED BUILDINGS, Evaluation Oversight Services	300,000
Keuka College	NEW CONSTRUCTION PROGRAM, NCP12601 - Keuka Commons-O	6,415
Kilowatt Engineering, Inc.	EXISTING FACILITIES, 2621 Umbrella Contract	45,151
	Industrial Process Effic, 2621 Umbrella Contract	25,747
Kingston Limited Partnership	MULTIFAMILY PERFORMANCE PROGRAM, Multifamily	140,300
Kissing Bridge Corp	Industrial Process Effic, Industrial Process Efficiency	128,000
KLD Engineering, P.C.	CLEAN TRANSPORTATION, Connected Eco-Driving Tech	148,663
KMJ Holdings LLC	NEW CONSTRUCTION PROGRAM, NCP11944 - 40 Farrington Road	23,013
Kraft Power Corporation	COMBINED HEAT AND POWER, CHPA - Mount Vernon High Schoo	266,250
	COMBINED HEAT AND POWER, CHPA - South Hill Business Cam	767,800
L&S Energy Services, Inc.	Agriculture Energy Eff Pgm, RFP3628FlexTechConsultUmbrella	27,500
	EMERGING TECHNOLOGY / ACCELERATED COMMERCIALIZATIO.	111,363
	Flexible Tech Assistance, Umbrella Contract	46,500
	FLEXIBLE TECHNICAL ASSISTANCE, Umbrella Contract	46,500
	Industrial Process Effic, Umbrella Contract	81,624
	INDUSTRIAL PROCESS EFFICIENCY, .	94,997
	INDUSTRIAL PROCESS EFFICIENCY, Umbrella Contract	49,717
	RENEWABLE HEAT NY. Umbrella Contract	19,829
	Technical Services, RFP3628FlexTechConsultUmbrella	7,500
LaBella Associates, P.C.	Agriculture Energy Eff Pgm, FlexTech Consultant Selection	10,000
	Agriculture Energy Eff Pgm, RFP3628FlexTechConsultUmbrella	2,500
	EXISTING FACILITIES, Technical Review and Program S	7,834
	Industrial Process Effic, Technical Review and Program S	5,960
Laertes Solar, LLC	Cornell - Harford	520,469
	NY-SUN, Cornell - Harford	840,093
Leferge Building Materiale	INDUSTRIAL PROCESS EFFICIENCY, Industrial Process Efficiency	2,854,131
Lafarge Building Materials Lafayette Development LLC		92,307
	NEW CONSTRUCTION PROGRAM, NCP11520 - Lafayette	
Lake Beverage Corporation		61,596
Lakawaya Martina	NY-SUN, Commercial/Industrial	152,588
Lakegrove Mart Inc	FUEL NY, PGI00298 - Lakegrove Mart Inc	106,543
Lakeside Manor Home For Adults Inc	ADVANCED BUILDINGS, EFP2382 - Lakeside Manor Home	31,200
	EXISTING FACILITIES, EFP2382 - Lakeside Manor Home	93,600
Lawrence Berkeley National Laboratory	Industrial Process Effic, Industrial Process Efficiency	30,000
LED Specialists Inc	ADVANCED BUILDINGS, Advanced Buildings Technology	244,236
Lilker EMO Energy Solutions, LLC	Flexible Tech Assistance, FlexTech Consultant Selection	7,005
Liverpool Central School Dist	NEW CONSTRUCTION PROGRAM, NCP13198 - Chestnut Hill Eleme	29,633
	NEW CONSTRUCTION PROGRAM, NCP13199 - Chestnut Hill Middl	63,327

Contractor	Contract Description	Total Contract Amount
Lockheed Martin Corporation	MARKET PATHWAYS, Products Program	434,981
	OTHER PROGRAM AREA, Products Program	44,588
	STATEWIDE RESIDENTIAL POINT OF SALE, Products Program	143,213
Locust Manor Family Residence II Limited	MULTIFAMILY PERFORMANCE PROGRAM, Multifamily	64,800
Loeb & Loeb LLP	NEW YORK GREEN BANK, Green Bank Outside Legal Couns	4,851
Long Island Power Authority	NY-SUN, LIPA MOU RGGI Compliance Progr	99,800,000
Long Island Power Solutions	<200KW PV, NY Sun	96,634
Long Pond Garden Apartments LLC	MULTIFAMILY PERFORMANCE PROGRAM, Multifamily	132,000
Lotus Energy, Inc.	<200KW PV, NY Sun	11,970
Louis T. Wright HDFC	NEW YORK ENERGY STAR HOMES, New Construction	23,500
Low-Level Radioactive Waste Forum, Inc.	NYSERDA ADMINISTRATION, Data & Markets	5,000
LSI Lightron	Industrial Process Effic, Industrial Process Efficiency	17,156
Lukoil North America LLC	FUEL NY, GSP00490-005 - LUKOIL North Am	10,000
Lumalon LLC	Commercial Imp Assist, CIAP008 - Lumalon; RRHH	150,000
M.J. Bradley & Associates	Electric Vehicles - Innovation, Utilities and EVs in NYS	50,000
M/E Engineering, P.C.	Commercial New Construc, M/E - EMP	27,400
	Flexible Tech Assistance, FlexTech Consultant Selection	397,650
	Industrial Process Effic, Technical Review and Program S	17,205
	INDUSTRIAL PROCESS EFFICIENCY, Technical Review and Progra	49,315
	NEW CONSTRUCTION PROGRAM, Technical Assistance Services	65,018
Madison County IDA	CLEANER GREENER COMMUNITIES, Madison County	250,000
Malcolm Pirnie, Inc.	COMBINED HEAT AND POWER, EFP Task Work Orders	15,000
	EXISTING FACILITIES, EFP Task Work Orders	17,500
	EXISTING FACILITIES, Existing Facilities Tech Assis	31,500
	INDUSTRIAL PROCESS EFFICIENCY, EFP Task Work Orders	28,006
Malone Central School District	NEW CONSTRUCTION PROGRAM, NCP12894 - Malone CSD Bus G.	18,859
Malverne Gas Inc.	FUEL NY, PGI00247 - Malverne Gas Inc.	92,637
Mapleview Dairy LLC	AGRICULTURE ENERGY EFFICIENCY, Agriculture Energy Efficiency	216,557
Mark Galezo and Associates	NEW YORK ENERGY STAR HOMES, New Construction	9,000
Marriott Hotel Services	NY-SUN, Solar + Storage Tech Conf	50,372
Matriarch Development Company	NEW CONSTRUCTION PROGRAM, NCP12648 - 101 Wolfs Lane	8,850
Max Solar Inc	<200KW PV, NY Sun	29,008
	<200KW PV, PON 2112 NY SUN	6,993
MCCK Syracuse Hotel No 2 LP	Home Perf w Energy Star, 2018 RES Training - Central	5,460
Meister Consultants Group, Inc.	EMERGING TECHNOLOGY / ACCELERATED COMMERCIALIZATIO	249,872
	ENERGY ANALYSIS, Renewable Heating Cooling TA	50,000
	INNOVATION CAPACITY & BUSINESS DEVELOPMENT, Renewable	304,283
	OTHER PROGRAM AREA, Renewable Heating Cooling TA	100,000
	REV Campus Challenge, REV CC - Meister CG	250,000
Melville Fuel Inc.	FUEL NY, PGI00302 - Melville Fuel Inc.	93,415
MEP Geothermal Engineering, PLLC	Geothermal Incentive Program, GSHP Incentve	474,000
MEPT/Cove Two Rector REIT LLC	Commercial New Construc, NCP15011 - 2 Rector St	232,470
Micatu, Inc.	OTHER PROGRAM AREA, RFQL3101 76W Clean Energy Comp	1,000,000
Michael A. Heim	AGRICULTURE ENERGY EFFICIENCY, Agriculture Energy Efficiency	17,218
Michaels Group	Low Rise New Construction, New Construction	18,000
Michaels Group Homes, LLC	Low Rise New Construction, New Construction	22,800
michaels Group Hollies, LLG		22,000

Contractor	Contract Description	Total Contract Amount
Midpoint Energy Inc	FUEL NY, PGI00116 - Midpoint Energy Inc	34,824
Midstate Printing Corp	INDUSTRIAL PROCESS EFFICIENCY, Industrial Process Efficiency	143,082
Milliman, Inc.	NYSERDA ADMINISTRATION, Valuation GASB 74 OPEB Liabili	17,166
mindSHIFT Technologies, Inc.	NYSERDA ADMINISTRATION, Website Development	775,000
Moffat Library	NEW CONSTRUCTION PROGRAM, NCP12436 - Moffat Library-OFLT	7,620
Mohonasen Central School District	NEW CONSTRUCTION PROGRAM, NCP12897 - Mohonasen High S	20,690
Momentive Performance Materials	INDUSTRIAL PROCESS EFFICIENCY, Industrial Process Efficiency	290,850
Monolith Solar Associates, LLC	<200KW PV, NY Sun	1,030,754
	<200KW PV, NY-Sun	377,199
	<200KW PV, RES-NewConst(no longer in use)	262,750
	NY-Sun	215,086
Moore Energy, LLC	<200KW PV, NY Sun	58,960
Morton Salt Inc	INDUSTRIAL PROCESS EFFICIENCY, Industrial Process Efficiency	1,123,004
Mount Sinai Medical Center	Flexible Tech Assistance, FT11621 - Mount Sinai Medical	82,984
Mount Sinai Queens	NEW CONSTRUCTION PROGRAM, NCP11594 - New Building and Cl	63,031
MS Financing, Inc.	NY-SUN, RPS CST Regional Program	776,732
Muckdog Solar II, LLC	>200KW PV, NY Sun	845,093
Muckdog Solar, LLC	>200KW PV, NY Sun	845,093
Mukti E 163rd Petroleum Inc	FUEL NY, PGI00290 - Mukti E 163rd Petro	128,250
Multisorb Technologies Inc.	INDUSTRIAL PROCESS EFFICIENCY, Industrial Process Efficiency	48,414
Nare Farms	AGRICULTURE ENERGY EFFICIENCY, Agriculture Energy Efficiency	36,594
Nathaniel General Contractors	NEW YORK ENERGY STAR HOMES, RES-NewConst(no longer in us	151,000
National Pipe Inc	INDUSTRIAL PROCESS EFFICIENCY, Industrial and Process Efficie	1,027,738
National Renewable Energy Laboratory	Cleantech ICC Engage, NREL's Industry Growth Forum	20,000
Nazareth Regional High School	Flexible Tech Assistance, FlexTech Program - PON 1746	13,866
	Flexible Tech Assistance, FT11614 - Nazareth High School	15,276
NBC Universal LLC	EXISTING FACILITIES, EFP2218 - NBC Universal - 30	1,374,771
	INDUSTRIAL PROCESS EFFICIENCY, Industrial Process Efficiency	101,618
Nehemiah Housing Development Fund Compan	NEW YORK ENERGY STAR HOMES, New Construction	325,000
NESCAUM	Electric Vehicles - Innovation, ZEV Marketing Campaign	262,500
	OTHER PROGRAM AREA, ZEV Marketing Campaign	262,500
NESEA	New Construction- Housing, 2019 NESEA ProTour Series	12,000
Netsparker Limited	NYSERDA ADMINISTRATION, Vulnerability Scanning Softwar	6,000
Netzero NRG LLC	NEW YORK ENERGY STAR HOMES, New Construction	97,000
New Buildings Institute, Inc.	Code to Zero, Codes Enable: NYStretch-Energy	87,500
	ENERGY ANALYSIS, Codes Enable: NYStretch-Energy	165,000
New York Academy of Sciences	Cleantech ICC Engage, 2018 NY Green Innovation Showc	35,000
New York Battery and Energy Storage	Rmve Barriers Dist Enrgy Storg, RFP 3407 Category 3B	498,002
New York Geothermal Energy Organization	Geothermal Incentive Program, 2019 NY-Geo Conference	8,900
New York Power Authority	FLEXIBLE TECHNICAL ASSISTANCE, FlexTech MOU NYSERDA-NY	265,300
	RENEWABLES & DER INTEGRATION, New York State Phasor Meas	400,000
New York Presbyterian Hospital	NEW CONSTRUCTION PROGRAM, NCP10758 - NYPH Rogers Build	33,975
	NEW CONSTRUCTION PROGRAM, NCP12440 - NYP CHONY Bundle	57,636
New York Proton Management	NEW CONSTRUCTION PROGRAM, PON1601-R3	139,766
New York State Catholic Healthplan, Inc.	INDUSTRIAL PROCESS EFFICIENCY, Industrial Process Efficiency	214,962
New York State Forum for IRM	NYSERDA ADMINISTRATION, NYS Forum Membership 18-19	5,500

Contractor	Contract Description	Total Contract Amount
New York State Smart Grid Consortium Inc	High Performing Grid, NYS Smart Grid Consortium Dues	30,000
New York State Solar Farm Inc.	<200KW PV, NY Sun	105,027
	<200KW PV, NY-Sun	6,820
New York University	NEW CONSTRUCTION PROGRAM, NCP11464 - Center for Urban Sc	984,583
	NEW CONSTRUCTION PROGRAM, NCP98341 - 58 Washington Squ	40,443
Newport Corporation	INDUSTRIAL PROCESS EFFICIENCY, Industrial Process Efficiency	38,024
Nexant, Incorporated	ADVANCED BUILDINGS, Technical Review and Program S	3,210
	EXISTING FACILITIES, Technical Review and Program S	9,629
	INDUSTRIAL PROCESS EFFICIENCY, Technical Review and Progra	36,708
NextCorps Inc	INNOVATION CAPACITY & BUSINESS DEVELOPMENT, NYSERDA	1,450,000
	INNOVATION CAPACITY & BUSINESS DEVELOPMENT, Proof-of-Co	4,890,500
	OTHER PROGRAM AREA, NYSERDA Entrepreneurs-in-Resid	500,000
Niagara Lodging	NEW CONSTRUCTION PROGRAM, NCP12765 -La Quinta Inn-OFLT	11,298
Nickels Energy Solutions LLC	<200KW PV, NY Sun	5,434
Nite Homes HDFC	MULTIFAMILY PERFORMANCE PROGRAM, Multifamily	48,100
Nixon Peabody LLP	NEW YORK GREEN BANK, Green Bank Outside Legal Serv.	56,464
NJP Consulting Inc.	<200KW PV, NY Sun	22,320
Nor Crest Service Station Inc.	FUEL NY, PGI00285 - Nor Crest Service S	94,500
Norampac, Ind., Inc.	INDUSTRIAL PROCESS EFFICIENCY, Industrial Process Efficiency	526,602
North Harbor Energy, LLC	ANAEROBIC DIGESTER, North Harbor Dairy Digester	2,000,000
Northeast Agriculture Technology Corp	Agriculture Energy Eff Pgm, FlexTech Consultant Selection	6,466
Northeast Energy Efficiency Partnerships	Air Source Heat Pumps, NEEP 2018 Sponsorship	46,500
	Campus/Technical Assistance, NEEP 2018 Sponsorship	10,000
	Clean Energy Communities, NEEP 2018 Sponsorship	15,000
	Code to Zero, NEEP 2018 Sponsorship	10,000
	Commercial Imp Assist, NEEP 2018 Sponsorship	8,500
	EVALUATION, NEEP 2018 Sponsorship	5,000
	Home Perf w Energy Star, NEEP 2018 Sponsorship	5,000
	K-12 SCHOOLS, NEEP 2018 Sponsorship	10,000
	NYSERDA ADMINISTRATION, NEEP 2018 Sponsorship	10,000
	On-Site Energy Manager, NEEP 2018 Sponsorship	10,000
	Prof & Expert Engagement, NEEP 2018 Sponsorship	25,000
Northeast Forests LLC	ENVIRONMENTAL RESEARCH, Devel Low Moisture Wood Chips	117,840
Northwell Health, Inc.	NEW CONSTRUCTION PROGRAM, NCP10696 - Lenox Hill Center f	292,375
Novel Approaches Solar Applications, LLC	<200KW PV, NY Sun	13,056
Novus Engineering, P.C.	NEW CONSTRUCTION PROGRAM, NCP TA Contract - ST10140	11,296
Novus Engineering, P.C.	Geothermal Incentive Program, Large-Scale GSHP Rebate	57,492
	Talent Pipeline:CE and OJT, OJT HIRE	5,760
NRG Energy Inc	Reimbursement to Clearway for	5,000
NRP Contractors LLC	NEW YORK ENERGY STAR HOMES, New Construction	121,000
NYC Department of Environmental Protect	NEW CONSTRUCTION PROGRAM, NCP13127 - Ben Nesin Lab	10,325
NYC Partnership Housing Dev. Fund Co.	MULTIFAMILY PERFORMANCE PROGRAM, Multifamily	748,950
NYS Dept of Corrections &	NEW CONSTRUCTION PROGRAM, NCP13137 - Coxsackie Cell Bloc	9,098
NYS Office for Technology	NYSERDA ADMINISTRATION, Information Technology	182,790
NYS Office of General Services	NEW CONSTRUCTION PROGRAM, NCP98179 - Mohawk Correctional	81,254
	POLICY DEVELOPMENT, Corporate Marketing	150,000

Contractor **Total Contract Amount Contract Description** NYS Office of General Services SARATOGA TECHNOLOGY & ENERGY PARK, STEP 75.030 NYS Office of Parks. Recreation and <200KW PV. NY Sun 8.649 NYS OGS Utilities Management ENVIRONMENTAL RESEARCH, Support for finalizing SGEIS 1,100,732 OTHER PROGRAM AREA, Support for finalizing SGEIS 78,653 299,000 NYS Olympic Regional Development Auth. Industrial Process Effic, Industrial Process Efficiency NYS Technology Enterprise Corporation NYSERDA ADMINISTRATION. Internal Audit 55.044 O'Brien & Gere Engineers, Inc. DER Integration(Intrcnect), PON 3404 DER Integration 162.597 FLEXIBLE TECHNICAL ASSISTANCE, FlexTech Consultant Selection 13,605 **O'Connell Electric Company** <200KW PV, NY Sun 114,990 Oak Mountain Industrial Process Effic, Industrial Process Efficiency 53,400 FLEXIBLE TECHNICAL ASSISTANCE, FlexTech Consultant Selection 20,405 OLA Consulting Engineers, P.C. Olin Corporation INDUSTRIAL PROCESS EFFICIENCY, Industrial Process Efficiency 1.220.950 Onyx Renewable Partners, LP <200KW PV. NY Sun 1.674.625 NYSERDA ADMINISTRATION, Peoplesoft - Oracle 2018/2019 Oracle America, Inc. 53,598 Orange and Rockland Utilities, Inc. RENEWABLES & DER INTEGRATION, Smart Grid T&D Pilot Project 1,000,000 **Orange Regional Medical Center** NEW CONSTRUCTION PROGRAM, NCP12977 - ORMC Physicians ... 149,548 **Orient Overseas Associates** FLEXIBLE TECHNICAL ASSISTANCE, FlexTech Program 28,260 **OwnBackup Inc.** NYSERDA ADMINISTRATION, Salesforce Backup Solutions 14,573 **Packer Collegiate Institute** NEW CONSTRUCTION PROGRAM, NCP13181 - Packer Early Learni 5,824 <200KW PV. NY Sun 184.864 Paradise Energy Solutions, LLC Park Monroe II Rehab HDFC MULTIFAMILY PERFORMANCE PROGRAM, Multifamily 25,200 **Passive Buildings Canada** Retrofit NY, Multifamily 50,000 MARKET PATHWAYS, CRETP - Paul Hastings - 200 Pa Paul Hastings LLP 140,000 Peconic Crossing, LLC NEW YORK ENERGY STAR HOMES. New Construction 68.500 Pepsi-Cola of the Hudson Valley Commercial/Industrial 77,643 NY-SUN, Commercial/Industrial 85,397 **PFNY LLC** FLEXIBLE TECHNICAL ASSISTANCE, FlexTech Program - PON 1746 51,450 PitchBook Data, Inc. OTHER PROGRAM AREA, Online Subscription 22,500 PlugPV, LLC <200KW PV, NY Sun 40,675 PMG Northeast LLC FUEL NY, PGI00186 - PMG Northeast LLC 113,401 FUEL NY, PGI00230 - PMG Northeast LLC 101.624 PrimaFilm LLC ADVANCED BUILDINGS, Nano insulating window coating 336,000 Prime Petro Inc FUEL NY, PGI00300 - Prime Petro Inc. 131.291 Prism Solar Technologies Inc. CLEAN TRANSPORTATION, InnovationCap&BizDev*inactive 1,500,000 **Proenergy Consulting LLC** SMART GRID SYSTEMS, Consulting NY Prize/Greenbank 22.590 Provantage, LLC NYSERDA ADMINISTRATION, Provantage Monitors - 52 10,078 **Providence Housing Development Corp** 63,000 Low Rise New Construction, New Construction NEW CONSTRUCTION PROGRAM, NCP13176 - Black Box Theater PS21, Inc 11,201 **Pulsar Properties LLC** MULTIFAMILY PERFORMANCE PROGRAM, Multifamily 28,800 Pyramid Energy Engineering Services PLLC Renewable Heat NY, FlexTech Consultant Selection 49,894 Quixotic Systems, Inc. <200KW PV. NY Sun 24,365 <200KW PV. NY-Sun 8.736 >200KW PV, NY Sun 181,460 QwikSolar, LLC <200KW PV, NY Sun 27,059 **R & A Petroleum Corp** FUEL NY, PGI00214 - R & A Petroleum Cor 85,000 **R T Vanderbilt Co Inc** INDUSTRIAL PROCESS EFFICIENCY, Industrial Process Efficiency 41,487

Contractor	Contract Description	Total Contract Amount
R3 Energy Management Audit & Review, LLC	Real Time Enrgy Management, Resnick&Sons-485MadisonAv-RTEM	21,210
R-Display and Lighting LLC	ADVANCED BUILDINGS, Advanced Buildings Technology	334,000
Rafferty Enterprises, Inc.	NYSERDA ADMINISTRATION, NYC Temp employee	37,908
	NYSERDA ADMINISTRATION, Temp Employee Services	83,184
	NYSERDA ADMINISTRATION, Temp Employees Services	82,500
	NYSERDA ADMINISTRATION, Temp Services NYC Office	40,769
	NYSERDA ADMINISTRATION, Temp Servies	20,183
Randstad North America Inc	NYSERDA ADMINISTRATION, Temp Services -	104,442
Randstad North America, Inc.	NYSERDA ADMINISTRATION, Temporary NYSUN Coordinator	112,476
Rapid Response Monitoring Services, Inc	Industrial Process Effic, Industrial Process Efficiency	33,792
RD & Associates Consulting LLC	OTHER PROGRAM AREA, RFP3267 Innovation Advis Pilot	240,000
Rebuilding Homes, LLC	NEW YORK ENERGY STAR HOMES, New Construction	8,500
Redocs Inc	Commercial Real Estate Ten, REDOCS-250 Greenpoint Ave-CT	23,951
Regents of the University of Michigan	ENVIRONMENTAL RESEARCH, Cloudwater Chemistry	40,000
Regional Greenhouse Gas Initiative, Inc.	ENERGY ANALYSIS, Energy & EnvironmentalAnalysis	1,844,203
	ENERGY ANALYSIS, RGGI Funding Agreement 2019	829,256
Renovus Energy, Inc.	<200KW PV, NY Sun	240,617
	>200KW PV, NY Sun	481,034
Rensselaer Polytechnic Institute	RENEWABLES & DER INTEGRATION, Electrompolymeric Dynamic D	291,900
Rensselaer Polytechnic Institute-LRC	ADVANCED BUILDINGS, Desktop Lighting Control	96,972
Research Foundation of CUNY	CLEAN TRANSPORTATION, Freight in Complete Streets	32,469
	ENVIRONMENTAL RESEARCH, Optical Assessment of CMAQ	40,000
Research Foundation of SUNY	ADVANCED BUILDINGS, Warm-Water Server Cooling	475,601
	FUEL CELLS, CNSE Fuji Fuel Cell	543,816
Research Foundation of The City	Workforce Industry Partnership, BOM Pilot	49,449
	Workforce Industry Partnership, BOM Pilot - Building Re-tuning	27,786
Research Into Action, Inc.	Workforce Industry Partnership, RFQ3183 Umbrella Agreement	148,834
Retroficiency, Inc.	EMERGING TECHNOLOGY / ACCELERATED COMMERCIALIZATIO	12,600
RHM Inc.	Renewable Heat NY, Aeon - Coots	21,000
	Renewable Heat NY, Aeon - Murray	18,250
	RENEWABLE HEAT NY, Aeon Heating - Baillargeon	21,000
Richardson Center Corporation	NEW CONSTRUCTION PROGRAM, NCP11581 - Richardson Olmsted	54,915
Robert Derector Associates	Commercial Real Estate Ten, 1301Ave of Americas-CRE Tenant	8,150
	Commercial Real Estate Ten, Robert Derector-205 W39thSt-CT	20,250
	Commercial Real Estate Ten, Robert Derector-300VeseySt-CT	10,750
	Commercial Real Estate Ten, THilfiger-285Madison-CRETenant	19,150
	FLEXIBLE TECHNICAL ASSISTANCE, FlexTech Consultant Selection	16,855
Robert Nape	RENEWABLE THERMAL, Clean Heating & Cooling	5,001
Robert O Gurman	NEW YORK GREEN BANK, Gurman Contract Consulting	50,000
Rochester Institute of Technology	NEW CONSTRUCTION PROGRAM, NCP14065 - The Magic Center	34,810
Ross Solar Group, LLC	<200KW PV, NY Sun	8,614
Rural Ulster Preservation Company	Low Rise New Construction, New Construction	53,000
RXR Atlas LLC	NEW CONSTRUCTION PROGRAM, NCP11905 - 75 Rockefeller Plaz	644,770
Ryan Homes (Virginia)	Low Rise New Construction, New Construction	269,150
Safari Energy LLC	<200KW PV, NY Sun	137,520

Contractor	Contract Description	Total Contract Amount
Samaritan Hospital of Troy Inc	NEW CONSTRUCTION PROGRAM, NCP12281-SamaritanHospitalO	243,887
SAP America Inc	NEW CONSTRUCTION PROGRAM, NCP12768-SAP Office	98,270
Schodack Central School District	NEW CONSTRUCTION PROGRAM, NCP12924 - High School Renovat	26,263
Scott Shipley	<200KW PV, NY-Sun	6,230
Scotto Brothers Woodbury Restaurant, LLC	Environmental Research, 2018 State of the Science Wksp	23,812
Sea Risk Solutions LLC	Off-Shore Wind Master Plan, Fisheries Liaison/ Consulting	50,000
Second Street Enterprise Inc.	FUEL NY, PGI00265 - Second Street Enter	115,770
Seed Renewables Inc.	<200KW PV, NY Sun	5,583
Seek More LLC	Residential-Engaging New Mkts, Consultant for SFR Upstream	50,000
Seneca Food Corporation	INDUSTRIAL PROCESS EFFICIENCY, Industrial Process Efficiency	253,291
SHI, Inc.	NYSERDA ADMINISTRATION, ADA-Compliance Subscription	15,544
	NYSERDA ADMINISTRATION, Embarcadero Enterprise Support	16,829
Silver Lining Solar	<200KW PV. NY Sun	23,010
Skadden, Arps, Slate, Meagher & Flom LL	NEW YORK GREEN BANK, Green Bank Outside Legal Couns	22,288
Ski Windham Operating Corp.	Industrial Process Effic, Industrial Process Efficiency	299,800
Skyline Solar Inc.	<200KW PV, NY Sun	8,750
Snyder Manufacturing, Inc	Geothermal Incentive Program, Large-Scale GSHP Rebate	27,804
Social Finance Inc.	Philanth Finance PayForSuccess, Pay for Success LMI feasibilit	50,000
Solar Alchemy, Inc.	<200KW PV, NY Sun	38,660
Solar and Wind FX, Inc. (Chris Schaefer)	<200KW PV, NY Sun	10,000
Solar Liberty Energy Systems, Inc	<200KW PV, NY Sun	295,137
	<200KW PV, NY-Sun	18,731
	<200KW PV, RES-NewConst(no longer in use)	16,500
	NY-Sun	830,639
Solar Plumbing Design Inc	<200KW PV, NY Sun	20,815
Solar Provider Group LLC	>200KW PV. NY Sun	1,623,562
Solcius, LLC	<200KW PV, NY Sun	5,075
South Colonie Central Schools	NEW CONSTRUCTION PROGRAM, NCP11976 - Colonie 2020 Capita	10,690
South Columbus Realty LLC	FUEL NY, GSP00310 - South Columbus Real	10,000
Southern Tier Central Regional Planning	CLEANER GREENER COMMUNITIES, CGC40255 - Cooperative Co	75,000
SPJ LLC	FUEL NY, PGI00284 - SPJ LLC	106,500
Sprint Communications Company LP	INDUSTRIAL PROCESS EFFICIENCY, Industrial Process Efficiency	156,754
SRI International	CLEAN TRANSPORTATION, NYS Clean Technologies Innovat	200,000
	INNOVATION CAPACITY & BUSINESS DEVELOPMENT, NYS Clean	100,000
	OTHER PROGRAM AREA, NYS Clean Technologies Innovat	40,000
	Subscription/Data Access, NYS Clean Technologies Innovat	40,000
St Joachim & Anne Nursing & Rehabilitati	EXISTING FACILITIES, Existing Facilities Program	174,000
St Regis Mohawk Tribe	NEW CONSTRUCTION PROGRAM, NCP11807 - Tribal Administrati	105,745
St. Ann's Warehouse	NEW CONSTRUCTION PROGRAM, NCP11351 - St. Ann's Warehouse	41,200
St. John Fisher College	NEW CONSTRUCTION PROGRAM, NCP12578 - SJFC Integrated Sci	28,177
Stanley Senior Housing Development Fund	MULTIFAMILY PERFORMANCE PROGRAM, Multifamily	121,828
Stantec Consulting Services, Inc.	Industrial Process Effic, Technical Review and Program S	7,364
	INDUSTRIAL PROCESS EFFICIENCY, Industrial Process Efficiency	11,938
	INDUSTRIAL PROCESS EFFICIENCY, Technical Review and Progra	6,885
	NEW CONSTRUCTION PROGRAM, Stantec-Energy Modeling Partne	9,945
	NEW CONSTRUCTION PROGRAM, Technical Assistance Services	83,391

Off-Shore Wind Master Plan, RFP3462 Umbrella Agreement NEW CONSTRUCTION PROGRAM, NCP10072 - Wooster Building (S AGRICULTURE ENERGY EFFICIENCY, Agriculture Energy Efficiency	
	116,756
AGRICULTURE ENERGY EFFICIENCY, Agriculture Energy Efficiency	
	18,375
LARGE SCALE RENEWABLES, Niagara Generating Facility	3,212,429
EXISTING FACILITIES, Technical Review and Program S	7,117
Low Rise New Construction, Technical Review and Program S	22,500
Multifam New Construction, Technical Review and Program S	22,500
NEW CONSTRUCTION PROGRAM, Technical Assistance Services	36,073
NEW CONSTRUCTION PROGRAM, Technical Review and Program S	9,396
NEW YORK GREEN BANK, NYGB Solar Energy RFP consulti	50,000
NY-SUN, RPS CST Regional Program	455,467
ADVANCED BUILDINGS, Conustling Deep Ret. Comp.	50,000
Industrial Process Effic, Industrial Process Efficiency	129,143
<200KW PV, NY Sun	96,193
<200KW PV, NY Sun	216,857
<200KW PV, NY Sun	10,301
NY-SUN, Competitive PV Program - RIT	1,989,665
>200KW PV, Commercial/Industrial PV	961,842
>200KW PV, NY-Sun C&I	439,294
Commercial/Industrial PV	990,966
<200KW PV, NY Sun	15,585
REC:CES REC Contracts, CESRFP1_Tier 1 RECS	21,132,900
<200KW PV, NY Sun	108,308
<200KW PV, NY-Sun	5,160
<200KW PV, PON 2112 NY SUN	23,820
<200KW PV, NY Sun	47,000
<200KW PV, NY Sun	45,577
	48,889
	58,468
	23,280
	33,724
	5,645
	651,489
	338,161
	657,066
	332,584
	119,775
	17,550
,	542,046
	7,791
	5,360
	330,257
	156,012
	8,986
NEW CONSTRUCTION PROGRAM, NCP12788 - Welcome Center INDUSTRIAL PROCESS EFFICIENCY, Industrial Process Efficiency	7,444 52,796
	Multifam New Construction, Technical Review and Program S NEW CONSTRUCTION PROGRAM, Technical Assistance Services NEW CONSTRUCTION PROGRAM, Technical Review and Program S NEW YORK GREEN BANK, NYGB Solar Energy RFP consulti NY-SUN, RPS CST Regional Program ADVANCED BUILDINGS, Conustling Deep Ret. Comp. Industrial Process Effic, Industrial Process Efficiency <200KW PV, NY Sun <200KW PV, NY Sun <200KW PV, NY Sun <200KW PV, NY Sun NY-SUN, Competitive PV Program - RIT >200KW PV, Commercial/Industrial PV >200KW PV, NY-Sun C&I Commercial/Industrial PV <200KW PV, NY Sun REC:CES REC Contracts, CESRFP1_Tier 1 RECS <200KW PV, NY Sun <200KW PV, NY Sun

Contractor	Contract Description	Total Contract Amoun
SUNY Upstate Medical University	NEW CONSTRUCTION PROGRAM, NCP12574-UpstateSimulation-O	9,079
	NEW CONSTRUCTION PROGRAM, NCP98635 - CNY Biotech Resea	101,302
Supervisor Town of Clay	Clean Energy Communities, CEC210199 - Town of Clay	150,000
Sustainable BioElectric LLC	REC:CES REC Contracts, 8th RPS Main Tier Solicitation	1,425,000
Sustainable Energy Advantage, LLC	Off-Shore Wind Master Plan, Large Scales Renewables Techni	120,113
	REC:CES REC System Dev Costs, Large Scales Renewables Techni	16,000
Sustainable Energy Developments Inc.	<200KW PV, NY Sun	24,110
	<200KW PV, PON 2112 NY SUN	18,120
Syracuse City School District	INDUSTRIAL PROCESS EFFICIENCY, Industrial Process Efficiency	128,920
Syracuse Label & Surround Printing	Industrial Process Effic, Industrial Process Efficiency	19,803
Syracuse University	Low Rise New Construction, 2018 Multifamily Summit	5,000
	Multifam New Construction, 2018 Multifamily Summit	5,000
	Multifam Performance Pgm, 2018 Multifamily Summit	40,000
Systems Management Planning, Inc.	NYSERDA ADMINISTRATION, AeroHive Subscription 1 year	5,414
	NYSERDA ADMINISTRATION, NetApp 2240 2018 - 2019	6,642
Taitem Engineering, P.C.	<200KW PV, NY Sun	17,892
	<200KW PV, NY-Sun	5,218
	Agriculture Energy Eff Pgm, FlexTech Consultant Selection	1,500
	Agriculture Energy Eff Pgm, RFP3628FlexTechConsultUmbrella	7,500
	EXISTING FACILITIES, Technical Review and Program S	61,428
	Flexible Tech Assistance, RFP3628FlexTechConsultUmbrella	16,510
	GJGNY REVOLVING LOAN FUND, Technical Review and Program S	49,978
	GREEN AFFORDABLE HOUSING, Multifamily	19,420
	Industrial Process Effic, Technical Review and Program S	4,084
	INDUSTRIAL PROCESS EFFICIENCY, Technical Review and Progra	9,974
	MULTIFAMILY PERFORMANCE PROGRAM, Multifamily	947,637
	On-Site Energy Manager, FlexTech Consultant Selection	351,436
	RENEWABLE THERMAL, Multifamily	33,150
	Retrofit NY, Multifamily	6,000
	Technical Services. RFP3628FlexTechConsultUmbrella	5,000
Tarah Rowse	Low Rise New Construction, New Construction	5,000
Taylor Group LTD	NYSERDA ADMINISTRATION, Corporate Marketing	15,482
Tech Valley Talent, LLC	ASSISTED HOME PERFORMANCE WITH ENERGY STAR, RES QA	24,000
	EMPOWER NY, RES QACSS Development	200,000
	HOME PERFORMANCE WITH ENERGY STAR, RES QACSS Develo	76,000
	NYSERDA ADMINISTRATION, Information Security Sercices	191,100
	NYSERDA ADMINISTRATION, RFP3143 Umbrella Agreement	2,041,480
Tecogen	COMBINED HEAT AND POWER, CHPA - Excelsior	350,000
recogen	Combined Heat and Power, CHPA - Glenn Gardens	385,000
TEKsystoms Inc		
TEKsystems Inc	NYSERDA ADMINISTRATION, Agile Team Training Camp	17,743
Temple Israel	NEW CONSTRUCTION PROGRAM, NCP12676 - Temple Israel	19,669
Tern Construction & Development, LLC	Low Rise New Construction, New Construction	50,600
Tesla Energy Operations Inc	<200KW PV, NY Sun	51,468
	>200KW PV, Commerical/IndustrialPV	336,016
	>200KW PV, NY Sun	1,008,122
	>200KW PV, NYSun CI	167,301

Contractor	Contract Description	Total Contract Amoun
Tesla Energy Operations Inc	Commercial/Industrial PV Progr	649,28
	NY-SUN, New York Sun Competitive PV Pr	1,333,878
	NY-SUN, PV System at Onondaga County -	234,599
Tessy Plastics Corp	Industrial Process Effic, Industrial Process Efficiency	350,50
	INDUSTRIAL PROCESS EFFICIENCY, Industrial Process Efficiency	1,579,50
The Bridge Inc	MULTIFAMILY PERFORMANCE PROGRAM, Multifamily	70,80
The Business Council of NYS, Inc.	Prof & Expert Engagement, Membership Business Council	6,08
The Cadmus Group, LLC	Air Source Heat Pumps, NYC ASHP Supply Chain Research	50,00
	Residential-Engaging New Mkts, RFQ3183 Umbrella Agreement	40,90
	Rmve Barriers Dist Enrgy Storg, RFP 3407 Category 4	573,44
The Continental Condominium	MULTIFAMILY PERFORMANCE PROGRAM, Multifamily	107,10
The Flea Theater	NEW CONSTRUCTION PROGRAM, NCP10839 - The Flea Theater	30,08
The Hearst Corporation	EXISTING FACILITIES, EFP2381 - Hearst Communication	352,11
The Radiant Store	Renewable Heat NY, Radiant - Cominole	7,00
	Renewable Heat NY, Radiant - Monastery	12,00
	Renewable Heat NY, Radiant Store - Sievers	12,00
	Renewable Heat NY, Radiant Store - Triumpho	7,00
	Talent Pipeline:CE and OJT, OJT PON 3982	5,76
The Real Estate Board of New York, Inc.	Commercial Real Estate Ten, 2018 PropTech Challenge	12,50
The Renewables Consulting Group, LLC	Off-Shore Wind Master Plan, RFP 3462	1,126,38
	Off-Shore Wind Master Plan, Technical Support for OSW Mast	50,00
	Off-Shore Wind Pre-Dev Act, RFP 3462	99,69
The Research Foundation of SUNY at Bing	RENEWABLES & DER INTEGRATION, Energy Conscious Scheduling	200,09
The Residences At Worldwide Plaza	MULTIFAMILY PERFORMANCE PROGRAM, Multifamily	327,00
The Source Service Station, Inc.	FUEL NY, PGI00259 - The Source Service	111,10
The Uniland Partnership of Delaware LP	NEW CONSTRUCTION PROGRAM, NCP11757 - 250 Delaware	176,60
Theatre for A New Audience	NEW CONSTRUCTION PROGRAM, NCP9056 - Theatre for a New Au	30,05
Thermo Control Heating Systems Ltd.	ADVANCED BUILDINGS, Thermo Control WB600-C Dual St	258,41
	ENVIRONMENTAL RESEARCH, Thermo Control WB600-C Dual St	49,00
Thomas Tousant	AGRICULTURE ENERGY EFFICIENCY, Agriculture Energy Efficiency	10,84
Thornton Tomasetti, Inc.	NEW CONSTRUCTION PROGRAM, Thornton Tomasetti-EMP	13,99
ThunderCat Technology LLC	NYSERDA ADMINISTRATION, Docusign - Subscription 19-20	84,51
	NYSERDA ADMINISTRATION, Jira Plug-in Licenses	5,06
	NYSERDA ADMINISTRATION, Jira Software User Count	18,33
Tilcon NY , Inc.	Industrial Process Effic, Industrial Process Efficiency	32,33
	INDUSTRIAL PROCESS EFFICIENCY, Industrial Process Efficiency	55,99
Time Warner	Industrial Process Effic, Industrial Process Efficiency	84,21
Titus Mountain Family Ski Center	Industrial Process Effic, Industrial Process Efficiency	240,00
TM Montante Solar Developments, LLC	<200KW PV. NY Sun	9,72
,,	>200KW PV, NY Sun	292,11
Toggenburg Mountain	Industrial Process Effic, Industrial Process Efficiency	35,20
Town of Avon	Clean Energy Communities, Town of Avon	50,00
Town of Brighton	CLEANER GREENER COMMUNITIES, CGC28762 - Town of Brighton	150,00
Town of Charloston	Clean Energy Communities DON 2200 CEC	
Town of Charleston Town of Clarence	Clean Energy Communities, PON 3298 CEC NEW CONSTRUCTION PROGRAM, NCP12952 -ClarencePolCrts-OF	50,00

Contractor	Contract Description	Total Contract Amoun
own of Seneca Falls NY	NEW CONSTRUCTION PROGRAM, NCP13165 - Town of Seneca Fall	8,053
own of Starkey	Clean Energy Communities, Town of Starkey	100,000
own of Webb	Industrial Process Effic, Industrial Process Efficiency	66,200
raco Manufacturing, Inc.	Industrial Process Effic, Industrial Process Efficiency	15,722
Trane	Real Time Enrgy Management, Charter - 75 9th Ave - RTEM	103,265
	Real Time Enrgy Management, FCRC-15 Metrotech-RTEM	101,829
	Real Time Enrgy Management, HydeParkCSD - Multisite - RTEM	364,127
ransportation Power, Inc.	INNOVATION CAPACITY & BUSINESS DEVELOPMENT, Advanced	684,497
TRC Energy Services	Agriculture Energy Eff Pgm, RFP3628FlexTechConsultUmbrella	2,500
	Commercial New Construc, Technical Review and Program S	56,250
	Commercial Real Estate Ten, Technical Review and Program S	127,650
	ENVIRONMENTAL RESEARCH, Staff Augmentation Services	333,000
	EXISTING FACILITIES, Technical Review and Program S	325,772
	Flexible Tech Assistance, Technical Review and Program S	112,500
	FLEXIBLE TECHNICAL ASSISTANCE, FlexTech Consultant Selection	587,861
	FLEXIBLE TECHNICAL ASSISTANCE, Technical Review and Progra	112,50
	Industrial Process Effic, Technical Review and Program S	4,95
	INDUSTRIAL PROCESS EFFICIENCY, Technical Review and Progra	14,92
	NEW CONSTRUCTION PROGRAM, Technical Review and Program S	318,75
	Real Time Enrgy Management, Technical Review and Program S	206,35
RC Engineers, Inc.	GREEN AFFORDABLE HOUSING, Low/Moderate Income	38,13
	GREEN AFFORDABLE HOUSING, Multifamily	80,53
	MULTIFAMILY PERFORMANCE PROGRAM, Low/Moderate Income	4,420,28
	MULTIFAMILY PERFORMANCE PROGRAM, Multifamily	3,633,86
	MULTIFAMILY PERFORMANCE PROGRAM, RES-Multifam(no longer	1,498,64
	RENEWABLE THERMAL, Low/Moderate Income	24,23
	RENEWABLE THERMAL, Multifamily	127,89
rinity Episcopal School Corporation	NEW CONSTRUCTION PROGRAM, NCP13195 - Trinity School	144,58
rinity Heating & Air, Inc.	<200KW PV, NY Sun	10,000
	<200KW PV, NY-Sun	5,51 ⁻
	NY Sun	31,500
ROPICANA MART INC	FUEL NY, PGI00249 - Tropicana Mart Inc.	21,015
	OTHER PROGRAM AREA, PGI00249 - Tropicana Mart Inc.	97,600
roy Web Consulting, LLC	NYSERDA ADMINISTRATION, Troy Web Hosting - Cloud	7,020
udor Heights Apartments LLC	MULTIFAMILY PERFORMANCE PROGRAM, Multifamily	48,000
W NY Properties LLC	NEW CONSTRUCTION PROGRAM, NCP14049-TWI Hudson Yard-O	368,85
wo Plus Four Construction Co., Inc.	Low Rise New Construction, New Construction	32,00
I.S. Department of Energy/Wv	FFY 2015 WVDP Cost Share	7,416,88
	FFY 2016 WVDP Cost Share	7,300,00
	FFY 2017 WVDP Cost Share	7,600,00
	FFY 2018 WVDP Cost Share	9,600,00
	WEST VALLEY DEVELOPMENT PROGRAM, FFY 2016 WVDP Cost	9,000,00
	ADVANCED BUILDINGS, Large Scale Condensing Boiler	500,000
Initux Advanced Manufacturing LLC	השיהויטבש שטובשווישט, במושב שנמוב טטוועבוושווש שטוובו	500,000
Inilux Advanced Manufacturing LLC	COMBINED HEAT AND DOWER DON/2701 CHP Program	2 400 000
Jnilux Advanced Manufacturing LLC	COMBINED HEAT AND POWER, PON2701 - CHP Program NEW CONSTRUCTION PROGRAM, NCP12929 - Roger Hull - OFLT	2,400,000

Contractor	Contract Description	Total Contract Amount
Unique Comp Inc.	NYSERDA ADMINISTRATION, RFP3143 Umbrella Agreement	1,609,485
Unique Electric Solutions LLC	Electric Vehicles - Innovation, Clean Transportation	400,000
Unison Enterprises	Low Rise New Construction, New Construction	5,500
United Bronx Parents, Inc	NEW CONSTRUCTION PROGRAM, NCP10545 - La Escuelita La Cas	28,984
United Health Services Hospitals Inc	Industrial Process Effic, Industrial Process Efficiency	31,729
United New York Sandy Hook Pilots' Assoc	NEW CONSTRUCTION PROGRAM, NCP11770 - Edgewater Rebuildin	9,099
United Talmudical Academy	NEW CONSTRUCTION PROGRAM, NCP9257 - Bais Ruchel High Sch	132,976
United Wind Project I, LLC	Small Wind, Wind Turbine Incentive	40,352
University at Albany	NEW CONSTRUCTION PROGRAM, NCP11874 - Building 25 Gut Reh	22,887
	NEW CONSTRUCTION PROGRAM, NCP12868 - UAlbany Onondaga	20,963
University of Rochester	ENVIRONMENTAL RESEARCH, Energy Related Air Quality	399,749
Upstate Capital Association of New York	OTHER PROGRAM AREA, NY Business Plan Comp Sponsor	25,000
	Prof & Expert Engagement, UCANY 2019 Sponsorship	40,000
Urban Electric Power, LLC	ADVANCED BUILDINGS, Optimization of Battery and DR	299,865
Uri Voskoboynik	NEW YORK ENERGY STAR HOMES, New Construction	9,000
USTA National Tennis Center, Inc.	NEW CONSTRUCTION PROGRAM, NCP14059 - USTA Armstrong	141,381
Utilities Program & Metering, Inc.	Real Time Enrgy Management, Tom Damsell - 1 Liberty - RTEM	33,581
Valley Gas Inc.	FUEL NY, PGI00270 - Valley Gas Inc.	84,000
Vanguard Graphics, LLC	Industrial Process Effic, Industrial Process Efficiency	24,313
Venture Home Solar LLC	<200KW PV, NY Sun	6,624
Verizon Communications Inc	Industrial Process Effic, Industrial Process Efficiency	41,913
Vermont Energy Investment Corporation	Air Source Heat Pumps, Umbrella Contract	25,000
	INDUSTRIAL PROCESS EFFICIENCY, Umbrella Contract	5,019
	MARKET PATHWAYS, Res Upstream HVAC Initiative	277,302
Viacom International, Inc.	EXISTING FACILITIES, EFP2311 - Viacom - 1515 Broadw	515,120
Vidaris, Inc.	ADVANCED ENERGY CODES, Code Manual for Design Pros	149,962
	FLEXIBLE TECHNICAL ASSISTANCE, FlexTech Consultant Selection	60,028
	NEW CONSTRUCTION PROGRAM, High Perf New Bldg(not in use)	41,582
	NEW CONSTRUCTION PROGRAM, Technical Assistant Services	346,572
	NEW CONSTRUCTION PROGRAM, Vidaris - EMP	53,250
VIII Hotel II Tribeca Holdings LLC	NEW CONSTRUCTION PROGRAM, NCP10660 - Baccarat Hotel & R	498,782
Village of Canton	Clean Energy Communities, Village of Canton	100,000
Village of Cazenovia	Clean Energy Communities, Village of Cazenovia	50,000
Village of Croton-on-Hudson	CLEANER GREENER COMMUNITIES, CEC500633 - Croton-on-Huds.	50,000
Village of Fayetteville	Clean Energy Communities, PON 3298 CEC	50,000
Vincents Heating and Fuel Service, LLC	Renewable Heat NY, Vincents Heating - Diorios	29,125
	Renewable Heat NY, Vincents Heating - Ostrander	20,750
Viola Homes Inc.	<200KW PV, NY Sun	88,707
Vishay Thin Film	Industrial Process Effic, Industrial Process Efficiency	27,222
Vivint Solar	<200KW PV, NY Sun	5,116
	<200KW PV, PON 2112 NY SUN	5,392
Voltaic Solaire LLC	NY Sun	28,224
Warex Terminals Corporation	FUEL NY, PGI00064 - Warex Terminals Cor	105,142
Watchtower Bible &	NEW CONSTRUCTION PROGRAM, NCP10426 - Maintenance and Fit	195,255
	NEW CONSTRUCTION PROGRAM, NCP13033 - Watchtower Wallkill	38,044
Wenat Realty Associates	NEW CONSTRUCTION PROGRAM, NCP13208 - 534 West 25th Stree	67,321
Tonat Nearly Associates		07,321

Contractor	Contract Description	Total Contract Amoun
Wendel Energy Services, LLC	Flexible Tech Assistance, RFP3628FlexTechConsultUmbrella	73,400
	Industrial Process Effic, Technical Review and Program S	5,813
West 37th Street Partners LLC	NEW CONSTRUCTION PROGRAM, NCP10558 - Homewood Suites	110,05
West 39th Street LLC	NEW CONSTRUCTION PROGRAM, NCP9032 - West 39th Street LLC	178,69
West Seneca Central School	Industrial Process Effic, Industrial Process Efficiency	16,54
West Seneca Fire District 2	NEW CONSTRUCTION PROGRAM, NCP12903-WestSenecaFireStati	13,17
WGL Energy Systems, Inc.	NY-Sun	243,56
	NY-SUN, New York Sun Competitive PV Pr	1,473,38
	NY-SUN, NY-Sun	320,83
White Plains Hospital Center	NEW CONSTRUCTION PROGRAM, NCP12086 - Dickstein Cancer Tr	8,75
	NEW CONSTRUCTION PROGRAM, NCP98601 - White Plains Hospit	7,26
Whitmore Court Apartments LLC	MULTIFAMILY PERFORMANCE PROGRAM, Multifamily	126,50
Whole Foods Market Group, Inc.	NEW CONSTRUCTION PROGRAM, NCP11298 - WFM Albany	119,79
	NEW CONSTRUCTION PROGRAM, NCP11299 - Whole Foods Mark	202,73
	NEW CONSTRUCTION PROGRAM, NCP11499 - Whole Foods Upper	83,62
	NEW CONSTRUCTION PROGRAM, NCP12343 - Whole Foods Harlem	39,94
	NEW CONSTRUCTION PROGRAM, NCP13143 - WholeFoodsBryant	43,58
Willard Mountain Inc.	Industrial Process Effic, Industrial Process Efficiency	125,00
Willdan Energy Solutions	Commercial Real Estate Ten, Willdan - MultiSite - CommTen	10,00
	Commercial Real Estate Ten, Willdan-Multisite Verizon-CT	41,71
	EMERGING TECHNOLOGY / ACCELERATED COMMERCIALIZATIO	65,63
	EXISTING FACILITIES, Technical Review and Program S	968,00
	Flexible Tech Assistance, FlexTech Consultant Selection	59,43
	Industrial Process Effic, Technical Review and Program S	69,69
	INDUSTRIAL PROCESS EFFICIENCY, Technical Review and Progra	1,044,75
	Real Time Enrgy Management, Technical Review and Program S	285,00
Willet Dairy, LLC	AGRICULTURE ENERGY EFFICIENCY, Agriculture Energy Efficiency	40,32
	NEW/ VORK OREEN RANK Revision of NVOP's RED	50,00
William J Dombrowski	NEW YORK GREEN BANK, Revision of NYGB's RFP	50,00
William J Dombrowski William Reynolds	<200KW PV, NY Sun	
		104,26
William Reynolds	<200KW PV, NY Sun	104,26
William Reynolds Wiltshire Renewable Energy Systems, LLC	<200KW PV, NY Sun NY Sun	104,26 6 70,35
William Reynolds Wiltshire Renewable Energy Systems, LLC Win Sum Ski Corporation	<200KW PV, NY Sun NY Sun <200KW PV, NY Sun	104,26 6 70,35 299,60
William Reynolds Wiltshire Renewable Energy Systems, LLC Win Sum Ski Corporation Wolfe Landing, Llc	<200KW PV, NY Sun NY Sun <200KW PV, NY Sun <200KW PV, NY Sun Industrial Process Effic, Industrial Process Efficiency	104,26 6 70,35 299,60 72,00
William Reynolds Wiltshire Renewable Energy Systems, LLC Win Sum Ski Corporation Wolfe Landing, Llc Woods Valley Ski Area	<200KW PV, NY Sun NY Sun <200KW PV, NY Sun Industrial Process Effic, Industrial Process Efficiency NEW YORK ENERGY STAR HOMES, New Construction	104,26 6 70,35 299,60 72,00 250,00
William Reynolds Wiltshire Renewable Energy Systems, LLC Win Sum Ski Corporation Wolfe Landing, Llc Woods Valley Ski Area Workforce Housing Advisors MM II, LLC	<200KW PV, NY Sun NY Sun <200KW PV, NY Sun Industrial Process Effic, Industrial Process Efficiency NEW YORK ENERGY STAR HOMES, New Construction Industrial Process Effic, Industrial Process Efficiency	104,26 6 70,35 299,60 72,00 250,00 173,75
William Reynolds Wiltshire Renewable Energy Systems, LLC Win Sum Ski Corporation Wolfe Landing, Llc Woods Valley Ski Area Workforce Housing Advisors MM II, LLC World Kitchen, LLC	<200KW PV, NY Sun NY Sun <200KW PV, NY Sun <200KW PV, NY Sun Industrial Process Efficiency NEW YORK ENERGY STAR HOMES, New Construction Industrial Process Effic, Industrial Process Efficiency MULTIFAMILY PERFORMANCE PROGRAM, Multifamily	104,26 6 70,35 299,60 72,00 250,00 173,75 114,99
William Reynolds Wiltshire Renewable Energy Systems, LLC Win Sum Ski Corporation Wolfe Landing, Llc Woods Valley Ski Area Workforce Housing Advisors MM II, LLC World Kitchen, LLC WSP USA Corp.	<200KW PV, NY Sun NY Sun <200KW PV, NY Sun <200KW PV, NY Sun Industrial Process Efficiency NEW YORK ENERGY STAR HOMES, New Construction Industrial Process Effic, Industrial Process Efficiency MULTIFAMILY PERFORMANCE PROGRAM, Multifamily INDUSTRIAL PROCESS EFFICIENCY, Industrial Process Efficiency	104,26 6 70,35 299,60 72,00 250,00 173,75 114,99 15,00
William Reynolds Wiltshire Renewable Energy Systems, LLC Win Sum Ski Corporation Wolfe Landing, Llc Woods Valley Ski Area Workforce Housing Advisors MM II, LLC World Kitchen, LLC WSP USA Corp.	<200KW PV, NY Sun NY Sun <200KW PV, NY Sun <200KW PV, NY Sun Industrial Process Effic, Industrial Process Efficiency NEW YORK ENERGY STAR HOMES, New Construction Industrial Process Effic, Industrial Process Efficiency MULTIFAMILY PERFORMANCE PROGRAM, Multifamily INDUSTRIAL PROCESS EFFICIENCY, Industrial Process Efficiency Flexible Tech Assistance, FlexTech Consultant Selection	104,26 6 70,35 299,60 72,00 250,00 173,75 114,99 15,00 49,83
William Reynolds Wiltshire Renewable Energy Systems, LLC Win Sum Ski Corporation Wolfe Landing, Llc Woods Valley Ski Area Workforce Housing Advisors MM II, LLC World Kitchen, LLC WSP USA Corp. Xerox Corp	 <200KW PV, NY Sun NY Sun <200KW PV, NY Sun Industrial Process Effic, Industrial Process Efficiency NEW YORK ENERGY STAR HOMES, New Construction Industrial Process Effic, Industrial Process Efficiency MULTIFAMILY PERFORMANCE PROGRAM, Multifamily INDUSTRIAL PROCESS EFFICIENCY, Industrial Process Efficiency Flexible Tech Assistance, FlexTech Consultant Selection Industrial Process Effic, Industrial Process Efficiency 	104,26 6 70,35 299,60 72,00 250,00 173,75 114,99 15,00 49,83 74,95
William Reynolds Wiltshire Renewable Energy Systems, LLC Win Sum Ski Corporation Wolfe Landing, Llc Woods Valley Ski Area Workforce Housing Advisors MM II, LLC World Kitchen, LLC WSP USA Corp. Xerox Corp	 <200KW PV, NY Sun NY Sun <200KW PV, NY Sun Industrial Process Effic, Industrial Process Efficiency NEW YORK ENERGY STAR HOMES, New Construction Industrial Process Effic, Industrial Process Efficiency MULTIFAMILY PERFORMANCE PROGRAM, Multifamily INDUSTRIAL PROCESS EFFICIENCY, Industrial Process Efficiency Flexible Tech Assistance, FlexTech Consultant Selection Industrial Process Effic, Industrial Process Efficiency INDUSTRIAL PROCESS EFFICIENCY, Industrial Process Efficiency INDUSTRIAL PROCESS EFFICIENCY, Industrial Process Efficiency 	104,26 6 70,35 299,60 72,00 250,00 173,75 114,99 15,00 49,83 74,95 1,068,06
William Reynolds Wiltshire Renewable Energy Systems, LLC Win Sum Ski Corporation Wolfe Landing, Llc Woods Valley Ski Area Workforce Housing Advisors MM II, LLC World Kitchen, LLC WSP USA Corp. Xerox Corp	 <200KW PV, NY Sun NY Sun <200KW PV, NY Sun Industrial Process Effic, Industrial Process Efficiency NEW YORK ENERGY STAR HOMES, New Construction Industrial Process Effic, Industrial Process Efficiency MULTIFAMILY PERFORMANCE PROGRAM, Multifamily INDUSTRIAL PROCESS EFFICIENCY, Industrial Process Efficiency Flexible Tech Assistance, FlexTech Consultant Selection Industrial Process Effic, Industrial Process Efficiency INDUSTRIAL PROCESS EFFICIENCY, Industrial Process Efficiency INDUSTRIAL PROCESS EFFICIENCY, Industrial Process Efficiency S200KW PV, Commercial/Industrial PV >200KW PV, Commercial/IndustrialPV 	104,26 6 70,35 299,60 72,00 250,00 173,75 114,99 15,00 49,83 74,95 1,068,06 1,281,67
William Reynolds Wiltshire Renewable Energy Systems, LLC Win Sum Ski Corporation Wolfe Landing, Llc Woods Valley Ski Area Workforce Housing Advisors MM II, LLC World Kitchen, LLC WSP USA Corp. Xerox Corp	 <200KW PV, NY Sun NY Sun <200KW PV, NY Sun Industrial Process Effic, Industrial Process Efficiency NEW YORK ENERGY STAR HOMES, New Construction Industrial Process Effic, Industrial Process Efficiency MULTIFAMILY PERFORMANCE PROGRAM, Multifamily INDUSTRIAL PROCESS EFFICIENCY, Industrial Process Efficiency Flexible Tech Assistance, FlexTech Consultant Selection Industrial Process Effic, Industrial Process Efficiency SUDUSTRIAL PROCESS EFFICIENCY, Industrial Process Efficiency INDUSTRIAL PROCESS EFFICIENCY, Industrial Process Efficiency >200KW PV, Commercial/Industrial PV >200KW PV, NY Sun 	104,26 6 70,35 299,60 72,00 250,00 173,75 114,99 15,00 49,83 74,95 1,068,06 1,281,67 2,210,23
William Reynolds Wiltshire Renewable Energy Systems, LLC Win Sum Ski Corporation Wolfe Landing, Llc Woods Valley Ski Area Workforce Housing Advisors MM II, LLC World Kitchen, LLC WSP USA Corp. Xerox Corp Xzerta Energy Group LLC	 <200KW PV, NY Sun NY Sun <200KW PV, NY Sun Industrial Process Effic, Industrial Process Efficiency NEW YORK ENERGY STAR HOMES, New Construction Industrial Process Effic, Industrial Process Efficiency MULTIFAMILY PERFORMANCE PROGRAM, Multifamily INDUSTRIAL PROCESS EFFICIENCY, Industrial Process Efficiency Flexible Tech Assistance, FlexTech Consultant Selection Industrial Process Effic, Industrial Process Efficiency S200KW PV, Commercial/Industrial PV >200KW PV, NY Sun >200KW PV, NY-Sun 	104,26 6 70,35 299,60 72,00 250,00 173,75 114,99 15,00 49,83 74,95 1,068,06 1,281,67 2,210,23 2,563,35
William Reynolds Wiltshire Renewable Energy Systems, LLC Win Sum Ski Corporation Wolfe Landing, Llc Woods Valley Ski Area Workforce Housing Advisors MM II, LLC World Kitchen, LLC WSP USA Corp. Xerox Corp	 <200KW PV, NY Sun NY Sun <200KW PV, NY Sun Industrial Process Effic, Industrial Process Efficiency NEW YORK ENERGY STAR HOMES, New Construction Industrial Process Effic, Industrial Process Efficiency MULTIFAMILY PERFORMANCE PROGRAM, Multifamily INDUSTRIAL PROCESS EFFICIENCY, Industrial Process Efficiency Flexible Tech Assistance, FlexTech Consultant Selection Industrial Process Effic, Industrial Process Efficiency SUDUSTRIAL PROCESS EFFICIENCY, Industrial Process Efficiency INDUSTRIAL PROCESS EFFICIENCY, Industrial Process Efficiency >200KW PV, Commercial/Industrial PV >200KW PV, NY Sun 	104,26 6 70,35 299,60 72,00 250,00 173,75 114,99 15,00 49,83 74,95 1,068,06 1,281,67 2,210,23 2,563,35 27,30 165,00

Contractor	Contract Description	Total Contract Amount
Zero Carbon Corporation	<200KW PV, NY Sun	18,144
Zones LLC	NYSERDA ADMINISTRATION, Network Switch - 15th FI. NYC	9,995
Grand Total		414,884,515