



**Emerging Technologies and Accelerated Commercialization Commercial/ Institutional Program (ETAC-CI) –
Large-Scale Demonstrations**
Program Opportunity Notice (PON) 2844
\$8,500,000 Available

Round 1 Proposals Due: September 22, 2014 by 5:00 PM Eastern Time*
Round 2 Proposals Due: January 28, 2015 by 5:00 PM Eastern Time*

The ETAC-CI Program supports market adoption of commercially available yet under-used energy-saving and load-reduction strategies or technologies in commercial, institutional, and non-process-related industrial settings. This solicitation will fund **large-scale and high-impact demonstrations** of these strategies and technologies. Large-scale and high-impact demonstrations will showcase solutions and strategies that address barriers to broad market acceptance of underused technologies and strategies. Successful projects must be replicable, leading to expanded market share across New York.

Proposals are sought in the following categories:

Category A. Strategy Demonstrations – demonstrations of innovative strategies, including pilot programs, or tools that offer promise for energy efficiency program administrators and energy practitioners

Category B. Technology Demonstrations – demonstrations of commercially available energy efficiency and load management systems or technologies that are not in widespread use

Proposals must identify a clear path to market growth and emphasize replication through marketability and widespread adoption across a building sector(s) or subsector(s) (e.g., office, retail, etc.). The proposed demonstration must result in quantifiable energy benefits, such as increased energy efficiency or reduced peak load, or must offer other benefits such as significantly lowering the cost of energy efficiency upgrades. Demonstration projects must be conducted at host sites located in New York State. Proposals for product research and development activities or projects focusing on utility power quality issues or grid-sited improvements are not eligible for funding under this solicitation, but may be eligible under other NYSERDA programs listed at www.nyserda.ny.gov.

NYSERDA will conduct a teleconference for prospective proposers on **August 14, 2014, at 1 pm EDT**. NYSERDA will review the PON requirements and address questions. Those who wish to participate in the teleconference must send an e-mail indicating their intent to participate to the following e-mail address etac-ci@nyserda.ny.gov, by 5 p.m. EDT on Monday, **August 11, 2014**, with the subject line "PON 2844 Teleconference." Participants will be provided call-in information on or about August 12. Prospective proposers may also submit written questions pertaining to the PON to etac-ci@nyserda.ny.gov, with the subject line "PON 2844 Question." Questions must be received before 5 p.m. on Monday, **August 11, 2014**, and answers will be provided where possible during the teleconference.

Proposal Submission: Proposers must submit two (2) signed copies of the proposal with a completed and signed Proposal Checklist attached, and one (1) CD which contains an electronic copy of the entire proposal (in Word/Excel and/or PDF format), including editable copies of the work plan and budget to assist with review and contract development. Proposals must be clearly labeled and submitted to:

Roseanne Viscusi, PON 2844
NYS Energy Research and Development Authority
17 Columbia Circle
Albany, NY 12203-6399

If you have technical questions concerning this solicitation, contact Liz Hanna, (518) 862-1090, ext. 3358 or liz.hanna@nyserda.ny.gov.

If you have contractual questions concerning this solicitation, contact Venice Forbes at (518) 862-1090, ext. 3507 or venice.forbes@nyserda.ny.gov.

No communication intended to influence this procurement is permitted except by contacting Liz Hanna (Designated Contact) at (518) 862-1090, ext. 3358 or liz.hanna@nyserda.ny.gov. Contacting anyone other than this Designated Contact (either directly by the proposer or indirectly through a lobbyist or other person acting on the proposer's behalf) in an attempt to influence the procurement: (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 proposals will be returned. Incomplete proposals may be subject to disqualification. It is the bidder'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 www.nyserda.ny.gov.

I. INTRODUCTION

The ETAC-CI Program supports market adoption of commercially available yet under-used energy-saving and load-reduction strategies or technologies in commercial, institutional, and non-process-related (e.g., lighting and other building systems) industrial settings. This solicitation will fund **large-scale and high-impact demonstrations** of these strategies and technologies at multiple sites. Large-scale and high-impact demonstrations will be used to showcase solutions and strategies that address barriers to broad market acceptance of underused systems, technologies and strategies. Successful projects will be replicable, leading to expanded market share across New York.

Funding requested from NYSDERDA is expected to range between \$250,000¹ and \$2.5 million per proposal. Funding requests of greater than \$1.5 million per proposal must include additional documentation of project benefits (see Section III, Available Funds).

Building energy use accounts for nearly two-thirds of New York State's total energy consumption, and 50% of the State's greenhouse gas emissions. The recent NYS Public Service Commission's proceeding on Reforming the Energy Vision (REV) supports improving system efficiency, empowering customer choice, system load factor improvements and encouraging greater penetration of clean distributed energy resources (DER). Expanding the clean energy options and choices for performance proven technologies and strategies and increasing energy efficiency in buildings delivers system efficiency, greenhouse gas reductions, and cost savings to ratepayers. Emerging energy efficiency and load management solutions provide expanded opportunities for electric and gas energy efficiency and load management in commercial and institutional buildings. The ETAC Program demonstrates these strategies and technologies, and provides validated performance data and market-ready options to participate in the future rates and markets envisioned under REV.

Until market acceptance is gained, these emerging technologies and strategies may face barriers such as higher upfront costs, installation or commissioning challenges, lack of a track record, limited customer or contractor awareness, and the lack of supply chain development. Through ETAC-CI, promising strategies and technologies will be demonstrated to identify barriers to increased market adoption, prove in-field performance, and increase market and customer awareness. By demonstrating performance effectiveness and identifying and addressing barriers to adoption, the ETAC-CI Program is designed to bridge the gap between research and development activities and wide-scale deployment.² This solicitation also seeks proposals for demonstrations of innovative strategies, including pilot programs, or tools that offer promise for energy efficiency program administrators and energy practitioners.

Proposals must emphasize replication (e.g., future sales, installations, or implementation) through marketability and widespread adoption across a buildings sector or subsector. The proposed demonstration must result in quantifiable energy benefits, such as increased energy efficiency or reduced peak load, or must offer other benefits such as significantly lowering the cost of energy efficiency upgrades. Demonstration projects must be conducted at host sites located in New York State. Proposals for product research and development activities or projects focusing on utility power quality issues are not eligible for funding under this solicitation but may be eligible under other NYSDERDA programs listed at www.nyserda.ny.gov.

Proposals are sought in the following categories:

Category A. Strategy Demonstrations

Category B. Technology Demonstrations

In addition to funds awarded under this solicitation, NYSDERDA will provide performance validation services for each project, through use of third-party technical consultants assigned by NYSDERDA. Performance validation will include evaluation of energy and non-energy related opportunities, barriers, and performance factors, and measurement and verification (M&V) of energy savings. M&V will generally follow the accepted standards of the International Performance Measurement and Verification Protocol (IPMVP); however, more rigorous data collection methods or longer collection periods may be required.

¹ NYSDERDA also offers an ongoing open enrollment ETAC-CI program, with a maximum award of \$250,000 per project. See [NYSDERDA Program Opportunity Notice 2689 - Emerging Technologies and Accelerated Commercialization for the Commercial/Institutional Sector](#).

² Developers of pre-commercial technologies seeking funding for research, product development, and pilot demonstrations should review [NYSDERDA Program Opportunity Notice 2606 – Advanced Building Program](#).

Proposals must include a plan for the *path to market growth* (e.g., a cohesive set of actions aimed at increasing the demonstration strategy or technology market share). Proposals must include a clear, deliberate and targeted plan for communicating results of the demonstration. Following the implementation of a successful demonstration project, the proposer (together with team members as appropriate) will organize and deliver effective communications of the results of the projects to the marketplace via case studies, presentations, site tours, webinars, etc.

ETAC-CI is funded through NYSEERDA's Technology and Market Development (T&MD) portfolio of programs, and is included under the Advanced Building Technologies initiative. For more information on the Advanced Building Technologies initiative, please see NYSEERDA's [Operating Plan for T&MD Programs \(2012 – 2016\)](#), Section 9.2.

II. DEFINITIONS

Commercially Available. A technology, strategy, or approach that has been available in the marketplace for at least six months, can be accessed through standard distribution channels, has manufacturer or independent third-party performance data available, has been successfully demonstrated or installed, and marketing, sales, and service resources are active and underway.

Emerging Technology. For the purposes of the ETAC-CI Program, an emerging technology is defined as a commercially available product, technology, technology type (for example, solid state lighting), technology bundle (for example, solid state lighting integrated with lighting controls), or strategy that has minimal market penetration, and provides new or expanded opportunities for electric and/or gas energy efficiency and/or load management in commercial and institutional buildings. Products must be code compliant and have performance and cost data available.

Project. The installation, implementation, and demonstration of a replicable emerging technology or strategy at multiple and/or high-visibility sites.

Host Site. May be commercial, institutional, or industrial facilities (to the extent that the strategy or technology being demonstrated is not industrial-process-related). May be a single building, multiple co-located buildings (such as a campus), or a discrete portion of a building (such as a laboratory wing, or one floor of a large office building).

System-peak-coincident. For the purposes of this solicitation, system-peak-coincident demand reductions (in kilowatts, or kW) are those that occur between the hours of 2 pm-6 pm, Monday through Friday, from June 1 through September 30, excluding legal holidays.

III. GENERAL PROGRAM REQUIREMENTS

Site and Project Eligibility

Demonstration sites must be commercial, institutional or industrial facilities located in New York State. While demonstration sites are not required to pay the System Benefits Charge (SBC), a proposal wherein the majority of energy benefits occur at non-SBC-paying demonstration sites should include an explanation of how the results of the project will benefit SBC-paying customers in New York State. Demonstration sites should be aligned with the long-term target customer for the strategy or technology being demonstrated. (In other words, if the target customers for a technology are schools and office buildings, then your proposed demonstration sites should be schools and office buildings, not grocery stores.) Both new construction and retrofit projects are eligible for funding. Strategies and technologies demonstrated must be commercially available, have a proven track record, have the potential to be widely adopted across a building sector or subsectors, and have met all applicable code, health and safety standards.

Ineligible Projects

The ETAC-CI Program seeks to avoid duplication of support offered through other NYSEERDA programs. The following project types may be eligible for other NYSEERDA programs (see <http://www.nyserda.ny.gov/Funding-Opportunities.aspx>) but are not eligible for ETAC-CI:

- Mature technologies or services, or opportunities or services that do not primarily deliver electric and/or gas energy efficiency and/or load management savings
- Industrial manufacturing process-related technologies.

- Stand-alone renewable energy technologies such as solar electric or solar thermal, wind turbines, fuel cells, or anaerobic digesters.
- Transportation projects and vehicle-charging stations.
- Biomass-related projects.
- Technologies that are eligible for pre-qualified incentives through NYSERDA's Existing Facilities or New Construction programs, unless integrated within an otherwise eligible project.

While the strategies and technologies identified in the PON 2689 [Focused Demonstration Targeted Categories](#) remain of particular interest to NYSERDA, this solicitation is not limited to those targeted categories.

Installation/implementation of the emerging technology or strategy to be demonstrated cannot begin until NYSERDA approves the project Performance Validation Plan (see next section).

Performance Validation and Data Collection

In addition to funds awarded under this solicitation, NYSERDA will provide and fund independent performance validation services for each project. A technical consultant (TC) will be assigned by NYSERDA to perform M&V and monitor and validate performance in each demonstration project. The TC may, in addition to the verification role, act in an advisory role to the Contractor (i.e., the proposer awarded a contract through this PON) to support project success and help to amplify replication opportunities. This could include support for the Contractor's mitigation and resolution of project issues/obstacles, sharing lessons learned to the extent applicable from TC experience, assisting Contractor in cases where an obstacle and/or opportunity may be broader than this single project (e.g. regulatory or utility concerns), and/or serve as an impartial sounding board for the Contractor and NYSERDA.

Performance validation will include evaluation of barriers and performance factors, as well as measurement and verification (M&V) of energy savings. M&V will generally follow the accepted standards of the International Performance Measurement & Verification Protocol (IPMVP); however, more rigorous data collection methods or longer collection periods (typically, 1-2 years) may be required. Projects involving weather-sensitive strategies or technologies should expect performance validation to occur over two full heating or cooling seasons.

Where it increases visibility and/or captures differences in weather and energy prices across the state, wide geographic distribution of demonstration sites is desired. Proposer should include enough sites and/or a diversity of sites in order to provide a meaningful dataset for performance validation. If an insufficient number or variety of sites is included, project validation reports and outreach materials may have to present limited or constrained findings. A sample Performance Validation Plan may be found at <http://www.nyserdera.ny.gov/Energy-Efficiency-and-Renewable-Programs/Commercial-and-Industrial/CI-Programs/ETAC/ETAC-Program-Participation/ETAC-Program-Sample-Validation.aspx>.

Path to Market Growth

Proposals must include a plan for the *path to market growth* (e.g., a cohesive set of actions aimed at increasing the demonstration strategy or technology market share). Proposer must identify the current status in New York and the broader market, the target market (including the sector/sub-sector, customer and building types the strategy or technology is most suited for), and market or regulatory obstacles and avenues to overcome them (may include barriers such as codes, insurance considerations, financeability, variable performance, disruption to end-user standard practice, etc.). Proposers should explain their business model, including how the strategy or technology will be delivered, and expected revenue streams. Proposers must identify and plan activities to develop and animate the supply and service chain (manufacturers, distributors, installers, service and maintenance professionals), as well as targeted outreach/marketing (such as sales documents and/or marketing and product information) to potential end users or buildings owners.

Outreach Plan

Upon completion of a successful demonstration project, proposers will lead outreach activities to communicate the results of the demonstration projects to the commercial/institutional energy community, including distribution channels (contractors, designers, and installers) and end-users (building owners, facilities managers, etc.). Proposals must include plans for conducting outreach activities, which may include webinars, seminars, and conference presentations; as well as a final report documenting the project. Proposers will take the lead in developing case studies and press releases with assistance from NYSERDA. Proposer may include costs for outreach activities, including preparing the case study and final report, in the budget proposal. These costs may represent up to 10% of the funding requested from NYSERDA, capped at \$50,000.

Final Project Report

Upon completion of the demonstration project, the proposer will submit a brief (not more than ten pages, excluding technical appendices) final report to NYSERDA summarizing the demonstration project. The final report should include project findings such as commissioning results, project performance, costs, energy and environmental benefits, barriers identified and remedies tested and recommended, and pathways to successful project replication in New York State. The final report should also include information and findings that address broader market-based costs, energy and environmental benefits, barriers and remedies, and pathways to successful project replication in New York State.

Contractor's Responsibility

Proposers are responsible for recruiting and securing commitments from demonstration sites. Proposals selected for funding will enter into a contract with NYSERDA. The Contractor will be responsible for the timely completion of the requirements described in this PON and the resulting contract. The selected Contractor assumes overall responsibility for coordinating the demonstration project among any team members included in the proposal. The Contractor will coordinate with the TC assigned by NYSERDA to conduct performance validation, and will ensure that the TC has the necessary access to demonstration sites and data.

NYSERDA's Responsibility

The NYSERDA Project Manager will be the primary contact at NYSERDA for the Contractor and will be responsible for managing and overseeing all tasks undertaken by the selected contractor and associated with the proposed demonstration project. In addition, the Project Manager will assign the performance validation TC, and will review and approve Performance Validation Plans prior to the commencement of the demonstration project. The Project Manager will also coordinate the development of any case studies and press releases with the Contractor and NYSERDA's Marketing Department.

Available Funds

Up to \$8.5 million is available for Categories A and B, and NYSERDA expects to fund 7-15 proposals.

All proposals must include minimum 40% cost-share by the proposing team. See Section IV. "General Proposal Requirements" for more information.

All proposers must include Attachment C, "Proposal Cost and Savings Ratio" with their proposal. Attachment C will be evaluated in relation to NYSERDA's funding and savings targets. Proposals that request more than \$1.5 million in funding must include a statement of justification for the funding request.

The remainder of this solicitation is organized into the following sections:

- IV. General Proposal Requirements
- V. Category A. Strategy Demonstrations
 - A. Proposal Requirements
 - B. Proposal Evaluation
- VI. Category B. Technology Demonstrations
 - A. Proposal Requirements
 - B. Proposal Evaluation
- VII. General Conditions
- VIII. Attachments

IV. GENERAL PROPOSAL REQUIREMENTS

Proposers must submit the appropriate number of copies of the completed proposal to the attention of Roseanne Viscusi at the address on the front of this Program Opportunity Notice. A completed and signed Proposal Checklist must be attached as the front cover of your proposal, one of which must contain an original signature. **Late proposals will be returned and proposals lacking the appropriate completed and signed Proposal Checklist may be returned. Faxed or e-mailed copies will not be accepted.**

Proposals should not be excessively long or submitted in an elaborate format that includes expensive binders or graphics. Proposals should adhere to the page limits given for each section. Unnecessary attachments beyond those sufficient to present a complete, comprehensive, and effective response will not influence the evaluation of the proposal. Each page of the proposal should state the name of the proposer, the PON number, and the page number. The proposal must be in the following format:

- **PON Proposal Checklist:** The Proposal Checklist to be completed is attached to this PON. The checklist must be attached to both copies of the proposal. At least one (1) copy must contain an original signature.
- **Attachment B:** Disclosure of Prior Findings of Non-Responsibility
- **Sections 1 – 8:** as identified below in **V. A** or **VI. A** “Proposal Requirements”, in the order given. Each section of the proposal must be clearly labeled. Proposals must clearly state for which Category (A or B) the proposal is being submitted.
- **Section 9: Cost Proposal**
Milestone Payments – Provide a list of deliverables associated with each task with proposed milestone payments assigned to major deliverables. The magnitude of the milestone payments should be based on the amount of effort required to reach the deliverable. Typical milestones may include equipment delivery, commissioning, submission of data, acceptance of final report, etc.

Also provide the following:

- Provide a task budget that details total costs and cost elements for each task identified in the scope of work. Provide detailed budget breakdowns for materials, equipment, travel, and any other costs.
- If applicable, provide a budget for each subcontractor or team member involved with the project.
- Proposals requesting more than \$1.5 million in funding must include a statement of justification for the funding request.
- **Cost Sharing** – The proposal must show non-NYSERDA funding of at least 40% 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	\$	\$	\$

- **Appendices:**
Attachment C – Proposal Cost and Savings Ratio
Letters of Commitment (see Attachment D for a sample letter of commitment)
Other Supporting Materials (*such as product cut sheets, reports documenting prior performance, etc.*)

Procurement Lobbying Requirements - State Finance Law sections 139-j and 139-k

Procurement lobbying requirements contained in State Finance Law sections 139-j and 139-k became effective on January 1, 2006. (The text of the laws is available at:

<http://www.ogs.ny.gov/aboutogs/regulations/advisoryCouncil/StatutoryReferences.html>). In compliance with §139-j and §139-k of the State Finance Law, for proposals submitted in response to this solicitation that could result in agreements with an annual estimated value in excess of \$15,000, additional forms must be completed and filed with proposals: (1) a signed copy of the Proposal Checklist including required certifications under the State Finance Law and (2) a completed Disclosure of Prior Findings of Non-Responsibility form. Failure to include a signed copy of the Proposal Checklist referenced in this solicitation will disqualify your proposal.

V. CATEGORY A. STRATEGY DEMONSTRATIONS

This category includes demonstrations of approaches, tools, or strategies (herein referred to collectively as “strategies”) that support customer decision-making and expanded market adoption of Clean DER. The target audience for the strategy demonstrated may be building owners/operators (preferably those with portfolios of buildings), energy efficiency program administrators, or other energy practitioners such as energy service companies (ESCOs) and other proposers having business relationships with a set of end-use customers.

Examples of proposals sought include, but are not limited to, the following:

- Analytical tools such as remote energy audits;
- Systems-based solutions that provide Clean DER benefits on an aggregated basis (e.g. portfolio-wide office or big-box retail, community level, association or affinity group).
- Strategies that accelerate customer decision-making or customer acquisition, or that streamline project development steps, or that propose creative solutions to existing barriers to market uptake of emerging technologies and Clean DER solutions;
- Program designs focused on under-used technologies or strategies that have been successfully implemented by energy efficiency program administrators elsewhere, but have not yet been tried or hit scale in New York. Proposer will need to demonstrate understanding of New York markets and be able to identify adaptations needed to successfully implement the program in New York. Examples include:
 - continuous energy improvement, which has been supported by the Northwest Energy Efficiency Alliance, California utilities, and Efficiency Vermont, among others
 - sector-specific strategies, such as an efficiency program designed to engage a specific sub-sector of the commercial/institutional (C/I) market, such as grocery stores, big-box retail, etc.;
- Systems, tools or models that can be used by energy practitioners, such as energy efficiency program administrators or ESCOs, to increase the accuracy of estimating energy savings or otherwise lower the cost or streamline the process of delivering energy efficiency projects.

Proposals must be cost-shared by the proposing team at or above 40%.

A. PROPOSAL REQUIREMENTS

Proposal should be in the following format. Also see Section IV. General Proposal Requirements.

Section 1: Executive Summary (1-2 pages)

Provide an overview of the proposed project and how it relates to the objectives and requirements of this PON. Clearly state the goals and objectives of the project, and describe its energy and other benefits. Briefly identify key information about the proposer’s organization and team members (if applicable).

Section 2: Strategy Identification (2-3 pages)

Describe the strategy that is proposed for demonstration and describe any precedents, previous pilot programs or demonstration projects involving the strategy. Describe when and where the strategy has been used previously. Include any available cost and performance data. Describe and provide links to (or attach) any reports and/or performance data from previous pilot programs or demonstrations. **Independent performance data is strongly preferred and will be an important factor in proposal evaluation.**

Section 3: Market Assessment, Path to Market Growth, and Replication Plan (3-6 pages)

Assess the market for this strategy, including evidence that the strategy is underused. Identify the target market or application, building types, sectors, subsectors, and/or regions where the strategy is most suitable and why. Identify market, institutional, regulatory or infrastructure obstacles that have limited market adoption, and avenues to address/overcome them.

Identify the current standard practice/code compliance and primary competitors for this strategy. Describe any improvements the strategy offers over the primary market competition, and how the strategy compares in cost and performance with competitive options. Explain any significant barriers that the new strategy faces relative to the current standard practice or market competition. Identify how you propose to break down or mitigate these barriers.

Quantify the annual energy savings from a typical application of the strategy in kilowatt-hours (kWh) and/or therms (for natural gas savings), and/or kW savings and identify both customer (utility account) and system-peak-coincident metrics. (Please identify project-specific energy savings in Section 4.)³ Identify any non-energy or performance benefits that this strategy provides (e.g., reduced maintenance costs, improved indoor air quality, water savings, etc.), as well as any additional benefits, including economic benefits to New York State. Describe the current typical return on investment and expected simple payback. Describe how you expect typical ROI and simple payback to change over the next 6-12 months (e.g., are equipment, installation, or other costs expected to decrease?). Describe how you expect the New York market for this strategy to change in the year following the conclusion of the proposed project, if selected by NYSERDA and successfully implemented. Also provide estimated life cycle cost savings and assumptions.

Discuss the potential for the demonstration project to be replicated, including how the strategy can be implemented to achieve similar results in comparable C/I buildings. Explain the business model, including how the strategy will be delivered, and expected revenue streams. Describe specific steps you are taking or plan to take in order to increase use of the strategy in New York State, including, where relevant, development of the supply and service chain and targeted outreach/marketing. Describe the level of replication achievable in New York State in the next three years. **Strong potential to penetrate New York markets will be an important factor in proposal evaluation.**

Section 4. Strategy Demonstration Project Description, Scope of Work, and Schedule (4-8 pages)

Give a detailed overview of the project. Quantify annual energy savings to be realized from this demonstration project in the following format:

kWh/year	
therms/year	
kW/year	
Annual energy savings (\$)	

Identify kW savings both from a customer (utility account) and system-peak-coincident basis. Identify and quantify load management benefits and load factor improvement where anticipated. State all assumptions used to develop energy savings figures, including, for instance, hours of operation, energy cost escalation, etc.

Identify and quantify any (non-energy) performance benefits associated with the demonstration project (e.g., reduced maintenance costs, improved indoor air quality, water savings, etc.).

Provide a draft Statement of Work (SOW) for the project. The SOW is a detailed work plan of how the Proposer will accomplish the objectives of the Program and is a primary contractual document that identifies the deliverables and milestones and provides a basis for payment. The SOW should clearly articulate strategies consistent with the objectives of this PON and detail the strategy and rationale for accomplishing tasks necessary to implement the demonstration project. List the major tasks necessary to complete the project, such as planning, installation, performance validation, reporting, and outreach. Provide a detailed description of each task, indicating who will perform it, how it will be performed, and anticipated results. Include deliverables as appropriate for each task. An outline for the SOW is provided as Attachment E.

³ For some strategies, e.g., demonstration of a tool or strategy that provides benefits by lowering the cost of energy efficiency upgrades, facilitating customer acquisition or lowering transaction costs, energy savings may not be an appropriate metric. In that case, please provide thorough justification of the other benefits and how they will ultimately contribute to increased energy efficiency, load management or load factor improvement in New York State.

Provide a schedule and timeline for the completion of each task in the SOW, as well as dates for deliverables. The schedule may be provided in the form of “months after contract award.” Proposer should indicate whether there are specific timeframes, such as seasons, or specific start dates, necessary for any tasks to ensure data validity or to maximize outreach opportunities.

Section 5. Demonstration Site Plan (1-3 pages, plus letters of commitment)

Attach letters of commitment from demonstration site owners and/or tenants (e.g., the entity that has the legal right to make or approve the proposed modifications to the building) and/or key project partners in the proposal appendix. A sample letter of commitment is provided as Attachment D. Letters of commitment should include a brief description of each site including physical address, square footage, building sector (e.g., office, hospital, retail, etc.), site contact information, electric utility territory, and whether the site(s) pay into the System Benefit Charge (SBC). A year’s worth of utility bill history for each site should be provided where available. **Firm commitments from multiple sites and/or key project partners will be an important factor in proposal evaluation.** Where demonstration sites are to be identified after contract award, describe the plan for recruiting and securing demonstration sites.

Section 6. Project Validation Proposal (1- 3 pages)

Include a proposed plan for project validation, to include measurement and verification (M&V) where appropriate to determine energy savings resulting from the demonstration, and overall performance and effectiveness. The Project Validation Proposal will inform the Project Validation Plan developed by NYSERDA. **Please note**, performance validation including M&V will be performed by the NYSERDA TC assigned to the project and will typically occur over one to two years. Do not include costs for performance validation in your budget proposal.

The Project Validation Proposal should cover the collection of adequate data for documentation and analysis of energy savings accruing from the project. The proposed plan should also cover non-energy- and performance-related factors to be tracked, including installation considerations (e.g., level of customer disruption, ease of installation, installation best practices, other building systems such as fire and life safety that will be affected, etc.), documentation of project costs and payback (simple payback, lifecycle cost and ROI), warranty issues associated with equipment retrofits, acceptance by operators and building occupants, availability of distribution channels and service providers, and any other relevant factors.

Section 7: Proposer Qualifications (1-3 pages, plus résumés)

Describe the nature of your business, locations, number of employees, and key personnel to be involved in the project. If teaming is included, clearly identify each team member’s responsibilities. Attach résumés for key personnel. Provide two to three examples of previous work relevant to the work proposed under this solicitation. While proposers are not required to be located in New York, those that have offices in New York are viewed favorably.

Section 8: Outreach Plan (1-3 pages)

Assuming a successful demonstration, include a plan for sharing project results. NYSERDA will assist with the development of case studies and press releases. Identify specific target audiences or venues most relevant for outreach and most likely to create replication.

Section 9: Cost Proposal

See Section IV. General Proposal Requirements for cost proposal guidelines.

B. PROPOSAL EVALUATION

Proposals will be reviewed by a Technical Evaluation Panel (TEP) using the Evaluation Criteria below. The percent to which each criterion will contribute to total evaluation is shown in parentheses.

Market Assessment and Replicability (20%)

How well does the proposal assess the strategy’s current market state and potential?

Is there a documented substantial market in New York State for the proposed strategy?

Is there a clear path to market growth and broad replication, and is the plan toward that path thorough and achievable?

To what extent is commercial readiness evident?

How well does the proposal identify and address market, institutional, and infrastructure barriers?

Are realistic strategies proposed for overcoming barriers?

Will the project be a significant catalyst for future implementation of the strategy?

Energy and Other Benefits (20%)

Does the project deliver sizable energy, environmental, and/or economic benefits, or does it demonstrate a significant lowering of the cost of energy efficiency upgrades, facilitating customer acquisition or lowering transaction costs? Are energy and other benefits well supported and realistic? Will project replication create sizable benefits?

Are there electric or gas system benefits to be gained from the project, including energy savings and/or load reduction/peak demand benefits?

Does the strategy provide improved resiliency of buildings in response to interruptions of the electric grid?

What other non-energy benefits are identified?

Responsiveness, Scope of Work/Project Validation Proposal (15%)

Does the proposed project demonstrate a strategy that is tested and proven, yet underused?

Does the proposal address all required components of the PON?

Is the proposal clear and well organized?

Is the proposed project well conceived and supported by a logical SOW and sufficient staffing plan?

Are the proposed tasks appropriate and suitable?

Are energy savings and other project benefits able to be measured and validated?

Does the Project Validation Proposal conform to industry standards for evaluating energy savings?

Are other performance factors considered in the Project Validation Proposal?

Budget, Project Plan, and Schedule (15%)

Is the overall budget reasonable? Is the funding request justified by the anticipated energy and non-energy benefits? Is the Proposal Cost and Savings Ratio (Attachment C) reasonable?

What is the cofunding percentage? Is the cofunding contribution higher than the required amount? Are the proposer's cofunding contributions (cash, in-kind contributions, etc.) appropriate?

Are overhead and G&A rates reasonable?

Are equipment, facility, material, and travel costs based on reasonable estimates?

Are the labor rates reflective of the industry?

Is the schedule realistic? Are significant milestones and delivery of reports and products identified?

Demonstration Site Plan (20%)

To what extent are specific sites identified? To what extent have letters of commitment from sites and/or key project partners been obtained?

To what extent does the site plan demonstrate large scale, high visibility, and/or geographic coverage?

How likely is the proposer to be able to recruit the proposed number and type of sites, if not already committed?

Proposer Qualifications (5%)

Does the proposer or proposing team have the relevant and necessary technical and business background and experience?

If teaming is included, are responsibilities clearly identified?

Were examples of previous work provided? How well do they relate to the proposed project?

Does proposer have offices in New York State?

Outreach Plan (5%)

Is the plan thorough and achievable? Is it likely to spur replication?

Are specific target audiences, communication channels, and/or venues identified?

VI. CATEGORY B. TECHNOLOGY DEMONSTRATIONS

This category includes demonstrations of emerging technologies that involve installation or modification of end-use equipment and systems that support customer decision-making and expanded market adoption of Clean DER. Examples of proposals sought include, but are not limited to, the following:

- Products, systems-based and/or integrated technology solutions that offer greater energy efficiency or load management benefits than standard practice, but are not yet in wide use;

- Clean DER, such as commercial building-scale energy storage system solutions and demand-side management technology that supports the objectives of the REV;
- Building or energy system-focused technologies that offer energy data analytics and performance information while producing actionable information for, and demonstrated responsiveness from, end-users in identifying and implementing energy savings opportunities;
- Systems-based solutions that provide Clean DER benefits on an aggregated basis (e.g. portfolio-wide office or big-box retail, community level, association or affinity group).

Proposals must be cost-shared by the proposing team at or above 40%.

A. PROPOSAL REQUIREMENTS

Proposal should be in the following format. Also see Section IV. General Proposal Requirements.

Section 1: Executive Summary (1-2 pages)

Provide an overview of the proposed project and how it relates to the objectives and requirements of this PON. Clearly state the goals and objectives of the project, and describe its energy and other benefits. Briefly identify key information about the proposer's organization and team members (if applicable).

Section 2: Technology Identification (2-3 pages)

Describe the emerging technology (hereafter, "the technology") that is proposed for demonstration and how it meets this PON's definition of commercially available. Describe how long the technology has been available, how many units have been sold, and whether there are installations in New York or the Northeast. Demonstrate that all code, health and safety standards have been met. Include product cut sheets where available. Include any available cost and performance data. Describe and provide links to (or attach) any reports, manufacturer's performance data and/or independent third-party validated performance data from previous installations or field demonstrations. **Independent performance data is strongly preferred and will be an important factor in proposal evaluation.**

Section 3: Market Assessment, Path to Market Growth, and Replication Plan (3-6 pages)

Assess the market for this technology type, including evidence that the technology type is underused. Identify the target market or application, building types, sectors, subsectors, and/or regions where the technology is most suitable and why. Identify market, institutional, regulatory or infrastructure obstacles that have limited market adoption, and avenues to address/overcome them. Obstacles may include barriers such as codes, insurance considerations, financeability, variable performance, disruption to end-user's standard practice, etc.

Identify the current standard practice/code compliance and primary competitors for this technology. Describe any improvements the technology offers over the primary market competition, and how the technology compares in cost and performance with competitive options. Describe the expected typical cost of project development and installation and how this compares to standard practice or code-compliant installations. Explain any significant barriers that the new technology faces relative to the current standard practice or market competition. Identify how you propose to break down or mitigate these barriers.

Quantify the annual energy savings from a typical installation in kWh and/or therms (for natural gas savings), and/or kW savings and identify both customer (utility account) and system-peak-coincident metrics. (Please identify project-specific energy savings in Section 4.)⁴ Identify any non-energy or performance benefits that this technology provides (e.g., reduced maintenance costs, improved indoor air quality, water savings, etc.), as well as any additional benefits, including economic benefits to New York State. Describe the current typical return on investment and expected simple payback. Describe how you expect typical ROI and simple payback to change over the next 6-12 months (e.g., are equipment, installation, and other costs expected to decrease?). Describe how you expect the New York market for this technology to change in the year following the conclusion of the proposed project, if selected by NYSDERDA and successfully implemented.

⁴ For some technologies, e.g., those who mainly provide benefits such as longer persistence of savings or lowered operations and maintenance costs as compared to the incumbent energy-efficient technology, energy savings may not be an appropriate metric. In that case, please provide thorough justification of the other benefits and how they will ultimately contribute to expanded adoption of Clean DER to deliver increased energy efficiency, load management and load factor improvement in New York State.

Discuss the potential for the demonstration project to be replicated, including how the technology can be implemented to achieve similar results in comparable C/I buildings. Explain the business model, including how the technology will be delivered, and expected revenue streams. Describe specific steps you are taking or plan to take in order to increase use of the technology in New York State.

- Discuss the current state of the supply and service chain (manufacturers, distributors, installers, service and maintenance professionals) as well as changes you anticipate in the next 6-12 months. Describe your planned activities to develop the supply and service chain.
- Describe current targeted marketing activities (e.g., sales documents and/or marketing and product information available for potential end users or buildings owners) as well as changes you anticipate in the next 6-12 months.
- Describe the level of replication achievable in New York State in the next three years.

Strong potential to penetrate New York markets will be an important factor in proposal evaluation.

Section 4. Demonstration Project Description, Scope of Work, and Schedule (4-8 pages)

Give a detailed overview of the project. Quantify annual energy savings to be realized from this demonstration project in the following format:

kWh/year	
therms/year	
kW/year	
Annual energy savings (\$)	

Identify kW savings both from a customer (utility account) and system-peak-coincident basis. Identify and quantify load management benefits and load factor improvement where anticipated. State all assumptions used to develop energy savings figures, including, for instance, hours of operation, energy cost escalation, etc.)

Identify and quantify any (non-energy) performance benefits associated with the demonstration project (e.g., reduced maintenance costs, improved indoor air quality, water savings, etc.).

Identify the demonstration project's expected simple payback and return on investment. Include cost estimates and assumptions for each of the components of the technology, including design, specification, equipment, installation, and O&M. Also provide estimated life cycle cost savings and assumptions.

Provide a draft Statement of Work (SOW) for the project. The SOW is a detailed work plan of how the Proposer will accomplish the objectives of the Program and is a primary contractual document that identifies the deliverables and milestones and provides a basis for payment. The SOW should clearly articulate strategies consistent with the objectives of this PON and detail the strategy and rationale for accomplishing tasks necessary to implement the demonstration project. List the major tasks necessary to complete the project, such as planning, installation, performance validation, reporting, and outreach. Provide a detailed description of each task, indicating who will perform it, how it will be performed, and anticipated results. Include deliverables as appropriate for each task. An outline for the SOW is provided as Attachment E.

Provide a schedule and timeline for the completion of each task in the SOW, as well as dates for deliverables. The schedule may be provided in the form of "months after contract award." Proposer should indicate whether there are specific timeframes, such as seasons, or specific start dates, necessary for any tasks to ensure data validity or to maximize outreach opportunities.

Section 5. Demonstration Site Plan (1-3 pages, plus letters of commitment)

Attach letters of commitment from demonstration site owners and/or tenants (e.g., the entity that has the legal right to make or approve the proposed modifications to the building) and/or key project partners in the proposal appendix. A sample letter of commitment is provided as Attachment D. Letters of commitment should include a brief description of each site including physical address, square footage, building sector (e.g., office, hospital, retail, etc.), site contact information, electric utility territory, and whether the site(s) pay into the System Benefit Charge (SBC). A year's worth of utility bill history for each site should be provided where available. **Firm commitments from multiple sites and/or key project partners will be an important factor in proposal evaluation.** Where demonstration sites are to be identified after contract award, describe the plan for recruiting and securing demonstration sites.

Section 6. Project Validation Proposal (1-3 pages)

Include a proposed plan for project validation, to include measurement and verification (M&V) where appropriate to determine energy savings resulting from the demonstration, and overall performance and effectiveness. The Project Validation Proposal will inform the Project Validation Plan developed by NYSERDA. **Please note**, performance validation including M&V will be performed by the NYSERDA TC assigned to the project, in accordance with IPMVP best practices where appropriate, and will typically occur over one to two years. Do not include costs for performance validation in your budget proposal.

The Project Validation Proposal should cover the collection of adequate data for documentation and analysis of energy savings accruing from the project. The proposed plan should also cover non-energy- and performance-related factors to be tracked, including installation considerations (e.g., level of customer disruption, ease of installation, installation best practices, other building systems such as fire and life safety that will be affected, etc.), documentation of project costs and payback (simple payback, lifecycle cost and ROI), warranty issues associated with equipment retrofits, acceptance by operators and building occupants, availability of distribution channels and service providers, and any other relevant factors.

Section 7. Proposer Qualifications (1-3 pages, plus résumés)

Describe the nature of your business, locations, number of employees, and key personnel to be involved in the project. If teaming is included, clearly identify each team member's responsibilities. Attach résumés for key personnel. Provide two to three examples of previous work relevant to the work proposed under this solicitation. While proposers are not required to be located in New York, those that have offices in New York are viewed favorably.

Section 8: Outreach Plan (1-3 pages)

Assuming a successful demonstration, include a plan for sharing project results. NYSERDA will assist with the development of case studies and press releases. Identify specific target audiences or venues most relevant for outreach and most likely to create replication.

Section 9: Cost Proposal

See Section IV. General Proposal Requirements for cost proposal guidelines.

B. PROPOSAL EVALUATION

Proposals that meet Proposal requirements will be reviewed by a Technical Evaluation Panel (TEP) using the Evaluation Criteria below. The percent to which each criterion will contribute to total evaluation is shown in parentheses.

Market Assessment and Replicability (20%)

How well does the proposal assess the technology's current market state and potential?

Is there a documented substantial market in New York State for the proposed technology?

Is there a clear path to market growth and broad replication, and is the plan toward that path thorough and achievable?

To what extent is commercial readiness evident in terms of the existence of a service network and distribution channels?

How well does the proposal identify market, institutional, and infrastructure barriers?

Are realistic strategies proposed for overcoming barriers?

Will the project be a significant catalyst for future implementation of the strategy?

Energy and Other Benefits (20%)

Does the project deliver sizable energy, environmental, and/or economic benefits, or does it demonstrate a significant performance improvement over incumbent energy-efficient or load management technologies? Are energy and other benefits well supported and realistic? Will project replication create sizable benefits?

Are there electric or gas system benefits to be gained from the project, including energy savings and/or load reduction/peak demand benefits?

Does the technology provide improved resiliency of buildings in response to interruptions of the electric grid?

What other non-energy benefits are identified?

Responsiveness, Scope of Work/Project Validation Proposal (15%)

Does the proposed project demonstrate a technology that is commercially available, yet underused?

Does the proposal address all required components of the PON?

Is the proposal clear and well organized?
Is the proposed project well conceived and supported by a logical SOW and sufficient staffing plan?
Are the proposed tasks appropriate and suitable?
Are energy savings and other project benefits able to be measured and validated?
Does the Project Validation Proposal conform to industry standards for evaluating energy savings (e.g., IPMVP)?
Are other performance factors considered in the Project Validation Proposal?

Budget, Project Plan, and Schedule (15%)

Is the overall budget reasonable? Is the funding request justified by the anticipated energy and non-energy benefits? Is the Proposal Cost and Savings Ratio (Attachment C) reasonable?
What is the cofunding percentage? Is the cofunding contribution higher than the required amount? Are the proposer's cofunding contributions (cash, in-kind contributions, etc.) appropriate?
Are overhead and G&A rates reasonable?
Are equipment, facility, material, and travel costs based on reasonable estimates?
Are the labor rates reflective of the industry?
Is the schedule realistic? Are significant milestones and delivery of reports and products identified?

Demonstration Site Plan (20%)

To what extent are specific sites identified? To what extent have letters of commitment from sites and/or key project partners been obtained?
To what extent does the site plan demonstrate large scale, high visibility, and/or geographic coverage?
How likely is the proposer to be able to recruit the proposed number and type of sites, if not already committed?

Proposer Qualifications (5%)

Does the proposer or proposing team have the relevant and necessary technical and business background and experience?
If teaming is included, are responsibilities clearly identified?
Were examples of previous work provided? How well do they relate to the proposed project?
Does proposer have offices in New York State?

Outreach Plan (5%)

Is the plan thorough and achievable? Is it likely to spur replication?
Are specific target audiences, communication channels, and/or venues identified?

VII. GENERAL CONDITIONS

Proprietary Information - Careful consideration should be given before confidential information is submitted to NYSERDA as part of your proposal. Review should include whether it is critical for evaluating a proposal, and whether general, non-confidential information, may be adequate for review purposes. The NYS Freedom of Information Law, Public Officers law, Article 6, provides for public access to information NYSERDA possesses. Public Officers Law, Section 87(2)(d) provides for exceptions to disclosure for records or portions thereof that "are trade secrets or are submitted to an agency by a commercial enterprise or derived from information obtained from a commercial enterprise and which if disclosed would cause substantial injury to the competitive position of the subject enterprise." Information submitted to NYSERDA that the proposer wishes to have treated as proprietary, and confidential trade secret information, should be identified and labeled "Confidential" or "Proprietary" on each page at the time of disclosure. This information should include a written request to exempt it from disclosure, including a written statement of the reasons why the information should be exempted. See Public Officers Law, Section 89(5) and the procedures set forth in 21 NYCRR Part 501 <http://nyserda.ny.gov/~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 minority- and women-owned business enterprises, as bidders, subcontractors, and suppliers on its procurement Agreements.

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

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

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

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

State Finance Law sections 139-j and 139-k - NYSERDA is required to comply with State Finance Law sections 139-j and 139-k. These provisions contain procurement lobbying requirements which can be found at <http://www.ogs.ny.gov/aboutogs/regulations/advisoryCouncil/StatutoryReferences.html>

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

Tax Law Section 5-a - NYSERDA is required to comply with the provisions of Tax Law Section 5-a, which requires a prospective contractor, prior to entering an agreement with NYSERDA having a value in excess of \$100,000, to certify to the Department of Taxation and Finance (the "Department") whether the contractor, its affiliates, its subcontractors and the affiliates of its subcontractors have registered with the Department to collect New York State and local sales and compensating use taxes. The Department has created a form to allow a prospective contractor to readily make such certification. See, ST-220-TD (available at http://www.tax.ny.gov/pdf/current_forms/st/st220td_fill_in.pdf). Prior to contracting with NYSERDA, the prospective contractor must also certify to NYSERDA whether it has filed such certification with the Department. The Department has created a second form that must be completed by a prospective contractor prior to contacting and filed with NYSERDA. See, ST-220-CA (available at http://www.tax.ny.gov/pdf/current_forms/st/st220ca_fill_in.pdf). The Department has developed guidance for contractors which is available at <http://www.tax.ny.gov/pdf/publications/sales/pub223.pdf>.

Contract Award - NYSERDA anticipates making multiple awards under this solicitation. It may award a contract based on initial applications without discussion, or following limited discussion or negotiations pertaining to the Statement of Work. Each offer should be submitted using the most favorable cost and technical terms. NYSERDA may request additional data or material to support applications. NYSERDA will use the Sample Agreement to contract successful proposals. NYSERDA reserves the right to limit any negotiations to exceptions to standard terms and conditions in the Sample Agreement to those specifically identified in the submitted proposal (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 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.

Limitation - This solicitation does not commit NYSERDA to award a contract, pay any costs incurred in preparing a proposal, or to procure or contract for services or supplies. NYSERDA reserves the right to accept or reject any or all proposals received, to negotiate with all qualified sources, or to cancel in part or in its entirety the solicitation when it is in NYSERDA's best interest. NYSERDA reserves the right to reject proposals based on the nature and number of any exceptions taken to the standard terms and conditions of the Sample Agreement.

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

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

VIII. ATTACHMENTS

Attachment A – Proposal Checklist
Attachment B – Disclosure of Prior Findings of Non- Responsibility
Attachment C – Proposal Cost and Savings Ratio
Attachment D – Sample Letter of Commitment
Attachment E – Sample Statement of Work
Attachment F – Sample Agreement