



**Electric Power Transmission and Distribution (EPTD)
Smart Grid Program
Program Opportunity Notice (PON) 3026
Up to a total of \$10 Million Available for Two Rounds**

**Proposals Due: February 18, 2015 by 5:00 PM Eastern Time *, Round 1
 August 5, 2015 by 5:00 PM Eastern Time *, Round 2**

All, or none of the available funds could be awarded in either round

The New York State Energy Research and Development Authority (NYSERDA) announces the availability of up to \$10 million in funds to support research and engineering studies, product development and demonstration projects that improve the resiliency, reliability, efficiency, quality, and overall performance of the electric power delivery system in New York State. Proposals must demonstrate significant statewide public benefit and quantify all energy, environmental and economic impacts. The primary objective of the program is to promote the development of a smart grid that accommodates a diverse supply of generation resources, enhances overall grid performance and enables customers to reduce costs, energy consumption, and environmental impacts.

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

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| <ul style="list-style-type: none"> Advanced Monitoring, Measurement and Controls Transmission & Distribution Automation / Management Advanced Cabling / Conductors Distributed Energy Interconnections / Micro-Grids Innovative Data Analytics | <ul style="list-style-type: none"> Grid Scale / Tied Energy Storage Renewable / Distributed Energy Integration Advanced System Modeling / Applications Advanced Sensors / Devices / Systems Innovative Demand Response Integration |
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NYSERDA is accepting proposals in the following categories:

Category	Total Project Cost Share
Category A: Research Studies	25%
Category B: Engineering Studies	25%
Category C: Product Development	50%
Category D: Demonstration Projects	50%

Note: This solicitation does not include a per project funding limit. Awards may be unevenly distributed among categories based upon proposal evaluation, portfolio balance, and available funds.

Proposal Submission: Electronic submission is preferable. NYSERDA will also accept proposals by mail or hand-delivery. If submitting electronically, proposers must submit the proposal in either PDF or MS Word format with a completed and signed Proposal Checklist and Disclosure of Prior Findings of Non-Responsibility, in PDF format. Proposal PDFs should be searchable and should be created by direct conversion from MS Word, or other conversion utility, rather than scanning. For ease of identification, all electronic files must be named using the proposer’s entity name in the title of the document. Proposals may be submitted electronically by following the link for electronic submissions found on this PON’s webpage, which is located in the “Current Opportunities” section of NYSERDA’s website (<http://www.nyserda.ny.gov/Funding-Opportunities/Current-Funding-Opportunities.aspx>). Instructions for submitting electronically are located in that section as Attachment G to this PON.

If mailing or hand-delivering, proposers must submit (2) paper copies of their proposal with a completed and signed Proposal Checklist, along with a CD or DVD containing both a PDF or MS Word digital copy of the proposal, following the above guidelines. Mailed or hand-delivered proposals must be clearly labeled and submitted to: Roseanne Viscusi, PON 3026, NYS Energy Research and Development Authority, 17 Columbia Circle, Albany, NY 12203-6399. Programmatic questions should be directed to John Love, 518-862-1090 ext: 3317 (john.love@nyserda.ny.gov), or Michael Razanousky, 518-862-1090 ext: 3245 (michael.razanousky@nyserda.ny.gov). Contractual questions should be directed to Nancy Marucci, (518) 862-1090 ext: 3335 (nancy.marucci@nyserda.ny.gov).

No communication intended to influence this procurement is permitted except by contacting Michael Razanousky, (518) 862-1090 ext: 3245. 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 or proposals lacking the appropriate completed and signed Proposal Checklist will be returned. Faxed or emailed proposals will not be accepted. Proposals will not be accepted at any other NYSERDA location other than the address above. Prior to preparing proposal for future rounds, proposer should contact NYSERDA regarding changes to solicitation. If changes are made to this solicitation, email notification will be sent to original distribution group as well as posted on NYSERDA’s web site: www.nyserda.ny.gov and in the Contract Reporter.

I. INTRODUCTION

This Electric Power Transmission and Distribution Smart Grid Program solicitation is issued for specific technology areas including, but not limited to: energy storage; transmission and distribution automation and management; renewable energy integration; advanced monitoring and controls; distributed energy resource integration; microgrids; advanced sensors, devices and systems, advanced cabling and conductors, and advanced system modeling and applications. Activities include demonstration projects, product development and studies that improve grid resiliency, reliability, efficiency, quality, and performance as the delivery network accommodates clean energy technologies such as renewable power generation, electric vehicles, and efficient distributed generation systems. Projects that promote smart grid technologies, components and/or systems both within and outside of the six NY regulated electric service territories (Consolidated Edison, Orange and Rockland, New York State Electric and Gas, Rochester Gas and Electric, Central Hudson Gas and Electric, and National Grid) and meet the Program Requirements are eligible for funding under this solicitation. The program strives to coordinate its activities with the Reforming the Energy Vision initiative being pursued in New York State. **All projects must demonstrate broad public benefit.**

Proposals will be evaluated in select categories and scored on criteria listed in this solicitation. All of the proposals will be reviewed by a technical evaluation panel (TEP) consisting of both internal NYSERDA staff and outside technical experts. All proposals will be evaluated according to the quality and level of detail provided and must include substantive documentation addressing all evaluation criteria items.

II. PROJECT CATEGORIES

This solicitation includes four project categories. **The proposer must indicate under which category they are proposing.** Proposers should give careful consideration to which category they choose to propose under, as inappropriate choices negatively affect project selection results. Proposers are encouraged to contact NYSERDA (see cover page for instructions) with technical questions to promote complete understanding of the project categories as described below:

Category A: Research Studies (Proposer total project cost share at or above 25%.)

- Research aimed at exploring new policy, business models, regulatory planning and cost recovery models, advanced concepts, innovative product and/or technology development. Studies that will reduce barriers to the deployment of advanced technologies that improve the resiliency, reliability, quality and efficiency of the electrical power delivery system.

Category B: Engineering Studies (Proposer total project cost share at or above 25%.)

- Engineering studies that assess the feasibility, design and effectiveness of demonstrating new or under-utilized technologies at a New York site. Studies are expected to ultimately lead to a project proposal under Category D: Demonstration Projects and are intended to support project development activity such as detailed design, site assessment, economic analysis, interconnection and permitting issues associated with potential demonstration projects that improve the resiliency, reliability, quality and efficiency of the electric power delivery system.

Category C: New Product Development (Proposer total project cost share at or above 50%.)

- Development and commercialization of products for improving the resiliency, reliability, quality and efficiency of the electrical power delivery system. Note that bench-scale testing and field verification or testing may be included in Category C projects. Technical and economic feasibility of the technology should have been demonstrated prior to submitting a Category C proposal. If they haven't, consider proposing in Category A.

Category D: Demonstration Projects (Proposer total project cost share at or above 50%.)

- Demonstrations of new or under-utilized technologies that are past the technology readiness level 3 or above stage. Projects in this category **should not** include technology or product development tasks. If technology or product development tasks are necessary, consider proposing in Category C. Projects in Category D should demonstrate innovative new or under-utilized products or technologies in pioneering applications. Proposals in this category should clearly identify how this project will bring the product or technology closer to commercial realization and how such demonstration will lead to increased use of the technology in New York State. Proposers must clearly identify whether the demonstration project will support either transmission or local distribution operations.

NOTE: NYSEDA reserves the right to negotiate scope of work, budget and funding levels on all awarded projects.

III. ELIGIBLE TECHNOLOGIES

Technologies eligible under this solicitation include innovative and under-utilized smart grid and other electric power delivery technologies that improve the resiliency, reliability, performance and efficiency. Potential technologies include, but are not limited to:

- (1) Transmission and distribution advanced monitoring and control systems and subsystems;
- (2) Innovative grid scale energy storage technologies including, but not limited to, stationary batteries, flywheels, ultra-capacitors, flow batteries, compression systems and superconducting magnetic energy storage;
- (3) Transmission and distribution automation and management systems and subsystems;
- (4) Processes, systems and technologies, such as micro-grids, that promote integration of renewable or distributed energy resources and electric energy storage technologies into the distribution system;
- (5) Innovative monitoring and control systems related to power delivery, such as remote or on-site monitoring and diagnostic systems, intelligent remote or on-site control systems to provide command and communication with power delivery systems equipment, or control systems;
- (6) Equipment that enhances reliability, efficiency, optimization, or enables integration of renewable power generation or storage technologies;
- (7) Advanced sensors, devices, control systems and other equipment innovations that improve transmission and distribution system performance and reliability;
- (8) Distributed and renewable energy integration and interconnection systems and subsystems;
- (9) Advanced systems modeling and applications, such as data processing, visualization, diagnostics and analytic technologies; and
- (10) Advanced conductor and cabling technologies to improve throughput and reduce losses.

IV. PROGRAM REQUIREMENTS

Projects selected for funding must:

- (1) Address an innovative electric power delivery technology that improves performance, power quality, resiliency, or reliability.

- (2) Provide direct and quantifiable energy, environmental, and economic benefits to New York State such as emissions reductions (such as greenhouse gases and criteria air pollutants), job creation, product manufacturing and sales, increased resiliency and reliability, higher efficiency, and reduced electric costs.
- (3) Include a project budget using the attached Contract Pricing Proposal Form (CPPF) showing total project cost and proposer cost-share. Include a cost-sharing breakdown by project task in the Statement of Work.
- (4) Provide for the sharing of project success by agreeing to pay recoupment, where required, to NYSERDA for any new technology or product development project requesting NYSERDA funding over \$100,000 upon product commercialization, if applicable (see terms and conditions in Attachment F, Sample Agreement).
- (5) Demonstrate that the proposer and/or team of proposers are qualified to carry out the submitted project proposal.
- (6) Provide a strong rationale as to how the project will overcome barriers impeding the implementation or adoption of any new or under-utilized technology.
- (7) For projects that develop technologies or products, emphasize development and/or application of marketable products for near-term commercialization, rather than basic research, and provide a preliminary commercialization and marketing strategy, and discuss the potential for manufacturing in New York State.
- (8) For demonstration projects, clearly identify how this project will bring the product closer to commercial readiness and how such demonstration will lead to increased use of the product in New York State. Demonstration projects must be installed within New York State.
- (9) Provide a letter of support and commitment from all funding sources and entities responsible for managing, operating and maintaining all electric delivery infrastructure impacted by project.
- (10) Demonstrate that the project and funding request addresses a current challenge to technology evolution that is not being addressed adequately by current industry practices and/or federal and/or other state research priorities and funding. Include a cost and New York statewide public benefit analysis to justify allocation of funds.

Other Considerations

- A proposal may be considered non-responsive if it fails to comply with the requirements of this solicitation.
- Prior to an award being made, potential contractors may be required to demonstrate: access to financial resources sufficient to perform the proposed work, technical experience and adequate facilities (or the ability to access them), a good performance record, and the ability to qualify for an award under applicable laws and regulations.
- Preference will be given to proposers that provide higher cash contributions towards project costs.
- External funding partnerships are encouraged to leverage limited New York State resources. Proposers are encouraged to develop projects that leverage funding with external resources partners such as other research and development organizations.

V. ADDITIONAL PROGRAM REQUIREMENTS FOR CATEGORY D DEMONSTRATION PROJECTS ONLY

Category D projects selected for funding **must**:

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

Data Acquisition Requirements for Category D Demonstration Projects Only

It is the intent of NYSERDA to provide system level operation and performance information, including economic performance information, to the general public on each of the demonstration projects funded under this solicitation. In order to meet this objective, each demonstration project must provide sufficient instrumentation and data transmittal, and analytical capabilities to allow the collection and analysis of technical and economic performance data.

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

Benefits Data Tracking and Reporting for Category D Demonstration Projects Only

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

Reporting Requirements for Category D Demonstration Projects Only

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

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

- System performance under user fault conditions, e.g. fault in customer plant, as appropriate.

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

Historical Performance Data Reporting for **Category D Demonstration Projects Only**

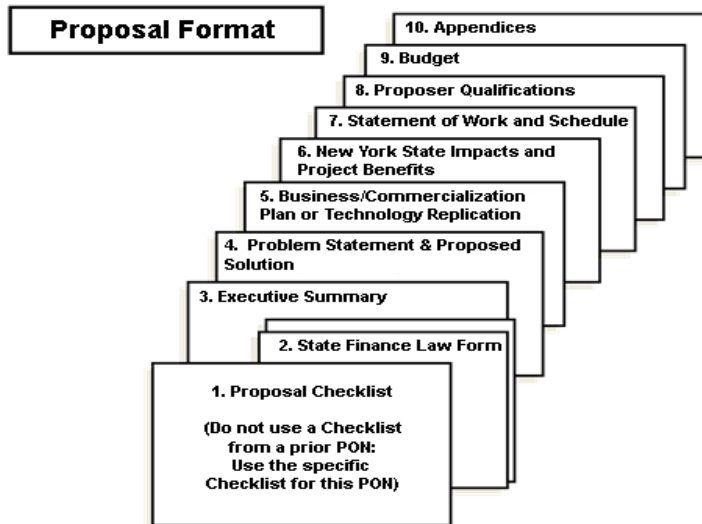
Where appropriate to document project benefits, historical utility system operational data prior to the installation of the demonstration system is required in order to provide credible baseline data on electrical system performance before and after the installation of the demonstration system. Information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

VI. PROPOSAL REQUIREMENTS

Proposal Submission: Electronic submission is preferable. NYSERDA will also accept proposals by mail or hand-delivery. If submitting electronically, proposers must submit the proposal in either PDF or MS Word format with a completed and signed Proposal Checklist and Disclosure of Prior Findings of Non-Responsibility, in PDF format. Proposal PDFs should be searchable and should be created by direct conversion from MS Word, or other conversion utility, rather than scanning. For ease of identification, all electronic files must be named using the proposer's entity name in the title of the document. Proposals may be submitted electronically by following the link for electronic submissions found on this PON's webpage, which is located in the "Current Opportunities" section of NYSERDA's website (<http://www.nysesda.ny.gov/Funding-Opportunities/Current-Funding-Opportunities.aspx>). Instructions for submitting electronically are located in that section as Attachment G to this PON.

If mailing or hand-delivering, proposers must submit (2) paper copies of their proposal with a completed and signed Proposal Checklist, along with a CD or DVD containing both a PDF or MS Word digital copy of the proposal, following the above guidelines. Mailed or hand-delivered proposals must be clearly labeled and submitted to: **Roseanne Viscusi, PON 2715, NYS Energy Research and Development Authority, 17 Columbia Circle, Albany, NY 12203-6399. Late proposals and proposals lacking the appropriate completed and signed Proposal Checklist may be returned.** Faxed or e-mailed copies will not be accepted.

Proposals should not be excessively long or submitted in an elaborate format that includes expensive binders or graphics - double-sided prints with a staple in the upper left corner is the preferred 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. **The proposal must be in the following format and sequence listed below** (suggested page limits for each section are shown in parentheses following the section title).



EXCEPT AS NOTED BELOW FOR CATEGORY C PRODUCT DEVELOPMENT PROPOSALS, ALL PROPOSALS MUST INCORPORATE THE FOLLOWING SECTIONS:

1. Proposal Checklist - Complete the specific Proposal Checklist attached as part of this PON, and include it as the front cover of the original and each copy of the proposal. Please note the following:

1. Indicate whether you accept the standard terms and conditions as contained in the attached Sample Agreement. If you do not accept the standard terms and conditions, provide alternate terms with justification based on the risk and benefit to NYSERDA and New York State. 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.
2. Be sure the individual who is signing the Proposal Checklist is authorized to commit the proposer's organization to the proposal as submitted.
3. Indicate to which category you are proposing on the proposal checklist. Each proposal will be considered for only one category of funding.

2. 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 laws are available at: <http://www.ogs.state.ny.us/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.

3. Executive Summary (two page maximum) – Briefly summarize the team members, the electric power delivery systems-related problem or opportunity, the proposed solution and its innovative characteristics, and potential energy, environmental, and economic benefits to New York State. Use the following Outline:

- A. Team Members
- B. Background
- C. Objective and Scope of Proposed Project
- D. Project Benefits

4. Problem Statement and Proposed Solution (two to four pages) – Describe the following:

1. The power systems-related problem or opportunity, and its significance to New York State.

2. The proposed solution and how it addresses the problem or opportunity and provides value to customers: the technical basis, innovative characteristics, and current market penetration in New York State.
3. How the proposed project addresses a current challenge or opportunity that is not being addressed adequately by current industry practices and/or federal and/or other state research priorities and funding.
4. The current state of the technology and the expected change in technology readiness level as a result of the project..
5. Cost, technical, and performance goals of the product or technology.
6. List of major tasks to be accomplished.
7. The expected benefits or economic value proposition to the end user or host site.
8. Duration of project and timing of major milestones.
9. Alternative solutions and why the proposed solution is superior.
10. Barriers to market entry and your ability to overcome them.
11. The monitoring strategy and how the data will be used to further the commercial application of the product or technology.
12. Any patents or licensing agreements associated with the product or system, where applicable.
13. The status of the earlier phase of a project if the proposal addresses a subsequent follow-on phase of a previously co-funded NYSERDA project.
14. If applicable, a brief description of additional phases, beyond the proposed work that will be necessary to fully achieve results.

4A. Business/Commercialization Plan or Strategy (FOR CATEGORY C PRODUCT DEVELOPMENT PROPOSALS ONLY)

(Two to three pages) – Describe how project results will be used to commercialize or deploy the new product or technology and indicate the parties involved in the process. Projects nearing commercialization should have a detailed commercialization plan, whereas an early-stage concept should be accompanied by a more detailed assessment outline of how the concept may ultimately be deployed. Cover the following topics:

- **Project Timeline:** Provide a multi-year timeline (e.g., graph) showing the paths, activities, milestones, resources, timing to take the technology from its current state of development to commercial product, and cost sharing in relation to total costs. Identify where you expect to be on this timeline by the end of the proposed effort.
- **Marketing and Sales:** Explain the customer’s economic motivation for buying the new product or technology, versus alternatives (i.e. the ‘value proposition’ to the customer). Identify target markets and their relevant characteristics (e.g., size, competition, regulatory and technological trends, etc.) Describe your proposed marketing strategies, explain why they should be successful, and provide sales estimates. Describe how you will reach your target market and distribute the product to your target market. Describe barriers to market entry and how you will overcome these barriers. Provide an estimate of the price of the product or system that eventually will be commercialized and provide a comparison of that price to competing products or systems.
- **Manufacturing Plan:** Provide a discussion of the commercialization path that is appropriate to the stage of development of the proposed technology. Discuss whether the strategy is for one of the team members to manufacture the product, identify a manufacturing partner, license the technology, or another strategy. Note that, even in early stage projects, initial projections of commercialization paths and challenges are essential to assessing benefits, risks, and future resource requirements. If the proposer plans on manufacturing the product, describe plans for setting up or expanding manufacturing facilities, and discuss any key issues such as: need for specialized production equipment or strategic alliances; critical make/buy decisions or cost/volume issues; and plans for ancillary activities such as service support functions. Indicate whether significant subsystems/components are manufactured in New York.
- **Finance:** Estimate funds required to go from the current stage of development to a financially self-sustaining level of commercialization. Include funding for R&D and initial marketing and manufacturing/deployment programs. Identify potential funding sources and how funding will be acquired. Identify any potential strategic partners who could reduce your costs by providing access to marketing/distribution channels, manufacturing facilities or other assets.
- **Organization Plan:** Describe staffing plans for transition from R&D stage to commercialization stage; include all organizational functions, such as management, administration, engineering, marketing/sales, and manufacturing.

- **Technology Transfer:** Describe any additional actions to promote the new technology, such as the presentation of technical papers.

5. Technology Transfer and Repeatability (two to three pages) – Describe the following:

- The target audience for the demonstrated technology that could benefit from the project results and may consider using the technology for other applications in New York State and nationally.
- The strategy for transferring project results to the target audience and causing replication or use of this technology in New York State and nationally.

6. New York State Impact and Project Benefits (one to two pages) – Outline benefits as follows:

- Quantify the following potential direct benefits to New York State to the extent possible:
 - Energy benefits (e.g., in New York State, percentage improvement in energy efficiency, reliability improvements, etc.)
 - Environmental benefits (e.g. pollutant emission reductions, elimination of hazardous materials, etc.)
 - Economic benefits (e.g., near-term jobs created, power generation equipment life-cycle cost reductions, etc.)
- Identify other tangible benefits (e.g., compliance with New York State or federal regulations, increased mobility, etc.)

7. Statement of Work and Schedule (two to four pages) The Statement of Work (SOW) is the primary contractual document that outlines work activities and quantifies deliverables. **Refer to Attachment C for a Statement of Work format and specific instructions regarding preparing the Statement of Work.**

The Statement of Work specifically delineates each step or procedure required to accomplish the project objectives. Therefore, each action shall be identified, indicating who will perform it, how it will be performed and its intended result. Be clear and specific: concentrate on how and not why. Use active voice sentence structure to make clear who is responsible for specific actions; for example, use the following phrase to start the description of every task and subtask: The Contractor shall

Schedule. Present a work schedule with a starting point and duration for each task and subtask. Presentation of the schedule in a bar chart is preferred starting with “Month 1”, Month 2”, etc. The schedule should include timing of major milestones such as design reviews, test result analyses, completion of working prototypes, delivery of products or services, and the start of metrics reporting to NYSERDA, showing progress toward project objectives and goals. Schedule for Category A and B projects preferred to be completed within 18 months, Category C and D projects preferred to be complete in 36 months.

If applicable, a brief description and anticipated duration of additional development or commercialization activities, beyond the proposed work, that will be necessary to fully achieve commercialization.

(INCLUDE MILESTONE PAYMENTS FOR PROPOSALS ONLY) 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. Completion of final design, equipment delivery, commissioning, submission of data, and acceptance of final report are examples of typical milestones for projects.

8. Proposer Qualifications (two to three pages; include resumes and other material in appendices) – Identify:

- Proposing Organization(s) - Include a brief description of organization(s) involved in the proposing team, including major subcontractors. Include date founded, history, size, product portfolio, and location. Also include an explanation of why the proposed organization or team is the best qualified to perform/implement the project from a technical and business perspective. Identify any other organizational qualifications relevant to the proposed work. If applicable, include examples of previous successful commercialization projects and the current status of those successes. For demonstration projects, demonstrate an

understanding of New York State energy markets and interconnection requirements, and include information on the organization that will host the demonstration. (Note: Subcontracts of \$50,000 or more are subject to competitive bid procedures except where the proposal identifies a specific subcontractor as an integral participant in the proposed work; see Sample Agreement).

- Organizational Chart - Prepare an organizational chart listing all team members, including the project manager and any subcontractors and other sponsors involved in the project, showing their roles and responsibilities.
- Qualifications of Key Individuals – Identify key individuals that will be involved in the project and its success. Provide one- to two-paragraph summaries of relevant technical and business expertise of these individuals. Submit resumes (as appendices) of all key project team members. Include in the resumes, education and experience that are relevant to the proposed work.
- Previous Experience - Describe the proposing team's experience that is relevant to the proposed effort. List related projects that have been undertaken and successfully completed by the Proposer and/or subcontractors. List NYSERDA contracts awarded to the proposer, if any, in the past five years.

9. Budget – Include a project budget using the attached Contract Pricing Proposal Form (CPPF) showing a total of project costs and proposer cost-share. Phased projects should include a CPPF for each phase, as well as one for the total project.

Cost Sharing - The proposal should show non-NYSERDA funding 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 that have already been undertaken. The proposer or proposing team cannot claim as cost-share any expenses that have already been incurred. Complete the following table for **ALL PROPOSALS** (expand table as needed):

FUNDING SOURCE TABLE			
Funding Source	Project Total \$		
	Cash	In-Kind	Total (cash + in-kind)
NYSERDA	\$		\$
Proposer	\$	\$	\$
Co-Funder (identify)	\$	\$	\$
Co-Funder (identify)	\$	\$	\$
Total (\$)	\$	\$	\$

Attach supporting documentation to support indirect cost (overhead) rate(s) included in your proposal as follows:

1. 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).
2. If rate(s) is approved by an independent organization, such as the federal government, provide a copy of such approval.
3. If rate(s) is based on estimated costs or prior period actual results, include calculations to support proposed rate(s). Calculation should provide enough information for NYSERDA to evaluate and confirm that the rate(s) are consistent with generally accepted accounting principles for indirect costs.

NYSERDA reserves the right to audit any indirect rate presented in the proposal and to make adjustment for such difference. Requests for financial statements or other needed financial information may be made if deemed necessary.

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 thirty percent (30%) 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 sixty percent (60%) 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 an amount equal to three times the amount of funds paid by NYSERDA to the Contractor, whichever comes first).

10. Appendices – Include any resumes, company qualifications, or ancillary information that is deemed necessary to support your proposal. If appropriate, also include:

- **Letters of Interest or Commitment** – 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 their 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 interest or commitment will be interpreted as the proposer not having support from the identified parties.
- **Exceptions to the Terms and Conditions** – If you do not accept the standard terms and conditions (including the recoupment provisions) as contained in the attached Sample Agreement, provide alternate terms with justification based on the risk and benefit to NYSERDA and New York State. 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.

VII. PROPOSAL EVALUATION

Proposals that meet Proposal Requirements will be reviewed by a Technical Evaluation Panel (TEP) using the Evaluation Criteria identified below. After the proposals are reviewed, NYSERDA will issue a letter to each proposer indicating the proposal evaluation results. Proposers receiving favorable evaluations will be invited to enter into contract negotiations with NYSERDA. The proposer may also be asked to address specific questions or recommendations of the TEP before contract award.

EVALUATION CRITERIA:

Problem and Proposed Solution (All Categories) -

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

Proposed Work (Category D only) –

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

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

- To what extent will there be economic benefits in New York State in the form of subsequent commercial activity and economic growth?
- Does the proposal include a New York State demonstration site?
- Are the appropriate letters of support and/or commitments included in the proposal?
- How well are the potential benefits to New York State quantified?
- How likely is it that the projected benefits will be realized?
- Does the proposed project have favorable energy, efficiency, environmental and economic impacts in New York State? How significant are these impacts?
- To what extent will there be economic benefits in New York State in the form of subsequent commercial activity?
- Are the technical risks identified, appropriately addressed, and balanced by project benefits?
- Does the proposal address an innovative electric power delivery technology that improves performance, quality or reliability / resiliency?
- How well does the project reflect NYSERDA's overall objectives (risk/reward relationships, similar ongoing or completed projects, the general distribution of NYSERDA projects among industries and other organizations, and the distribution of projects within New York State)?

Statement of Work and Schedule (All Categories) -

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

(Category D Only) –

- Are the data acquisition, monitoring, and reporting plans reasonable and do they meet the requirements in Section V, 'ADDITIONAL PROGRAM REQUIREMENTS FOR CATEGORY D DEMONSTRATION PROJECTS ONLY'?
- Is the benefits tracking plan reasonable and does it meet the requirements in Section V, 'ADDITIONAL PROGRAM REQUIREMENTS FOR CATEGORY D DEMONSTRATION PROJECTS ONLY'?
- If monitoring baseline utility system operation is necessary to document system benefits, does the Statement

of Work include a provision to adequately gather baseline utility operational data?

Proposer Qualifications (All Categories) -

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

Project Cost and Value (All Categories) -

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

Technology Transfer / Repeatability (All Categories) –

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

Business/Commercialization Plan (Category C only) -

- Is the proposed product or concept likely to be successful?
- Are there sufficient markets or needs for the concept/technology?
- Does the proposed project address market needs?
- Are the business and commercialization or replication plans appropriate for the type of project and stage of development?
- How significant are the barriers to market entry?
- Does the proposer demonstrate a clear understanding of the steps required to overcome these barriers?
- Has the market been identified and characterized?
- Does the proposal identify competing and alternate solutions, and clearly show why this product or concept is superior to, price competitive with, or provides value compared to alternative products or solutions?
- If follow-on financial resources are necessary, are plans to raise necessary financial resources likely to be successful?

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

VIII. GENERAL CONDITIONS

PROPRIETARY INFORMATION

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

The NYS Freedom of Information Law, Public Officers law, Article 6, provides for public access to information NYSERDA possesses. Public Officers Law, Section 87(2)(d) provides for exceptions to disclosure for records or portions thereof that "are trade secrets or are submitted to an agency by a commercial enterprise or derived from information obtained from a commercial enterprise and which if disclosed would cause 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://www.nyserdera.ny.gov/About/-/media/Files/About/Contact/NYSERDA-Regulations.ashx> [Regulations.ashx](#). However, NYSERDA cannot guarantee the confidentiality of any information submitted.

OMNIBUS PROCUREMENT ACT OF 1992

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

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

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

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

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

State Finance Law sections 139-j and 139-k - NYSERDA is required to comply with State Finance Law sections 139-j and 139-k. These provisions contain procurement lobbying requirements which can be found at <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 NYSEDA, the prospective contractor must also certify to NYSEDA 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 NYSEDA. 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 - NYSEDA 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. NYSEDA may request additional data or material to support applications. NYSEDA will use the Sample Agreement to contract successful proposals. NYSEDA, at its sole discretion, will decide whether to contract successful projects using time and material or milestone payment terms. NYSEDA 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. NYSEDA expects to notify proposers in approximately 10 weeks from the proposal due date whether your proposal has been selected to receive an award. **NYSEDA may decline to contract with awardees who are delinquent with respect to any obligation under any previous or active NYSEDA agreement.**

Annual Metrics Reports – If awarded, the proposer will be required to submit to NYSEDA'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 E: Sample Metrics Reporting Guides for the metrics that you will be expected to provide and the reporting duration. **NYSEDA may decline to contract with awardees that are delinquent with respect to metrics reporting for any previous or active NYSEDA agreement.**

Limitation - This solicitation does not commit NYSEDA to award a contract, pay any costs incurred in preparing a proposal, or to procure or contract for services or supplies. NYSEDA 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 NYSEDA's best interest. NYSEDA 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 NYSEDA after the award of a contract, NYSEDA 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 - Proposal Checklist

Attachment B - Disclosure of Prior Findings of Non-responsibility (mandatory)

Attachment C - Statement of Work Format

Attachment D - Contract Pricing Proposal Form (CPPF)

Attachment D1 – Contract Pricing Proposal Form (Excel)

Attachment E - Sample Product Development Metrics

Attachment E1 – Sample Demonstration Metrics

Attachment E2 – Sample Information Dissemination Metrics

Attachment F - Sample Agreement with Exhibits

Attachment G – Instructions for Electronic Proposal Submission