Climate Change Adaptation Research and Strategies Program Opportunity Notice (PON) 3242 Approximately \$2,000,000 Available

Proposals Due: May 16, 2016 by 5:00 PM Eastern Time*

There is general agreement among the scientific community that anthropogenic activities are affecting the global climate. Climate change is a challenging energy-related environmental issue, as the potential adverse impacts are significant and far reaching. In response, New York State (NYS) has made a substantial commitment to develop and deploy energy efficient and renewable energy technologies, to reduce greenhouse gas (GHG) emissions, and to further the viability of approaches to prepare for a changing climate. The need for resiliency and adaptation under future climate conditions has come to the forefront in recent years. However, given the potential magnitude of climate change impacts and the complexities associated with implementing new approaches to enhancing resiliency and adaptation, many research and information needs remain.

Approximately \$2,000,000 is being made available through this PON for projects in two research categories related to our changing climate: (A) Energy Infrastructure Adaptation and (B) Other Sector Climate Change Adaptation.

Multiple awards are anticipated in Categories A and B. Proposals should not exceed \$300,000. Cost-sharing of at least 25% is preferred. Leveraging of other research funding is strongly encouraged. In-kind cost-sharing is acceptable.

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 included as Attachment F 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 3242 NYS Energy Research and Development Authority 17 Columbia Circle Albany, NY 12203-6399

If you have technical questions concerning this solicitation, contact Amanda Stevens at (518) 862-1090, ext. 3325 or Amanda.Stevens@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 Amanda Stevens (Designated Contact) at (518) 862-1090, ext. 3325 or Amanda.Stevens@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 proposer's responsibility to ensure that all pages have been included in the proposal. Faxed or e-mailed proposals will not be accepted. Proposals will not be accepted at any other NYSERDA location other than the address above. If changes are made to this solicitation, notification will be posted on NYSERDA's web site at www.nyserda.ny.gov.

I. Introduction

Proposals will be considered responsive to this PON if important research gaps or information needs related to climate change adaptation and resiliency in New York State (NYS) are addressed. **Proposals solely focusing on reducing greenhouse gas (GHG) emissions (i.e., climate mitigation) are not eligible and will not be selected under this PON.** However, as GHG reduction may be a co-benefit of a resiliency or adaptation strategy, the documentation of this co-benefit may be included as part of the proposal submitted under this PON.

Preferred projects are those that will provide data in a form that is usable by policy and decision makers; use research and analytical capabilities in NYS; consist of interdisciplinary teams (including environmental scientists, social scientists, and public policy analysts); leverage out-of-state, federal, or other resources; and reduce the disproportionate cost burden and climate-related impacts on low-income families and environmental justice communities (please refer to Chapter 3 of the ClimAID Report).

II. Program Requirements

A total of approximately \$2 million is available for projects. The two categories for this PON are Category A: Energy Infrastructure Adaptation, and Category B: Other Sector Climate Change Adaptation. Multiple awards for Categories A and B are anticipated. Individual proposals should not request more than \$300,000 of NYSERDA funds. The proposal funding limit pertains to the NYSERDA-funded portion of the project and excludes any cost-share amount. There is no specified length of time for a proposed project, but the time period should be reasonable for the project tasks. The project schedule and timeliness of results will be considered in the proposal evaluation, as discussed in section IV, Proposal Evaluation. There is no limitation on the types of organizations that are eligible to propose, including out-of-state entities and municipalities. Proposed projects are allowed to include a pilot or demonstration.

Categories A and B will be evaluated separately. Proposals should clearly identify to which category they are proposing. NYSERDA reserves the right to change a proposal's category if deemed appropriate, or to group similar proposals into additional categories for evaluation to avoid the potential for funding duplicative projects.

Targeted projects are identified for each category. Proposals may address needs outside of these targeted projects, but priority will be given during evaluation to proposals that address these targeted needs or otherwise relate to the NYS Energy Plan (http://energyplan.ny.gov/), the Reforming the Energy Vision (REV) initiative (www.dps.ny.gov/REV/), or the Community Risk and Resiliency Act (CRRA; http://www.dec.ny.gov/energy/102559.html). Climate change projections used in any project should be from the 2014 ClimAID update (http://www.nyserda.ny.gov/climaid), unless a strong case can otherwise be made.

The results of funded projects will be made publicly available.

A. CATEGORY A - ENERGY SECTOR ADAPTATION & RESILIENCY

Energy Infrastructure Adaptation proposals should focus primarily on adaptation options for energy infrastructure but may also include components that would be useful to, or have benefits for, sectors in addition to the energy sector. Note that the term "energy sector" is not limited to electricity infrastructure but could also include infrastructure related to natural gas, heating oil, etc. Identified targeted projects related to the energy sector are as follows:

Assessing the Vulnerability of Systems and Infrastructure Necessary to Support a Future
Low-carbon NYS economy. To achieve the NYS 80X50 greenhouse gas reduction goal,
there will be fundamental transformations in building and transportation systems and in the
need for generation of large amounts of zero-carbon electricity. The NY State Energy Plan
and REV begin to present a long-term vision for these transformations. As the State
continues to support the development of a low-carbon economy, it will be beneficial to

understand any unique climate-related vulnerabilities to this future economy that need to be considered moving forward. The vulnerability of the clean energy systems to a climate different than today's baseline should be evaluated. The project evaluation should consider how potential changes in climate-change-related variables, such as sea level elevation, flood frequency, heat waves, water temperatures, solar radiation, and water availability, will influence development options. For example, will changes in availability of water have positive or negative implications for pumped storage and hydroelectric generation? Considering emergency response operations for flooding and storms, how does increased reliance on mass transportation and electric vehicles impact the ability to plan for moving people out of harm's way?

- Developing climate vulnerability and resilience guidance for distributed generation and combined heat and power (DG/CHP) and microgrid systems, which are anticipated to be installed in support of REV. These types of systems may be installed to increase community or facility resilience to power outages. It is important to ensure that the systems themselves will be resilient under current and future climate conditions across the State. Guidance should be developed that will assist planners and developers in identifying vulnerabilities of microgrid and DG/CHP systems to future climate changes and in identifying potential ways of reducing those vulnerabilities and increasing the resilience of the systems as they are installed. The guidance developed should not pertain to any one specific installation, but should instead be developed for use by anyone planning to implement such a system in NYS. Proposers may refer to NYSERDA's Combined Heat and Power Performance Program or NY Prize for more information on the current requirements for these technologies.
- Assessing the climate vulnerability of gas compressor stations and other natural gas
 infrastructure in NYS. Natural gas infrastructure may be vulnerable to certain aspects of
 climate change. Proposals should include a Statewide assessment of these vulnerabilities,
 specifically regarding NYS's existing and potential future infrastructure, as well as possible
 ways to increase the resiliency of the infrastructure. Vulnerabilities may be different in
 different regions of the State, which should be considered in the assessment.
- Assessing the climate vulnerability of the liquid-fuel infrastructure in NYS. As with natural
 gas, the State's liquid-fuel infrastructure may be vulnerable to certain aspects of climate
 change. Proposals should include a Statewide assessment of these vulnerabilities,
 specifically regarding NYS's existing and potential future infrastructure, as well as possible
 ways to increase the resiliency of the infrastructure. Vulnerabilities may be different in
 different regions of the State, which should be considered in the assessment.
- Assessing the opportunities for PV to provide power during emergencies. Storms and other extreme weather under future climate may cause more frequent power outages. PV systems may be able to provide emergency power during these times when the electric grid is unavailable. Proposals should consider what the opportunities for this are across the State and how it would be accomplished. For example, how would such a system be set up? What would be the need regarding inverters or storage? What would be the cost and feasibility of such a system? Are there particular applications or situations in which it would be more feasible than others? A focus of the project could be applications such as housing complexes or low/moderate income communities, where such a system could allow residents to shelter in place, or include non-traditional ownership models. Projects should build upon work already performed in this area (e.g., http://www.nyserda.ny.gov/-/media/Files/Publications/Research/Clean-Power-Innovation/Residential-Solar-Storage-Study.pdf).

If proposals outside of these targeted projects include development of a tool or guidance, they must include partnership with an end-user in NYS who has expressed an interest in use of the resulting tool. A letter of commitment from the end user must be included. These types of proposals must also include a clear, defined path for the results of the project to be used by the partner entity or others throughout the State.

B. CATEGORY B - OTHER SECTOR ADAPTATION & RESILIENCY

Climate change adaptation strategies are needed to build resiliency in all sectors of NYS, such as agriculture, buildings, coastal zones, ecosystems, public health, telecommunications, transportation, and water resources. Specific research gaps and information needs were identified through a stakeholder-driven process and can be found in the Climate Change Adaptation research component of NYSERDA's Environmental Program's Research Plan. Proposed projects should not duplicate research already performed but should instead build upon such research and be relevant to NYS. Proposals should describe how the project will help increase NYS's resiliency to climate change, whether at a community level or statewide. Identified targeted projects in this category are as follows:

- Developing a consistent monitoring and evaluation framework, or modifying an existing framework, to track the costs, resiliency performance, and ecological effects of natural, hard engineered, and hybrid (including living shorelines) coastal shoreline infrastructure over time. Understanding the performance of different options will allow for better decision making regarding adaptation and will inform design, construction, placement, and regulatory decision making. The framework should include both pre- and post-construction monitoring goals and should consider life-cycle costs, failure rates and consequences, and nonmonetary costs and benefits. The data collection framework should focus on comparison among natural, nature-based, and hard engineered shorelines, understanding the outcomes of each approach, and correlating those outcomes to site conditions and land use/density (e.g., predominant wind action, fetch, wave heights, geomorphology of area, etc.). The data should help determine the effectiveness of different measures for different regions of New York (i.e., Long Island, NYC, Hudson River, and Great Lakes) and assist with future development of design guidelines for nature-based and hybrid shorelines. The framework should be presented in a way that lends itself to the creation of a statewide database at a later time. The framework should be in a format that is easily used and understood by stakeholders, including property owners and local and state regulators. Once the framework has been developed, the project team should work with the NYS Department of State, the NYS Department of Environmental Conservation, and others to identify several existing shoreline infrastructure developments to which the monitoring framework can be applied over multiple seasons as a pilot test. Long-term monitoring is encouraged, but NYSERDA funds may be limited to three years.
- Completing a geomorphological classification of the New York State shoreline. Understanding shoreline exposure to natural and human influences is helpful in identifying suitable management options as water levels change and climate effects are realized. NYC produced a guidance document on shoreline conditions and management options to reduce storm impacts, which analyzed length of fetch/waves, geological substrate, armoring, nearshore slope, and other factors (http://www.nyc.gov/html/dcp/pdf/sustainable_communities/urban_waterfront_print.pdf). Proposed projects should complete an analysis similar to Part II of the document for other shoreline areas of NYS. Priority areas would be the Great Lakes, Westchester County, and Long Island. Incorporation of land use type/density is another important factor to consider in shoreline management decision making. Other factors could also be incorporated as well, such as sediment availability and upland vegetation. Use of the NYC methodology, or improving upon it, would be useful in producing a consistent, statewide classification of the shoreline applicable to coastal management efforts.
- Developing and implementing a monitoring framework to track and evaluate the
 performance of different storm water bioretention designs. The goal of the proposed project
 would be to establish an experimental site to measure the performance of different
 bioretention design options and provide data on performance in sites with constraints
 including, but not limited to, shallow depth to groundwater, shallow depth to bedrock, and
 high loading ratios. The designs should include separate experimental cells that include

variations on bioretention soil depth and composition to identify design options for a variety of site constraints and design objectives (e.g., maximize evapotranspiration or infiltration). The cells should be designed to fit into urban areas or be appropriate for constrained and small sites. Monitoring for volume reduction and infiltration rate should be performed for all cells. Water quality should be measured by, at a minimum, phosphorous, nitrogen, and total suspended solids (TSS).

The site design should include cells with the following, at a minimum:

- o 3-5 soil mixes with different saturated hydraulic conductivity (Ksat) values
- o 3 different depths (1.5', 2.5', 4') for each soil mix
- o Lined and unlined versions of each mix and depth
- A consistent plant palette, but incorporating plants of different maturities to simulate the effects of plant growth over time
- o A consistent ponding depth (e.g., 6")

If selected, proposers should expect to work with NYSERDA on the final site design and parameters.

Monitoring should occur for three years, to account for changes in plant and root growth. The project should include simulation of at least one 1-year rainfall event and the 90% rainfall event for the site, per year of monitoring.

Results will be used to help identify optimal designs for use on a variety of sites and conditions across the state, without the need to intensely monitor each individual installation site. Projects could also discuss the potential changes in rainfall frequency under future climate change and how those changes might affect bioretention site design (see, e.g., http://ny-idf-projections.nrcc.cornell.edu/idf_viewer.html).

- Developing tools or information to assist with increasing the state's resilience to current or future inland flooding. Flooding from extreme precipitation events is a concern for much of the state. Such flooding is likely to increase in the future as these rainfall events occur more frequently under climate change. It is important for communities to better understand their flood risk in order to adapt and increase their resilience. Proposals that address this need should focus on inland areas of NYS (i.e., riverine, Great Lakes, Finger Lakes).
- Developing New York State-specific pre-event long-term recovery plan. It is likely that the largest investments in resiliency, particularly in areas not affected by Superstorm Sandy, will be made in the wake of future weather-related events. Recognizing the value of pre-event long-term recovery planning, FEMA and the American Planning Association (APA) developed a report with a recommended planning process (https://www.planning.org/pas/reports/pdf/PAS_576.pdf). Using the APA planning framework as the foundation, develop a planning process and guidance document that is specific to New York State, including recognition of New York's home-rule laws for land use. Additionally, develop or recommend a protocol for identifying communities most at risk, considering, among other factors, exposure to future climate hazards and social vulnerability, making efficient use of existing resources already developed for some areas of the state. Once the guidance has been developed, the project team should then identify one or more high-risk communities located in areas of environmental justice concern and facilitate community-based pre-event long-term recovery planning as a pilot test of the guidance document.

If proposals outside of these targeted projects include development of a tool or guidance, they must include partnership with an end user in NYS who has expressed an interest in use of the resulting tool. A letter of commitment from the end user must be included. These

types of proposals must also include a clear, defined path for the results of the project to be used by the partner entity or others throughout the State.

The following resources may be helpful in developing proposals:

- The <u>Climate Change Adaptation research component</u> of the Environmental Program's NYS Research Plan
- <u>ClimAID Integrated Assessment for Effective Climate Change Adaptation in New York</u>
 State
- Community Risk and Resiliency Act
- NYS Sea Level Rise Task Force Report
- NYS Climate Action Plan interim report
- New York's Great Lakes Basin: Interim Action Agenda
- List of ongoing NYSERDA Climate Adaptation projects

III. Proposal Requirements

Proposals should follow the format below and provide sufficient and succinct information to complete the required descriptions and answer the questions described in the Proposal Evaluation criteria listed in Section IV. Proposals should explicitly state under which category they are submitting.

Proposals should not be excessively long nor submitted in an elaborate format (e.g., with expensive binders or graphics). Unnecessary attachments beyond those sufficient to present a complete, comprehensive, and effective response will not influence the evaluation of the proposal. **Proposals longer than 15 pages** (not including the Proposal Checklist Cover Sheet (Attachment A), Acceptance of Standard Terms and Conditions (Attachment A-1), Disclosure of Prior Findings of Non-Responsibility (Attachment B), Contract Pricing Proposal Forms (Attachment C), one-page letters of commitment, resumes, or other required forms), or using a font smaller than 11 point, may be rejected. The preferred lengths of particular proposal sections are shown below. Each page of the proposal should state the name of the proposer, "PON 3242," and the page number.

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 emailed copies will not be accepted.

Proposals must include:

- A. Proposal Checklist Cover Sheet (Not included in page count): A signed and completed Proposal Checklist (Attachment A) must be attached to the front of the proposal. Proposals lacking the appropriate completed and signed Proposal Checklist will be returned.
- **B. Abstract** (*Limit to one* (1) page): Identify the project goals and major objectives. Summarize the proposed project, methods, benefits of the project, and how the project will help increase New York State's resilience to climate change. Indicate the Category (A or B) to which the proposal is submitted.
- C. Statement of Work and Schedule: The Statement of Work is the primary contractual document that identifies the work to be performed and outcome to be produced and provides the basis for NYSERDA payment. It is an action document that specifically delineates each step or procedure required to accomplish the project objectives. Therefore, each action should be identified with a description of its objective, who will perform it, how it will be performed, and the anticipated product deliverables.

- a. Task Objectives, Methods, and Deliverables: Proposed Statement of Work tasks should identify specific objectives, methods, and quantifiable and measurable targets that define success of each task and that can be evaluated at project completion. Description of each task should include:
 - i. The objective of the task.
 - ii. Detailed description of what work will be performed for the task, including methods to be used and a brief description of any quality control and quality assurance measures, analytical procedures, or statistical analyses to be employed to optimize the quality of the data and project results.
 - iii. Soundness of the methods to be used in the task. Briefly explain why the equipment, models, methods, and other aspects of the work are expected to meet objectives. Describe the extent to which chosen methods have been accepted by policy-making organizations, or otherwise demonstrated to be valid.
 - iv. The persons responsible for completing the task.
 - v. Deliverables for the task.
 - vi. Task budget—the approximate amount, in dollars, allocated to the task.
- b. Dissemination of Results: Include a task for reporting and disseminating project results. This is a key aspect of the Environmental Research Program. Identify the end user or target audience of the project results; who will find the project results useful? Consider the decision-makers or audiences to whom the project results will be most relevant when crafting the dissemination plan. The results of funded projects will be made publicly available. The following reporting and information transfer work should be considered in allocating resources for this task:
 - i. Minimum reporting and information transfer shall be accomplished through presentations and submission of monthly or quarterly progress reports, a final technical report, and an article for a peer-reviewed journal. The format of the final report will be determined upon discussion with the NYSERDA project manager. Principal investigators are strongly encouraged to use a technical editor for all final documents. If requested by NYSERDA, findings to date shall be presented to the Environmental Research Program Advisory Group and invited guests at meetings arranged by NYSERDA staff in Albany, NY. Electronic access to project data shall also be provided after appropriate quality assurance.
 - ii. Additional methods of information transfer and reporting may be proposed to involve pertinent decision-makers or regulators and other target audience representatives during the project, and for using the anticipated project results to achieve projected public benefits.
 - iii. If awarded, the proposer may be required to submit annual metrics reports to NYSERDA's Project Manager, a prepared analysis and summary of metrics addressing the anticipated energy, environmental, and economic benefits or technology transfer efforts 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. NYSERDA may decline to contract with awardees that are delinquent with respect to metrics reporting for any previous or active NYSERDA agreement.

- **c. Master Schedule:** Complete a schedule showing the starting and completion times of all major tasks, in terms of months following project initiation. The schedule should include major milestones and meetings, tests, demonstrations, reports, and other key deliverables.
- D. Contract Pricing Proposal Form (Not included in page count): Complete the attached Contract Pricing Proposal Form (Attachment C) for the entire project, including any in-kind contributions and other cost-sharing. The degree of cost-sharing will be considered in the evaluation of proposals. Cost-sharing of at least 25% is desirable. Leveraging of other research funding is preferable. In-kind cost-sharing is acceptable.
 - a. Cost-Sharing: While cost-sharing is not required, non-NYSERDA funding of at least 25% of the total project cost is preferred. Cost-sharing can be from the proposer, other team members, or other government or private sources. Contributions of direct labor (for which the laborer is paid as an employee) and purchased materials may be considered "cash" contributions. Unpaid labor, indirect labor, or other general overhead may be considered "in-kind" contributions. 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. Show the cost-sharing plan in the following format (expand table as needed):

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

- **b.** 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.

E. Usefulness and Value of Project Results: Explain how the project results will address in a timely manner a targeted project area or another climate change adaptation issue important to NYS. Describe how the project results will help increase New York State's resilience to climate change. If applicable, explicitly describe how the project relates to a need of the Energy sector, the NYS Energy Plan, REV, or CRRA. Maximum coordination with other national and state initiatives is desirable. Explain how the project will make use of other relevant data and coordinate with other

research initiatives, where possible, to provide maximum value to NYS. *Proposals should not duplicate work already completed or under way.*

F. Management Plan and Qualifications

- **a. Organizational Chart:** Prepare an organizational chart listing project personnel. Include any subcontractors and other sponsors involved in the project, showing their roles and responsibilities.
- **b.** Tasking Chart: Prepare a tasking chart, setting forth approximately (in hours or days) the amount of time contributed by each person to each task and to the total effort.
- **c. Résumés** (*Not included in page count*): Identify key project personnel. Submit relevant portions of resumes for all key project personnel, including those of proposed subcontractors. Include education and experience that are relevant to the proposed work.
- d. Related Projects (Limit to one (1) page): List related projects that have been undertaken by the proposer and/or subcontractors. For each project, provide a brief summary describing the project's title, scope, funding amount and client contact numbers. NYSERDA may contact listed clients.
- **G.** Letters of Commitment or Support (Not included in page count): If you are relying on other organizations or businesses to do work, provide services, data, or equipment, or share in the non-NYSERDA cost, you must include a letter of commitment from those organizations or businesses describing their commitment.

If your proposal states that another organization will benefit from the results of your project, it is **strongly recommended** that you include a letter from those organizations stating their support for the project. Absence of letters of support will be interpreted as the proposer lacking those parties' commitment and support. A letter of support is **not needed** if the organization is a NYS agency; however, in those instances, proposers should identify the agency, indicate that the agency has been contacted, and convey that the agency has agreed that the project would provide value.

H. Procurement Lobby Requirements – State Finance Law Sections 139-j and 139-k (Not included in page count): In compliance with §139-j and §139-k of the State Finance Law (see Section V, General Conditions below for additional information), additional forms must be completed and filed with proposals:(1) a signed copy of the Proposal Checklist (Attachment A) including required certifications under the State Finance Law and (2) a completed Disclosure of Prior Findings of Non-Responsibility form (Attachment B). Failure to include a signed copy of the Proposal Checklist referenced in this solicitation may disqualify your proposal.

IV. Proposal Evaluation

Proposals that meet Proposal requirements will be review by a Technical Evaluation Panel (TEP) using the Evaluation Criteria below:

A. Technical Evaluation Criteria:

- a. Statement of Work and Schedule: How suitable are the proposed project methods and overall research design for meeting the project objectives and yielding accepted results? How comprehensive, realistic, and explicit is the Statement of Work with respect to the project objectives and proposal requirements? Is the schedule reasonable and realistic? Will the results be available in a timely manner?
- **b.** Communication of Results: Is the end user or target audience identified? Will the reporting and information transfer plan use project results to realize the potential benefits of the project? Does the plan specifically target those decision-makers or audiences to

whom the project results will be most relevant? For development of tools or guidance outside the listed targeted projects: Does the project include a clear, defined path for the results of the project to be used by end users in NYS? Is there a letter of support from an end user?

- c. Cost Criteria: How justifiable and reasonable are the overall costs compared to the expected usefulness of the project results and the level of effort and duration of the project? How justified and reasonable are the proposer's cost allocations and co-funding contributions (cash, in-kind services, etc.)? To what degree does the proposal include meaningful cost-sharing from other key organizations important for the success of the project?
- d. Usefulness and Value of Project Results: Does the proposal address one of the targeted projects? Does the proposal address a need of the energy sector, or otherwise relate to the NYS Energy Plan, REV, or CRRA? Would the project result in benefits to low-income or environmental justice communities? Would the project help increase NYS's resilience to climate change? How well would the project use, build upon, and integrate other relevant data and coordinate with other research initiatives to provide maximum value to NYS?
- e. Management Plan and Qualifications: How well has the proposer organized a management plan and a project team with the necessary educational, technical, operations, technology transfer, financing, and administrative experience for successfully completing the project? Does the team include partnerships with other research groups? Has the proposer assembled an interdisciplinary team, including environmental scientists, social scientists, public policy analysts, and technologists, as appropriate? Are there letters of commitment from subcontractors or other team members? How many of the team members are located in NYS? For development of tools or guidance: Does the project team include an end user with an express interest in the project results?
- **B.** Other Considerations: Projects will be reviewed to determine whether they complement the overall objectives of the Environmental Program and NYSERDA, including:
 - The balance among projects of long- and short-term benefits and risk/reward relationships, and whether similar projects are presently or have been previously funded.
 - The general distribution of projects of diverse topics related to program goals.
 - The ways in which the proposed project fits with currently funded projects.
 - The ease of measuring project success in quantifiable ways.

V. GENERAL CONDITIONS

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

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

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

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

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

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

State Finance Law sections 139-j and 139-k - NYSERDA is required to comply with State Finance Law sections 139-j and 139-k. These provisions contain 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 may, at its discretion, elect to extend and/or add funds to any project funded through this solicitation. NYSERDA reserves the right to limit any negotiations to exceptions to standard terms and conditions in the Sample Agreement to those specifically identified in the submitted proposal (see Attachment A - Proposal Checklist and Attachment A-1 - Acceptance of Standard Terms and Conditions). Proposers should keep in mind that acceptance of all standard terms and conditions will generally result in a more expedited contracting process. NYSERDA expects to notify proposers approximately twelve (12) weeks from the proposal due date whether the proposal has been selected to receive an award. NYSERDA may decline to contract with awardees that are delinquent with respect to any obligation under any previous or active NYSERDA agreement.

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.

VI. Attachments:

Attachment A: Proposal Checklist

Attachment A-1: Acceptance of Standard Terms and Conditions

Attachment B: Disclosure of Prior Findings of Non-Responsibility Form

Attachment C: Contract Pricing Proposal Form (CPPF) and Instructions

Attachment D: Sample R&D Cost-Share Agreement

Attachment E: Sample Metrics Reporting Guide

Attachment F: Electronic Submission Instructions