



Electric Vehicle-Enabling Technology Demonstration Program
Program Opportunity Notice (PON) 2755
\$2 million Available

Proposals Due: October 22, 2013 by 5:00 PM Eastern Time*

The Electric Vehicle-Enabling Technology Demonstration Program (the Program) seeks research and demonstration proposals that demonstrate new technologies and approaches to accelerate the market adoption of plug-in electric vehicles (PEVs) and make PEV infrastructure easier to use and more economically viable in New York State. Total available funding is \$2 million. All, some, or none, of the available funding may be allocated.

In funding this solicitation, NYSEERDA seeks to advance technologies, strategies, business models, behavioral approaches, and policy ideas that support the expansion of the PEV market and PEV industry in New York State. NYSEERDA is interested in projects that will study and/or demonstrate existing technologies, or combinations of technologies, and strategies that have not been applied to the PEV market or have not been demonstrated in New York. Of particular interest are technologies and strategies that can integrate PEVs into the electric grid, enable long-distance PEV travel, and ease financial and regulatory obstacles to PEV adoption. Proposals should focus on research, results, or strategies that can be transferred and implemented throughout the State in the near term to advance PEV acceptance.

This solicitation is not for technology development and is not intended to pay primarily for electric vehicle supply equipment (EVSE) deployment.

Proposal Submission: Proposers must submit one (1) hard copy of the proposal with a completed and signed Proposal Checklist attached to the front, which must contain an original signature, and one (1) copy of the proposal documents on a CD. Proposals must be clearly labeled and submitted to:

**Roseanne Viscusi, PON 2755
NYS Energy Research and Development Authority
17 Columbia Circle
Albany, NY 12203-6399**

If you have technical questions concerning this solicitation, contact Adam Ruder (518) 862-1090, ext. 3411 or ar3@nyserda.ny.gov or Patrick Bolton at (518) 862-1090, ext. 3322 or ppb@nyserda.ny.gov. If you have contractual questions concerning this solicitation, contact Nancy Marucci at (518) 862-1090, ext. 3335 or nsm@nyserda.ny.gov.

No communication intended to influence this procurement is permitted except by contacting Adam Ruder (Designated Contact) at (518) 862-1090, ext. 3411 or ar3@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 NYSEERDA location other than the address above. If changes are made to this solicitation, notification will be posted on NYSEERDA's web site at www.nyserda.ny.gov

INTRODUCTION

The plug-in electric vehicle (PEV) market has grown rapidly in both New York State and the United States as a whole. PEVs consist of both battery electric vehicles (BEVs), which run only on electricity, and plug-in hybrid electric vehicles (PHEVs), which run using electricity stored onboard from the electric grid as well as gasoline. Between May 2012 and May 2013, registered PEVs in New York State grew by more than 300 percent, from under 1,000 to over 4,000. Installations of electric vehicle supply equipment (EVSE) are also increasing rapidly, with over 600 EVSE installed in the state as of June 2013.

PEVs still face significant challenges before they reach widespread adoption, the most widely noted being their high upfront costs and, for BEVs specifically, a shorter mileage range than internal combustion engine-powered (ICE) vehicles. Currently, PEV prices have been falling, especially for leases, and are approaching competitiveness with ICE vehicles when factoring in the federal electric vehicle tax credit. Operating costs for PEVs are often much lower than ICE vehicles, because of both reduced fuel costs and reduced maintenance costs. Most BEVs available today have ranges between 75 and 100 miles, while PHEVs have all-electric ranges of 10 to 40 miles before they switch over to running on gasoline.

Most of these vehicles are personal vehicles that are primarily charged in residential settings. At home, PEV drivers charge their cars using Level 1 or Level 2 AC EVSE. Most cars are parked at home for at least 12 hours starting in the early evening until the morning, which is more than enough time to fully charge most PEVs based on their daily usage. The timing of PEVs' usage and home charging lends itself well to managed charging and alternative rate structures, which can help prevent PEVs from adding to peak demand or overloading local distribution systems.

Recharging PEVs can take from 2 to 8 hours using Level 2 AC EVSE, depending on the car's and EVSE's power ratings and the size of the car's battery. Level 2 AC charging generally operates between 3 and 7 kW, but can reach nearly 20 kW in some instances. Increasingly, BEVs are equipped with ports for DC fast charging, which can charge a car to 80% state of charge in less than 30 minutes. This offers drivers a reasonable option to recharge their cars quickly when necessary, but also poses potential electric grid challenges, as DC fast charging power surges can reach upwards of 50 kW. Commercial models for offering public charging of all types are still emerging. In addition, fleets pose particular challenges for charging infrastructure, as large numbers of PEVs charging simultaneously can quickly overload existing transformers. Fleet users must manage their charging to avoid large demand charges that could make charging PEVs prohibitively expensive.

As PEV drivers seek to use more public EVSE, there will be a need for new policies and technologies to reduce the strain on the electric grid from public EVSE and keep the cost of charging PEVs down. Distributed generation, on-site energy storage, and software to integrate charging loads can all help reduce electric grid strains and expensive demand charges. Emerging technologies like vehicle-to-building and vehicle-to-grid services could allow PEVs to generate additional revenue or provide extra value as a backup electric generator of sorts.

Additionally, new policies, consumer incentives, financing models, and behavioral approaches may help accelerate PEV sales and leases beyond current early adopters into the mainstream vehicle market. Solutions that make owning PEVs more attractive relative to ICE vehicles could draw the attention of vehicle purchasers that would not have considered purchasing a PEV otherwise.

Goal: The goal of this solicitation is to help support the market acceptance of PEVs as a better, more viable option for drivers by researching and demonstrating new technologies and policies that can reduce some of the financial, economic, practical, policy and behavioral barriers currently facing the industry. This includes projects that help make PEVs more desirable for consumers and more economically viable, while lowering their impact on the electric grid and maximizing their environmental benefits.

In funding this solicitation, NYSERDA seeks to advance/demonstrate new technologies, strategies, business models, and policy ideas that support the expansion of the PEV market and PEV industry in New York State. NYSERDA is interested in projects that will study and/or demonstrate existing technologies and strategies that have not been applied to the PEV market or have not been demonstrated in New York. Of particular interest are technologies and strategies that can integrate PEVs into the electric grid, enable long-distance PEV travel, ease financial and regulatory obstacles to PEV adoption, and increase market demand for PEVs. Proposals should focus on research, empirical results, and replicable strategies that can be transferred and implemented throughout the State to increase the market penetration of PEVs. This solicitation is not for technology product development and is not intended to pay for standard electric vehicle supply equipment (EVSE) deployment.

Examples of PEV-enabling technology demonstrations and policy studies that might support this goal:

- EVSE paired with on-site energy storage or distributed generation
- PEVs used for vehicle-to-building/vehicle-to-grid power or providing emergency backup power in disaster resiliency situations
- EVSE integrated into a building energy management system
- DC fast charging installations, systems, and policies
- Innovative regulatory policies and incentives
- Cyber-security policies for EVSE
- Advanced metering, time-of-use rates, and other rate structures for EVSE
- Innovative financing of PEVs and EVSE, including innovative battery ownership models
- Consumer behavior and decision-making research regarding PEVs and EVSE
- Use of behavior-based strategies to influence PEV and EVSE adoption

To support and reinforce the goal of this solicitation, four focus areas have been defined and are described below. Each of these focus areas promotes increased consumer adoption of PEVs by enhancing the value proposition of PEVs while managing the electric grid impacts of PEVs and maximizing environmental benefits from PEVs.

Focus Area 1, PEV and Electric Grid Interaction: As PEVs draw more power from the electric grid in localized pockets, there will be a need to reduce electric grid impacts at the local level and demand charges for individual customers. This could be done either through technologies like advanced metering, building energy management systems, distributed electricity generation, or on-site energy storage tied to the EVSE. Additionally, providing power from a vehicle battery to a building or the electric grid (V2X) could have benefits for the electric grid, vehicle owners, and disaster resiliency. Pairing existing technologies with EVSE that have not been combined in this way before is an approach that is of particular interest to NYSERDA.

Focus Area 2, Regulation, Financing and Financial Incentives: Because the PEV market is new and has many unexplored regulatory questions, regulation surrounding the PEV market is still evolving. Many states, including New York, have begun developing a regulatory framework to encourage PEV adoption, especially regarding utility regulation (such as advanced metering, alternative rate structures for residential customers, and EVSE ownership rules) and local government regulations such as zoning and parking ordinances, building codes, and permitting rules. Private sector financial institutions have also begun developing financial tools to advance PEV adoption and address market barriers like the high initial cost of PEVs. Financial tools that target infrastructure, fleet or personal vehicles and regulations that could be implemented at the state or local level are of particular interest to NYSERDA.

Focus Area 3, Expanding EV Mobility: Policies, systems, and technologies that help new types of drivers use PEVs and drive PEVs further can help expand PEV adoption in New York State. New York has a large population that does not live at locations with personal garages or driveways, the most common type of situation for home PEV charging. Making PEV charging work at multi-family residential buildings, public transportation hubs, or workplaces could open up large new markets for PEVs and create alternatives to the currently dominant home charging model. Expanded access to DC fast charging, and the accompanying technologies and policies to limit demand charges and electric grid impacts for DC fast charging, could encourage people who may be nervous about the range of PEVs to consider purchasing one. Innovative DC fast charging installations are of particular interest to NYSERDA, as are systems or policies to manage EVSE use at multi-family residential buildings.

Focus Area 4, EV Consumer Behavior: Consumers make personal vehicle purchasing decisions based on many factors besides a vehicle's performance and cost. Better understanding consumer knowledge of and reactions to PEVs would help New York State craft programs that are more effective in accelerating PEV purchases. Research that evaluates the efficacy of behavior-based PEV marketing and incentive approaches compared to conventional approaches could also inform more effective policies intended to advance PEV adoption.

1.0 PROGRAM REQUIREMENTS

Solicitation Goal: As previously stated, the goal of this solicitation is to make PEVs a better, more viable option for drivers by researching and demonstrating new technologies and policies that support their use. This includes projects that help make PEVs more desirable for consumers and more economically viable, while lowering their impact on the electric grid and maximizing their environmental benefits. Under this solicitation this should be done through policies, strategies, processes, services, technologies, and innovative collaborations other than specific technology improvements to PEVs or EVSE. Proposals should demonstrate how their successful implementation would advance the development of New York State's electric vehicle market and improve the State's energy independence, environmental quality, and economic vitality.

Funding Categories: Two categories of projects will be considered for funding:

1. **Feasibility and Market Research Studies**, including activities and research in one or more of the four Focus Areas to develop plans and related planning processes, strategies, and policies for New York State that have the potential to achieve the solicitation goal. This includes research to identify market characteristics that impact policy decisions related to the solicitation goal. These studies generally consist of paper studies resulting in a publishable final report. Projects funded in this category will be limited to a maximum of \$75,000 per project of NYSERDA funds.
2. **Integration and Demonstration of New Technologies** that have the potential to achieve the solicitation goal while advancing one or more of the four Focus Areas. Demonstration projects generally consist of equipment installations or software deployment over an extended period accompanied by data collection and analysis that results in a publishable and publicly available final report. Projects funded in this category will be limited to a maximum of \$500,000 per project of NYSERDA funds.

Category 1 is designed to fund specific plans and studies for PEV-related policies, business models, and financing strategies, which may or may not include field and/or market data collection. Plans and studies may comprise feasibility assessments, business case studies, engineering studies, consumer research studies, and related analysis necessary to establish the energy, environmental, and additional benefits of a relevant policy, strategy, product or technology. This category is aimed at identifying promising new policies and strategies for the PEV market and researching consumer trends that can inform new policies and strategies in the future. All studies must investigate policies and strategies with regard to how they could be implemented in New York State, and how they would impact PEVs in the State.

Category 2 is designed to fund the demonstration of commercial technologies that either have been successfully deployed in other states or countries, but have not been previously deployed in New York State to any significant extent, or have been commonly deployed as separate solutions but never been successfully deployed in combination (or within the PEV market). It is recognized that significant procurement of material and equipment may be necessary, but no more than 15% of the total project cost should be spent on EVSE. Data collection and analysis is a critical element of any demonstration project and should be included in the proposal. This category is aimed at finding new and emerging 'best practices' in PEV charging and PEV use that have yet to be significantly deployed in New York State. The intent is not to research the existing technology per se, but to quantify and validate potential benefits and identify specific barriers to adoption for New York State. Because this solicitation is funded by a System Benefits Charge (SBC) on the electricity transmitted and distributed by the State's investor-owned utilities, the site of any equipment and system demonstration must be in New York State and must pay into the System Benefits Charge on its utility bill and all projects must have benefits in the service territories of New York State's investor-owned utilities.

Cost share is required for all projects. Category 1 projects are required to provide at least 25% of total project costs in non-NYSERDA matching funds. Category 2 projects are required to provide at least 50% of total project costs in non-NYSERDA matching funds. For both categories, cash co-funding is preferred over in-kind services.

Funds will be allocated on a competitive basis. NYSERDA anticipates awarding funding for multiple projects under this PON. All, some, or none, of the total available funding may be allocated. In its sole discretion, NYSERDA may award partial funding to proposals or modify any submitted scope of work as appropriate. NYSERDA will not reimburse for costs incurred before the date of contract execution.

Eligibility Requirements

Funding is available to the following entities: incorporated nonprofit entities, corporations, limited liability companies or partnerships and public entities such as counties, villages, towns and cities. Individuals are not eligible to apply. Because this solicitation is funded by a System Benefits Charge (SBC) on the electricity transmitted and distributed by the State's investor-owned utilities, the site of any equipment and system demonstration must be in New York State and must pay into the System Benefits Charge on its utility bill and all projects must have benefits in the service territories of New York State's investor-owned utilities.

All EVSE and vehicle communications must be in accordance with NEC 625. Level 2 EVSE cord connection must be in accordance with SAE J1772. DC fast charging EVSE must include either a SAE J1772 Combo cord connection or CHAdeMO cord connection. NYSERDA may require DC fast charging EVSE to be upgradeable to include dual SAE/CHAdeMO cord connections in the future. All public-access EVSE units must be code compliant and UL Certified (or equivalent). Documentation of the certifications must be submitted with the proposal. EVSE that are used solely by a fleet of medium- or heavy-duty EVs may be pending UL certification (or equivalent), but the EVSE manufacturer must have at least submitted to UL for review and approval by the due date for this PON. All installations of equipment must comply with applicable local and State Environmental, Building, and Fire Codes.

Project Scope

Projects selected for funding must:

- Identify readily quantifiable metrics that track how the project contributes to advancing PEVs in New York State
- Emphasize the ultimate broad-based deployment of technical solutions rather than conducting basic research
- Document energy, environmental, and economic benefits in New York State
- Provide the required amount of cost-sharing by the proposer or third parties in the form of cash (preferable) or in-kind labor, materials, equipment, facilities, and other resources, subject to verifiable valuation. Co-funding may be from the proposer or other private or government sources. Letters from all co-funders confirming cost share are required to be submitted with the proposal. New York State funds cannot be used to reimburse or replace normal expenses of other government organizations.

Other Considerations

A proposal may be considered non-responsive if it fails to comply with the requirements above, the Proposal Requirements of Section 2, or the General Conditions of Section 3.

Projects are expected to begin within six months of the proposal due date. Generally the project schedule should not exceed 24 months.

Teaming arrangements are not only encouraged but may be necessary to achieve project success. Proposal teams may include commercial firms, industry associations or research organizations, universities, government agencies, end-users, and other stakeholders. Letters of commitment from each identified team member should be included in an appendix to the proposal. The lack of such letters, especially in cases where co-funding is indicated, is viewed as a very serious proposal deficiency and will be judged accordingly in the technical evaluation process

Total proposal length should be 20 pages or less, plus letters of commitment in an appendix. Double-sided printing is preferred and suggested page limits for each section are provided below in parentheses. If you believe proprietary information must be submitted to present an adequate proposal, please contact an individual listed at the beginning of this PON and comply with the Section 3 instructions for submitting proprietary material. Rigid bindings and other elaborate presentation material should not be used - a single staple in the upper left corner is preferred. Proposals should concisely present the information needed to fully address the evaluation criteria (see Section IV). Proposals that grossly exceed the page limits or fail to follow the format guidelines may be rejected as non-responsive.

2.0 PROPOSAL REQUIREMENTS

Proposers must submit one (1) hard copy and one (1) electronic media copy (CD) of the 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, WHICH MUST CONTAIN AN ORIGINAL SIGNATURE. **Late proposals and proposals lacking the appropriate completed and signed Proposal Checklist will 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. Attempt to follow the page length guides for each proposal section below. Unnecessary attachments beyond those sufficient to present a complete, comprehensive, and effective response will not influence the evaluation of the proposal. Each page of the proposal should state the name of the proposer, the PON number, and the page number. The proposal must be in the following format and should present the items in the sequence indicated below.

The following are requirements for the project proposal:

1. The proposal must clearly indicate the Funding Category (Category 1 or 2) on Attachment A.
2. All proposals must include a schedule with a project start and end date and a detailed timeline with milestones to complete the project.
3. Partnerships must be fully described in the proposal and must include letters of support detailing each of the participating entities' financial commitment to the project.

4. All proposals must include a detailed proposer profile and resumes from the primary project manager and all project staff.

2.1 PROPOSAL SECTIONS

YOUR PROPOSAL MUST CONTAIN THE FOLLOWING DOCUMENTS IN THE FOLLOWING ORDER:

1. **Attachment A - Proposal Checklist WITH AN ORIGINAL SIGNATURE (Mandatory)**
2. **Attachment B - Disclosure of Prior Findings of Non-Responsibility Form (Mandatory)**
3. **Attachment C - Contract Pricing Proposal Form (Mandatory)**
4. **Attachment D - Proposal Overview Form (Mandatory)**
5. **Proposal narrative as described in the following pages (Mandatory)**
6. **Letters of project commitment from all financial partners to the proposal are mandatory. Absence of signed commitment letters will be viewed as a lack of financial commitment to the project proposal.**
7. **Exceptions to NYSERDA standard terms and conditions (provided under Attachment F), if any**

NYSERDA will enter into a contract with successful proposers using the attached Sample Agreement (**Attachment F**). **If you do not accept the standard terms and conditions, provide alternate terms with justification based on the risk and benefit to New York State. Any negotiation of terms will be at NYSERDA's sole discretion.** NYSERDA reserves the right to consider only exceptions to terms that are specifically included with the proposal. Any negotiation of terms will be at NYSERDA's sole discretion. Attachment F does not need to be completed; it is provided only for review per the discussion above.

1. **Proposal Checklist.** Complete Attachment A, the Proposal Checklist, and include it as the front cover of the proposal. Note the following:
 - Indicate whether you accept the standard terms and conditions as contained in the attached Sample Agreement (Attachment F). If you do not accept the standard terms and conditions, provide alternate terms with justification based on the risk and benefit to New York State. NYSERDA reserves the right to consider only exceptions to terms that are specifically included with the proposal. Any negotiation of terms will be at NYSERDA's sole discretion.
 - Do not leave any blanks. If a specific question is not applicable, indicate N/A.
 - Be sure the individual signing the Proposal Checklist is authorized to commit the proposer's organization to the proposal as submitted. The Proposal Checklist **MUST** include an original signature on the hard copy submitted.
2. **Disclosure of Prior Findings of Non-Responsibility Form.** Complete Attachment B, the Disclosure of Prior Findings of Non-Responsibility Form, and include it directly following the Proposal Checklist. Be sure the individual signing the Disclosure of Prior Findings of Non-Responsibility Form is authorized to commit the proposer's organization to the proposal as submitted.
3. **Contract Pricing Proposal Form.** A Contract Pricing Proposal Form (CPPF), with associated instructions, is provided as Attachment C to this PON. Each proposal must include a completed CPPF and also a cost-sharing table (see Budget portion of Project Narrative for example) identifying the allocation of funding by task. The net cost to NYSERDA is one of the evaluation criteria and will be closely considered. Include the CPPF directly following the Disclosure of Prior Findings of Non-Responsibility Form.
4. **Proposal Overview Form.** The Proposal Overview Form summarizes the salient details of the proposal on one page. It should include details such as proposer information, background information relevant to the project, a brief summary of the objective and main work of the project, and proposal strengths and weaknesses from the perspective of the Proposer. Complete Attachment D, the Proposal Overview Form, and include it directly following the CPPF. Please submit this document in Word format in the electronic copy.
5. **Project Narrative.** The Project Narrative includes the core details of the proposal, including who will do the work, what the work will consist of, and details on how much the work will cost. The Project Narrative should include the following sections:
 - **Executive Summary (one page maximum).** Indicate the Focus Area (1, 2, 3, or 4) and the Funding Category (1 or 2) to which your proposal is being submitted. Briefly summarize the team members, the related problem or opportunity, the proposed solution and its innovative characteristics, and the potential for PEV market expansion

and resulting energy and GHG reductions in New York State. Strictly limit the Executive Summary to one page and use the following outline:

- Team Members
- Background
- Objective and Scope of Proposed Project
- Project Benefits

- **Background and Proposed Approach (two to four pages).** Provide a narrative including a detailed description of the aspect of the PEV market the project focuses on, how it currently operates, and what opportunities exist for improvement. Explain how the project is innovative and different from current practices in the PEV market. Explain fully how successful implementation of the technology or policy would improve the PEV market and produce energy, environmental, and economic benefits for New York State. Describe the proposed approach to designing the study or demonstration, how the proposed project will be implemented, and how the proposer will collect and analyze data from the study or demonstration. For demonstration projects, identify the project site and whether the site owner pays into the System Benefits Charge on its utility bill.
- **Proposed Statement of Work and Schedule (three to four pages).** In the electronic version, please include the Statement of Work (SOW) as a stand-alone file in Word format. The SOW is the primary contractual document that outlines work activities and specifies deliverables. It delineates each step required to accomplish the project objectives. Therefore, each action needs to be identified, indicating who will perform it, how it will be performed and its intended result. At the end of each task description, specific task deliverable(s) must be listed. Be sure to identify the task deliverable, as this will be a measure of your performance. Be clear and specific: concentrate on “how” and not “why”. Use “active voice” sentence structure to make clear who is responsible for specific actions. Use the following phrase to start the description of every task and subtask (“The Contractor shall....”). The SOW structure should include:

Task 1.0 Project Management.

Subtask 1.1 Subcontracts. The Contractor shall enter into the following agreements. Describe all required subcontracts, even if the subcontractor is yet to be defined.

Subtask 1.2 Meetings. The Contractor shall hold a Kick-Off Meeting, Interim Review Meetings (as warranted), and a Wrap-Up Meeting at the end of the project.

Subtask 1.3 Progress Reports. NYSERDA will expect to receive written monthly or quarterly progress reports, as part of the project management task. These activities should be considered when developing your cost proposal. Such reports shall describe any difficulties encountered during the reporting period and shall include a statement of the Project Director setting forth the cost of the work during the reporting period. The progress reports should be submitted to the NYSERDA Project Managers no later than the 10th of the following month.

Subtask 1.4 Data Collection and Benefit Reporting. For Category 1 Study Projects, NYSERDA will require two brief annual updates on the effectiveness of the information dissemination (e.g. conference presentations, workshops, publications, citations, etc.). A simple, web-based pdf form will be provided for electronic filing (Attachment E1).

For Category 2 Implementation/Demonstration Projects, the proposal should include a detailed plan to collect data and provide reporting to validate the claimed transportation benefits. Depending on the project, this may require periodic data collection and reporting activities, conducted by the proposer or subcontracted to an unbiased third party. This is an important aspect of a properly-crafted project and it will benefit the proposer and New York State if done properly.

For Category 2 Projects, NYSERDA will also require five brief annual updates on the effectiveness and additional replication of the Strategy/Technology. A simple, web-based pdf form will be provided for electronic filing (Attachment E2).

Subtask 1.5 Final Report. The Final Report is a significant project deliverable and should detail all of the work performed and task deliverables, but exclude proprietary information. The comprehensive Final Report shall cover all aspects of the project and shall merge together, and build further on, the previously generated monthly progress and benefit reports. Although not onerous, NYSERDA has elements of required report formats, which need to be satisfied and which will be provided to successful proposers at the start of the project.

Task 2.0, 3.0, 4.0, etc. Project-specific Work Scope Tasks. Add as many tasks and subtasks as necessary to cover all actions needed to achieve the goals and objectives of the project. These will be action steps. Each task should include a concise narrative description of the work that will be performed and how the work will be performed and specific deliverables to be provided. Typical tasks may include, but are not limited to, study/demonstration design, study/demonstration execution, and data collection.

Schedule. Present a work schedule with a starting point and duration for each task and subtask. Presentation of the schedule in a table or bar chart is preferred starting with "Month 1," "Month 2," etc. along the top horizontally with tasks and subtasks running vertically down the left hand side. Define and indicate key milestones in the schedule, including planned start and completion dates for each task.

- **Proposer Qualifications (two to four pages, depending on team size).** Provide an overview of the relevant qualifications of the proposer, other team members and major subcontractors. Note that 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 Attachment F: Sample Agreement). Resumes, facility qualifications, and data sheets do not belong in the body of the proposal, but should be included in the appendix. Key individuals identified in the proposal need to be available to commit to the project in the time frame proposed and subsequent personnel substitutions will require NYSERDA approval. Additionally, discuss any NYSERDA contracts awarded to the proposer in the past five years and identify NYSERDA project managers associated with those contracts.

To the extent that proposed Category 2 activities include the use of any existing intellectual property (IP) assets, the proposer must describe the IP and provide details that would identify any granted patents or pending applications related to the IP. If the proposer does not own the relevant IP, but is a licensee of the IP, then the proposal must specifically identify and describe any relevant license agreements. Proposers are encouraged to provide copies of relevant IP license agreement(s) and/or letter(s) of support from licensors as attachments to the proposal. To the extent any of the above represents non-public information, please refer to the "Proprietary Information" section in Section 3.0 below.

- **Project Benefits (two to three pages).** Discuss how the proposed project will advance PEV adoption in New York State and reduce petroleum use and GHG emissions in the State. Provide estimates of the potential improvement. Quantify any additional project benefits to the extent possible: electric grid benefits (e.g., reduced peak loads, more balanced usage, etc.), environmental benefits (e.g., emission reductions, elimination of hazardous materials, etc.), economic benefits (e.g., jobs created or retained, reduced transportation system life-cycle costs, enhanced viability of New York State businesses, etc.), safety and security benefits (e.g., reduction in deaths, injuries and real property losses, etc.), and other benefits (e.g., lowering the cost of compliance with State or Federal regulations, enhanced quality of life issues, etc.)
- **Budget.** All cost information must be provided on the attached Contract Pricing Proposal Form (**Attachment C**). Each subcontractor to the Proposer should complete a separate Attachment C form.

In addition to the CPPF, the proposal should include a brief description of the budget, including a cost-sharing table (see example below) identifying the allocation of funding by task. The description should describe the equipment needed for the project, the equipment's function and necessity, estimates of the costs to purchase and install the equipment, the people who will do the work and whether they are external subcontractors or internal personnel, and the cost share, including the type, amount, and source of cost share. Provide as much detail as possible, such as quotes and preliminary engineering cost estimates. Indicate the number of hours each individual will spend on each task and an hourly rate of pay. Provide justification or verification for the rate of pay proposed.

All recipients of awards for projects will receive funds on a reimbursement basis based on submission of invoices, proof of payment to vendors and sub-contractors and documentation of project completion, in accordance with a mutually agreed-upon Statement of Work. No reimbursement will be provided for costs incurred prior to the contract execution date for proposals awarded funding.

Cost Sharing. Category 1 proposals should show non-NYSERDA funding of at least 25% of total project costs. Category 2 proposals should show non-NYSERDA funding of at least 50% of total project costs. The amount of cost sharing will be an important consideration in the proposal evaluation process. Cost sharing can be from the proposer, other team members, and other government or private sources. Include documentation of cost share support from entities other than the proposer. Absence of documentation of funding will be construed as a lack of commitment to the project by that entity. NYSEDA funds cannot be used to reimburse or replace normal expenses of other government organizations.

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. For example, labor may be provided at discount rates, while products for commercial demonstration may be provided at a significant discount or at cost to the project. Requested funds, cash cost share, and in-kind contributions together must account for 100% of the cost of eligible expenses for implementing the project.

It is the responsibility of the proposer to adequately document the level of cost share being provided from all sources. If funded, the proposer will also need to provide cost share documentation with each invoice submitted. NYSERDA funds 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 within your proposal (expand as needed).

PROPOSAL COST SHARING TABLE							
Proposed Funding By Task (Cash and In-Kind)					Project Total		
Funding Source	Task 1 (\$)	Task 2 (\$)	Task 3 (\$)	...	Cash (\$)	In-Kind (\$)	Total (\$)
NYSERDA							
Proposer							
Co-Funder 1 (identify)							
Co-Funder 2 (identify)							
Task Total (\$)							

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

- Describe the basis for the rates proposed (i.e., based on prior period actual results; based on projections; based on federal government or other independently-approved rates).
- If rate(s) is approved by an independent organization, such as the federal government, provide a copy of such approval.
- If rate(s) is based on estimated costs or prior period actual results, include calculations to support proposed rate(s). Calculation should provide enough information for NYSERDA to evaluate and confirm that the rate(s) 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.

- **Annual Metrics Reports.** If awarded, the proposer will be required to submit to NYSERDA's Project Manager on an annual basis, a prepared analysis and summary of metrics addressing the anticipated energy, environmental and economic benefits that are realized by the project. All estimates shall reference credible sources and estimating procedures, and all assumptions shall be documented. Reporting shall commence the first calendar year after the contract is executed. Reports shall be submitted by January 31st for the previous calendar years activities (i.e. reporting period). Please see Attachment E1/E2: 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.
- **Appendices.** Include any resumes, company qualifications, or ancillary information which 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 provide services, equipment or cost share, you must include a letter from that organization describing their planned participation. Where appropriate, proposed field demonstrations should include letters of commitment from the host site or vehicle fleet owner.

Also include letters of interest or commitment from team members, businesses or other organizations critical to the success of the project. Absence of letters of interest or commitment will be interpreted as the proposer not having support from the identified parties.

2.2 PROPOSAL EVALUATION

Proposals will be reviewed by a Technical Evaluation Panel (TEP) and will be scored and ranked according to the following criteria, in order of importance. Both categories of projects will be evaluated together.

1. Proposal Quality

- **Program Goals and Benefits:** How well does the project help meet the goals of expanding the New York State PEV market and creating energy, environmental, and economic benefits for New York State? How significant is the statewide potential for PEV adoption resulting from the project? Are the expected benefits likely to be realized, given other constraints or barriers? Are there additional significant benefits, such as enhanced electric grid, environmental, economic, safety and security benefits? If adopted, will there be economic benefits in New York State in the form of subsequent manufacturing or technical service activity?
- **Project Design:** Is the proposed work plan technically feasible, innovative, and superior to potential alternatives? Is there a strong likelihood that the project can be completed as described, with the intended benefits? Does the approach to completing the project seem appropriate for the proposed schedule and budget?
- **Innovation:** Does the project contain a novel approach to the PEV market that has not been demonstrated in New York to date? Does the proposal contain detailed information on the proposed innovation and how that innovation will be implemented?
- **Data Collection and Analysis:** Does the proposal contain a detailed plan for data collection and analysis?

2. Proposer Qualifications

- **References and Past Performance:** Does the Proposer have a history of successfully completing similar projects? Do they have the necessary technical expertise to complete the project?
- **Partnerships:** Does the project comprise significant innovative partnerships with appropriate partners for accomplishing the project's goals?
- **Level of commitment from partners:** Did the project partners provide commitment letters detailing their roles in the project and any financial or technical cost share for the project?
- **New York State Content:** Does the team consist of New York State businesses, thereby providing economic benefits in the form of jobs?

3. Project Value

- **Cost/Benefit Considerations:** Is the overall project cost justified based on the expected benefits? Relative to the project cost, how significant are the potential benefits? Are the equipment and labor costs reasonable for the type of equipment and labor being used?
- **Schedule:** Does the proposal contain a reasonable schedule to complete the work?
- **Budget Detail:** Is the level of detail included in the budget sufficient to evaluate the project costs? Is the budget appropriate for the proposed work plan?
- **Cost Share:** Has the minimum cost share requirement been met? Is there cost share provided beyond the minimum required? How appropriate are the proposer's cost share contributions (sources and amounts) with respect to the degree of risk, potential to benefit from the work, and financial status of the proposing organization and project team?

3.0 GENERAL CONDITIONS

Proprietary Information - Careful consideration should be given before confidential information is submitted to NYSERDA as part of your proposal. Review should include whether it is critical for evaluating a proposal, and whether general, non-confidential information, may be adequate for review purposes. The NYS Freedom of Information Law, Public Officers law, Article 6, provides for public access to information NYSERDA possesses. Public Officers Law, Section 87(2)(d) provides for exceptions to disclosure for records or portions thereof that "are trade secrets or are submitted to an agency by a commercial enterprise or derived from information obtained from a commercial enterprise and which if disclosed would cause substantial injury to the competitive position of the subject enterprise." Information submitted to NYSERDA that the proposer wishes to have treated as proprietary, and confidential trade secret information, should be identified and labeled "Confidential" or "Proprietary" on each page at the time of disclosure. This information should include a written request to exempt it from disclosure, including a written statement of the reasons why the information should be exempted. See Public

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

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

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

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

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

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

State Finance Law sections 139-j and 139-k - NYSERDA is required to comply with State Finance Law sections 139-j and 139-k. These provisions contain procurement lobbying requirements which can be found at <http://www.ogs.ny.gov/aboutogs/regulations/advisoryCouncil/StatutoryReferences.html>. The attached Proposal Checklist calls for a signature certifying that the proposer will comply with State Finance Law sections 139-j and 139-k and the Disclosure of Prior Findings of Non-responsibility form includes a disclosure statement regarding whether the proposer has been found non-responsible under section 139-j of the State Finance Law within the previous four years.

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

Contract Award - NYSERDA anticipates making multiple awards under this solicitation. It may award a contract based on initial applications without discussion, or following limited discussion or negotiations pertaining to the Statement of Work. Each offer should be submitted using the most favorable cost and technical terms. NYSERDA may request additional data or material to support applications. NYSERDA will use the Sample Agreement to contract successful proposals. NYSERDA reserves the right to limit any negotiations to exceptions to standard terms and conditions in the Sample Agreement to those specifically identified in the submitted proposal (see Proposal Checklist). Proposers should keep in mind that acceptance of all standard terms and conditions will generally result in a more expedited contracting process. NYSERDA expects to notify proposers in approximately 12 weeks from the proposal due date whether your proposal has been selected to receive an award. NYSERDA may decline to contract with awardees that are delinquent with respect to any obligation under any previous or active NYSERDA agreement.

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

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

ATTACHMENTS

- Attachment A – Proposal Checklist
- Attachment B – Disclosure of Prior Findings of Non-Responsibility Form
- Attachment C – Contract Pricing Proposal Form
- Attachment D – Proposal Overview Form
- Attachment E1 and E2 – Sample Metrics Reporting Guides
- Attachment F – Sample Agreement