



Proposal Due Dates:
Round 1: February 10, 2015 by 5:00 PM Eastern Time*
Round 2: September 16, 2015 by 5:00 PM Eastern Time*
All, some, or none, of the available funds may be awarded

The Plug-In Electric Vehicle-Enabling Technology Demonstration Program (the Program) seeks research and demonstration proposals to demonstrate new technologies and strategies that help overcome barriers to the market adoption of plug-in electric vehicles (PEVs) and make them more economically viable while reducing their impact on the electric grid and environment in New York State. Two solicitation rounds are anticipated and the total available funding is \$3 million. All, some, or none, of the available funding may be allocated in total and in any one round.

NYSERDA 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, improve the user experience for PEV drivers, reduce the cost of deploying PEV charging infrastructure, ease financial and regulatory obstacles to PEV adoption, and increase market demand for PEVs. Proposals should focus on research, results, or strategies that can become economically viable on their own and be replicated 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: Electronic submission is preferable. NYSERDA will also accept proposals by mail or hand-delivery. If submitting electronically, proposers must submit the proposal in either PDF or MS Word format with a completed and signed Proposal Checklist and Disclosure of Prior Findings of Non-Responsibility, in PDF format. Proposal PDFs should be searchable and should be created by direct conversion from MS Word, or other conversion utility, rather than scanning. For ease of identification, all electronic files must be named using the proposer's entity name in the title of the document. Proposals may be submitted electronically by following the link for electronic submissions found on this PON's webpage, which is located in the "Current Opportunities" section of NYSERDA's website (<http://www.nyserda.ny.gov/Funding-Opportunities/Current-Funding-Opportunities.aspx>). Instructions for submitting electronically are located in that section as Attachment G to this PON.

If mailing or hand-delivering, proposers must submit two (2) paper copies of their proposal with a completed and signed Proposal Checklist attached to the front, along with a CD or DVD containing both a PDF and 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 3016
NYS Energy Research and Development Authority
17 Columbia Circle
Albany, NY 12203-6399

If you have technical questions concerning this solicitation, contact Patrick Bolton, (518) 862-1090, ext. 3322 or patrick.bolton@nyserda.ny.gov or Adam Ruder, (518) 862-1090, ext. 3411 or adam.ruder@nyserda.ny.gov. If you have contractual questions concerning this solicitation, contact Nancy Marucci at (518) 862-1090, ext. 3335 or nancy.marucci@nyserda.ny.gov.

No communication intended to influence this procurement is permitted except by contacting Patrick Bolton (Designated Contact) at (518) 862-1090, ext. 3322 or patrick.bolton@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.

*Whether filed electronically, hand delivered or mailed, proposals must be RECEIVED by NYSERDA by 5:00 PM Eastern time on the corresponding Due Date. 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

1.0 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 July 2014, registered PEVs in New York State grew by more than 1,000 percent, from under 1,000 to over 11,000. Installations of electric vehicle supply equipment (EVSE), more commonly called charging stations, are also increasing rapidly, with over 1,000 EVSE installed in the State as of September 2014. New York State has been leading the push for wider PEV adoption through Governor Andrew M. Cuomo's Charge NY initiative, which sets a goal of 30,000 to 40,000 PEVs and 3,000 charging stations on New York roads by 2018, plus regulatory reforms, increased understanding of the benefits of PEVs, and new technology advances in the industry. In addition, New York State is working with seven other states to collaborate on policies that advance PEVs and fuel cell vehicles through a multi-state Zero Emission Vehicle (ZEV) Action Plan.

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 gasoline-powered vehicles. Currently, PEV prices have been falling, especially for leases, and are approaching competitiveness with gasoline-powered vehicles when factoring in the federal electric vehicle tax credit. Operating costs for PEVs are often much lower than those of gasoline-powered 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.

Reducing the price and increasing the range of PEVs is important, but new tools, policies, consumer incentives, financing models, and behavioral approaches can also help accelerate PEV sales and leases beyond current early adopters into the mainstream vehicle market. Solutions that make owning PEVs more attractive relative to gasoline-powered vehicles could draw the attention of vehicle purchasers that would not have considered purchasing a PEV otherwise.

To help the PEV market become truly viable, the economics and impacts of PEV charging infrastructure must also improve. There is a need for new policies and technologies to reduce the strain on the electric grid from 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 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.

New business models need to emerge that make charging station ownership a profitable venture. Currently, upfront costs can be hard to recover because of low usage, expensive installations, and consumers' low willingness to pay. Reducing initial costs and tying EVSE ownership to other revenue streams may help attract additional private investments in public PEV infrastructure.

Solicitation Goals and Focus Areas

The goal of this solicitation is to help overcome market barriers to broader PEV adoption by researching and demonstrating new technologies, strategies, 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 and demonstrate new technologies, strategies, business models, education initiatives, 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, improve the user experience for PEV drivers, reduce the cost of deploying PEV charging infrastructure, 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. Because the PEV market is evolving rapidly, projects with short timeframes that will produce results that can easily be incorporated into the PEV market quickly are strongly preferred. Proposers are expected to be able to explain why their project is important for expanding the PEV market and how it will influence the market. Demonstrations should show a clear path to economic viability and replicability at a larger scale.

This solicitation is NOT for technology product development and is NOT intended to pay for standard electric vehicle supply equipment (EVSE)/charging station deployment, including DC fast chargers.

Projects **MUST** address one or more of the following Focus Areas, which should be identified in the proposal. Proposals that do not address one or more of the Focus Areas may be considered unresponsive.

- Strategies and techniques for reducing the installation and operating costs of EVSE
- Controlling electric demand from charging, especially through the integration of EVSE into building energy management systems
- Innovative business models for the ownership of and generation of revenue from EVSE
- Consumer-focused activities that increase awareness, understanding, and exposure to PEVs, such as ride-and-drive events
- Innovative approaches to spurring PEV usage among low- and medium-income drivers
- Engaging with employers and/or implementing employer-based programs to encourage workplace charging and employee EV purchases
- Engaging with dealers and/or implementing dealer recognition and incentive programs to encourage greater PEV sales
- Informing local planning committees about how to incorporate EVSE recommendations/requirements into the site review process
- Analysis of the potential costs and benefits that PEVs can provide to electric utilities in New York State
- Innovative financing of PEVs and EVSE, including innovative battery ownership models
- Encouraging fleets, particularly municipal fleets, to adopt PEVs
- Methods for educating key stakeholders on how they can best support the PEV market
- Use of behavior-based strategies to influence PEV and EVSE adoption
- Business models for the expansion of the secondary market for PEVs
- Innovative regulatory policies and incentives

2.0 PROGRAM REQUIREMENTS

Solicitation Goal: As previously stated, the goal of this solicitation is to make PEVs a more attractive and viable option for drivers by researching and demonstrating new technologies, strategies, and policies that support their use and by educating key stakeholders in the PEV market. 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 the study or demonstration of 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 PEV market and improve the State's energy independence, environmental quality, and economic vitality. Proposals should incorporate appropriate cost sharing to leverage private investments and should be able to be completed in a short timeframe. Proposals should demonstrate a real market demand for solving the proposed problem and should investigate solutions that can become economically viable and are easily replicable in the broader PEV market.

Funding Categories: The following categories of projects will be considered for funding:

1. **Education and Outreach Projects** that educate specific target audiences (such as car dealers, planners, or municipalities) about PEVs and the actions that the groups can take to build the PEV market. This may include spreading knowledge about successful PEV strategies or programs that have been done in New York or elsewhere. These projects will generally consist of curriculum or workshop development, one or more outreach events, and development of a plan explaining how the activities can be continued once NYSERDA funding is exhausted. These projects should target a single audience and describe how the effort will impact the PEV market. All education and outreach projects must identify ways that the work will continue to be used and have an impact on the PEV market after NYSERDA funding is exhausted. Projects funded in this category will be limited to **a maximum of \$50,000 per project of NYSERDA funds. All Category 1 projects are required to provide at least 25% of total project costs in non-NYSERDA matching funds.**
2. **Feasibility and Policy Studies**, including activities and research in one or more of the Focus Areas listed above to investigate the basic feasibility of technologies, strategies, and policies for New York State that have the potential to expand the PEV market in New York State. Studies may be comprised of 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. All studies must investigate policies and strategies with regard to how they could be implemented in New York State, and how they would impact PEV adoption in the State. These studies generally should consist of paper studies resulting in a

publishable final report. Projects funded in this category will be limited to **a maximum of \$100,000 per project of NYSERDA funds. All Category 2 projects are required to provide at least 25% of total project costs in non-NYSERDA matching funds.**

While other proposals will be considered, NYSERDA is especially interested in funding Category 2 studies that include:

- The development of a guidance document to inform local planning committees how to incorporate EVSE recommendations/requirements into the site review process. This should address ways that a municipal planning board can encourage or require site owners applying for site approval to include EVSE in the implementation of their projects.
- A policy study that analyzes the potential costs and benefits of PEVs can provide to utilities in New York State. This should include an analysis of the net economic and societal benefits of PEVs to the State, the costs and benefits of PEVs to utilities, and how PEVs impact utility rates for all utility customers. The study should build off of previously published studies, including those completed previously for NYSERDA that have investigated the electric grid impacts of PEVs and managed/smart charging options for PEVs.

- 3. Demonstration of Innovative Engagement Programs** that recognize exemplary achievements in promoting PEVs by specific target audiences (employers and car dealers), generate increased interest in PEVs from new members of those audiences, and/or implement innovative incentive or outreach programs that spur these audiences to be more actively involved in promoting PEV adoption. Projects can include education and outreach, events to recognize top performers, installation of EVSE (no more than 25% of the total project cost), incentives to employees or car dealers for buying/selling PEVs, and other mechanisms for encouraging participation. Proposals should identify how they will enlist participation by members of the target audience and will be evaluated by whether they do this while generating new PEV sales in a cost effective manner. Data collection and analysis is a critical element of any demonstration project and should be included in the proposal; independent data collection and analysis is preferred. Projects funded in this category will be limited to **a maximum of \$300,000 per project of NYSERDA funds. All Category 3 projects are required to provide at least 25% of total project costs in non-NYSERDA matching funds.**

NYSERDA will only consider Category 3 demonstrations that consist of:

- Demonstrations of approaches to engage with employers and/or implement employer-based programs to encourage workplace charging and employee PEV purchases
- Demonstrations of approaches to engage with dealers and/or implement dealer recognition and incentive programs to encourage greater PEV sales

- 4. Integration and Demonstration of New Technologies and Business Models** that have the potential to achieve the solicitation goal while advancing one or more of the Focus Areas. Demonstration projects generally consist of equipment installations or software deployment accompanied by data collection and analysis that results in a publishable and publicly available final report. 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. It is recognized that significant procurement of material and equipment may be necessary, but no more than 25% 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; independent data collection and analysis is preferred. Projects funded in this category will be limited to **a maximum of \$500,000 per project of NYSERDA funds. All Category 3 projects are required to provide at least 50% of total project costs in non-NYSERDA matching funds.**

While other proposals will be considered, NYSERDA is especially interested in funding Category 4 demonstrations that include:

- Demonstrations of ways to reduce the costs of installation focused on workplace charging such as tying in to parking lot lighting systems
- Demonstrations of strategies to control electric demand from charging, particularly through energy management systems
- Demonstrations of consumer-focused activities that increase awareness, understanding, and exposure to EVs, such as ride-and-drive events
- Demonstrations of business models integrating new revenue streams for EV or EVSE owners, such as DR aggregation, sponsored EVSE, and retailer revenue sharing

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

EVSE Requirements

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. NYSEERDA 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 all 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 of this PON.

Projects are expected to be able to begin within six months of the proposal due date. Because the PEV market is evolving quickly, shorter projects are strongly preferred. Generally the project schedule should not exceed 18 months.

For all categories, cash co-funding is preferred over in-kind services.

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.

3.0 PROPOSAL REQUIREMENTS

Proposers must either submit their proposal through the electronic submission process described on the front of this Program Opportunity Notice and in Attachment G or submit two (2) hard copies and one (1) electronic media copy (CD or DVD) of the proposal to the attention of Roseanne Viscusi at the address on the front of this Program Opportunity Notice. Electronic files should be submitted in readily accessible formats (Word, Excel, PDF). 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 – double-sided printing with a single staple in the upper left corner is preferred. Total proposal length should be 20 pages or less, plus appendices. Suggested page limits for each section are provided below in parentheses. Proposals that grossly exceed the page limits or fail to follow the format guidelines may be rejected as non-responsive. Proposals should concisely present the information needed to fully address the evaluation criteria (see Section 4). Each page of the proposal should state the name of the proposer, the PON number, and the page number. If you believe proprietary information must be submitted to present an adequate proposal, please contact the Designated Contact listed at the beginning of this PON and comply with the Section 5.0 instructions for submitting proprietary material.

3.1 PROPOSAL SECTIONS

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

1. Attachment A - Proposal Checklist WITH AN ORIGINAL SIGNATURE
2. Attachment B - Disclosure of Prior Findings of Non-Responsibility Form
3. Attachment C - Contract Pricing Proposal Form
4. Attachment D - Proposal Overview Form
5. Proposal narrative as described in the following pages
6. Letters of project commitment from all financial partners to the proposal. 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.

In addition, the electronic version of your proposal should contain the following files:

1. The entire proposal in electronic format, preferably in a single Word or PDF file although multiple files are acceptable if necessary
2. Attachment C as a stand-alone Excel file
3. Attachment D as a stand-alone Word file
4. The proposed statement of work as a stand-alone Word file

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.

The proposal must be in the following format and should present the items in the sequence indicated below.

1. **Proposal Checklist.** Complete Attachment A, the Proposal Checklist, and include it as the front cover of the proposal. Note the following:
 - The proposer must clearly indicate the Funding Category (Category 1, 2, or 3) for the proposal. Each proposal may only apply under one (1) Funding Category.
 - Indicate whether you accept the standard terms and conditions as contained in the attached Sample Agreement (Attachment F).
 - 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.** Complete Attachment D, Proposal Overview Form, which summarizes the salient details of the proposal on one page, directly following the CPPF. Please submit this document in Word format in the electronic copy. **Please note: the Proposal Overview Form must contain entirely *non-proprietary* information.**
5. **Project Narrative.** The Project Narrative includes the core details of the proposal. The Project Narrative should include the following sections:
 - **Executive Summary (one page maximum).** Indicate the Funding Category (1, 2, 3, or 4) to which your proposal is being submitted and the Focus Area(s) it addresses. 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 greenhouse gas (GHG) reductions in New York State. Please note: the Executive

Summary must contain entirely *non-proprietary* information. 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 outreach, study or demonstration. Fully describe all partnerships involved in the proposed project.
- **Path to Market Acceptance (two to three pages).** Provide evidence that market actors, such as utilities, public or workplace EVSE owners, installers, fleets, etc. are interested in the innovation being investigated. Explain how they would benefit from the innovation being widely introduced in New York State and why they would be likely to favor that innovation over alternatives. Describe the barriers standing in the way of broad acceptance of the technology, policy, or business strategy being studied and explain how the project will educate stakeholders about ways to avoid or break down these barriers. Characterize a plausible path to broader adoption of the technology, policy, or business strategy, including a description of the resources and stakeholders that must be engaged to accomplish this.
- **Project Evaluation and Assessment (two to three pages).** Explain how the project's impacts will be evaluated and how the project will assess the actual and potential benefits to NYS that are derived from the project's completion. Describe the appropriate criteria to evaluate the success of the proposed project and how the proposer will collect data to assess the project's progress toward meeting those criteria. Proposals should include expected milestones for measuring success that can be evaluated at six-month intervals while the project is ongoing.
 - For Category 1 Projects, the proposal should include a detailed plan to assess the impacts of the educational outreach, including the number of stakeholders influenced, the changes in behavior stakeholders make because of the information learned through the project, and how these changes improve the PEV market in NYS.
 - For Category 2 Projects, the proposal should include a detailed plan to estimate potential impacts of the study if the technologies, strategies or policies studied are implemented in NYS. Assessments should address the potential scope of the market impact and how the technologies, strategies or policies studied would impact the market.
 - For Category 3 and 4 Implementation/Demonstration Projects, the proposal should include a detailed plan to collect data and provide reporting to validate the claimed benefits. Data collected should include, at a minimum, GHG reductions, investments in NYS, and appropriate metrics to measure impacts on the PEV market. This will likely require periodic data collection and reporting activities, conducted by the proposer or, preferably, subcontracted to an objective third party.

For all categories, proposers should include project evaluation as a discrete task in the statement of work and allocate a portion of the overall budget to this task.

- **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 Subcontracts. 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 month following the period in which the work was performed.

Subtask 1.4 Data Collection and Benefit Reporting. For Categories 1 and 2, 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 3 and 4 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 progress reports and task deliverables. In addition, conclusions and recommendations for further work should be provided.

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, how it 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. As noted above, one task must be focused on data collection and project evaluation.

Schedule. All proposals must include a schedule with a project start and end date and a detailed timeline with milestones to complete the project. 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 three 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 Section 5.02 of Exhibit B in 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 4 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 5.0 below.

- **Project Benefits (one to two 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.

Award recipients will receive funds on a reimbursement basis based on costs incurred, as evidenced by submitted invoices, and proof of payment to vendors and sub-contractors, in accordance with a mutually agreed-upon Statement of Work. No reimbursement will be provided for costs incurred prior to the contract execution date.

Cost Sharing. All Category 1, 2, and 3 proposals are required to show non-NYSERDA funding of at least 25% of total project costs. All Category 4 proposals are required to show non-NYSERDA funding of at least 50% of total project costs. For example, a Category 1 project seeking \$45,000 in NYSEDA funds would be required to provide a minimum of \$15,000 in cost share, which is 25% of the total project cost of \$60,000. A Category 2 project seeking \$75,000 in NYSEDA funds would be required to provide a minimum of \$25,000 in cost share, which is 25% of the total project cost of \$100,000. A Category 4 project seeking \$350,000 in NYSEDA funds would be required to provide a minimum of \$350,000 in cost share, which is 50% of the total project cost of \$700,000.

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, such as letters of financial commitment from the participating entities (in an appendix). 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. For all categories, cash co-funding is preferred over in-kind services.

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. NYSEDA 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 year's 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.
- **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.

In addition, include letters of support from PEV market actors, such as utilities, public or workplace EVSE owners, installers, fleets, etc. that can attest to the potential to expand the PEV market of the innovation the project will study. Letters should address how that entity would benefit from the innovation being widely introduced in New York State and why they would be likely to favor that innovation over alternatives.

4.0 PROPOSAL EVALUATION

Proposals that meet the Proposal Requirements will be reviewed by a Technical Evaluation Panel (TEP) and will be scored and ranked according to the following criteria, which are listed in order of importance. All three categories of projects will be evaluated together. NYSERDA reserves the right to interview proposers as part of the evaluation process. After the proposals are reviewed, NYSERDA will issue a letter to each proposer indicating the proposal evaluation results. Proposers receiving favorable evaluations will be invited to enter into contract negotiations with NYSERDA. The proposer may also be asked to address specific questions or recommendations of the TEP before contract award.

1. Proposal Quality

- **Program Goals and Benefits:** How well does the project help meet the goals of removing market barriers to PEV adoption in New York State and creating energy, environmental, and economic benefits for New York State? How well does it address one or more of the listed Focus Areas? How significant is the statewide potential for expanded 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 investments, manufacturing or technical service activity? For Category 3 projects, how cost effective is the project in generating new PEV sales and engaging employers/car dealers in the PEV market?
- **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?

- **Market Demand and Replicability:** Has the proposer demonstrated that the technology, strategy, or policy being studied is something that market actors are interested in implementing and feel would provide benefits if successful? Are there letters from market actors attesting to the value of the project? Does the project demonstrate a path to market acceptance and economic viability? Is there a path for it to be replicable beyond a single demonstration?
- **Data Collection and Analysis:** Does the proposal contain a detailed plan for data collection and analysis? Does it include thoughtful ways to measure success and potential or actual impacts? Does it include a well-considered plan for independent analysis of the project, where appropriate?

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? Is the schedule short enough and flexible enough to be able to respond to changing market conditions?
- **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? Does the project offer the potential to catalyze additional investments in the future if successful?

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

5.0 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://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 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 each 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
- Attachment G – Instructions for Submitting Electronic Proposals