

**FINANCIAL ASSISTANCE
FUNDING OPPORTUNITY ANNOUNCEMENT**



**U.S. Department of Energy
Energy Efficiency and Renewable Energy
National Energy Technology Laboratory**

**Zero Emission Cargo Transport Demonstration
Funding Opportunity Number: DE-FOA-0000669**

Announcement Type: 001 (Issued 5/1/2012)

CFDA Number: 81.086 – Conservation Research and Development

Issue Date: 03/20/2012

Letter of Intent Due Date: Not Applicable

Pre-Application Due Date: Not Applicable

Application Due Date: 05/15/2012 at 8:00 PM Eastern Time

The purpose of this amendment is to insert and revise language regarding Congressional Notifications of Multi-Year Awards and Lighting Efficiency Standards. Sections, II. (B) Estimated Funding and IV. Funding Restrictions have been revised for Congressional Notifications of Multi-Year Awards and Section VI. Award Administration Information, Special Terms and Conditions have been revised for Lighting Efficiency Standards. These changes have been noted in yellow highlight on Pages 10, 23, and 29 – 31.

NOTE: Applications must be submitted through the EERE eXCHANGE SYSTEM to be considered under this announcement. Applications submitted by any other means will not be accepted. You cannot submit an application unless you are registered with EERE eXCHANGE. Application forms and/or instructions can be found with this announcement on the EERE eXCHANGE website at <http://eere.energy.gov/financing/exchange>.

REGISTRATION/SUBMISSION REQUIREMENTS

Registration Requirements

There are several one-time actions the applicant must complete in order to submit an application in response to this Announcement (e.g., obtain a Dun and Bradstreet Data Universal Numbering System (DUNS) number, register with EERE eXCHANGE, register with the Central Contractor Registration (CCR), and register with FedConnect).

Applicants who are not registered with CCR and FedConnect should allow at least 21 days to complete these requirements.

Applicants must register through the EERE eXCHANGE. EERE eXCHANGE website: <http://eere.energy.gov/financing/exchange>

Applicants must obtain a DUNS number. DUNS website: <http://fedgov.dnb.com/webform>

Applicants must register with CCR. CCR website: <http://www.ccr.gov/>

Applicants must register with FedConnect. FedConnect website: <https://www.fedconnect.net/>

Besides the eXCHANGE registration system, which does not have a delay, **the other registration requirements could take several weeks to process and are necessary in order for a potential applicant to receive an award under this announcement.** Therefore, although not required in order to submit an application through the EERE eXCHANGE site, **all potential applicants lacking a DUNS number, or not yet registered with CCR should complete those registrations as soon as possible.**

EERE Web-Based Submission Information

All application submissions are to be made via the EERE eXCHANGE at <http://eere.energy.gov/financing/exchange>. To gain access to the EERE eXCHANGE system, the applicant must first register and create an account on the main EERE eXCHANGE site. This account will then allow the user to register for any open EERE Funding Opportunity Announcements (FOA) that are currently in eXCHANGE. It is recommended that each organization or business unit, whether acting as a team or a single entity, utilize one account as the appropriate contact information for each submission.

Applicants will receive an automated response when the Application is received; this will serve as a confirmation of EERE receipt. Please do not reply to the automated response. Applicants will have the opportunity to re-submit a revised Application for any reason as long as the relevant submission is submitted before the specified due date and time. A “User Guide” for the EERE eXCHANGE can be found on the EERE website at <http://eere.energy.gov/financing/exchange/Manuals.aspx> after logging in to the system.

To receive notices via email regarding a FOA, such as amendments to the announcement or the posting of new questions and answers, applicants must first register for the FOA by initiating a submission to that FOA.

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SECTION I - FUNDING OPPORTUNITY DESCRIPTION

A. DESCRIPTION

The U.S. Department of Energy (DOE) National Energy Technology Laboratory (NETL), on behalf of the Office of Energy Efficiency and Renewable Energy's (EERE) Office of Vehicle Technologies (OVT) Program, is seeking applications for grants to establish one or more projects to accelerate the introduction and penetration of electric transportation technologies (ETT) into the cargo transport sector.

B. RESTRICTED ELIGIBILITY

1. Eligibility for prime applicants is restricted to local governments, ports, metropolitan transportation authorities, air pollution control districts, or combinations of those governments, authorities, districts, and entities.
2. To be eligible, prime applicants must apply in partnership with a major ETT original equipment manufacturer or major supplier of ETT vehicle, system, or energy technology.
3. Prime applicants must operate in and/or govern areas of severe or extreme National Ambient Air Quality Standards (NAAQS) 8-hour ozone nonattainment as defined by the EPA under the Clean Air Act: <http://epa.gov/oaqps001/greenbk/gnc.html> lists the five geographic areas that meet this criterion.
4. Prime applicants must operate in and/or govern areas of severe traffic congestion. Severe traffic congestion is defined herein as having greater than the average Yearly Delay per Auto Commuter for the population category of the applicant as reported in Table 1 of the Texas Transportation Institute's 2011 Urban Mobility Report, which can be found at <http://mobility.tamu.edu/files/2011/09/all-nat-cong-tables.pdf>.

The result of the severe nonattainment and traffic congestion restrictions described above is that eligible applicants will operate in and/or govern one of these two 8-hour ozone nonattainment areas:

- **Los Angeles South Coast Air Basin nonattainment area**
- **Houston-Galveston-Brazoria nonattainment area.**

The following link to the U.S. Environmental Protection Agency's Green Book provides further links to maps and descriptions of the geographic boundaries of these nonattainment areas: <http://epa.gov/oaqps001/greenbk/gnc.html#Note>.

These restrictions are based on guidance accompanying the Consolidated Appropriations Act, 2012 (P.L. 112-74): "Further, within available funds up to \$10,000,000 is made available to fund section 131 of the 2007 Energy Independence and Security Act [EISA] to promote zero emission cargo transport in areas of severe nonattainment and severe

traffic congestion. Eligible recipients must provide 1-to-1 matching funds.” (Senate Report 112-075, Energy and Water Development Appropriations Bill, 2012, as referenced in the Joint Explanatory Statement of the Committee Conference Report, 112-331).

C. PROGRAM OBJECTIVES AND GOALS

A key objective of the OVT program is to accelerate the development and production of various electric transportation technologies (ETT) to substantially reduce petroleum consumption and related emissions. In order to meet this goal, advanced ETT needs to be cost effective and meet the customers’ performance expectations. The ETT system usage and typical operation needs to be understood to provide an optimized system, at a low cost and providing the desired performance to achieve mass market penetration.

Goals for awards resulting from this FOA include demonstrating reductions of 1) petroleum use, 2) greenhouse gas emissions, and 3) criteria pollutant and toxics emissions. Other goals include evaluating the market viability of cargo electric transportation technologies and collecting detailed information to analyze the benefits and viability of this freight transportation approach for this and other nonattainment areas.

D. PROJECT PHASES

DOE anticipates that awards resulting from this FOA will consist of one or two phases; Demonstration only or Development and Demonstration. All projects must have a Demonstration Phase.

Within the Development Phase, if proposed, applicants shall develop cargo electric transportation technologies and research and evaluate the market viability of those technologies as they apply to the project area. Applicants shall collect detailed test information sufficient to analyze the performance of the cargo electric transportation technology system(s). Examples of development work include the analysis, design, fabrication, and integration of component or propulsion systems and vehicle integration development.

Within the Demonstration Phase, applicants shall demonstrate a Zero Emission Cargo Transport (ZECT) system for a minimum of two (2) years. Applicants will be expected to collect data under real world cargo transport conditions in the prime applicant’s 8-hour ozone nonattainment area.

If a development phase is proposed, it can overlap with the demonstration phase, but the justification for overlapping phases must be provided in the project narrative. If a development phase is proposed, its duration cannot exceed 1 year.

Regardless of whether an applicant proposes development and demonstration phases or only a demonstration phase, the effort funded through any award from this FOA will be considered to meet the criteria for Technology Readiness Level 8:

TRL-8. Actual system/process completed and qualified through test and demonstration- Pre-commercial demonstration: End of system development. Full-scale system is fully integrated into operational environment with fully operational hardware and software systems. All functionality is tested in simulated and operational scenarios with demonstrated achievement of end-user specifications. Technology is ready to move from development to commercialization.

E. ELIGIBLE TECHNOLOGIES

This FOA is focused on accelerating the introduction and penetration of ZECT technologies. ZECT technologies are those that meet the definition of electric transportation technologies (ETT) provided in Section 131(a)(3) of the Energy Independence and Security Act (EISA), P.L. 112-74 and that produce zero emissions from the transport vehicle (or other equipment which propels cargo) for all or large portions of their duty cycle. Examples of such technology include, but are not limited to:

- 1) heavy-duty on-road trucks that transport shipping containers of one or more twenty-foot-equivalent units and that are propelled by electric motors powered by batteries, fuel cells, overhead catenary wires, or hybrid-electric technologies that operate in all electric mode for a large portion of their duty cycle;
- 2) locomotives propelled by electric motors powered by batteries, overhead catenary wires, fuel cells, or hybrid-electric technologies that operate in all electric mode for a large portion of their duty cycle; and,
- 3) systems in roadbeds or rail lines that propel trucks or trains.

F. OTHER TECHNICAL REQUIREMENTS

- a. The ZECT system to be demonstrated must be identified and fully described in the application. This includes, but is not limited to, an estimate of the life cycle capital and operating costs for the ZECT system.
- b. The Recipient must deploy and demonstrate a ZECT system over at least two (2) years of the grant period of performance. A minimum two (2) years of data collection from the ZECT system is required.
- c. Demonstration activities must be conducted under real world cargo transport conditions in the prime applicant's NAAQS 8-hour ozone nonattainment area.
- d. Any vehicles included in the ZECT system, including retrofits/conversion systems, must meet all applicable federal and state agency standards.
- e. The project narrative must clearly describe the proposed technical approach. The technical approach must include a description of the ZECT system concept, and

describe in detail the plans for development, deployment, and operation of the system, including the approach to testing, data collection, and operational analysis.

- f. The test strategy should include variation in the usage and electric range for both loaded and unloaded configurations. Data to be collected shall include: operational data for any vehicles included in the ZECT system, including detailed powertrain, fuel cell (if applicable), and battery operational data; vehicle speed, load (payload), and auxiliary electrical loads; and data on the supporting infrastructure operation, including charge time, duration, and load. The vehicle operating and maintenance costs shall also be recorded.

As applicable to the proposed ZECT system, data collected should at a minimum include vehicle efficiency, cargo ton-miles per vehicle and fleet, petroleum consumption (if any), hydrogen consumption (if any), charging profiles, including times, duration, and electricity used, operational profiles, including times of operation, type of operation, and loading, accessory loading, time stamps, capital costs, operating costs, maintenance logs, maintenance costs, information related to the potential for electromagnetic interference, fuel cell specific information (if applicable), and battery specific data including state of charge, voltage, current, and temperatures.

- g. Test strategies and data collection plans are required as appendices to the Project Management Plan (see Section IV.C.3.) and shall be subject to DOE review and approval. All information collected (i.e., data and analyses) shall be provided to DOE. DOE may provide these data and analyses to DOE/NNSA National Laboratories.
- h. Applications must describe in detail the infrastructure requirements of the proposed ZECT system, including existing and needed infrastructure components (e.g., refueling or recharging stations, test or monitoring equipment, related electricity or data services), estimated schedule for completing the infrastructure, permitting issues and costs, and estimated infrastructure construction and operation costs.
- i. Applications should emphasize approaches that represent a positive business case for further replication or growth beyond the scope of the proposed project. It is required that each applicant's team include an ETT manufacturer or supplier currently producing the technology in the United States. It is highly desired that applications include commitments to manufacture and build the technology in the United States subsequent to the technology development and demonstration effort. The application must include a commercialization plan that addresses plans to manufacture the technology end item or portions of the technology end item. Applications must discuss the rationale for not domestically sourcing technologies (if applicable).
- j. Applications shall provide an analysis of the following expected benefits (as compared to a FY12 commercially available similar class vehicle or system):

- i. Expected Reduction in Petroleum Consumption
 - ii. Expected Reduction of Green House Gas Emissions (Million Metric Tons of Carbon Equivalent (MMTCE)/year)
 - iii. Expected Reduction of Criteria Pollutant and Toxic Emissions

- k. Applications for general infrastructure improvements, i.e. improvements that are not necessary for the advancement of the cargo electric transportation technologies or installation or operation of the proposed technology, will not be considered. Such applications will not be considered for comprehensive merit review (See Section V – APPLICATION REVIEW INFORMATION).

SECTION II - AWARD INFORMATION

A. TYPE OF AWARD INSTRUMENT

DOE anticipates awarding grants under this funding opportunity announcement.

B. ESTIMATED FUNDING

Approximately \$10,000,000 is expected to be available for new award(s) under this announcement.

Funding for all awards and future budget periods are contingent upon the availability of funds appropriated by Congress for the purpose of this program and the availability of future-year budget authority.

C. MAXIMUM AND MINIMUM AWARD SIZE

Ceiling (i.e., the maximum amount of Federal funding for an individual award made under this announcement):

\$10,000,000

Floor (i.e., the minimum amount of Federal funding for an individual award made under this announcement):

\$2,000,000

D. EXPECTED NUMBER OF AWARDS

DOE anticipates making up to 2 awards under this announcement in Fiscal Year 2012, depending on the size of awards and available funding.

DOE reserves the right to make additional selections to be made after the initial selections are announced. This will allow consideration of additional selections should additional funding become available through Fiscal Year 2013 appropriations.

E. PERIOD OF PERFORMANCE

DOE anticipates that the period of performance for awards resulting from this Announcement will vary in length for a period of up to four (4) years.

F. TYPE OF APPLICATION

DOE will only accept new applications under this announcement.

SECTION III - ELIGIBILITY INFORMATION

A. ELIGIBLE APPLICANTS

Restricted Eligibility

In accordance with 10 CFR 600.6(b), eligibility for award is restricted to the following:

1. Eligibility for prime applicants is restricted to local governments, ports, metropolitan transportation authorities, air pollution control districts, or combinations of those governments, authorities, districts, and entities.
2. To be eligible prime applicants must apply in partnership with a major ETT original equipment manufacturer or major supplier of ETT vehicle, system, or energy technology.
3. Prime applicants must operate in and/or govern areas of severe or extreme National Ambient Air Quality Standards (NAAQS) 8-hour ozone nonattainment as defined by the EPA under the Clean Air Act:
<http://epa.gov/oaqps001/greenbk/gnc.html> lists the five geographic areas that meet this criterion.
4. Prime applicants must operate in and/or govern areas of severe traffic congestion. Severe traffic congestion is defined herein as having greater than the average Yearly Delay per Auto Commuter for the population category of the applicant as reported in Table 1 of the Texas Transportation Institute's 2011 Urban Mobility Report, which can be found at <http://mobility.tamu.edu/files/2011/09/all-nat-cong-tables.pdf>.

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- **Los Angeles South Coast Air Basin nonattainment area**
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These restrictions are based on guidance accompanying the Consolidated Appropriations Act, 2012 (P.L. 112-74): "Further, within available funds up to \$10,000,000 is made available to fund section 131 of the 2007 Energy Independence and Security Act [EISA] to promote zero emission cargo transport in areas of severe nonattainment and severe traffic congestion. Eligible recipients must provide 1-to-1 matching funds." (Senate

Report 112-075, Energy and Water Development Appropriations Bill, 2012, as referenced in the Joint Explanatory Statement of the Committee Conference Report, 112-331).

B. COST SHARING

Cost Share 50%

The cost share must be at least 50% of the total allowable costs (i.e., the sum of the Government share, including FFRDC contractor costs if applicable, and the recipient share of allowable costs equals the total allowable cost of the project) and must come from non-Federal sources unless otherwise allowed by law. (See 10 CFR 600 for the applicable cost sharing requirements.)

C. OTHER ELIGIBILITY REQUIREMENTS

FFRDC/National Laboratories

Federally Funded Research and Development Center (FFRDC) Contractors. FFRDC contractors may be proposed as a team member on another entity's application subject to the following guidelines:

Authorization for non-DOE/NNSA FFRDCs. The Federal agency sponsoring the FFRDC contractor must authorize in writing the use of the FFRDC contractor on the proposed project and this authorization must be submitted with the application. The use of a FFRDC contractor must be consistent with the contractor's authority under its award and must not place the FFRDC contractor in direct competition with the private sector.

Authorization for DOE/NNSA FFRDCs. The cognizant contracting officer for the FFRDC must authorize in writing the use of a DOE/NNSA FFRDC contractor on the proposed project and this authorization must be submitted with the application. The following wording is acceptable for this authorization.

"Authorization is granted for the [*Name*] Laboratory to participate in the proposed project. The work proposed for the laboratory is consistent with or complimentary to the missions of the laboratory, will not adversely impact execution of the DOE/NNSA assigned programs at the laboratory, and will not place the laboratory in direct competition with the domestic private sector."

Value/Funding. The value of, and funding for, the FFRDC contractor portion of the work will be included in the award to a successful applicant. That is, the FFRDC will be a subrecipient to the successful applicant. DOE/NNSA will **not** fund a DOE/NNSA FFRDC contractor through the DOE field work proposal system nor other FFRDC contractors through an interagency agreement with the sponsoring agency.

Cost Share. The applicant's cost share requirement will be based on the total cost of the project, including the applicant's and the FFRDC contractor's portions of the effort.

Responsibility. The applicant, if successful, will be the responsible authority regarding the settlement and satisfaction of all contractual and administrative issues, including but not limited to, disputes and claims arising out of any agreement between the applicant and the FFRDC contractor.

SECTION IV - APPLICATION AND SUBMISSION INFORMATION

A. ADDRESS TO REQUEST APPLICATION PACKAGE

Application forms and/or instructions can be found on the EERE eXCHANGE website at <http://eere.energy.gov/financing/exchange>.

B. LETTER OF INTENT AND PRE-APPLICATION

Letter of Intent

Letters of Intent Not Required.

Pre-application

Pre-applications Not Required.

C. CONTENT AND APPLICATION FORMS

Applicants must complete the required application documents and any applicable optional documents in accordance with the instructions provided on the application documents and the additional instructions provided below, as required by this FOA. Templates for many of the application documents required for this specific FOA are provided with this announcement at the EERE eXCHANGE website at <http://eere.energy.gov/financing/exchange>.

A control number will be issued when an Applicant begins the application submission process. This control number will automatically be included in file names upon upload into eXCHANGE.

1. SF 424 Application for Federal Assistance (Mandatory)

A template SF 424 Application for Federal Assistance is found with this announcement at <http://eere.energy.gov/financing/exchange>. Complete all required fields in accordance with the instructions on the form. The list of certifications and assurances referenced in Field 21 of the form can be found at <http://energy.gov/management/office-management/operational-management/financial-assistance/financial-assistance-forms>.

Note: The dates and dollar amounts on the SF 424 are for the complete project period and not just the first year, first Budget Period, or other subset of the project period. **Save the information in a single file named "SF424 .doc."**

2. Public Abstract (Mandatory)

The Public Abstract must contain a summary of the proposed activity suitable for

dissemination to the public. It should be a self-contained document that identifies the name of the applicant, the project director/principal investigator(s), the project title, the objectives of the project, a description of the project, including methods to be employed, the potential impact of the project (i.e., benefits, outcomes), and major participants (for collaborative projects). This document must not include any proprietary or sensitive business information as the Department may make it available to the public after award. The Abstract **must not exceed 1 page, single-spaced**, when printed using standard 8.5” by 11” paper with 1” margins (top, bottom, left, and right) with font not smaller than 11 point. **Save the information in a single file named “Summary-Abstract.pdf.”**

3. Project Narrative File (Mandatory)

The project narrative must not exceed 30 pages, including cover page, table of contents, charts, graphs, maps, photographs, tables, and other pictorial presentations, when printed using standard 8.5" by 11" paper with 1 inch margins (top, bottom, left, and right) single spaced with font not smaller than 11 point. **EVALUATORS WILL ONLY REVIEW THE NUMBER OF PAGES SPECIFIED IN THE PRECEDING SENTENCE.** Do not include any Internet addresses (URLs) that provide information necessary to review the application, because the information contained in these sites will not be reviewed. See Section VIII.D for instructions on how to mark proprietary application information. **Save the information in a single file named “ProjectNarrative.pdf.”**

The project narrative must include:

- **Cover Page (included in 30-page limit)**

The Project Narrative cover page should indicate the prime applicant’s name and type of organization, the announcement number, the project title, and both the technical and business points of contact for the applicant, denoting the names, titles, addresses, telephone numbers, and electronic mail addresses. The cover page should also include a table providing:

- Participants’ names, city, state and zip code (both prime and subrecipients),
- Total budget for each participant (both DOE share and cost share),
- Cost Share percentage for each participant, and
- Entity type for each participant (For-Profit, Non-profit, Institution of Higher Education, FFRDC).

- **Project Objectives:** This section should provide a clear, concise statement of the specific objectives/aims of the proposed project.

- **Other Technical Requirements:** This section must address each of the Other Technical Requirements listed in Section I, FUNDING OPPORTUNITY DESCRIPTION, Paragraph F.

- **Merit Review Criteria Discussion:** The section should be formatted to address each of the merit review criteria and sub-criteria listed in Section V.A. Provide sufficient information so that reviewers will be able to evaluate the application in accordance with these merit review criteria. **DOE WILL EVALUATE AND CONSIDER ONLY THOSE**

APPLICATIONS THAT ADDRESS SEPARATELY EACH OF THE MERIT REVIEW CRITERIA AND SUB-CRITERIA.

- **Relevance and Outcomes/Impacts:** This section should explain the relevance of the effort to the objectives and goals in the program announcement and the expected outcomes and/or impacts.
- **Roles Of Participants:** For multi-organizational or multi-investigator projects, describe the roles and the work to be performed by each participant/investigator, business agreements between the applicant and participants, and how the various efforts will be integrated and managed.
- **Multiple Principal Investigators (PIs):** The applicant, whether a single organization or team/partnership/consortium, must indicate if the project will include multiple PIs. This decision is solely the responsibility of the applicant. If multiple PIs will be designated, the application must identify the Contact PI/Project Coordinator and provide a "Coordination and Management Plan" that describes the organization structure of the project as it pertains to the designation of multiple PIs. This plan should, at a minimum, include:
 - process for making decisions on scientific/technical direction;
 - publications;
 - intellectual property issues;
 - communication plans;
 - procedures for resolving conflicts; and
 - PIs' roles and administrative, technical, and scientific responsibilities for the project.
- **Facilities And Other Resources:** Identify the facilities (e.g., office, laboratory, computer, cargo transport facilities, etc.) to be used at each performance site listed and, if appropriate, indicate their capacities, pertinent capabilities, relative proximity, and extent of availability to the project. Describe only those resources that are directly applicable to the proposed work. Provide any information describing the other resources available to the project such as machine and electronics shops.
- **Equipment:** List important items of equipment already available for this project and, if appropriate, note the location and pertinent capabilities of each. If you are proposing to acquire equipment, describe that equipment and its proposed use. Describe comparable equipment, if any, already at your organization and explain why it cannot be used.
- **Bibliography and References:** Provide a bibliography for any references cited in the Project Narrative section. This section must include only bibliographic citations.
- **Statement of Project Objectives (SOPO):** The project narrative must contain a single, detailed Statement of Project Objectives that addresses how the project objectives will be met. The Statement of Project Objectives must contain a clear, concise description of all activities to be completed during project performance and follow the

structure discussed below. The Statement of Project Objectives may be released to the public by DOE in whole or in part after award. It is therefore required that it shall not contain proprietary or confidential business information.

The Statement of Project Objectives is generally less than ten (10) pages in total for the proposed work. The Statement of Project Objectives is **not** inclusive to the maximum thirty (30) page requirement of the Project Narrative but remains an incorporated section of the Project Narrative.

Applicants shall prepare the Statement of Project Objectives in the following format:

TITLE OF WORK TO BE PERFORMED (Insert the title of work to be performed. Be concise and descriptive.)

A. OBJECTIVES

Include one paragraph on the overall objective(s) of the work. Also, include objective(s) for each phase of the work.

B. SCOPE OF WORK

This section should not exceed one-half page and should summarize the effort and approach to achieve the objective(s) of the work for each Phase.

C. TASKS TO BE PERFORMED

Tasks, concisely written, should be provided in a logical sequence and should be divided into the phases of the project, as appropriate. This section provides a brief summary of the planned approach to this project. An outline of the Project Management Plan (referenced in Task 1.0 below and required to be submitted with your application) is provided later in this Section.

PHASE I

Task 1.0 - Project Management and Planning

(Description includes work elements required to revise and maintain the Project Management Plan and to manage and report on activities in accordance with the plan)

Subtask 1.1

(Description)

Task 2.0 - (Title)

PHASE II (Optional)

Task 3.0 - (Title)

D. DELIVERABLES

The periodic, topical, and final reports shall be submitted in accordance with the attached "Federal Assistance Reporting Checklist" and the instructions accompanying the

checklist.

[Note: The Recipient shall provide a list of deliverables other than those identified on the "Federal Assistance Reporting Checklist" that will be delivered. These deliverables shall also be identified within the text of the Statement of Project Objectives. See the following examples:

1. Task 1.1 - (Report Description)
2. Task 2.2 - (Report Description)

D. BRIEFINGS/TECHNICAL PRESENTATIONS

The Recipient shall prepare detailed briefings for presentation to the Project Officer at the Project Officer's facility located in Pittsburgh, PA or Morgantown, WV; or other location specified by the DOE Project Officer. Briefings shall be given by the Recipient to explain the plans, progress, and results of the technical effort. The first briefing shall be presented within 30 days after the grant award. Additional briefings shall be presented at least 30 days before completion of each Budget Period. The final briefing shall be presented at least 30 days prior to the date the award is due to expire.

Not more than annually, the Recipient shall provide and present a technical paper(s) at the DOE Peer Review Meeting to be held at DOE Headquarters in Washington D.C.; or other location specified by the DOE Project Officer.

(END OF STATEMENT OF PROJECT OBJECTIVES)

4. Project Management Plan (Mandatory)

This plan should be formatted to include the following sections, with each section to include the information as described below:

A. Executive Summary: Provide a description of the project that includes the objective, project goals, and expected results. For purposes of the application, this information is included in the Project Narrative and should be simply copied to this document for completeness, so that the Project Management Plan is a stand-alone document.

B. Key Partnerships or Teaming Arrangements: Provide a list of key team members in the project as well as the role of each team member. A hierarchical project organization and structure chart should be provided along with a description of the role and responsibilities of each team member in terms of contribution to project scope. The section should also include key team members who fulfill single or multiple roles within a project as well as the contact information for each.

C. Risk Management: Provide a summary description of the proposed approach to identify, analyze, and respond to perceived risks associated with the proposed project. Project risk events are uncertain future events that, if realized, impact the success of the project. As a minimum, include the initial identification of significant technical, resource, and management issues that have the potential to impede project progress and

strategies to minimize impacts from those issues.

D. Detailed Task Description: Provide more detail than described in the SOPO.

E. Milestone Log: Provide milestones for each budget period (or phase) of the project. Each milestone should include a title and planned completion date. Milestones should be quantitative and show progress toward budget period and/or project goals.

[Note: During project performance, the Recipient will report the Milestone Status as part of the required quarterly Progress Report as prescribed under Attachment 4, Reporting Requirements Checklist. The Milestone Status will present actual performance in comparison with Milestone Log, and include:

- (1) the actual status and progress of the project,
- (2) specific progress made toward achieving the project's milestones, and,
- (3) any proposed changes in the project's schedule required to complete milestones.]

F. Funding and Costing Profile: Provide a table (the Project Funding Profile) that shows, by budget period, the amount of government funding and Recipient cost share funding allocated to each project team member. Also provide a table (the Project Costing Profile) that projects, by month, the expenditure of government funds for the first budget period, at a minimum.

G. Project Timeline: Provide a timeline of the project (similar to a Gantt chart) broken down by each task and subtask, as described in the Statement of Project Objectives. The timeline should include for each task, a start date, and end date. The timeline should show interdependencies between tasks and include the milestones that are identified in the Milestone Log (Section E).

H. Success Criteria at Decision Points: Provide success criteria for each decision point in the project, including go/no-go decision points and the conclusions of budget periods and the entire project. The success criteria should be objective and stated in terms of specific, measurable, and repeatable data. Usually, the success criteria pertain to desirable outcomes, results, and observations from the project.

I. Test Strategy and Data Collection Plan (appendix to Project Management Plan).

[Note: As the first task in the Statement of Project Objectives, successful applicants will revise the version of the Project Management Plan that is submitted with their applications by including details from the negotiation process. This Project Management Plan will be updated by the Recipient as the project progresses, and the Recipient must use this plan to report schedule and budget variances.]

(END OF PROJECT MANAGEMENT PLAN)

Save this plan in a single file named "PMP.pdf."

5. Commitment Letters from Third Parties Contributing to Cost Sharing (If Applicable)

If a third party, (i.e., a party other than the organization submitting the application) proposes to provide all or part of the required cost sharing, the applicant must include a letter from the third party stating that it is committed to providing a specific minimum dollar amount of cost sharing. The letter should also identify the proposed cost sharing (e.g., cash, services, and/or property) to be contributed. Letters must be signed by the person authorized to commit the expenditure of funds by the entity and be provided in a PDF format. **Save this information in a single file named "CL.pdf."**

6. Environmental Questionnaire (Mandatory)

You must complete the environmental questionnaire found with this announcement at <http://eere.energy.gov/financing/exchange>. **Save the questionnaire in a single file named "EQ.pdf."**

7. Limited Rights Data (If Applicable)

You must complete and submit a Representation of Limited Rights Data and Restricted Software that can be found with this announcement at <http://eere.energy.gov/financing/exchange>. **Save the Representations and Certifications in a single file named "Reps&Certs.pdf."**

8. Applicant Budget SF 424A (Mandatory)

Applicants must provide a separate budget (SF 424A) for each year of support requested and a cumulative budget for the total project period. Applicants shall use the SF 424A "Budget Information Non-Construction Programs" form provided with this Announcement at <http://eere.energy.gov/financing/exchange>. Applicants may request funds under any of the Object Class Categories as long as the item and amount are necessary to perform the proposed work, meet all the criteria for allowability under the applicable Federal cost principles, and are not prohibited by the funding restrictions in this announcement. **Save this information in a single file named "Budget.pdf."**

9. Applicant Budget Justification (Mandatory)

Applicants must justify the costs proposed in each Object Class Category by providing a basis of cost. Applicants shall use the PMC 123.1 Detailed Budget Justification form found with this announcement at <http://eere.energy.gov/financing/exchange>. **Save this information in a single file named "Budget Justification.xls."**

10. Subrecipient Budget SF 424A (Mandatory)

Applicants must also provide a separate budget (i.e., budget for each year and a cumulative budget) for each subrecipient that is expected to perform work estimated to be more than \$100,000 or 50% of the total work effort (whichever is less). Applicants shall use the SF 424A "Budget Information Non-Construction Programs" form provided with this Announcement at <http://eere.energy.gov/financing/exchange>. If an FFRDC or other DOE/NNSA National Laboratory is being proposed as a subrecipient, an SF-424A is also required for their effort (See Section III.C for role of FFRDC/National Laboratories). Applicants may request funds under any of the Object Class Categories as long as the item and amount are necessary to perform the proposed work, meet all the criteria for allowability under the applicable Federal cost principles, and are not prohibited by the funding restrictions in this announcement. **Save this information in a single file named "SubBudget.pdf."**

11. Subrecipient Budget Justification (Mandatory)

Applicants must also provide a separate budget justification (i.e., budget for each year and a cumulative budget) for each subrecipient that is expected to perform work estimated to be more than \$100,000 or 50% of the total work effort (whichever is less). Applicants shall use the PMC 123.1 Detailed Budget Justification form found with this announcement at <http://eere.energy.gov/financing/exchange>. **Save this information in a single file named "SubBudget Justification.xls."**

12. DISCLOSURE OF LOBBYING ACTIVITIES (SF-LLL) (If Applicable)

Applicants shall complete SF- LLL form found with this announcement at <http://eere.energy.gov/financing/exchange>. Applicability: If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the grant/cooperative agreement, you must complete and submit Standard Form - LLL, "Disclosure Form to Report Lobbying."**Save this information in a single file named "SF-LLL.pdf"**

Summary of Required Forms/Files

	Name of Document	Document Summary	Document Naming Convention
1	SF 424 Application	Application for Federal Assistance	SF424.doc
2	Public Abstract	Public Abstract – Summary of the proposed activity (must be suitable for public release)	Summary-Abstract.pdf
3	Project Narrative, including required appendices	Technical Discussion	ProjectNarrative.pdf
4	Project Management Plan	Definition of Project	PMP.pdf
5	Commitment Letters from Third Parties	Confirmation of Work	CL.pdf
6	Environmental Questionnaire	NEPA	EQ.pdf
7	Limited Rights Data	Pre-Award Proposed Representation of Limited Rights Data and Restricted Software	Reps&Certs.pdf
8	Applicant Budget SF424A	Prime Applicant Yearly and Cumulative Budget	Budget.pdf
9	Applicant Budget Justification PMC 123.1	Prime Applicant Detailed Budget Breakout	BudgetJustification.xls
10	Sub-Recipient Budget SF424A	Sub-Recipient Yearly and Cumulative Budget	SubBudget.pdf
11	Sub-Recipient Budget Justification PMC 123.1	Sub-Recipient Detailed Budget Breakout	SubBudgetJustification.xls
12	Disclosure of Lobbying Activities SF-LLL	SF-LLL Disclosure of Lobbying Activities	SF-LLL.pdf

D. SUBMISSIONS FROM SUCCESSFUL APPLICANTS

If selected for award, DOE reserves the right to request additional or clarifying information for any reason deemed necessary, including, but not limited to:

- Indirect cost information
- Other budget information
- Updated Representation of Limited Rights Data and Restricted Software, if applicable

E. SUBMISSION DATES AND TIMES

Pre-application and Letter of Intent Due Date

Pre-applications and Letters of Intent Are Not Required

Application Due Date

Applications must be received by May 15, 2012, not later than 8:00 PM Eastern Time. You are strongly encouraged to transmit your application well before the deadline. APPLICATIONS RECEIVED AFTER THE DEADLINE WILL NOT BE REVIEWED OR CONSIDERED FOR AWARD.

F. INTERGOVERNMENTAL REVIEW

This program is not subject to Executive Order 12372 - Intergovernmental Review of Federal Programs.

G. FUNDING RESTRICTIONS

Cost Principles. Costs must be allowable, allocable and reasonable in accordance with the applicable Federal cost principles referenced in 10 CFR 600. The cost principles for commercial organization are in FAR Part 31.

Pre-award Costs. Certain recipients may charge to an award resulting from this announcement pre-award costs that were incurred within the ninety (90) calendar day period immediately preceding the effective date of the award, if the costs are allowable in accordance with the applicable Federal cost principles referenced in 10 CFR 600. Recipients must obtain the prior approval of the contracting officer for any pre-award costs that are for periods greater than this 90 day calendar period.

If Recipients are State or Local Governments, they may not incur pre-award costs prior to award, without prior approval of the DOE Contracting Officer.

Pre-award costs are incurred at the applicant's risk. DOE is under no obligation to reimburse such costs if for any reason the applicant does not receive an award or if the award is made for a lesser amount than the applicant expected.

Funding for all awards and future budget periods are contingent upon the availability of funds appropriated by Congress for the purpose of this program and the availability of future-year budget authority.

H. OTHER SUBMISSION AND REGISTRATION REQUIREMENTS

Where to Submit

APPLICATIONS MUST BE SUBMITTED THROUGH THE EERE eXCHANGE SYSTEM (<http://eere.energy.gov/financing/exchange>) TO BE CONSIDERED FOR AWARD UNDER THIS ANNOUNCEMENT. Applications submitted by any other means will not be accepted. You cannot submit an application unless you are registered.

Registration Process

There are several one-time actions the Applicant should complete. The Applicant should:

- Register through the EERE eXCHANGE at <http://eere.energy.gov/financing/exchange>
- Obtain a Dun and Bradstreet Data Universal Numbering System (DUNS) number at <http://fedgov.dnb.com/webform>
- Register with the Central Contractor Registry (CCR) at <https://www.bpn.gov/ccr/default.aspx>.
- Register in FedConnect at <https://www.fedconnect.net/>; use “Register as a Vendor” link. To create an organization account, your organization’s CCR MPIN is required; obtain the MPIN from your organization’s Electronic Business Point of Contact. Refer to the FedConnect Quick Start guide at the website.

Besides the eXCHANGE registration system, which does not have a delay, these registration requirements could take several weeks to process and are necessary in order for a potential Applicant to receive an award under this announcement. Therefore, although not required in order to submit an Application, all potential Applicants lacking a DUNS number or not yet registered with CCR should complete them as soon as possible.

EERE Web-Based Submission Information

All application submissions are to be made via the EERE eXCHANGE system at <http://eere.energy.gov/financing/exchange>. To gain access to the EERE eXCHANGE system, the applicant must first register and create an account on the main EERE eXCHANGE site. This account will then allow the user to register for FOAs. It is recommended that each organization or business unit, whether acting as a team or a single entity, utilize one account as the appropriate contact information for each submission.

The Applicant will receive an automated response when the application is received; this will serve as a confirmation of EERE receipt. Please do not reply to the automated response. The Applicant will have the opportunity to re-submit an application for any reason as long as the relevant submission is submitted before the specified due date and time. A “User Guide” for the EERE eXCHANGE can be found at <http://eere.energy.gov/financing/exchange/Manuals.aspx> after logging in to the system.

Electronic Authorization of Applications and Award Documents

Submission of an application and supplemental information under this announcement through electronic systems used by the Department of Energy, including EERE eXCHANGE and FedConnect, constitutes the authorized representative’s approval and electronic signature.

Submission of award documents, including modifications, through electronic systems used by the Department of Energy, including FedConnect, constitutes the authorized representative’s approval and acceptance of the terms and conditions of the award. Award acknowledgement via FedConnect constitutes the authorized representative’s electronic signature.

SECTION V - APPLICATION REVIEW INFORMATION

A. CRITERIA

Initial Review Criteria

Prior to a comprehensive merit evaluation, DOE will perform an initial review to determine that (1) the applicant is eligible for an award; (2) the information required by the funding opportunity announcement has been submitted; and (3) the proposed project is responsive to the objectives of the funding opportunity announcement. Applications that fail to pass the initial review will not be forwarded for merit review and will be eliminated from further consideration.

Merit Review Criteria

All applications that pass the initial review process will be evaluated and scored in accordance with the criteria and weights listed below. No single sub-criterion below is given any specific weight.

Evaluation criteria and weights are:

- 1) Technical Approach and Project Management (40%);
 - a. Responsiveness and relevance to the programmatic goals and requirements identified in this announcement, including rationale for the system, vehicle and/or infrastructure design
 - b. Adequacy and thoroughness of the approach to the proposed work to successfully meet the project objectives, including plans to comprehensively address key problems
 - c. Degree and source of the identified risk in demonstrating the proposed technology, including definition of potential technology deficiencies along with proposed solutions to mitigate the risk
 - d. The thoroughness of the testing, operation, and maintenance plans for the vehicles, including the plan to meet all relevant emission regulations and comply with applicable safety standards
 - e. Adequacy, reasonableness and soundness of the proposed project management approach, including the definition of roles and responsibilities, the identification of go/no-go decisions and associated success criteria, and identification of the project schedule including interim milestones
- 2) Potential Benefits (35%)
 - a. Potential reduction of petroleum use in the demonstration area
 - b. Potential reduction of greenhouse gas emissions in the demonstration area
 - c. Potential reduction of criteria pollutant and toxic emissions in the

- demonstration area
 - d. Potential for positive market viability of the ZECT system based on estimated life cycle capital and operating costs.
 - e. Potential for the results of the project to increase adoption of the demonstrated technologies (e.g., through outreach, manufacturing, commercialization, marketing, or other efforts)
 - f. Extent U.S. manufacturers and suppliers are favored in the manufacturing and commercialization plans described in the application
- 3) Applicant and Team Member Roles, Capabilities, and Facilities (25%)
- a. Qualifications and capabilities of key personnel
 - b. Team member capabilities relative to execution of the proposed scope
 - c. Extent of involvement of an electric transportation technology (per EISA Section 131) manufacturer or major supplier in the execution of the proposed work
 - d. Availability and adequacy of equipment, facilities, and other support necessary for the successful performance of the proposed work

Other Selection Factors

The selection official will consider the following program policy factors in the selection process:

1. Optimization of Funds - It may be desirable to select projects for award of less technical merit than other projects, if such a selection will optimize use of available funds by allowing more projects to be supported while not being detrimental to the overall objectives of the program. This may include, but is not limited to, the percentage of non-federal cost share contributed to the project.
2. Geographic Diversity - It may be desirable to select projects for award of less technical merit than other projects, if such a selection will represent a diversity of geographic locations, without being detrimental to the overall objectives of the program.
3. Diversity of Technologies - It may be desirable to select projects for award of less technical merit than other projects, if such a selection will represent a diversity of technology concepts and applications, as well as technical approaches, without being detrimental to the overall objectives of the program.

B. REVIEW AND SELECTION PROCESS

Applications Subject to Merit Review

Applications that pass the initial review will be subjected to a merit review in accordance with the guidance provided in the "Department of Energy Merit Review Guide for Financial Assistance." This guide is available at <http://energy.gov/management/office-management/operational-management/financial-assistance> under Financial Assistance Policy and Guidance.

Selection Official Consideration

The Selection Official will consider the merit review recommendation, program policy factors, and the amount of funds available.

Discussions and Award

The Government may enter into discussions with a selected applicant for any reason deemed necessary, including but not limited to: (1) the budget is not appropriate or reasonable for the requirement; (2) only a portion of the application is selected for award; (3) the Government needs additional information to determine that the recipient is capable of complying with the requirements in 10 CFR 600; and/or (4) special terms and conditions are required. Failure to resolve satisfactorily the issues identified by the Government will preclude award to the applicant.

C. ANTICIPATED NOTICE OF SELECTION AND AWARD DATES

DOE anticipates notifying applicants selected for award by August 2012 and making at least one award by no later than September 30, 2012.

SECTION VI - AWARD ADMINISTRATION INFORMATION

A. AWARD NOTICES

Selected Applicants Notification

DOE will notify applicants selected for award. This notice of selection is not an authorization to begin performance. (See Section IV.G with respect to the potential allowability of pre-award costs.)

Non-selected Notification

Organizations whose applications have not been selected will be advised as promptly as possible. This notice will explain why the application was not selected.

Notice of Award

An Assistance Agreement issued by the contracting officer is the authorizing award document. It normally includes either as an attachment or by reference: (1) Special Terms and Conditions; (2) Applicable program regulations, if any; (3) Application as approved by DOE; (4) DOE assistance regulations at 10 CFR part 600, or, for Federal Demonstration Partnership (FDP) institutions, the FDP terms and conditions; (5) National Policy Assurances To Be Incorporated As Award Terms; (6) Budget Summary; and (7) Federal Assistance Reporting Checklist, which identifies the reporting requirements.

For grants and cooperative agreements made to universities, non-profits and other entities subject to Title 2 CFR the Award also includes the Research Terms and Conditions located at <http://www.nsf.gov/bfa/dias/policy/rct/index.jsp>

B. ADMINISTRATIVE AND NATIONAL POLICY REQUIREMENTS

Administrative Requirements

The administrative requirements for DOE grants and cooperative agreements are contained in 10 CFR 600 (See: <http://ecfr.gpoaccess.gov>). Grants and cooperative agreements made to universities, non-profits and other entities subject to Title 2 CFR are subject to the Research Terms and Conditions located on the National Science Foundation web site at <http://www.nsf.gov/bfa/dias/policy/rct/index.jsp>.

DUNS and CCR Requirements

Additional administrative requirements for DOE grants and cooperative agreements are contained in 2 CFR, Part 25 (See: <http://ecfr.gpoaccess.gov>). Prime awardees must keep their data at CCR current. Subawardees at all tiers must obtain DUNS numbers and

provide the DUNS to the prime awardee before the subaward can be issued.

Subaward and Executive Reporting

Additional administrative requirements necessary for DOE grants and cooperative agreements to comply with the Federal Funding and Transparency Act of 2006 (FFATA) are contained in 2 CFR, Part 170. (See: <http://ecfr.gpoaccess.gov>). Prime awardees must register with the new FSRS database and report the required data on their first tier subawardees. Prime awardees must report the executive compensation for their own executives as part of their registration profile in the CCR.

Special Terms and Conditions and National Policy Requirements

The DOE Special Terms and Conditions for Use in Most Grants and Cooperative Agreements are located at:

http://energy.gov/sites/prod/files/maprod/documents/SPECIAL_TERMS_AND_CONDITIONS_FOR_USE_IN_MOST_GRANTS_AND_COOPERATIVE_AGREEMENTS.pdf

The National Policy Assurances to be Incorporated as Award Terms are located at:

<http://energy.gov/management/office-management/operational-management/financial-assistance/financial-assistance-forms>.

By submitting an application in response to this FOA the Applicant certifies that:

- (1) It is not a corporation that has been convicted (or had an officer or agent of such corporation acting on behalf of the corporation convicted) of a felony criminal violation under any Federal law within the preceding 24 months,
- (2) It is not a corporation that has any unpaid Federal tax liability that has been assessed, for which all judicial and administrative remedies have been exhausted or have lapsed, and that is not being paid in a timely manner pursuant to an agreement with the authority responsible for collecting the tax liability,
- (3) If the Applicant's financial assistance application is chosen for award and the award is in excess of \$1,000,000, the applicant will, by the end of the fiscal year, upgrade the efficiency of their facilities by replacing any lighting that does not meet or exceed the energy efficiency standard for incandescent light bulbs set forth in Section 325 of the Energy Policy and Conservation Act (42 U.S.C. 6295).

Applicant Lighting Efficiency Certification (April 2012)

In submitting an application in response to this FOA the Applicant certifies that if chosen for a grant award and the award is in excess of \$1,000,000 it will, by the end of the Federal Government's fiscal year, upgrade the efficiency of its facilities by replacing any incandescent lighting of the type for which section 325 of the Energy Policy and Conservation Act (42 USC 6295) establishes a standard that does not meet or exceed the energy efficiency standard for incandescent light bulbs set forth in that section with a

lamp that meets or exceeds the standards for lamps established in or pursuant to that section.

Incandescent reflector lamps shall meet or exceed the lamp efficacy standards shown in the table:

Rated lamp wattage	Lamp spectrum	Lamp diameter (inches)	Rated voltage	Minimum average lamp efficacy (lm/W)
40–205	Standard Spectrum	>2.5	≥125V	$6.8 * P^{0.27}$
			<125V	$5.9 * P^{0.27}$
		≤2.5	≥125V	$5.7 * P^{0.27}$
			<125V	$5.0 * P^{0.27}$
40–205	Modified Spectrum	>2.5	≤125V	$5.8 * P^{0.27}$
			<125V	$5.0 * P^{0.27}$
		≤2.5	≥125V	$4.9 * P^{0.27}$
			<125V	$4.2 * P^{0.27}$

Note 1: P is equal to the rated lamp wattage, in watts.

Note 2: Standard Spectrum means any incandescent reflector lamp that does not meet the definition of modified spectrum in 10 CFR 430.2.

Subject to the exemption below, the standards specified in this section shall apply to ER incandescent reflector lamps, BR incandescent reflector lamps, BPAR incandescent reflector lamps, and similar bulb shapes.

Subject to the exemption below, the standards specified in this section shall apply to incandescent reflector lamps with a diameter of more than 2.25 inches, but not more than 2.75 inches.

Exemption: The standards specified in this section shall not apply to the following types of incandescent reflector lamps:

- (A) Lamps rated at 50 watts or less that are ER30, BR30, BR40, or ER40 lamps;
- (B) Lamps rated at 65 watts that are BR30, BR40, or ER40 lamps; or
- (C) R20 incandescent reflector lamps rated 45 watts or less.

For purposes of this Certification, the following definitions apply:

(A) Facilities mean the room(s), area(s), or building(s) that are used to complete a majority of the work under the project.

(B) In excess of \$1,000,000 means the total value of the grant including all budget periods funded with Federal funds and recipient cost share is greater than \$1,000,000.

(C) Federal Government’s fiscal year begins October 1st and ends September 30th.

(D) Except as provided in subparagraph (4) below, the term “incandescent lamp” means a lamp in which light is produced by a filament heated to incandescence by an electric current, including only the following:

(1) Any lamp (commonly referred to as lower wattage nonreflector general service lamps, including any tungsten-halogen lamp) that has a rated wattage between 30 and 199 watts, has an E26 medium screw base, has a rated voltage or voltage range that lies at least partially within 115 and 130 volts, and is not a reflector lamp.

(2) Any lamp (commonly referred to as a reflector lamp) which is not colored or designed for rough or vibration service applications, that contains an inner reflective coating on the outer bulb to direct the light, an R, PAR, ER, BR, BPAR, or similar bulb shapes with E26 medium screw bases, a rated voltage or voltage range that lies at least partially within 115 and 130 volts, a diameter which exceeds 2.25 inches, and has a rated wattage that is 40 watts or higher.

(3) Any general service incandescent lamp (commonly referred to as a high- or higher-wattage lamp) that has a rated wattage above 199 watts (above 205 watts for a high wattage reflector lamp).

(4) The term “incandescent lamp” does not include any lamp excluded by the Secretary, by rule, as a result of a determination that standards for such lamp would not result in significant energy savings because such lamp is designed for special applications or has special characteristics not available in reasonably substitutable lamp types.

(E) The term “base” means the portion of the lamp which connects with the socket as described in ANSI C81.61–1990.

(F) The term “bulb shape” means the shape of lamp, especially the glass bulb with designations for bulb shapes found in ANSI C79.1–1980 (R1984).

(G) The term “lamp efficacy” means the lumen output of a lamp divided by its wattage, expressed in lumens per watt (LPW).

(H) The term “lamp wattage” means the total electrical power consumed by a lamp in watts, after the initial seasoning period referenced in the appropriate IES standard test procedure and including, for fluorescent, arc watts plus cathode.

C. REPORTING

Reporting requirements are identified on the Federal Assistance Reporting Checklist, DOE F 4600.2, attached to the award agreement. The checklist is available at: <http://energy.gov/management/office-management/operational-management/financial-assistance/financial-assistance-forms> under Award Forms.

SECTION VII - QUESTIONS/AGENCY CONTACTS

A. QUESTIONS

Questions related to use of the EERE eXCHANGE website should be submitted to:
EERE-ExchangeSupport@hq.doe.gov

Questions related to the Funding Opportunity Announcement must be submitted to DE-FOA-0000669-ZECT@NETL.DOE.GOV and shall be submitted not later than 3 calendar days prior to the final application due date. Questions submitted after that date may not allow the Government sufficient time to respond.

All questions and answers related to this FOA will be posted at <http://eere.energy.gov/financing/exchange>. DOE will try to respond to a question within 3 business days, unless a similar question and answer have already been posted on the website.

B. AGENCY CONTACT

John Hatfield, Contract Specialist
Email: DE-FOA-0000669-ZECT@netl.doe.gov
Telephone: 304-285-5235
Fax: 304-285-4683

SECTION VIII - OTHER INFORMATION

A. MODIFICATIONS

Notices of any modifications to this announcement will be posted on the EERE eXCHANGE web site. When you create an application record you are then registered to receive notifications of changes. This notice will be delivered by e-mail to the address listed in your application record.

B. GOVERNMENT RIGHT TO REJECT OR NEGOTIATE

DOE reserves the right, without qualification, to reject any or all applications received in response to this announcement and to select any application, in whole or in part for negotiation and/or award. DOE reserves the right, without qualification, not to make an award to a selected applicant.

C. COMMITMENT OF PUBLIC FUNDS

The Contracting Officer is the only individual who can make awards or commit the Government to the expenditure of public funds. A commitment by other than the Contracting Officer, either explicit or implied, is invalid.

D. PROPRIETARY APPLICATION INFORMATION

Patentable ideas, trade secrets, proprietary or confidential commercial or financial information, disclosure of which may harm the applicant, should be included in an application only when such information is necessary to convey an understanding of the proposed project. The use and disclosure of such data may be restricted, provided the applicant includes the following legend on the first page of the project narrative and specifies the pages of the application which are to be restricted:

"The data contained in pages [_____] of this application have been submitted in confidence and contain trade secrets or proprietary information, and such data shall be used or disclosed only for evaluation purposes, provided that if this applicant receives an award as a result of or in connection with the submission of this application, DOE shall have the right to use or disclose the data herein to the extent provided in the award. This restriction does not limit the government's right to use or disclose data obtained without restriction from any source, including the applicant."

To protect such data, each line or paragraph on the pages containing such data must be specifically identified and marked with a legend similar to the following:

"The following contains proprietary information that (name of applicant) requests not be

released to persons outside the Government, except for purposes of review and evaluation."

E. EVALUATION AND ADMINISTRATION BY NON-FEDERAL PERSONNEL

In conducting the merit review evaluation, the Government may seek the advice of qualified non-Federal personnel as reviewers. The Government may also use non-Federal personnel to conduct routine, nondiscretionary administrative activities. The applicant, by submitting its application, consents to the use of non-Federal reviewers/administrators. Non-Federal reviewers must sign conflict of interest and non-disclosure agreements prior to reviewing an application. Non-Federal personnel conducting administrative activities must sign a non-disclosure agreement.

F. INTELLECTUAL PROPERTY DEVELOPED UNDER THIS PROGRAM

Patent Rights. The government will have certain statutory rights in an invention that is conceived or first actually reduced to practice under a DOE award. 42 U.S.C. 5908 provides that title to such inventions vests in the United States, except where 35 U.S.C. 202 provides otherwise for nonprofit organizations or small business firms. However, the Secretary of Energy may waive all or any part of the rights of the United States subject to certain conditions. (See "Notice of Right to Request Patent Waiver" in paragraph G below.)

Rights in Technical Data. Normally, the government has unlimited rights in technical data created under a DOE agreement. Delivery or third party licensing of proprietary software or data developed solely at private expense will not normally be required except as specifically negotiated in a particular agreement to satisfy DOE's own needs or to insure the commercialization of technology developed under a DOE agreement.

Program Covered Under Special Protected Data

Special Protected Data Statutes. This program is covered by a special protected data statute. The provisions of the statute provide for the protection from public disclosure, for a period of up to five (5) years from the development of the information, of data that would be trade secret, or commercial or financial information that is privileged or confidential, if the information had been obtained from a non-Federal party. Generally, the provision entitled, Rights in Data Programs Covered Under Special Protected Data Statutes (10 CFR 600 Appendix A to Subpart D), would apply to an award made under this announcement. This provision will identify data or categories of data first produced in the performance of the award that will be made available to the public, notwithstanding the statutory authority to withhold data from public dissemination, and will also identify data that will be recognized by the parties as protected data.

Under this FOA, DOE will offer data protection for up to three (3) years for information

developed under the Development Phase (see Section I, Funding Opportunity Description for discussion of Project Phases), if a Development Phase is included in the application.

G. NOTICE OF RIGHT TO REQUEST PATENT WAIVER

Applicants may request a waiver of all or any part of the rights of the United States in inventions conceived or first actually reduced to practice in performance of an agreement as a result of this announcement, in advance of or within 30 days after the effective date of the award. Even if such advance waiver is not requested or the request is denied, the recipient will have a continuing right under the award to request a waiver of the rights of the United States in identified inventions, i.e., individual inventions conceived or first actually reduced to practice in performance of the award. Any patent waiver that may be granted is subject to certain terms and conditions in 10 CFR 784 at <http://energy.gov/gc/patents-licensing-and-patent-waivers> under the Patent Waivers.

Domestic small businesses and domestic nonprofit organizations will receive the patent rights clause at 37 CFR 401.14, i.e., the implementation of the Bayh-Dole Act. This clause permits domestic small business and domestic nonprofit organizations to retain title to subject inventions. Therefore, small businesses and nonprofit organizations do not need to request a waiver.

H. NOTICE REGARDING ELIGIBLE/INELIGIBLE ACTIVITIES

Eligible activities under this program include those which describe and promote the understanding of scientific and technical aspects of specific energy technologies, but not those which encourage or support political activities such as the collection and dissemination of information related to potential, planned or pending legislation.