

**FINANCIAL ASSISTANCE
FUNDING OPPORTUNITY ANNOUNCEMENT**



U. S. Department of Energy

**National Energy Technology Laboratory
Office of Energy Efficiency and Renewable Energy**

**Electrochemical Storage Technologies Suitable for Automobile
Industry Applications**

Funding Opportunity Number: DE-FOA-0000722

Announcement Type: Initial

CFDA Number: 81.086 Conservation Research and Development

Issue Date:	November 30, 2012
Letter of Intent Due Date:	Not Applicable
Pre-Application Due Date:	Not Applicable
Application Due Date:	01/31/2013 at 8:00:00 PM Eastern Time

NOTE: Applications must be submitted through the Energy Efficiency and Renewable Energy (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>.

NOTE: REGISTRATION/SUBMISSION REQUIREMENTS

Registration Requirements

There are several one-time actions you 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 the System for Award management (SAM), and register with Grants.gov). Applicants who are not registered with SAM and Grants.gov, should allow at least 44 days to complete these requirements. It is suggested that the process be started as soon as possible.

Applicants must register with the SAM. SAM website: <http://www.sam.gov/>. If you had an active registration in CCR, you should have an active registration in SAM. More information about SAM registration for applicants is found at:

[https://www.sam.gov/sam/transcript/Quick Guide for Grants Registrations v1.7.pdf](https://www.sam.gov/sam/transcript/Quick%20Guide%20for%20Grants%20Registrations%20v1.7.pdf).

Applicants must register with Grants.gov. There are 3 steps to this process.

1) The Authorized Organizational Representative (AOR) must register at:

<https://apply07.grants.gov/apply/OrcRegister>

2) An email is sent to the E-Business (E-Biz) POC listed in SAM. The E-Biz POC must approve the AOR registration using their MPIN from their SAM registration.

3) AOR verifies that registration was completed at:

http://grants.gov/applicants/applicant_profile.jsp.

More information about the above steps is provided at:

http://www.grants.gov/applicants/organization_registration.jsp.

Applicants must register with FedConnect. FedConnect website: www.fedconnect.net

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 submit applications for open EERE Funding Opportunity Announcements (FOAs) 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. 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 an FOA in eXCHANGE, such as amendments to the announcement or the posting of new questions and answers from eXCHANGE you must initiate an application submission to the FOA of interest. Please note that you must finalize your application before the specified due date and time to be considered for award. After uploading documentation into the system, please be sure to click “Submit” for a successful submission to the eXCHANGE website. After this has been completed, an acknowledgment message will display on the screen, as well as by an automatically generated email notification containing the date/time stamp of the submission to the applicant. For additional guidance on the submission process, please review the EERE eXCHANGE Applicant User Guide available on the eXCHANGE website.

Questions

Questions related to the use of the EERE eXCHANGE website or technical issues concerning the application submittal should be submitted to: EERE-ExchangeSupport@hq.doe.gov.

Questions related to the content of the Funding Opportunity Announcement must be submitted to DE-FOA-0000722@netl.doe.gov and shall be submitted not later than January 17, 2013 so that all applicants have sufficient time to review answers prior to submitting their application. Questions submitted after that date may not allow the Government sufficient time to respond.

All questions and answers related to the content of this FOA will be posted at <http://eere.energy.gov/financing/exchange>. DOE will try to respond to questions within 3 business days, unless a similar question and answer have already been posted on the website. Applicants are encouraged to review the posted questions and answers daily. **Please note that potential applicants and/or interested parties must first select this FOA Number in order to view the questions and answers specific to this FOA.**

Section I - FUNDING OPPORTUNITY DESCRIPTION	5
Section II - AWARD INFORMATION	7
A. TYPE OF AWARD INSTRUMENT	7
B. ESTIMATED FUNDING	7
C. MAXIMUM AND MINIMUM AWARD SIZE	7
D. EXPECTED NUMBER OF AWARDS	7
E. ANTICIPATED AWARD SIZE	7
F. PERIOD OF PERFORMANCE	7
Section III - ELIGIBILITY INFORMATION	8
A. ELIGIBLE APPLICANTS	8
B. COST SHARING	8
C. OTHER ELIGIBILITY REQUIREMENTS	8
Section IV - APPLICATION AND SUBMISSION INFORMATION	10
A. ADDRESS TO REQUEST APPLICATION PACKAGE	10
B. LETTER OF INTENT AND PRE-APPLICATION	10
C. CONTENT AND FORM OF APPLICATION	10
D. SUBMISSIONS FROM SUCCESSFUL APPLICANTS	15
E. SUBMISSION DATES AND TIMES	16
F. INTERGOVERNMENTAL REVIEW	16
G. FUNDING RESTRICTIONS	16
H. OTHER SUBMISSION AND REGISTRATION REQUIREMENTS	17
Section V - APPLICATION REVIEW INFORMATION	19
A. CRITERIA	19
B. REVIEW AND SELECTION PROCESS	20
C. ANTICIPATED NOTICE OF SELECTION AND AWARD DATES	20
Section VI - AWARD ADMINISTRATION INFORMATION	21
A. AWARD NOTICES	21
B. ADMINISTRATIVE AND NATIONAL POLICY REQUIREMENTS	21
C. REPORTING	22
Section VII - QUESTIONS/AGENCY CONTACTS	23
A. QUESTIONS	23
B. AGENCY CONTACT	23
Section VIII - OTHER INFORMATION	24
A. AMENDMENTS TO ANNOUNCEMENT	24
C. COMMITMENT OF PUBLIC FUNDS	24
D. PROPRIETARY APPLICATION INFORMATION	24
E. EVALUATION AND ADMINISTRATION BY NON-FEDERAL PERSONNEL	24
F. INTELLECTUAL PROPERTY DEVELOPED UNDER THIS PROGRAM	25
G. NOTICE OF RIGHT TO REQUEST PATENT WAIVER	25
H. NOTICE REGARDING ELIGIBLE/INELIGIBLE ACTIVITIES	25
APPENDIX A – DEFINITIONS	26
APPENDIX B – PERSONALLY IDENTIFIABLE INFORMATION	28
APPENDIX C – COST SHARE INFORMATION	30

Section I - FUNDING OPPORTUNITY DESCRIPTION

The Department of Energy's (DOE's) Office of Energy Efficiency and Renewable Energy (EERE), Vehicle Technologies Program (VTP) supports the President's Electric Vehicle (EV) Everywhere Grand Challenge, with the goal of enabling U.S. companies to be the first in the world to produce electric vehicles within the next ten years that are as affordable and convenient for the average American family as today's gas-powered vehicles.

Description

The DOE's VTP general goal is to develop technologies that enable cars and trucks to become highly efficient through affordable and improved drive trains, light-weighting technologies, and cleaner domestic fuels. Specific goals of the VTP Hybrid and Electric Systems Team include enabling the use of advanced electric drive technologies in vehicle systems by developing low-cost batteries, advanced power electronics and electric motor components, and the development and validation of models and simulation tools to predict the performance, fuel economy, and emissions of advanced conventional and electric-drive vehicle systems. A key goal of the Energy Storage activity is the reduction of the production cost of light duty electric drive vehicle (EDV) batteries without compromising performance and safety over the life of a vehicle. In response to this goal, the VTP has set a cost target for EDV batteries of \$300/kWh by 2014 and \$125/kWh by 2020, to enable cost-competitive market entry of plug-in electric vehicles.

The energy storage goals will be accomplished through DOE funding of research and development (R&D), ranging from focused, long-term research to more applied R&D on full cells and battery systems. Most of the longer term research will be done in universities and the national laboratories, but much of the more applied work will be done within the domestic battery industry.

In order to ensure that this R&D is relevant and responsive to the needs of the manufacturers of electric drive vehicles, VTP believes that it is important to be able to work with and through a consortium that brings together a significant fraction of the major manufacturers of electric drive vehicles in the United States (US). One of the goals of this consortium would be to engage the battery manufacturers and other key stakeholders, including universities, the National Laboratories, and manufacturers and developers that supply critical materials and components to the battery industry. The research and development carried out will be an integral part of the DOE's effort to develop advanced transportation technologies that will significantly reduce the nation's dependence on foreign oil, specifically by supporting R&D in the energy storage area for vehicles using electric drive components, including hybrid electric vehicles (HEVs), plug-in hybrid electric vehicles (PHEVs) and electric vehicles (EVs).

VTP seeks applicants to manage pre-competitive, vehicle-related R&D in advanced battery technology with substantial involvement by DOE. It is the intent of DOE that the applicants to this announcement be led by associations or consortia which include automobile manufacturers that intend to commercialize electric vehicles. Participation by other organizations including national laboratories, materials suppliers, universities, and independent research organizations is permitted but not required. The primary purpose of this consortium will be to fund and manage research to design, develop, build, and test electrochemical energy storage devices that have the potential of meeting or exceeding the Department's light duty EDV battery cost and performance targets. Funding will be supplied by DOE for both consortium management costs, and subaward R&D costs with the appropriate cost share provided by the consortium or R&D subawards for both the management and R&D costs, respectively.

The successful applicant must establish a process for the competitive solicitation and selection of energy storage technology R&D projects with appropriate subawardees, consistent with the applicable Federal procurement requirements and/or Federal financial assistance regulations. Members of the consortium may not receive funding as subawardees on projects sponsored by this agreement because of conflict of interest concerns. As a part of the competitive process, it is expected that the consortium will perform technical evaluations of proposed subawardees which include an evaluation of the subawardees accounting system, financial management, and procurement system in accordance with 10 CFR 600 to determine if the

subawardee is capable of managing costs and technical performance under a Federal award, as well as an evaluation of the technical merit of the R&D proposal.

The R&D efforts should focus on high-power batteries, high-energy batteries, and ultracapacitors for automobile applications. Each selected project will be managed by technical experts from the consortium's key stakeholders. It is anticipated that these technical experts will form work groups, focusing on specific issues, to conduct periodic reviews of selected topics and projects. In addition, the applicant will be required to define storage device requirements for the vehicle applications, as well as standard performance and abuse tests and procedures for product performance and safety evaluations.

The applicant as part of the application will deliver an annual operating plan. The plan is expected to contain detailed information for the initial year of the project, with less fidelity and general planning for the remaining years of the project period of performance in order to assure the project is agile with respect to technology advances. For subsequent year plans, the DOE Vehicle Technology Program officials will provide additional guidance information on topics and approaches so that the recipient will be prepared to provide an annual operating plan for review and approval by the DOE Project Officer.

It is anticipated that the applicant will form managerial and technical committees or the equivalent as part of their management of the R&D portfolio and projects. DOE will serve in an advisory role with regards to any management or technical committees. The DOE Project Manager will provide technical recommendations in the process of approving the recipient's annual operating plan.

A quarterly review meeting to summarize technical progress of subawards and to review managerial issues with DOE representatives will be held and the recipient will provide a meeting place for these quarterly reviews. If requested, the recipient and its subawardees will also provide written reports for inclusion in one or more of the VTP's annual reports and will provide oral or poster presentations at the VTP's Annual Merit Review.

Section II - AWARD INFORMATION

A. TYPE OF AWARD INSTRUMENT

Cooperative Agreement: DOE anticipates awarding a cooperative agreement under this announcement. DOE may award a cooperative agreement, field work authorization, or interagency agreement under this Funding Opportunity Announcement (FOA). A DOE field work authorization will be awarded to a successful DOE/NNSA Federally Funded Research and Development Center (FFRDC) contractor. Participation by non-DOE/NNSA FFRDC contractors' team will be funded under an interagency agreement. A cooperative agreement will be awarded to any other successful entity including, but not limited to, universities, nonprofit organizations, and for-profit organizations.

B. ESTIMATED FUNDING

The total DOE share of the awards to be made under the FOA is estimated to be up to \$62,500,000.

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 for an individual award made under this announcement):
\$ 62,500,000 (DOE) (\$12,500,000 DOE per year for five years)

Floor (i.e., the minimum amount for an individual award made under this announcement):
\$ 25,000,000 (DOE) (\$5,000,000 DOE per year for five years)

D. EXPECTED NUMBER OF AWARDS

DOE anticipates making one award under this announcement.

E. ANTICIPATED AWARD SIZE

DOE anticipates making a single award with an award size ranging from \$25,000,000 to \$62,500,000 (DOE Share with 50% cost share requirement).

F. PERIOD OF PERFORMANCE

The total period of performance for this award is expected to be up to 60 months.

G. TYPE OF APPLICATION

DOE will only accept new applications under this announcement.

Section III - ELIGIBILITY INFORMATION

A. ELIGIBLE APPLICANTS

All types of entities, including DOE/NNSA National Laboratories Federally Funded Research and Development Centers (FFRDCs) (as defined in EPACT 2005, Section 989), non-DOE FFRDCs, and foreign entities are eligible to apply as either prime Recipients or consortium members, except NETL and other Federal agencies, and nonprofit organizations described in section 501(c)(4) of the Internal Revenue Code of 1986 that engaged in lobbying activities after December 31, 1995. Please reference the following website for a listing of eligible FFRDC's <http://www.nsf.gov/statistics/ffrdclist/start.cfm>.

It should be noted that if a DOE/NNSA National Laboratory/FFRDC is selected as a prime recipient under this announcement, it is DOE's intent to award the selection through the Field Work Proposal (FWP) process. The laboratory will also be responsible for providing non-Federal source cost share to meet the cost share requirements as outlined in this announcement. Alternatively, the Labs may elect to partner with primary organizations as a team member and as such would contract directly with the primary recipient.

Prime recipients and consortium members would not be eligible for R&D subawards under this consortium because of conflict of interest concerns.

It is the intent of DOE that the applicants to this announcement be an association or consortium which includes automobile manufacturers that intend to commercialize electric vehicles. Participation by other organizations including FFRDCs, materials suppliers, universities, and independent research organizations is permitted but not required.

B. COST SHARING

The cost share must be at least 50% of the total allowable costs (i.e., the sum of the Government share, including FFRDC 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

Federally Funded Research and Development Center (FFRDC) Contractors:

A DOE/NNSA National Laboratory Contractor is eligible to be proposed as either prime Recipients or consortium/team members under this announcement if its cognizant Contracting Officer provides written authorization and this authorization is submitted with the application. If a DOE/NNSA National Laboratory Contractor is selected for participation in an award, the proposed work will be authorized under the DOE work authorization process and performed under the laboratory's Management and Operating (M&O) contract. The following wording is acceptable for the authorization:

“Authorization is granted for the [_____] Laboratory to participate in the proposed project. The work proposed for the laboratory is consistent with or complementary to the missions of the laboratory, and will not adversely impact execution of the DOE assigned programs at the laboratory.”

A Non-DOE FFRDC contractor is also eligible to be proposed as either prime Recipients or consortium/team members under this announcement if its cognizant Contracting Officer provides written authorization and this authorization is submitted with the application. If a non-DOE FFRDC is selected for an award or participation in an award, the proposed work will be authorized through an Interagency Agreement. 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 non-DOE

FFRDC contractor must be consistent with the contractor's authority under its award. The following wording is acceptable for this authorization:

“Authorization is granted for the _____ Laboratory to participate in the proposed project. The work proposed for the laboratory is consistent with or complementary to the missions of the laboratory and will not adversely impact execution of the Federal Agency assigned programs at the laboratory. THIS LABORATORY IS AUTHORIZED TO PERFORM THE WORK PROPOSED IN THE APPLICATION SUBMITTED UNDER DOE FUNDING OPPORTUNITY ANNOUNCEMENT # DE-FOA-xxxxxx BY THE FOLLOWING STATUTORY AUTHORITY [insert Statute name, citation, and section]_____.”

FFRDC Contractor as Other Than Prime Recipient:

The scope of work to be performed by the FFRDC contractor may not be more significant than the scope of work to be performed by the prime applicant.

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.

For the purposes of the subaward(s) to FFRDCs, the terms and conditions of the Management and Operating contract between the FFRDC and the cognizant Federal Agency will apply instead of the normal flow-down provisions associated with the financial assistance award. For subawards to DOE/NNSA FFRDCs, the applicant shall use the Department of Energy's Work for Others program and the terms and conditions established for that program,

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's portions of the effort.

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> under the appropriate Funding Opportunity Number.

B. LETTER OF INTENT AND PRE-APPLICATION

1. Letter of Intent.

Letters of Intent are not required.

2. Pre-application

Pre-applications are not required.

C. CONTENT AND FORM OF APPLICATION

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> under "Required Application Documents." **Please be sure to select the subject FOA to download the applicable application documents.** All application files must be in Adobe Portable Document Format (PDF) unless otherwise specified in this announcement. After uploading documentation into the system, please be sure to click "Submit" for a successful submission to the eXCHANGE website. After this has been completed, an acknowledgment message will display on the screen, as well as by an automatically generated email notification containing the date/time stamp of the submission to the applicant.

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

1. SF 424 - Application for Federal Assistance (Mandatory)

A template SF 424 Application for Federal Assistance is provided with this announcement under "Required Application Documents". 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 phase, or other subset of the project period.

Save the information in a single file named "SF424Application.pdf"

2. Public Project Summary/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 program area of interest that the application addresses, 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 "ProjectSummary.pdf"

3. Project Narrative File (Mandatory)

The project narrative must not exceed 30 pages, including cover page, table of contents, charts, graphs, maps, photographs, and other pictorial presentations, when printed using standard 8.5" by 11" paper with 1 inch margins (top, bottom, left, and right) single spaced. **EVALUATORS WILL REVIEW ONLY THE NUMBER OF PAGES SPECIFIED IN THE PRECEDING SENTENCE.** The font must not be smaller than 11 point. Do not include any Internet addresses (URLs) that provide information necessary to review the application. See Part 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 the 30-page limit). The Project Narrative File 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 sub-recipients);
- Total budget for each participant (both DOE share and cost share, if applicable);
- Entity type for each participant (Non-profit, Institution of Higher Education, FFRDC, or Other – see Section III.A).

Project Objectives: This sub-section should provide a clear, concise statement of the specific objectives/aims of the proposed project and shall include the anticipated outcome or advancement of the proposed approach. This section should also include a statement of need/business case for the proposed work.

Merit Review Criterion Discussion: The section should be formatted to address each of the merit review criterion and sub-criterion 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 CRITERION AND SUB-CRITERION.**

Project Timetable: This section should outline as a function of time all the important activities or phases of the project, including the duration and sequencing of tasks and the scheduling of project milestones verifying that the project will be completed within the proposed period of performance. Successful applicants must use this project timetable to report progress.

Relevance and Outcomes/Impacts: This section should explain the relevance of the effort to the objectives in the program announcement and the expected outcomes and/or impacts. The justification for the proposed project should include a clear statement of the importance of the project in terms of the utility of the outcomes and the target community of beneficiaries.

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.

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 comparable equipment, if any, already at your organization and explain why it cannot be used. **As noted in the description section, equipment should not include the purchase or installation of fueling infrastructure or vehicles. Applications that propose to use funds for either of these unallowable items may be considered non-responsive.**

Bibliography And References, If Applicable: 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 file must contain a single, detailed Statement of Project Objectives that addresses how the project objectives will be met. The SOPO must contain a clear, concise description of the major activities to be completed during project performance and follow the structure discussed below. It is therefore required that it shall not contain proprietary or confidential business information.

The Statement of Project Objectives is generally less than four (4) pages in total for the proposed work. 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.

B. SCOPE OF WORK

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

C. TASKS TO BE PERFORMED

Tasks should be provided in a logical sequence. This section provides a brief summary of the planned approach to this project.

Task 1.0 - Project Management/Administration

(Description includes work elements required to manage and report on activities in accordance with the applicants proposed project.)

Task 2.0 – Policy Initiatives and Activities

Subtask 2.1 (subtask to be determined by the activities submitted by the applicant)

Subtask 2.2 (subtask to be determined by the activities submitted by the applicant)

Subtask 2.3 (subtask to be determined by the activities submitted by the applicant)

Task 3.0 – Barrier Reduction Initiatives and Activities

Subtask 3.1 (subtask to be determined by the activities submitted by the applicant)

Subtask 3.2 (subtask to be determined by the activities submitted by the applicant)

Subtask 3.3 (subtask to be determined by the activities submitted by the applicant)

Task 4.0 – Safety and Training Initiatives and Activities

Subtask 4.1 (subtask to be determined by the activities submitted by the applicant)

Subtask 4.2 (subtask to be determined by the activities submitted by the applicant)

Subtask 4.3 (subtask to be determined by the activities submitted by the applicant)

Task 5.0 – Market Development/Outreach Initiatives and Activities

Subtask 5.1 (subtask to be determined by the activities submitted by the applicant)

Subtask 5.2 (subtask to be determined by the activities submitted by the applicant)

Subtask 5.3 (subtask to be determined by the activities submitted by the applicant)

D. DELIVERABLES

Reports will be submitted in accordance with the “Federal Assistance Reporting Checklist” in the resultant award and the instructions accompanying the checklist. In addition, the following deliverables are required.

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

Deliverable 1 - (deliverable to be determined by the applicant)

Deliverable 2 - (deliverable to be determined by the applicant)

E. BRIEFINGS/TECHNICAL PRESENTATIONS

Recipient shall prepare detailed briefings to explain the plans, progress, and results of the technical effort during the performance period of the award. A quarterly review meeting to summarize technical progress of subawards and to review managerial issues with DOE representatives will be held and the recipient will provide a meeting place for these quarterly reviews. In addition, reports/presentations shall be developed and delivered as appropriate at Program Merit Reviews, or at various forums organized by DOE to report on progress and share lessons learned, such as conference calls, meetings, and workshops. Up to two Program Merit Review briefings, along with up to two additional project briefings may be required during the project period.

4. Annual Operating Plan File (Mandatory)

The annual operating plan (AOP) should include a description of the organizational structure of the association or consortium, including managerial and technical team structures, and in the initial application version a discussion of processes and/or procedures, including procedures for managerial issue resolution, that will be used to manage the organization. It should additionally include proposed government/industry cost-sharing breakdown. The AOP should also include a technology program plan that lists candidate technologies, addresses approaches to resolve technical development issues, and summary of the overall technical objectives.

Save the information in a single file named "AOP.pdf"

5. Commitment Letters from Consortium Members (Mandatory)

The members of the applicant association or consortium must should provide letters of commitment both to address consortium participation and role as well as individual member commitment to non-Federal cost share.

Save the information in a single file named "CommitmentLetters.pdf"

6. Environmental Questionnaire (Mandatory)

You must complete the environmental questionnaire (Form NETL F451.1-1/3) found with this announcement at <http://eere.energy.gov/financing/exchange>.

Save the questionnaire in a single file named "EQ.pdf"

7. **Resume File (Mandatory)**

Provide a resume for each key person proposed, including subawardees and consultants if they meet the definition of key person. A key person is any individual who contributes in a substantive, measurable way to the execution of the project. . The biographical information for each resume must not exceed 2 pages when printed on 8.5" by 11" paper with 1 inch margins (top, bottom, left, and right) single-spaced with font no smaller than 11 point and should include the following information, if applicable:

Education and Training: Undergraduate, graduate, and postdoctoral training; provide institution, major/area, degree, and year.

Professional Experience: Beginning with the current position list, in chronological order, professional/academic positions with a brief description. Expertise or professional expertise relevant to the proposed work should be emphasized.

Publications: Provide a list of up to 10 publications most closely related to the proposed project. For each publication, identify the names of all authors (in the same sequence in which they appear in the publication), the article title, book or journal title, volume number, page numbers, year of publication, and website address if available electronically.

Patents, copyrights, and software systems developed may be provided in addition to or substituted for publications.

Synergistic Activities: List no more than 5 professional and scholarly activities related to the effort proposed.

Save the all resumes in a single file named "Bio.pdf"

8. **Prime Applicant - SF 424A Excel, Budget Information (Mandatory)**

Applicants must provide a cumulative budget (SF 424A) for the total project period. 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. A template SF 424A "Budget Information Non-Construction Programs" is provided with this announcement under "Required Application Documents". All consortium members including FFRDCs that propose should include a copy of an SF 424A and a budget justification file (see below).

Save the information in a single file named "PrimeBudget424A.xls or xlsx"

9. **Prime Applicant - Budget Justification File (Mandatory)**

Applicants must justify the costs proposed in each Object Class Category by providing a basis of cost. A template Project Management Center (PMC) 123.1 (OMB Number: 1910-5162) Detailed Budget Justification form is provided with this announcement under "Required Application Documents".

Save the budget justification information in a single file named "PrimeBudgetJustification.xls or xlsx"

10. **Authorization for FFRDCs (If applicable)**

The cognizant contracting officer for the FFRDC must authorize in writing the use of a DOE/NNSA FFRDC or non-DOE/NNSA FFRDC contractor on the proposed project and this authorization must be submitted with the application. Please include authorization language as indicated in III. C. OTHER ELIGIBILITY REQUIREMENTS.

Save the information in a single file named "Authorization.pdf"

11. SF-LLL Disclosure of Lobbying Activities (If applicable)

Complete the SF- LLL form found with this announcement provided with this announcement under “Required Application Documents”.

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 the information in a single file named "SF-LLL.pdf"

Summary of Required Forms/Files

Your application must include the following documents:

Name of Document	Format	File Name
SF424 Application for Federal Assistance	Form	SF424Application.pdf
Project Summary/Abstract	PDF	ProjectSummary.pdf
Project Narrative File	PDF	ProjectNarrative.pdf
Annual Operating Plan	PDF	AOP.pdf
Commitment Letters from Consortium Members	PDF	CommitmentLetters.pdf
Environmental Questionnaire	PDF	EQ.pdf
Resume File	PDF	Bio.pdf
SF424A File - Budget Information for Non-Construction Programs	Excel	PrimeBudget424A.xls or xlsx
Budget Justification File	Excel	PrimeBudgetJustification.xls or xlsx
Authorization for FFRDCs	PDF	Authorization.pdf
SF-LLL Disclosure of Lobbying Activities (if applicable)	Form	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
- Name and phone number of the Designated Responsible Employee for complying with national policies prohibiting discrimination (See 10 CFR 1040.5)
- Representation of Limited Rights Data and Restricted Software, if applicable
- Commitment Letter from Third Parties Contributing to Cost Sharing, if applicable

E. SUBMISSION DATES AND TIMES

1. Pre-application Due Date

Pre-applications are not required.

2. Application Due Date

Applications must be received by 01/31/2013, not later than 8:00 PM Eastern Time. You are 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 organizations are in FAR Part 31.

Pre-Award Costs: Pre-award costs are subject to the following:

- For awards with Educational Institutions: Consistent with OMB Circular A-21, educational institutions may not incur pre-award costs prior to award, without prior approval of the DOE Contracting Officer.
- For awards with State or Local Governments: Consistent with OMB Circular A-87, State or Local Governments may not incur pre-award costs prior to award, without prior approval of the DOE Contracting Officer.
- For awards with Other Non-Profit Recipients (not including hospitals): Consistent with OMB Circular A-122, other non-profit recipients may not incur pre-award costs prior to award, without prior approval of the DOE Contracting Officer.
- For awards with For-Profit Recipients: Consistent with 10 CFR 600.317, for-profit 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. **Pre-award costs are incurred at the applicant's risk.** DOE is under no obligation to reimburse such costs including 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 Availability: 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.

Property Management: Consistent with 10 CFR 600.134 (Non-Profits), 10 CFR 600.232 (States and Local Governments), and 10 CFR 600.321 (For Profits), title to real property, equipment and supplies (excluding Government-furnished property) acquired by or on behalf of the Recipient in connection with performance of the project will not vest in the Recipient unconditionally at the end of the project. The Government retains its equitable interest in the property purchased by the Recipient. Property disposition will be in accordance with the applicable DOE property regulations at 10 CFR 600.132-600.134 (Non-Profits), 10 CFR 600.231-600.233 (States and Local Governments), and 10 CFR 600.321-600.324 (For Profits),

H. OTHER SUBMISSION AND REGISTRATION REQUIREMENTS

1. 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. After uploading documentation into the system, please be sure to click “Submit” for a successful submission to the eXCHANGE website. After this has been completed, an acknowledgment message will display on the screen, as well as by an automatically generated email notification containing the date/time stamp of the submission to the applicant. For additional guidance on the submission process, please review the EERE eXCHANGE Applicant User Guide available on the eXCHANGE website.

2. **Registration Process** There are several one-time actions that must be completed before submitting an Application in response to this Funding Opportunity Announcement (FOA). The applicant must:

- 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 SAM at: <http://www.sam.gov/>;
- Register in FedConnect at <https://www.fedconnect.net/>. In the event that an application is selected for negotiation of award, Applicants must be registered with FedConnect to receive the award. To create an organization account, your organization’s CCR MPIN is required. For more information about the CCR MPIN or other registration requirements, review the FedConnect Ready, Set, Go! Guide at https://www.fedconnect.net/FedConnect/PublicPages/FedConnect_Ready_Set_Go.pdf;
- Register in Grants.gov at <http://grants.gov/>; in order to receive automatic updates, in the event that, Amendments to this FOA are posted. However, please note that applications will not be accepted through Grants.gov.

In addition to 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.

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 submit an application for open EERE Funding Opportunity Announcements (FOAs) that are currently in eXCHANGE. It is recommended that each organization or business unit, whether acting as a consortium 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. 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.

To receive notices via email regarding an FOA in eXCHANGE, such as amendments to the announcement or the posting of new questions and answers from eXCHANGE you must initiate an application submission to the FOA of interest. Please note that you must finalize your application before the specified due date and time to be considered for award.

3. Electronic Authorization of Applications and Award Documents

Submission of an application and supplemental award information under this announcement through electronic systems used by the Department of Energy, including EERE eXCHANGE, 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.

4. Environmental Questionnaire

All projects receiving financial assistance from DOE must be reviewed under the National Environmental Policy Act (NEPA). Based on its review of the activities in the areas of interest that are eligible for funding under this announcement, DOE has determined that many of these activities may be categorically excluded from further analysis under NEPA. However, some proposed activities may require the preparation of an environmental assessment or an environmental impact statement. You must complete the environmental questionnaire (NETL Form 451.1-1/3) for each location where work will be performed (do not fill out NETL Form 451.1-1/1, which is attached at the end of Form 451.1-1/3; DOE is responsible for completing Form 451.1-1/1). Fill-able versions of the Environmental Questionnaire are available at http://www.netl.doe.gov/business/forms.html#POST_SEL_AP. See Section IV C. CONTENT AND FORM OF APPLICATION above for submission instructions.

Section V - APPLICATION REVIEW INFORMATION

A. CRITERIA

1. 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 meet all of mandatory requirements will not pass the initial review, and the application will not be forwarded for comprehensive merit review and the application will be eliminated from further consideration.

2. Merit Review Criteria

(1) **Likelihood of Further Advancing State of the Art Battery Technology (40%):**

- a. Extent to which the Applicant demonstrates an understanding of the current state-of-the-art battery technology and presents a vision that would significantly improve performance over the current state-of-the-art;
- b. Extent to which the Applicant demonstrates an awareness of competing commercial and emerging technologies and identifies how the consortium would manage the evaluation and improvement of these competing solutions;
- c. Extent to which the Applicant proposes quantitative topics for R&D subawards that demonstrate the potential for measureable and significant advancement; and
- d. Extent to which the Applicant demonstrates success pertaining to the development of state of the art battery technology to the point of market entry.

(2) **Qualifications, Experience, and Capabilities (30%):**

- a. Extent to which the Applicant or Applicant's primary team members have commercialized or have a clear intent to commercialize hybrid, plug-in hybrid, and battery electric vehicles;
- b. Extent to which the management team and proposed technical team have the skill and expertise needed to successfully execute the project plan, including both technical skill and the administrative experience and skill needed to appropriately manage the solicitations and resulting projects;
- c. Extent to which the Applicant has an established, robust project and cost management system and process in place to track the progress, schedule, and cost for each development project;
- d. Extent to which the Applicant has prior experience which demonstrates an ability to manage solicitations and projects of similar risk and complexity;
- e. Extent to which the Applicant has worked together with its teaming partners on prior projects or programs;
- f. Extent to which the Applicant has adequate access to facilities necessary to accomplish the management effort and/or clearly explains how it intends to obtain access to necessary facilities; and
- g. Extent to which the Applicant demonstrates a capability and path forward to manufacturing electric vehicles in the US.

(3) **Soundness of Management Plan for the Proposed Consortium (30%) :**

- a. The extent to which the Applicant's management plan adequately provided for the management of personnel, resources and the solicitations;
- b. Extent to which the Applicant's annual plan represents a near term strategy consistent with advancing state-of-the-art battery R&D;

- c. Extent to which the Applicant proposes to allocate appropriate levels of people and resources to tasks;
- d. Extent to which the Applicant can demonstrate the capability to provide the necessary project management and technical processes to successfully manage advanced battery development projects and tasks;
- e. Extent to which the Applicant identifies major management risks and clearly defines planned mitigation efforts, including conflict resolution processes;
- f. Extent to which the proposed schedule to form a management process, implement a solicitation for proposals and select R&D projects is reasonable;
- g. Extent to which work is performed in the United States; and
- h. Effectiveness of planned processes to monitor and control the planned work.

3. Other Selection Factors

Program Policy Factors

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

- It may be desirable to select projects that optimize Federal investment and maximize commitment as demonstrated by cost share.
- It may be desirable to select projects for award that will complement or enhance other research activities supported by DOE.

B. REVIEW AND SELECTION PROCESS

1. Merit Review

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."

2. Selection

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

3. 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 April 2013 and making an award by the end of July 2013.

Section VI - AWARD ADMINISTRATION INFORMATION

A. AWARD NOTICES

1. Notice of Selection

Selected Applicants Notification: DOE will notify the applicant selected for award. This notice of selection is not an authorization to begin performance.

Non-Selected Notification: Organizations whose applications have not been selected for award will be advised as promptly as possible. This notice will explain why the application was not selected.

2. 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; (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 rtc/index.jsp>.

B. ADMINISTRATIVE AND NATIONAL POLICY REQUIREMENTS

1. 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 rtc/index.jsp>.

DUNS AND SAM 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 the System for Award Management (SAM) current at <http://www.sam.gov> current SAM is the government-wide system that replaced the CCR. If you had an active registration in the CCR, you have an active registration in SAM. 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 System for Award Management (SAM).

2. 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.

Corporate Felony Conviction and Federal Tax Liability Representations (March 2012)

In submitting an application in response to this FOA the Applicant represents 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) **No** officer or agent of the corporation have been convicted of a felony criminal violation for an offense arising out of actions for or on behalf of the corporation under Federal law in the past 24 months,
- (3) 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.

For purposes of these representations the following definitions apply:

A Corporation includes any entity that has filed articles of incorporation in any of the 50 states, the District of Columbia, or the various territories of the United States [but not foreign corporations]. It includes both for-profit and non-profit organizations.

Lobbying Restrictions: By accepting funds under this award, you agree that none of the funds obligated on the award shall be expended, directly or indirectly, to influence congressional action on any legislation or appropriation matters pending before Congress, other than to communicate to Members of Congress as described in 18 U.S.C. 1913. This restriction is in addition to those prescribed elsewhere in statute and regulation.

National Policy Assurances: 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>.

Intellectual Property Provisions: The standard DOE financial assistance intellectual property provisions applicable to the various types of recipients are located at:

<http://energy.gov/gc/standard-intellectual-property-ip-provisions-financial-assistance-awards>

Statement of Substantial Involvement: There will be substantial involvement between the DOE and the Recipient during performance of the resultant cooperative agreements. Awards under this Announcement will be cooperative agreements. The DOE Specialist and DOE Project Officer will negotiate a Statement of Substantial Involvement prior to award.

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 the use of the EERE eXCHANGE website or technical issues concerning the application submittal should be submitted to: EERE-ExchangeSupport@hq.doe.gov.

Questions related to the content of the Funding Opportunity Announcement must be submitted to DE-FOA0000722@netl.doe.gov and shall be submitted not later than January 31, 2013. Questions submitted after that date may not allow the Government sufficient time to respond.

All questions and answers related to the content of this FOA will be posted at <http://eere.energy.gov/financing/exchange>. DOE will try to respond to questions within 3 business days, unless a similar question and answer have already been posted on the website. Applicants are encouraged to review the posted questions and answers daily. **Please note that you must first select this FOA Number in order to view the questions and answers specific to this FOA.**

B. AGENCY CONTACT

Name: Jodi Collins
E-mail: DE-FOA-0000722@netl.doe.gov

Section VIII - OTHER INFORMATION

A. AMENDMENTS TO ANNOUNCEMENT

Notices of any Amendments to this announcement will be posted on the EERE eXCHANGE web site and the Grants.gov system. However, you will only receive an email when an amendment or an announcement is posted on these sites if you register for email notifications for this FOA in Grants.gov or initiate a proposal in eXCHANGE. DOE recommends that you register as soon after the release of the FOA as possible to ensure you receive timely notice of any amendments or other announcements.

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, as a basis for negotiation and/or award.

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.

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.

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 [Insert 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 under EPLA 2005. The provisions of the statute provide for the protection from public disclosure, for a period of up to 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.

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.

APPENDIX A – DEFINITIONS

“Amendment” means a revision to a Funding Opportunity Announcement.

"Applicant" means the legal entity or individual signing the application. This entity or individual may be one organization or a single entity representing a group of organizations (such as a team or consortium) that has chosen to submit a single application in response to a Funding Opportunity Announcement.

"Application" means the documentation submitted in response to a Funding Opportunity Announcement.

“Authorized Organization Representative (AOR)” is the person with assigned privileges who is authorized to submit grant applications through Grants.gov on behalf of an organization. The privileges are assigned by the organization’s E-Business Point of Contact designated in the CCR.

"Award" means the written documentation executed by a DOE Contracting Officer, after an applicant is selected, which contains the negotiated terms and conditions for providing financial assistance to the applicant. A financial assistance award may be either a grant or a cooperative agreement.

"Budget" means the cost expenditure plan submitted in the application, including both the DOE contribution and the applicant cost share.

"Consortium (plural consortia)" means the group of organizations or individuals that have chosen to submit a single application in response to a Funding Opportunity Announcement.

"Contracting Officer" means the DOE official authorized to execute awards on behalf of DOE and who is responsible for the business management and non-program aspects of the financial assistance process.

"Cooperative Agreement" means a financial assistance instrument used by DOE to transfer money or property when the principal purpose of the transaction is to accomplish a public purpose of support or stimulation authorized by Federal statute, and substantial involvement (see definition below) is anticipated between DOE and the applicant during the performance of the contemplated activity.

"Cost Sharing" means the respective share of total project costs to be contributed by the applicant and by DOE. The percentage of applicant cost share is to be applied to the total project cost (i.e., the sum of applicant plus DOE cost shares) rather than to the DOE contribution alone.

“Data Universal Numbering System (DUNS) Number” is a unique nine-character identification number issued by Dun and Bradstreet (D&B). Organizations must have a DUNS number prior to registering in the CCR. Call 1-866-705-5711 to receive one free of charge.

http://www.grants.gov/applicants/request_duns_number.jsp

“E-Business Point of Contact (POC)” is the individual who is designated as the Electronic Business Point of Contact in the CCR registration. This person is the sole authority of the organization with the capability of designating or revoking an individual’s ability to conduct CCR transactions.

“E-Find” is a Grants.gov webpage where you can search for Federal Funding Opportunities in FedGrants.

<http://www.grants.gov/search/searchHome.do>

"Financial Assistance" means the transfer of money or property to an applicant or participant to accomplish a public purpose of support authorized by Federal statute through grants or cooperative agreements and sub-awards. For DOE, it does not include direct loans, loan guarantees, price guarantees, purchase agreements, Cooperative Research and Development Agreements (CRADAs), or any other type of financial incentive instrument.

“FedConnect” is where Federal agencies post opportunities and make awards via the web. Any applicant

can view public postings without registering. However, registered users have numerous added benefits including the ability to electronically submit applications / responses to the government directly through this site. <https://www.fedconnect.net/FedConnect/>

“Federally Funded Research and Development Center (FFRDC)” means a research laboratory as defined by Federal Acquisition Regulation 35.017.

“Funding Opportunity Announcement (FOA)” is a publicly available document by which a Federal agency makes known its intentions to award discretionary grants or cooperative agreements, usually as a result of competition for funds. Funding opportunity announcements may be known as program announcements, notices of funding availability, solicitations, or other names depending on the agency and type of program.

“Grants.gov” is the “storefront” web portal which allows organizations to electronically find grant opportunities from all Federal grant-making agencies. Grants.gov is the single access point for over 900 grant programs offered by the 26 Federal grant-making agencies. <http://www.grants.gov>

“Key Personnel” mean the individuals who will have significant roles in planning and implementing the proposed project on the part of the applicant and participants, including FFRDCs.

“Participant” for purposes of this Funding Opportunity Announcement only, means any entity, including team or consortium members, or other business arrangement (including all parties to the application at any tier), responding to the Funding Opportunity Announcement.

“Principal Investigator” refers to the technical point of contact/Project Manager for a specific project award.

“Project” means the set of activities described in an application or other document that is approved by DOE for financial assistance (whether such financial assistance represents all or only a portion of the support necessary to carry out those activities).

“Proposal” is the term used to describe the documentation submitted in response to a Funding Opportunity Announcement. Also see Application.

“Recipient” means the organization, individual, or other entity that receives a financial assistance award from DOE, is financially accountable for the use of any DOE funds or property provided for the performance of the project, and is legally responsible for carrying out the terms and condition of the award.

“Selection” means the determination by the DOE Selection Official that negotiations take place for certain projects with the intent of awarding a financial assistance instrument.

“Selection Official” means the DOE official designated to select applications for negotiation toward award under a subject Funding Opportunity Announcement.

“Substantial Involvement” means involvement on the part of the Government. DOE's involvement may include shared responsibility for the performance of the project and providing technical assistance or guidance which to the applicant. Such involvement will be negotiated with each applicant prior to signing any agreement.

“System for Award Management (SAM)” is a free web site that consolidates the capabilities you used to find in CCR/FedReg, ORCA, and EPLS: <https://www.sam.gov/portal/public/SAM/>.

“Total Project Cost” means all the funds to complete the effort proposed by the applicant, including DOE funds (including direct funding of any FFRDC) plus all other funds that will be committed by the applicant as cost sharing.

APPENDIX B – PERSONALLY IDENTIFIABLE INFORMATION

In responding to this announcement, applicants must ensure that Protected Personally Identifiable Information (PII) is not included in the following documents: Public Abstract, Project Narrative, Resumes or Budget. These documents will be used by the Merit Review Committee in the review process to evaluate each application. PII is defined by the Office of Management and Budget (OMB) and DOE as:

Any information about an individual maintained by an agency, including but not limited to, education, financial transactions, medical history, and criminal or employment history and information that can be used to distinguish or trace an individual's identity, such as their name, social security number, date and place of birth, mother's maiden name, biometric records, etc., including any other personal information that is linked or linkable to an individual.

This definition of PII can be further defined as: (1) Public PII and (2) Protected PII.

Public PII: PII found in public sources such as telephone books, public websites, business cards, university listing, etc. Public PII includes first and last name, address, work telephone number, email address, home telephone number, and general education credentials.

Protected PII: PII that requires enhanced protection. This information includes data that if compromised could cause harm to an individual such as identity theft.

Listed below are examples of Protected PII that applicants must not include in the files listed above to be evaluated by the Merit Review Committee.

- Social Security Numbers in any form
- Place of Birth associated with an individual
- Date of Birth associated with an individual
- Mother's maiden name associated with an individual
- Biometric record associated with an individual
- Fingerprint
- Iris scan
- DNA
- Medical history information associated with an individual
- Medical conditions, including history of disease
- Metric information, e.g. weight, height, blood pressure
- Criminal history associated with an individual
- Employment history and other employment information associated with an individual
- Ratings
- Disciplinary actions
- Performance elements and standards (or work expectations) are PII when they are so intertwined with performance appraisals that their disclosure would reveal an individual's performance appraisal
- Financial information associated with an individual
- Credit card numbers
- Bank account numbers
- Security clearance history or related information (not including actual clearances held)

Listed below are examples of Public PII that applicants may include in the files listed above to be evaluated by the Merit Review Committee:

- Phone numbers (work, home, cell)
- Street addresses (work and personal)
- Email addresses (work and personal)
- Digital pictures
- Medical information included in a health or safety report

Employment information that is not PII even when associated with a name
Resumes, unless they include a Social Security Number
Present and past position titles and occupational series
Present and past grades
Present and past annual salary rates (including performance awards or bonuses, incentive awards, merit pay amount, Meritorious or Distinguished Executive Ranks, and allowances and differentials)
Present and past duty stations and organization of assignment (includes room and phone numbers, organization designations, work email address, or other identifying information regarding buildings, room numbers, or places of employment)
Position descriptions, identification of job elements, and those performance standards (but not actual performance appraisals) that the release of which would not interfere with law enforcement programs or severely inhibit agency effectiveness
Security clearances held
Written biographies (e.g. to be used in a program describing a speaker)
Academic credentials
Schools attended
Major or area of study
Personal information stored by individuals about themselves on their assigned workstation or laptop unless it contains a Social Security Number

APPENDIX C – COST SHARE INFORMATION

Cost Sharing or Cost Matching

The terms “cost sharing” and “cost matching” are often used synonymously. Even the DOE Financial Assistance Regulations, 10 CFR Part 600, use both of the terms in the titles specific to regulations applicable to cost sharing. DOE almost always uses the term “cost sharing,” as it conveys the concept that non-Federal share is calculated as a percentage of the Total Project Cost. An exception is the State Energy Program Regulation, 10 CFR Part 420.12, State Matching Contribution. Here “cost matching” for the non-Federal share is calculated as a percentage of the Federal funds only, rather than the Total Project Cost.

How Cost Sharing Is Calculated

As stated above, cost sharing is calculated as a percentage of the Total Project Cost. Following is an example of how to calculate cost sharing amounts for a project with \$1,000,000 in Federal funds with a minimum 20% non-Federal cost sharing requirement:

Formula: Federal share (\$) divided by Federal share (%) = Total Project Cost

Example: \$1,000,000 divided by 80% = \$1,250,000

Formula: Total Project Cost (\$) minus Federal share (\$) = Non-Federal share (\$)

Example: \$1,250,000 minus \$1,000,000 = \$250,000

Formula: Non-Federal share (\$) divided by Total Project Cost (\$) = Non-Federal share (%)

Example: \$250,000 divided by \$1,250,000 = 20%

See the sample cost share calculation for a blended cost share percentage below. Keep in mind that FFRDC funding is DOE funding.

What Qualifies For Cost Sharing

While it is not possible to explain what specifically qualifies for cost sharing in one or even a couple of sentences, in general, if a cost is allowable under the cost principles applicable to the organization incurring the cost and is eligible for reimbursement under a DOE grant or cooperative agreement, then it is allowable as cost share. Conversely, if the cost is not allowable under the cost principles and not eligible for reimbursement, then it is not allowable as cost share. In addition, costs may not be counted as cost share if they are paid by the Federal Government under another award unless authorized by Federal statute to be used for cost sharing.

The rules associated with what is allowable as cost share are specific to the type of organization that is receiving funds under the grant or cooperative agreement, though are generally the same for all types of entities. The specific rules applicable to:

Institutions of Higher Education, Hospitals, and Other Nonprofit Organizations are found at 10 CFR600.123;

State and Local Governments are found at 10 CFR600.224;

For-profit Organizations are found at 10 CFR600.313.

In addition to the regulations referenced above, other factors may also come into play such as timing of donations and length of the project period. For example, the value of ten years of

donated maintenance on a project that has a project period of five years would not be fully allowable as cost share. Only the value for the five years of donated maintenance that corresponds to the project period is allowable and may be counted as cost share.

Additionally, DOE generally does not allow pre-award costs for either cost share or reimbursement when these costs precede the signing of the appropriation bill that funds the award. In the case of a competitive award, DOE generally does not allow pre-award costs prior to the signing of the Selection Statement by the DOE Selection Official.

Following is a link to the DOE Financial Assistance Regulations. You can click on the specific section for each Code of Federal Regulations reference mentioned above.

[DOE Financial Assistance Rules \(10 CFR 600\)](#)

As stated above, the rules associated with what is allowable cost share are generally the same for all types of organizations. Following are the rules found to be common, but again, the specifics are contained in the regulations and cost principles specific to the type of entity:

(A) *Acceptable contributions.* All contributions, including cash contributions and third party in-kind contributions, must be accepted as part of the recipient's cost sharing if such contributions meet all of the following criteria:

- (1) They are verifiable from the recipient's records.
- (2) They are not included as contributions for any other Federally-assisted project or program.
- (3) They are necessary and reasonable for proper and efficient accomplishment of project or program objectives.
- (4) They are allowable under the cost principles applicable to the type of entity incurring the cost as follows:

(a) *For-profit organizations.* Allowability of costs incurred by for-profit organizations and those nonprofit organizations listed in Attachment C to OMB Circular A-122 is determined in accordance with the for-profit costs principles in 48 CFR Part 31 in the Federal Acquisition Regulation, except that patent prosecution costs are not allowable unless specifically authorized in the award document.

(b) *Other types of organizations.* Allowability of costs incurred by other types of organizations that may be subrecipients under a prime award is determined as follows:

(i) *Institutions of higher education.* Allowability is determined in accordance with [2 CFR 220 Cost Principles for Educational Institutions](#)

(ii) *Other nonprofit organizations.* Allowability is determined in accordance with [2 CFR 230 Cost Principles for Nonprofit Organizations](#)

(iii) *Hospitals.* Allowability is determined in accordance with the provisions of [Title 45 Appendix E to Part 74—Principles for Determining Costs Applicable to Research and Development Under Grants and Contracts With Hospitals](#)

(iv) *Governmental organizations.* Allowability for State, local, or Federally recognized Indian tribal government is determined in accordance with [PART 225—Cost Principles for State, Local, and Indian Tribal Governments \(OMB Circular A–87\)](#)

(v) *Commercial Organizations.* Allowability is determined in accordance with [FAR Subpart 31.2—Contracts with Commercial Organizations](#)

(5) They are not paid by the Federal Government under another award unless authorized by Federal statute to be used for cost sharing or matching.

(6) They are provided for in the approved budget.

(B) *Valuing and documenting contributions*

(1) *Valuing recipient's property or services of recipient's employees.* Values are established in accordance with the applicable cost principles, which mean that amounts chargeable to the project are determined on the basis of costs incurred. For real property or equipment used on the project, the cost principles authorize depreciation or use charges. The full value of the item may be applied when the item will be consumed in the performance of the award or fully depreciated by the end of the award. In cases where the full value of a donated capital asset is to be applied as cost sharing or matching, that full value must be the lesser or the following:

(a) The certified value of the remaining life of the property recorded in the recipient's accounting records at the time of donation; or

(b) The current fair market value. If there is sufficient justification, the contracting officer may approve the use of the current fair market value of the donated property, even if it exceeds the certified value at the time of donation to the project. The contracting officer may accept the use of any reasonable basis for determining the fair market value of the property.

(2) *Valuing services of others' employees.* If an employer other than the recipient furnishes the services of an employee, those services are valued at the employee's regular rate of pay, provided these services are for the same skill level for which the employee is normally paid.

(3) *Valuing volunteer services.* Volunteer services furnished by professional and technical personnel, consultants, and other skilled and unskilled labor may be counted as cost sharing or matching if the service is an integral and necessary part of an approved project or program. Rates for volunteer services must be consistent with those paid for similar work in the recipient's organization. In those markets in which the required skills are not found in the recipient organization, rates must be consistent with those paid for similar work in the labor market in which the recipient competes for the kind of services involved. In either case, paid fringe benefits that are reasonable, allowable, and allocable may be included in the valuation.

(4) *Valuing property donated by third parties.*

(a) Donated supplies may include such items as office supplies or laboratory supplies. Value assessed to donated supplies included in the cost sharing or matching share must be reasonable and must not exceed the fair market value of the property at the time of the donation.

(b) Normally only depreciation or use charges for equipment and buildings may be applied. However, the fair rental charges for land and the full value of equipment or other capital assets

may be allowed, when they will be consumed in the performance of the award or fully depreciated by the end of the award, provided that the contracting officer has approved the charges. When use charges are applied, values must be determined in accordance with the usual accounting policies of the recipient, with the following qualifications:

(i) The value of donated space must not exceed the fair rental value of comparable space as established by an independent appraisal of comparable space and facilities in a privately-owned building in the same locality.

(ii) The value of loaned equipment must not exceed its fair rental value.

(5) *Documentation.* The following requirements pertain to the recipient's supporting records for in-kind contributions from third parties:

(a) Volunteer services must be documented and, to the extent feasible, supported by the same methods used by the recipient for its own employees.

(b) The basis for determining the valuation for personal services and property must be documented.