

**FINANCIAL ASSISTANCE
FUNDING OPPORTUNITY ANNOUNCEMENT**



**U.S. Department of Energy
Golden Field Office**

Recovery Act: Hydroelectric Facility Modernization

Funding Opportunity Announcement Number: DE-FOA-0000120

Announcement Type: Initial

CFDA Number: 81.087

Issue Date: 06/30/2009
Letter of Intent Due Date: 07/22/2009, 11:59 PM Eastern Time
Application Due Date: 08/20/2009 11:59 PM Eastern Time

NOTE: Questions regarding the content of this announcement must be submitted through FedConnect. Applicants must be registered in FedConnect to submit or view Questions.

APPLICATION SUBMISSION, FEDCONNECT QUICK START GUIDE, REGISTRATION REQUIREMENTS, AND WHERE TO SUBMIT QUESTIONS

1. Application Submission

APPLICATIONS MUST BE SUBMITTED THROUGH FEDCONNECT AT <https://www.fedconnect.net/> TO BE CONSIDERED FOR AWARD. The application forms identified in Part IV. C. are posted as attachments to this FOA (in FedConnect) and are also found at <https://www.eere-pmc.energy.gov/Forms.aspx#APPForms>. It is the responsibility of the applicant, prior to the Application due date and time, to verify successful transmission.

2. 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 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. Submission via FedConnect constitutes the authorized representative's electronic signature

3. FedConnect Quick Start Guide

Use this guide to assist you with FedConnect:

https://www.fedconnect.net/FedConnect/PublicPages/FedConnect_Ready_Set_Go.pdf

4. Registration Requirements

To submit an application in response to this FOA, Applicants must be registered with FedConnect. Before you can register with FedConnect, you will need the following:

- A. Your organization's DUNS (including plus-4 extension if applicable). If you don't know your organization's DUNS or if your organization does not have a DUNS, you can search for it or request one at <http://fedgov.dnb.com/webform/displayHomePage.do>.
- B. A federal Central Contractor Registration (CCR) account. If your organization is not currently registered with CCR, please register at www.ccr.gov before continuing with your FedConnect registration.
- C. Possibly, your organization's CCR MPIN. If you are the first person from your organization to register, FedConnect will need to create an organization account. Only a person who knows your organization's CCR MPIN can do this. To find out who this is in your organization, go to [http://www.ccr.gov/](http://www.ccr.gov) and click **Search CCR**. Once you've found your organization, locate the Electronic Business Point of Contact.

After the initial FedConnect account is created, employees can register themselves without the MPIN. If you are not sure whether your organization has an account with FedConnect, complete the registration form and FedConnect will let you know if your organization is registered. (PLEASE REFER TO THE FEDCONNECT QUICK START GUIDE).

Applicants who are not registered with CCR and FedConnect, should allow at least 21 days to complete these requirements. It is suggested that the process be started as soon as possible. For those Applicants already registered in CCR, the CCR registration must be updated

annually at <http://www.ccr.gov/Renew.aspx>.

5. Instructions for Completion of Adobe Application Package

The Adobe Application Package was intended to be utilized in Grants.gov; however, the DOE is currently utilizing it with FedConnect. Please disregard any instructions within the Adobe Application Package regarding use with Grants.gov; specifically, **DO NOT use the “Save & Submit” button in the Adobe Application Package, since that button is only used when submitting an application in Grants.gov.**

- A. Copy the Adobe Application Package to your desktop;
- B. Open the Adobe Application Package, and first complete the SF-424 Application, Project/Performance Site Location(s) form, and SF-LLL form (if applicable) which are all part of the Adobe Application Package. To start this process, simply click on the form's name to select the item and then click on the => button. This will move the document to the appropriate "Documents for Submission" box and the form will be automatically added to your application package. Open the forms by selecting the form name and clicking on the "Open Form" button, then complete the required data fields.
- C. Identify the remaining forms required to be completed, as identified in Part IV of the Announcement. Prepare and save these forms to your desktop (e.g., project narrative, resume file, budget file). Once finalized and files are named as indicated in Part IV of the Announcement, upload (attach) these files individually within the Adobe Application Package by clicking on “Add Mandatory Other Attachment” to attach the Project Narrative and clicking on “Add Optional Other Attachment” to attach the remaining files;
- D. Once all completed files have been attached within the Adobe Application Package, save the Adobe Application Package to your desktop, and submit to FedConnect, following the steps outlined in the FedConnect Quick Start Guide at: https://www.fedconnect.net/Fedconnect/PublicPages/FedConnect_Ready_Set_Go.pdf. Note that Applications may be submitted to multiple Topic Areas; however, SEPARATE applications must be submitted for each Topic Area. If submitting to multiple Topic Areas, save the Adobe Application Package in a single file, using up to 10 letters of the Applicant’s Organization Name as the file name (e.g., UCLA). If your organization is submitting more than one Application to different Topic Areas, you must identify an application number and the Topic Area Number at the end of each file name (e.g., UCLA-1-Topic1).

Note that it is the responsibility of the applicant, prior to the Application due date and time, to verify successful transmission in FedConnect.

6. Questions

Questions regarding the content of the announcement must be submitted through the FedConnect portal. You must register with FedConnect to submit questions and to receive responses to questions. It is recommended that you register as soon after release of the FOA as possible to have the benefit of all responses. More information is available at https://www.fedconnect.net/FedConnect/PublicPages/FedConnect_Ready_Set_Go.pdf. DOE will try to respond to a question within 3 business days, unless a similar question and answer have already been distributed.

Questions pertaining to the submission of applications through FedConnect should be directed by e-mail to support@FedConnect.net or by phone to FedConnect Support at 1-800-899-6665. The FedConnect Helpdesk is available from 8:00 am to 8:00 pm Eastern time.

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PART I – FUNDING OPPORTUNITY DESCRIPTION

A. INTRODUCTION: AMERICAN RECOVERY AND REINVESTMENT ACT OF 2009

Projects under this FOA will be funded, in whole or in part, with funds appropriated by the American Recovery and Reinvestment Act of 2009, Pub. L. 111-5, (Recovery Act or Act). The Recovery Act's purposes are to stimulate the economy and to create and retain jobs. The Act gives preference to activities that can be started and completed expeditiously. Accordingly, special consideration will be given to projects that promote and enhance the objectives of the Act, especially job creation, preservation and economic recovery, in an expeditious manner.

Be advised that special terms and conditions may apply to projects funded by the Act relating to:

- Reporting, tracking and segregation of incurred costs;
- Reporting on job creation and preservation;
- Publication of information on the Internet;
- Access to records by Inspectors General and the Government Accountability Office;
- Prohibition on use of funds for gambling establishments, aquariums, zoos, golf courses or swimming pools;
- Ensuring that iron, steel and manufactured goods are produced in the United States;
- Ensuring wage rates are comparable to those prevailing on projects of a similar character;
- Protecting whistleblowers and requiring prompt referral of evidence of a false claim to an appropriate inspector general; and
- Certification and Registration.

These special terms and conditions will be based on provisions included in Titles XV and XVI of the Act. The special terms and conditions can be found at: http://management.energy.gov/policy_guidance/1672.htm.

The Office of Management and Budget (OMB) has issued Implementing Guidance for the Recovery Act. See M-09-10, Initial Implementing Guidance for the American Recovery and Reinvestment Act of 2009 and M-09-15, Updated Implementing Guidance for the American Recovery and Reinvestment Act of 2009. OMB will be issuing additional guidance concerning the Act in the near future. Applicants should consult the DOE website, www.energy.gov, the OMB website: <http://www.whitehouse.gov/omb/> and the Recovery website: www.recovery.gov regularly to keep abreast of guidance and information as it evolves.

Recipients of funding appropriated by the Act shall comply with requirements of applicable Federal, State, and local laws, regulations, DOE policy and guidance, and instructions in this FOA, unless relief has been granted by DOE. Recipients shall flow down the requirements of applicable Federal, State and local laws, and regulations, DOE policy and guidance, and instructions in this FOA to subrecipients at any tier to the extent necessary to ensure the recipient's compliance with the requirements.

Be advised that Recovery Act funds can be used in conjunction with other funding, as necessary to complete projects, but tracking and reporting must be separate to meet the reporting requirements of the Recovery Act and related OMB Guidance. Applicants for projects funded by sources other than the Recovery Act should plan to keep separate records for Recovery Act funds and to ensure those records comply with the requirements of the Act. Funding provided through the Recovery Act that is supplemental to an existing grant is one-time funding.

Applicants should require their first tier subawardees to obtain a DUNS number (or update the existing DUNS record) and register with the Central Contractor Registration (CCR).

FOA Summary

FOA Sub-Topic	Anticipated Recovery Act Funding	Award Type	Expected Number of Awards	Required Non-Federal Cost Share	Estimated Range per Award (DOE Share)	Period of Performance
A. Upgrades at Large Projects	\$25million	Grant	1 - 5	80%	1A: up to \$25 million	2 years
B. Upgrades at Small Projects	\$7 million	Grant	1 - 5	50%	1B: up to \$7 million	2 years

B. DESCRIPTION

The Department of Energy is soliciting applications from industry members or industry-led partnerships that propose to develop, deploy, and test hydropower projects that would modernize the existing hydropower infrastructure in the U.S. and increase both the quantity and value of hydropower generation, including environmental performance. The program will focus on supporting the deployment of turbines and control technologies to increase and maximize system generation at existing non-Federal hydroelectric facilities. Financial assistance will be provided to a variety of hydropower projects that can be developed without significant modifications to dams and with a minimum of regulatory delay. Projects should be able to demonstrate improved environmental performance, such as a reduction in the rate of fish mortality at project sites or an increase in concentration of dissolved oxygen surrounding the project sites. Cost-shared projects will be selected competitively to maximize total system efficiency through equipment and control system upgrades. The potential for increased power generation per federal dollar spent will be an important criterion upon which the application will be reviewed. Regional diversity of projects and level of cost share will be important policy factors to be applied during the selection process.

Proposed projects should be able to demonstrate improved quantity and quality (value) of energy produced, through increased efficiency and enhanced environmental performance. Projects that propose to use advanced technologies that improve upon on technologies or operations in common use are preferred.

Applications are encouraged for projects that can be developed with a minimum of regulatory delay, such as upgrades of equipment and operating procedures at existing power plants to increase generation and improve system flexibility or generation profiles so as to maximize the value of energy produced. Applicants should be able to demonstrate that the proposed projects will increase generation by at least 5% at the facility or facilities in question; larger increases are preferred. Projects that require the construction of new dams or diversions will not be considered. DOE funding in this topic area can be applied towards any aspect of the design, development, construction or installation of the technology to be deployed, or any component or process necessary for its development and deployment. There is a strong preference for applications that will produce substantial new electric generation within two years from project initiation. Successful applications must provide details regarding the development and deployment timeline and should demonstrate a comprehensive knowledge of the necessary steps of the development and deployment process, as well as the design steps necessary to prepare the technology or procedure in question for full deployment.

Specific subtopics of interest are:

A. Deployment of Hydropower Upgrades at Projects >50 MW (\$25M): These include projects at larger, non-Federal facilities (greater than 50 MW capacity) with existing or advanced technologies that will enable higher energy and environmental performance and significant new generation. Preference will be given to projects that can be completed without significant modifications to dams and reservoir operation, that can avoid regulatory

delays, and that demonstrate improvements through the use of advanced hydropower technologies.

B. Deployment of Hydropower Upgrades at Projects < 50 MW (\$7M): These include projects at smaller, non-Federal facilities (less than 50 MW capacity) with existing or advanced technologies that will enable higher energy and environmental performance and significant new generation. Preference will be given to projects that can avoid regulatory delays, and those that demonstrate improvements through the use of advanced hydropower technologies.

Proprietary data resulting from the testing and evaluation will be protected from public disclosure for up to five years, with some exceptions for data of a general nature that demonstrates progress toward DOE's programmatic goals. The data rights provision in the Agreement will identify data or categories of data first produced in the performance of the award that will be made available to the public, and will also identify data that will be recognized by the parties as data protected from public disclosure for up to 5 years. DOE will have the right to use the data for Government purposes. The exact terms and conditions of the data use and public release will be set forth in the agreement according to 10 C.F.R. 600.325, Appendix A, "Rights in Data – Programs Covered by Special Data Statutes."

The Energy Policy Act of 2005 provided authorization to DOE to conduct research on all water power technologies and the Energy Independence and Security Act (EISA) of 2007 calls for DOE to establish a robust program of research, development, demonstration and commercial application activities to expand marine and hydrokinetic renewable energy production.

In order to specifically address these required elements, DOE's Office of Energy Efficiency and Renewable Energy (EERE), Wind and Hydropower Technologies Program (WHTP) is issuing this Recovery Act funding opportunity announcement for research, deployment and testing of conventional hydropower technologies.

The term "**conventional hydropower**" refers to energy from any source that uses a dam, diversionary structure, or impoundment for electric power purposes.

The Wind and Hydropower Technologies Program (WHTP) contributes directly to the Department of Energy's missions of improving national, energy, and economic security and of increasing the diversity of our Nation's energy resources. The WHTP works to maximize renewable energy utilization in the United States by leading the Nation's research and development efforts that improve wind and water energy generation technology and that address barriers to the use of renewable energy. DOE does this in coordination with a broad range of stakeholders, including other federal and state agencies, industry groups, academia, and non-governmental organizations. Success in DOE's mission will result in greater energy security and enhanced domestic economic benefit through more diverse, clean, reliable, affordable, and secure domestic electricity supplies.

The statutory authority for this program is the Energy Policy Act of 2005, Section 931(a)(2)(D).

PART II – AWARD INFORMATION

A. TYPE OF AWARD INSTRUMENT

- DOE anticipates awarding grants under this funding opportunity announcement.

B. ESTIMATED FUNDING

- Approximately \$32 million is expected to be available for new awards under this announcement.

C. MAXIMUM AND MINIMUM AWARD SIZE

- Ceiling (i.e., the maximum amount for an individual award made under this announcement):
Subtopic A: \$25.0 million
Subtopic B: \$7.0 million
- Floor (i.e., the minimum amount for an individual award made under this announcement):
none

D. EXPECTED NUMBER OF AWARDS

- Subtopic A: DOE anticipates making at least 1 award under this announcement, and no more than 5.
- Subtopic B: DOE anticipates making at least 1 award under this announcement, and no more than 5.

E. ANTICIPATED AWARD SIZE

- The anticipated award size for projects under each Program/Topic Area in this announcement is:

<u>Program/ Sub-Topic Area</u>	<u>Award Size</u>
A	\$5 - \$25 million
B	\$2 - \$7 million

F. PERIOD OF PERFORMANCE

- DOE anticipates making awards that will run for up to 2 years.

G. TYPE OF APPLICATION

- Only new applications will be accepted under this announcement (e.g., applications for renewals of existing DOE funded projects will not be considered).

PART III - ELIGIBILITY INFORMATION

A. ELIGIBLE APPLICANTS.

Eligibility is restricted to industry members or industry-led partnerships within the hydropower industry. The industry member or industry lead can be a technology developer, project developer, private utility, or a public municipal or cooperative utility, privately-funded research organization, or service company. A technology developer is defined as a company engaged in the research, development and/or deployment of a hydropower technology. A service company is a company that provides engineering, design, environmental, or construction services via contracts to hydropower developers, utilities, or power producers.

Federal and State entities will not be considered for an award under this Funding Opportunity.

B. COST SHARING

The cost share from industry-led applications must be at least 50% of the total allowable costs for small (<50 MW) demonstration projects and at least 80% for large projects (>50 MW) (i.e., the sum of the Government share 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.

C. OTHER ELIGIBILITY REQUIREMENTS

Federally Funded Research and Development Center (FFRDC) Sub-awardees

FFRDC contractors are not eligible to apply as a Prime or Sub-awardee.

D. MULTIPLE PRINCIPAL INVESTIGATORS

The assignment and use of multiple Principal Investigators (PIs) in projects awarded under this FOA is allowed. The applicant, whether a single organization or team/partnership/consortium, must however indicate in the application if the project will include multiple PIs. The decision to use multiple PIs for a project is the sole responsibility of the applicant. If multiple PIs will be designated, the application must identify in the application 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

SECTION IV – APPLICATION AND SUBMISSION INFORMATION

A. Address to Request Application Package

Apply at FedConnect

APPLICATIONS MUST BE SUBMITTED THROUGH FEDCONNECT AT <https://www.fedconnect.net/> TO BE CONSIDERED FOR AWARD. The Adobe Application Package is provided as a separate attachment to this Funding Opportunity Announcement in FedConnect. Once you have SAVED the application package and completed all the required documentation, you will submit your application via the FedConnect portal. **DO NOT use the “Save & Submit” selection in Grants.gov.**

Organizations with system-to-system capabilities with Grants.gov for their submissions may continue to use their systems, and their applications will be accepted in Grants.gov to be considered for award.

B. Letter of Intent and Pre-Application

1. Letter of Intent

Applicants are requested to submit a letter of intent by **July 22, 2009, 11:59 PM Eastern Time**. This letter should include the name of the applicant, a brief description of the project (1 paragraph maximum), the Topic Area, and a point of contact for the application. Letters of intent will be used by DOE to organize and expedite the merit review process. A letter of intent does not commit an applicant to submit an application. They should not contain any proprietary or sensitive business information. The letter of intent should be sent by E-mail to ARRA_Water2009@go.doe.gov .

2. Pre-Application

A pre-application is not required.

C. Content and Form of Application

The Adobe Application Package is provided as a separate attachment to this Funding Opportunity Announcement in FedConnect.

Organizations with system-to-system capabilities with Grants.gov for their submissions may continue to use their systems, and their applications will be accepted in Grants.gov to be considered for award.

You must complete the mandatory forms and any applicable optional forms (e.g., SF-LLL, Disclosure of Lobbying Activities) in accordance with the instructions on the forms and the additional instructions below. **Files that are attached to the forms must be in Adobe Portable Document Format (PDF), unless otherwise specified in this announcement.**

Once the forms below have been completed, save the Adobe Application Package in a single file, using up to 10 letters of the Applicant’s Organization Name as the file name (e.g.,

UCLA). If your organization is submitting more than one Application, you must identify an application number at the end of each file name (e.g., UCLA-1). If your organization is submitting more than one Application to different topic areas, you must identify an application number and the Topic Area Number at the end of each file name (e.g., UCLA-1-Topic1).

1. SF 424 - Application for Federal Assistance

Complete this form first to populate data in other forms. Complete all required fields in accordance with the pop-up instructions on the form. To activate the instructions in the form, turn on the “Help Mode” (icon with the pointer and question mark at the top of the form). The list of certifications and assurances referenced in Field 21 can be found at http://management.energy.gov/business_doe/business_forms.htm, under Certifications and Assurances.

2. Project/Performance Site Location(s)

Indicate the primary site where the work will be performed. If a portion of the project will be performed at any other site(s), identify the site location(s) in the blocks provided. **Note that the Project/Performance Site Congressional District is entered in the format of the 2 digit state code followed by a dash and a 3 digit Congressional district code; for example, VA-001.** In the form, hover over this field for additional instructions.

Use the “Next Site” button to expand the form to add additional Project/Performance Site Locations.

3. Other Attachments Form

Submit the following files with your application and attach them to the Other Attachments Form. Click on “Add Mandatory Other Attachment” to attach the Project Narrative. Click on “Add Optional Other Attachment,” to attach the other files.

a. Project Summary/Abstract File

The project summary/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. The project summary must not exceed 1 page when printed using standard 8.5” by 11” paper with 1” margins (top, bottom, left and right), single spaced, with font not smaller than 11 point. Save this information in a file named “Summary.pdf,” and click on “Add Optional Other Attachment” to attach.

b. Project Narrative File - Mandatory Other Attachment

The project narrative must not exceed 20 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 Section VIII.D for instructions on how to mark proprietary application information. Save the information in a single file named “Project.pdf,” and click on “Add Mandatory Other Attachment” to attach.

The project narrative must include:

- Project Objectives.
This section should provide a clear, concise statement of the specific objectives/aims of the proposed project.
- Merit Review Criteria Discussion.
The section should be formatted to address each of the merit review criteria and sub-criteria listed in Part V. A. below. 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.**
- Project Timetable:
This section should outline as a function of time, year by year, all the important activities or phases of the project, including any activities planned beyond the project period. Successful applicants must use this project timetable to report progress.
- 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:
The applicant, whether a single organization or team/partnership/consortium, must indicate if the project will include multiple PIs. The decision to use multiple PIs for a project is the sole 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, 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 comparable equipment, if any, already at your organization and explain why it cannot be used.
- American Recovery and Reinvestment Act of 2009, P.L. 111-5 (Recovery Act) Information:
This section should address how the project will promote and enhance the objectives of the Recovery Act, especially job creation and/or preservation, and economic recovery in an expeditious manner. The response must include quantitative data supporting the number of jobs created and/or preserved, as well as data supporting any other direct economic recovery impacts attributable to the performance and conduct of the project.

All the components of your Project Narrative (listed above) must be within the Narrative page limit specified in paragraph b. above. Documents listed below may be included as clearly marked appendices to your Narrative and will not count towards the Project Narrative page limit. Please note that some of the required documents listed below may have their own page limits to which you must adhere.

c. Resume File

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. Save all resumes in a single file named "resume.pdf" and click on "Add Optional Other Attachment" to attach. 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 not 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.

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.

Of the key personnel identified in this file, indicate the Principal Investigator(s) (PI). If multiple PIs are proposed, the applicant must provide the information indicated in Section III, Section D. as part of this file.

The resume file should not exceed 10 pages.

d. Budget File

SF 424 A Excel, Budget Information – Non-Construction Programs File

You must provide a separate budget for each year of support requested and a cumulative budget for the total project period. Use the SF 424 A Excel, “Budget Information – Non Construction Programs” form on the DOE Financial Assistance Forms Page at http://management.energy.gov/business_doe/business_forms.htm.

You 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 (see Section IV, G). Save the information in a single file named “SF424A.xls,” and click on “Add Optional Other Attachment” to attach.

e. Budget Justification File

You must justify the costs proposed in each Object Class Category/Cost Classification category (e.g., identify key persons and personnel categories and the estimated costs for each person or category; provide a list of equipment and cost of each item; identify proposed subaward/consultant work and cost of each subaward/consultant; describe purpose of proposed travel, number of travelers and number of travel days; list general categories of supplies and amount for each category; and provide any other information you wish to support your budget). Provide the name of your cognizant/oversight agency, if you have one, and the name and phone number of the individual responsible for negotiating your indirect rates. If cost share is required, you must have a letter from each third party contributing cost

share (i.e., a party other than the organization submitting the application) stating that the third party is committed to providing a specific minimum dollar amount of cost share. In the budget justification, identify the following information for each third party contributing cost share: (1) the name of the organization; (2) the proposed dollar amount to be provided; (3) the amount as a percentage of the total project cost; and (4) the proposed type of cost share – cash, services, or property. By submitting your application, you are providing assurance that you have signed letters of commitment. Successful applicants will be required to submit these signed letters of commitment.

Save the budget justification information in a single file named “Budget.pdf,” and click on “Add Optional Other Attachment” to attach.

f. American Recovery and Reinvestment Act of 2009, P.L. 111-5 (Recovery Act) Additional Budget Justification Information

Applications shall provide information which validates that all laborers and mechanics on projects funded directly by or assisted in whole or in part by and through funding appropriated by the Recovery Act are paid wages at rates not less than those prevailing on projects of a character similar in the locality as determined by Subchapter IV of Chapter 31 of Title 40, United States Code (Davis-Bacon Act). For guidance on how to comply with this provision, see <http://www.dol.gov/esa/whd/contracts/dbra.htm>.

To satisfy this requirement, please provide a written assurance that you will comply with the Davis-Bacon Act, as identified above, with the signature of the authorized representative of your organization. **Save the information in a single file named “DavisBacon.pdf,” and click on “Add Optional Other Attachment” in the Adobe Application Package to attach file.**

g. Letters of Commitment

If cost share is required, you must have a letter from each third party contributing cost share (i.e., a party other than the organization submitting the application) stating that the third party is committed to providing a specific minimum dollar amount of cost share. **All Letters of Commitment must be attached as an Appendix to the Project Narrative File.** Identify the following information for each third party contributing cost share: (1) the name of the organization; (2) the proposed dollar amount to be provided; (3) the amount as a percentage of the total project cost; and (4) the proposed type of cost share – cash, services, or property. Letters of Commitment from parties participating in the project, exclusive of vendors, who will not be contributing cost share, but will be integral to the success of the project must be included as part of this Appendix to the Narrative. Letters of Commitment will not count towards the Project Narrative page limit.

h. Subaward Budget File(s)

You must provide a separate budget (i.e., budget for each budget year and a cumulative budget) for each subawardee that is expected to perform work estimated

to be more than \$100,000 or 50 percent of the total work effort (whichever is less). Use the SF 424 A Excel for Non Construction Programs or the SF 424 C Excel for Construction Programs. These forms are found on the DOE Financial Assistance Forms Page at http://management.energy.gov/business_doe/business_forms.htm. Save each Subaward budget in a separate file. Use up to 10 letters of the subawardee's name (plus 424.xls) as the file name (e.g., ucla424.xls or energyres424.xls). Click on "Add Optional Other Attachment" to attach each file.

A budget justification for the subaward budget is also required. The budget justification must include the same justification information described in paragraph e. above.

First-Tier Subawardee American Recovery and Reinvestment Act of 2009, P.L. 111-5 (Recovery Act) Additional Budget Justification Information

First-Tier Subawardee Budget Justifications shall provide information which validates that all laborers and mechanics on projects funded directly by or assisted in whole or in part by and through funding appropriated by the Recovery Act are paid wages at rates not less than those prevailing on projects of a character similar in the locality as determined by Subchapter IV of Chapter 31 of Title 40, United States Code (Davis-Bacon Act). For guidance on how to comply with this provision, see <http://www.dol.gov/esa/whd/contracts/dbra.htm>.

To satisfy this requirement, first-tier subawardees should provide a written assurance that they will comply with the Davis-Bacon Act, as identified above, with the signature of the authorized representative of the organization. Save the information in a single file named "DavisBacon_[add sub name].pdf".

i. SF-LLL Disclosure of Lobbying Activities

Complete SF- LLL, "Disclosure Form to Report Lobbying". 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. Negative responses are required. The form is available in the optional document box on the Adobe Application Package attached to this FOA.

Summary of Required Forms/Files

Your application must include the following documents:

Name of Document	Format	File Name
SF 424 - Application for Federal Assistance	Part of Adobe Application Package	
Project / Performance Site Locations	Part of Adobe Application Package	
Other Attachments Form: Attach the following files to this form:	Part of Adobe Application Package	See Instructions
Project Summary/Abstract File	PDF	Summary.pdf
Project Narrative File, including required appendices and Letters of Commitment	PDF	Project.pdf
Resume File	PDF	Resume.pdf
SF 424A Excel – Budget Information for Non-Construction Programs File	Excel	SF424A.xls
Budget Justification File	As applicable	See Instructions
Davis Bacon File	PDF	DavisBacon.pdf
Subaward Budget File(s), if applicable	Excel for Budget, PDF for Justification	See Instructions
First Tier Subaward Davis Bacon File, if applicable	PDF	DavisBacon_[add sub name].pdf
SF-LLL Disclosure of Lobbying Activities	Part of Adobe Application Package	

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
- Environmental questionnaire (EF-1)
- Because Recovery Act funds apply to awards under this announcement, additional certification requirements will be required for state or local governments. See Special Provisions located at:
http://management.energy.gov/business_doe/business_forms.htm.

E. SUBMISSION DATES AND TIMES

Letter of Intent Due Date

- Letters of Intent are requested by **July 22, 2009, 11:59 PM Eastern Time**. Please submit to ARRA_Water2009@go.doe.gov.

Application Due Date

- Applications must be received by **August 20, 2009, 11:59 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 in accordance with the applicable Federal cost principles referenced in 10 CFR Part 600. The cost principles for commercial organization are in FAR Part 31.

Pre-award Costs. 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 part 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 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.

H. SUBMISSION AND REGISTRATION REQUIREMENTS

1. Where to Submit

APPLICATIONS MUST BE SUBMITTED THROUGH FEDCONNECT TO BE CONSIDERED FOR AWARD. Submit electronic applications through the FedConnect portal. Information regarding how to submit applications via Fed Connect can be found at https://www.fedconnect.net/FedConnect/PublicPages/FedConnect_Ready_Set_Go.pdf.

Further, it is the responsibility of the applicant, prior to the Application due date and time, to verify successful transmission.

2. Registration Process Requirements

To submit an application in response to this FOA, Applicants must be registered with FedConnect. Before you can register with FedConnect, you will need the following:

- A. Your company's DUNS (including plus-4 extension if applicable). If you don't know your company's DUNS or if your company does not have a DUNS you can search for it or request one at <http://fedgov.dnb.com/webform/displayHomePage.do>.
- B. A federal Central Contractor Registration (CCR) account. If your company is not currently registered with CCR, please register at www.ccr.gov before continuing with your FedConnect registration.
- C. Possibly, your company's CCR MPIN. If you are the first person from your company to register, FedConnect will need to create a company account. Only a person who knows your company's CCR MPIN can do this. To find out who this is in your company, go to <http://www.ccr.gov/> and click **Search CCR**. Once you've found your company, locate the Electronic Business Point of Contact.

After the initial FedConnect account is created, employees can register themselves without the MPIN. If you are not sure whether your company has an account with FedConnect, don't worry. Complete the registration form and FedConnect will let you know (PLEASE REFER TO QUICK START GUIDE FOR QUESTIONS).

Applicants who are not registered with CCR and FedConnect, should allow at least 21 days to complete these requirements. It is suggested that the process be started as soon as possible. For those Applicants already registered in CCR, the CCR registration must be updated annually at <http://www.ccr.gov/Renew.aspx>.

3. Instructions for Completion of Adobe Application Package

The Adobe Application Package was intended to be utilized in Grants.gov; however, the DOE is currently utilizing it with FedConnect. Please disregard any instructions within the Adobe Application Package regarding use with Grants.gov; specifically, **DO NOT use the "Save & Submit" button in the Adobe Application Package, since that button is only used when submitting an application in Grants.gov.**

- a. Copy the Adobe Application Package to your desktop;
- b. Open the Adobe Application Package, and first complete the SF-424 Application, Project/Performance Site Location(s) form, and SF-LLL form (if applicable) which are all part of the Adobe Application Package. To start this process, simply click on the form's

name to select the item and then click on the => button. This will move the document to the appropriate "Documents for Submission" box and the form will be automatically added to your application package. Open the forms by selecting the form name and clicking on the "Open Form" button, then complete the required data fields.

- c. Identify the remaining forms required to be completed, as identified in Part IV of the Announcement. Prepare and save these forms to your desktop (e.g., project narrative, resume file, budget file). Once finalized and files are named as indicated in Part IV of the Announcement, upload (attach) these files individually within the Adobe Application Package by clicking on "Add Mandatory Other Attachment" to attach the Project Narrative and clicking on "Add Optional Other Attachment" to attach the remaining files;
- d. Once all completed files have been attached within the Adobe Application Package, save the Adobe Application Package to your desktop, and submit to FedConnect, following the steps outlined in the FedConnect Quick Start Guide at:
https://www.fedconnect.net/Fedconnect/PublicPages/FedConnect_Ready_Set_Go.pdf.
Note that Applications may be submitted to multiple Topic Areas; however, SEPARATE applications must be submitted for each Topic Area. If submitting to multiple Topic Areas, save the Adobe Application Package in a single file, using up to 10 letters of the Applicant's Organization Name as the file name (e.g., UCLA). If your organization is submitting more than one Application to different Topic Areas, you must identify an application number and the Topic Area Number at the end of each file name (e.g., UCLA-1-Topic1).

Note that it is the responsibility of the applicant, prior to the Application due date and time, to verify successful transmission in FedConnect.

Part V - APPLICATION REVIEW INFORMATION

A. REVIEW CRITERIA

1. Initial Review Criteria: Application Award Eligibility

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 announcement has been submitted; (3) all mandatory requirements are satisfied; and (4) the proposed project is responsive to the objectives of the funding opportunity announcement. If an application fails to meet these requirements, it may be deemed non-responsive and eliminated from full Merit Review.

2. Merit Review Criteria

Applications will be evaluated against the merit review criteria shown below.

Criterion 1: Technical Merit and Innovation

Weight: [30%]

- Predicted generation increase and improvement in environmental performance from the technology to be deployed, relative to amount of Federal funds requested.
- The likelihood of successful early deployment of the technology or upgrade, based on the application's identification of the technical and non-technical barriers specific to the project in question and on a comprehensive plan to address and overcome the barriers identified.
- Likelihood that the project will help modernize the existing hydropower infrastructure in the U.S by increasing generation and reducing the environmental impacts of hydroelectric energy and will produce new jobs in the U.S.

Criterion 2: Technical Approach and Project Research Plan

Weight: [30%]

- Likelihood that the technical approach and the project research plan will achieve FOA objectives and are aligned with the objectives of the American Recovery and Reinvestment Act.
- Degree to which proposed plan is clearly stated, organized, achievable, and technically feasible, including the adequacy and completeness of proposed tasks and the resources identified to successfully address all elements of the technical plan.
- The degree to which the application demonstrates a full understanding of the potential environmental, socio-economic, and recreational impacts of the technology to be deployed, and an effective and feasible plan to minimize, avoid, or mitigate such impacts, including getting all necessary federal and state leases, licenses and permits in a time-frame consistent with the proposed project schedule.

Criterion 3: Qualifications and Resources

Weight: [25%]

- Capabilities, experience, qualifications, and credentials of team members, including the quality of applicant’s team experience and record of success in technical innovation and performance
- Availability of required equipment, field, laboratory and construction/fabrication facilities, analytic support, and other necessary resources for completing the proposed project, and a plan to acquire such equipment; particularly with respect to equipment that must be installed before operations can commence
- Support of each team member’s organization for participation and/or cost share, as demonstrated in letters of commitment or other documentation, plus letters of support from other stakeholders including state/local entities, industry groups, and other organizations.

Criterion 4: Deployment Plan

Weight: [15%]

- Demonstrated level, diversity, and comprehensiveness of plan to disseminate testing results to others in the water power industry (may include conferences, papers, workshops, and web-based information sharing) in a timely manner (i.e. publications, technical presentations, and patent filings).
- Degree to which technology, site and permitting specifications will allow project to be implemented with a minimum of regulatory delay.

3. Other Selection Factors

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

1. Regional diversity of projects.
2. Technological diversity of projects.
3. Cost Share above the minimum required.
4. Significance of environmental considerations.
5. Preference for Applications that promote and enhance the objectives of the American Recovery and Reinvestment Act of 2009, P.L. 111-5, especially job creation and retention, especially those with small and local businesses, and/or preservation and economic recovery in an expeditious manner.

B. REVIEW AND SELECTION PROCESS

3. 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 and Unsolicited Proposals.” This guide is at <http://www.management.energy.gov/documents/meritrev.pdf>.

It is very important that those documents, Project Abstract and Project Narrative file, that will be used during the Merit Review Process do not contain any Personally Identifiable Information as described in Appendix B.

4. Selection

Selection Official Consideration

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

5. Discussions and Award

Government Discussions with Applicant

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 part 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 11/24/09 and anticipates making awards by 12/30/2009.

Part VI - AWARD ADMINISTRATION INFORMATION

A. AWARD NOTICES

1. Notice of Selection

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

Organizations whose applications have not been selected 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, 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; 7. Federal Assistance Reporting Checklist, which identifies the reporting requirements; and 8. Statement of Project Objectives.

B. ADMINISTRATIVE AND NATIONAL POLICY REQUIREMENTS

1. Administrative Requirements

The administrative requirements for DOE grants and cooperative agreements are contained in 10 CFR part 600 (See: <http://ecfr.gpoaccess.gov>), except for grants made to Federal Demonstration Partnership (FDP) institutions. The FDP terms and conditions and DOE FDP agency specific terms and conditions are located on the National Science Foundation web site at http://www.nsf.gov/awards/managing/fed_dem_part.jsp.

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://www.management.energy.gov/documents/specialtermsandconditions0808.pdf>

The National Policy Assurances To Be Incorporated As Award Terms are located at http://management.energy.gov/business_doe/1374.htm.

3. Intellectual Property Provisions

The standard DOE financial assistance intellectual property provisions applicable to the various types of recipients are located at http://www.gc.doe.gov/financial_assistance_awards.htm.

4. Recovery Act Provisions

- Special Provisions relating to work funded under American Recovery and Reinvestment Act of 2009, Pub. L. 111-5 shall apply. These provisions can be found at http://management.energy.gov/policy_guidance/1672.htm.

- The following provisions from OMB's regulations for implementing the Recovery Act at 2 CFR Part 176 are incorporated in this FOA:

Wage Rate Requirements under Section 1606 of the American Recovery and Reinvestment Act of 2009

a) Section 1606 of the Recovery Act requires that all laborers and mechanics employed by contractors and subcontractors on projects funded directly by or assisted in whole or in part by and through the Federal Government pursuant to the Recovery Act shall be paid wages at rates not less than those prevailing on projects of a character similar in the locality as determined by the Secretary of Labor in accordance with subchapter IV of chapter 31 of title 40, United States Code.

Pursuant to Reorganization Plan No. 14 and the Copeland Act, 40 U.S.C. 3145, the Department of Labor has issued regulations at 29 CFR Parts 1, 3, and 5 to implement the Davis-Bacon and related Acts. Regulations in 29 CFR 5.5 instruct agencies

concerning application of the standard Davis-Bacon contract clauses set forth in that section. Federal agencies providing grants, cooperative agreements, and loans under the Recovery Act shall ensure that the standard Davis-Bacon contract clauses found in 29 CFR 5.5(a) are incorporated in any resultant covered contracts that are in excess of \$2,000 for construction, alteration or repair (including painting and decorating).

(b) For additional guidance on the wage rate requirements of section 1606, contact your awarding agency. Recipients of grants, cooperative agreements and loans should direct their initial inquiries concerning the application of Davis-Bacon requirements to a particular federally assisted project to the Federal agency funding the project. The Secretary of Labor retains final coverage authority under Reorganization Plan Number 14.

(End of Notice)

Buy American Requirements under Section 1605 of the American Recovery and Reinvestment Act of 2009

Depending upon the applicability of relevant international agreements, one of the following two notices applies:

NOTICE OF REQUIRED USE OF AMERICAN IRON, STEEL, AND MANUFACTURED GOODS—SECTION 1605 OF THE AMERICAN RECOVERY AND REINVESTMENT ACT OF 2009

(a) *Definitions.* “Manufactured good,” “public building and public work,” and “steel,” as used in this notice, are defined in the 2 CFR 176.140.

(b) *Requests for determinations of inapplicability.* A prospective applicant requesting a determination regarding the inapplicability of section 1605 of the American Recovery and Reinvestment Act of 2009 (Pub. L. 111-5)(Recovery Act) should submit the request to the award official in time to allow a determination before submission of applications or proposals. The prospective applicant shall include the information and applicable supporting data required by paragraphs (c) and (d) of the award term and condition at 2 CFR 176.140 in the request. If an applicant has not requested a determination regarding the inapplicability of 1605 of the Recovery Act before submitting its application or proposal, or has not received a response to a previous request, the applicant shall include the information and supporting data in the application or proposal.

(c) *Evaluation of project proposals.*

If the Federal government determines that an exception based on unreasonable cost of domestic iron, steel, and/or manufactured goods applies, the Federal Government will evaluate a project requesting exception to the requirements of section 1605 of the Recovery Act by adding to the estimated total cost of the project 25 percent of the project cost, if foreign iron, steel, or manufactured goods are used in the project based on unreasonable cost of comparable manufactured domestic iron, steel, and/or manufactured goods.

(d) *Alternate project proposals.*

(1) When a project proposal includes foreign iron, steel, and/or manufactured goods not listed by the Federal Government at paragraph (b)(2) of the award term and condition at 2 CFR 176.140, the applicant also may submit an alternate proposal based on use of equivalent domestic iron, steel, and/or manufactured goods.

(2) If an alternate proposal is submitted, the applicant shall submit a separate cost comparison table prepared in accordance with paragraphs (c) and (d) of the award term and condition at 2 CFR 176.140 for the proposal that is based on the use of any foreign iron, steel, and/or manufactured goods for which the Federal Government has not yet determined an exception applies.

(3) If the Federal government determines that a particular exception requested in accordance with paragraph (b) of the award term and condition at 2 CFR 176.140 does not apply, the Federal Government will evaluate only those proposals based on use of the equivalent domestic iron, steel, and/or manufactured goods, and the applicant shall be required to furnish such domestic items.

(End of notice)

NOTICE OF REQUIRED USE OF AMERICAN IRON, STEEL, AND MANUFACTURED
GOODS (COVERED UNDER INTERNATIONAL AGREEMENTS)—SECTION 1605 OF THE
AMERICAN RECOVERY AND REINVESTMENT ACT OF 2009

(a) *Definitions.* “Designated country iron, steel, and/or manufactured goods,” “foreign iron, steel, and/or manufactured good,” “manufactured good,” “public building and public work,” and “steel,” as used in this provision, are defined in 2 CFR 176.160(a).

(b) *Requests for determinations of inapplicability.* A prospective applicant requesting a determination regarding the inapplicability of section 1605 of the American Recovery and Reinvestment Act of 2009 (Pub. L. 111-5)(Recovery Act) should submit the request to the award official in time to allow a determination before submission of applications or proposals. The prospective applicant shall include the information and applicable supporting data required by paragraphs (c) and (d) of the award term and condition at 2 CFR 176.160 in the request. If an applicant has not requested a determination regarding the inapplicability of 1605 of the Recovery Act before submitting its application or proposal, or has not received a response to a previous request, the applicant shall include the information and supporting data in the application or proposal.

(c) *Evaluation of project proposals.*

If the Federal government determines that an exception based on unreasonable cost of domestic iron, steel, and/or manufactured goods applies, the Federal Government will evaluate a project requesting exception to the requirements of section 1605 of the Recovery Act by adding to the estimated total cost of the project 25 percent of the project cost if foreign iron, steel, or manufactured goods are used based on unreasonable cost of comparable domestic iron, steel, or manufactured goods.

(d) *Alternate project proposals.*

(1) When a project proposal includes foreign iron, steel, and/or manufactured goods, other than designated country iron, steel, and/or manufactured goods, that are not listed by the Federal Government in this Buy American notice in the request for applications or proposals, the applicant may submit an alternate proposal based on use of equivalent domestic or designated country iron, steel, and/or manufactured goods.

(2) If an alternate proposal is submitted, the applicant shall submit a separate cost comparison table prepared in accordance with paragraphs (c) and (d) of the award term and condition at 2 CFR 176.160 for the proposal that is based on the use of any foreign iron, steel, and/or manufactured goods for which the Federal Government has not yet determined an exception applies.

(3) If the Federal government determines that a particular exception requested in accordance with paragraph (b) of the award term and condition at 2 CFR 176.160 does not apply, the Federal Government will evaluate only those proposals based on use of the equivalent domestic or designated country iron, steel, and/or manufactured goods, and the applicant shall be required to furnish such domestic or designated country items.

(End of notice)

- The following provisions from OMB's regulations for implementing the Recovery Act at 2 CFR Part 176 will be incorporated in awards resulting from this FOA:

Reporting and Registration Requirements under Section 1512 of the American Recovery and Reinvestment Act of 2009, Public Law 111-5

(a) This award requires the recipient to complete projects or activities which are funded under the American Recovery and Reinvestment Act of 2009 ("Recovery Act") and to report on use of Recovery Act funds provided through this award. Information from these reports will be made available to the public.

(b) The reports are due no later than ten calendar days after each calendar quarter in which the recipient receives the assistance award funded in whole or in part by the Recovery Act.

(c) Recipients and their first-tier recipients must maintain current registrations in the Central Contractor Registration (www.ccr.gov) at all times during which they have active federal awards funded with Recovery Act funds. A Dun and Bradstreet Data Universal Numbering System (DUNS) Number (www.dnb.com) is one of the requirements for registration in the Central Contractor Registration.

(d) The recipient shall report the information described in section 1512(c) using the reporting instructions and data elements that will be provided online at www.FederalReporting.gov and ensure that any information that is pre-filled is corrected or updated as needed.

(End of award term)

Single Audit Information for Recipients of Recovery Act Funds

Recovery Act Transactions listed in Schedule of Expenditures of Federal Awards and Recipient Responsibilities for Informing Sub-recipients

- (a) To maximize the transparency and accountability of funds authorized under the American Recovery and Reinvestment Act of 2009 (Public Law 111-5)(Recovery Act) as required by Congress and in accordance with 2 CFR 215, subpart __. 21 “Uniform Administrative Requirements for Grants and Agreements” and OMB A-102 Common Rules provisions, recipients agree to maintain records that identify adequately the source and application of Recovery Act funds.
- (b) For recipients covered by the Single Audit Act Amendments of 1996 and OMB Circular A-133, “Audits of States, Local Governments, and Non-Profit Organizations,” recipients agree to separately identify the expenditures for Federal awards under the Recovery Act on the Schedule of Expenditures of Federal Awards (SEFA) and the Data Collection Form (SF-SAC) required by OMB Circular A-133. This shall be accomplished by identifying expenditures for Federal awards made under Recovery Act separately on the SEFA, and as separate rows under Item 9 of Part III on the SF-SAC by CFDA number, and inclusion of the prefix “ARRA-” in identifying the name of the Federal program on the SEFA and as the first characters in Item 9d of Part III on the SF-SAC.
- (c) Recipients agree to separately identify to each sub-recipient, and document at the time of sub-award and at the time of disbursement of funds, the Federal award number, CFDA number, and amount of Recovery Act funds. When a recipient awards Recovery Act funds for an existing program, the information furnished to sub-recipients shall distinguish the sub-awards of incremental Recovery Act funds from regular sub-awards under the existing program.
- (d) Recipients agree to require their sub-recipients to include on their SEFA information to specifically identify Recovery Act funding similar to the requirements for the recipient SEFA described above. This information is needed to allow the recipient to properly monitor sub-recipient expenditure of ARRA funds as well as oversight by the Federal awarding agencies, Offices of Inspector General and the Government Accountability Office.

(End of award term)

C. REPORTING

DOE Reporting requirements are identified on the Federal Assistance Reporting Checklist, DOE F 4600.2, attached to the award agreement. The proposed Checklist for this program can be found at

https://www.eere-pmc.energy.gov/procurenet/FinancialAssistance/Forms/DOE_Forms/DOEF4600_2.doc

Awards under this FOA will be funded with funds appropriated by the American Recovery and Reinvestment Act of 2009, Pub. L. 111-5, (Recovery Act or Act). Be advised that Recovery Act reporting requirements apply to projects funded by the Act. The reporting requirements will be specified in the DOE F 4600.2 or other related Recovery Act guidance as they become available. The Office of Management and Budget (OMB) has issued Implementing Guidance for the Recovery Act. See M-09-10, Initial Implementing Guidance for the American Recovery and Reinvestment Act of 2009 and M-09-15, Updated Implementing Guidance for the American Recovery and Reinvestment Act of 2009.

The OMB Guidance can be found at:

http://www.whitehouse.gov/omb/assets/memoranda_fy2009/m09-15.pdf

http://www.whitehouse.gov/omb/assets/memoranda_fy2009/m09-10.pdf

PART VII - QUESTIONS/AGENCY CONTACTS

A. QUESTIONS

Questions regarding the content of the announcement must be submitted through the FedConnect portal. You must register with FedConnect to respond as an interested party to submit questions, and to view responses to questions. It is recommended that you register as soon after release of the FOA as possible to have the benefit of all responses. More information is available at

https://www.fedconnect.net/FedConnect/PublicPages/FedConnect_Ready_Set_Go.pdf. 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.

Questions pertaining to the **submission** of applications through FedConnect should be directed by e-mail to support@FedConnect.net or by phone to FedConnect Support at 1-800-899-6665.

PART VIII - OTHER INFORMATION

A. MODIFICATIONS

Notices of any modifications to this announcement will be posted on Grants.gov and the FedConnect portal. You can receive an email when a modification or an announcement message is posted by registering with FedConnect as an interested party for this FOA. It is recommended that you register as soon after release of the FOA as possible to ensure you receive timely notice of any modifications 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.

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.

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 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.

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.

I. NOTICE OF RIGHT TO CONDUCT A REVIEW OF FINANCIAL CAPABILITY

DOE reserves the right to conduct an independent third party review of financial capability for applicants that are selected for negotiation of award (including personal credit information of principal(s) of a small business if there is insufficient information to determine financial capability of the organization).

J. NOTICE OF POTENTIAL DISCLOSURE UNDER FREEDOM OF INFORMATION ACT

Applicants should be advised that identifying information regarding all applicants, including applicant names and/or points of contact, may be subject to public disclosure under the Freedom of Information Act, whether or not such applicants are selected for negotiation of award.

REFERENCE MATERIAL

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 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.

“Central Contractor Registration (CCR)” is the primary database which collects, validates, stores and disseminates data in support of agency missions. Funding Opportunity

Announcements which require application submission through FedConnect or Grants.gov require that the organization first be registered in the CCR at <http://www.grants.gov/CCRRegister>.

“Credential Provider” is an organization that validates the electronic identity of an individual through electronic credentials, PINS, and passwords for Grants.gov. Funding Opportunity Announcements which require application submission through Grants.gov require that the individual applying on behalf of an organization first be registered with the Credential Provider at http://www07.grants.gov/applicants/register_credential_provider.jsp

“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 submit grant applications on behalf of their organization through Grants.gov.

“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 questions and Applications / Responses to the government directly through this site. <http://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.

“Grant” 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 no Substantial Involvement is anticipated between DOE and the Applicant during the performance of the contemplated activity.

“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>

“Indian Tribe” means any Indian tribe, band, nation, or other organized group or community, including Alaska Native village or regional or village corporations, as defined in or established pursuant to the Alaska Native Claims Settlement Act (85 Stat. 688)[43 U.S.C. § 1601 et seq.], which are recognized as eligible for the special programs and services provided by the United States to Indians because of their status as Indians.

“Industry Interactive Procurement System (IIPS)” is DOE’s Internet-based procurement system which allows access to DOE’s business opportunities database, allows user registration and submittal of Applications: <http://e-center.doe.gov/>.

"Key Personnel" means the individuals who will have significant roles in planning and implementing the proposed Project on the part of the Applicant and Participants, including FFRDCs.

“Marketing Partner Identification Number (MPIN)” is a very important password designated by your organization when registering in CCR. The E-Business Point of Contact will need the MPIN to login to Grants.gov to assign privileges to the individual(s) authorized to submit applications on behalf of your organization. The MPIN must have 9 digits containing at least one alpha character (must be in capital letters) and one number (no spaces or special characters permitted).

"Participant" for purposes of this Funding Opportunity Announcement only, means any entity, except the Applicant substantially involved in a Consortium, 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, State plan, 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 in IIPS meaning 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; providing technical assistance or guidance which the Applicant is to follow; and the right to intervene in the conduct or performance of the Project. Such involvement will be negotiated with each Applicant prior to signing any agreement.

"Technology Investment Agreement (TIA)" is a type of assistance instrument used to support or stimulate research projects involving for-profit firms, especially commercial firms that do business primarily in the commercial marketplace. TIAs are different from grants and cooperative agreements in that the award terms may vary from the Government-wide standard terms (See DOE TIA regulations at 10 CFR Part 603). The primary purposes for including a TIA in the type of available award instruments are to encourage non-traditional Government contractors to participate in an R&D program and to facilitate new relationships and business practices. A TIA can be particularly useful for awards to consortia (See 10 CFR 603.225(b) and 603.515, Qualification of a consortium).

"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: Project Abstract, Project Narrative, Biographical Sketches, Budget or Budget Justification. 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.

- a. **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.
- b. **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 Regulations:

<http://ecfr.gpoaccess.gov/cgi/t/text/text-idx?c=ecfr&sid=98a996164312e8dcf0df9c22912852b0&rgn=div5&view=text&node=10:4.0.1.3.9&idno=10>

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 OMB Circular No. A-21 -- Cost Principles for Educational Institutions

(ii) *Other nonprofit organizations.* Allowability is determined in accordance with OMB Circular A-122, Cost Principles for Non-Profit Organizations

(iii) *Hospitals.* Allowability is determined in accordance with the provisions of 45 CFR Part 74, Appendix E, 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 OMB Circular No. A-87, Cost Principles for State, Local, and Indian Tribal Governments

(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.