

**FINANCIAL ASSISTANCE
FUNDING OPPORTUNITY ANNOUNCEMENT**



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

Recovery Act - Solar Market Transformation

Topic 1: Solar America Cities Special Projects

Topic 2: Solar Workforce Development

Funding Opportunity Announcement Number: DE-FOA-0000078

Announcement Type: 002

CFDA Number: 81.117

Issue Date: 05/28/2009

Application Due Date: 07/30/2009, 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.



Department of Energy

Golden Field Office

1617 Cole Boulevard

Golden, Colorado 80401-3393

DE-FOA-0000085

Modification No. 002

DATE: July 21, 2009

FROM: Nancy Kiyota, Contracting Officer

TO: All Prospective Applicants

SUBJECT: Modification No. 002 to Announcement DE-FOA-0000078,
"Recovery Act: Solar Market Transformation"

I. The purpose of this amendment is to:

A) Add the following Recovery Act Provisions in Section VI. B. 5.

- a. Wage Rate Requirements under Section 1606 of the American Recovery and Reinvestment Act of 2009
- b. Buy American Requirements under Section 1605 of the American Recovery and Reinvestment Act of 2009
- c. Reporting and Registration Requirements under Section 1512 of the American Recovery and Reinvestment Act of 2009, Public Law 111-5
- d. Recovery Act Transactions listed in Schedule of Expenditures of Federal Awards and Recipient Responsibilities for Informing Sub-recipients

II. All other parts of the Funding Opportunity Announcement (FOA) remain unchanged.

III. The areas which have changed are highlighted within the FOA.



Department of Energy

Golden Field Office
1617 Cole Boulevard
Golden, Colorado 80401-3393

DE-FOA-0000085
Modification No. 001

DATE: June 4, 2009
FROM: Nancy Kiyota, Contracting Officer
TO: All Prospective Applicants

SUBJECT: Modification No. 001 to Announcement DE-FOA-0000078,
"Recovery Act: Solar Market Transformation"

The purpose of this amendment is to revise this Funding Opportunity Announcement (FOA) in its entirety. Please read this revised Announcement thoroughly.

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.

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.

2. FedConnect Quick Start Guide:

Use this guide to assist you with FedConnect:

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

3. 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 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/> 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, don't worry. Complete the registration form and FedConnect will let you know. (PLEASE REFER TO THE FEDCONNECT 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>.

4. 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 information 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.

- 1) Copy the Adobe Application Package to your desktop;
- 2) 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.
- 3) 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;
- 4) 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., ABC corp). 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., ABC corp-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.

5. 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.

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PART I – FUNDING OPPORTUNITY DESCRIPTION

A. American Recovery and Reinvestment Act of 2009 (“Recovery Act”)

Projects under this Funding Opportunity Announcement (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, including a goal of using at least 50 percent of the funds made available by it for activities that can be initiated not later than June 17, 2009. Due to the schedule of this FOA, the preceding date will not affect Applications submitted under this FOA. Accordingly, special consideration will be given to projects that promote and enhance the objectives of the Act, especially job creation and 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 exact terms and conditions will be provided when available. The currently available Special Provisions are located at:

http://management.energy.gov/business_doe/business_forms.htm.

The Office of Management and Budget (OMB) has issued Initial Implementing Guidance for the Recovery Act. See M-09-10, Initial 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, 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 begin planning activities for their first tier subawardees, including obtaining a DUNS number (or updating the existing DUNS record), and registering with the Central Contractor Registration (CCR). The extent to which subawardees will be required to register in CCR will be determined by OMB at a later date.

B. Background

The mission of the Department of Energy's (DOE) Solar Energy Technology Program (SETP) is to accelerate the wide-spread adoption of solar electric technologies across the United States. SETP's goal is for solar technologies to become cost-competitive across U.S. markets by 2015. SETP also works closely with DOE's Building Technologies Program (BTP) in developing solar heating and cooling (SHC) technologies to meet BTP's goal of zero energy buildings.

SETP is working to reduce market barriers and promote market expansion of solar energy technologies through non-R&D activities, including: 1) activities that provide technical, regulatory, institutional, financial and educational solutions to market transformation barriers; and 2) efforts that accelerate demand for new solar technologies.

Below are several defining aspects of SETP efforts:

- DOE is seeking to identify and minimize or remove barriers to solar technology commercialization as quickly and efficiently as possible.
- Given the proximity of its 2015 goal, DOE is seeking to make large and significant changes in the marketplace through its activities.
- Emphasis will be on projects and activities with the greatest potential to assist the DOE in reaching its SETP cost-competitiveness goal by 2015.

C. Funding Opportunity Goals and Objectives

The objectives of this Funding Opportunity Announcement (FOA) are to: 1) address current market barriers to the adoption of solar technologies; and 2) establish a nationally coordinated effort to spread solar installation training to the local level.

- Topic 1 – Solar America Cities Special Projects

As the load centers of energy use across the nation, cities present unique challenges and opportunities for solar market transformation. Cities can be champions of progressive energy efficiency and renewable energy efforts. DOE wishes to support their bold and innovative approaches to accelerate solar technology adoption at the local level.

Through Solar America Cities funding opportunities in 2007 and 2008, DOE has current partnerships with 25 Solar America Cities committed to developing a comprehensive, systemic, city-wide approach to solar technology that facilitates mainstream adoption and provides a model for other cities. With the support of the Solar America Cities financial and technical assistance, many cities have developed innovative programs and concepts with potential to significantly boost the solar market.

Under this Topic, DOE is looking for the Solar America Cities to scale-up innovative programs and concepts so they can be tested in a broader marketplace; thereby, increasing the likelihood of replication in other U.S. cities. Such an approach recognizes the city's role as an important end user of electricity, as a key intermediary to other end users within their jurisdiction, and as a regulatory entity. DOE expects award recipient cities to develop projects that support their city-wide solar implementation plans.

Through this Topic, DOE is seeking to advance the progress toward a sustainable solar infrastructure started with the earlier Solar America City efforts and partnerships. In contrast to the city-wide programs supported previously, this Topic is intended to support discrete focused projects. Projects must tackle specific barriers important to urban solar and must be replicable at some level among fellow Solar America Cities, other cities and local governments, states, and internationally.

Applicants may propose new projects or new partners that were not part of their original scope of work under the Solar America Cities award. New partners may include other Solar America Cities or non-Solar America Cities; however, only one city can lead the project (apply as the prime Applicant; see restrictions below). Applicants must clearly detail their project plan and outline the roles and responsibilities of all participants.

Please note that no Federal Funds awarded under this Funding Opportunity can be used as financial incentive or rebate payments.

Projects proposed by Solar America Cities should:

- promote the city's overall plan for integrating solar energy into the city's energy and master plan;
- target key barriers that are preventing Applicants from reaching their solar energy goals and which are barriers shared by other local governments nationally;
- be replicable by other local governments, and;
- complement activities addressed under the existing Solar America Cities award.

Restricted Eligibility: In accordance with 10 CFR 600.6(b) eligibility for award under Topic 1 is restricted to the existing 25 Solar America Cities awarded under the FY07 Solar City Strategic Partnerships Funding Opportunity Announcement DE-PS36-07GO97007 and the FY08 Solar City Strategic Partnerships Funding Opportunity Announcement DE-PS36-08GO98003.

These cities are:

Ann Arbor, Michigan; Austin, Texas; Berkeley, California; Boston, Massachusetts; Denver, Colorado; Houston, Texas; Knoxville, Tennessee; Madison, Wisconsin; Milwaukee, Wisconsin; Minneapolis - St. Paul, Minnesota; New Orleans, Louisiana; New York, New York; Orlando, Florida; Philadelphia, Pennsylvania; Pittsburgh, Pennsylvania; Portland, Oregon; Sacramento, California; Salt Lake City, Utah; San Antonio, Texas; San Diego, California; San Francisco, California; San Jose, California; Santa Rosa, California; Seattle, Washington; and Tucson, Arizona.

- Topic 2 – Solar Installer Instructor Training

The U.S. solar industry is experiencing rapid increases in demand for solar products and a subsequent increase in demand for a downstream workforce to install solar systems. According to a recent study of job growth in California’s solar industry, which is the largest solar market in the U.S., the industry expects to add 5,000 new jobs in five occupations within the solar installation workforce (solar thermal installers, solar photovoltaic installers, sales representatives, solar engineers, and solar installation foremen) over the 12-month period in 2008 – 2009¹. However, 77% of employers surveyed cited having difficulty in recruiting entry-level employees with appropriate training and education. As other state markets are growing, states and localities across the U.S. are facing similar training challenges in meeting their burgeoning local solar industry. This lack of qualified installation personnel is a significant barrier to market expansion and widespread adoption of solar PV and solar heating and cooling (SHC) technologies and for ensuring the safe and high-quality installation of these systems.

SETP defines the PV and SHC installation workforce as the set of workers involved in the process of selling, designing, engineering, installing, commissioning, and repairing PV or SHC systems. The workers are in non-manufacturing occupations only, including public employees such as code officials.

Educational institutions face many challenges in developing programs to meet the needs of the growing solar industry. Increasingly, educational institutions are having difficulty finding qualified instructors to develop and teach courses and meet the student demand. While some curricula has been developed, there is not widespread use of any model curricula, and instructors are often forced to develop their courses and programs from scratch, sometimes without sufficient expertise in PV or SHC technologies. There is little opportunity to share best practices, and educational providers across the U.S. are grappling with similar training questions. Since the solar industry is relatively young, growing rapidly, and dependent on subsidies, labor market information and workforce development needs can be difficult to quantify, rendering planning difficult for workforce systems. Community college leaders and industry executives report that many community colleges are unable to meet the demand for training in their region because of critical capacity constraints such as insufficient resources to support training facilities and equipment, curriculum, faculty, and/or other elements necessary to provide the volume or quality of training industry requires. There is a clear need for a nationally coordinated effort within the U.S. educational infrastructure to develop model curricula and best practices and to spread solar installation training to the local level.

This Topic intends to address the workforce development needs of the solar industry, both for grid-tied PV systems in residential, commercial, and utility markets, and for SHC systems. Funded activities are not intended to support off-grid PV applications. This activity will be carried out in close collaboration with the U.S. Department of Labor and the U.S. Department of Education.

The overall goal of this Topic is to promote an increase in the quality and availability of

¹ Center of Excellence, San Francisco Bay. Environmental Scar, Solar Industry, San Francisco Bay & Greater Silicon Valley Regions; April 2008.

instruction relating to the installation of PV and SHC systems. This Topic will provide funding to two Categories of Applicants.

Description of Applicant Categories

Category 1: Regional Resource & Training Providers

The primary task of this group is to provide training and professional development to instructors who are creating or improving existing PV or SHC installation training courses. The Regional Resource & Training Providers will also be active members of the National Consortium for Solar Installer Instructor Training (see below). ***Category 1 Awardees will be entities that currently offer high quality training in the solar installation process and possess both excellent instructors and training facilities.*** Applicants may choose to apply as a PV-only, SHC-only, or combined PV & SHC Resource & Training Provider, as follows:

- Category 1A – PV only
- Category 1B – SHC only
- Category 1C – PV & SHC

Category 2: Administration of the National Consortium for Solar Installer Instructor Training

The primary tasks of this group are to create and manage the operations of the National Consortium for Solar Installer Instructor Training (see below) and to coordinate activities between itself, the National Consortium and the Regional Resource & Training Providers.

Working Relationship between Applicant Categories

With the awardees in Categories 1 and 2, DOE seeks to bring together a network of experienced trainers of the solar installation workforce to develop model curricula and provide hands-on and other professional development opportunities for educational institutions wishing to start training programs for the solar installation workforce, thus becoming a resource for states and localities in developing their solar workforce.

The awardees of both Categories 1 and 2 will work together to create a **National Consortium for Solar Installer Instructor Training (National Consortium)**, which is a collaboration of solar training experts and stakeholders intent on improving instructional practices in solar installation process throughout the U.S. The Category 1 awardees will provide technical expertise and Category 2 awardee will coordinate the effort.

See Appendix D for a graphical representation of the working relationship between Categories, as well as the relationship between this DOE activity and activities funded by other organizations including the U.S. Department of Labor.

Goals and Objectives for Categories 1 and 2

With Categories 1 and 2, DOE intends to fund several “training-the-trainer” Providers (Category 1) and Administration (Category 2) of a national consortium of educators, solar experts, and other stakeholders invested in improving solar installer training. Through the consortium, DOE

seeks to create a highly participatory network of national and regional experts involved in improving the education, training and professional development of solar instructors and, by extension, the downstream solar installation workforce. Furthermore, through collective feedback and collaboration, the awardees of Categories 1 and 2 will engage in the outreach activities necessary to engage various stakeholders at the local, regional, and national levels. In developing model curricula and offering professional development opportunities, awardees from Categories 1 and 2 should align with appropriate national standards organizations, such as the Institute for Sustainable Power Quality and the North American Board of Certified Energy Practitioners.

The objectives for Categories 1 and 2 are as follows:

Objective 1: Provide a forum and means for national and regional experts in solar training to share, develop, and disseminate model curricula, lessons learned, and best practices.

Objective 2: Increase the capacity of educational providers, such as community colleges, vocational technical high schools, and training programs to train workers in careers dealing with the PV and SHC installation process.

Objective 3: Facilitate and support the inclusion of PV and SHC theory and application into the national educational and training infrastructure

Objective 4: Provide national and regional forums regarding PV and SHC installer instructor training.

**It is expected that, upon completion of the five-year DOE-funded effort, further DOE investment will not be required.

**None of the Categories will be responsible for the certification of installers or trainers. Training offered by the Regional Resource & Training Providers, however, should be in accordance with national certifications and accreditations such as the Institute for Sustainable Power Quality.

Description of Applicant Categories and Responsibilities

Category 1: Regional Resource & Training Providers

The primary task of this group is to provide the training and professional development to instructors who are creating or improving existing training courses for their local PV or SHC installation workforce. The Resource & Training Providers will be active members of the National Consortium. Applicants can apply as PV only, SHC only, or combined PV and SHC Resource & Training Providers.

The intent of this Category is to improve and scale up training efforts appropriately, not to create a training capability that was not already resident in the institution.

Resource & Training Providers must have a commitment to offering the highest quality training

possible, to working cooperatively with and sharing their knowledge and expertise with the National Consortium and other Resource & Training Providers, and to using the tools, information, and framework collaboratively created by the National Consortium. Resource & Training Providers must have a regional focus that goes beyond traditional political boundaries such as state lines and make their services broadly available. Applicants may form appropriate partnerships to provide the necessary services.

Training priorities will include organizations who wish to incorporate training into their existing educational and workforce development infrastructure, such as community colleges, vocational technical high schools, and training programs such as the U.S. Department of Labor's YouthBuild program.

Specific Responsibilities for Category 1

Participate in the National Consortium

Resource & Training Providers are expected to be active members of and contributors to the National Consortium, as needed, to:

- Gather, adapt, develop, and share model curricula for use by educational institutions in training the solar installation workforce, including surveying currently available curricula, conducting a needs assessment and developing curricula necessary to fill holes.
- Share best practices and lessons learned regarding instruction of solar installations
- Gather, adapt, develop, and share curriculum for use by other Resource & Training Providers in training instructors.
- Gather, adapt, develop, and share as dictated by new technologies and workforce needs, new courses on topics such as advanced solar installations.

Provide professional development opportunities

- Develop, adapt, and provide professional development opportunities for educators at institutions that wish to start or improve training and education programs in the field of solar installation. Professional development courses should be based on the Train-the-Trainer curricula and models developed by the National Consortium
- Provide mentoring and support in program development for educators or institutions that have received professional development training from the Resource & Training Providers.
- Update and improve training offered to reflect materials collaboratively developed by the National Consortium.
- Add regional-specific information to the National Consortium Train-the-Trainer curriculum, as necessary, including any regionally-relevant technical or policy information.
- Proactively develop, administer, and grow networks and networking opportunities for instructors and other stakeholders in the field of solar installation workforce development.

Develop Regional Outreach Plan

- Develop and execute a plan to engage with target markets and institutions and an approach to prioritizing market needs and training activities.
- Proactively communicate available resources to candidate educational institutions such as community colleges, vocational technical high schools, training programs, and networks such as agricultural extension services and other networks or programs that target disadvantaged or underserved populations.

- When possible, the Resource & Training Providers' activities should be coordinated with local, regional, and statewide economic development strategic plans.

Note: The above responsibilities might change following initial discussions and decisions of the National Consortium. The intent of the work, however, will remain to provide educational institutions with high quality information on solar installations and to build their capacity to incorporate this into their training offerings.

Restrictions: Open to all domestic entities or institutions.

Category 2: Administrator of the National Consortium for Solar Installer Instructor Training

The primary tasks of this group are to create and manage the operations of the National Consortium for Solar Installer Instructor Training and to coordinate activities with the Regional Resource & Training Providers. The National Administrator will coordinate and facilitate the workings of the National Consortium, communicate with a national audience, convene national expertise in solar installer instructor training and provide guidance to the Regional Resource & Training Providers. This Awardee will serve as the central point of communication with the Regional Resource & Training Providers for instructor training in solar technologies.

The Administrator will work to improve technological education in the field of PV and SHC installations, providing a forum for expertise in the field of training workers in the PV and SHC installation process and relevant national stakeholders to share lessons learned and develop best practices, consolidating currently existing curricula, developing new curricula where necessary, and recommending model curricula for career pathways in the field of solar installation. The Administrator will act as a central point of communication for national stakeholder input and will coordinate with national and state agencies involved.

Successful Applicants will demonstrate that they possess the necessary skills and desire to administer and coordinate the National Consortium, ideally with a history of managing large national efforts in workforce development and training. Successful Applicants will also show knowledge and experience in technology workforce development, ideally in the field of energy efficiency or renewable energy. The Administrator will gather, refine and disseminate PV and SHC workforce training curricula and serve as a central point of communication for instructor training in PV and SHC technologies.

Specific Responsibilities for Category 2

Manage and administer operations

- Facilitate and manage the logistics of the National Consortium, including convening regular meetings and gathering and incorporating broad stakeholder input.
- Develop metrics to measure and track the effectiveness of the National Consortium and Regional Resource & Training Providers. In accordance with the ARRA, Applicants should emphasize tracking job creation and instructor impact.
- Execute a Multi-Year Plan for the National Consortium.

Ensure proper engagement of key stakeholders

- Develop and implement a broad strategy for stakeholder engagement to ensure the relevance of the materials and services. Stakeholder groups should include, but are not limited to the following:
 - Educational institutions such as community colleges
 - State Directors of Career and Technical Education
 - State and Local Workforce Investment Boards
 - Solar industry associations, solar manufacturers, installers, and other members and employers in the solar industry
 - Appropriate representatives for code officials, including the International Association of Electrical Inspectors and the International Association of Plumbing and Mechanical Officials
 - State and Federal agencies such as U.S. Department of Energy, the U.S. Department of Labor, the National Science Foundation, and the U.S. Department of Education

Create resources and identify and deliver products

Through convening the National Consortium, the Administrator is responsible for providing key deliverables which include but are not limited to the following:

- Provide a centralized location for national stakeholder input, interfacing with employers, industry, government, educators, etc.
- Collect, disseminate and update core body of solar-specific knowledge required for occupations in solar installation workforce.
- Develop model curricula and compile lessons learned and best practices in curriculum, curriculum delivery, course and program development, and laboratory and facility design.
Development of new educational materials is not a primary mission of the National Consortium; rather, the National Consortium will conduct a gap analysis of educational materials and curricula currently in the public domain, collect and adapt existing exemplary materials and curricula, and develop new materials and curricula as needed.
Any basic introductory information on solar technologies should include a description of PV, SHC and Concentrating Solar Power (CSP) technologies.
- Define career and educational pathways for various occupations in the downstream solar workforce.
- Define scope of information an instructor should know and design Train-the-Trainer curriculum (which also includes curricula for training the solar installers) to be adapted and delivered by the Regional Resource & Training Providers.

Support Regional Resource & Training Providers

- Promote the use by Resource & Training Providers of materials and deliverables collaboratively created by the National Consortium.
- Provide expertise, support, and guidance to the Resource & Training Providers, as needed.

Note: The above list of responsibilities is not exhaustive and might change following initial discussions and decisions of the National Consortium and the U.S. Department of Energy. The intent of the work, however, will remain to provide educational institutions and the workforce system with the high quality information on workforce issues in the solar installation process and the ability to incorporate this into their training offerings.

Restrictions: Open to all domestic entities or institutions.

The Awardees under all categories of this Topic are encouraged to use materials found in the public domain. If the Awardees plan to use copyrighted materials, those Awardees are responsible for securing appropriate licensing that will allow use by all members of the National Consortium and dissemination to the public as necessary to further the objectives of this FOA. DOE encourages Awardees to place materials developed under this Award in the public domain. Awardees may copyright materials it develops only with the prior written permission of DOE. Requests for permission to copyright must be submitted to the DOE Contracting Officer and must include a plan to disseminate the materials among the National Consortium members and the general public consistent with this FOA.

D. Other Considerations

- **Applicants must indicate the Topic Area to which they are applying in their Application narrative (e.g. Topic Area 1 Solar America Cities Special Projects or Topic Area 2 Solar Installer Instructor Training). Failure to designate the Topic Area may result in the Application not receiving a comprehensive Merit Review.**
- **Applicants may submit Applications to multiple Topic Areas; however, SEPARATE Applications must be submitted for each Topic Area.**
- **All projects must be planned with phases, not exceeding 12 months in duration. These projects may be incrementally funded. DOE will conduct a review of all projects awarded through this FOA upon completion of each phase. Project continuation into the succeeding phases will depend on a satisfactory review by the DOE on the project progress in meeting the scope, key milestones, go/no-go criteria, and the schedule and budget performance, as well as funding availability.**
- **One or more Phases will be funded through the American Recovery and Reinvestment Act of 2009 (Recovery Act). Phases funded through the Recovery Act will be negotiated as a stand-alone Award. All future Phases are planned to be negotiated as a separate agreement. Cost share and reporting requirements may differ between Phases. (SEE PART III B)**
- **Topic 2 - Applicants must indicate the Category to which they are applying in their Application narrative (e.g. Category 1, Regional Resource & Training Providers, or Category 2, Administration of the National Consortium for Solar Installer Instructor Training) Failure to designate the Category Area may result in the Application not receiving a comprehensive Merit Review.**
- **Topic 2 - Applicants under this Topic may apply for multiple Category Areas (1 or 2); however, SEPARATE Applications must be submitted for each Category. If an Applicant for Category 1 has the skills and expertise in both PV and SHC, it may apply (in one Application) to provide work in both areas.**

PART II – AWARD INFORMATION

A. TYPE OF AWARD INSTRUMENT

DOE anticipates awarding cooperative agreements under this announcement. Under a cooperative agreement, the nature of the Federal substantial involvement will be included in a special award condition.

Topic Area 1

DOE will be substantially involved through collaboration and coordination across the Solar America Cities activities.

Topic Area 2

To support DOE goals, it is anticipated that each recipient project under this announcement will have a project performance period that will be divided into sequential awards for two Phases:

- a. A financial assistance award will be issued for Phase 1, using Recovery Act funds.
- b. Toward the end of Phase 1, a go/no go review or stage gate review will be conducted to determine whether the project will continue to Phase 2. DOE's determination for proceeding from Phase 1 to the next phase will be based on go/no go review or stage gate review decision criteria that will be negotiated with the selected Applicants.
- c. After DOE determines the recipient made satisfactory progress to continue the project after Phase 1, a second financial assistance award will be issued for Phase 2. The Phase 2 award will be issued, subject to DOE's program goals and availability of appropriated funds.

Under a cooperative agreement, the DOE will be substantially involved in directing the work performed under the resulting award to ensure that projects in each topic area are the most beneficial to achieve the goals of the SETP and the BTP. The level of DOE involvement will be negotiated with each Recipient prior to award. Substantial involvement may consist of items such as setting of training priorities, ongoing evaluation of key performance parameters and/or conduct of stage-gate reviews.

With regard to Category 1, substantial involvement may consist of items such as national laboratory participation in the National Consortium, DOE representation and participation in meetings, DOE input on the quantity and diversity of professional development activities offered by the Regional Resource & Training Providers, and DOE guidance on strategic planning.

With regard to Category 2, substantial involvement may consist of items such as DOE input regarding the quantity and diversity of professional development activities offered and the cost structure for professional development opportunities.

B. ESTIMATED FUNDING

Approximately \$20,000,000 is expected to be available for new awards for Phases issued with

Recovery Act Funds. An additional \$17,000,000 is expected to be available for the remaining Phases of awards, distributed over the years FY 2010 through FY2013, subject to the availability of appropriated funds.

	FY09(M)	FY10(M)	FY11(M)	FY12(M)	FY13(M)
Topic 1	\$ 10.0	\$ -	\$ -	\$ -	\$ -
Topic 2					
Category 1	\$ 7.0	\$ 2.0	\$ 4.0	\$ 4.0	\$ 4.0
Category 2	\$ 3.0	\$ -	\$ 1.0	\$ 1.0	\$ 1.0
Total	\$ 20.0	\$ 2.0	\$ 5.0	\$ 5.0	\$ 5.0

C. MAXIMUM AND MINIMUM AWARD SIZE

Under this announcement, DOE expects to make the following number of awards for each Program/Topic Area:

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

Topic 1: \$100,000 - \$2,000,000

Topic 2, Category 1: \$2,000,000 - \$3,500,000

Topic 2, Category 2: \$2,500,000 - \$6,000,000

D. EXPECTED NUMBER OF AWARDS

Topic 1: 5-20 Awards

Topic 2, Category 1: 6-10 Awards

Topic 2, Category 2: 1 Award

E. PERIOD OF PERFORMANCE

Anticipated number of awards is subject to Congressional appropriations.

Topic 1: Two Years

Topic 2, Category 1: Five Years

Topic 2, Category 2: Five Years

Year 1 activities will be funded with Recovery Act funds. Follow-on activities will be made under a separate award, subject to appropriations for the program.

F. TYPE OF APPLICATION

Based on the objectives of this Funding Opportunity Announcement, this is determined to be Financial Assistance due to public purpose of support or stipulation authorized by a law of the United States. 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

Topic 1:

- In accordance with 10 CFR 600.6(b) eligibility for award is restricted to the existing 25 Solar America Cities awarded under the FY07 Solar City Strategic Partnerships Funding Opportunity Announcement DE-PS36-07GO97007 and the FY08 Solar City Strategic Partnerships Funding Opportunity Announcement DE-PS36-08GO98003.

These cities are:

Ann Arbor, Michigan; Austin, Texas; Berkeley, California; Boston, Massachusetts; Denver, Colorado; Houston, Texas; Knoxville, Tennessee; Madison, Wisconsin; Milwaukee, Wisconsin; Minneapolis - St. Paul, Minnesota; New Orleans, Louisiana; New York, New York; Orlando, Florida; Philadelphia, Pennsylvania; Pittsburgh, Pennsylvania; Portland, Oregon; Sacramento, California; Salt Lake City, Utah; San Antonio, Texas; San Diego, California; San Francisco, California; San Jose, California; Santa Rosa, California; Seattle, Washington; and Tucson, Arizona.

Topic 2, Category 1: Open to all domestic entities or institutions

Topic 2, Category 2: Open to all domestic entities or institutions

B. COST SHARING OR MATCHING

Topic 1:

- The cost share must be at least 50% of the total allowable costs for demonstration projects (i.e., the sum of the Government share, including FFRDC contractor costs if applicable, and the recipient share of allowable costs equals the total allowable cost of the project) and must come from non-Federal sources unless otherwise allowed by law. However, Applications from Local Governments with proposed cost share as low as 10% applicant share may be considered by DOE, using the Secretary's statutory authority to reduce cost-share requirements. Applicants proposing cost-share below 50% (applicant-share) shall provide a justification for their request and include it in the Adobe Application Package (see Section IV). As part of this justification, Applicants should describe efforts made to secure sufficient financing and indicate why meeting this requirement would create undue financial burden (if applicable). DOE reserves the right to request supporting documentation at a later date.

Topic 2:

- Cost sharing is not required. However, Applicants in all categories are encouraged to leverage resources to support and maximize the impact of their project.

C. OTHER ELIGIBILITY REQUIREMENTS

- **Federally Funded Research and Development Center (FFRDC) Contractors**

FFRDC contractors are not eligible for an award under this announcement and may not be proposed as a team member on another entity's Application.

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, must however indicate in the Application if the project will include multiple PI's. (See Part IV, Section C, c. Resume. File) The decision to use multiple PIs for a project is the sole responsibility of the Applicant. If multiple PI's 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 organizational structure of the project as it pertains to the designation of multiple PI's. This plan should, at a minimum, include:

- Process for making decisions on the organization and management of the National Consortium and coordination with Resource Centers.
- Publications and all materials relating to Solar Installation Curriculum and Workforce Development
- Intellectual property issues
- Communication plans
- Procedures for resolving conflicts; and
- PI's roles and managerial responsibilities for the project.

PART IV – APPLICATION AND SUBMISSION INFORMATION

A. ADDRESS TO REQUEST APPLICATION FORMS

Apply at FedConnect

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.

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.

The Adobe Application Package was intended to be utilized in Grants.gov; however, the DOE is currently utilizing it with FedConnect. Please disregard any information 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.

- 1) Copy the Adobe Application Package to your desktop;
- 2) 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.
- 3) 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;
- 4) 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., ABC corp). 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., ABC corp-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.

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

Letter of Intent

- Letters of Intent are not required.

Pre-Application Due Date

- Pre-Applications are 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., ABC Corp). If your organization is submitting more than one Application, you must identify an Application number at the end of each file name (e.g., ABC corp-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., ABC corp-1-Topic1).

1. SF 424 - Application for Federal Assistance (this form is within the Adobe Application Package)

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) (this form is within the Adobe Application Package)

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.** Save in a file named “PPSL.doc” and attach.

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” in the Adobe Application Package 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). EVALUATORS WILL REVIEW ONLY THE NUMBER OF PAGES SPECIFIED IN THE PRECEDING SENTENCE. The font must not be smaller than 11 point. Do not include any Internet addresses (URLs) that provide information necessary to review the Application. See Part VIII.D for instructions on how to mark proprietary Application information. **Save the information in a single file named “Project.pdf,” and click on “Add Mandatory Other Attachment” in the Adobe Application Package to attach.**

Year 1 activities must be clearly delineated from follow-on years as year one will be funded with Recovery Act funds, which requires special report tracking. Follow-on activities will be made under a separate award, subject to appropriations for the program.

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 Criterion Discussion.

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

Topic 1:

Criterion 1: Project Description

Weight: 40%

- Describe the approach to overcoming key barriers that hinder the city from reaching its solar energy goals.
- As appropriate, describe the plan for how the project will continue after this initial DOE funding has been depleted.
- Describe how the project can serve as a model for replication within the applicant city, by other cities and/or other jurisdictions.
- Describe the impact of the project on the city’s long-term goal for solar energy. Describe how the project directly or indirectly will assist the city in reaching the installation targets.
- Provide details on how the city intends to utilize project funds on this project. Describe how the project will enhance key activities within the city that cannot be adequately addressed under their existing Solar America City award, while complementing those existing activities.

Criterion 2: Project Implementation Plan

Weight: 40%

- Describe the proposed activities and discuss how the project will be implemented.
- Identify potential barriers to carrying out the proposed project and discuss strategies for mitigating risks.
- Identify key milestones and decision points. Where possible, identify quantifiable metrics that will be used for measuring project success.

Criterion 3: Roles, Responsibilities, Capabilities, Knowledge and Experience

Weight: 20%

- Describe the organizational structure of the entity that will perform the proposed project, including roles, responsibilities and qualifications of key personnel to accomplish the goals of the project. Partner roles should be clearly explained.
- Describe the Applicant’s plan to collaborate with partners.

Topic 2:

Category 1 – Regional Resource & Training Providers

Project Description and Implementation Plan**Weight: 30%**

DOE understands that the Applicant will be able to more clearly define the operation plan for Years 1 and 2, while the operation plan for Years 3 – 5 will be less defined at the time of Application and subject to change based on information and input gathered during the first two years of operation.

- Discuss the professional development activities that will be carried out.
- Describe approach for working with other instructors and stakeholders in the workforce system.
- Discuss the regional solar installer instructor training needs and relevant solar industry trends.
- Describe any resources that will be leveraged through this project and how this supports the overall FOA goals.

Technical expertise**Weight: 25%**

- Describe your knowledge and experience in developing and delivering technical training in the solar installation process, including related codes and standards.
- Discuss your qualifications and credentials related to technical and training aspects of the solar installation process.
- Discuss approach to sharing knowledge and expertise with the National Consortium and to using the materials and knowledge generated by the National Consortium to improve the professional development opportunities.

Training capabilities**Weight: 25%**

- Discuss the availability and applicability of solar laboratories and facilities that will be used in offering professional development opportunities.

Roles and responsibilities**Weight: 20%**

- Discuss the organizational structure, including roles, responsibilities and qualifications of key personnel.
- Discuss the availability of key personnel to fulfill the responsibilities of the Regional Resource & Training Provider.

Category 2: Administrator of the National Consortium for Solar Installer Instructor Training**Project Description and Implementation Plan****Weight: 40%**

DOE understands that the Applicant will be able to more clearly define the project description and implementation plan for Years 1 and 2, while the plan for Years 3 – 5 will be less defined at the time of Application and subject to change based on information and input gathered during the first two years of operation.

- Provide an initial multi-year operation plan, including plans for coordinating and communicating with the Regional Resource & Training Providers, coordination and logistics of professional development activities offered by the Regional Resource & Training Providers, and approach for participation by the Regional Resource & Training Providers in the National Consortium.

- Discuss the organizational structure of the National Consortium and logistics for operating the National Consortium. Describe how this plan supports the FOA’s objectives.
- Discuss how the effectiveness of the National Consortium and Regional Resource & Training Providers will be measured, including the collection methods that will be utilized.
- Identify key deliverables and discuss plans for conducting a gap analysis.
- Identify approach for obtaining technology updates and how this will be used to update curricula and other educational materials.

Stakeholder Engagement and Communications Plan **Weight: 20%**

- Discuss approach for timely gathering and incorporation of broad stakeholder input.
- Describe plans for communicating the strategy and offerings of the National Consortium.
- Describe plans for garnering national support for the activities of the National Consortium.

Knowledge of workforce and curriculum development **Weight: 20%**

- Describe your knowledge and experience in workforce development including workforce system and issues surrounding training and workforce development at the Federal and State level.
- Describe your knowledge and experience in curriculum development, including the types of materials that must be developed in order to achieve the overall goal of this FOA.
- Discuss the relevant workforce development issues surrounding the solar industry and the activities and deliverables necessary to meet these challenges.

Roles, Responsibilities, Capabilities **Weight: 20%**

- Discuss the organizational structure and identify the roles, responsibilities and qualifications of key personnel. Discuss the experience of key personnel to accomplish the project goals.
- Describe your capabilities and past experiences in the facilitation required to run the National Consortium, including past experiences in facilitating stakeholder meetings, gathering broad stakeholder input from across the U.S., and incorporating this information into key deliverables.
- Describe your capabilities and past experiences in national communication and outreach.

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.

American Recovery and Reinvestment Act (ARRA) 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. Applicants to Topic 1 should also address how the proposed project, and associated federal funding, will address the economic needs of the city.

The above listed components of your Project Narrative combined, must be within the Narrative page limit specified 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.

4. 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.doc” and click on “Add Optional Other Attachment” in the Adobe Application Package to attach.** Each resume must not exceed 2 pages when printed on 8.5” by 11” paper with 1 inch margins (top, bottom, left, and right) 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 and locations.

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 PI's are proposed, the Applicant must provide the information indicated in Part III, Section D. as part of this file.

The resume file does not have a page limitation.

5. 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 Applicant and Recipient 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 PART IV, G). The budget must include federal share and any cost share. **Save the information in a single file named “SF424A.xls,” and click on “Add Optional Other Attachment” in the Adobe Application Package to attach.**

Year 1 activities must be clearly delineated from follow-on years as year one will be funded with Recovery Act funds, which requires special report tracking. Follow-on activities will be made under a separate award, subject to appropriations for the program.

6. Budget Justification File (also see Appendix E)

A Budget Justification for SF 424A must be provided for 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 as part of the budget justification. **Save the information in a single file named “budgetjustification.xls,” and click on “Add Optional Other Attachment” in the Adobe Application Package to attach file.**

Please refer to Appendix E – Budget Justification for guidelines and examples of the amount of information and support that is sufficient.

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

Proposals 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 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 attach written affirmation that the budget justification you will comply with the Davis-Bacon Act, as identified above, along 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.

8. Letters of Commitment

You must have a letter from each third party contributing cost sharing (i.e., a party other than the organization submitting the Application) that proposes to provide all or part of the required cost sharing. **All Letters of Commitment must be attached to the Project Narrative File.** The letter must state that the third party is committed to providing a specific minimum dollar amount of cost sharing.

The letter must state that the third party is committed to providing a specific minimum dollar amount of cost sharing. In the budget justification, identify the following information for each third party contributing cost sharing: (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 cost sharing – 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.

9. 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 (which ever is less). Use the SF 424 A Excel for Non Construction Programs or the SF 424 C Excel for Construction Programs.

This form is found on the Applicant and Recipient 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., ABC corp424.xls), and click on “Add Optional Other Attachment” in the Adobe Application Package to attach file.**

A separate budget justification for the subaward budget is also required. **Save the information in a single file named BudgetJustification.xls (include brief name of sub as part of file name), and click on “Add Optional Other Attachment” in the Adobe Application Package to attach.** Please refer to Appendix E – Budget Justification for guidelines and examples of the amount of information and support that is sufficient.

10. SF-LLL Disclosure of Lobbying Activities

If applicable, complete SF- LLL. Applicability: If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the grant/cooperative agreement, you must complete and submit

Standard Form - LLL, "Disclosure Form to Report Lobbying." Save in a file named "SF-LLL.doc" and attach.

11. Cost Share Justification

For Topic 1, Applicants proposing cost-share below the requirement shall provide a separate justification for their request. As part of this justification, Applicants should describe efforts made to secure sufficient financing and indicate why meeting this requirement would create undue financial burden (if applicable). DOE reserves the right to request supporting documentation at a later date. **Save the justification in a single file named "costsharejust.pdf" and click on "Add Optional Other Attachments" in the Adobe Application Package to attach.**

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	
Project Summary/Abstract File	PDF	Summary.pdf
Project Narrative File, including required appendices	PDF	Project.pdf
Resume File	PDF	Resume.pdf
SF 424A Excel – Budget Information for Non-Construction Programs File	Excel	SF424A.xls
Budget Justification File	PDF	See Instructions
Davis Bacon	PDF	davisbacon.pdf
Subaward Budget File(s), if applicable	Excel	See Instructions
SF-LLL Disclosure of LobbyingActivities	Word	SF-LLL.doc
Cost Share Justification	PDF	costsharejust.pdf

D. SUBMISSIONS FROM SUCCESSFUL APPLICANTS

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

- Indirect cost information
- Other budget information
- Commitment Letter from Third Parties Contributing to Cost Sharing, if applicable
- Environmental Questionnaire
- 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

Application Due Date

- Applications must be received by July 30, 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.**

FedConnect questions should be directed to: support@fedconnect.net

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. Recipients that are State and Local Governments must have the prior approval of the contracting officer for any pre-award costs prior to the date of award.

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 at www.FedConnect.net. Information regarding how to submit Applications via Fed Connect can be found at:

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

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.

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 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/> 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, don't worry. Complete the registration form and FedConnect will let you know (PLEASE REFER TO QUICK START GUIDE FOR QUESTIONS).

Applicants 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 information 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.

- 1) Copy the Adobe Application Package to your desktop;
- 2) 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.
- 3) 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;
- 4) 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., ABC corp). 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., ABC corp-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

- 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

The following criteria are proposed to be used to evaluate Applications/Proposals:

Topic 1:

Criterion 1: Project Description

Weight: 40%

- Barriers: Thoroughness and viability of the approach to overcoming those key barriers that hinder reaching their goals.
- Sustainability: As appropriate, viability of the project to continue after the funding has been depleted.
- Replicability: Thoroughness and viability of the project to serve as a model for replication within the applicant city, by other cities and/or other jurisdictions.
- Impact: Viability and overall impact of the project on the city's long-term goal for solar energy, and the level of existing installed solar capacity.
- Funding: Appropriateness of how the city intends to utilize project funds on this project.

Criterion 2: Project Implementation Plan

Weight: 40%

- Feasibility and likelihood of success of project.
- Adequacy of identified barriers to carrying out the proposed project, including plans to mitigate these risks.
- Appropriateness of milestones and key decision points

Criterion 3: Roles, Responsibilities, Capabilities, Knowledge and Experience

Weight: 20%

- Organizational Structure: Adequacy of the Applicant's organizational structure, including roles, responsibilities and qualifications of key personnel to accomplish the goals of the project.
- Collaboration: As appropriate, adequacy of Applicant's plan for collaborating with partners.

Topic 2:

Category 1: Regional Resource & Training Providers

Project Description and Implementation Plan

Weight: 30%

DOE understands that the Applicant will be able to more clearly define the operation plan for Years 1 and 2, while the operation plan for Years 3 – 5 will be less defined at the time of Application and subject to change based on information and input gathered during the first two years of operation.

- Adequacy and applicability of the types of professional development activities proposed. Demonstrated understanding of the likely scenarios and needs for professional development opportunities.
- Adequacy and applicability of the plan to develop and administer networks and opportunities to share experiences among instructors and other stakeholders in the workforce system.
- Demonstrated understanding and awareness of regional solar installer instructor training needs and solar industry trends.
- Quality of the leveraged resource and extent to which these resources further the Applicant's ability to meet the goals of this FOA.

Technical expertise

Weight: 25%

- Depth and applicability of knowledge and experience in developing and delivering technical training in the solar installation process, including related codes and standards.
- Appropriateness of qualifications and credentials related to technical and training aspects of the solar installation process.
- Demonstrated commitment to sharing the Applicant's knowledge and expertise with the National Consortium and to using the materials and knowledge generated by the National Consortium to improve the professional development opportunities offered by the Applicant.

Training capabilities

Weight: 25%

- Quality, credibility, comprehensiveness, availability and applicability of the Applicant's solar laboratories and facilities that will be used in offering professional development opportunities.

Roles and responsibilities

Weight: 20%

- Adequateness and appropriateness of organizational structure, including roles, responsibilities and qualifications of key personnel to accomplish the goals of the project.
- Adequateness and appropriateness of the time commitment of key personnel to fulfill the responsibilities of the Regional Resource & Training Providers.

Category 2: Administrator of the National Consortium for Solar Installer Instructor Training

Project Description and Implementation Plan

Weight: 40%

DOE understands that the Applicant will be able to more clearly define the project description and implementation plan for Years 1 and 2, while the plan for Years 3 – 5 will be less defined at the time of application and subject to change based on information and input gathered during the first two years of operation.

- Effectiveness and soundness of the initial multi-year operation plan, including plans for coordinating and communicating with the Regional Resource & Training Providers, coordination and logistics of professional development activities offered by the Regional Resource & Training Providers, and approach for participation by the Regional Resource & Training Providers in the National Consortium.
- Soundness and feasibility of organizational structure of the National Consortium and logistics for operating the National Consortium. Likelihood that the plan will meet the FOA's objectives.
- Soundness and adequacy of plan for measuring the effectiveness of the National Consortium and Regional Resource & Training Providers, including the appropriateness of proposed measured outcomes and collection methods. Likelihood that the Applicant will be able to collect and validate outcome data in a timely and accurate manner.
- Adequacy and applicability of plan for providing key deliverables, including appropriateness of initial list of deliverables, plan for conducting a gap analysis, and a timeline for developing and publishing the deliverables.
- Effectiveness and adequacy of plan for obtaining technology updates and changes and plan for updating curricula and other educational materials.

Stakeholder Engagement and Communications Plan

Weight: 20%

- Effectiveness, soundness, and balance of plan for gathering and incorporating broad stakeholder input. Likelihood that the proposed strategy will allow the National Consortium and Regional Resource & Training Providers to develop relevant and timely deliverables and offerings.
- Clarity, quality, credibility, comprehensiveness, and responsiveness of the plan for communicating the strategy and offerings of the National Consortium.
- Clarity, quality, credibility, comprehensiveness, and responsiveness of the plan for garnering national support for the activities of the National Consortium.

Knowledge of workforce and curriculum development

Weight: 20%

- Depth and applicability of knowledge and experience in workforce development including knowledge of the workforce system and issues surrounding training and workforce development at the Federal and State level.
- Depth and applicability of knowledge and experience in curriculum development, including the types of materials that must be developed in order to achieve the overall goal of this FOA.

- Depth and applicability of experience and demonstrated understanding of the relevant workforce development issues surrounding the solar industry and the activities and deliverables necessary to meet these challenges.

Roles, Responsibilities, Capabilities

Weight: 20%

- Adequacy and depth of organizational structure, including roles, responsibilities and qualifications of key personnel to accomplish the goals of the project. Sufficiency of time commitment of key personnel to accomplish the project goals.
- Depth and applicability of capabilities and past experiences in the facilitation required to run the National Consortium, including past experiences in facilitating stakeholder meetings, gathering broad stakeholder input from across the U.S., and incorporating this information into key deliverables.
- Depth and applicability of capabilities and past experiences in national communication and outreach.

3. Other Selection Factors

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

Topic 1

- Geographic diversity of projects
- Technology diversity of projects
- Cost share above minimum required
- Extent to which other private and public investments are leveraged
- Selection of Applications which promote and enhance the objectives of the American Recovery and Reinvestment Act of 2009, P.L. 111-5, especially job creation, and/or preservation and economic recovery in an expeditious manner, with particular consideration for demonstrated economic need.

Topic 2

- Geographic diversity of projects
- Technology diversity of projects
- Best value to the government
- Extent to which other private and public investments are leveraged
- Selection of Applications which promote and enhance the objectives of the American Recovery and Reinvestment Act of 2009, P.L. 111-5, especially job creation, and/or preservation and economic recovery in an expeditious manner.

B. REVIEW AND SELECTION PROCESS

a. 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.

b. Selection

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

c. Discussions and Award

The Government may enter into discussions with a selected Applicant for any reason deemed necessary, including, but not limited to: (1) the budget is not appropriate or reasonable for the requirement; (2) only a portion of the application is selected for award; (3) the Government needs additional information to determine that the recipient is capable of complying with the requirements in 10 CFR 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 the end of August 2009 and making awards by the end of December 2009.

Part VI - AWARD ADMINISTRATION INFORMATION

A. AWARD NOTICES

1. Notice of Selection

DOE will notify Applicants selected for negotiation of 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

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

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>).

American Recovery and Reinvestment Act 2009 Award Administration Information
Special Provisions relating to work funded under American Recovery and Reinvestment Act of 2009, Pub. L. 111-5 shall apply. (Special Provisions are located at: http://management.energy.gov/business_doe/business_forms.htm.) Also, the Office of Management and Budget may be promulgating additional provisions or modifying existing provisions. Those additions and modifications will be incorporated into the Special Provisions as they become available.

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://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.

Special Provisions relating to work funded under American Recovery and Reinvestment Act of 2009, Pub. L. 111-5 shall apply. Also, the Office of Management and Budget may be promulgating additional provisions or modifying existing provisions. Those additions

and modifications will be incorporated into the Special Provisions as they become available.

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. Statement of Substantial Involvement

Either a grant or cooperative agreement may be awarded under this program announcement. If the award is a cooperative agreement, the DOE Contract Specialist and DOE Project Officer will negotiate a Statement of Substantial Involvement prior to award.

5. 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

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, 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). Be advised that Recovery Act reporting requirements may 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.

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.

B. AGENCY CONTACT(S)

Name: Patrick Liles, patrick.liles@go.doe.gov

All questions should be submitted through the “Submit Question” feature of FedConnect. (See Part A of this Part, above.)

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.

G. 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).

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

“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 Applications / Responses to the government directly through this site. <https://www.fedconnect.net/FedConnect/>

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

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

"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>

“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 new type of assistance instrument for DOE, but they have been used by the Department of Defense for many years 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:

- 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
- 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:

- 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.

Appendix D – Working Relationship Between Topic 2, Solar Installer Instructor Training, Categories

CATEGORY 2:

National Administrator

- Identifies and convenes solar experts, educators and industry representatives
- Facilitates the development of model curricula, establishment of best practices and the definition of career pathways
- Conducts national communication and outreach

Funded by the U.S. Department of Energy

CATEGORY 1:

Regional Resource & Training Providers

Community colleges, vo-tech schools, local union chapters and others train workers and support the local solar industry

Funded by the U.S. Department of Energy



Appendix E – Budget Justification

Using the “Object Class Categories” in the SF-424A Budget form, justify the costs in each category **for each budget period of the project.**

The SF424A Budget form and the Budget Justification must include both Federal (DOE), and Non-Federal (cost share) funds, thereby reflecting TOTAL PROJECT COSTS proposed.

The award recipient must complete a budget and budget justification. In addition, each sub-recipient (with estimated costs of \$100,000 or more) must complete a budget and budget justification.

All costs incurred by the Applicant’s sub-recipients, vendors, contractors, consultants and Federal Research and Development Centers (FFRDCs), should be entered only in section f. Contractual. All other sections are for the costs of the Applicant only.

Personnel

List costs solely for employees of the Applicant. Identify positions to be supported. Key personnel should be identified by title. All other personnel should be identified either by title or a group category. State the amounts of time (e.g., hours or % of time) to be expended, the composite base pay rate, total direct personnel compensation and identify the rate basis (e.g., actual salary, labor distribution report, technical estimate, state civil service rates, etc.). Identify the number of employees (on a Full Time Equivalent) that will be employed in each position or group category. Note the prevailing wage requirements in the ARRA (P.L. 111-5). See example below.

Task # and Title	Position Title	Budget Period 1			Budget Period 2			Budget Period 3			Project Total Hours	Project Total Dollars	Rate Basis
		Time (Hours)	Pay Rate (\$/Hr)	Total Budget Period 1	Time (Hours)	Pay Rate (\$/Hr)	Total Budget Period 2	Time (Hours)	Pay Rate (\$/Hr)	Total Budget Period 3			
Task 1 – Task Name	Sr. Engineer (1)	2000	\$85.00	\$170,000	200	\$50.00	\$10,000	200	\$50.00	\$10,000	2400	\$190,000	Actual Salary
Task 2 – Task Name	Process engineers (3)	6200	\$35.00	\$217,000	400	\$35.00	\$14,000	600	\$35.00	\$21,000	7200	\$252,000	Actual Salary
Task 3 – Task Name	Technician (1)	1800	\$20.00	\$36,000	0	\$0.00	\$0	0	\$0.00	\$0	1800	\$36,000	Actual Salary

Fringe

A federally approved fringe benefit rate agreement, or a proposed rate supported and agreed upon by DOE for estimating purposes is required if reimbursement for fringe benefits is requested. If a fringe benefit rate has been negotiated with, or approved by, a federal government agency, a copy of the latest rate agreement must be included with this application. If there is not a current, federally approved rate agreement negotiated and available, provide a copy of the proposal with the application. If selected, the rate agreement will be finalized during award negotiations. Calculate the fringe rate and enter the total amount in Section B, line 6.b. (“Fringe Benefits”) of form SF-424A.

IMPORTANT: Provide all fringe rates, along with a complete explanation and the full calculations used to derive the total fringe costs. If the total fringe costs are a cumulative amount of more than one calculation or rate application, the explanation and calculations should identify all rates used, along with the base they were applied to (and how the base was derived), and a total for each (along with grand total). The rates and how they are applied should not be averaged to get one fringe rate. **NOTE:** The fringe rate should be applied to both the Federal Share and Recipient Cost Share.

Travel

See example of travel detail below. Identify total Foreign and Domestic Travel as separate items. Purpose of travel are items such as professional conferences, DOE sponsored meetings, project management meetings, etc. Identify number of travelers, estimated cost per traveler, and duration of trip. The Basis for Estimating Costs could be items such as past trips, current quotations, Federal Travel Regulations, etc. All listed travel must be necessary for performance of the Statement of Project Objectives. **NOTE:** All projects should include travel for 1-2 travelers to a DOE project review during each year of the project. Each review will take approximately 2-3 days.

Purpose of travel	No. of Travelers	Depart From	Destination	No. of Days	Cost per Traveler	Cost per Trip	Basis for Estimating Costs
Budget Period 1							
Domestic Travel							
Visit to reactor mfr. to set up vendor agreement	2	Denver CO	Dallas TX	2	\$650	\$1,300	Internet prices
Domestic Travel subtotal						\$1,300	
International Travel							
Visit to technology provider to discuss IP agreement	2	Denver CO	Berlin Germany	5	\$4,000	\$8,000	Previous experience
International Travel subtotal						\$8,000	
Budget Period 1 Total						\$9,300	
(repeat as necessary for each Budget Period)							

Equipment

Equipment is generally defined as an item with an acquisition cost greater than \$5,000 and a useful life expectancy of more than one year. All proposed equipment should be identified, providing a basis of cost such as vendor quotes, catalog prices, prior invoices, etc., and briefly justifying its need as it applies to the Statement of Project Objectives. If it is existing equipment, and the value of its contribution to the project budget is being shown as cost share, provide logical support for the estimated value shown. If it is new equipment which will retain a useful life upon completion of the project, provide logical support for the estimated value shown. For equipment over \$50,000 in price, also include a copy of the associated vendor quote or catalog price list. See example below.

Equipment Item	Qty	Unit Cost	Total Cost	Basis of Cost	Justification of need
Budget Period 1					
EXAMPLE ONLY!!! Thermal shock chamber	2	\$20,000	\$40,000	Vendor Quote	Reliability testing of PV modules- Task 4.3

Budget Period 1 Total			\$40,000		
(repeat as necessary for each Budget Period)					

Supplies

Supplies are generally defined as an item with an acquisition cost of \$5,000 or less and a useful life expectancy of less than one year. Supplies are generally consumed during the project performance. Further definitions can be found in 10 CFR 600.

Proposed supplies should be identified, providing a basis of cost such as vendor quotes, catalog prices, prior invoices, etc., and briefly justifying the need for the Supplies as they apply to the Statement of Project Objectives. Note that Supply items must be direct costs to the project at this budget category, and not duplicative of supply costs included in the indirect pool that is the basis of the indirect rate applied for this project.

General Category of Supplies	Qty	Unit Cost	Total Cost	Basis of Cost	Justification of need
Budget Period 1					
EXAMPLE ONLY!!! Wireless DAS components	10	\$360.00	\$3,600	Catalog price	For Alpha prototype - Task 2.4
Budget Period 1 Total			\$3,600		
(repeat as necessary for each Budget Period)					

Contractual

The applicant must provide and justify all costs related to sub-recipients, vendors, contractors, consultants and FFRDC partners. See example below.

Sub-recipients (partners, sub-awardees):

For each sub-recipient with total project costs of \$100,000 or more, a separate SF-424A budget and budget justification form must be submitted. The support to justify the budgets of sub-recipients with estimated costs less than \$100,000, provide what Statement of Project Objectives task(s) are being performed, the purpose/need for the effort, and a basis of the estimated costs that is considered sufficient for DOE evaluation.

Vendors (includes contractors and consultants):

Identify all vendors, contractors and consultants supplying commercial supplies or services used to support the project. The support to justify vendor costs (in any amount) should provide the purpose for the products or services and a basis of the estimated costs that is considered sufficient for DOE evaluation.

Federal Research and Development Centers (FFRDCs):

For FFRDC partners, the applicant should provide a Field Work Proposal (if not already provided with the original application), along with the FFRDC labor mix and hours, by category and FFRDC major purchases greater than \$25,000, including Quantity, Unit Cost, Basis of Cost, and Justification.

Sub-Recipient Name/Organization	Purpose/Tasks in SOPO	Budget Period 1 Costs	Budget Period 2 Costs	Budget Period 3 Costs	Project Total
EXAMPLE ONLY!!! XYZ Corp.	Partner to develop optimal fresnel lens for Gen 2 product - Task 2.4	\$48,000	\$32,000	\$16,000	\$96,000
	Sub-total	\$48,000	\$32,000	\$16,000	\$96,000

Vendor Name/Organization	Product or Service, Purpose/Need and Basis of Cost (Provide additional support at bottom of page as needed)	Budget Period 1 Costs	Budget Period 2 Costs	Budget Period 3 Costs	Project Total
EXAMPLE ONLY!!! ABC Corp.	Vendor for developing custom robotics to perform lens inspection, alignment, and placement (Task 4). Required for expanding CPV module mfg. capacity. Cost is from competitive quotes.	\$32,900	\$86,500		\$119,400
	Sub-total	\$32,900	\$86,500	\$0	\$119,400
FFRDC Name/Organization	Purpose	Budget Period 1 Costs	Budget Period 2 Costs	Budget Period 3 Costs	Project Total
					\$0
	Sub-total	\$0	\$0	\$0	\$0
Total Contractual		\$80,900	\$118,500	\$16,000	\$215,400

Construction

Construction, for the purpose of budgeting, is defined as all types of work done on a particular facility, including erecting, altering, or remodeling. Construction conducted by the award recipient should be justified in this category. Any construction work that is performed by a vendor or subrecipient to the award recipient should be entered under “Contractual.”

Identify all proposed construction, providing a basis of cost such as engineering estimates, prior construction, etc., and briefly justify its need as it applies to the Statement of Project Objectives. For major endeavors, a copy of the engineering estimate or quote should also be provided. See example below.

Overall description of construction activities:			
Example Only!!! - Build wind turbine platform			
General Description	Cost	Basis of Cost	Justification of need
Budget Period 1			
Three days of excavation for platform site EXAMPLE ONLY!!!	\$28,000	Engineering estimate	Site must be prepared for construction of platform.
Budget Period 1 Total	\$28,000		
(repeat as necessary for each Budget Period)			

Other Direct Costs

Other direct costs are direct cost items required for the project which do not fit clearly into other categories, and are not included in the indirect pool for which the indirect rate is being applied to this project. Basis of cost are items such as vendor quotes, prior purchases of similar or like items, published price list, etc.

General description	Cost	Basis of Cost	Justification of need
Budget Period 1			
EXAMPLE ONLY!!! Grad student tuition	\$16,000	Established UCD costs	Support of graduate students working on project
Budget Period 1 Total	\$16,000		
(repeat as necessary for each Budget Period)			

Indirect Costs

A federally approved indirect rate agreement, or rate proposed supported and agreed upon by DOE for estimating purposes is required if reimbursement of indirect benefits is requested. If there is a federally approved indirect rate agreement, a copy must be provided with this application and if selected, must be provided electronically to the Contracting Officer for this project. If there is no current, federally approved indirect rate agreement or if the federally approved indirect rate agreement has been changed or updated, a rate proposal must be included with the application. If selected, the rate agreement will be finalized during award negotiations. Calculate the indirect rate dollars and enter the total in the Section B., line 6.j. (Indirect Charges) of form SF 424A.

IMPORTANT: Provide a complete explanation and the full calculations used to derive the total indirect costs. If the total indirect costs are a cumulative amount of more than one calculation or rate application, the explanation and calculations should identify all rates used, along with the base they were applied to (and how the base was derived), and a total for each (along with grand total). The rates and how they are applied should not be averaged to get one indirect cost percentage. **NOTE:** The indirect rate should be applied to both the Federal Share and Recipient Cost Share.

Cost Share

A detailed presentation of the cash or cash value of all cost share proposed for the project must be provided. Identify the source and amount of each item of cost share proposed by the Applicant and each sub-recipient. Letters of commitment must be submitted for all third party cost share (other than award recipient).

Note that "cost-share" is not limited to cash investment. Other items that may be assigned value in a budget as incurred as part of the project budget and necessary to performance of the project, may be considered as cost share, such as: contribution of services or property; donated, purchased or existing equipment; buildings or land; donated, purchased or existing supplies; and/or unrecovered personnel, fringe benefits and indirect costs, etc. For each cost share contribution identified as other than cash, identify the item and describe how the value of the cost share contribution was calculated.

Funds from other Federal sources MAY NOT be counted as cost share. This prohibition includes FFRDC sub-recipients. Non-Federal sources include private, state or local Government, or any source not originally derived from Federal funds.

Fee or profit will not be paid to the award recipients or subrecipients of financial assistance awards. Additionally, foregone fee or profit by the applicant shall not be considered cost sharing under any resulting award. Reimbursement of actual costs will only include those costs that are allowable and allocable to the project as determined in accordance with the applicable cost principles prescribed in 10 CFR 600.127, 10 CFR 600.222 or 10 CFR 600.317. Also see 10 CFR 600.318 relative to profit or fee. See example below.

Organization/Source	Type (cash or other)	Cost Share Item	Budget Period 1 Cost Share	Budget Period 2 Cost Share	Budget Period 3 Cost Share	Total Project Cost Share
ABC Company EXAMPLE ONLY!!!	Cash	Project partner ABC Company will provide 40 PV modules for product development at 50% off the of the retail price of \$680	\$13,600			\$13,600
		Totals	\$0	\$0	\$0	\$0
Total Project Cost:		\$312,300	Cost Share Percent of Award:			0.0%

American Recovery and Reinvestment Act Information:

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, the Applicant and First-Tier Subrecipients must provide a written affirmation that you will comply with the Davis-Bacon Act, as identified above, along with the signature of the authorized representative of your organization.