

**FINANCIAL ASSISTANCE  
FUNDING OPPORTUNITY ANNOUNCEMENT**

**OFFICE OF ENERGY EFFICIENCY AND RENEWABLE ENERGY**

**U.S. DEPARTMENT OF ENERGY SOLAR DECATHLON 2015**

Funding Opportunity Announcement (FOA) Number: DE-FOA-0000959

**FOA Type: 0001  
CFDA Number: 81.086**

<b>FOA Issue Date:</b>	November 1, 2013
<b>Solar Decathlon 2015 Informational Webinar</b>	December 4, 2013, 2:00 PM-3:00 PM Eastern Time
<b>Submission Deadline for Full Applications:</b>	December 20, 2013, 5:00 PM Eastern Time
<b>Expected Date for EERE Selection Notifications:</b>	February 14, 2014
<b>Expected Timeframe for Award Negotiations</b>	February 14, 2014 to April 14, 2014

- To apply to this FOA, Applicants must register with and submit application materials through EERE Exchange at <https://eere-Exchange.energy.gov>, EERE's online application portal. Frequently asked questions for this FOA and the EERE Application process can be found at <https://eere-exchange.energy.gov/FAQ.aspx>.
- Applicants must designate primary and backup points-of-contact in EERE Exchange with whom EERE will communicate to conduct award negotiations. If an application is selected for award negotiations, it is not a commitment to issue an award. It is imperative that the Applicant/Selectee be responsive during award negotiations and meet negotiation deadlines. Failure to do so may result in cancelation of further award negotiations and rescission of the Selection.

*Questions about this FOA? Email [solardecathlon2015@go.doe.gov](mailto:solardecathlon2015@go.doe.gov). Problems with EERE Exchange? Email [EERE-ExchangeSupport@hq.doe.gov](mailto:EERE-ExchangeSupport@hq.doe.gov). Include FOA name and number in subject line.*



**Department of Energy**  
Golden Field Office  
15013 Denver West Parkway  
Golden, Colorado 80401

DE-FOA-0000959  
Amendment No. 0001

DATE: November 20, 2013  
FROM: Christina Raines, Contracting Officer  
TO: All Prospective Applicants

SUBJECT: Amendment No. 0001 to Announcement DE-FOA-0000959, "US Department of Energy Solar Decathlon 2015"

I. The purpose of this Amendment is to:

1. Include webinar instructions for a webinar to be held on December 4<sup>th</sup>, 2013.

II. All edits are highlighted in green to clearly call attention to the revisions that have been made.

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**EXECUTIVE SUMMARY**

<b>Means of Submission</b>	Full Applications must be submitted through EERE Exchange at <a href="https://eere-Exchange.energy.gov">https://eere-Exchange.energy.gov</a> , EERE's online application portal. EERE will not review or consider applications submitted through other means. The Users' Guide for Applying to the Department of Energy EERE Funding Opportunity Announcements is found at <a href="https://eere-Exchange.energy.gov/Manuals.aspx">https://eere-Exchange.energy.gov/Manuals.aspx</a> .	
<b>Total Amount to be Awarded</b>	\$1,000,000	
<b>Average Award Amount</b>	EERE anticipates making awards of \$50,000 per recipient.	
<b>Types of Funding Agreements</b>	Cooperative Agreements	
<b>Period of Performance</b>	24 months	
<b>Eligible Applicants</b>	Institutions of higher education, subject to the definitions in Section III.A.	
<b>Cost Share Requirement</b>	50% of Total Project Costs	
<b>Submission of Multiple Applications</b>	Applicants may only submit one Full Application for consideration under this FOA. If an applicant submits more than one Full Application, EERE will only consider the last timely submission for evaluation. Any other submissions received listing the same applicant will be considered non-compliant and not eligible for further consideration. This limitation does not prohibit an applicant from collaborating on other applications (e.g., as a potential Subrecipient or partner) so long as the entity is only listed as the Prime Applicant on one Full Application submitted under this FOA.	
<b>Application Forms</b>	Required forms and templates for Full Applications are available on EERE Exchange at <a href="https://eere-Exchange.energy.gov">https://eere-Exchange.energy.gov</a> .	
<b>Required Submissions Checklist</b>	Submission	Check
	Full Application	
	• Technical Volume	X
	• Application for Federal Assistance (SF-424)	X
	• Budget Justification (PMC 123.1)	X
	• Budget Information (SF-424A)	X
	• Summary for Public Release	X
	• Summary Slide	X
	• Qualifications, Experience, and Capabilities	X
	• Letters of Commitment	X
	• Subaward Budget Justification (PMC 123.1)	X
	• Disclosure of Lobbying Activities (SF-LLL) (if applicable)	X

### REGISTRATION REQUIREMENTS

There are several one-time actions before submitting an Application in response to this Funding Opportunity Announcement (FOA), and it is vital that applicants address these items as soon as possible. Some may take several weeks, and failure to complete them could interfere with an applicant's ability to apply to this FOA, or to meet the negotiation deadlines and receive an award if the application is selected. These requirements are as follows:

- Register and create an account on EERE Exchange at <https://eere-Exchange.energy.gov>. This account will then allow the user to register for any open EERE FOAs that are currently in EERE Exchange. It is recommended that each organization or business unit, whether acting as a team or a single entity, use only one account as the contact point for each submission. Applicants should also designate backup points of contact so applicants may be easily contacted if deemed necessary. **This step is required to apply to this FOA.**

The EERE Exchange registration does not have a delay; however, **the remaining registration requirements below could take several weeks to process and are necessary for a potential applicant to receive an award under this FOA.** Therefore, although not required in order to submit an Application through the EERE Exchange site, all potential applicants lacking a DUNS number, or not yet registered with SAM or FedConnect should complete those registrations as soon as possible.

- Obtain a Dun and Bradstreet Data Universal Numbering System (DUNS) number (including the plus 4 extension, if applicable) at <http://fedgov.dnb.com/webform>.
- Register with the System for Award Management (SAM) at <https://www.sam.gov>. Designating an Electronic Business Point of Contact (EBiz POC) and obtaining a special password called an MPIN are important steps in SAM registration. Please update your SAM registration annually.
- Register in FedConnect at <https://www.fedconnect.net/>. To create an organization account, your organization's SAM MPIN is required. For more information about the SAM MPIN or other registration requirements, review the FedConnect Ready, Set, Go! Guide at [https://www.fedconnect.net/FedConnect/PublicPages/FedConnect Ready Set Go.pdf](https://www.fedconnect.net/FedConnect/PublicPages/FedConnect%20Ready%20Set%20Go.pdf).
- Register in [Grants.gov](http://www.grants.gov) (<http://www.grants.gov>) to receive automatic updates when Amendments to this FOA are posted. However, please note that Full Applications **will not** be accepted through [Grants.gov](http://www.grants.gov).

- **Electronic Authorization of Applications and Award Documents**

Submission of an application and supplemental information under this FOA through electronic systems used by the Department of Energy, including EERE Exchange and fedconnect.net, constitutes the authorized representative's approval and electronic signature.



## **I. FUNDING OPPORTUNITY DESCRIPTION**

### **A. DESCRIPTION/BACKGROUND**

As part of the Administration's larger initiative to improve the country's science, technology, engineering, and mathematics (STEM) education efforts and build a more knowledge-intensive workforce, the Department of Energy (DOE) is eager to create and support education and workforce development programs that are specific to applied energy and necessary to build the workforce able to carry out DOE's mission and advance energy technologies for the future.

The Department of Energy Solar Decathlon is an educational workforce development program designed to educate university-level students. The Solar Decathlon is also a public outreach demonstration designed to foster greater adoption of clean energy technologies and energy efficiency. For more information on the Solar Decathlon visit the Solar Decathlon Website: <http://www.solardecathlon.gov/>.

Ramping up the development of clean and renewable supplies of energy is one of the most pressing and technically difficult scientific and engineering challenges of both this and the next generation. Yet, at this time of increased energy demand and growth in the energy sector, the United States faces an impending shortage of a workforce and students trained to lead and support the low-carbon economy. For this reason, DOE's Strategic Plan supports the establishment of a stronger foundation in this area by developing and providing the educational and technical training opportunities needed by the students and workforce who will lead the low-carbon economy.

#### **Purpose of the Solar Decathlon**

The Solar Decathlon is a key step to achieving an important goal for DOE, namely, to foster development and facilitate widespread adoption of homes that demonstrate solar and energy efficiency technologies in marketable applications, through technology development and key partnerships. The strategy includes fostering excellence in building science education in universities with the goal of equipping future design and construction professionals with the skills necessary to design and build quality high performance homes that are healthy, safe, durable and energy efficient.

The purpose of the Solar Decathlon is to:

- Educate students and the public about the money-saving opportunities and environmental benefits presented by clean-energy products and design solutions.
- Demonstrate to the public the comfort and affordability of homes that combine energy-efficient construction and appliances with renewable-energy systems available today.
- Provide participating students with unique training that prepares them to enter our nation's clean-energy workforce.

- Support University based Renewable Energy and Energy Efficiency Curriculum Development

### **About the Solar Decathlon**

The Solar Decathlon challenges 20 domestic and international affiliated collegiate teams to design, build, and operate solar-powered houses that are cost effective, energy-efficient, and attractive. The winner of the competition is the team that best blends affordability, consumer appeal, and design excellence with optimal energy production and maximum efficiency. For a list of prior solar decathlon teams, including winners of past competitions, see:

[www.solardecathlon.gov](http://www.solardecathlon.gov).

The Solar Decathlon is a two-year program that culminates with an on-site competition between each university Team that submits a home for the competition. Multi-disciplinary teams of students are assembled, primarily from schools of architecture and engineering to compete in the Decathlon. The first year is centered on design while the second year involves materials selection, construction and fundraising. After construction is completed on campus, the houses are disassembled and transported to the event site where they are reassembled and made ready for the competition.

The Solar Decathlon on-site competition spans approximately 25 consecutive days. Teams have 8-10 days to assemble their houses. During the assembly period, event organizers and sponsors install electrical grids, communication and internet equipment, infrastructure facilities, monitoring and scoring instrumentation, signage and walkways. Once these activities are completed the competition begins and continues for an additional ten days. During the ten days of competition the houses are open to the public. After the competition is over the teams and organizers have five days to disassemble the village and return home.

The first Solar Decathlon was held in 2002; the competition has since occurred biennially in 2005, 2007, 2009, 2011 and 2013. Past Solar Decathlons in Washington, DC have attracted 100,000-150,000 visitors to tour the houses and see the decathletes in action. Media outreach is significant, as well as social media.

For the student competitors, the project is designed to increase education about energy-efficient home design, and to accelerate home research and development. The competition fosters collaborations among students in the disciplines of architecture, engineering, business and marketing, and communications at the outset of their careers to achieve the goal of developing and demonstrating solar and energy efficiency technologies in marketable residential applications. Like the athletic decathlon, the Solar Decathlon will test proficiency in a wide range of skills. Unlike its athletic counterpart, however, the Solar Decathlon is a team event, in which the diversity of abilities comes from the composition of the team rather than a single individual.

The Solar Decathlon is also a public event designed to increase awareness about energy for residential use. The competition demonstrates that a beautifully and well-designed house can generate enough thermal and electrical energy to meet the needs of a household, including electricity for lighting, cooking, washing clothes and dishes, powering home and home-office electronics, and maintaining a comfortable indoor temperature and air quality.

A critical long-range outcome of the Solar Decathlon project is the development and demonstration of cost-effective solar-powered homes. DOE is soliciting proposals from post-secondary educational institutions for entries that not only consider participation in the competition but also include a research and development (R&D) component that meets this critical outcome.

Through this Funding Opportunity Announcement (FOA), DOE intends to support up to 20 college and university teams that will participate in the 2015 Solar Decathlon. The available funding is not expected to cover the entire expense of this project. Fund Raising and Team Support are a part of the evaluation and selection criteria and program policy factors for this FOA. These criteria also state that industry involvement will be considered. However, it should be noted that such involvement shall be collaborative and is not intended to be a lower-tier subcontract.

### **FOA Successful Applicant Description**

Institutions considering the submission of a proposal for future competitions are encouraged to familiarize themselves with the Solar Decathlon rules. Please note that rule changes are typical from one competition to the next.

The Solar Decathlon 2013 Rules document (Solar Decathlon rules) will be the basis for the 2015 competition, *though the rules will be revised prior to the 2015 event* based on lessons learned and technology advancements at the Solar Decathlon 2013. The Solar Decathlon rules are posted at:

<http://www.solardecathlon.gov/apply.html>

### **Tasks and Activities**

The U.S. Department of Energy Solar Decathlon (Solar Decathlon) challenges 20 collegiate teams to design, build, and operate solar-powered houses that are cost-effective, energy-efficient, and attractive. The winner of the competition is the team that best blends cost-effectiveness, consumer appeal, and design excellence with optimal energy production and maximum efficiency. Each participating home must be designed and constructed in accordance with the Solar Decathlon rules.

Solar Decathlon houses are modular structures with nominal 600 ft<sup>2</sup> (55.7 m<sup>2</sup>) to 1000 ft<sup>2</sup> (92.9 m<sup>2</sup>) finished floor areas as measured by ANSI Z765-2003. Permanent foundations are prohibited

and the houses' temporary foundations shall not disturb the ground on which they rest. The energy source for the houses is limited to the global solar radiation incident on each house's site.

The challenge to the teams competing in Solar Decathlon 2015 is to safely and effectively design, build, and operate solar-powered houses that are cost-effective, energy-efficient, and attractive in less than 24 months. The winner of the competition is the team that best blends affordability, consumer appeal, and design excellence with optimal energy production and maximum efficiency. On time completion of the design and documentation is required to meet deliverable requirements and typical construction timelines, and will leave enough time to conduct tests of the assembly, operation, and disassembly competition phases during the summer preceding the competition.

It is critical that high quality and complete design documentation is provided on time to enable successful review of designs and distribution of feedback in a timeline appropriate for academic and construction schedules. The biggest non-financial challenges are typically

- 1) achieving full cooperation among students, faculty, and staff from many university departments and offices; and
- 2) completing design development and construction documentation on time.

### **Deliverables**

Each participating team is expected to meet the competition deliverables as shown in the Solar Decathlon rules. Participating teams are expected to meet all deliverables, including participation in the Solar Decathlon 2015 competition.

### **Review Meetings**

The following review meetings will take place during the period of performance (all dates are to be determined):

- February 2014: Orientation teleconference and/or webinar
- June 2014: Schematic Design Review Workshop (Location and format TBD)
- January 2015: Design Development Review Workshop (Location TBD)
- March 2014 – September 2015: Monthly teleconferences (date/time TBD)

In addition to the review meetings listed above, meetings may be arranged with individual teams at various times throughout the period of performance.

## **B. APPLICATIONS SPECIFICALLY NOT OF INTEREST**

The following types of applications will be deemed nonresponsive and will not be reviewed or considered (See Section III.C.2 of the FOA):

- Applications that fall outside the technical parameters specified in Section I.A of the FOA, including but not limited to applications that do not propose participation in the Solar Decathlon 2015 by a university team.
- Applications that propose a project home previously built for a prior Solar Decathlon competition (including homes that began design but were not completed) sponsored by the U.S. Department of Energy or another country hosting a Solar Decathlon event.
- Applications for proposed technologies that are not based on sound scientific principles (e.g., violates the law of thermodynamics).
- Applications that propose projects that do not conform to the Solar Decathlon rules.

## **II. AWARD INFORMATION**

### **A. AWARD OVERVIEW**

#### **1. ESTIMATED FUNDING**

EERE expects to make approximately \$1,000,000 of Federal funding available for new awards under this FOA, subject to the availability of appropriated funds. EERE anticipates making approximately twenty (20) awards under this FOA. EERE may issue one, multiple, or no awards.

The maximum award each team can receive is \$50,000.

EERE will establish more than one budget period for each award and may fund only the initial budget period(s). Applicants are not guaranteed funding beyond the initial budget period(s). Before the expiration of the initial budget period(s), EERE may perform a down-select among different recipients and provide additional funding only to a subset of recipients.

#### **2. PERIOD OF PERFORMANCE**

EERE anticipates making awards that will run up to 24 months in length, subject to the availability of appropriations. Projects will be divided into two budget periods. Continuation from one budget period to the next will be contingent upon satisfactory performance of the first budget period, go/no-go decision reviews, the availability of funds appropriated by Congress for the purpose of this Office, and the availability of future-year budget authority. At the go/no-go decision points, EERE will evaluate project performance, project schedule

adherence, meeting milestone objectives, compliance with reporting requirements, and overall contribution to the program goals and objectives. As a result of this evaluation, EERE will make a determination to continue the project, re-direct the project, or discontinue funding the project. Only those projects demonstrating a high probability of successfully meeting the program targets will be continued.

### **3. NEW APPLICATIONS ONLY**

EERE will accept only new applications under this FOA. EERE will not consider applications for renewals of existing EERE-funded awards through this FOA.

## **B. EERE FUNDING AGREEMENTS**

Through Cooperative Agreements and other similar agreements, EERE provides financial and other support to projects that have the potential to realize the FOA objectives. EERE does not use such agreements to acquire property or services for the direct benefit or use of the United States Government.

### **COOPERATIVE AGREEMENTS**

EERE generally uses Cooperative Agreements to provide financial and other support to Prime Recipients.

Through Cooperative Agreements, EERE provides financial or other support to accomplish a public purpose of support or stimulation authorized by Federal statute. Under Cooperative Agreements, the Government and Prime Recipients share responsibility for the direction of projects.

EERE has substantial involvement in all projects funded via Cooperative Agreement. See Section VI.C.7 of the FOA for more information on what substantial involvement may involve.

## **C. PERFORMANCE OF WORK IN THE UNITED STATES**

EERE requires all work under EERE funding agreements to be performed in the United States. The Prime Recipient must obtain a waiver from the EERE Contracting Officer to expend project funding (including cost share) outside of the United States. The waiver requirement does not apply to the purchase of supplies and equipment; however the Prime Recipient should make every effort to purchase supplies and equipment within the United States.

EERE may deny reimbursement for any failure to comply with this requirement.

Applicants and Prime Recipients may request a waiver of this requirement. Applicants must include a written waiver request in the Full Application. Prime Recipients must submit any waiver requests in writing to the EERE Contracting Officer. The EERE Contracting Officer has discretion to waive this requirement if he/she determines that it will further the purposes of this FOA, and is otherwise in the interest of EERE. See Section IV.E.14 of the FOA for waiver request information.

### **III. ELIGIBILITY INFORMATION**

#### **A. ELIGIBLE APPLICANTS**

##### **1. *DOMESTIC ENTITIES***

Educational institutions that are incorporated (or otherwise formed) under the laws of a particular State or territory of the United States are eligible to apply for funding as a Prime Recipient or Subrecipient.

##### **2. *FOREIGN ENTITIES***

Other than as provided in the “Domestic Entities” sections above, all Prime Recipients receiving funding under this FOA must be incorporated (or otherwise formed) under the laws of a State or territory of the United States. If a foreign educational institution applies for funding as a Prime Recipient, it must designate in the Full Application a subsidiary or affiliate incorporated (or otherwise formed) under the laws of a State or territory of the United States to be the Prime Recipient. The Full Application must state the nature of the corporate relationship between the foreign entity and domestic subsidiary or affiliate.

#### **B. COST SHARING**

Cost Share 50%:

The cost share must be at least 50% of the total allowable costs for demonstration projects (i.e., the sum of the Government share, and the recipient share of allowable costs equals the total allowable cost of the project) and must come from non-Federal sources unless otherwise allowed by law. (See 10 CFR 600.30 for the applicable cost sharing requirements.)

The anticipated total project funding (includes both Federal and non-Federal funds) for any one individual award made under this announcement is expected to be \$100,000.

### **1. LEGAL RESPONSIBILITY**

Although the cost share requirement applies to the project as a whole, including work performed by members of the project team other than the Prime Recipient, the Prime Recipient is legally responsible for paying the entire cost share. The Prime Recipient's cost share obligation is expressed in the Assistance agreement as a static amount in U.S. dollars (cost share amount) and as a percentage of the Total Project Cost (cost share percentage). If the funding agreement is terminated prior to the end of the project period, the Prime Recipient is required to contribute at least the cost share percentage of total expenditures incurred through the date of termination.

The Prime Recipient is solely responsible for managing cost share contributions by the Project Team and enforcing cost share obligation assumed by Project Team members in subawards or related agreements.

### **2. COST SHARE ALLOCATION**

Each Project Team is free to determine how best to allocate the cost share requirement among the team members. The amount contributed by individual Project Team members may vary, as long as the cost share requirement for the project as a whole is met.

### **3. COST SHARE TYPES AND ALLOWABILITY**

Every cost share contribution must be allowable under the applicable Federal cost principles, as described in Section IV.J.1 of the FOA. In addition, cost share must be verifiable upon submission of the Full Application.

Project Teams may provide cost share in the form of cash or in-kind contributions. Cash contributions may be provided by the Prime Recipient or Subrecipients. Allowable in-kind contributions include, but are not limited to: personnel costs, indirect costs, facilities and administrative costs, rental value of buildings or equipment, and the value of a service, other resource, or third party in-kind contribution.

Project teams may use funding or property received from state or local governments to meet the cost share requirement, so long as the funding was not provided to the state or local government by the Federal Government.

The Prime Recipient may not use the following sources to meet its cost share obligations including, but not limited to:

- Revenues or royalties from the prospective operation of an activity beyond the project period;



- Proceeds from the prospective sale of an asset of an activity;
- Federal funding or property (e.g., Federal grants, equipment owned by the Federal Government); or
- Expenditures that were reimbursed under a separate Federal Technology Office.

In addition, Project Teams may not use independent research and development (IR&D) funds to meet their cost share obligations. Project Teams may not use the same cash or in-kind contributions to meet cost share requirements for more than one project or program.

Cost share contributions must be specified in the project budget, verifiable from the Prime Recipient's records, and necessary and reasonable for proper and efficient accomplishment of the project. As all sources of cost share are considered part of total project cost, the cost share dollars will be scrutinized under the same Federal regulations as Federal dollars to the project. Every cost share contribution must be reviewed and approved in advance by the Contracting Officer and incorporated into the project budget before the expenditures are incurred.

Applicants are encouraged to refer to 10 CFR Parts 600 and 603 for additional guidance on cost sharing, specifically 10 CFR §§600.30, 600.123, 600.224, 600.313, and 603.525-555.

#### **4. COST SHARE VERIFICATION**

Applicants are required to provide written assurance of their proposed cost share contributions in their Full Applications.

Upon selection for award negotiations, Applicants are required to provide additional information and documentation regarding their cost share contributions. Please refer to Appendix B of the FOA for guidance on the requisite cost share information and documentation.

#### **5. COST SHARE PAYMENT**

All proposed cost share contributions must be reviewed in advance by the Contracting Officer and incorporated into the project budget before the expenditures are incurred.

EERE requires Prime Recipients to contribute the cost share amount incrementally over the life of the award. Specifically, every Prime Recipient is required to contribute, at a minimum, the cost share percentage of total expenditures incurred during each billing period. For example, a Prime Recipient is required to contribute at least 31% of the total expenditures incurred during each billing period if the award states that the cost share percentage is 31%.

If Prime Recipients anticipate difficulty providing the requisite cost share every billing period, they may request authorization from EERE upon selection for award negotiations to waive this

requirement. Such requests must be sent by email to the Contracting Officer during award negotiations and include the following information: (1) a detailed justification for the request; (2) a proposed schedule of payments, including amounts and dates; (3) a written commitment to meet that schedule; and (4) such evidence as necessary to demonstrate that the Prime Recipient has complied with its cost share obligations to date. The Contracting Officer must approve all such requests before they may go into effect.

## **C. COMPLIANCE CRITERIA**

To be considered for substantive evaluation, an applicant submission must meet the Compliance criteria set forth below. EERE will not review or consider noncompliant Full Application submissions that were: submitted through means other than EERE Exchange; submitted after the applicable deadline; and/or submitted incomplete. EERE will not extend the submission deadline for Applicants that fail to submit required information due to server/connection congestion.

### **1. COMPLIANCE CRITERIA**

#### *i. Full Applications*

Full Applications are deemed compliant if:

- The Full Application complies with the content and form requirements in Section IV.C of the FOA; and
- The Applicant entered all required information necessary for a meaningful review, successfully uploaded all required documents, and clicked the “Submit” button in EERE Exchange by the deadline stated in the FOA.

## **D. RESPONSIVENESS CRITERIA**

EERE performs a preliminary technical review of Full Applications. Any “Applications Specifically Not of Interest,” as described in Section I.C of the FOA, are deemed nonresponsive and are not reviewed or considered.

## **E. LIMITATION ON NUMBER OF FULL APPLICATIONS ELIGIBLE FOR REVIEW**

Applicants may only submit one Full Application for consideration under this FOA. The Full Application must address the purpose and objectives identified in Section I.A of the FOA. If an applicant submits more than one Full Application, EERE will only consider the last timely submission for evaluation. Any other submissions received listing the same applicant will be considered noncompliant and not eligible for further consideration. This limitation does not prohibit an applicant from collaborating on other applications (e.g., as a potential Subrecipient

or partner) so long as the entity is only listed as the Prime Applicant on one Full Application submitted under this FOA.

## F. QUESTIONS REGARDING ELIGIBILITY

EERE will not make eligibility determinations for potential applicants prior to the date on which applications to this FOA must be submitted. The decision whether to submit an application in response to this FOA lies solely with the applicant.

# IV. APPLICATION AND SUBMISSION INFORMATION

## A. APPLICATION PROCESS

The application process consists of the Full Application by each applicant. EERE performs an initial eligibility review of the applicant submissions to determine whether they meet the eligibility requirements of Section III of the FOA. EERE will not review or consider noncompliant and/or nonresponsive submissions. All submissions must conform to the following form and content requirements, including maximum page lengths, described below and must be submitted via EERE Exchange at <https://eere-exchange.energy.gov/>, unless specifically stated otherwise. **EERE will not review or consider submissions submitted through means other than EERE Exchange, submissions submitted after the applicable deadline, and incomplete submissions.** EERE will not extend deadlines for Applicants who fail to submit required information and documents due to server/connection congestion. A control number will be issued when an Applicant begins the Exchange application process. This control number must be included with all Application documents, as described below.

The Full Application must conform to the following requirements:

- Each must be submitted in Adobe PDF format.
- Each must be written in English.
- All pages must be formatted to fit on 8.5 x 11 inch paper with margins not less than one inch on every side. Use Times New Roman typeface, a black font color, and a font size of 12 point or larger (except in figures in tables, which may be 10 point font). A symbol font may be used to insert Greek letters or special characters, but the font size requirement still applies. References must be included as footnotes or endnotes in a font size of 10 or larger. Footnotes and endnotes are counted toward the maximum page requirement.
- The Control Number must be prominently displayed on the upper right corner of the header of every page. Page numbers must be included in the footer of every page.

- Each must not exceed the specified maximum page limit, including cover page, charts, graphs, maps, and photographs when printed using the formatting requirements set forth above and single spaced. If Applicants exceed the maximum page lengths indicated below, EERE will review only the authorized number of pages and disregard any additional pages.

Applicants are responsible for meeting each submission deadline. **Applicants are strongly encouraged to submit their Full Applications at least 48 hours in advance of the submission deadline.** Under normal conditions (i.e., at least 48 hours in advance of the submission deadline), Applicants should allow at least 1 hour to submit a Full Application. Once the Application is submitted in EERE Exchange, Applicants may revise or update their application until the expiration of the applicable deadline.

EERE urges Applicants to carefully review their Full Applications and to allow sufficient time for the submission of required information and documents. All Full Applications that pass compliance review will undergo comprehensive technical merit review according to the criteria identified in Section V of the FOA.

## **B. APPLICATION FORMS**

The application forms and instructions are available on EERE Exchange. To access these materials, go to <https://eere-Exchange.energy.gov> and select the appropriate funding opportunity number.

Note: The maximum file size that can be uploaded to the EERE Exchange website is 10MB. Files in excess of 10MB cannot be uploaded, and hence cannot be submitted for review. If a file exceeds 10MB but is still within the maximum page limit specified in the FOA it must be broken into parts and denoted to that effect. For example:

**ControlNumber\_LeadOrganization\_Project\_Part\_1**  
**ControlNumber\_LeadOrganization\_Project\_Part\_2, etc.**

## **C. CONTENT AND FORM OF THE FULL APPLICATION**

Applicants must submit a Full Application by the specified due date in order to be considered for funding under this FOA. Applicants must complete the following application forms found on the EERE Exchange website at <https://eere-Exchange.energy.gov/>, in accordance with the instructions.

All Full Application documents must be marked with the Control Number issued to the Applicant.

### **1. FULL APPLICATION CONTENT REQUIREMENTS**

EERE will not review or consider ineligible Full Applications (see Section III of the FOA).

*Questions about this FOA? Email [solardecathlon2015@go.doe.gov](mailto:solardecathlon2015@go.doe.gov). Problems with EERE Exchange? Email [EERE-ExchangeSupport@hq.doe.gov](mailto:EERE-ExchangeSupport@hq.doe.gov). Include FOA name and number in subject line.*

Each Full Application should be limited to a single concept or technology. Unrelated concepts and technologies should not be consolidated in a single Full Application.

Full Applications must conform to the following requirements:

SUBMISSION	COMPONENTS	FILE NAME (IF NECESSARY)
<b>Full Application (PDF, unless stated otherwise)</b>	Technical Volume (See Chart in Section IV.E.2)	ControlNumber_LeadOrganization_TechnicalVolume
	SF-424 (no page limit)	ControlNumber_LeadOrganization_App424
	Budget Justification (PMC 123.1) (no page limit, Microsoft Excel format. Applicants must use the template available in EERE Exchange)	ControlNumber_LeadOrganization_Budget_Justification
	Summary for Public Release (1 page max)	ControlNumber_LeadOrganization_Summary
	Summary Slide (1 page limit, Microsoft PowerPoint format)	ControlNumber_LeadOrganization_Slide
	Qualifications, Experience, and Capabilities (3 pages max. for each Personal Qualifications Summary)	ControlNumber_LeadOrganization_Resume
	Letters of Commitment (signed letters of cost share commitment if applicable)	ControlNumber_LeadOrganization_Commitments
	Subaward Budget Justification (PMC 123.1);	ControlNumber_LeadOrganization_Subawardee_Budget_Justification
	SF-LLL Disclosure of Lobbying Activities	ControlNumber_LeadOrganization_SF-LLL

**Note:** The maximum file size that can be uploaded to the EERE Exchange website is 10MB. Files in excess of 10MB cannot be uploaded, and hence cannot be submitted for review. If a file exceeds 10MB but is still within the maximum page limit specified in the FOA it must be broken into parts and denoted to that effect. For example:

**ControlNumber\_LeadOrganization\_Project\_Part\_1**  
**ControlNumber\_LeadOrganization\_Project\_Part\_2, etc.**

**EERE will not accept late submissions that resulted from technical difficulties due to uploading files that exceed 10MB.**

EERE provides detailed guidance on the content and form of each component below.

Questions about this FOA? Email [solardecathlon2015@go.doe.gov](mailto:solardecathlon2015@go.doe.gov). Problems with EERE Exchange? Email [EERE-ExchangeSupport@hq.doe.gov](mailto:EERE-ExchangeSupport@hq.doe.gov). Include FOA name and number in subject line.

## 2. TECHNICAL VOLUME

The Technical Volume must be submitted in Adobe PDF format. The Technical Volume must conform to the following content and form requirements, including maximum page lengths. If Applicants exceed the maximum page lengths indicated below, EERE will review only the authorized number of pages and disregard any additional pages. This volume must address the Merit Review Criteria as discussed in Section V.A.2 of the FOA. Save the Technical Volume in a single PDF file using the following convention for the title: "ControlNumber\_LeadOrganization\_TechnicalVolume".

Applicants must provide sufficient citations and references to the primary research literature to justify the claims and approaches made in the Technical Volume. EERE and reviewers may review primary research literature in order to evaluate applications. However, EERE and reviewers are under no obligation to review cited sources (e.g., internet websites).

The Technical Volume to the Full Application may not be more than 30 pages, including the cover page, table of contents, and all citations, charts, graphs, maps, photos, or other graphics, and must include all of the information in the table below. The applicant should consider the weighting of each of the evaluation criteria (see Section V.A.2 of the FOA) when preparing the Technical Volume.

SECTION/PAGE LIMIT	DESCRIPTION
<b>Cover Page</b>	The cover page should include the project title, both the technical and business points of contact, names of all team member organizations, and any statements regarding confidentiality.
<b>Project Overview</b> (This section should constitute approximately 10% of the Technical Volume)	<p>The Project Overview should contain the following information:</p> <ul style="list-style-type: none"> <li>• <b>Background:</b> The Applicant should discuss the background of their organization, including the history, successes, and current research and development status (i.e., the technical baseline) relevant to the technical topic being addressed in the Full Application.</li> <li>• <b>Project Goal:</b> The Applicant should explicitly identify the targeted improvements to the baseline technology and the critical success factors in achieving that goal.</li> <li>• <b>DOE Impact:</b> The Applicant should discuss the impact that DOE funding would have on the proposed project. Applicants should specifically explain how DOE funding, relative to prior, current, or anticipated funding from other public and private sources, is necessary to achieve the project objectives.</li> </ul>

<p><b>Technical Description, Innovation, and Impact</b> (This section should constitute approximately 25% of the Technical Volume)</p>	<p>The Technical Description should contain the following information:</p> <ul style="list-style-type: none"> <li>• <b>Relevance and Outcomes:</b> The Applicant should provide a detailed description of the technology, including the scientific and other principles and objectives that will be pursued during the project. This section should describe the relevance of the proposed project to the goals and objectives of the FOA, including the potential to meet specific DOE technical targets or other relevant performance targets. The Applicant should clearly specify the expected outcomes of the project.</li> <li>• <b>Feasibility:</b> The Applicant should demonstrate the technical feasibility of the proposed technology and capability of achieving the anticipated performance targets, including a description of previous work done and prior results.</li> <li>• <b>Innovation and Impacts:</b> The Applicant should describe the current state of the art in the applicable field, the specific innovation of the proposed technology, the advantages of proposed technology over current and emerging technologies, and the overall impact on advancing the state of the art/technical baseline if the project is successful.</li> </ul>
<p><b>Workplan</b> (This section should constitute approximately 25% of the Technical Volume)</p>	<p>The Workplan should contain the following information:</p> <ul style="list-style-type: none"> <li>• <b>Project Objectives:</b> The Applicant should provide a clear and concise (high-level) statement of the goals and objectives of the project as well as the expected outcomes.</li> <li>• <b>Technical Scope Summary:</b> The Applicant should provide a summary description of the overall work scope and approach to achieve the objective(s). The overall work scope is to be divided by performance periods that are separated by discrete, approximately annual decision points (see below for more information on go/no-go decision points). The applicant should describe the specific expected end result of each performance period.</li> <li>• <b>Work Breakdown Structure (WBS) and Task Descriptions:</b> The Workplan should fully describe the work to be accomplished and how the applicant will achieve the milestones, will accomplish the final project goal(s), and will produce all deliverables. The Workplan is to be structured with a hierarchy of performance period (approximately annual), task and subtasks, which is typical of a standard work breakdown structure (WBS) for any project. The Workplan shall contain a concise detailed description of the specific activities to be conducted over the life of the project. "Detailed" is defined as a full explanation and disclosure of the project being proposed (i.e., a statement such as "we will then complete a proprietary process" is unacceptable). It is the Applicant's responsibility to prepare an adequately detailed task plan to describe the proposed project and the plan for addressing the objectives of this FOA. To this end each task and subtask is to have a unique number and title and an indication of the duration of the task or subtask in months. Each task and subtask is to have a task summary that describes the objectives, what work is to be accomplished, and relationship to project deliverables or expected results. Appropriate</li> </ul>



	<p>milestones should be incorporated into the task and subtask structure. Each task and subtask is to have a technical details section, as appropriate, to discuss how the work will be done, anticipated problems or uncertainties, and any further clarification, such as why a specific approach is being taken. An example Work Breakdown Structure is provided below.</p> <ul style="list-style-type: none"> <li>• <b>Milestones:</b> The Applicant should provide appropriate milestones throughout the project to demonstrate success, where success is defined as technical achievement rather than simply completing a task. To ensure that milestones are relevant, Applicants should follow the SMART rule of thumb, which is that all milestones should be Specific, Measurable, Achievable, Relevant, and Timely. Unless otherwise specified in the FOA, the minimum requirement is that each project must have at least one milestone per quarter for the duration of the project (depending on the project, more milestones may be necessary to comprehensively demonstrate progress). The Applicant should also provide the means by which the milestone will be verified. In addition to describing milestones in the Workplan text and including them in the schedule, the Applicant is required to complete the Milestone Summary Table shown below.</li> <li>• <b>Go/No-Go Decision Points:</b> The Applicant should provide project-wide go/no-go decision points at appropriate points in the Workplan. A go/no-go decision point is a risk management tool and a project management best practice to ensure that, for the current phase or period of performance, technical success is definitively achieved and potential for success in future phases or periods of performance is evaluated, prior to actually beginning the execution of future phases. Unless otherwise specified in the FOA, the minimum requirement is that each project must have at least one project-wide go/no-go decision point for each year (12-month period) of the project. The Applicant should also provide the specific technical criteria to be used to make the go/no-go decision. In addition to describing the go/no-go decision points in the Workplan text and including them in the schedule, the Applicant is required to complete the Milestone Summary Table shown below, which must include go/no-go decision points and their method of verification.</li> <li>• <b>Project Schedule (Gantt Chart or similar):</b> The Applicant should provide a detailed schedule for the entire project, including task and subtask durations, milestones, and go/no-go decision points.</li> <li>• <b>Project Management:</b> The Applicant should discuss the team's proposed management plan, including the following: <ul style="list-style-type: none"> <li>○ The overall approach to and organization for managing the work</li> <li>○ The roles of each Project Team member</li> <li>○ Any critical handoffs/interdependencies among Project Team members</li> <li>○ The technical and management aspects of the management plan, including systems and practices, such as financial and</li> </ul> </li> </ul>
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	<p>project management practices</p> <ul style="list-style-type: none"> <li>○ The approach to project risk management</li> <li>○ A description of how project changes will be handled</li> <li>○ If applicable, the approach to Quality Assurance/Control</li> <li>○ How communications will be maintained among Project Team members</li> </ul> <ul style="list-style-type: none"> <li>● Market Transformation/Commercialization Plan: The Applicant should provide a market transformation/commercialization plan, including the following: <ul style="list-style-type: none"> <li>○ Identification of target market, competitors, and distribution channels for proposed technology along with known or perceived barriers to market penetration, including a mitigation plan</li> <li>○ Identification of a product development and/or service plan, commercialization timeline, financing, product marketing, legal/regulatory considerations including intellectual property, infrastructure requirements, data dissemination, U.S. manufacturing plan etc., and product distribution.</li> </ul> </li> </ul>
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**Example Milestone Summary Table and Work Breakdown Structure are provided on following two pages, after which the Technical Volume requirements will continue.**

Milestone Summary Table							
Recipient Name:							
Project Title:							
Task Number	Task Title or Subtask Title (If Applicable)	Milestone Type (Milestone or Go/No-Go Decision Point)	Milestone Number* (Go/No-Go Decision Point Number)	Milestone Description (Go/No-Go Decision Criteria)	Milestone Verification Process (What, How, Who, Where)	Anticipated Date (Months from Start of the Project)	Anticipated Quarter (Quarters from Start of the Project)

\*Milestone numbering convention should align with Task and Subtask numbers, as appropriate. For example, M1.1, M3.2, etc.

Note 1: It is required that each project have at least one milestone per quarter for the entire project duration. It is not necessary that each task have one milestone per quarter.

Note 2: It is required that each project have at least one project-wide go/no-go decision point each year. If a decision point is not specific to a particular task, then you may leave the task information blank for those decision points.

Note 3: All milestones should follow the SMART rule of thumb: Specific, Measureable, ~~Achievable~~Achievable, Relevant, and Timely

### Example Work Breakdown Structure

**Technical Summary:** Provide a high-level overview of the final result of this project. Explain the final objective, outcome, milestone and/or deliverable that are to be produced and the rationale for why the applicant has organized the tasks in the way they have.

**Technical Details (Optional):** Describe the relevant management, engineering, design, process, scientific or other principles and aspects of the project that warrant discussion.

**Task 1:** Distinctive Title, Date range of the task in months (M1-M4)

**Task Summary:** Task summaries shall explicitly describe what work is to be accomplished, identify the project objectives/outcomes being addressed and provide a concise statement of the objectives of that task. In addition, the description should indicate the project deliverables that this task will help achieve (D1, D2, D5 etc. note that deliverables may be applicable to multiple or all tasks.)

**Task Details:** Within this section, the barriers and risks should be identified, as well as the approaches for overcoming those barriers and risks. Where appropriate, multiple pathways early in the effort can be outlined for risk reduction.

**Milestone 1.1** (if applicable)

**Milestone 1.2** (if applicable)

Etc.

**Subtask 1.1:** Date range (M1-M2)

**Subtask Summary:** Describe the specific and detailed work efforts that go into achieving the higher-level tasks.

**Subtask Details:** Describe the evaluation techniques that will be used and the expected result that will be generated from the effort.

**Milestone 1.1.1** (if applicable)

**Milestone 1.1.2** (if applicable)

Etc.

**Subtask 1.2:**

(Continue until all Task 1 subtasks are listed)

**Task 2:** (continue in the format above until all tasks and subtasks are listed)

**Subtask 2.1:** Description and Discussion

**Subtask 2.2:** Description and Discussion

<b>Technical Qualifications and Resources</b> (Approximately 15% of the Technical Volume)	<p>The Technical Qualifications and Resources should contain the following information:</p> <ul style="list-style-type: none"> <li>• Describe the Project Team’s unique qualifications and expertise, including those of key subrecipients</li> <li>• Describe the Project Team’s existing equipment and facilities that will facilitate the successful completion of the proposed project; include a justification of any new equipment or facilities requested as part of the project</li> <li>• This section should also include relevant, previous work efforts, demonstrated innovations, and how these enable the Applicant to achieve the project objectives.</li> <li>• Describe the time commitment of the key team members to support the project.</li> <li>• Attach one-page resumes for key participating team members as an appendix. Resumes do not count towards the page limit. Multi-page resumes are not allowed.</li> <li>• Describe the technical services to be provided by DOE/NNSA FFRDCs and GOGOs, if applicable.</li> <li>• Attach any letters of support from partners/end users as an appendix (1 page maximum per letter). Letters of support do not count towards the page limit.</li> <li>• For multi-organizational or multi-investigator projects, describe succinctly:             <ul style="list-style-type: none"> <li>○ The roles and the work to be performed by each PI and Key Participant;</li> <li>○ Business agreements between the Applicant and each PI and Key Participant;</li> <li>○ How the various efforts will be integrated and managed;</li> <li>○ Process for making decisions on scientific/technical direction;</li> <li>○ Publication arrangements;</li> <li>○ Intellectual Property issues; and</li> <li>○ Communication plans</li> </ul> </li> </ul>
<b>Conceptual Design</b> (Approximately 25% of the Technical Volume)	<p>The Conceptual Design must be submitted as a separate, stand-alone document and is part of the 30-page technical proposal limit.):</p> <ul style="list-style-type: none"> <li>• Provide graphics, e.g., sketches, drawings, diagrams, etc., and a one-page 500-word maximum narrative summarizing the most important elements of the conceptual design solution. Refer to the Solar Decathlon rules for additional information.</li> </ul>

### **3. SF-424: APPLICATION FOR FEDERAL ASSISTANCE**

Complete all required field in accordance with the instructions on the form. The list of certifications and assurances in Field 21 can be found at <http://energy.gov/management/office-management/operational-management/financial-assistance/financial-assistance-forms>, under Certifications and Assurances. Note: The dates and dollar amounts on the SF-424 are for the complete project period and not just the first year, first phase or other subset of the project period. Save the SF-424 in a single file titled "ControlNumber\_LeadOrganization\_App424".

### **4. BUDGET JUSTIFICATION WORKBOOK (PMC 123.1)**

Applicants are required to complete the Budget Justification Workbook. This form is available on EERE Exchange at <https://eere-Exchange.energy.gov/>. Recipients must complete each tab of the Budget Justification Workbook for the project as a whole, including all work to be performed by the Prime Recipient and its Subrecipients and Contractors, and provide all requested documentation (e.g., a Federally-approved forward pricing rate agreement, Defense Contract Audit Agency or Government Audits and Reports, if available). Applicants should include costs associated with required annual audits and incurred costs proposals in their proposed budget documents. The "Instructions and Summary" included with the Budget Justification Workbook will "auto-populate" as the Applicant enters information into the Workbook. Applicants must carefully read the "Instructions and Summary" tab provided within the Budget Justification Workbook. Save the Budget Justification Workbook in a single file titled "ControlNumber\_LeadOrganization\_Budget\_Justification".

### **5. BUDGET INFORMATION SF-424A**

Applicants must provide a separate budget for each year of support requested and a cumulative budget for the total project period. Use the SF-424A "Budget Information – Non Construction Programs" form on the DOE Financial Assistance Forms Page at <http://energy.gov/management/office-management/operational-managment/financial-assistance/financial-assistance-forms>. The SF-424A provides columns for each individual budget-year as well as the cumulative project-budget.

Applicants may request funds under any of the Object Class Categories as long as the item and amount are necessary to perform the proposed work, meet all the criteria for allowability under the applicable Federal cost principles, and are not prohibited by the funding restrictions in this announcement (see Section IV.J). Save the information in a single file titled "ControlNumber\_LeadOrganization\_SF424A".

### **6. SUMMARY/ABSTRACT FOR PUBLIC RELEASE**

Applicants are required to submit a one-page summary/abstract of their project. 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 after selections are made. The project summary must not exceed 1 page when printed using standard 8.5 x 11 paper with 1" margins (top, bottom, left, and right) with font not smaller than 11 point. Save the Summary for Public Release in a single file titled "ControlNumber\_LeadOrganization\_Summary".

## **7. SUMMARY SLIDE**

Applicants are required to provide a single PowerPoint slide summarizing the proposed project. The slide must be submitted in Microsoft PowerPoint format. This slide is used during the evaluation process. Save the Summary Slide in a single file titled "ControlNumber\_LeadOrganization\_Slide".

The Summary Slide template requires the following information:

- A technology Summary;
- A description of the technology's impact;
- Proposed project goals;
- Any key graphics (illustrations, charts and/or tables);
- The project's key idea/takeaway;
- Project title and Principal Investigator information; and
- Requested EERE funds and proposed applicant cost share.

## **8. QUALIFICATIONS, EXPERIENCE, AND CAPABILITIES**

Applicants are required to provide a resume for the PI and each Key Participant. Each resume is limited to 3 pages maximum. Curriculum vitae will not be considered. Each resume must include:

- Education/training;
- Employment history;
- Awards and honors;
- Up to 10 peer-reviewed publications specifically related to the proposed project;
- Up to 10 other peer-reviewed publications demonstrating capabilities in the broad field;
- Up to 10 non-peer reviewed publications and patents demonstrating capabilities in the broad field.

Save the Qualifications, Experience, and Capabilities in a single file titled "ControlNumber\_LeadOrganization\_Resumes".

### **9. SUBAWARD BUDGET JUSTIFICATION PMC 123.1**

Applicants must provide a separate budget justification, PMC 123.1 (i.e., budget justification for each budget year and a cumulative budget) for each subawardee that is expected to perform work estimated to be more than \$250,000 or 25 percent of the total work effort (whichever is less). The budget justification must include the same justification information described in the “Budget Justification” section, above. Save each subaward budget justification in a single file titled “ControlNumber\_LeadOrganization\_Subawardee\_Budget\_Justification”.

### **10. SF-LLL: DISCLOSURE OF LOBBYING ACTIVITIES**

Prime Recipients and Subrecipients may not use any Federal funds to influence or attempt to influence, directly or indirectly, congressional action on any legislative or appropriation matters.

Prime Recipients and Subrecipients are required to complete and submit SF-LLL, “Disclosure of Lobbying Activities” (<http://www.whitehouse.gov/sites/default/files/omb/grants/sflllin.pdf>) if any non-Federal funds have been paid or will be paid to any person for influencing or attempting to influence any of the following in connection with your application:

- An officer or employee of any Federal agency;
- A Member of Congress;
- An officer or employee of Congress; or
- An employee of a Member of Congress.

Save the SF-LLL in a single file titled “ControlNumber\_LeadOrganization\_SF-LLL”.

### **11. WAIVER REQUESTS: FOREIGN ENTITIES AND PERFORMANCE OF WORK IN THE UNITED STATES**

#### *i. Foreign Entity Participation:*

As set forth in Section III.A.3, all Prime Recipients receiving funding under this FOA must be incorporated (or otherwise formed) under the laws of a State or territory of the United States. If a foreign entity applies for funding as a Prime Recipient, it must designate in the Full Application a subsidiary or affiliate incorporated (or otherwise formed) under the laws of a State or territory of the United States to be the Prime Recipient.

To seek a waiver of this requirement, the Applicant must submit an explicit waiver request in the Full Application, which includes the following information:

- Entity name;
- Country (or state) of incorporation;
- Description of the work to be performed by the entity for whom the waiver is being requested; and

- Countries where the work will be performed.

In the waiver request, the Applicant must demonstrate to the satisfaction of EERE that it would further the purposes of this FOA and is otherwise in the interests of EERE to have a foreign entity serve as the Prime Recipient. The Contracting Officer may require additional information before considering the waiver request. Save the waiver request(s) in a single PDF file titled “ControlNumber\_LeadOrganization\_Waiver”.

*ii. Performance of Work in the United States*

Section II.C requires that all work under EERE funding agreements to be performed in the United States. The Prime Recipient must obtain a waiver from the EERE Contracting Officer to expend project funding (including cost share) outside of the United States. This requirement does not apply to the purchase of supplies and equipment, so a waiver is not required for foreign purchases of these items. However, the Prime Recipient should make every effort to purchase supplies and equipment within the United States.

EERE may deny reimbursement for any failure to comply with this requirement.

To seek a waiver of this requirement, the Applicant must submit an explicit waiver request in the Full Application, which includes the following information:

- The countries in which the work will be performed;
- A description of the work to be performed outside the U.S.; and
- The rationale for performing the work overseas.

In the waiver request, the Applicant must demonstrate to the satisfaction of the EERE Contracting Officer that a waiver would further the purposes of this FOA and is otherwise in the interests of EERE and the United States. For example, an Applicant may seek to demonstrate the United States economic interest will be better served through a greater percentage of work performed outside the United States (i.e., Showing how the expertise to develop the technology exists only outside the United States, but the technology’s ultimate commercialization will result in substantial benefits to the United States such as improved electricity reliability or increased employment). The Contracting Officer may require additional information before considering the waiver request. Save the waiver request(s) in a single PDF file titled “ControlNumber\_PerformanceofWork\_Waiver”.

**D. SUBMISSIONS FROM SUCCESSFUL APPLICANTS**

If selected for award, EERE 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 Letters from Third Parties Contributing to Cost Share, if applicable
- Name and phone number of the Designated Responsible Employee for comply with national policies prohibiting discrimination (See 10 CFR 1040.5)
- Representation of Limited Rights Data and Restricted Software, if applicable
- Environmental Questionnaire

## **E. SUBMISSION DATES AND TIMES**

### **1. FULL APPLICATION DUE DATE**

Applications must be received by December 20, 2013, not later than 5:00 PM Eastern Time. You are encouraged to transmit your application well before the deadline. Applications received after the deadline will not be reviewed or considered for award.

## **F. INTERGOVERNMENTAL REVIEW**

This Technology Office is not subject to Executive Order 12372 – Intergovernmental Review of Federal Technology Offices.

## **G. FUNDING RESTRICTIONS**

### **1. ALLOWABLE COSTS**

All expenditures must be allowable, allocable, and reasonable in accordance with the applicable Federal cost principles.

Refer to the following applicable Federal cost principles for more information:

- 2 CFR 220 for Educational Institutions;
- 2 CFR 225 for State, Local, and Indian Tribal Governments;
- 2 CFR 230 for Non Profit Organizations; and
- FAR Part 31 for For-Profit entities.

### **2. PRE-AWARD COSTS**

Recipients may charge to an award resulting from this FOA pre-award costs that were incurred within the ninety (90) calendar day period immediately preceding the effective date of the award and no earlier than the selection date, if the costs are allowable in accordance with the applicable Federal cost principles reference in 10 CFR Part 600. Recipients must obtain the prior approval of the Contracting Office for any pre-award costs that are for periods greater than this 90 day calendar period. If recipients are State or local Governments, they may not incur pre-award costs prior to award, without prior approval of the Contracting Officer.

*i. Pre-Award Costs Related to National Environmental Policy Act (NEPA) Requirements*

EERE's decision whether and how to distribute federal funds under this FOA is subject to NEPA. Applicants should carefully consider and should seek legal counsel or other expert advice before taking any action related to the proposed project that would have an adverse effect on the environment or limit the choice of reasonable alternatives prior to EERE completing the NEPA review process.

EERE does not guarantee or assume any obligation to reimburse costs where the Prime Recipient incurred the costs prior to receiving written authorization from the Contracting Officer. If the Applicant elects to undertake activities that may have an adverse effect on the environment or limit the choice of reasonable alternatives prior to receiving such written authorization from the Contracting Officer, the Applicant is doing so at risk of not receiving Federal funding and such costs may not be recognized as allowable cost share. Likewise, if a project is selected for negotiation of award, and the Prime Recipient elects to undertake activities that are not authorized for Federal funding by the Contracting Officer in advance of EERE completing NEPA review, the Prime Recipient is doing so at risk of not receiving Federal Funding and such costs may not be recognized as allowable cost share. Nothing contained in the pre-award cost reimbursement regulations or any pre-award costs approval letter from the Contracting Officer override these NEPA requirements to obtain the written authorization from the Contracting Officer prior to taking any action that may have an adverse effect on the environment or limit the choice of reasonable alternatives.

**3. PERFORMANCE OF WORK IN THE UNITED STATES**

EERE requires all work under EERE funding agreements to be performed in the United States. See Section II.C for more information. Applicants and Prime Recipients may request a waiver of this requirement. See Section IV.E.14 of the FOA for waiver request information.

**4. CONSTRUCTION**

EERE generally does not fund projects that involve major construction. Recipients are required to obtain written authorization from the Contracting Officer before incurring any major construction costs.

**5. FOREIGN TRAVEL**

If international travel is proposed for your project, please note that your organization must comply with the International Air Transportation Fair Competitive Practices Act of 1974 (49 USC 40118), commonly referred to as the "Fly America Act," and implementing regulations at 41 CFR 301-10.131 through 301-10.143. The law and regulations require air transport of people or property to, from, between, or within a country other than the United States, the cost of which

is supported under this award, to be performed by or under a cost-sharing arrangement with a U.S. flag carrier, if service is available.

## **6. EQUIPMENT AND SUPPLIES**

To the greatest extent practicable, all equipment and products purchased with funds made available under this award should be American-made. Property disposition will be required at the end of a project if the property is no longer used by the Prime Recipient for the objectives of the project, and the fair market value of property exceeds \$5,000. The rules for property disposition are set forth in the following sections of 10 CFR Part 600:

- 10 CFR 600.130 to 600.137 for Universities, Hospitals, or other Nonprofit Institutions;
- 10 CFR 600.231 to 600.233 for State and Local Governments; and
- 10 CFR 600.320 to 600.325 for For-Profit organizations.

## **7. LOBBYING**

Recipients and Subrecipients may not use any Federal funds to influence or attempt to influence, directly or indirectly, congressional action on any legislative or appropriation matters.

Recipients and Subrecipients are required to complete and submit SF-LLL, “Disclosure of Lobbying Activities” (<http://www.whitehouse.gov/sites/default/files/omb/grants/sflllin.pdf>) if any non-Federal funds have been paid or will be paid to any person for influencing or attempting to influence any of the following in connection with your application:

- An officer or employee of any Federal agency;
- A Member of Congress;
- An officer or employee of Congress; or
- An employee of a Member of Congress.

## **8. ADDITIONAL REQUIREMENTS**

Applicants will be required to comply with the Solar Decathlon rules and building code. The 2015 Solar Decathlon rules and building code will be available at [www.solardecathlon.gov](http://www.solardecathlon.gov).

# **V. APPLICATION REVIEW INFORMATION**

## **A. TECHNICAL REVIEW CRITERIA**

### **1. FULL APPLICATIONS**

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

Questions about this FOA? Email [solardecathlon2015@go.doe.gov](mailto:solardecathlon2015@go.doe.gov). Problems with EERE Exchange? Email [EERE-ExchangeSupport@hq.doe.gov](mailto:EERE-ExchangeSupport@hq.doe.gov). Include FOA name and number in subject line.

DOE will select up to 20 teams of collegiate recipients through a competitive solicitation process. The challenge to the teams competing in the Solar Decathlon 2015 is to safely and successfully design, build, and operate solar-powered houses that are cost-effective, energy-efficient, and attractive in less than 24 months.

- **Technical Innovation and Design (25%)** — The proposal demonstrates that the institution(s) is taking an aggressive yet practical approach to the project and has maximized its chances of success, in part by studying past competitions and committing to a design philosophy that demonstrates it has learned from the performance of past institutions and their designs. Are there innovations with a high likelihood of success and with the potential to benefit professional home builders proposed? (See the Building America Web site ([www.buildingamerica.gov](http://www.buildingamerica.gov)) for areas of current research.)
- **Fundraising and Team Support (25%)** — The proposal demonstrates a clear understanding of the costs associated with the project and the need for fundraising sufficient funds to support all phases of the two-year project. Fundraising has been adequately planned. The level of available or obtainable equipment, instrumentation, and facilities is adequate. Industry involvement in the project is considered.
- **Organization and Project Planning (20%)** — The proposal demonstrates that the team understands all the activities involved in the project. The activities are planned and organized adequately to ensure successful completion.
- **Conceptual Design (15%)** — The proposal demonstrates an energy-efficient, solar-powered house design at the conceptual design stage. The conceptual design communicates ideas, character, and forms of an architectural design including aesthetics, building envelope, and solar components. The design offers a sense of inspiration and delight. The design demonstrates a potential to benefit professional home builders.
- **Curriculum and Integration (15%)** — The proposal demonstrates that the institution has an architecture and/or building science curriculum and that Solar Decathlon project is well-integrated into the students' course work. The institution(s) incentivizes top students to make long-term commitments to the project by offering scholarships, independent study credit, paid research assistantships, or other paid or academic compensation.

## **B. STANDARDS FOR APPLICATION EVALUATION**

Applications that are determined to be compliant will be evaluated in accordance with this FOA, by the standards set forth in EERE's Notice of Objective Merit Review Procedure (76 Fed. Reg. 17846, March 31, 2011) and the guidance provided in the "Department of Energy Merit Review

Guide for Financial Assistance,” which is available at:  
<http://energy.gov/sites/prod/files/meritrev.pdf>.

## **C. OTHER SELECTION FACTORS**

### **1. PROGRAM POLICY FACTORS**

In addition to the above criteria, EERE may consider the following program policy factors in determining which Applicants to encourage to submit Full Applications and which Full Applications to select for award negotiations:

- The degree to which the proposed project optimizes the use of available EERE funding and would best leverage EERE’s resources to achieve programmatic objectives;
- The geographic diversity among the competing teams
- Technology diversity

## **D. MERIT REVIEW AND SELECTION PROCESS**

### **1. OVERVIEW**

The Review Process will be carried out in multiple phases: (1) an initial compliance review of the Full Applications; and (2) a technical merit review of the Full Applications

Applications that pass the initial eligibility review will be subjected to a merit review in accordance with the guidance provided in the “Department of Energy Merit Review Guide for Financial Assistance.” This guide is available at: <http://energy.gov/sites/prod/files/meritrev.pdf>.

### **2. PRE-SELECTION CLARIFICATION**

EERE may determine that pre-selection clarifications are necessary from one or more applicants. These pre-selection clarifications will solely be for the purposes of clarifying the application, and will be limited to information already provided in the application documentation. The pre-selection clarifications may occur before, during or after the merit review evaluation process. Information provided by an applicant that is not necessary to address the pre-selection clarification question will not be reviewed or considered. Typically, a pre-selection clarification will be carried out through either written responses to EERE’s written clarification questions or video or conference calls with EERE representatives; however, in rare circumstances the clarifications could be conducted through in-person meetings at EERE or applicant site.

The information provided by Applicants to EERE through pre-selection clarifications is incorporated in their applications and contributes to the merit review evaluation and EERE’s

selection decisions. Selection for participation in pre-selection clarifications does not signify that applicants have been selected for negotiation of award or that applicant is among the top ranked applications. EERE will not reimburse applicants for travel and other expenses relating to the pre-selection clarifications, nor will these costs be eligible for reimbursement as pre-award costs.

### **3. SELECTION**

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

## **VI. AWARD ADMINISTRATION INFORMATION**

### **A. ANTICIPATED NOTICE OF SELECTION AND AWARD DATES**

EERE anticipates notifying applicants selected for negotiation of award by February 14, 2014 and making awards by April 14, 2014.

### **B. AWARD NOTICES**

#### **1. REJECTED SUBMISSIONS**

Noncompliant and nonresponsive Full Applications are rejected by the Contracting Officer and are not reviewed or considered. The Contracting Officer sends a notification letter by email to the technical and administrative points of contact designated by the Applicant in EERE Exchange. The notification letter states the basis upon which the Concept Paper was discouraged or the Full Application was rejected.

#### **2. FULL APPLICATION NOTIFICATIONS**

EERE notifies Applicants of its determination via a notification letter by email to the technical and administrative points of contact designated by the Applicant in EERE Exchange. The notification letter may inform the Applicant that its Full Application was selected for award negotiations, or not selected. Alternatively, EERE may notify one or more Applicants that a final selection determination on particular Full Applications will be made at a later date, subject to the availability of funds or other factors.

#### **3. SUCCESSFUL APPLICANTS**

A notification letter selecting a Full Application for award negotiations does not authorize the Applicant to commence performance of the project. If an application is selected for award negotiations, it is not a commitment to issue an award. Applicants do not receive an award until award negotiations are complete and the Contracting Officer executes the funding agreement.

The award negotiation process will take approximately 60 days. Applicants must designate a primary and a backup point-of-contact in EERE Exchange with whom EERE will communicate to conduct award negotiations. The Applicant must be responsive during award negotiations (e.g., provide requested documentation) and meet the negotiation deadlines. If the Applicant fails to do so or negotiations are otherwise unsuccessful, EERE will cancel award negotiations and rescind the Selection. EERE reserves the right to terminate award negotiations at any time for any reason.

Please refer to Section IV.J.2 of the FOA for guidance on pre-award costs.

#### **4. POSTPONED SELECTION DETERMINATIONS**

A notification letter postponing a final selection determination until a later date does not authorize the Applicant to commence performance of the project. EERE may ultimately determine to select or not select the Full Application for award negotiations.

#### **5. UNSUCCESSFUL APPLICANTS**

EERE shall promptly notify in writing each applicant whose application has not been selected for award or whose application cannot be funded because of the unavailability of appropriated funds. If the application was not selected, the written notice shall explain why the application was not selected.

### **C. ADMINISTRATIVE AND NATIONAL POLICY REQUIREMENTS**

#### **1. ADMINISTRATIVE REQUIREMENTS**

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

The EERE Special Terms and Conditions used in most grants and cooperative agreements are located at: <http://energy.gov/management/office-management/operational-management/financial-assistance/financial-assistance-forms>.

#### **2. DUNS AND SAM REQUIREMENTS**

Additional administrative requirements for DOE grants and cooperative agreements are contained in 2 CFR Part 25.

Upon Selection for award negotiations, Prime Recipients and Subrecipients are required to register with the System for Award Management (SAM) and obtain a Dun and Bradstreet Data Universal Numbering System (DUNS) number.

SAM is the government-wide system that replaced the Central Contractor Registry (CCR). SAM can be found at <https://www.sam.gov>. If you had an active registration in CCR, you have an active registration in SAM. Prime Recipients and Subrecipients who already have an active registration in SAM are advised to ensure that it is current. A DUNS number can be obtained at <http://fedgov.dnb.com/webform>.

Prime Recipients and Subrecipients should commence this process as soon as possible in order to expedite the execution of a funding agreement. Obtaining a DUNS number and registering with SAM could take several weeks.

### **3. SUBAWARD AND EXECUTIVE REPORTING**

Additional administrative requirements necessary for DOE grants and cooperative agreements to comply with the Federal Funding and Transparency Act of 2006 (FFATA) are contained in 2 CFR Part 170. Prime Recipients must register with the new FFATA Sub-award Reporting System database and report the required data on their first tier Subrecipients. Prime Recipients must report the executive compensation for their own executives as part of their registration profile in SAM.

### **4. NATIONAL POLICY REQUIREMENTS**

The National Policy Assurances that are incorporated as a term and condition of award are located at: <http://energy.gov/management/office-management/operational-management/financial-assistance/financial-assistance-forms>.

### **5. ENVIRONMENTAL REVIEW IN ACCORDANCE WITH NATIONAL ENVIRONMENTAL POLICY ACT (NEPA)**

EERE's decision whether and how to distribute federal funds under this FOA is subject to the National Environmental Policy Act (42 USC 4321, *et seq.*). NEPA requires federal agencies to integrate environmental values into their decision-making processes by considering the potential environmental impacts of their proposed actions. For additional background on NEPA, please see DOE's NEPA website, at <http://nepa.energy.gov/>.

While NEPA compliance is a Federal agency responsibility and the ultimate decisions remain with the federal agency, all projects selected for an award will be required to assist in the timely and effective completion of the NEPA process in the manner most pertinent to their proposed project. This includes submitting the following information:

- A detailed description of all activities and facilities proposed;
- A detailed description of the affected environment; and



Best management practices and measure to be implemented to reduce or eliminate impacts to the environmental and socioeconomic resources and conflicts with other uses of the area.

## **6. APPLICANT REPRESENTATIONS AND CERTIFICATIONS**

### *i. Lobbying Restrictions*

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

### *ii. Corporate Felony Conviction and Federal Tax Liability Representations (March 2012)*

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

It is not a corporation that has been convicted (or had an officer or agent of such corporation acting on behalf of the corporation convicted) of a felony criminal violation under any Federal law within the preceding 24 months;

No officer or agent of the corporation have been convicted of a felony criminal violation for an offence arising out of actions for or on behalf of the corporation under Federal law in the past 24 months; or

It is not a corporation that has any unpaid Federal tax liability that has been assessed, for which all judicial and administrative remedies have been exhausted or have lapsed, and that is not being paid in a timely manner pursuant to an agreement with the authority responsible for collecting the tax liability.

For purposes of these representations, the following definitions apply:

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

### ~~iii.~~ *Applicant Lighting Efficiency Certification (April 2012)*

### ~~iv.~~ iii.

In submitting an application in response to this FOA, the Applicant certifies that if chosen for a grant award and the award is in excess of \$1,000,000 it will, by the end of the Federal Government's fiscal year, upgrade the efficiency of its facilities by replacing any incandescent

lighting of the type for which section 325 of the Energy Policy and Conservation Act (42 USC 6295) establishes a standard that does not meet or exceed the energy efficiency standard for incandescent light bulbs set forth in that section with a lamp that meets or exceeds the standards for lamps established in or pursuant to that section.

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

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

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

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

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

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

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

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

For purposes of this Certification, the following definitions apply:

- (A) Facilities means the room(s), area(s), or building(s) that are used to complete a majority of the work under the project.
- (B) In excess of \$1,000,000 means the total value of the grant including all budget periods funded with Federal funds and Prime Recipient cost share is greater than \$1,000,000.
- (C) The Federal Government's fiscal year begins<sup>st</sup> and ends September 30<sup>th</sup>.
- (D) Except as provided in subparagraph (4) below, the term "incandescent lamp" means a lamp in which light is produced by a filament heated to incandescence by an electric current, including only the following:
  - (1) Any lamp (commonly referred to as lower wattage nonreflector general service lamps, including any tungsten-halogen lamp) that has a rated wattage between 30 and 199 watts, has an E26 medium screw base, has a rated voltage range that lies at least partially within 115 and 130 volts, and is not a reflector lamp;
  - (2) Any lamp (commonly referred to as a reflector lamp) which is not colored or designed for rough or vibration service applications, that contains an inner reflective coating on the outer bulb to direct the light, an R, PAR, ER, BR, BPAR, or similar bulb shapes with E26 medium screw bases, a rated voltage or voltage range that lies at least partially within 115 and 130 volts, a diameter which exceeds 2.25 inches, and has a rated wattage that is 40 watts or higher;
  - (3) Any general service incandescent lamp (commonly referred to as a high- or higher-wattage lamp) that has a rated wattage above 199 watts (above 205 watts for a high wattage reflector lamp); or
  - (4) The term "incandescent lamp" does not include any lamp excluded by the Secretary, by rule, as a result of a determination that standards for such lamp would not result in significant energy savings because such lamp is designed for special applications or has special characteristics not available in substitutable lamp types.
- (E) The term "base" means the portion of the lamp which connects with the socket as described in ANSI C81.61-1990.
- (F) The term "bulb shape" means the shape of the lamp, especially the glass bulb with designations for bulb shapes found in ANSI C79.1-1980 (R1984).
- (G) The term "lamp efficacy" means the lumen output of a lamp divided by its wattage, expressed in lumens per watt (LPW).

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

## **7. STATEMENT OF SUBSTANTIAL INVOLVEMENT**

There will be a substantial involvement between EERE and the Prime Recipient during the performance of a resultant cooperative agreement. The EERE Technology Office goals and objectives addressed by the project are of such importance that shared responsibility for the management, control, direction and performance of the project is needed to ensure goals and objectives are met. EERE has the right to intervene in the conduct or performance of project activities for programmatic reasons. Intervention includes the interruption or modification of the conduct or performance of project activities. Substantial involvement includes, but is not limited to the following shared responsibilities:

1. EERE shares responsibility with the Prime Recipient for the management, control, direction, and performance of work under this award.
2. EERE reviews and approves in a timely manner project plans, including project management, testing and technology transfer plans, and recommending alternate approaches, if the plans do not address the critical programmatic issues.
3. EERE participates in project management planning activities, including risk analysis, to ensure EERE Technology Office requirements or limitations are considered in performance of the work elements.
4. EERE conducts site visits, as required, to participate in recipient “kick off” meetings; gain clearer understanding of problems or issues; observe testing; meet with stakeholders/attend public meetings; verify equipment installations; validate reported progress; review confidential/proprietary information; participate in progress and cost/financial reviews; and conduct structured project review per programmatic direction.
5. EERE promotes and facilitates technology transfer activities, including disseminating Technology Office results through presentations and publications.
6. The Prime Recipient must adhere to EERE technical direction and comply with agency-specific and programmatic requirements.
7. EERE may intervene at any time in the conduct or performance of work under this Award.
8. EERE does not limit its involvement to the administrative requirements of the award.
9. EERE may modify or terminate projects that fail to achieve predetermined Go/No Go decision criteria.
10. EERE participates in major project decision-making processes.

## **8. SUBJECT INVENTION UTILIZATION REPORTING**

To ensure that Prime Recipients and Subrecipients holding title to subject inventions are taking the appropriate steps to commercialize subject inventions, EERE may require submission of annual reports (throughout the project period and for the duration of U.S. patents resulting from the EERE project) on the utilization of subject inventions and efforts made by Recipients or their licensees or assignees to stimulate such utilization. The reports must include information regarding the status of development, date of first commercial sale or use, gross royalties received by the Prime Recipient, and such other data and information as EERE may specify.

## **9. INTELLECTUAL PROPERTY PROVISIONS**

The standard DOE financial assistance intellectual property provisions applicable to the various types of recipients are located at <http://energy.gov/gc/standard-intellectual-property-ip-provisions-financial-assistance-awards>.

## **10. REPORTING**

Reporting requirements are identified on the Federal Assistance Reporting Checklist, DOE F 4600.2, attached to the award agreement. The checklist can be accessed at [http://energy.gov/sites/prod/files/FA\\_RepReqChecklist\\_033011\\_final.pdf](http://energy.gov/sites/prod/files/FA_RepReqChecklist_033011_final.pdf).

# **VII. QUESTIONS/AGENCY CONTACTS**

Upon the issuance of a FOA, EERE personnel are prohibited from communicating (in writing or otherwise) with Applicants regarding the FOA except through the established question and answer process as described below. Specifically, questions regarding the content of this FOA must be submitted to: [solardecathlon2015@go.doe.gov](mailto:solardecathlon2015@go.doe.gov) not later than 3 business days prior to the application due date.

All questions and answers related to this FOA will be posted on EERE Exchange at: <https://eere-exchange.energy.gov>. **Please note that you must first select this specific FOA Number in order to view the questions and answers specific to this FOA.** EERE will attempt to respond to a question within 3 business days, unless a similar question and answer has already been posted on the website.

Questions related to the registration process and use of the EERE Exchange website should be submitted to: [EERE-ExchangeSupport@hq.doe.gov](mailto:EERE-ExchangeSupport@hq.doe.gov).

## **VIII. OTHER INFORMATION**

### **A. FOA MODIFICATIONS**

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

### **B. GOVERNMENT RIGHT TO REJECT OR NEGOTIATE**

EERE reserves the right, without qualification, to reject any or all applications received in response to this FOA 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 anyone other than the Contracting Officer, either express or implied, is invalid.

### **D. TREATMENT OF APPLICATION INFORMATION**

In general, EERE will use data and other information contained in applications for evaluation purposes only unless such information is generally available to the public or is already the property of the Government.

Applicants should not include trade secrets or commercial or financial information that is privileged or confidential in their application unless such information is necessary to convey an understanding of the proposed project or to comply with a requirement in the FOA. Applications containing trade secrets or commercial or financial information that is privileged or confidential, which the applicant does not want disclosed to the public or used by the Government for any purpose other than application evaluation, must be marked as described in this section.

The cover sheet of the application must be marked as follows and identify the specific pages containing trade secrets or commercial or financial information that is privileged or confidential:

Notice of Restriction on Disclosure and Use of Data:

Pages [list applicable pages] of this document may contain trade secrets or commercial or financial information that is privileged or confidential, and is exempt from public disclosure. Such information shall be used or disclosed only for evaluation purposes or in accordance with a financial assistance or loan agreement between the submitter and the Government. The Government may use or disclose any information that is not appropriately marked or otherwise restricted, regardless of source.  
[End of Notice]

The header and footer of every page that contains trade secrets or commercial or financial information that is privileged or must be marked as follows: “May contain trade secrets or commercial or financial information that is privileged or confidential and exempt from public disclosure.”

In addition, each line or paragraph containing trade secrets or commercial or financial information that is privileged or confidential must be marked with brackets or other clear identification, such as highlighting.

The above markings enable EERE to follow the provisions of 10 CFR 1004.11(d) in the event a Freedom of Information Act (FOIA) request is received for information submitted with an application. Failure to comply with these marking requirements may result in the disclosure of the unmarked information under a FOIA request or otherwise. The U.S. Government is not liable for the disclosure or use of unmarked information, and may use or disclose such information for any purpose.

When a FOIA request covers information submitted to EERE by an applicant and the cognizant EERE FOIA Officer cannot make an independent determination regarding the suitability of public release with respect to this information, the cognizant EERE FOIA Officer will contact the submitter (the applicant) and ask for comment regarding the redaction of information under one or more of the nine FOIA exemptions. However, the cognizant EERE FOIA Officer will make the final decision regarding FOIA redactions. Submitters are given a minimum of 7 days to provide redaction comments. If EERE disagrees with the submitter’s comment, EERE will notify the submitter of the intended public release no less than seven (7) days prior to the public disclosure of the information in question. (10 CFR Part 1004.11).

#### **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. NOTICE REGARDING ELIGIBLE/INELIGIBLE ACTIVITIES**

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

#### **G. NOTICE OF RIGHT TO CONDUCT A REVIEW OF FINANCIAL CAPABILITY**

EERE 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.

#### **I. REQUIREMENT FOR FULL AND COMPLETE DISCLOSURE**

Applicants are required to make a full and complete disclosure of all information requested. Any failure to make a full and complete disclosure of the requested information may result in:

- The rejection of a Full Application
- The termination of award negotiations;
- The modification, suspension, and/or termination of a funding agreement;
- The initiation of debarment proceedings, debarment, and/or a declaration of ineligibility for receipt of Federal contracts, subcontracts, and financial assistance and benefits; and
- Civil and/or criminal penalties.



## **J. RETENTION OF SUBMISSIONS**

EERE expects to retain copies of all Full Applications and other submissions. No submissions will be returned. By applying to EERE for funding, Applicants consent to EERE's retention of their submissions.

## **K. TITLE TO SUBJECT INVENTIONS**

Ownership of subject inventions is governed pursuant to the authorities listed below.

- Domestic Small Businesses, Educational Institutions, and Nonprofits: Under the Bayh-Dole Act (35 U.S.C. § 200 et seq.), domestic small businesses, educational institutions, and nonprofits may elect to retain title to their subject inventions.
- All other parties: The Federal Non Nuclear Energy Act of 1974, 42. U.S.C. 5908, provides that the Government obtains title to new inventions unless a waiver is granted (see below).
- Class Waiver: Under 42 U.S.C. § 5908, title to subject inventions vests in the U.S. Government and large businesses and foreign entities do not have the automatic right to elect to retain title to subject inventions. However, EERE may issue "class patent waivers" under which large businesses and foreign entities that meet certain stated requirements may elect to retain title to their subject inventions.
- Advance and Identified Waivers: Applicants may request a patent waiver that will cover subject inventions that may be invented under the award, in advance of or within 30 days after the effective date of the award. Even if an advance waiver is not requested or the request is denied, the recipient will have a continuing right under the award to request a waiver for identified inventions, i.e., individual subject inventions that are disclosed to EERE within the timeframes set forth in the award's intellectual property terms and conditions. Any patent waiver that may be granted is subject to certain terms and conditions in 10 CFR 784.

## **L. GOVERNMENT RIGHTS IN SUBJECT INVENTIONS**

Where Recipients and Subrecipients retain title to subject inventions, the U.S. Government retains certain rights.

### **1. GOVERNMENT USE LICENSE**

The U.S. Government retains a nonexclusive, nontransferable, irrevocable, paid-up license to practice or have practiced for or on behalf of the United States any subject invention

throughout the world. This license extends to contractors doing work on behalf of the Government.

## **2. MARCH-IN RIGHTS**

The U.S. Government retains march-in rights with respect to all subject inventions. Through “march-in rights,” the Government may require a Prime Recipient or Subrecipient who has elected to retain title to a subject invention (or their assignees or exclusive licensees), to grant a license for use of the invention. In addition, the Government may grant licenses for use of the subject invention when Recipients, Subrecipients, or their assignees and exclusive licensees refuse to do so.

The U.S. Government may exercise its march-in rights if it determines that such action is necessary under any of the four following conditions:

- The owner or licensee has not taken or is not expected to take effective steps to achieve practical application of the invention within a reasonable time;
- The owner or licensee has not taken action to alleviate health or safety needs in a reasonably satisfied manner;
- The owner has not met public use requirements specified by Federal statutes in a reasonably satisfied manner; or
- The U.S. Manufacturing requirement has not been met.

## **M. RIGHTS IN TECHNICAL DATA**

Data rights differ based on whether data is first produced under an award or instead was developed at private expense outside the award.

“Limited Rights Data”: The U.S. Government will not normally require delivery of confidential or trade secret-type technical data developed solely at private expense prior to issuance of an award, except as necessary to monitor technical progress and evaluate the potential of proposed technologies to reach specific technical and cost metrics.

Government Rights in Technical Data Produced Under Awards: The U.S. Government retains unlimited rights in technical data produced under Government financial assistance awards, including the right to distribute to the public. One exception to the foregoing is that invention disclosures may be protected from public disclosure for a reasonable time in order to allow for filing a patent application.

## N. COPYRIGHT

The Prime Recipient and Subrecipients may assert copyright in copyrightable data, such as software, first produced under the award without EERE approval. When copyright is asserted, the Government retains a paid-up nonexclusive, irrevocable worldwide license to reproduce, prepare derivative works, distribute copies to the public, and to perform publicly and display publicly the copyrighted work. This license extends to contractors and others doing work on behalf of the Government.

## O. PROTECTED PERSONALLY IDENTIFIABLE INFORMATION

In responding to this FOA, 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 EERE as:

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

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

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

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

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

- Social Security Numbers in any form
- Place of Birth associated with an individual
- Date of Birth associated with an individual
- Mother's maiden name associated with an individual
- Biometric record associated with an individual
- Fingerprint
- Iris scan
- DNA

- Medical history information associated with an individual
- Medical conditions, including history of disease
- Metric information, e.g. weight, height, blood pressure
- Criminal history associated with an individual
- Employment history and other employment information associated with an individual
- Ratings
- Disciplinary actions
- Performance elements and standards (or work expectations) are PII when they are so intertwined with performance appraisals that their disclosure would reveal an individual's performance appraisal
- Financial information associated with an individual
- Credit card numbers
- Bank account numbers
- Security clearance history or related information (not including actual clearances held)

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

- Phone numbers (work, home, cell)
- Street addresses (work and personal)
- Email addresses (work and personal)
- Digital pictures
- Medical information included in a health or safety report
- Employment information that is not PII even when associated with a name
- Resumes, unless they include a Social Security Number
- Present and past position titles and occupational series
- Present and past grades
- Present and past annual salary rates (including performance awards or bonuses, incentive awards, merit pay amount, Meritorious or Distinguished Executive Ranks, and allowances and differentials)
- Present and past duty stations and organization of assignment (includes room and phone numbers, organization designations, work email address, or other identifying information regarding buildings, room numbers, or places of employment)
- Position descriptions, identification of job elements, and those performance standards (but not actual performance appraisals) that the release of which would not interfere with law enforcement programs or severely inhibit agency effectiveness
- Security clearances held
- Written biographies (e.g. to be used in a Technology Office 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

**P. ANNUAL COMPLIANCE AUDITS**

If a for-profit entity is a Prime Recipient and has expended greater than \$500K of Federal funds in a respective fiscal year, an annual compliance audit performed by an independent auditor may be required. For additional information, please refer to 10 C.F.R. § 600.316 and for-profit audit guidance documents posted under the “Coverage of Independent Audits” heading at <http://energy.gov/management/office-management/operational-management/financial-assistance/financial-assistance-forms>

If an educational institution, non-profit organization, or state/local government is a Prime Recipient or Subrecipient and has expended greater than \$500K of Federal funds in a respective fiscal year, then an A-133 audit is required. For additional information, please refer to OMB Circular A-133 through the link below.

<http://www.whitehouse.gov/sites/default/files/omb/assets/omb/circulars/a133/a133.pdf>

Applicants and sub-recipients (if applicable) should propose sufficient costs in the project budget to cover the costs associated with the audit. EERE will share in the cost of the audit at its applicable cost share ratio.

## **APPENDIX A – DEFINITIONS**

**"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 FOA.

**"Application"** means the documentation submitted in response to a FOA.

**"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 SAM.

**"Award"** means the written documentation executed by a 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 a Grant, Cooperative Agreement, or Technology Investment Agreement.

**"Budget"** means the cost expenditure plan submitted in the Application, including both the EERE contribution and the Applicant Cost Share.

**"Compliance"** is an eligibility determination that refers to the non-technical requirements outlined in a FOA (e.g., formatting, timeliness of submission, or satisfaction of prerequisites).

**"Consortium (plural consortia)"** means the group of organizations or individuals that have chosen to submit a single Application in response to a FOA.

**"Contracting Officer"** means the EERE official authorized to execute Awards on behalf of EERE and who is responsible for the business management and non-Technology Office aspects of the Financial Assistance process.

**"Cooperative Agreement"** means a Financial Assistance instrument used by EERE 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 EERE and the Applicant during the performance of the contemplated activity. Refer to 10 CFR 600.5 for additional information regarding cooperative agreements.

**"Cost Sharing"** means the respective share of Total Project Costs to be contributed by the Applicant and by EERE. The percentage of Applicant Cost Share is to be applied to the Total Project Cost (i.e., the sum of Applicant plus EERE Cost Shares) rather than to the EERE contribution alone.

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

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

**“E-Find”** is a Grants.gov webpage where you can search for Federal Funding Opportunities in FedGrants. It can be found at <http://www.grants.gov/search/searchHome.do>.

**“EERE Exchange”** is the Department of Energy, Energy Efficiency and Renewable Energy’s web system for posting Federal FOAs and receiving applications.  
EERE Exchange website

**“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 EERE, 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 make awards via the web. It can be found at <https://www.fedconnect.net/FedConnect/>.

**“Federally Funded Research and Development Center (FFRDC)”** means a government-sponsored operation that exists for the purpose of carrying out various functions related to both basic and applied research and development on behalf of the Government. Typically, most or all of the facilities utilized in an FFRDC are owned by the Government, but the operations are not always managed by the Government; an FFRDC may be managed by a University or consortium of Universities, other not-for-profit or nonprofit organization, or a for-profit organization, with the Government performing an oversight function.

**“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. FOAs may be known as FOAs, notices of funding availability, solicitations, or other names depending on the agency and type of program.

**“Grant”** means a Financial Assistance instrument used by EERE 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 EERE 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. It can be accessed at <http://www.grants.gov>.

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

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

**"Marketing Partner Identification Number (MPIN)"** is a very important password designated by your organization when registering in SAM. The E-Business Point of Contact will need the MPIN to assign privileges to the individual(s) authorized to perform SAM transactions 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).

**"Modification"** means a revision to a FOA.

**"Participant"** for purposes of this FOA 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 FOA.

**"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 EERE for Financial Assistance (whether such Financial Assistance represents all or only a portion of the support necessary to carry out those activities).

**"Project Team"** means the team which consists of the Prime Recipient, Subrecipients, and others performing or otherwise supporting work under an EERE funding agreement.

**"Proposal"** is the term used to describe the documentation submitted in response to a FOA. Also see Application.

**"Prime Recipient"** means the organization, individual, or other entity that receives a Financial Assistance Award from EERE (i.e., is the signatory on the award), is financially accountable for the use of any EERE funds or property provided for the performance of the Project, and is legally responsible for carrying out the terms and condition of the award.



**“Responsiveness”** is an eligibility determination that refers to the objective technical requirements (not goals or targets) outlined in a FOA, such as a technology type or technical parameters. For example, submission of a photovoltaic solar panel design in response to a FOA calling for innovative geothermal drilling technologies should be found nonresponsive. Likewise, an application with a design that incorporates rare earth materials to a FOA that prohibits the use of rare earth materials should be found nonresponsive. Conversely, the belief that a technology will not achieve the technical targets of the FOA will never be used as a proper basis for a rejection as nonresponsive.

**“System for Award Management (SAM)”** is the primary database which collects, validates, stores and disseminates data in support of agency missions. It can be accessed at <https://www.sam.gov>.

**"Selection"** means the determination by the EERE Selection Official that negotiations take place for certain Projects with the intent of awarding a Financial Assistance instrument.

**"Selection Official"** means the EERE official designated to select Applications for negotiation toward Award under a subject FOA.

**"Substantial Involvement"** means involvement on the part of the Government. EERE's involvement may include shared responsibility for the performance of the Project; providing technical assistance or guidance which the Applicant is to follow; and the right to intervene in the conduct or performance of the Project. Such involvement will be negotiated with each Applicant prior to signing any agreement.

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

**"Total Project Cost"** means all the funds to complete the effort proposed by the Applicant, including EERE funds (including direct funding of any FFRDC) plus all other funds that will be committed by the Applicant as Cost Sharing.

**“Tribal Energy Resource Development Organization or Group”** means an “organization” of two or more entities, at least one of which is an Indian Tribe (see “Indian Tribe” above) that has the written consent of the governing bodies of all Indian Tribes participating in the organization to apply for a grant or loan, or other assistance under 25 U.S.C. § 3503.

## **APPENDIX B – 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. EERE 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 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 an EERE 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 CFR 600.123;
- State and Local Governments are found at 10 CFR 600.224;
- For-profit Organizations are found at 10 CFR 600.313.

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, EERE 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, EERE generally does not allow pre-award costs prior to the signing of the Selection Statement by the EERE Selection Official.

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

#### DOE Financial Assistance Rules (10 CFR 600)

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

- (A) Acceptable contributions. All contributions, including cash contributions and third party in-kind contributions, must be accepted as part of the Prime 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 cost 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. (v) Commercial Organizations. FAR Subpart 31.2—Contracts with Commercial Organizations

- b. Other types of organizations. Allowability of costs incurred by other types of organizations that may be Subrecipients under a prime award is determined as follows:
  - i. Institutions of higher education. Allowability is determined in accordance with: 2 CFR 220 Cost Principles for Educational Institutions
  - ii. Other nonprofit organizations. Allowability is determined in accordance with: 2 CFR 230 Cost Principles for Nonprofit Organizations
  - iii. Hospitals. Allowability is determined in accordance with the provisions of: Title 45 Appendix E to Part 74—Principles for Determining Costs Applicable to Research and Development Under Grants and Contracts With Hospitals
  - iv. Governmental organizations. Allowability for State, local, or federally recognized Indian tribal government is determined in accordance with: PART 225—Cost Principles for State, Local, and Indian Tribal Governments (OMB Circular A–87)

(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 C – SAMPLE COST SHARE CALCULATION FOR BLENDED COST SHARE PERCENTAGE**

The following example shows the math for calculating required cost share for a project with \$2,000,000 in Federal funds with four tasks requiring different Non-federal cost share percentages:

Task	Proposed Federal Share	Federal Share %	Recipient Share %
Task 1 (R&D)	\$1,000,000	80%	20%
Task 2 (R&D)	\$500,000	80%	20%
Task 3 (Demonstration)	\$400,000	50%	50%
Task 4 (Outreach)	\$100,00	100%	0%

Federal share (\$) divided by Federal share (%) = Task Cost

Each task must be calculated individually as follows:

**Task 1**

\$1,000,000 divided by 80% = \$1,250,000 (Task 1 Cost)

Task 1 Cost minus federal share = Non-federal share

\$1,250,000 - \$1,000,000 = \$250,000 (Non-federal share)

**Task 2**

\$500,000 divided 80% = \$625,000 (Task 2 Cost)

Task 2 Cost minus federal share = Non-federal share

\$625,000 - \$500,000 = \$125,000 (Non-federal share)

**Task 3**

\$400,000 / 50% = \$800,000 (Task 3 Cost)

Task 3 Cost minus federal share = Non-federal share

\$800,000 - \$400,000 = \$400,000 (Non-federal share)

**Task 4**

Federal share = \$100,000

Non-federal cost share is not mandated for outreach = \$0 (Non-federal share)

The calculation may then be completed as follows:

Tasks	\$ Federal Share	% Federal Share	\$ Non-Federal Share	% Non-Federal Share	Total Project Cost
Task 1	\$1,000,000	80%	\$250,000	20%	\$1,250,000
Task 2	\$500,000	80%	\$125,000	20%	\$625,000
Task 3	\$400,000	50%	\$400,000	50%	\$800,000
Task 4	\$100,000	100%	\$0	0%	\$100,000
Totals	\$2,000,000		\$775,000		\$2,775,000

Blended Cost Share %

Non-federal share (\$775,000) divided by Total Project Cost (\$2,775,000) = 27.9% (Non-federal)

Federal share (\$2,000,000) divided by Total Project Cost (\$2,775,000) = 72.1% (Federal)