

FINANCIAL ASSISTANCE FUNDING OPPORTUNITY ANNOUNCEMENT



**U.S. Department of Energy
Energy Efficiency and Renewable Energy**

**Accelerating the Deployment of Energy Efficiency and Renewable Energy
Technologies in South Africa and Saudi Arabia**

Funding Opportunity Announcement (FOA) Number: DE-FOA-0000837

Announcement Type: Amendment 0002

Issue Date of Amendment 0002: June 28, 2013

FOA Type: Initial CFDA Number: 81.117

FOA Issue Date:	04/16/2013
Submission Deadline for Concept Papers:	05/20/2013
Deadline for Questions:	07/09/2013
Submission Deadline for Full Applications:	07/12/2013
Expected Date for Selection Notifications:	8/30/2013
Mandatory Post-Selection Meeting:	09/16/2013

Applicants must submit a Concept Paper by the due date listed above to be eligible to submit a Full Application.



Department of Energy
Golden Field Office
1617 Cole Boulevard
Golden, Colorado 80401-3393

DE-FOA-0000837
Amendment No. 001

DATE: May 29, 2013

FROM: Robert Kingsley, Contracting Officer

To: All Prospective Applicants

SUBJECT: Amendment No. 001 to Announcement DE-FOA-0000837, "Accelerating the Deployment of Energy Efficiency and Renewable Energy Technologies in South Africa and Saudi Arabia"

1. The purpose of this amendment is to extend the application due date to July 12, 2013.
2. All other parts of the FOA remain unchanged.
3. All areas which have changed are highlighted in yellow within the Funding Opportunity Announcement.



Department of Energy
Golden Field Office
1617 Cole Boulevard
Golden, Colorado 80401-3393

DE-FOA-0000837

Amendment No. 0002

DATE: June 28, 2013

FROM: Robert Kingsley, Contracting Officer

To: All Prospective Applicants

SUBJECT: Amendment No. 0002 to Announcement DE-FOA-0000837, "Accelerating the Deployment of Energy Efficiency and Renewable Energy Technologies in South Africa and Saudi Arabia"

1. The purpose of this amendment is to revise the Full Application Document Required Files/Forms.
2. All other parts of the FOA remain unchanged.
3. All areas which have changed are highlighted in green within the FOA.

REGISTRATION REQUIREMENTS

There are several one-time actions before submitting an Application in response to this Funding Opportunity Announcement (FOA), 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.

The applicant will receive an automated response when the Concept Paper or Application is received by EERE. This will serve as a confirmation of receipt. Please do not reply to the automated response. The applicant will have the opportunity to re-submit a revised Concept Paper or Application for any reason as long as the relevant submission is submitted by the specified deadline. The Users' Guide for Applying to the Department of Energy EERE FOAs is found at <https://eere-Exchange.energy.gov/Manuals.aspx>.

The EERE Exchange registration does not have a delay; however, the remaining **registration requirements below could take several weeks to process and are necessary in order 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**.

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

Applicants should not wait until the last minute to begin the submission process. During the final hours before the submission deadline, Applicants may experience server/connection congestion that prevents them from completing the necessary steps in EERE-E Exchange to submit their applications. **EERE will not extend the submission deadline for Applicants that fail to submit required information and documents due to server/connection congestion.**

- 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

- Register in Grants.gov to receive automatic updates when Amendments to this FOA are posted. However, please note that applications and concept papers 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, constitutes the authorized representative's approval and electronic signature.
- **Questions**
Questions related to the use of the EERE Exchange website should be submitted to:
EERE-ExchangeSupport@hq.doe.gov.

Questions related to the FOA must be submitted to:
InternationalFOA837@go.doe.gov and shall be submitted not later than 3 calendar days prior to the final application due date which is the close of this FOA. Therefore, **the deadline for submission of questions is July 9, 2013 5:00 PM eastern time**. Any questions submitted after that time will NOT be addressed. Questions regarding problems encountered with the application submittal will be answered as time permits. Applicants are encouraged to review the posted questions and answers daily. Please be as specific as possible when asking questions to insure that questions will be adequately addressed. Failure to be specific may result in additional time to address the question or require further correspondence for further clarification regarding the submitted question(s).

All questions and answers related to this FOA will be posted at <http://eere.energy.gov/financing/Exchange>. EERE will try to respond to questions within 3 to 5 business days, unless a similar question and answer have already been posted on the website.

TABLE OF CONTENTS:

REGISTRATION REQUIREMENTS	3
REQUIRED DOCUMENTS CHECKLIST	7
EXECUTIVE SUMMARY	8
SECTION I – FUNDING OPPORTUNITY DESCRIPTION	11
A. Description/Background.....	11
B. Topic Areas/Target Markets under this FOA	12
C. Scope	14
D. Application Process Overview	16
E. Concept Papers and Full Applications	17
F. Submissions from Successful Applicants.....	19
1. Reply to Reviewer Comments	19
2. Pre-Selection Meetings.....	20
3. Selection for Award Negotiations.....	20
4. Post-Selection Meeting	20
SECTION II – AWARD INFORMATION	21
A. Type of Award Instrument.....	21
B. Estimated Funding and Maximum/Minimum Award Size	21
C. Anticipated Number of Awards.....	22
D. Period of Performance.....	22
E. Type of Application	22
F. Environmental Review in Accordance with National Environmental Policy Act (NEPA).....	22
SECTION III - ELIGIBILITY INFORMATION	23
A. Eligible Applicants	23
1. Individuals.....	23
2. Domestic Entities	23
3. Foreign Entities.....	23
4. Incorporated Consortia	24
5. Unincorporated Consortia.....	24
B. Cost Sharing.....	25
C. Other Eligibility Requirements.....	27
D. Submissions Required in Advance of Full Application	28
E. Limitation on Number of Concept Papers and Full Applications Eligible for Review.....	28
F. Questions Regarding Eligibility	29
SECTION IV – APPLICATION AND SUBMISSION INFORMATION	29
A. Overview of Application Process	29
B. Address to Request Application Forms.....	29
C. Concept Paper	29
D. Content and Form of Application	31
E. Content and Form of Replies to Reviewer Comments.....	37
F. Submissions from Successful Applicants.....	38
G. Intergovernmental Review	38
H. Funding Restrictions.....	38
SECTION V - APPLICATION REVIEW INFORMATION	40
A. Overview of Application Review Process.....	40
B. FOA Criteria.....	40
1. Compliance Criteria.....	40
2. Technical Review Criteria for Concept Papers	41
3. Merit Review Criteria for Full Applications.....	42
4. Other Selection Factors.....	43

C. Review and Selection Process.....	44
1. Merit Review.....	44
2. Pre-Selection Clarification.....	44
3. Criteria for Replies to Reviewer Comments	45
4. Review and Selection Process.....	45
5. Discussions and Award	45
D. Anticipated Notice of Selection and Award Dates.....	45
SECTION VI - AWARD ADMINISTRATION INFORMATION	45
A. Award Notices	45
1. Rejected Submissions	45
2. Concept Paper Notifications	46
3. Full Application Notifications	46
4. Notice of Award	47
B. Administrative Requirements, National Policy Requirements, and Applicant Representations and Certifications	47
1. Administrative Requirements	47
2. DUNS and SAM Requirements.....	47
3. Subaward and Executive Reporting	47
4. Special Terms and Conditions, National Policy Requirements, and Applicant Representations and Certifications.....	48
5. Statement of Substantial Involvement.....	48
6. Subject Invention Utilization Reporting	50
7. Intellectual Property Provisions.....	51
C. Reporting	51
SECTION VII - QUESTIONS/AGENCY CONTACTS	52
A. Questions.....	52
SECTION VIII - OTHER INFORMATION.....	53
A. Amendments	53
B. Government Right to Reject or Negotiate.....	53
C. Commitment of Public Funds	53
D. Treatment of Application Information	53
E. Evaluation and Administration by Non-Federal Personnel	54
F. Notice Regarding Eligible/Ineligible Activities	54
G. Notice of Right to Conduct a Review of Financial Capability	54
H. Notice of Potential Disclosure under Freedom of Information Act.....	55
I. Requirement for Full And Complete Disclosure	55
J. Retention of Submissions	55
K. Title to Subject Inventions	55
L. Government Rights in Subject Inventions	56
M. Government Use License	56
N. March-In Rights.....	56
O. Rights in Technical Data	56
P. Copyright.....	57
Q. Protected Personally Identifiable Information.....	57
R. Annual Compliance Audits for For-Profit Entities.....	59
Appendix A – Definitions	60
Appendix B – Cost Share Information.....	64
Appendix C - Open Source Software	71

REQUIRED DOCUMENTS CHECKLIST

Concept Papers, Full Applications, and Replies to Reviewer Comments must be submitted through EERE Exchange at <https://eere-Exchange.energy.gov>, 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 FOAs is found at <https://eere-Exchange.energy.gov/Manuals.aspx>. Required forms for Full Applications are available on EERE Exchange at <https://eere-Exchange.energy.gov>, including the SF-424, SF-424A .

THE FOLLOWING COMPONENTS REQUIRED AS PART OF APPLICATION SUBMISSION ARE FULLY EXPLAINED IN SECTION IV OF THIS FOA.

Name of Document	Format	File Name
SF-424 - Application for Federal Assistance	Part of Adobe Application Package	[Control#]_[Institution]_A pplication.pdf
Project Summary/Abstract File	PDF	[Control#]_[Institution]_S ummary.pdf
Project Narrative File	PDF	[Control#]_[Institution]_P roject.pdf
Resume File	PDF	[Control#]_[Institution]_R esume.pdf
SF 424A Excel – Budget Information for Non-Construction Programs File	Excel	[Control#]_[Institution]_S F424A.xls
PMC 123.1 Excel - Budget Justification File	Excel	[Control#]_[Institution]_P MC123.1_Budget.xls
Subaward Budget File(s), if applicable Budget Justification(s), if applicable	Excel	See instructions in Section IV
Budget for Federally Funded Research and Development Center (FFRDC) Contractor File, if applicable.	PDF	See instructions in Section IV
SF-LLL Disclosure of Lobbying Activities	PDF	[Control#]_[Institution]_S F-LLL.pdf

EXECUTIVE SUMMARY

Federal Agency	U.S. Department of Energy
FOA Title	EERE Market Development in South Africa and Saudi Arabia
FOA Type	Initial FOA
FOA Number	DE-FOA0000837
CFDA Number	81.117
FOA Issue Date:	4/16/2013
Concept Papers Submission Deadline:	5/20/2013 at 5 p.m. Eastern Time
Full Applications Submission Deadline:	7/12/2013 at 5 p.m. Eastern Time
Means of Submission	Concept Papers and Full Applications must be submitted through EERE Exchange at https://eere-Exchange.energy.gov , 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 https://eere-Exchange.energy.gov/Manuals.aspx .
Total Amount to Be Awarded	\$900,000
Anticipated Awards	1-2
Types of Funding Agreements	Cooperative Agreements
Period of Performance	Up to 3 years
Eligible Applicants	Domestic Entities Including DOE/NNSA National Laboratory Contractors
Individuals	U.S. citizens and lawful permanent residents are eligible to apply for funding as a prime recipient or subrecipient.
Domestic Entities	<p>For-profit entities, educational institutions, and nonprofits¹ 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.</p> <p>State, local, and tribal government entities are eligible to apply for funding as a prime recipient or subrecipient.</p> <p>DOE/NNSA Federally Funded Research and Development Centers (FFRDCs) and DOE Government-Operated Government-Owned laboratories (GOGOs) are eligible to apply for funding as a prime recipient or subrecipient.</p> <p>Non-DOE/NNSA FFRDCs and non-DOE GOGOs are eligible to apply for funding as a subrecipient, but are not eligible to apply as a prime recipient.</p> <p>Federal agencies and instrumentalities (other than DOE) are eligible to apply for funding as a subrecipient, but are not eligible to apply as a prime recipient.</p>
Foreign Entities	Foreign entities are not eligible to apply for funding as a prime recipient under this FOA.

¹Nonprofit organizations described in section 501(c)(4) of the Internal Revenue Code of 1986 that engaged in lobbying activities after December 31, 1995, are not eligible to apply for funding.

	<p>Other than as provided in the “Individuals” or “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 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. The Full Application must state the nature of the corporate relationship between the foreign entity and domestic subsidiary or affiliate. Foreign entities may request a waiver of this requirement in the Full Application. See Section IV.D.17(a) for waiver request information. The DOE 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 interests of EERE.</p> <p>A foreign entity may receive funding as a subrecipient. However, foreign entities are encouraged to participate in project activities by leveraging their own funds from other sources.</p>
Incorporated Consortia	<p>Incorporated consortia, which may include domestic and/or foreign entities, are eligible to apply for funding as a prime recipient or subrecipient. For consortia incorporated (or otherwise formed) under the laws of a State or territory of the United States, please refer to “Domestic Entities” above. For consortia incorporated in foreign countries, please refer to the requirements in “Foreign Entities” above.</p> <p>Each incorporated consortium must have an internal governance structure and a written set of internal rules. Upon request, the consortium must provide a written description of its internal governance structure and its internal rules to the DOE Contracting Officer.</p>
Unincorporated Consortia	<p>Unincorporated consortia, which may include domestic and foreign entities, must designate one member of the consortium to serve as the prime recipient/consortium representative. The prime recipient/consortium representative must be incorporated (or otherwise formed) under the laws of a State or territory of the United States. The eligibility of the consortium will be determined by the eligibility of the prime recipient/consortium representative under Section III.A of the FOA.</p> <p>Upon request, unincorporated consortia must provide the DOE Contracting Officer with a collaboration agreement, commonly referred to as the articles of collaboration, which sets out the rights and responsibilities of each consortium member. This agreement binds the individual consortium members together and should discuss, among other things, the consortium's:</p> <ul style="list-style-type: none"> - Management structure; - Method of making payments to consortium members; - Means of ensuring and overseeing members' efforts on the project; - Provisions for members' cost sharing contributions; and - Provisions for ownership and rights in intellectual property developed previously or under the agreement.
Cost Share Requirement	<p>This is an Outreach and Education project, no cost share is required by statute.</p>

Submission of Multiple Applications	Applicants may only submit up to two Concept Papers and two Full Applications for consideration under this FOA at up to \$450,000 for each topic. If an applicant submits more than two Concept Papers or Full Applications, DOE 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 Concept Paper and Full Application submitted under this FOA.
Agency Contact	See Section VII.A of the FOA for guidance on submitting questions to EERE.
Application Forms	Required forms for Full Applications are available on EERE Exchange at https://eere-Exchange.energy.gov , including the SF-424 and SF-424A. Applicants must use the templates available on EERE Exchange at https://eere-Exchange.energy.gov .

SECTION I – FUNDING OPPORTUNITY DESCRIPTION

A. Description/Background

The Department of Energy (DOE) is an agency focused on research, development, demonstration and deployment to improve energy security and national security. The Department's Strategic Plan recognizes that international engagement can bring benefits to the nation's domestic and international agenda. These benefits include:

- Accelerated research and development results
- Accelerated deployment of new energy technologies
- Reduction of global greenhouse gas emissions and greater energy security
- Development of markets for export of U.S. clean energy technologies and services

As noted in DOE's Strategic Plan:

Because the greatest energy challenges are global in nature, the Department will foster international partnerships to advance our common goals for developing and deploying clean energy technologies and addressing climate change, energy security, and energy scarcity. The Department's strategy for developing these partnerships focuses on engaging other major economies and participating in broader regional platforms for cooperation. Technologies must be deployed globally if they are to materially impact consumption and emissions. U.S. leadership through the Department can help promote clean energy technologies around the world. Other countries can have greater demand, pace, risk and/or tolerance in energy innovation. International partnerships could offer more diverse projects to increase learning rates, promote the global adoption of clean energy technologies, and perhaps ease foreign market entry for U.S. firms. However, intellectual property and competitiveness issues will be carefully managed.

DOE's Office of Energy Efficiency and Renewable Energy (EERE) invests in clean energy technologies that strengthen the economy, protect the environment, and increase U.S. energy independence. In EERE's Office of Strategic Programs, EERE International manages projects across the EERE portfolio to provide the most impact on advancing the Department's strategic goals through collaboration with key foreign partners.

DOE and EERE International recognize the strategic importance of partnering with foreign governments to apply U.S. clean energy policy and technology expertise to help prime foreign markets for the uptake of energy efficiency and renewable energy technologies and services. By engaging and incorporating the U.S. private sector in these activities, EERE International enhances the ability of U.S. firms to gain marketshare in new, developing markets for energy efficiency and renewable energy technology and services. Furthermore, through coordination with other U.S. government agencies (USG), EERE International leverages the resources and capabilities among the interagency to maximize the cost-effectiveness and impact U.S. government investment.

Objectives of this Funding Opportunity Announcement (FOA):

- Reduce or eliminate specific barriers to large-scale deployment of energy efficiency and/or renewable energy in the targeted foreign market(s);
- Maximize the impact of activities to address market barriers in the targeted foreign market(s) by disseminating findings and lessons learned through multilateral (e.g., regional) mechanisms and through U.S. public-private dialogues;
- Maximize the cost-effectiveness and impact of U.S. government investment through coordination with other U.S. government (USG) agencies/initiatives and non-governmental organizations (NGOs)/initiatives;
- Enhance the ability of U.S. firms to gain marketshare in the targeted foreign market(s) through close cooperation with the U.S. private sector, such as trade associations;
- Increase U.S. exports of energy efficiency and renewable energy technologies and services through coordination with USG export assistance/trade promotion agencies and the U.S. private sector;
- Establish lasting relationships on clean energy between public and private entities in the U.S. with public and private entities in the targeted foreign market(s);

B. Topic Areas/Target Markets under this FOA

EERE International identified the Middle East and Africa as two key regional markets for the development and deployment of EERE technologies and services in which EERE International has yet to significantly engage. To further refine and inform the development of this solicitation, further analysis was done to identify specific countries within these regions that offer the best market opportunities for U.S. exports of EERE technologies and services, based on policy, social, economic and energy statistics. By issuing a competitive solicitation to establish activities in these untapped markets, EERE seeks to identify the best project performers and activities to maximize the impact of its budget expenditures, consistent with its Strategic Plan.

This announcement will provide funding to provide technical assistance in the area of energy efficiency and renewable energy to enable the market uptake of these technologies, and promote U.S. technology and service providers in the target countries identified below.

Topic Area/Target Market 1: Africa: the Republic of South Africa

In his *U.S. Strategy Toward Sub-Saharan Africa* issued in June 2012, President Obama states that “given the growing strategic importance of sub-Saharan Africa to the United States, over the next 5 years we will elevate our focus on and dedicate greater effort to strengthening democratic institutions and spurring economic growth, trade, and investment, while continuing to pursue other objectives on the continent.”

As the largest economy in Sub-Saharan Africa, the Republic of South Africa (South Africa) represents a distinct opportunity for EERE International and exports of U.S. clean energy technologies and services. South Africa is the largest producer of electricity on the continent. According to the U.S. Energy Information Administration (EIA), South Africa generated approximately 242 billion kWh of electricity in 2010, or over 38 percent of total African

generation. According to the South Africa Department of Energy (SADOE), coal-fired power plants comprise 90 percent of domestic capacity, nuclear represents an additional 5 percent, and hydroelectric/pumped storage make up the remaining 5 percent of capacity.

South Africa is also the largest electricity consuming market in Africa at approximately 215 billion kWh, or over 38 percent of total African consumption in 2010. According to the EIA, South Africa's total electricity consumption has grown by about 20 percent between 2000 and 2010, but generating capacity grew by only 7 percent over the same period, which led to blackouts in 2007 and 2008. In response to this undercapacity, the South African government has re-commissioned previously mothballed coal power plants, raised electricity tariffs, and established feed-in tariffs for renewable energy. The SADOE's Integrated Resource Plan for 2010-2030—a long-term scenario analysis of electricity supply and demand—envisioned an approximately 12 percent increase in demand that will be met largely by renewable electricity. The plan calls for 42 percent of capacity additions from renewables, or a total of 17.8 GW by 2030. It is also worth noting that the 12.5 percent electricity demand increase is constrained by SADOE's assumption of a 35 percent improvement in economic energy intensity—both through economic shifts away from energy intensive manufacturing and through demand-side energy efficiency.

In 2011, the South African government launched the Renewable Energy Independent Power Producer Procurement (REIPPP) Program, a public tendering process designed to award 3,625MW of wind, solar thermal, solar photovoltaic, biomass, biogas, landfill gas or small hydro projects. Over the first two windows of the REIPPP Program in 2011 and 2012, SADOE has awarded approximately 2.5GW of renewable electricity generation projects. The third window for project proposals is set to close in August 2013.

Other USG agencies have instituted bilateral programs to enhance U.S.-South African trade that will provide significant opportunities for leveraging the EERE International Program's resources. Such USG programs include the U.S. Export-Import Bank's August 2012 Declaration of Intent to "assist in financing up to \$2 billion worth of U.S. technologies, products and services to South Africa's energy sector, with an emphasis on clean-energy development."² The U.S. Trade and Development Agency also has an active portfolio with South Africa, which has included workshops, training activities, and reverse trade missions in the areas of energy efficiency and renewable energy between 2011 and 2013.

Topic Area 2/Target Market: Middle East: the Kingdom of Saudi Arabia

The Kingdom of Saudi Arabia was also identified as a key emerging market for EERE technologies and services. Saudi Arabia has the largest GDP in the Middle East region. According to the EIA, Saudi Arabia ranked as the region's second largest producer of electricity (212.2 billion kWh) after Iran. Saudi Arabia currently has approximately 60 GW of electricity generating capacity. Nearly all of this capacity uses fossil fuels. Saudi Arabia produces approximately 50% of its electricity from oil and petroleum fuels.

² <http://www.exim.gov/newsandevents/releases/2012/ex-im-bank-to-assist-in-financing-up-to-2-billion-of-us-exports-to-south-africas-energy-sect.cfm>

Saudi Arabia also ranked as the largest electricity consumer in the region in 2010, consuming 190.9 billion kWh. Saudi electricity demand has also experienced consistent, rapid growth over the past few years. Both EIA and the International Energy Agency (IEA) estimate Saudi's demand for electricity has increased by approximately 34 percent from 2006 to 2010. Electricity demand peaks in the summer month due to the increased cooling load. Over 50 percent of demand is in residential buildings. Cooling represents as much as 70% of this residential demand during peak cooling season.

In response to the trends of growing energy demand and the corresponding decrease in oil exports, the Saudi Government has increased its focus on alternative energy sources—namely, renewables and nuclear. In May 2012, the King Abdullah City for Atomic and Renewable Energy (K.A.CARE) unveiled a plan to generate 50% of its electricity from non-fossil sources by 2032, requiring \$109B of investment. The K.A.CARE plan calls for the installation 54 GW of renewable energy capacity by 2032, including 25 GW of concentrating solar power capacity, 16 GW of solar photovoltaics, 9 GW of wind power, 1 GW of geothermal power, and 3 GW of waste-to-energy. The Saudi government is also considering policies to improve demand-side energy efficiency in the industrial, buildings and transportation sector, which is being coordinated by the Saudi Energy Efficiency Center.

These policies will undoubtedly create demand for energy efficiency and renewable energy technologies and services in Saudi Arabia. This new demand could represent significant new opportunities for U.S. clean energy companies, which could be advanced by this solicitation and reinforced through DOE's bilateral relationship with the Saudi government and other mechanisms, such as the U.S.-Saudi Business Council.

C. Scope

This announcement is directed toward the advancement of U.S. capabilities that can provide technology development services to increase the deployment of energy efficiency and renewable energy technologies in South Africa and Saudi Arabia. Projects will be designed to address the specific barriers to technology deployment in order to reduce private sector risk and enable investment necessary to increase the adoption of renewable energy and energy efficiency technologies and policies. Results, best practices and lessons learned will be shared through multilateral organizations such as the Southern African Power Pool (SAPP), Gulf Cooperation Council (GCC), the Regional Center for Renewable Energy and Energy Efficiency (RCREEE) and International Renewable Energy Agency (IRENA) to maximize the reach and benefit of the work undertaken through this announcement.

Projects conducted under this announcement will be coordinated with other U.S. government organizations where possible, such as the U.S. Trade and Development Agency, U.S. Agency for International Development, Department of Commerce, Overseas Private Investment Corporation, Export-Import Bank, and Department of State, in order to leverage resources and expertise to achieve maximum results and benefits.

Projects will develop and implement activities that deploy U.S. expertise in areas such as strategic

and policy planning and analysis, energy market analysis, energy modeling, workforce development, and technical analysis to prime markets for increased use of energy efficient and renewable energy technologies in South Africa and Saudi Arabia.

Partnerships will be developed between public and private entities in the U.S., South Africa and Saudi Arabia that coordinate with U.S. DOE and other agencies, South African and Saudi government officials and other stakeholders as appropriate to implement a series of activities over a two-year term that provide mutual benefit to the U.S., South Africa and Saudi Arabia. Project implementation at the local or provincial level in South Africa and Saudi Arabia will be considered in order to develop replicable models and programs that can be employed across the countries and other economies in the regions, respectively.

This announcement will provide two (2) awards for developing and implementing programs to provide services and technical assistance to enhance energy savings and renewable energy production capabilities; one award will be provided for activities in South Africa, and one award for activities in Saudi Arabia. With the exception of the post-activity report(s) described further below in this section, all project activities are expected to be completed within 24 months of the award. Activities will build on current work in the respective country, be consistent with the goals of EERE International and the objectives of the FOA described above in Section I.A, and be integrated into existing programs sponsored by other U.S. government agencies, where possible. Activities to be proposed must include a description of relevant capabilities to implement clean energy promotion activities. Activities could include such areas as:

- Develop training and self-assessment packages and videos that can be used for webinars, trainings, self-assessments and other purposes so techniques and results can be more widely disseminated to governments, companies, and/or industries in the target market.
- Identify, train, coordinate and manage a group of experienced trainers who can provide in-country training on tools for implementing energy efficiency and renewable energy technologies.
- Provide information and training assistance for policy design and implementation to reduce non-economic barriers to the deployment of energy efficient and renewable energy technologies.
- Develop and implement a platform for exchanging experience in developing and implementing clean energy technology policy and reducing barriers to deployment.
- Promoting energy efficiency and renewable energy activities that complement climate policies and derive maximum benefit from climate change financing options.
- Advance the Administration's National Export Initiative by developing opportunities for U.S. companies to advance their technology development and capture market opportunities in the target market.
- Coordinate with EERE Technology Offices to demonstrate U.S. technologies in the target market.
- Conduct a post project (6-12 months later) evaluation to determine the extent to which project activities contributed to deployment of energy efficient and renewable energy technologies.

Projects may be developed to validate U.S. energy efficiency and renewable energy technologies through demonstration activities in South Africa and/or Saudi Arabia. However, DOE does not intend to provide funding for equipment, installation or maintenance for possible demonstration projects under this FOA; such investments should be supported by leveraged funds through public-private partnerships.

The Awardee(s) will be required to prepare post-activity reports in order to determine the extent to which the activities contributed to the goals and expected outcomes of each project.

One of the requirements of this FOA is that Awardees work with DOE to ensure that best practices, lessons learned and other results and findings from the projects conducted under the DOE-funded agreement are shared on platforms such as the Open Energy Information website (<http://en.openei.org>) and the Clean Energy Solutions Center (<http://cleanenergysolutions.org/>), the U.S. government's Export.gov/REEE, and other relevant fora and networks such as the International Renewable Energy Agency (IRENA), World Future Energy Summit, and Regional Center for Renewable Energy and Energy Efficiency (RCREEE).

D. Application Process Overview

This FOA requires two mandatory submissions. The mandatory submissions are the Concept Paper and the Full Application. The optional submission is the Reply to Reviewer Comments. **All submissions must be submitted through EERE Exchange** (<https://eere-Exchange.energy.gov>), EERE's online application portal.

Applicants are responsible for meeting each submission deadline. **Applicants are strongly encouraged to submit their Concept Papers and 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 Concept Paper or Full Application. In addition, Applicants should allow at least 15 minutes to submit a Reply to Reviewer Comments. Once the application is submitted in EERE Exchange, Applicants may revise or update their application until the expiration of the applicable deadline.

EERE will not further 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. The following errors could cause a submission to be deemed "incomplete" and thus noncompliant:

- Failing to comply with the form and content requirements in Section IV of the FOA;
- Failing to enter required information in EERE Exchange;
- Failing to upload required document(s) to EERE Exchange;
- Uploading the wrong document(s) or application(s) to EERE Exchange; and

- Uploading the same document twice, but labeling it as different documents. (In the latter scenario, the Applicant failed to submit a required document.)

EERE urges Applicants to carefully review their Concept Papers and 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.B.3.

E. Concept Papers and Full Applications

Applicants are required to submit the Concept Paper by **5 pm Eastern Time on 5/20/2013** in order to be eligible to submit a Full Application to the subsequently issued FOA. The purpose of the Concept Paper is to enable DOE to provide feedback to applicants with regard to the perceived overall viability of the proposed effort. Applicants that submit a responsive Concept Paper that passes the initial review (See Section V, Application Review Information) may submit a corresponding Full Application. DOE will not use Concept Papers for down selection purposes.

Concept Papers must be submitted via EERE Exchange at <https://eere-exchange.energy.gov/>. **CONCEPT PAPERS RECEIVED AFTER THE SPECIFIED DEADLINE OR BY ANY OTHER MEANS WILL NOT BE REVIEWED OR CONSIDERED FOR AWARD.**

The requirements and contents of the Concept Paper are described below:

1. Cover Page

The Concept Paper cover page should indicate the name and type of organization, the announcement FOA number, the project title, and both the technical and business points of contact for the applicant, denoting the names, titles, addresses, telephone and facsimile numbers, and electronic mail addresses. The cover page should also identify the names for all other participants (subrecipients) and provide an estimated total DOE funding request and any proposed leveraged (non-DOE) funding.

2. Project Narrative (2-page limit)

The Concept Paper project narrative must not exceed 2 pages, including charts, graphs, maps, and photographs when printed using standard 8.5" by 11" paper with 1 inch margins (top, bottom, left, and right), single spaced. **EVALUATORS WILL REVIEW ONLY THE NUMBER OF PAGES SPECIFIED IN THE PRECEDING SENTENCE.** The font must not be smaller than 11 point. Do not include any Internet addresses (URLs) that provide information necessary to review the application. See Section VIII, Other Information for instructions on how to mark proprietary application information.

The following should be addressed within the Concept Paper:

The Concept Paper should provide a clear, concise statement of the specific objectives, primary

approaches, and expected outcomes and impacts of the proposed project. The Concept Paper should include a description of the proposed project areas and activities, as well as a description of the current targeted markets and how the proposed efforts are expected to impact these markets consistent with the objectives of the FOA outlined in Section I.A. The Concept Paper should also include a description of the intended partnerships and collaboration opportunities. Finally, the Concept Paper should address each of the Merit Review Criteria for Concept Papers listed in Section V, A.1. It must provide sufficient information that reviewers will be able to evaluate the technical merits of the Concept Paper in accordance with these merit review criteria.

Applicants must have submitted a Concept Paper by the required due date, passed the Concept Paper initial compliance review, and received DOE feedback to be eligible to submit a Full Application. Once the Concept Paper window closes and DOE has provided feedback on the initial Concept Papers, Full Application submissions are to be made via the EERE Exchange website at <http://eere.energy.gov/financing/exchange>. Applicants must complete the following application forms found on the EERE Exchange website at <https://eere-exchange.energy.gov/>, in accordance with the instructions. Applicants will receive a Control # once they “Apply to this FOA” on the EERE Exchange website and should include the designated Control # in the file name, as indicated below.

Full Applications must be received by 5 pm Eastern Time on 7/12/2013. You are encouraged to transmit your application well before the deadline.

APPLICATIONS RECEIVED AFTER THE DEADLINE WILL NOT BE REVIEWED OR CONSIDERED FOR AWARD.

Summary of Required Forms/Files for Full Application: DE-FOA-0000837

Applicants must have submitted a Concept Paper by the required due date, passed the Concept Paper initial compliance review, and received DOE feedback to be eligible to submit a Full Application. Once the Concept Paper FOA closes and DOE has provided feedback on the initial Concept Papers, Full Application submissions are to be made via the EERE Exchange website at <http://eere.energy.gov/financing/exchange>. Each full application must include the following documents which are described in detail in Section IV of this FOA:

Name of Document	Format	File Name
SF-424A - Application for Federal Assistance	Part of Adobe Application Package	[Control#]_[Institution]_Application.pdf
Project Summary/Abstract File	PDF	[Control#]_[Institution]_Summary.pdf
Project Narrative File	PDF	[Control#]_[Institution]_Project.pdf
Resume File	PDF	[Control#]_[Institution]_Resume.pdf

		Resume.pdf
SF 424A Excel – Budget Information for Non-Construction Programs File	Excel	[Control#]_[Institution]_SF424A.xls
PMC 123.1 Excel - Budget Justification File	Excel	[Control#]_[Institution]_PMC123.1_Budget.xls
Subaward Budget File(s), if applicable Budget Justification(s), if applicable	Excel	See instructions in Section IV
Budget for Federally Funded Research and Development Center (FFRDC) Contractor File, if applicable.	PDF	See instructions in Section IV
SF-LLL Disclosure of Lobbying Activities	PDF	[Control#]_[Institution]_SF-LLL.pdf

F. Submissions from Successful Applicants

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

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

DOE reserves the right, without qualification, to reject any or all applications received in response to this announcement and to select any application, in whole or in part, as a basis for negotiation and/or award.

1. Reply to Reviewer Comments

This FOA allows applicants the option to submit a Reply to Reviewer Comments.

Once EERE has completed its comprehensive technical review of Full Applications, reviewer comments on compliant and responsive Full Applications are made available to Applicants via EERE Exchange. Each Applicant will have access only to comments on its own application(s). Applicants may submit an optional Reply to Reviewer Comments, which must be submitted by the deadline stated in the FOA. **The assigned Control Number must be marked in the header of the Reply.** Section IV.D of the FOA provides instructions on submitting a Reply to Reviewer Comments.

It is anticipated that reviewer comments will be made available on 8/30/2013. Applicants will have two (2) business days from the time the comments are posted to prepare and submit a Reply to Reviewer Comments. Therefore, it is anticipated the due date for the Reply to Reviewer Comments is 9/04/2013.

The Reply to Reviewer Comments (Reply) consists of two (2) pages of text and one (1) page of visual displays of data. EERE will not review any information provided beyond the stated page limits.

EERE performs an initial compliance review of Replies to Reviewer Comments to determine whether they are compliant, as described in Section V.B.1 of the FOA. **EERE will not review or consider noncompliant Replies. Submitting a Reply to Reviewer Comments is optional. EERE will review and consider each compliant and responsive Full Application, even if no Reply is submitted or if the Reply is found to be noncompliant.**

2. Pre-Selection Meetings

As part of the merit review process, EERE may schedule conferences between representatives of one or more of the top ranked applicants and the Merit Review Panel to allow Merit Review Panels to clarify the contents of the Full Applications and otherwise ask questions regarding the proposed project. If so, EERE will invite those applicants to participate in a one-on-one meeting with EERE via webinar, videoconference, or conference call. In the alternative, EERE may invite Applicants to meet in person at EERE's offices or a mutually agreed upon location. EERE may also arrange pre-selection site visits to certain Applicants' facilities.

If EERE opts to conduct Pre-Selection meetings, it is anticipated the Pre-Selection meetings will occur approximately one month after the Full Application deadline. EERE will not reimburse Applicants for travel and other expenses relating to pre-selection meetings and site visits, nor will these costs be eligible for reimbursement as pre-award costs.

EERE may obtain additional information through pre-selection meetings and site visits that will be used to make a final selection determination. EERE may select applications for funding and make awards without pre-selection meetings and site visits. Participation in a pre-selection meeting or site visit with EERE does not signify that Applicants have been selected for award negotiations.

3. Selection for Award Negotiations

EERE carefully considers all of the information obtained through the application process and makes an independent assessment of each compliant and responsive Full Application based on the Merit Review Criteria for Full Applications and the Program Policy Factors in Sections V.B.3 and V.B.4, respectively, of the FOA. EERE may initially select, partially select, or not select a Full Application for award negotiations. EERE may elect to make additional selections at a later date subject to the availability of funds and other factors.

EERE will make best efforts to promptly notify Applicants of EERE's determination. EERE may stagger its selection determinations. As a result, some Applicants may receive their notification letter in advance of other Applicants. Please refer to Section VI.A of the FOA for guidance on selection notifications.

4. Post-Selection Meeting

All selected Applicants, including the Principal Investigator and the financial manager for the project, are required to participate in a meeting that is generally held within approximately one week of the award announcement. During the meeting, EERE officials present important information on the award negotiation process, including deadlines for the completion of certain actions.

SECTION II – AWARD INFORMATION

A. Type of Award Instrument

Cooperative Agreements

EERE anticipates awarding cooperative agreements under this FOA (See Part VI.B.5 Statement of Substantial Involvement).

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

B. Estimated Funding and Maximum/Minimum Award Size

Total Amount Available of New Awards

Approximately \$900,000 of Federal funding is expected to be available for new awards under this FOA. Funding for all awards and future budget periods are contingent upon the availability of funds appropriated by Congress for the purpose of this program and the availability of future-year budget authority.

The anticipated total project funding (includes both Federal and non-Federal funds) and the approximate maximum and minimum Federal Share for any one individual award made under this announcement are set forth in the table below:

Topic Area Number	Topic Area	Anticipated Maximum Award Size for Any One Individual Award (Fed Share)	Anticipated Minimum Award Size for Any One Individual Award (Fed Share)	Anticipated Award Size (Fed Share)	Approximate Total Federal Funding Available for All Awards
1	Accelerating the Deployment of Energy Efficiency and/or Renewable Energy Technologies in South Africa	\$450,000	\$450,000	\$450,000	\$450,000
2	Accelerating the Deployment of Energy Efficiency and/or Renewable Energy Technologies in Saudi Arabia	\$450,000	\$450,000	\$450,000	\$450,000

C. Anticipated Number of Awards

EERE anticipates making two (2) awards under this FOA depending on the amount of each award. The anticipated number of awards and period of performance for each topic area are as follows:

Topic Area Number	Topic Area	Anticipated Number of Awards	Period of Performance
1	Accelerating the Deployment of Energy Efficiency and/or Renewable Energy Technologies in South Africa	1	3 years
2	Accelerating the Deployment of Energy Efficiency and/or Renewable Energy Technologies in Saudi Arabia	1	3 years

D. Period of Performance

As reflected in the chart in Section II.C, EERE anticipates making awards that will run up to 3 years in length subject to the availability of appropriations. Projects will be divided into 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 review and **contingent upon the availability of funds appropriated by Congress for the purpose of this program 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 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.

Period of Performance Per Topic Area

Please refer to the chart in Section II.C.

E. Type of Application

EERE will accept only new applications under this FOA (i.e., applications for renewals of existing EERE funded projects will not be considered).

F. Environmental Review in Accordance with National Environmental Policy Act (NEPA)

DOE's decision whether and how to distribute federal funds under this FOA is subject to the National Environmental Policy Act [42 United States Code (U.S.C.) 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 measures to be implemented to reduce or eliminate impacts to environmental and socioeconomic resources and conflicts with other uses of the area.

SECTION III - ELIGIBILITY INFORMATION

A. Eligible Applicants

1. Individuals

U.S. citizens and lawful permanent residents are eligible to apply for funding as a prime recipient or subrecipient.

2. Domestic Entities

For-profit entities, educational institutions, and nonprofits³ 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.

State, local, and tribal government entities are eligible to apply for funding as a prime recipient or subrecipient.

DOE/NNSA Federally Funded Research and Development Centers (FFRDCs) and DOE Government-Operated Government-Owned laboratories (GOGOs) are eligible to apply for funding as a prime recipient or subrecipient.

Non-DOE/NNSA FFRDCs and non-DOE GOGOs are eligible to apply for funding as a subrecipient, but are not eligible to apply as a prime recipient.

Federal agencies and instrumentalities (other than DOE) are eligible to apply for funding as a subrecipient, but are not eligible to apply as a prime recipient.

3. Foreign Entities

Foreign entities, whether for-profit or otherwise, are not eligible to apply for funding as a prime recipient under this FOA.

Other than as provided in the “Individuals” or “Domestic Entities” sections above, all prime recipients and subrecipients receiving funding under this FOA must be incorporated (or otherwise

³ Nonprofit organizations described in section 501(c)(4) of the Internal Revenue Code of 1986 that engaged in lobbying activities after December 31, 1995, are not eligible to apply for funding.

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. The Full Application must state the nature of the corporate relationship between the foreign entity and domestic subsidiary or affiliate. Foreign entities may request a waiver of this requirement in the Full Application. See Section IV.D.17(a) for waiver request information. The DOE 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 interests of EERE.

A foreign entity may receive funding as a subrecipient. Applicants are encouraged to solicit partnerships with foreign entities in the target country (or countries) that have the ability advance the objectives of the FOA as described in Section I.A. However, these foreign partners should be encouraged to provide their own resources toward project implementation, which should be substantiated in the Full Application through Letters of Commitment, as described under Section I.C.

4. Incorporated Consortia

Incorporated consortia, which may include domestic and/or foreign entities, are eligible to apply for funding as a prime recipient or subrecipient. For consortia incorporated (or otherwise formed) under the laws of a State or territory of the United States, please refer to “Domestic Entities” above. For consortia incorporated in foreign countries, please refer to the requirements in “Foreign Entities” above.

Each incorporated consortium must have an internal governance structure and a written set of internal rules. Upon request, the consortium must provide a written description of its internal governance structure and its internal rules to the DOE Contracting Officer.

5. Unincorporated Consortia

Unincorporated consortia, which may include domestic and foreign entities, must designate one member of the consortium to serve as the prime recipient/consortium representative. The prime recipient/consortium representative must be incorporated (or otherwise formed) under the laws of a State or territory of the United States. The eligibility of the consortium will be determined by the eligibility of the prime recipient/consortium representative under Section III.A of the FOA. Consortium members that are not incorporated (or otherwise formed) under the laws of a State or territory of the United States are not eligible for funding as a prime recipient or a subrecipient under this FOA. These parties would be required to provide leveraged funding and resources to participate in project activities.

Upon request, unincorporated consortia must provide the DOE Contracting Officer with a collaboration agreement, commonly referred to as the articles of collaboration, which sets out the rights and responsibilities of each consortium member. This agreement binds the individual consortium members together and should discuss, among other things, the consortium's:

- Management structure;

- Method of making payments to consortium members;
- Means of ensuring and overseeing members' efforts on the project;
- Provisions for members' cost sharing contributions; and
- Provisions for ownership and rights in intellectual property developed previously or under the agreement.

B. Cost Sharing

Cost Sharing Encouraged

Cost sharing is encouraged, but not required.

1. Legal Responsibility

Although the cost share requirement applies to the Project Team as a whole, the assistance agreement makes the Recipient legally responsible for paying the entire cost share. The 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 Recipient is required to contribute at least the cost share percentage of total expenditures incurred through the date of termination.

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

2. Cost Share Allocation

Each Project Team is free to determine how much each Project Team member will contribute towards the cost share requirement. 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.G.1 of the FOA.

Project Teams may provide cost share in the form of cash or in-kind contributions. Cash contributions may be provided by the 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 or property was not provided to the state or local government by the Federal Government.

The 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 program.
- Bank loans from financial institutions (loan meaning funds borrowed from a financial institution which will later be paid back in full.

In addition, Project Teams may not use independent research and development (IR&D) funds to meet their cost share obligations under cooperative agreements. However, Project Teams may use IR&D funds to meet their cost share obligations under grants and TIAs. 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 Recipient's records, and necessary and reasonable for proper and efficient accomplishment of the project. 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 C.F.R. Parts 600 and 603 for additional guidance on cost sharing, specifically 10 C.F.R. §§ 600.30, 600.123, 600.224, 600.313, and 603.525-555.

4. Cost Share Contributions by FFRDCs and GOGOs

Because FFRDCs and GOGOs are funded by the Federal Government, costs incurred by FFRDCs and GOGOs generally may not be used to meet the cost share requirement. FFRDCs may contribute cost share only if the contributions are paid directly from the contractor's Management Fee or a non-Federal source.

5. 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.

6. Cost Share Payment

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

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

If Recipients anticipate difficulty providing the requisite cost share every billing period, they may request authorization from EERE upon selection for award negotiations to (1) contribute the cost share percentage of total expenditures incurred every quarter (i.e., every three months), or (2) contribute the cost share percentage of total expenditures incurred every half-year (i.e., every six months). 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 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. Other Eligibility Requirements

Requirements for DOE/NNSA Federally Funded Research and Development Center (FFRDC) listed as the Applicant.

A DOE FFRDC is eligible to apply for funding under this FOA if its cognizant Contracting Officer provides written authorization and this authorization is submitted with the application. If a DOE FFRDC is selected for award, the proposed work will be authorized under the DOE work authorization process and performed under the laboratory's Management and Operating (M&O) contract.

The following wording is acceptable for the authorization:

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

Requirements for DOE/NNSA and non-DOE/NNSA Federally Funded Research and Development Centers (FFRDC) and GOGOs Included as a Team Member

DOE/NNSA and non-DOE/NNSA FFRDCs and GOGOs may be proposed as a team member on another entity's application subject to the following guidelines:

Authorization for non-DOE/NNSA FFRDCs and GOGOs. The Federal agency sponsoring the FFRDC or GOGO must authorize in writing the use of the FFRDC or GOGO on the proposed project and this authorization must be submitted with the application. The use of a FFRDC or GOGO must be consistent with the its authority under its award.

Authorization for DOE/NNSA FFRDCs and GOGOs. The cognizant Contracting Officer for the FFRDC or GOGO must authorize in writing the use of the FFRDC or GOGO on the proposed project and this authorization must be submitted with the application. The following wording is acceptable for this authorization.

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

Value/Funding. The value of, and funding for, the FFRDC portion of the work will not normally be included in the award to a successful applicant. Usually, DOE will fund a DOE FFRDC contractor through the DOE field work proposal system and other FFRDC through an interagency agreement with the sponsoring agency.

Cost Share. Although the FFRDC or GOGO portion of the work is usually excluded from the award to a successful applicant, the applicant's cost share requirement will be based on the total cost of the project, including the applicant's and the FFRDC's portions of the effort.

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

D. Submissions Required in Advance of Full Application

Applicants must submit a Concept Paper by the due date specified on the FOA Cover Page to be eligible to submit a Full Application.

E. Limitation on Number of Concept Papers and Full Applications Eligible for Review

Applicants may only submit one Concept Paper and one Full Application for consideration under each Topic Area of this FOA. If an applicant submits more than one Concept Paper or Full Application for each Topic Area, DOE 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 Concept Paper and Full Application submitted under this FOA.

F. Questions Regarding Eligibility

DOE 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.

SECTION IV – APPLICATION AND SUBMISSION INFORMATION

A. Overview of Application Process

The application process will include two phases: a Concept Paper phase and a Full Application phase. **Only applicants who have submitted a compliant Concept Paper will be eligible to submit a Full Application.** At each phase, EERE performs an initial compliance review of the applicant submissions to determine whether they are compliant and responsive. EERE will not review or consider noncompliant and/or nonresponsive submissions.

B. Address to Request 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.

(e.g. ControlNumber_LeadOrganization_Project_Part_1, Part_2, etc.)

C. Concept Paper

Concept Papers must conform to the following form and content requirements, including maximum page lengths, described below. Concept Papers must be submitted via EERE Exchange at <https://eere-exchange.energy.gov/>. A control number will be issued when an Applicant begins the concept paper submission process. This control number must be included with the Full Application documents, as described in Section C. below.

Each Concept Paper should be limited to a single concept or technology. Unrelated concepts and technologies should not be consolidated into a single Concept Paper.

1. Concept Paper Format Requirements

The Concept Paper must conform to the following requirements:

- The Concept Paper must be submitted in Adobe PDF format.

- The Concept Paper must be written in English.
- All pages must be formatted to fit on 8-1/2 by 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 points or larger (except in figures and tables). A Symbol font may be used to insert Greek letters or special characters, but the font size requirement still applies.
- 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.
- The Concept Paper must not exceed [3] pages, including cover page, charts, graphs, maps, and photographs when printed using standard 8.5” by 11” paper with 1 inch margins (top, bottom, left, and right), 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.

2. Concept Paper Content Requirements

The Concept Paper must conform to the following content requirements

SECTION	PAGE LIMIT	DESCRIPTION
Cover Page	1 pages maximum	<p>The Concept Paper cover page should indicate the name and type of organization, the announcement FOA number, the project title, and both the technical and business points of contact for the applicant, denoting the names, titles, addresses, telephone and facsimile numbers, and electronic mail addresses. The cover page should also identify the names for all other participants (subrecipients) and provide an estimated total DOE funding request and any proposed leveraged (non-DOE) funding.</p> <p>The Concept Paper should provide a clear, concise statement of the specific objectives, primary approaches, and expected outcomes and impacts of the proposed project. The Concept Paper should include a description of the proposed project areas and activities, as well as a description of the current targeted markets and how the proposed efforts are expected to impact these markets consistent with the objectives of the FOA outlined in Section I.A. The Concept Paper should also include a description of the intended partnerships and collaboration opportunities. Finally, the Concept Paper should address each of the Merit Review Criteria for Concept Papers listed in Section V, A.1. It must provide sufficient information that reviewers will be able to evaluate the technical merits of the Concept Paper in accordance with these merit review criteria.</p>

Project Narrative	2 pages maximum	The Concept Paper project narrative must not exceed 2 pages, including charts, graphs, maps, and photographs when printed using standard 8.5” by 11” paper with 1 inch margins (top, bottom, left, and right), single spaced. EVALUATORS WILL REVIEW ONLY THE NUMBER OF PAGES SPECIFIED IN THE PRECEDING SENTENCE. The font must not be smaller than 11 point. Do not include any Internet addresses (URLs) that provide information necessary to review the application. See Section VIII, Other Information for instructions on how to mark proprietary application information.
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EERE performs an initial compliance review of Concept Papers to determine whether they are compliant and responsive, as described in Section V.B.1 of the FOA. EERE will not review or consider noncompliant and/or nonresponsive Concept Papers.

EERE makes an independent assessment of each Concept Paper based on the criteria in Section V.B.2 of the FOA. EERE will encourage a subset of Applicants to submit Full Applications. Other Applicants will be discouraged from submitting a Full Application. A “discouraged” notification does not bar an applicant from filing a Full Application. Regardless if the applicant receives an “encouraged” or “discouraged” notification, DOE will review the Full Application so long as it is compliant and fits the FOA objectives. However, by discouraging the submission of a Full Application, EERE intends to convey its lack of programmatic interest in the proposed project in an effort to save the Applicant the time and expense of preparing an application that is unlikely to be selected for award negotiations. Such assessments do not necessarily reflect judgments on the merits of the proposed project. Regardless of the response received from EERE on the Concept Paper, Applicants should continue to submit innovative ideas and concepts to future FOAs.

Due to the expected volume of submissions, EERE will not provide technical feedback on Concept Papers. Although technical feedback will not be provided, EERE will notify Applicants whether they are encouraged or discouraged from submitted a Full Application.

D. Content and Form of Application

You must complete the following application forms found on the EERE Exchange website at <https://eere-Exchange.energy.gov/>, in accordance with the instructions. **Applicants will receive a Control Number once they “Apply to this FOA” on the EERE Exchange website and should include the Control Number in the file name, as indicated below. [This Control Number was issued if the applicant submitted a Letter of Intent or when the Concept Paper was submitted under this FOA.]**

Summary of Required Forms/Files: Your application must include the following documents:

1. Full Application Format Requirements

Full Applications must conform to the following requirements:

- Each document must be submitted in the file format prescribed below.
- All Full Applications must be written in English.
- All pages must be formatted to fit on 8-1/2 by 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 11 points or larger (except in figures and tables). A Symbol font may be used to insert Greek letters or special characters, but the font size requirement still applies.
- 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 section of the Full Application conform with the page limits stated below. If Applicants exceed the maximum page lengths indicated below, EERE will review only the authorized number of pages and disregard any additional pages.

2. Full Application Content Requirements

EERE will not review or consider noncompliant and/or nonresponsive Full Applications (see Section V.B.1 of the FOA).

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.

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.

(e.g., ControlNumber_LeadOrganization_Project_Part_1, Part_2, etc.) EERE will not accept late submissions that resulted from technical difficulties due to uploading files that exceed 10MB.

The requirements and contents of the Full Application are described below:

1. SF-424 – Application for Federal Assistance

Complete all required fields 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 information in a single file titled in the following format: “[insert Control#]_[insert Institution name]_Application.pdf”, using the designated Control # provided by the EERE Exchange website described above.

2. Project Summary/Abstract File (1-page limit)

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 DOE may make it available to the public if an award is made. The project summary must not exceed 1 page when printed using standard 8.5" by 11" paper with 1" margins (top, bottom, left and right), single spaced, with font not smaller than 11 point. Save the information in a single file titled in the following format: "[insert Control#]_[insert Institution name]_Summary.pdf", using the designated Control # provided by the EERE Exchange website.

3. Project Narrative File (20-page limit)

The project narrative must not exceed 20 pages, including cover page, table of contents, charts, graphs, maps, photographs, and other pictorial presentations, when printed using standard 8.5" by 11" paper with 1 inch margins (top, bottom, left, and right), single spaced. **EVALUATORS WILL REVIEW ONLY THE NUMBER OF PAGES SPECIFIED IN THE PRECEDING SENTENCE.** The font must not be smaller than 11 point. Do not include any Internet addresses (URLs) that provide information necessary to review the application. See Section VIII.D for instructions on how to mark proprietary application information. Save the information in a single file titled in the following format: "[insert Control#]_[insert Institution name]_Project.pdf", using the designated Control # provided by the EERE Exchange website.

The project narrative must include:

- Project Objectives: This section should provide a clear, concise statement of the specific objectives/aims of the proposed project, which should be consistent—in whole or in part—with the objectives of this FOA as described in Section I.A.
- Merit Review Criterion Discussion: This section should be formatted to address each merit review criterion and sub-criterion listed in Part V. A. below. The narrative should provide sufficient information so that reviewers will be able to evaluate the application in accordance with these merit review criteria. **DOE WILL EVALUATE AND CONSIDER ONLY THOSE APPLICATIONS THAT SEPARATELY ADDRESS EACH MERIT REVIEW CRITERION AND SUB-CRITERION.**
- Project Timetable: This section should outline as a function of time all the important activities or phases of the project, including any activities planned beyond the project period, such as those related to project evaluation. The successful applicant must use this project timetable to report progress.
- Roles of Participants: For multi-organizational or multi-investigator projects, the narrative should describe the roles and the work to be performed by each

participant/investigator, business agreements between the Applicant and participants, and how the various efforts will be integrated and managed.

All the components of your Project Narrative (listed above) must be within the Narrative page limit specified in paragraph 3 above. Documents listed below may be included as clearly marked appendices to your Narrative and will not count towards the Project Narrative page limit. Please note that some of the required documents listed below may have their own page limits to which each application must adhere.

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

4. Resume File

Provide a resume for each key person proposed, including subrecipients and consultants if they meet the definition of a key person; these resumes for each key person should be compiled into one document. For the purpose of this FOA, a “key person” is defined as any individual who contributes in a substantive, measurable way to the execution of the project. The biographical information for each resume must not exceed 2 pages when printed on 8.5” by 11” paper with 1-inch margins (top, bottom, left, and right), single spaced, with font not smaller than 11 point. The resume file does not have a page limit. Save the information in a file titled in the following format “[insert Control#]_[insert Institution name]_Resume.pdf”, using the designated Control # provided by the EERE Exchange website.

The resume file should include the information below for each proposed key person, if applicable:

- Education and Training: Undergraduate, graduate and postdoctoral training; provide institution, major/area, degree and year.
- Professional Experience: Beginning with the current position list, in chronological order, professional/academic positions with a brief description.
- Publications: Provide a list of up to 10 publications most closely related to the

proposed project. For each publication, identify the names of all authors (in the same sequence in which they appear in the publication), the article title, book or journal title, volume number, page numbers, year of publication, and website address, if available electronically. Applicable patents, copyrights and software systems may be provided in addition to, or in lieu of, publications.

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

Of the key personnel identified, this file should clearly indicate the Principal Investigator (PI). In the event where the application includes multiple PIs, the applicant—whether a single organization or team/partnership/consortium—must clearly indicate and identify each PI in the Resume File. The decision to use multiple PIs for a project is the sole responsibility of the applicant. If multiple PIs will be designated, the application must identify the Contact PI/Project Coordinator and provide a “Coordination and Management Plan” that describes the organization structure of the project as it pertains to the designation of multiple PIs. This plan should, at a minimum, include:

- Process for making decisions on scientific/technical direction;
- Publications;
- Intellectual property issues;
- Communication plans;
- Procedures for resolving conflicts; and
- PIs’ roles and administrative, technical, and scientific responsibilities for the project.

5. *SF-424A, Budget Information – Non-Construction Programs File*

Each application must provide a budget file using the SF-424A, “Budget Information – Non Construction Programs” form on the DOE Financial Assistance Forms Page at <http://energy.gov/management/office-management/operational-management/financial-assistance/financial-assistance-forms>. The SF-424A is an Excel-based form that provides columns for each individual budget-year, as well as the cumulative project budget. **EACH APPLICATION MUST PROVIDE A SEPARATE BUDGET FOR EACH YEAR OF SUPPORT REQUESTED AND A CUMULATIVE BUDGET FOR THE TOTAL PROJECT PERIOD.**

The application 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 FOA (see Section IV, G). Save the information in a single file titled in the following format: “[insert Control#]_[insert Institution name]_SF424A.xls”, using the designated Control # provided by the EERE Exchange website.

6. *PMC 123.1, Budget Justification File (See Appendix D for further information)*

Each application must justify the costs proposed in each Object Class Category/Cost Classification category (e.g., identify key persons and personnel categories and the estimated costs for each person or category; identify proposed subaward/consultant work

and cost of each subaward/consultant; describe purpose of proposed travel, number of travelers and number of travel days; list general categories of supplies and amount for each category; and provide any other information you wish to support your budget). Provide the name of your cognizant/oversight agency, (if known) and the name and phone number of the individual responsible for negotiating your indirect rates. If leveraged funding is anticipated, the application must include a letter from each third party contributing funding or in-kind resources (i.e., a party other than the organization submitting the application) stating that the third party is committed to providing a specific minimum dollar amount of funding. In the budget justification form (PMC 123.1), identify the following information for each third party contributing leveraged funding: (1) the name of the organization; (2) the proposed dollar amount to be provided; (3) the amount as a percentage of the total project cost; and (4) the proposed type of cost share – cash, services, or property. Save the budget justification information in a single file titled in the following format: “[insert Control#]_[insert Institution name]_PMC123.1_Budget.pdf”, using the designated Control # provided by the EERE Exchange website.

7. Subaward Budget File(s)

Each application must provide a separate budget (i.e., **budget for each budget year and a cumulative budget**) for each subawardee that is expected to perform work estimated to be more than \$100,000. Use the SF-424A Excel for Non-Construction Programs. This form is found on the DOE Financial Assistance Forms Page at <http://energy.gov/management/office-management/operational-management/financial-assistance/financial-assistance-forms>. Save each Subaward budget in a single file titled in the following format: “[insert Control#]_Subawardee_SF424A.xls”, using the designated Control # provided by the EERE Exchange website.

A budget justification (form PMC 123.1) for the subaward budget is also required.

The budget justification form must include the same justification information described in Paragraph 6 above. Save each Subaward budget justification in a single file titled in the following format: “[insert Control#]_Subawardee_PMC 123.1_Budget.xls”, using the designated Control # provided by the EERE Exchange website. See PMC 123.1 form for further information.

8. Budget for DOE Federally Funded Research and Development Center (FFRDC) Contractor File, if applicable

If a DOE FFRDC contractor is to perform a portion of the work, the application must provide a DOE Field Work Proposal (FWP) in accordance with the requirements in DOE Order 412.1 Work Authorization System. The DOE Order 412.1, Work Authorization System and the DOE O 412.1, Field Work Proposal form are available at the following link, under “DOE Budget Forms”:

<http://energy.gov/management/office-management/operational-management/financial-assistance/financial-assistance-forms>. Save the Field Work Proposal in a single file titled in the following format: “[insert Control#]_FFRDC_FWP.pdf”, using the designated Control # provided by the EERE Exchange website.

9. *SF-LLL Disclosure of Lobbying Activities*

If applicable, complete the SF- LLL. **If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the grant/cooperative agreement, you must complete and submit Standard Form - LLL, "Disclosure Form to Report Lobbying."** If applicable, save the SF-LLL in a single file titled in the following format: "[insert Control#]_[insert Institution name]_SF-LLL.pdf", using the designated Control # provided by the EERE Exchange website.

E. Content and Form of Replies to Reviewer Comments

Written feedback on Full Applications is made available to Applicants before the submission deadline for Replies to Reviewer Comments. Applicants have a brief opportunity to prepare a short Reply to Reviewer Comments responding to one or more comments or supplementing their Full Application. Applicants must use this Reply to Reviewer Comments template to complete their Reply to Reviewer Comments. Applicant Replies to Reviewer Comments are limited to clarifying aspects of the application and correcting misunderstandings. The reply may not be used to modify or materially change the submitted application.

Replies to Reviewer Comments must conform to the following requirements:

- The Reply to Reviewer Comments must be submitted in Adobe PDF format.
- The Reply to Reviewer Comments must be written in English.
- All pages must be formatted to fit on 8-1/2 by 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 points or larger (except in figures and tables). A Symbol font may be used to insert Greek letters or special characters, but the font size requirement still applies.
- 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.

EERE will not review or consider noncompliant Replies (see Section V.B.1 of the FOA). EERE will review and consider each compliant and responsive Full Application, even if no Reply is submitted or if the Reply is found to be noncompliant.

Replies to Reviewer Comments must conform to the following content and form requirements, including maximum page lengths, described below. If a Reply to Reviewer Comments is more than three pages in length, EERE will review only the first three pages and disregard any additional pages.

SECTION	PAGE LIMIT	DESCRIPTION
Text	2 pages maximum	<ul style="list-style-type: none">• Applicants may respond to one or more reviewer comments or supplement their Full Application.
Images	1 page maximum	<ul style="list-style-type: none">• Applicants may provide graphs, charts, or other data to respond to reviewer comments or supplement their Full Application.

F. Submissions from Successful Applicants

Applicants will have approximately 30 days from receipt of the Concept Paper Encourage/Discourage notification to prepare and submit a Full Application. Regardless of the date the applicant receives the Encourage/Discourage notification, the submission deadline for the Full Application remains the date stated on the FOA cover page, 7/12/2013, at 5 pm EST.

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 complying with national policies prohibiting discrimination (See 10 CFR 1040.5)

Representation of Limited Rights Data and Restricted Software, if applicable

Environmental Questionnaire

G. Intergovernmental Review

Program Not Subject to Executive Order 12372

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

H. Funding Restrictions

1. Allowable Costs

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

Refer to the applicable Federal cost principles referenced in: 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 commercial organizations.

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 referenced in 10 CFR Part 600. Recipients must obtain the prior approval of the Contracting Officer for any pre-award costs that are for periods greater than this 90 day calendar period. If recipients are State or Local Governments, they may not incur pre-award costs prior to award, without prior approval of the Contracting Officer.

National Environmental Policy Act (NEPA) Requirements. DOE'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 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 recipient elects to undertake activities that are not authorized for Federal funding by the Contracting Officer in advance of DOE completing NEPA review, the 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. 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.

4. Foreign Travel

For any international travel proposed for your project, please note that your organization must comply with the International Air Transportation Fair Competitive Practices Act of 1974 (49 U.S.C. 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.

5. 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 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 applicable sections of 10 CFR Part 600.

6. 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.

SECTION V - APPLICATION REVIEW INFORMATION

A. Overview of Application Review Process

The Review Process will be carried out in multiple phases: (1) an initial compliance review of the Concept Papers; (2) a technical merit review of the Concept Papers; (3) an initial compliance review of the Full Applications; (4) a technical merit review of the Full Applications; (5) review of applicants’ replies to reviewer comments; (6) oral presentations by a subset of applicants.”

B. FOA Criteria

1. Compliance Criteria

Compliance review of Concept Papers

Concept Papers are deemed compliant if:

- The Applicant meets the eligibility requirements in Section III of the FOA;
- The Concept Paper complies with the content and form requirements in Section IV.C of the FOA;
- 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;
- All mandatory requirements are satisfied; and
- The proposed project is responsive to the technical objectives of the FOA.

EERE will not review or consider noncompliant Concept Papers, including Concept Papers submitted through other means, Concept Papers submitted after the applicable deadline, and incomplete Concept Papers. EERE will not extend the submission deadline for Applicants that fail to submit required information and documents due to server/connection congestion.

Compliance review of Full Applications

Full Applications are deemed compliant if:

- The Applicant submitted a compliant and responsive Concept Paper;
- The Applicant meets the eligibility requirements in Section III of the FOA;
- The Full Application complies with the content and form requirements in Section IV.D 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;
- All mandatory requirements are satisfied; and
- The proposed project is responsive to the technical objectives of the FOA.

EERE will not review or consider noncompliant Full Applications, including Full Applications submitted through other means, Full Applications submitted after the applicable deadline, and incomplete Full Applications. A Full Application is incomplete if it does not include required information and documents, such as Forms SF-424 and 424A. EERE will not extend the submission deadline for Applicants that fail to submit required information and documents due to server/connection congestion.

Compliance review of Replies to Reviewer Comments

Replies to Reviewer Comments are deemed compliant if:

- The Applicant successfully uploaded all required documents to EERE Exchange by the deadline stated in the FOA.

EERE will not review or consider noncompliant Replies to Reviewer Comments, including Replies submitted through other means and Replies submitted after the applicable deadline. EERE will not extend the submission deadline for Applicants that fail to submit required information due to server/connection congestion. EERE will review and consider each compliant and responsive Full Application, even if no Reply is submitted or if the Reply is found to be noncompliant.

2. Technical Review Criteria for Concept Papers

Concept Papers are evaluated based on the following criteria:

Initial Review Criteria

Application Award Eligibility DOE will perform an initial review of the concept paper to determine that (1) the applicant is eligible for an award; (2) the information required by the FOA has been submitted; (3) all mandatory requirements are satisfied; and (4) the proposed project is responsive to the objectives of the FOA. If a concept paper fails to meet these requirements, it may be deemed non-responsive and eliminated from full Merit Review.

The following criterion are proposed to be used to evaluate Concept Papers. Each Criterion is scored on scale of +/0/-

a. Criterion 1: Overall Concept

Extent to which activities identified in the concept paper are responsive to the objectives of the FOA as described in Section I.

b. Criterion 2: Support/Justification of proposed activities

Degree to which the Applicant justifies activities in a certain market area as supported with relevant data.

c. Criterion 3: Ability to Carry Out Project Objectives

Extent to which the capabilities, experience, and qualifications of the entity involved are consistent with, and support, the proposed scope of work and the proposed objectives.

3. Merit Review Criteria for Full Applications

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

Initial Review Criteria

Application Award Eligibility

Prior to a comprehensive merit evaluation, DOE will perform an initial review to determine that (1) the applicant is eligible for an award; (2) the information required by the FOA has been submitted; (3) all mandatory requirements are satisfied; and (4) the proposed project is responsive to the objectives of the FOA. If an application fails to meet these requirements, it may be deemed non-responsive and eliminated from full Merit Review.

Merit Review Criteria for Full Applications

Proposals will be evaluated, scored and ranked by an independent review panel of qualified experts. The highest-scoring applicants may be subject to a secondary review that could include written material or oral presentation.

The following evaluation criteria will be used in the comprehensive evaluation of all applications. For each full application criterion for final applicants, the weighting (out of a total of 100%) is indicated to show the relative importance.

The following criterion are proposed to be used to evaluate Full Applications:

Criterion 1: Strategic Plan - Weight: 40%

- Quality of proposed plan to develop and implement activities that deploy U.S. technical expertise in South Africa and/or Saudi Arabia to achieve outcomes consistent with the stated objectives of this FOA.
- Extent to which the Applicant identifies relevant public- and private-sector stakeholders in the U.S. and South Africa/Saudi Arabia and strategies for engaging those stakeholders.
- Demonstration of support as evidenced by the letters of commitment and letters of support.
- Extent to which Applicant identifies similar and related activities being undertaken by other government programs, Non-Governmental Organizations (NGOs) and/or local governments, and identifies ways in which application may work in concert with those activities.

Criterion 2: Understanding of Market Environment - Weight: 30%

- Extent to which Applicant demonstrates a thorough understanding of current market opportunities to increase adoption of energy efficiency and renewable energy technologies in South Africa and/or Saudi Arabia.
- Identification of specific barriers to EERE technology deployment and how this project's activities will address these barriers.
- Extent to which these market opportunities and barriers are substantiated with supporting evidence from credible sources.

Criterion 3: Qualifications, Resources, Capabilities and Management - Weight: 30%

- Extent to which and appropriateness of project team's capabilities (prime and sub recipients of proposed project), experience, and qualifications of the organization involved are consistent with, and support, the stated objectives of the FOA.
- Identification of a strong project manager capable of leading a diverse team and interfacing effectively with DOE and multilateral organizations/fora such as the International Renewable Energy Agency (IRENA), Southern African Power Pool (SAPP), AGOA Forum, Regional Center for Renewable Energy and Energy Efficiency (RCREEE), or the Gulf Cooperation Council (GCC), to maximize transparency and information sharing.
- Quality of Applicant's proposed schedule, with defined tasks, timing, and resource allocation to accomplish goals within the project period.

4. Other Selection Factors**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.

- Level of cost-share and leveraging of additional resources, demonstrated by letters of commitment;
- Diversity and complementary nature of activities, approaches, methods involved;
- The degree to which the proposed project optimizes the use of available EERE funding to achieve programmatic objectives;
- Inherent risks associated with the selected countries;
- Whether the proposed activities are likely to lead to increased employment and manufacturing in the United States;

C. Review and Selection Process

1. Merit Review

Applications Subject to Merit Review

Applications that are determined to be compliant will be evaluated by the Federal Merit Review Panel in accordance with 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>.

Pre-Selection Meetings

As part of the merit review process, EERE may schedule conferences between representatives of one or more of the top ranked applicants and the Merit Review Panel to allow Merit Review Panels to clarify the contents of the Full Applications and otherwise ask questions regarding the proposed project. If so, EERE will invite those applicants to participate in a one-on-one meeting with EERE via webinar, videoconference, or conference call. In the alternative, EERE may invite Applicants to meet in person at EERE's offices or a mutually agreed upon location. EERE may also arrange pre-selection site visits to certain Applicants' facilities.

If EERE opts to conduct Pre-Selection meeting, it is anticipated the Pre-Selection meetings will occur in August 2013. EERE will not reimburse Applicants for travel and other expenses relating to pre-selection meetings and site visits, nor will these costs be eligible for reimbursement as pre-award costs.

EERE may obtain additional information through pre-selection meetings and site visits that will be used to make a final selection determination. EERE may select applications for funding and make awards without pre-selection meetings and site visits. Participation in a pre-selection meeting or site visit with EERE does not signify that Applicants have been selected for award negotiations.

2. Pre-Selection Clarification

Based upon the results of the merit review of written applications, EERE may determine that pre-selection clarifications are necessary from certain Applicants. These pre-selection clarifications will be for the purposes of clarifying the application and may take the form of one or more of the following procedures: written responses to EERE's written clarification questions, video or conference calls with EERE representatives, in person-meetings or presentations at EERE or applicant site. EERE, based upon the results of the merit review of written applications and in its

sole discretion, may decide not to hold any pre-selection clarifications. The information provided by Applicants to EERE through pre-selection clarifications is incorporated in their application 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. Applicant costs incurred to participate in pre-selection clarifications (such as travel or other presentation costs) are application costs and are only allowable to awardees as indirect expenses to Federally sponsored projects to the extent that those costs are allowable, allocable and reasonable.

3. Criteria for Replies to Reviewer Comments

EERE has not established separate criteria to evaluate Replies to Reviewer Comments. Instead, Replies to Reviewer Comments are evaluated as an extension of the Full Application.

4. Review and Selection Process

Selection Official Consideration

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

5. Discussions and Award

Government Discussions with Applicant

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

D. Anticipated Notice of Selection and Award Dates

Selection and Award Date

EERE anticipates notifying applicants selected for award by **end of August 2013** and making awards by **end of October 2013**.

Award Date

EERE strives to make awards within 3 months. The time interval begins on the date applications are due or the date the application is received, if there is no specified due date/deadline.

SECTION VI - AWARD ADMINISTRATION INFORMATION

A. Award Notices

1. Rejected Submissions

Noncompliant and nonresponsive Concept Papers and Full Applications are rejected by the Contracting Officer and are not reviewed or considered.

Per 10 CFR 600.22 (f):

(f) Review on appeal. (1) The Senior Procurement Executive shall have no jurisdiction to review (i) Any preaward dispute (except as provided in paragraph (f)(2)(ii) of this section), including use of any special restrictive condition pursuant to § 600.114, § 600.212, or § 600.304;

(f)(2)(ii) A DOE decision not to make a continuation award based on any of the determinations described in paragraph (f)(2)(i) of this section

The Contracting Officer sends a notification letter by email to the technical and administrative points of contact designated by the Applicant in EERE Exchange.

2. Concept Paper Notifications

EERE promptly notifies Applicants of its determination to encourage or discourage the submission of a Full Application. EERE sends a notification letter by email to the technical and administrative points of contact designated by the Applicant in EERE Exchange. Due to the anticipated volume of applications, EERE is unable to provide technical feedback on Concept Papers.

A notification letter encouraging the submission of a Full Application does not authorize the Applicant to commence performance of the project. Please refer to Section IV.G.2 of the FOA for guidance on pre-award costs.

3. Full Application Notifications

EERE promptly notifies Applicants of its determination. EERE sends 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.

a. SUCCESSFUL APPLICANTS

A notification letter selecting a Full Application for award negotiations does not authorize the Applicant to commence performance of the project. **EERE selects Full Applications for award negotiations, not for award.** Applicants do not receive an award until award negotiations are complete and the Contracting Officer executes the funding agreement.

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

b. 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.

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

c. 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.

4. Notice of Award

A Financial Assistance Award or Assistance Agreement issued by the Contracting Officer is the authorizing award document. It normally includes, either as an attachment or by reference: (1) Assistance Agreement Form; (2) Special Terms and Conditions; (3) Intellectual Property Provisions; (4) Statement of Project Objectives; (5) Reporting Checklist and Instructions; (6) Budget Information; (7) National Policy Assurances; (8) Applicable program regulations, if any; (9) Application as approved by DOE; and (10) DOE assistance regulations at 10 CFR part 600.

For grants and cooperative agreements made to universities, non-profits and other entities subject to OMB Circular A-110, the Award also includes the Research Terms and Conditions and the DOE Agency Specific Requirements located at: <http://www.nsf.gov/bfa/dias/policy/rtc/index.jsp>.

B. Administrative Requirements, National Policy Requirements, and Applicant Representations and Certifications

1. Administrative Requirements

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

2. DUNS and SAM Requirements

Additional administrative requirements for DOE grants and cooperative agreements are contained in 2 CFR, Part 25 (See: <http://ecfr.gpoaccess.gov>). Prime awardees must keep their data at the System for Award Management (SAM) current at <https://www.sam.gov>. SAM is the government-wide system that replaced the SAM. If you had an active registration in the CCR, you have an active registration in SAM. Subawardees at all tiers must obtain DUNS numbers and provide the DUNS to the prime awardee before the subaward can be issued.

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. (See: <http://ecfr.gpoaccess.gov>). Prime awardees must register with the new FSRS database and report the required data on their first tier subawardees. Prime awardees must report the executive compensation for their own executives as part of their registration profile in the System for Award Management (SAM).

4. Special Terms and Conditions, National Policy Requirements, and Applicant Representations and Certifications

The EERE Special Terms and Conditions for Use in Most Grants and Cooperative Agreements are located at: <http://energy.gov/management/office-management/operational-management/financial-assistance/financial-assistance-forms>

The National Policy Assurances To Be Incorporated as Award Terms are located at: <http://energy.gov/management/office-management/operational-management/financial-assistance/financial-assistance-forms>

Applicant Representations and Certifications

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

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

- (1) It is **not** a corporation that has been convicted (or had an officer or agent of such corporation acting on behalf of the corporation convicted) of a felony criminal violation under any Federal law within the preceding 24 months,
- (2) **No** officer or agent of the corporation have been convicted of a felony criminal violation for an offence arising out of actions for or on behalf of the corporation under Federal law in the past 24 months,
- (3) It is **not** a corporation that has any unpaid Federal tax liability that has been assessed, for which all judicial and administrative remedies have been exhausted or have lapsed, and that is not being paid in a timely manner pursuant to an agreement with the authority responsible for collecting the tax liability.

For purposes of these representations the following definitions apply:

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

5. Statement of Substantial Involvement

There will be substantial involvement between the EERE and the Recipient during the performance of the resultant cooperative agreement. The EERE program goals and objectives addressed by the project are of a degree of 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 Recipient for the management, control, direction, and

- performance of the work under this Award.
2. EERE reviewing and approving in a timely manner project plans, including project management, testing and technology transfer plans, and recommending alternate approaches, if the plans do not address critical programmatic issues.
 3. EERE participating in project management planning activities, including risk analysis, to ensure EERE program requirements or limitations are considered in performance of the work elements.
 4. EERE conducting 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 promoting and facilitating technology transfer activities, including disseminating program results through presentations and publications.
 6. The Recipient must adhere to EERE technical direction and comply with agency-specific and programmatic requirements.
 7. EERE shall be substantially involved in the Project and this involvement shall include EERE input to the Recipient regarding the management, direction, and performance of the Project.
 8. EERE may intervene at any time in the conduct or performance of work under this Award.
 9. 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.
 10. EERE does not limit its involvement to the administrative requirements of this Award.
 11. EERE may modify or terminate projects that fail to achieve predetermined Go/No Go decision criteria. [if applicable]
 12. EERE participation in major project decision-making processes.
 13. EERE will work with the successful Applicant to identify an appropriate plan to capture and communicate meaningful impacts and outcomes consistent with the stated objectives of this FOA.

U.S. Manufacturing Requirement

EERE requires subject inventions (i.e., inventions conceived or first actually reduced to practice under EERE awards) to be substantially manufactured in the United States by Project Teams and their licensees, as described below. The Applicant may request a modification or waiver of the U.S. Manufacturing Requirement through the Business Assurances Form submitted with the Full Application.

a. SMALL BUSINESSES, EDUCATIONAL INSTITUTIONS AND NONPROFITS

Small businesses (including Small Business Concerns), domestic educational institutions, and nonprofits that are Recipients or Subrecipients under EERE funding agreements must require their exclusive licensees to substantially manufacture the following products in the United States for any use or sale in the United States: (1) articles embodying subject inventions, and (2) articles produced through the use of subject invention(s). This requirement does not apply to articles that are manufactured for use or sale overseas.

Small businesses, domestic educational institutions and nonprofits must require their assignees to apply the same U.S. Manufacturing requirements to their exclusive licensees.

These U.S. Manufacturing requirements do not apply to nonexclusive licensees.

b. LARGE BUSINESSES, FOREIGN ENTITIES, and State and Local Government Entities

Large businesses and foreign entities that are Recipients or Subrecipients under EERE funding agreements that take title to subject inventions through a patent waiver are required to substantially manufacture the following products in the United States: (1) products embodying subject inventions, and (2) products produced through the use of subject invention(s). This requirement applies to products that are manufactured for use or sale in the United States and overseas.

Large businesses and foreign entities must apply the same U.S. Manufacturing requirements to their assignees, licensees, and entities acquiring a controlling interest in the large business or foreign entity. Large businesses and foreign entities must require their assignees and entities acquiring a controlling interest in the large business or foreign entity to apply the same U.S. Manufacturing requirements to their licensees.

c. FFRDCs

DOE FFRDCs are subject to the U.S. Manufacturing requirements set forth in their Management and Operating Contracts. All other FFRDCs are subject to the U.S. Manufacturing requirements as set forth above, based on their size and for-profit status.

EERE requires every Project Team to negotiate and establish an Intellectual Property Management Plan for the management and disposition of intellectual property arising from the project. The Recipient must submit a completed and signed Intellectual Property Management plan to EERE within six weeks of the effective date of the EERE funding agreement. All Intellectual Property Management Plans are subject to the terms and conditions of the EERE funding agreement and applicable Federal laws, regulations, and policies, all of which take precedence over the terms of Intellectual Property Management Plans.

EERE has developed a template for Intellectual Property Management Plans (<http://EERE.energy.gov/FundingAgreements/Overview.aspx>) so as to facilitate and expedite negotiations between Project Team members. EERE does not mandate the use of this template. EERE and DOE do not make any warranty (express or implied) or assume any liability or responsibility for the accuracy, completeness, or usefulness of the template. EERE and DOE strongly encourage Project Teams to consult independent legal counsel before using the template.

6. Subject Invention Utilization Reporting

To ensure that Recipients and Subrecipients holding title to subject inventions are taking the appropriate steps to commercialize subject inventions, EERE may require Recipients to submit 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

Recipient, and such other data and information as EERE may specify.

7. Intellectual Property Provisions

The standard DOE financial assistance intellectual property provisions applicable to the various types of recipients are located at *<http://energy.gov/management/office-management/operational-management/financial-assistance/financial-assistance-forms>*

C. Reporting

Reporting requirements are identified on the Federal Assistance Reporting Checklist, DOE F 4600.2, attached to the award agreement.

SECTION VII - QUESTIONS/AGENCY CONTACTS

A. Questions

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: InternationalFOA837@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*

Questions regarding program requirements must be directed to: *John P. Cabaniss, 202-287-5531, john.cabaniss@ee.doe.gov*

SECTION VIII - OTHER INFORMATION

A. Amendments

Amendments to this FOA will be posted on the EERE Exchange web site and the Grants.gov system. However, you will only receive an email when an amendment or an 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 other than the Contracting Officer, either explicit 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 applications 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 confidential 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 public releasability of 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 and 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 program include those which describe and promote the understanding of scientific and technical aspects of specific energy technologies, but not those which encourage or support political activities such as the collection and dissemination of information related to potential, planned or pending legislation.

G. Notice of Right to Conduct a Review of Financial Capability

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

H. Notice of Potential Disclosure under Freedom of Information Act

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

I. Requirement for Full And Complete Disclosure

Applicants are required to make a full and complete disclosure of the information requested in the Business Assurances Form and the Other Sources of Funding Disclosure form. Disclosure of the requested information is mandatory. Any failure to make a full and complete disclosure of the requested information may result in:

- The rejection of a Concept Paper, Full Application, and/or Reply to Reviewer Comments;
- 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 Letters of Intent, Concept Papers, Full Applications, Replies to Reviewer Comments, 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. If a large business or foreign entity elects to retain title to its subject invention, it must file a patent application.
- 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 DOE 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.

M. 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.

N. 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 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.

O. 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.

- Option 1 (with data protection): Generated Data: The U.S. Government normally retains unlimited rights in technical data produced under Government financial assistance awards, including the right to distribute to the public. However, pursuant to special statutory authority, certain categories of data generated under EERE-E awards may be protected from public disclosure for up to five years after the data is generated (“Protected Data”). For awards permitting Protected Data, the protected data must be marked as set forth in the awards intellectual property terms and conditions and a listing of unlimited rights data must be inserted into the data clause in the cooperative agreement. In addition, invention disclosures may be protected from public disclosure for a reasonable time in order to allow for filing a patent application-
- Option 2 (without data protection): Generated Data: The U.S. Government normally 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-

P. Copyright

The 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. In addition, for those awards requiring distribution of software as OSS, the additional information in Appendix C must be addressed in the application.

Q. 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 DOE as:

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

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

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

Protected PII: PII that requires enhanced protection. This information includes data that if

compromised could cause harm to an individual such as identity theft.

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

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

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

- Phone numbers (work, home, cell)
- Street addresses (work and personal)
- Email addresses (work and personal)
- Digital pictures
- Medical information included in a health or safety report
- Employment information that is not PII even when associated with a name
- Resumes, unless they include a Social Security Number
- Present and past position titles and occupational series
- Present and past grades
- Present and past annual salary rates (including performance awards or bonuses, incentive awards, merit pay amount, Meritorious or Distinguished Executive Ranks, and allowances and differentials)
- Present and past duty stations and organization of assignment (includes room and phone

numbers, organization designations, work email address, or other identifying information regarding buildings, room numbers, or places of employment)

- Position descriptions, identification of job elements, and those performance standards (but not actual performance appraisals) that the release of which would not interfere with law enforcement programs or severely inhibit agency effectiveness
- Security clearances held
- Written biographies (e.g. to be used in a program describing a speaker)
- Academic credentials
- Schools attended
- Major or area of study
- Personal information stored by individuals about themselves on their assigned workstation or laptop unless it contains a Social Security Number

R. Annual Compliance Audits for For-Profit Entities

If a for-profit entity is a Recipient or Subrecipient 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 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 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. DOE will share in the cost of the audit at its applicable cost share ratio.

REFERENCE MATERIAL

Appendix A – Definitions

“Amendment” means a revision to a FOA

"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 either a Grant or a Cooperative Agreement.

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

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

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

"Cooperative Agreement" means a Financial Assistance instrument used by DOE to transfer money or property when the principal purpose of the transaction is to accomplish a public purpose of support or stimulation authorized by Federal statute, and Substantial Involvement (see definition below) is anticipated between DOE and the Applicant during the performance of the contemplated activity. 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 DOE. The percentage of Applicant Cost Share is to be applied to the Total Project Cost (i.e., the sum of Applicant plus DOE Cost Shares) rather than to the DOE contribution alone.

“Data Universal Numbering System (DUNS) Number” is a unique nine-character identification number issued by Dun and Bradstreet (D&B). Organizations must have a DUNS number prior to registering in the 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. <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 DOE, it does not include direct loans, loan guarantees, price guarantees, purchase agreements, Cooperative Research and Development Agreements (CRADAs), or any other type of financial incentive instrument.

“FedConnect” is where federal agencies make awards via the web.
<https://www.fedconnect.net/FedConnect/>

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

“Funding Opportunity Announcement (FOA)” is a publicly available document by which a Federal agency makes known its intentions to award discretionary grants or cooperative agreements, usually as a result of competition for funds. 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 DOE to transfer money or property when the principal purpose of the transaction is to accomplish a public purpose of support or stimulation authorized by Federal statute, and no Substantial Involvement is anticipated between DOE and the Applicant during the performance of the contemplated activity.

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

“Indian Tribe” means any Indian tribe, band, nation, or other organized group or community, including Alaska Native village or regional or village 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).

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

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

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

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

“Selection” means the determination by the DOE Selection Official that negotiations take place for certain Projects with the intent of awarding a Financial Assistance instrument.

“Selection Official” means the DOE official designated to select Applications for negotiation toward Award under a subject FOA.

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

“Technology Investment Agreement (TIA)” is a type of assistance instrument used to support or stimulate research projects involving for-profit firms, especially commercial firms that do business primarily in the commercial marketplace. TIAs are different from grants and cooperative agreements in that the award terms may vary from the Government-wide standard terms (See DOE

TIA regulations at 10 CFR Part 603). The primary purposes for including a TIA in the type of available award instruments are to encourage non-traditional Government contractors to participate in an R&D program and to facilitate new relationships and business practices. A TIA can be particularly useful for awards to consortia (See 10 CFR 603.225(b) and 603.515, Qualification of a consortium).

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

"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. DOE almost always uses the term “cost sharing,” as it conveys the concept that non-federal share is calculated as a percentage of the Total Project Cost. An exception is the State Energy Program Regulation, 10 CFR 420.12, State Matching Contribution. Here “cost matching” for the non-federal share is calculated as a percentage of the Federal funds only, rather than the Total Project Cost.

How Cost Sharing Is Calculated

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

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

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

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

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

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

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

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

What Qualifies For Cost Sharing

While it is not possible to explain what specifically qualifies for cost sharing in one or even a couple of sentences, in general, if a cost is allowable under the cost principles applicable to the organization incurring the cost and is eligible for reimbursement under a DOE grant or cooperative agreement, then it is allowable as cost share. Conversely, if the cost is not allowable under the cost principles and not eligible for reimbursement, then it is not allowable as cost share. In addition,

costs may not be counted as cost share if they are paid by the Federal Government under another award unless authorized by Federal statute to be used for cost sharing.

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

- Institutions of Higher Education, Hospitals, and Other Nonprofit Organizations are found at 10 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, DOE generally does not allow pre-award costs for either cost share or reimbursement when these costs precede the signing of the appropriation bill that funds the award. In the case of a competitive award, DOE generally does not allow pre-award costs prior to the signing of the Selection Statement by the DOE Selection Official.

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

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

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

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

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

cost as follows:

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

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	Required Federal Share %	Non-federal Cost 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)	100,000	100%	0%
	\$2,000,000		

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:

Task	Proposed Federal Share	Federal Share %	Required Non-federal Cost Share \$	Required Non-federal Cost 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
	\$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)

Appendix C - Open Source Software

This Appendix must be attached to all FOAs that require software produced under at least one Topic Area of the Award to be distributed as open source.

Open Source Software Distribution Plan

Applicants that are applying to one or more Topic Areas for which open source software distribution is required must submit a plan describing how software produced under this FOA will be distributed. For a DOE National Laboratory or a FFRDC, the data rights clause, including rights and requirements pertaining to computer software, in its Management and Operating (M&O) Contract shall apply and shall take precedence over any requirement set forth in this Appendix. The plan must include the following elements:

1. A complete description of any existing software that will be modified or incorporated into software produced under this FOA, including a description of the license rights. The license rights must allow the modified or incorporated software to be distributed as open source.
2. A discussion of the open source license that the Applicant plans to use for the software it plans to produce under the FOA, and how that choice furthers the goals of this FOA. The discussion must also address how the license conforms to the conditions listed below.
3. A method for depositing the software in a source code repository.
4. A method for sharing and disseminating the software and other information to team members or others when multiple parties will contribute to the development of the software or the FOA requires that the software or other information be shared or disseminated to others.

Open Source Definition: Open source licenses must conform to all of the following conditions:

- **Free Redistribution**

The license shall not restrict any party from selling or giving away the software as a component of an aggregate software distribution containing programs from several different sources. The license shall not require a royalty or other fee for such sale. The rights attached to the software must apply to all to whom the software is redistributed without the need for execution of an additional license by those parties.

- **Source Code**

The program must include source code, and must allow distribution in source code as well as compiled form. Where some form of a product is not distributed with source code, there must be a well-publicized means of obtaining the source code for no more than a reasonable reproduction cost preferably, *e.g.*, downloading via the Internet without charge. The source code must be the preferred form in which a programmer would modify the program. Deliberately obfuscated source code and intermediate forms such as the output of a preprocessor or translator are not allowed.

- **Derived Works**

The license must allow modifications and derived works, and permit the option of distributing the modifications and derived works under the same terms as the license of the original software.

- **Integrity of the Author's Source Code**

The license may restrict source-code from being distributed in modified form only if the license allows the distribution of "patch files" with the source code for the purpose of modifying the program at build time. The license must explicitly permit distribution of software built from modified source code. The license may require derived works to carry a different name or version number from the original software.

- **No Restriction Against Fields of Endeavor**

The license must not restrict anyone from making use of the program in a specific field of endeavor. For example, it may not restrict the program from being used in a business, or from being used for genetic research.

- **License Must Not Be Specific to a Product or Technology**

The rights attached to the program must not depend on the program's being part of a particular software distribution. If the program is extracted from that distribution and used or distributed within the terms of the program's license, all parties to whom the program is redistributed should have the same rights as those that are granted in conjunction with the original software distribution. No provision of the license may be predicated on any individual technology or style of interface.

- **License Must Not Restrict Other Software**

The license must not place restrictions on other software that is distributed along with the licensed software. For example, the license must not insist that all other programs distributed on the same medium must be open-source software.

Examples of Acceptable Licenses

- **Apache License, 2.0**

<http://www.apache.org/licenses/>

The 2.0 version of the Apache License was approved by the Apache Software Foundation in 2004. The goals of this license revision were to reduce the number of frequently asked questions, to allow the license to be reusable without modification by any project (including non-ASF projects), to allow the license to be included by reference instead of listed in every file, to clarify the license on submission of contributions, to require a patent license on contributions that necessarily infringe the contributor's own patents, and to move comments regarding Apache and other inherited attribution notices to a location outside the license terms

The result is a license that is compatible with other open source licenses, while remaining true to and supportive of collaborative development across both nonprofit and commercial organizations.

All packages produced by the ASF are implicitly licensed under the Apache License, Version 2.0, unless otherwise explicitly stated.

- **GNU General or Public License (GPLv3)**

<http://www.gnu.org/licenses/gpl.html>

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- **GNU Library or “Lesser” General Public License (LGPLv3)**

<http://www.gnu.org/licenses/lgpl.html>

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The LGPL is primarily used for software libraries, although it is also used by some stand-alone applications, most notably Mozilla and OpenOffice.org.

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- **Mozilla Public License 2.0 (MPL-2.0)**

<http://www.mozilla.org/MPL/2.0/>

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