DEPARTMENT OF ENERGY (DOE)
OFFICE OF ENERGY EFFICIENCY AND RENEWABLE ENERGY (EERE)

STATE ENERGY PROGRAM 2014 COMPETITIVE AWARDS

Funding Opportunity Announcement (FOA) Number: DE-FOA-0001073
FOA Type: Initial
CFDA Number: 81.119

FOA Issue Date:	4/30/14 5:00pm ET
Informational Webinar:	5/12/14
Submission Deadline for Full Applications:	6/30/14 5:00pm ET
Expected Date for EERE Selection Notifications:	9/18/14
Expected Timeframe for Award Negotiations	9/24/14-12/31/14

- To apply to this FOA, Applicants must register with and submit application materials through Grants.gov.
- Applicants must designate primary and backup points-of-contact in Grants.gov with whom EERE will communicate to conduct award negotiations. If an application is selected for award negotiations, it is not a commitment to issue an award. It is imperative that the Applicant/Selectee be responsive during award negotiations and meet negotiation deadlines. Failure to do so may result in cancelation of further award negotiations and rescission of the Selection.

REGISTRATION AND APPLICATION SUBMISSION REQUIREMENTS

Registration Requirements: Allow at least 60 days to complete registrations.

To submit an application under this announcement, complete the following registrations:

1. Obtain a Dun and Bradstreet Data Universal Numbering System (DUNS) number, at http://fedgov.dnb.com/webform.

2. Register in the System for Award Management (SAM) system, at https://www.sam.gov. Designating an E-Business Point of Contact (EBiz POC) and obtaining a special password called an MPIN are important steps in SAM registration. These items are needed to submit applications in Grants.gov. Update your SAM registration annually.

3. Register in Grants.gov at http://www.grants.gov/. See http://www.grants.gov/web/grants/applicants/organization-registration.html for information on how to register as an organization. The Applicant User Guide is at http://www.grants.gov/documents/19/18243/GrantsGovApplicantUserGuide.pdf

4. Register in FedConnect at https://www.fedconnect.net/; use "Register as a Vendor" link. To create an organization account, your organization's SAM MPIN is required.

Where to Download the Application Package:
Download the Application Package for this announcement at http://www.grants.gov/. Click on the "Apply for Grants" link; then, click on the "Download a Grant Application Package" link and follow the instructions. Insert the announcement number to download the Application Package.

Where to Submit the Application Package:
APPLICATIONS MUST BE SUBMITTED THROUGH GRANTS.GOV TO BE CONSIDERED FOR AWARD. Follow instructions in the User's Guide for application submissions. Applicants are responsible for verifying successful transmission, prior to the Application due date and time.

Where to Ask Questions About the Funding Opportunity Announcement Content:
To ask questions about the Funding Opportunity Announcement, use FedConnect at https://www.fedconnect.net/. You must be a registered user in the system and submit questions by sending messages in your FedConnect email box. Part VII of this announcement explains how to submit questions to the Department of Energy (DOE).

Where to Submit Questions About the Registrations or Systems:
DUNS & Bradstreet: govt@dnb.com

System for Award Management (SAM) system: https://www.sam.gov
By phone: 866-606-8220 or 334-206-7828 (8:00 a.m. to 8:00 p.m., Eastern Time)

Grants.gov: support@grants.gov
By phone: 1-800-518-4726 (7:00 a.m. to 9:00 p.m., Eastern)

FedConnect: support@FedConnect.net
By phone: 1-800-899-6665 (8:00 a.m. to 8:00 p.m., Eastern)

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EXECUTIVE SUMMARY

Means of Submission	Full Applications must be submitted through Grants.gov. EERE will not review or consider applications submitted through other means.
Total Amount to be Awarded	Up to $5,000,000
Average Award Amount	EERE anticipates making awards that range from $75,000 to $500,000.
Types of Funding Agreements	Cooperative Agreements
Period of Performance	24 to 36 months
Eligible Applicants	In accordance with 10 CFR 600.6(b), eligibility is restricted to the 50 States, the District of Columbia, American Samoa, Guam, the Northern Mariana Islands, Puerto Rico, and the US Virgin Islands.
Cost match Requirement	20% of Total Federal Funds
Submission of Multiple Applications	For Area of Interest 1, Applicants may submit (1) a State-specific proposal (which covers the State applicant only), or (2) a multi-State proposal, where the State is the prime recipient, or a proposal that involves other States but where each State applies separately. A State may submit a maximum of one application. For Area of Interest 2, Applicants may submit up to two applications: (1) one Full Application that includes no other State partners and covers only the applying State (i.e. a State-specific application) and (2) one Full Application that includes other State partners (i.e. a multi-state application), where the State is the prime recipient, or one Full Application that includes no other States as partners on the application but involves other States that are applying separately.
Application Forms	Required forms and templates for Full Applications are available on Grants.gov.
FOA Summary	The SEP competitive funding opportunity provides up to $5 million for cooperative agreements that allow States to develop high-impact, innovative approaches and solutions to transform clean energy (including energy efficiency and renewable energy) markets and achieve the economic and environmental benefits that clean energy offers. This competitive Funding Opportunity Announcement (FOA) allows States to compete for funding designed to meet EERE's nationally focused initiatives for the fundamental and permanent transformation of markets across all sectors of the economy. This FOA will include two Areas of Interest.

I. FUNDING OPPORTUNITY DESCRIPTION

A. DESCRIPTION/BACKGROUND

Description

The Office of Energy Efficiency and Renewable Energy's (EERE's) State Energy Program (SEP) seeks applications to advance policies, programs, and market strategies that accelerate job creation and reduce energy bills while achieving energy and climate security for the nation. This competitive Funding Opportunity Announcement (FOA) allows States (which includes the 50 States, District of Columbia and five territories) to compete for funding designed to meet EERE's nationally focused initiatives for the fundamental and permanent transformation of markets across all sectors of the economy. Specifically, this FOA focuses on two areas of interest:

Area of Interest 1 - State Energy Planning

Through this funding, DOE hopes to bolster State/regional energy planning by funding efforts to facilitate stakeholder and interagency discussions and related activities concerning (1) the future direction of the energy sector in the region/State, with emphasis on the electric power sector and natural gas supply and transport and (2) how energy efficiency and renewable energy fit into the vision for the future. These discussions will help States explore and enhance economic development opportunities associated with promoting energy efficiency and renewable energy as part of an all-of-the-above approach, identify measures for enhancing the resiliency and reliability of energy supplies and the electric grid (energy assurance-related activities), undertake relevant analytical efforts, and plan strategically for current and future environmental regulations and other economic pressures that will have an impact on the energy sector, and conduct related activities.

Area of Interest 2 - Innovative Opportunities for Energy Efficiency and Renewable Energy Practices

In this year's FOA, Applicants will complete a State Policy Information Section about State energy policies (FY14 State Energy Assessment). In addition to providing an understanding about the "state of play" in the State energy space, this year's assessment (in a modified form, as explained below) will also form the basis for a State's application(s) for financial assistance under the Competitive Awards.

DOE intends to allow States to present proposals, based on many (but not all) questions in the FY14 State Energy Assessment, that identify which areas they could progress and develop and implement a plan to advance specific clean energy policies. This could be in the form of changing a "No" answer to a "Yes" for one or more of the questions and/or by expanding the scope of an existing regulation or policy addressed in the assessment.

DOE believes this approach will provide flexibility to States. States will decide which areas of energy policy they would like to focus on (based on the FY14 State Energy Assessment) and

where they believe they can most advance energy efficiency and renewable energy in their States. DOE hopes this will promote innovative ideas from States tailored to their resources and energy profiles.

Background

The mission of the SEP is to provide leadership to maximize the benefits of energy efficiency and renewable energy through technology deployment, communications and outreach activities, and access to new partnerships and resources. Through the SEP, DOE provides formula and competitive funding assistance to States. States use formula awards to address their energy priorities through programs and policies that accelerate adoption of emerging energy efficiency and renewable energy technologies. DOE provides competitive awards to support policy and project developments that are highly leveraged and sustainable.

The SEP upholds the Department of Energy (DOE) Strategic Plan Goals 1.2 and 1.4.

- Goal 1.2 - "Environmental Impact of Energy" aims to improve the quality of the environment.
- Goal 1.4 - "Energy Productivity" serves to cost-effectively improve the energy efficiency of the U.S. economy.

Congress authorized the DOE to allow for formula and competitive grants and/or cooperative agreements to the States under the SEP. See e.g., Energy Policy and Conservation Act, section 365(f) (codified at 42 USC 6325(f) and Energy Independence and Security Act of 2007, section 531. DOE provides formula grants to States to design and carry out their own energy efficiency and renewable energy programs. In FY2014, the SEP competitive funding opportunity provides up to $5 million for cooperative agreements that allow States to develop high-impact, innovative approaches and solutions to transform clean energy (including energy efficiency and renewable energy) markets and achieve the economic and environmental benefits that clean energy offers.

B. AREAS OF INTEREST

Area of Interest 1 – State Energy Planning
Number of Projects: Up to 9
Total Potential Award Funding: Up to $3,500,000
Awards Range: approximately $200,000 to $300,000 for an individual State-specific application; approximately $300,000- $500,000 total for multi-State applications.
Award duration: 2 years

DOE is seeking applications from States to bolster State/regional energy planning by facilitating stakeholder and interagency discussions and related activities concerning (1) the future direction of the energy sector in the region/State, with emphasis on the electric power sector and natural gas supply and transport, and (2) how energy efficiency and renewable energy fit into the vision for the future.

Ideal proposals would contain the following elements:

- Identification of the extent to which the State already uses energy efficiency and renewable energy as part of their energy resource mix and future plans;
- Establishment of a dialogue, facilitated by a third party, among the different State agencies with purview over the energy sector to develop a coordinated vision for energy planning that can help meet state policy goals, support electric reliability and comply with environmental standards. This would include a discussion of the disparate mandates of the State agencies; a discussion of current, near term and future challenges they see in the energy sector, including regulatory challenges, market challenges, reliability challenges, resiliency challenges, economic development opportunities, and any other challenges; and a discussion of solutions (more below);
- Establishment of a stakeholder engagement process, including with utilities, to obtain their input on electric power sector planning;
- Outline of a process to map out and assess a set of solutions over several scenarios that:
    - Meets projected electricity demand;
    - Addresses reliability and resiliency concerns (energy assurance);
    - Promotes economic development;
    - Mitigates to the extent possible any increase in customer bills;
    - Identifies any energy resource constraints, including infrastructure (supply, transport, transmission, delivery)
    - Discusses how State Energy Offices, Public Utility Commissions and Departments of Environmental Protection will work together to accurately and rigorously measure, track, and report energy savings and emissions reductions;
    - Complies with existing and forthcoming environmental regulations (making assumptions about future regulations);
    - Considers a range of potential solutions, including market-based approaches
    - Demonstrates how energy efficiency can help meet these goals; and
    - Includes renewable energy options; and
- Development of a roadmap for implementing a preferred set of solutions related to the electric power sector and natural gas supply and transport, with milestones set for 2020 and 2025.

Multi-state planning, coordination, and approaches by States would be strongly encouraged, although excellent State-specific proposals from individual States would be considered as well. States submitting individual proposals that intend to work with other States on a multi-State approach should indicate with which other States they are working. Note: DOE anticipates awarding a maximum of $500,000 for any proposal involving multiple States, whether the proposal is contained in a multi-State application (submitted by the prime applicant) or the proposal consists of individual applications submitted by separate States.

A successfully implemented proposal will position the region or State well to:

- Ensure reliability and resiliency of the electricity grid and energy supplies;
- Promote economic development in the clean energy sector;
- Maximize the deployment of renewable energy and energy efficiency potential in the region or State;
- Comply effectively with current and projected environmental regulations;
- Satisfy the mandates of the different State agencies; and
- Chart a path forward for the energy sector in the region or State, in a way that demonstrates how energy efficiency and renewable energy can help achieve this vision.

Creating Roadmaps

Baselining

A critical first step to roadmapping is a rigorous baselining of the current landscape of the energy situation and factors that affect it, including federal and state environmental regulations, energy efficiency and renewable energy policies at the federal, state and local level, transmission and grid constraints, fuel supply issues and economic development efforts. This allows participants to work from an agreed upon vision of the present in order to build a vision of the future.

Time-Horizon and State/Regional Energy Goals

After baselining is complete, the next step in roadmapping is to identify tangible goals as well as a specific time-horizon – in this case 2020 and 2025. A shorter time-horizon may increase certainty but it will also circumscribe the range of outcomes. And, of course, time is not the only goal-setting parameter that will compel trade-offs between the probability of realization with the magnitude of the desired benefits. One or more tangible future goals will help define the vision of the future.

Action/Implementation Plans

The real measure of a roadmap is how well it serves to connect a present baseline with future goals. It is important to balance fidelity to a preferred path with flexibility to manage contingency in ways that provide actionable guidance to decision-makers in the region. Bridging the gap requires analysis to forecast broad trends in the energy, environmental and economic arena and to evaluate the region's capacity to adapt to and capitalize on larger trends in these sectors. It also involves bringing together the key stakeholders referenced above so that all perspectives are considered. The roadmap should identify preferred outcomes, actions to achieve those outcomes, and potential risks that may impede achievement of the outcomes. With respect to the latter, the roadmap should also identify other actions or paths that can be taken to overcome these obstacles.

Program Elements

The following program elements in conjunction with the merit review criteria in Section V.A.1 will be used to evaluate Area of Interest 1 recipient applications. A well-designed program in this Area of Interest should include, but not be limited to, the following elements:

- State and/or Region: Identification of the state(s) and/or region(s) that the program will address.
- Objective: A specific description of the state's energy and environment planning goals.
- Approach: A discussion of the state's proposed roadmapping approach, including a discussion of any partnership structures, data needs, and schedule or implementation plan for the program.
- Barriers: Identification of barriers to implementing a successful program and a description of how the proposed strategy and activities will overcome those barriers.
- Program Support and Team: An outline and description of the structure of the implementing agencies, partners, contractors, and personnel who will advance the goals and outcomes of the program through the implementation process, serving as program champions and technical advisors, and provide education and outreach to stakeholders and prospective clients.
- Stakeholder Engagement: An explanation of the extent to which appropriate stakeholders for the program will be engaged in the overall effort and an outline of the timeframe of their involvement. Examples of stakeholders include: state and local environmental agencies and public utility commissioners; national associations of air, energy and utility commissioners; utilities; public benefit fund administrators; contractors; educational institutions; non-profits, etc.

Area of Interest 2 – Opportunities for Innovative Energy Efficiency and Renewable Energy Practices

Number of Projects: Up to 12
Total Potential Award Funding: Up to $2,500,000
Awards Range: approximately $75,000 to $300,000 for an individual State-specific application; approximately $300,000 to $500,000 total for multi-State applications
Award duration: 2 to 3 years

The purpose of this Area of Interest is to assist States in advancing residential, commercial and/or industrial markets for energy efficiency and renewable energy through a set of policy and regulatory actions within a portfolio of six possible transformative areas. From a self-assessment of the current "state of play" in these six areas, states will determine which one(s) provide the best potential for making significant progress in overcoming barriers and achieving implementation of policies, legislation, regulatory changes and other catalyzing actions to increase adoption of energy efficiency and renewable energy technologies in their jurisdictions.

DOE is seeking applications from States based on their self-assessment on a range of policy, program and/or regulatory actions over which State government agencies have authority and

that have the potential to significantly advance residential, commercial and/or industrial markets for energy efficiency and renewable energy. This Area of Interest builds upon the State Policy Information section included in last year's FOA that has been revised and included in this year's Announcement in Section IV.C.3.i to better understand the current state energy efficiency and renewable energy policy and program landscape. All FY2014 FOA applicants are required to respond to all questions covered in the 2014 State Energy Assessment that DOE is including in the FOA; however, a subset of the energy efficiency and renewable issues in the Assessment that is specifically relevant to the levers that State Energy Offices (SEOs) can act on provides the basis of Area of Interest 2. DOE's goal is to provide broad flexibility to States in determining which policy, program, and regulatory areas to address in a project while also focusing on those actions that can achieve the greatest energy savings and other benefits for the individual States and the nation as a whole. It is also a key goal of DOE under this Area of Interest to promote the most innovative ideas from States tailored to their energy resources and profiles.

The subset of the State Energy Assessment from which States may choose to address in Area of Interest 2 fall into six topics of emphasis:

1. Statewide energy efficiency and renewable energy targets/goals -including Energy Efficiency Resource Standards, Renewable Portfolio Standards, and/or energy efficiency targets as part of an integrated resource plan, part of an RPS, or portfolio of programs that will provide defined savings. (Category 1, Question 4)
2. Policies and programs for distributed energy resources and those administered by utilities and/or third parties. (Category 1, Questions 5, 6)
3. Frameworks for evaluation, measurement and verification of energy and emission reductions. (Category 1, Question 7)
4. Sources/models for financing retrofits for public facilities. (Category 3, Question 2)
5. Supporting partnerships with local governments and others to incentivize and/or remove barriers to energy efficiency and renewable energy investments. (Category 3, Question 3)
6. Building energy performance information for decision-making, including benchmarking and disclosure, aggregation of whole building usage data and data access. (Category 4, Questions 1, 2, 3)

DOE is requesting that interested States present proposals comprising a selection from among the questions included here, that, based on the State's responses in the State Energy Assessment, identify one or more areas in which they could make significant progress. A proposal under this Area of Interest will outline how the State (or States, in the case of a multi-State application) will develop and implement a plan to advance energy efficiency and renewable energy programs and policies in these specified areas. For example, a proposal will explain the steps a State or States would take in order to change a "No" answer to a "Yes" for one or more of the questions in these six topics of emphasis and/or by expanding the scope of an existing program, regulation or policy addressed in the State Energy Assessment. Applicants are encouraged to offer a proposal that encompasses more than one question and must provide an integrated approach to addressing the questions.

For Area of Interest 2, Applicants may submit up to two applications: (1) one Full Application that includes no other State partners and covers only the applying State (i.e. a State-specific application) and (2) one Full Application that includes other State partners (i.e. a multi-state application), where the State is the prime recipient, or one Full Application that includes no other States as partners on the application but involves other States that are applying separately. A State-specific proposal should address one or more of the questions that the State can move from "No" to "Yes" on by itself. A State may also choose to be part of a multi-State proposal addressing one or more questions where a joint approach would enhance synergies and/or allow cross-jurisdictional issues to be more effectively addressed (working on an issue such as interconnection or ratepayer programs, for example, for which the group of states would work with the same utility or transmission organization, and where other jurisdiction-specific issues do not present a significant barrier to success for the States as a group). Note: DOE anticipates awarding a maximum of $500,000 for any proposal involving multiple States, whether the proposal is contained in a multi-State application (submitted by the prime applicant) or the proposal consists of individual applications submitted by separate States.

States are encouraged to stimulate energy efficiency and renewable energy action through implementation of policies and programs in unaddressed areas that have the opportunity for increased investment and high-impacts. Activities to be undertaken will be outlined in the application and should include collaborations that need to occur with key stakeholders (e.g., other policy-makers, utilities, business and industry groups, and other key actors). Successful projects accomplished under Area of Interest 2 will provide models that can serve as "how-to" guides for other States and local governments to use to develop and implement similar approaches in their jurisdictions; these are called "Implementation Models." An Implementation Model identifies a solution to a key barrier to energy efficiency deployment and provides a step-by-step detailed approach your organization took to create a replicable and sustainable solution, including the development of or changes to policies, processes, outreach efforts, and tools/resources. States are required to develop Implementation Models as part of their awards under Area of Interest 2.

Each proposal will be gauged by the degree to which energy efficiency savings and/or renewable energy generation are projected to increase as a result of adoption and implementation of the policies, programs or other mechanisms that are enabled by successfully moving from "No" to "Yes" and/or expanding the scope in the selected areas the State or States will be working to change. A successful application will also include a detailed explanation of the approach the State or States are proposing to take under this project, including its scope, value proposition, implementation team, stakeholder engagement, barriers to be addressed, impact of the project and how success will be evaluated. Proposals will also need to identify the baseline(s) from which the change will be measured. The baseline(s) will be established by the State or States as part of the application and, along with the size of, and impact to, the applicable market sector, will be considered in the selection process.

States should submit proposals that contain a period of performance between two and three years. Although DOE prefers a two-year performance period, we recognize that States may need

up to three years to fully implement their proposed scope of work. States are therefore encouraged to submit proposals with a period of performance (between two and three years) that is most realistic for the scope of work proposed.

State Energy Assessment – Subset for Area of Interest 2 Proposals

Interested States will identify one or more of the areas based on the responses to the subset of the State Energy Assessment below that have the greatest potential for the State (or, in the case of a multi-State application, a group of States) to change from a "No" to a "Yes" or to effectively expand the scope of a program or policy through:

(a) a short term set of actions that can be implemented to get to "Yes" or meaningful program or policy expansion within the 2-3 year timeframe of the award; and/or

(b) a longer term set of actions for which the State could achieve one or more significant and measurable milestone(s) within the 2-3 year timeframe of the award that enables the State to take the policy to a next level.

Ideal proposals will include a combination of short and longer term timeframes and outcomes and that will result in transformative change of the energy landscape in the jurisdictions covered by the proposed project.

<u>Area of Interest 2 -Topic of Emphasis 1: Statewide Energy Efficiency and Renewable Energy Targets/Goals</u>

Category 1: Energy Planning and Using Energy Efficiency (EE) and Renewable Energy (RE) as an Energy Resource

Question 4: Statewide energy efficiency and renewable energy targets/goals

a. Does your state have targets / goals that require utilities[1] to achieve energy savings (including EERS, target as part of an IRP, part of an RPS, or portfolio of programs that will provide defined savings):

- ☐ *Yes, 0.5%-1% savings (relative to annual retail sales)*
- ☐ *Yes, 1-1.5% savings (relative to annual retail sales)*
- ☐ *Yes, 1.5-2%% savings (relative to annual retail sales)*
- ☐ *Yes, 2% or higher (relative to annual retail sales)*
- ☐ *No, but a statewide savings target/goal is under consideration within a regulatory process*
- ☐ *No*

[1] The term utility is used broadly to include public and private organizations that may be responsible for administering organized energy efficiency programs within the state.

b. Are the utilities in your state currently achieving[2] the required energy savings targets / goals? (Select all that apply)

- ☐ *Yes*
- ☐ *No*
- ☐ *The date for meeting the required target / goal has not yet occurred.*

c. Does your state have targets / goals that require utilities to provide a certain portion of electricity sales through renewable energy

- ☐ *Yes*
- ☐ *No*

Regarding Category 1, Question 4: DOE recognizes the importance of setting targets, both for energy savings and renewable energy generation, to help States achieve their goals. The benefits of these policy approaches are well documented[3]. In previous years, DOE has made awards to States to establish or increase a statewide energy savings goal, including developing a suite of results-based policies and programs projected to decrease statewide electricity consumption by one percent or more per year. Savings targets encourage utilities to minimize costs per unit of energy saved. Renewable energy targets can encourage energy resource diversity and help meet environmental / sustainability goals. Policy approaches for efficiency and renewable targets /goals include: energy efficiency resource standards (EERS), renewable portfolio standards (RPS), clean energy portfolio standards (CEPS), as well as incorporating specific amounts of efficiency and renewables into utility integrated resource plans (IRP). IRPs typically consider energy demand and the mix of resources (efficiency, existing plants, plant improvements, and new plants) that can best meet energy needs at low cost and risk to consumers[4]. In some States, IRPs and/or requirements for utilities to capture "all cost-effective efficiency opportunities" are used to establish targets[5].

Targets and goals may be specified in various ways. Probably the most common is to express these targets as a percentage of annual electricity or natural gas sales. Thus, utilities might be required to demonstrate that they have operated programs to provide savings of 0.5% or 1.0% in a year, as a percentage of the energy that would have been delivered in the absence of such programs. Such goals can also be specified in terms of cumulative impacts, including savings achieved by energy efficiency measures installed in earlier years that are still in place. In this construction, a goal might specify 0.25% savings in the first year, 0.75% savings in the second year (including the 0.25% from the first year), etc. Other metrics that have been used are to

[2] Achieving for this question is defined as the utilities have met interim savings targets; or the utilities have met the savings targets; or the utilities' reported savings are on track to achieving the savings target (as measured by the utilities being in good standing relative to any penalties for not meeting these targets).

[3] http://www.aceee.org/topics/eers, http://emp.lbl.gov/publications/benefits-and-costs-aggressive-energy-efficiency-programs-and-impacts-alternative-source, http://www.rff.org/RFF/Documents/RFF-DP-12-10.pdf, http://www1.eere.energy.gov/seeaction/pdfs/ratepayer_efficiency_targets.pdf

[4] http://www1.eere.energy.gov/seeaction/pdfs/ratepayer_efficiency_targets.pdf, http://www1.eere.energy.gov/seeaction/pdfs/ratepayer_efficiency_irpportfoliomanagement.pdf, http://www.epa.gov/cleanenergy/documents/suca/resource_planning.pdf

[5] http://www1.eere.energy.gov/seeaction/ratepayer_efficiency.html

specify targets in terms of annual kilowatt hours (kWh) of electricity saved, million British thermal units (Btu) of natural gas saved, or kilowatt (kW) of peak demand savings[6].

As of February 2014, 26 States have policies in place that establish specific energy savings targets that utilities or non-utility program administrators must meet through customer energy efficiency programs. The strongest EERS requirements are in Massachusetts, Rhode Island, and Vermont, which require almost 2.5% savings annually[7].

A successful proposal responding to Question 4 will include a description of:

- The current energy savings targets / goals and/or renewable energy targets / goals in the State;
- The status of utilities in the State achieving the current targets / goals; and
- How the State will pursue:
    - the identification of a suite of energy efficiency policies and programs that will provide significant electricity savings;
    - the adoption of the electricity savings goal/increase and/or; and
    - the development of the implementation plan to achieve the goal/increase. This includes any proposed stakeholder process expected to be utilized.

<u>Area of Interest 2 -Topic of Emphasis 2: Policies and Programs for Distributed Energy Resources</u>

Category 1: Energy Planning and Using Energy Efficiency (EE) and Renewable Energy (RE) as an Energy Resource

Question 5: Distributed energy resources

a. *Are there standardized interconnection rules across your state's utilities' for distributed resources regardless of fuel? (Select all that apply)*
    - ☐ *Yes, up to 10 kW*
    - ☐ *Yes, up to 100 kW*
    - ☐ *Yes, up to 20MW*
    - ☐ *Yes, up to a defined capacity larger than 20 MW*
    - ☐ *No, there are not standardized interconnection rules for distributed resources regardless of fuel.*

Regarding Category 1, Question 5: DOE recognizes that a key element to the market success of distributed energy resources (DER) is the ability to safely, reliably, and economically interconnect with the existing utility grid system. However, uncertainty in the cost, timing, and technical requirements of the grid interconnection process can be a barrier to increased deployment of DER. Standardized interconnection rules typically address the technical requirements and the application process for DER systems, including solar and combined heat and power (CHP), to connect to the electric grid. Most DER systems are sized to provide a

[6] Ibid.
[7] http://www.aceee.org/topics/eers

portion of the site's electrical needs, and the site continues to remain connected to the utility grid system for supplemental, standby, and backup power services, and, in select cases, for selling excess power. In previous years, DOE has made awards to States for the development of programs and strategies that support the productivity and competitiveness of the States' industrial sectors by providing support for industrial efficiency and CHP. DOE identified specific activities of interest in these previous awards by including convening State and local policy makers, utilities, industrial users, and other key actors to address existing policy, regulatory and program barriers to industrial energy efficiency and CHP, including interconnection standards.

Standardized interconnection rules can support the development of DER by providing clear and reasonable rules for connecting clean energy systems to the electric utility grid. Standard interconnection rules can help reduce uncertainty and prevent excessive time delays and costs that DER systems may encounter when obtaining approval for grid connection.

The benefits of increasing the number of clean distributed generation (DG) projects include: enhancing economic development in the State, reducing peak electrical demand, reducing electric grid constraints, reducing the environmental impact of power generation, and helping States achieve success with other clean energy initiatives. The application of DG in targeted load pockets can reduce grid congestion, potentially deferring or displacing more expensive transmission and distribution infrastructure investments.

The State and Local Energy Efficiency Action Network identified effective State standardized interconnection rules for DER systems with no electricity export as often having the following characteristics:

- Interconnection fees commensurate with system complexity;
- Streamlined procedures with simple decision-tree screens (allowing faster application processing for smaller systems and those unlikely to produce significant system impacts);
- Practical and predictable technical requirements often based on existing technical standards Institute of Electrical and Electronics Engineers (IEEE) 1547 and Underwriters Laboratories (UL) 1741;
- Standardized, simplified interconnection agreements;
- Dispute resolution procedures to resolve disagreements;
- The ability for larger DER systems, and those not captured under net metering rules, to qualify under the standards; and
- The ability for DER to interconnect to both radial and network grids.

A successful proposal responding to Question 5 will include a description of:

- The current status of interconnection rules in the State, including addressing the following questions:
    - Are the rules standardized across the utilities (investor-owned and/or muni and/or coops);
    - What DER size categories are covered;
    - How net metering is treated under interconnection rules, if at all; and

- How the state will pursue standardized interconnection rules, including stakeholder engagement (utilities, technology developers) and state utility regulatory engagement.

Question 6: Utility or third-party administered energy efficiency programs

a. *Are energy customers in your state across **ALL** customer classes including residential, commercial and industrial offered **electricity** ratepayer-funded energy efficiency programs? (Select all that apply)*
   - ☐ *Yes, by investor-owned utilities*
   - ☐ *Yes, by municipally-owned utilities*
   - ☐ *Yes, by cooperatively-owned utilities*
   - ☐ *Yes, by other energy efficiency program administrator*
   - ☐ *No, utilities do not offer electricity ratepayer-funded programs across all customer classes, but do offer programs at least in one customer class*[8]
   - ☐ *No, utilities do not offer electricity ratepayer-funded energy efficiency programs in my state*

b. *Are energy customers in your state across **ALL** customer classes including residential, commercial and industrial offered **natural gas** ratepayer-funded energy efficiency programs? (Select all that apply)*
   - ☐ *Yes, by investor-owned utilities*
   - ☐ *Yes, by municipally-owned utilities*
   - ☐ *Yes, by cooperatively-owned utilities*
   - ☐ *Yes, by other energy efficiency program administrator*
   - ☐ *No, utilities do not offer gas ratepayer-funded energy efficiency programs across all customer classes, but do offer programs at least in one customer class*
   - ☐ *No, utilities do not offer gas ratepayer-funded energy efficiency programs in my state*

c. *Are energy customers in your state across customer classes including residential, commercial and/or industrial customer classes offered **other fuel (e.g. heating oil)** ratepayer-funded energy efficiency programs? (Select all that apply)*
   - ☐ *Yes, by investor-owned utilities*
   - ☐ *Yes, by municipally-owned utilities*
   - ☐ *Yes, by cooperatively-owned utilities*
   - ☐ *Yes, by other energy efficiency program administrator*
   - ☐ *No, other fuels are not significant in my state*
   - ☐ *No, utilities do not offer other fuel ratepayer-funded programs in my state*

[8] Example customer classes include residential, commercial, and industrial customer classes as well as important parts of these classes such as multifamily, small/medium industrial, and small/medium commercial.

*d. Does your state evaluate ratepayer-funded programs **using more than one** cost-effectiveness test[9] to reflect the long-term resource value of energy efficiency? (Select all that apply)?*

- ☐ *Participant Cost Test*
- ☐ *Utility/Program Administrator Cost Test*
- ☐ *Ratepayer Impact Measure Cost Test*
- ☐ *Total Resource Cost Test without non-energy benefits*
- ☐ *Total Resource Cost Test with non-energy benefits (e.g., emissions reductions)*
- ☐ *Societal Cost Test.*
- ☐ *No, my state uses just one test to evaluate energy efficiency programs as selected above*
- ☐ *No, my state does not use cost-effectiveness tests to reflect the long-term resource value of energy efficiency*

Regarding Category 1, Question 6: Energy efficiency is the lowest-cost energy resource. A 2014 report from Lawrence Berkeley National Lab finds that electric utility customer-funded efficiency programs that reported results during 2009-2011 delivered energy savings at a cost of roughly 2 cents per kilowatt-hour (kWh) saved over the lifetime of the investment. Ensuring all customer classes have access to cost-effective electric and natural gas energy efficiency programs is important to fully utilizing efficiency as an energy resource.

Energy efficiency cost-effectiveness is measured by comparing the benefits of an investment with the costs. Five key cost-effectiveness tests have, with minor updates, been used for over 20 years as the primary approaches for energy efficiency program evaluation. These five cost-effectiveness tests are the participant cost test (PCT), the utility/program administrator cost test (PACT), the ratepayer impact measure test (RIM), the total resource cost test (TRC), and the societal cost test (SCT). There is no single best test for evaluating the cost-effectiveness of energy efficiency. Each of the cost-effectiveness tests provides different information about the impacts of energy efficiency programs from distinct vantage points in the energy system. Together, multiple tests provide a comprehensive approach. States seeking to increase efficiency implementation may choose to emphasize the PACT, which compares energy efficiency as a utility investment on a par with other resources.

A successful proposal responding to Question 6 will include a description of:

- The current status of which customer classes are offered electric ratepayer-funded energy efficiency programs;
- The current status of which customer classes are offered natural gas ratepayer-funded energy efficiency programs;
- The current status of which customer classes are offered ratepayer-funded energy efficiency programs for other fuels (not electric or natural gas);

[9] National Action Plan for Energy Efficiency (2008). *Understanding Cost-Effectiveness of Energy Efficiency Programs: Best Practices, Technical Methods, and Emerging Issues for Policy-Makers*. Energy and Environmental Economics, Inc. and Regulatory Assistance Project. http://www.epa.gov/cleanenergy/documents/suca/cost-effectiveness.pdf

- The current status of how cost-effectiveness tests are applied to ratepayer-funded energy efficiency programs;
- How the state will pursue achieving the goal of all customer classes being offered energy efficiency programs for the applicable fuel types; and
- How the state will ensure the long-term resource value of energy efficiency is accounted for in the application of cost-effectiveness tests.

Area of Interest 2 -Topic of Emphasis 3: Frameworks for Evaluation, Measurement and Verification

Category 1: Energy Planning and Using Energy Efficiency (EE) and Renewable Energy (RE) as an Energy Resource

Question 7: Evaluation, Measurement and Verification

a. *Does your state use an EM&V framework or plan that uses commonly accepted protocols or methodologies and is transparent in order to determine energy and emissions reductions from ratepayer-funded efficiency programs? (Select all that apply)*
   - ☐ *Yes, our state uses an independent, third-party statewide evaluator*
   - ☐ *Yes, our state uses the Uniform Methods Project M&V protocols for relevant programs*
   - ☐ *Yes, our state is part of a regional group that works together to determine savings*
   - ☐ *No*

Regarding Category 1, Question 7: A good EM&V framework is a key component of a successful efficiency portfolio. An EM&V framework is simply some type of document that discusses how EM&V will be conducted for the implemented efficiency programs. In some states, like Connecticut[10], this is called an "evaluation plan." There are certain advantages to EM&V frameworks that utilize the three options listed above. A statewide evaluator uses the same evaluators for all (or multiple) efficiency programs regardless of the utility/program administrator. One of the main benefits of this choice is that different programs are evaluated the same way. When two different evaluators are evaluating the same program for two different utilities, the evaluators may not use the same assumptions or methods. Regional groups that address EM&V have some of the same benefits as the statewide evaluator but on an even larger scale. Regional groups involve multiple states that address evaluation issues together. The Northwest Power and Conservation Council's Regional Technical Forum[11] and the Mid-Atlantic Technical Reference[12] Manual are two examples.

The Uniform Methods Project provides a single protocol for measuring energy savings for a particular program. Each protocol has been collaboratively developed and vetted by professional evaluators. Utilizing the Uniform Methods Project[13] measurement and verification

[10] http://www.energizect.com/government-municipalities/2014-16-eeb-evaluation-plan-final-attachments-b
[11] http://rtf.nwcouncil.org/
[12] http://www.neep.org/Assets/uploads/files/emv/emv-products/A5_Mid_Atlantic_TRM_V2_FINAL.pdf
[13] http://energy.gov/eere/about-us/initiatives-and-projects/uniform-methods-project-determining-energy-efficiency-program-savings

protocols is another way to address the potential issue of differing assumptions and methodologies by specifying a single protocol for how evaluators measure the energy savings. Each of the options listed are examples of an evaluation process that improve the consistency of how energy savings are determined.

A successful proposal responding to Question 7 will include:
- A description of the process by which an EM&V plan/framework will be created;
- An explanation of how this process will include the relevant stakeholders and be transparent;
- How the state will align with and/or apply the Uniform Methods Project protocols; and
- A description of how the State will pursue adopting the selected EM&V framework.

For more information on elements to consider when developing a plan, refer to SEEAction's "Energy Efficiency Program Impact Evaluation Guide[14]."

Area of Interest 2 -Topic of Emphasis 4: Sources/Models for Financing Retrofits for Public Facilities

Category 3: States Leading by Example

Question 2: Financing Retrofits for Public Facilities

a. Does your state use or have mechanisms beyond annual appropriations for energy efficiency and other clean energy or low carbon investments? (Select all that apply).
- ☐ *Yes, energy savings performance contracts (ESPC).*
- ☐ *Yes, revolving loan funds.*
- ☐ *Yes, a loan loss reserve fund.*
- ☐ *Yes, QECBs, or other bonds that can be allocated to retrofit investments.*
- ☐ *Yes, lease purchase agreements.*
- ☐ *Yes, an established green/infrastructure bank that can be used for retrofit investments.*
- ☐ *No, my state depends on annual appropriations for energy efficiency investments.*

b. Does your state have a self-sustaining ESPC program? (Select all that apply).
- ☐ *Yes, enabling legislation that authorizes the use of ESPC for public buildings.*
- ☐ *Yes, a centralized ESPC program exists at the state level that provides guidance for all state ESPC projects.*
- ☐ *Yes, a centralized ESPC program exists that requires the use of standardized contracts and procedures.*
- ☐ *Yes, a fee-based centralized ESPC program.*
- ☐ *No, my state does not use ESPCs on public retrofit projects.*

Regarding Category 3, Question 2: DOE recognizes that financing remains a significant barrier to implementing energy efficiency and renewable energy measures in public buildings and advancing State Lead by Example programs. In previous years, DOE has made awards to States focused on developing and refining standardized contracts and procurement provisions

[14] http://www1.eere.energy.gov/seeaction/pdfs/emv_ee_program_impact_guide.pdf

associated with funding mechanisms, designing technical assistance approaches, working on other elements to streamline access to and use of financing structures for public sector retrofits, and working to increase uptake of energy efficiency financing mechanisms in three key market sectors of interest: (1) local government facilities; (2) public housing; and (3) State facilities.

Financing mechanisms available to States include:

• Energy savings performance contracts (ESPCs): ESPCs are used with a variety of financing options to ensure States achieve a specified level of energy savings. An ESPC is an agreement between a building owner and an energy services company (ESCO) that identifies, designs, and installs energy-related improvements and guarantees their performance. ESPCs are often structured so that guaranteed energy cost savings are large enough to cover principal and interest payments for financing. If actual savings from a project under-perform the guaranteed savings level, the ESCO pays for the difference between the actual and guaranteed savings. A performance contract often includes continuing operations and maintenance services. States can implement one-off ESPCs, as well as establish long-term ESPC programs (see Question 2b) to promote and support the use of ESPCs across all public sector entities in their jurisdiction (e.g., State agencies, local governments, public housing, schools). A successful example is Utah, which has completed over $165 million in ESPC projects in state and local governments.

• Qualified Energy Conservation Bonds (QECBs) or other public bonds: Bonds are one of the most common forms of financing used by States, because they are a low-cost source of capital available to most entities. States may consider using bonds for a variety of clean energy purposes, including: financing a specific set of energy upgrades in their own facilities (can be combined with an ESPC) and/or capitalizing finance programs for public sector energy upgrades (e.g., revolving loan funds – see below). A variety of bonds are available to States for clean energy initiatives. Municipal/public bonds are the most traditional, and there is also a federally-subsidized option debt product specifically aimed at supporting clean energy – Qualified Energy Conservation Bonds (QECBs). States may also wish to partner with State-chartered bond authorities, such as housing finance authorities, who can provide tax-exempt bond financing to non-profits and industry. A successful example is Massachusetts' first of its kind "green bond" issuance, to capitalize its Clean Energy Investment Program.

• Leasing arrangements: Leasing energy-related improvements, especially the use of tax exempt lease-purchase agreements for energy efficiency equipment, is a common and cost effective way for States to finance retrofits and then use the energy savings to pay for the financing cost. Leases are contracts that allow an entity to obtain the use of (or purchase of) equipment or real estate. They are similar to long term rental agreements where the lessee gets to use the equipment for a period of time in return for regular payments to a third party (lessor). Leases come with a purchase option that can be exercised at the end of the lease period. Leases often have slightly higher rates than bond financing; however, they can be a faster and more flexible tool. States can also establish programs to aggregate lease-purchase financing demand from public entities across the State and issue Certificates of Participation (COPs) to fund these projects. This can enable participants to get more attractive rates than they would otherwise

have access to and avoid the time and effort required to set up their own individual financing options. A successful example is Washington's Local Option Capital Asset Lending (LOCAL) program.[15]

• Revolving loan funds (RLFs): RLFs are pools of capital from which loans can be made for clean energy projects – as loans are repaid, the capital is then re-lent for another project. Assuming that defaults remain low, RLFs can be "evergreen" sources of capital that are recycled over and over again to fund projects well into the future. States can establish RLFs to support their own energy upgrades and/or throughout the public sector (e.g., local governments, schools). A successful example is the Texas LoanSTAR Program.[16]

• Loan loss reserves (LLRs): LLRs (and other forms of credit enhancement) complement the finance mechanisms discussed above, because they are used to improve the chances that financing will be repaid. Specifically, an LLR is a pool of funding that provides partial risk coverage to lenders—meaning that in the event of loan defaults, the reserve will cover a pre-specified amount of the losses. For example, a State may set aside a LLR to cover a private lender's losses up to 10% of the total principal of a loan portfolio. The financial institution working with the State can then draw on the LLR to cover losses on defaulted loans according to the terms of the agreement between the lender and the state. Although LLRs and other credit enhancements can be used to support public finance mechanisms (e.g., bond issuances, revolving loan funds, property-assessed clean energy financing (PACE), and on-bill financing), ***typically States do not need to use them for public facility retrofits***, because most have relatively easy access to low-cost financing without them. This is because the MUSH market is familiar to financiers and credit profiles for public entities have traditionally been high. ***However, if a State is looking to encourage lenders and investors to put money into unfamiliar public markets (e.g., public housing) or products (e.g., PACE), or secure access to financing for public entities with lower credit profiles (e.g., distressed communities), LLRs may be a good option.***

• Green/infrastructure banks: A "green bank" – also sometimes referred to as an energy investment partnerships (EIP) – is an emerging term and the models that exist are varied, but generally the purpose of establishing this kind of a structure is to align clean energy financing efforts and give States the authority to leverage scarce public dollars with private capital, ultimately providing low-cost financing for a range of clean energy programs/projects, including for the public sector. These entities can engage in a range of activities, from raising and leveraging funds from private sources (e.g., through bond issuances) to administering financing programs. Some States have used the model of consolidating/coordinating a State's existing and/or future clean energy finance programs under one State or quasi-state entity. In others, States are tasking existing entities (e.g., those with bonding authority) with this work or in some cases providing them with new authorities. A green/infrastructure bank may utilize many or all

[15] See http://www.tre.wa.gov/LOCAL/index.shtml.
[16] See http://www.seco.cpa.state.tx.us/ls/.

of the finance mechanisms described above. Early examples of green banks include the New York Green Bank[17] and Connecticut's Clean Energy Finance & Investment Authority.[18]

Please note, States can also use many of the above financing mechanisms to support retrofits beyond the public sector (e.g., residential and commercial markets), but the focus of this question is financing for retrofits in public facilities. Also, DOE acknowledges that the above is not an exhaustive list of financing mechanisms available for public retrofits. Please see Question 3b for a focus on mechanisms in the context of working with local governments and in facilitating private investments.

All of these financing mechanisms can advance energy efficiency and renewable energy by helping States overcome one of the fundamental barriers to clean energy initiatives – limited sources of up-front capital. In particular, these mechanisms are used most effectively when they create sustainable sources of funding.

The following elements or strategies do not meet DOE's objectives in this area:

- **Programs that include government assets other than buildings and facilities, such as fleets;**
- **Programs targeted to making new construction energy-efficient; and**
- **Programs that use award funds to design, develop, and implement specific project-level energy efficiency retrofits and upgrades. (However, States could use project funds to design and develop programs that could lead to retrofits implemented with non-project funds).**
- **Programs that use project funds to capitalize financing programs. (However, States could use project funds to design and develop templates for the creation of financing programs).**

For more details on all of these mechanisms and their relative advantages and disadvantages, please visit the DOE State and Local Solution Center Finance Solutions webpage at http://www1.eere.energy.gov/wip/solutioncenter/financing.html.

A successful proposal responding to Question 2 will include:

- A description of the current financing mechanisms offered by the State, if any, for public sector energy efficiency and renewable energy projects;
- A description of which of the above financing mechanisms the State will seek to adopt or expand and how adoption/expansion will address significant market barriers;
- A description of the target market size and sectors of the proposed financing mechanism(s), including baseline energy use (KWh/yr and therms/yr) in the sector(s) targeted;
- A description of the potential savings that could be achieved;

[17] See http://greenbank.ny.gov/.
[18] See http://www.ctcleanenergy.com/.

- A description of how the benefits (e.g., energy savings and/or installed generation) will be measured; and
- A list of stakeholders and partners, how they will be engaged and any potential for leveraging private capital as a result of their engagement.

Area of Interest 2 -Topic of Emphasis 5: Supporting Partnerships with Local Governments and Others

Category 3: States Leading by Example

Question 3: Working with Local Governments and Others

a. *Does your state have a program that supports your local governments in their efforts toward an energy efficiency target?*
   - ☐ *Yes, a defined suite of support services and/or partnership opportunities for local governments including financial support is offered.*
   - ☐ *Yes, a defined suite of support services to local governments, without financial support.*
   - ☐ *No, local governments are eligible to access our technical assistance, but we do not have a formal program.*

b. *Has your state helped provide financing options or incentives for clean energy investments? (Select all that apply)*
   - ☐ *Yes, the state has passed legislation in support of commercial PACE*
   - ☐ *Yes, the state has established a clean energy fund to support loans for energy efficiency and renewable energy*[19]
   - ☐ *Yes, the state has established one or more incentives in support of energy efficiency and renewable energy*[20]
   - ☐ *No, the state has not established legislation or financing options*

Regarding Category 3, Question 3: Local governments (including municipalities, counties, school districts) represent potentially significant components of meeting state energy efficiency plans/goals/targets. Energy efficiency opportunities exist in administrative buildings; cultural and recreational facilities; street lights; water/wastewater systems; schools; and municipal hospitals. Energy efficiency solutions can entail improvements to building envelopes; HVAC systems and controls; lighting; pumps; motors; variable speed drives; and in certain instances combined heat and power (CHP) and renewable energy. Local governments can also promote energy efficiency in other sectors through effective building code enforcement, and can encourage construction exceeding code requirements through considerations on zoning, utility hook-ups, and other local regulatory measures.

[19] A "yes" answer indicates these clean energy loans are administered by the state and does not include ratepayer-funded financing programs.

[20] A "yes" answer indicates these energy efficiency and renewable energy incentives are administered by the state and does not include ratepayer-funded financing programs.

Opportunities for partnerships with local governments can include the following features:

- Providing guidance and/or templates on conducting local government energy efficiency and/or carbon reduction plans and target-setting to indicate potential savings and prioritize opportunities;
- Providing examples of typical energy efficiency improvements and performance in representative applications (e.g., administrative buildings, schools, street lights, water/waste water systems);
- Providing assistance in designing and implementing activities;
- Providing model program designs to encourage consistency in approaches based on effective examples;
- Providing guidance in implementing state laws and regulations relating to Energy Saving Performance Contracts (ESPCs) and Commercial PACE;
- Bundling multiple local governments' procurement of energy efficiency products to obtain high-volume cost reductions;
- Providing specifications for green procurement of office equipment;
- Establishing financing facilities to provide favorable terms for local governments, allowing local governments to use similar State financing facilities, and/or helping local governments prepare bankable applications for financing from State or commercial financing sources;
- Assisting local governments in applying for available utility incentives; and
- Encouraging low carbon vehicles in local government fleets and mass transit, and/or electric vehicle (EV) charging stations and low carbon refueling stations for fleets and private vehicles.

A successful proposal responding to Question 3 will include descriptions of the following:

- Structure of the partnership with local governments, including the number and type of local government partners;
- Areas to be addressed under the partnership (e.g., types of facilities and technologies);
- Parameters of assistance to be provided by the State;
    - A definition of the State and local governments' respective roles and responsibilities in the partnership, including technical assistance to be provided by the State and outcomes that local government(s) anticipate delivering under the partnership;
- Method(s) to be used to provide the proposal's technical assistance to the local government partners cost-effectively;
- How results from the partnership will be measured and verified; and
- How the assistance will be made sustainable by institutionalizing the features of the partnership within the State and local government partners.

Area of Interest 2 -Topic of Emphasis 6: Building Energy Performance Information for Decision-Making

Category 4: Providing Greater Access to Building Energy Performance Information for Decision Making

Question 1: Building Energy Performance Benchmarking and Disclosure

a. *Does your state or communities within your state have a law or regulation that requires benchmarking or disclosure of energy use for **non-public** buildings?*
   - ☐ *Yes, **all** commercial buildings of a certain size in the state must be benchmarked regularly and results disclosed publicly*
   - ☐ *Yes, homeowners must disclose energy performance data on their homes at some frequency or at key transaction points (e.g. time of sale).*
   - ☐ *No, state-level benchmarking and disclosure laws have not been passed, but one or more local government has passed a local ordinance.*
   - ☐ *No, state-level benchmarking and disclosure laws have not been passed, but one or more local government is engaged in a voluntary program.*
   - ☐ *No, state- or local-level benchmarking and disclosure laws have not been passed for non-public buildings.*

b. *Does one or more of your investor-owned utilities provide direct data exchange with benchmarking tools such as ENERGY STAR Portfolio Manager (automated benchmarking services)?*
   - ☐ *Yes*
   - ☐ *No*

Regarding Category 4, Question 1: A number of States and/or local governments are pursuing benchmarking and disclosure policies since they provide increased transparency around building energy performance as a means to facilitate market-based approaches for improving the efficiency of buildings. Since 2007, more than ten State and local governments have adopted policies requiring that the energy efficiency of buildings be measured using a recognized "benchmarking" tool such as ENERGY STAR Portfolio Manager. The intent of these policies is to advance energy efficiency through increased access to building performance information by building owners, buyers, renters, and other decision makers.

Existing benchmarking and disclosure policies vary in multiple details, most notably the requirements regarding what building types are covered, the minimum building size that is covered, and disclosure requirements. These policies also typically require disclosure of the resulting energy performance information to the public, or to parties involved in a real estate transaction with the building, such as prospective tenants or investors. The extent to which benchmarking information is shared can range from widespread public disclosure (Philadelphia, New York, Boston, Minneapolis, and San Francisco) or more limited disclosure (Austin and Seattle) of the efficiency status of the buildings. Other jurisdictions sponsor voluntary benchmarking programs as a way to increase the capacity of building owners and operators to track and manage their energy use and to provide owners who elect to participate with a

mechanism to share more transparent information on their building's performance. In a recent study of 35,000 buildings, the U.S. Environmental Protection Agency found that buildings that were benchmarked saved an average of 2.4 percent of energy per year, for a total savings of 7 percent between 2008 and 2011[21]. Often these programs are tied to broader community-wide efficiency goals and are leveraged to recognize top performing buildings and their contributions toward these goals.

From a recent publication by the State and Local Energy Efficiency Action Network (SEEAction):

> *Building owners who want to manage energy costs must be able to measure their building's performance. State and local governments can encourage building owners to improve the efficiency of their buildings by making energy performance visible, which can drive new investment and create an estimated 5 to 15 green jobs per $1 million invested[22]. For example, a recent study found that energy performance benchmarking prompted energy efficiency investments through improved energy management processes (62% of those who participated in a benchmarking program) or building upgrades and behavioral efficiency projects (84% of benchmarking participants[23]).*

Additional resources on related successful practices are listed below:

a. SEE Action, Benchmarking and Disclosure: State and Local Policy Design Guide and Sample Policy Language. May 2012. http://www1.eere.energy.gov/seeaction/pdfs/commercialbuildings_benchmarking_policy.pdf
b. SEE Action, Energy Benchmarking, Rating, and Disclosure for State Governments. May 2012. http://www1.eere.energy.gov/seeaction/pdfs/commercialbuildings_factsheet_benchmarking_stategovt.pdf
c. Institute for Market Transformation, Building Energy Transparency: A Framework for Implementing U.S. Commercial Energy Rating & Disclosure Policy. July 2011. http://www.buildingrating.org/sites/default/files/documents/IMT-Building_Energy_Transparency_Report.pdf

A successful proposal responding to Question 4 will include:

- A detailed explanation of the approach the State is proposing to take to create and/or expand benchmarking and disclosure policies or programs, either at the State level or in jurisdictions within the state;
- An explanation of the type of policy or program to be pursued (mandatory, voluntary, or some hybrid) and the scope of the policy/program;

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[21] U.S. Environmental Protection Agency, Data Trends: Benchmarking and Energy Savings. http://www.energystar.gov/ia/business/downloads/datatrends/DataTrends_Savings_20121002.pdf?3d9b-91a5. October 2012.

[22] U.S. Environmental Protection Agency, *Rapid Deployment Energy Efficiency (RDEE) Toolkit: Planning & Implementation Guides*. www.epa.gov/cleanenergy/documents/suca/rdee_toolkit.pdf. December 9, 2009.

[23] NMR Group, Inc. and Optimal Energy, Inc., *Statewide Benchmarking Process Evaluation, Volume 1: Report*, April 2012. www.energydataweb.com/cpucFiles/pdaDocs/837/Benchmarking%20Report%20%28Volume%201%29%20w%20CPUC%20Letter%204-11-12.pdf.

• The qualifications and credentials of the implementation team
• A description of the strategy for engaging stakeholders and clients;
• An explanation of how the State will coordinate with related policies and programs;
• The timeline for implementation; and
• The resources required for successful implementation.

Question 2: Whole-Building Data

a. *Does one or more investor-owned utilities provide aggregated whole-building energy usage data to building owners for purposes of benchmarking and energy management in cases where individual tenants in a building have separate utility meters and accounts?*

☐ *Yes*
☐ *No*

b. *Has your state utility regulator established a rule describing what constitutes sufficiently aggregated customer energy usage data that can be given to building owners while addressing privacy concerns?*

☐ *Yes*
☐ *Rules are under consideration or pending*
☐ *No*

Regarding Category 4, Question 2: One of the main issues that commercial and multifamily building owners face with respect to benchmarking their buildings is gaining access to whole-building energy usage data in cases where there are multiple tenants or meters associated with the building. Utilities or energy supplier data systems are generally designed to track energy consumption by individual meter or account and their systems do not recognize buildings as a unit of measurement. To that end, there are both technical and policy issues associated with providing a building owner with the energy consumption data associated with the entire building. On the technical end, utilities can establish systems to aggregate energy consumption data by associating the correct meters with the correct buildings. However, in addition to the technical hurdles, there are also concerns about protecting individual tenant privacy in providing the building owner with whole-building data access. Various solutions exist to protect privacy of individual tenants in these cases and the two main options that have emerged are to: (1) ask for consent from each individual tenant or (2) set a minimum threshold level of tenants that need to be aggregated without requiring individual consent from each tenant. Requiring consent from each tenant has posed a significant barrier for some building owners interested in benchmarking their buildings.

DOE is working to accelerate whole-building data access through the Better Buildings Energy Data Accelerator program, which was launched with twenty city-utility pairs in December 2013. Signatories to this Accelerator are utilities and local governments who have committed to providing at least 20% of commercial and/or multifamily building owners within the local jurisdiction with access to whole-building data to building owners for benchmarking. Accelerator Partners will collaborate with DOE to demonstrate streamlined, best practice approaches for building owners to access whole-building energy usage data – with a specific focus on providing building owners with aggregated energy usage information across multiple tenants.

A successful proposal responding to Question 2 will include:

- A description of the process by which the applicant will develop policies that enable low-cost, standardized approaches for providing energy data for the purpose of whole-building energy performance benchmarking while protecting tenant privacy;
- Where applicable, a description of how the proposed process will be transparent and include stakeholders;
- A description of how the State will work to obtain support from the state's regulatory utility commission (PUC, PSC, etc.), since in most cases this entity has regulatory authority in this area;
- The qualifications and credentials of the implementation team;
- A description of the strategy for engaging stakeholders and clients;
- An explanation of how the State will coordinate with related policies and programs;
- The timeline for implementation; and
- The resources required for successful implementation.

Question 3: Data Access

a. *Does one or more of your investor-owned utilities allow customers to access their energy usage data in a standardized format (e.g. Green Button)?*

☐ *Yes*
☐ *Utilities have committed to this but are still implementing*
☐ *No*

b. *Does one or more of your investor-owned utilities allow customers to designate one or more service providers who can access their energy usage data in a standardized format (e.g. Green Button)?*

☐ *Yes*
☐ *Utilities have committed to this, but are still implementing*
☐ *No*

c. *Does your state have guidelines or rules regarding third party access to customer energy usage data?*

☐ *Yes*
☐ *Rules are under consideration or pending*
☐ *No*

Regarding Category 4, Question 3: Having the right data is often the first step in the process of making an investment in energy efficiency. Accessing energy consumption data is not always as simple as it sounds. Furthermore, even when the data is available, it is not always in a format that is easy to use. Many utilities are using the Green Button data standard to share data with their customers. This allows the data to be used in any number of tools and applications that have been developed to work with Green Button. Some utilities allow customers to designate a third party to receive data directly from the utility, making it easier to get the data into the hands of the people who are analyzing the data. Some entities would like access to customer

meter data without the consent of the customer. Companies use the data for a myriad of reasons, including to better target customers who might benefit from their services. In these cases, developing rules about what can be shared with these companies is important to protect customer privacy while also maximizing the benefit of the data collected by smart meters.

A successful proposal responding to Question 3 will include:
• A description of the process by which the applicant will develop policies that address data format standards, privacy and data access rules;
• How the data standard will align with, compare to, or apply the Green Button standard;
• Where applicable, the proposal should describe how the proposed process will be transparent and include stakeholders; and
• A description of how the State will work to obtain support from the state's regulatory utility commission (PUC, PSC, etc.), since in most cases this entity has regulatory authority in this area.

Examples of Alignment with Prior SEP Competitive FOAs

It is DOE's intent in Area of Interest 2 to allow States to submit proposals focusing on some of the topics outlined in recent SEP competitive FOAs. Topics from past FOAs that would be applicable in Area of Interest 2 include:

• Stimulating Energy Efficiency Action in States (FY 12 & 13): Increase investments in cost-effective energy efficiency through policy and program frameworks created through collaboration with key stakeholders to design and develop high-impact policies and programs that support greater investment in energy efficiency and significantly increase statewide energy savings. (See Category 1, Question 4 above)

• Improving or Developing a Fee-based Self-funded Public Facility Retrofit Program (FY 12): Develop/improve and implement a comprehensive and well-designed self-funded program which relies on a fee-for-services model that can successfully be used to retrofit public facilities statewide across many sectors (e.g., state buildings, municipal buildings, National Guard assets, school districts, water and wastewater treatment facilities, street lighting, etc.). (Category 3, Question 2 and/or 3)

• Driving Demand for Public Facility Retrofits (FY 13): Develop and implement models to drive demand for public facility retrofit programs using sustainable financing programs (e.g., performance contracting) with a focus on increasing uptake in underserved market sectors, such as local government facilities, public housing, state facilities and others. (Category 3, Question 2 and/or 3)

• Advancing Industrial Energy Efficiency (FY13): Develop and implement programs and policies to expand industrial energy efficiency and the use of combined heat and (Category 1, Question 5 and Question 6);

DOE encourages States that submitted proposals that were not awarded under any of the four prior FOA Areas of Interest above to revisit them in alignment with the six topics of emphasis included in Area of Interest 2.

This year DOE is not including areas of interest corresponding to last year's topic Clean Energy-Economic Opportunity Roadmaps. For this topic DOE will examine the outcomes of the FY 2013 projects to determine whether to include further efforts in future SEP Competitive FOAs.

Program Elements

The applicant's discussion of the following elements in conjunction with the Merit Review Criteria in Section V.A.1 will be used to evaluate Area of Interest 2 recipient applications. A well-designed proposal in Area of Interest 2 should include, but not be limited to:

1. State Energy Assessment areas: Outline the specific area(s) from the eligible subset that (1) in the case of a proposal from an individual state, the state will address in the project; or (2) in the case of a proposal involving multiple states, that the participating states will address in the project.

2. Goals and Objectives: Applicants should have specific, identifiable goals and objectives for the project and provide a vision of what they can accomplish with DOE funding.

3. Vision of Success/Goal Achievement: This section should include a preliminary vision of success for the project and a description of the strategies and approaches the applicants will undertake in the project to achieve their stated goals and objectives.

4. Existing Efforts: Applicants should describe the current "state of play" in the state policy/program area(s) addressed in the proposed project. This may include an explanation of the state's needs, assessment of current policies or regulations affecting the state's ability to take action in these policy/program areas, and other barriers the state will address in order to succeed in moving from "No" to "Yes" in these area(s) included in the project scope.

5. Project Team and Supporting Partners: Applicants should outline and describe the structure of the state agencies and personnel, partners, and contractors, who will have responsibility for implementing the project and advancing the goals and outcomes of the proposed project.

6. Stakeholders and Engagement: Applicants are anticipated to be engaging with state, local and private sector actors that play a distinct role in accomplishing their specified goals and objectives. Statements of support from key stakeholders, executives, and corporate champions may help to shepherd the effort to its greatest potential. This section should include a description of a clear and consistent effort the state will take to structure stakeholder engagement to achieve the goals outlined in the objective section.

7. Energy Consumption Baseline: Applicants must provide an estimate of the baseline energy use associated with each of the policy/program area(s) the state is addressing in the project and the estimated improvement from the baseline that the state estimates it can achieve by moving from “No” to “Yes” in each policy/program area.

8. Market Impact: The application should provide an estimate of the size(s) of markets and potential impact represented by addressing each of the policy/program area(s) the state is addressing in the project, which may include number of buildings, square feet, number and type of utilities affected; number and type of industries and industrial facilities targeted; and other relevant measures.

9. Energy Savings and/or New Generation: Applicants will include an estimate of the potential dollar and energy savings or energy use reduction per year in the state and/or the growth in renewable generation as a result of implementation of the policies and/or programs targeted in the project’s scope.

10. Other State Models: Applicants will identify other state and/or local government efforts that have proven successful and that can serve as models or mentors for the specific policy and/or programmatic path most promising for the state to achieve the goal.

C. APPLICATIONS SPECIFICALLY NOT OF INTEREST

The following types of applications will be deemed nonresponsive and will not be reviewed or considered:

- Applications that fall outside the technical parameters specified in Section I.B of the FOA, including but not limited to:
    a) Construction, such as construction of mass transit systems and exclusive bus lanes, or for construction or repair of buildings or structures;
    b) Purchase of land, a building or structure or any interest therein;
    c) Subsidizing fares for public transportation;
    d) Subsidizing utility rate demonstrations or State tax credits for energy conservation measures or renewable energy measures;
    e) The conduct of, or purchase equipment to conduct, research, development or demonstration of energy efficiency or renewable energy techniques and technologies not commercially available;
    f) Loan guarantees or loan forgiveness (10 CFR section 420.18);
    g) Programs that include government assets other than buildings and facilities, such as fleets;
    h) Programs targeted to making new construction energy-efficient;
    i) Programs that use award funds to design, develop, and implement specific project-level energy efficiency retrofits and upgrades. (However, States could use project funds to design and develop programs that could lead to retrofits implemented with non-project funds); and
    j) Programs that use project funds to capitalize financing programs. (However, States could use project funds to design and develop templates for the creation of financing programs).

- Applications from DOE National Laboratories/ Federally Funded Research and Development Center (FFRDC) as applicants or as partners.

II. AWARD INFORMATION

A. AWARD OVERVIEW

1. ESTIMATED FUNDING

EERE expects to make approximately $5,000,000 million of Federal funding available for new awards under this FOA, subject to the availability of appropriated funds. EERE anticipates making approximately 10-15 awards under this FOA. EERE may issue one, multiple, or no awards.

Individual awards may vary between approximately $75,000 and $500,000.

EERE may issue awards in one, multiple, or none of the following Areas of Interest:

Area of Interest 1: State Energy Planning
EERE may issue up to 9 awards in this Area of Interest.

Area of Interest 2: Innovative Opportunities for Energy Efficiency and Renewable Energy Practices
EERE may issue approximately 12 awards in this Area of Interest.

EERE may establish more than one budget period for each award and fund only the initial budget period(s). Funding for all budget periods, including the initial budget period, is not guaranteed.

2. PERIOD OF PERFORMANCE

EERE anticipates making awards that will run 24 months in length for Area of Interest 1 and between 24 and 36 months for Area of Interest 2.

3. NEW APPLICATIONS ONLY

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

Area of Interest 1 - State Energy Planning: Applicants may submit (1) a State-specific proposal (which covers the State applicant only), or (2) a multi-State proposal, where the State is the prime recipient, or a proposal that involves other States but where each State applies separately. A State may submit a maximum of one application.

Area of Interest 2 - Innovative Opportunities for Energy Efficiency and Renewable Energy Practices: Applicants may submit up to two applications: (1) one Full Application that includes no other State partners and covers only the applying State (i.e. a State-specific application) and (2) one Full Application that includes other State partners (i.e. a multi-state application), where

the State is the prime recipient, or one Full Application that includes no other States as partners on the application but involves other States that are applying separately.

States could potentially receive awards in both Areas of Interest; however, separate applications are required for each area of interest.

B. EERE FUNDING AGREEMENTS

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

1. COOPERATIVE AGREEMENTS

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

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

EERE has substantial involvement in all projects funded via Cooperative Agreement. See Section VI.C.10 of the FOA for more information on what substantial involvement may involve.

III. ELIGIBILITY INFORMATION

A. ELIGIBLE APPLICANTS

1. DOMESTIC ENTITIES

State entities are eligible to apply for funding as a Prime Recipient.

In accordance with 10 CFR 600.6(b) and Energy Policy and Conservation Act, section 365(f) codified at 42 USC 6325(f) and Energy Independence and Security Act of 2007, section 531, eligibility for award for Areas of Interest 1 and 2 is restricted to the 50 States, the District of Columbia, American Samoa, Guam, the Northern Mariana Islands, Puerto Rico, and the US Virgin Islands. Applications must be submitted by the State Energy Office (SEO) or other agency responsible for administering the State Energy Program pursuant to 10 CFR 420, although States may work in collaboration with non-State entities. Non-State entities interested in collaborating with their respective State Energy Office must contact their respective SEO.

B. COST MATCH

The Recipient cost match must be at least 20% of the total Federal Funds allocated. Total Estimated Project Cost is the sum of the Federal Government share and Recipient match of the estimated project costs. The Recipient's cost match must come from non-Federal sources unless otherwise allowed by law. By accepting Federal funds under this award, the Recipient agrees to be liable for its percentage match of Federal Government share, on a budget-period basis, even if the project is terminated early or is not funded to its completion. See 10 CFR Part 420.

To assist Applicants in calculating proper cost match amounts, EERE has included a cost match information sheet Appendix B to this Funding Opportunity Announcement.

1. LEGAL RESPONSIBILITY

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

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

2. COST MATCH ALLOCATION

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

3. COST MATCH TYPES AND ALLOWABILITY

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

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

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

The Prime Recipient may not use the following sources to meet its cost match 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;

- Federal funding or property (e.g., Federal grants, equipment owned by the Federal Government); or

- Expenditures that were reimbursed under a separate Federal Technology Office.

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

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

Applicants are encouraged to refer to 10 CFR Parts 600 and 603 for additional guidance on cost match, specifically 10 C.F.R. 420 for the State Energy Program.

4. COST MATCH VERIFICATION

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

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

5. COST MATCH PAYMENT

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

C. COMPLIANCE CRITERIA

Full Applications must meet all Compliance criteria listed below or they will be considered noncompliant. EERE will not review or consider noncompliant submissions, including Full Applications that were: submitted through means other than Grants.gov; submitted after the applicable deadline; and/or submitted incomplete. EERE will not extend the submission deadline for Applicants that fail to submit required information due to server/connection congestion.

1. COMPLIANCE CRITERIA

i. Full Applications

Full Applications are deemed compliant if:

- The Full Application complies with the content and form requirements in Section IV.C of the FOA; and

- The Applicant successfully uploaded all required documents and clicked the "Submit" button in Grants.gov by the deadline stated in the FOA.

D. LIMITATION ON NUMBER OF FULL APPLICATIONS ELIGIBLE FOR REVIEW

For Area One, Applicants may submit (1) a State-specific proposal (which covers the State applicant only), or (2) a multi-State proposal, where the State is the prime recipient, or a proposal that involves other States but where each State applies separately. A State may submit a maximum of one application. If an applicant submits more than one Full Application in Area One, EERE will only consider the last timely submission for evaluation. Any other submissions received listing the same applicant for the same Area of Interest will be considered noncompliant and not eligible for further consideration. This limitation does not prohibit an applicant from collaborating on other applications (e.g., as a potential partner) so long as the entity is only listed as the Prime Applicant on one Full Application submitted under this FOA.

For Area Two, Applicants may submit up to two applications: (1) one Full Application that includes no other State partners and covers only the applying State (i.e. a State-specific application) and (2) one Full Application that includes other State partners (i.e. a multi-state application), where the State is the prime recipient, or one Full Application that includes no other States as partners on the application but involves other States that are applying separately. If an applicant submits more than one Full Application that is State-specific, EERE

will only consider the last timely submission for evaluation. Any other State-specific submission received listing the same applicant for Area Two will be considered noncompliant and not eligible for further consideration. If an applicant submits more than one Full Application with multiple State partners covering the same questions or includes no other States as partners on the application but involves other States that are applying separately, EERE will only consider the last timely submission for evaluation. Any other submission involving multiple States received listing the same applicant for Area Two covering the same questions will be considered noncompliant and not eligible for further consideration. This limitation does not prohibit an applicant from collaborating on other applications (e.g., as a potential partner) so long as the entity is only listed as the Prime Applicant on one Full multi-State Application submitted under this FOA.

E. QUESTIONS REGARDING ELIGIBILITY

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

IV. APPLICATION AND SUBMISSION INFORMATION

A. APPLICATION PROCESS

EERE performs an initial eligibility review of the applicant submissions to determine whether they meet the eligibility requirements of Section III of the FOA. EERE will not review or consider noncompliant and/or nonresponsive or otherwise ineligible submissions. All submissions must conform to the following form and content requirements, including maximum page lengths, described below and must be submitted via Grants.gov, unless specifically stated otherwise. **EERE will not review or consider submissions submitted through means other than Grants.gov, 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 Full Application must conform to the following requirements:

- Must be submitted in Adobe PDF format.
- Must be written in English
- All pages must be formatted to fit on 8.5 x 11 inch paper with margins not less than one inch on every side. Use Times New Roman typeface, a black font color, and a font size of 12 point or larger (except in figures or tables, which may be 10 point font). A symbol font may be used to insert Greek letters or special characters, but the font size requirement

still applies. References must be included as footnotes or endnotes in a font size of 10 or larger. Footnotes and endnotes are counted toward the maximum page requirement.

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

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

EERE urges Applicants to carefully review their Full Application 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.A.1 of the FOA.

B. Application Forms

Application forms and instructions are available at Grants.gov. To access these materials, go to http://www.grants.gov, select "Apply for Grants," and then select "Download Application Package." Enter the CFDA and/or the funding opportunity number located on the cover of this announcement and then follow the prompts to download the application package.

Once the forms below have been completed, save the Application Package in a single file, using up to 10 letters of the Applicant's Organization Name as the file name (e.g., Company). If your organization is submitting more than one Application, you must identify an application number at the end of each file name (e.g., Company-1). If your organization is submitting more than one Application to different areas of interest, you must identify an application number and the Area of Interest Number at the end of each file name (e.g., Company-1-Area of Interest 1).

C. Content and Form of the Full Application

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

You must complete the mandatory forms and any applicable optional forms, in accordance with the instructions on the forms and the additional instructions below, as required by this FOA. Files that are attached to the forms must be in Adobe Portable Document Format (PDF) unless otherwise specified in this announcement.

Once the forms below have been completed, save the Application Package in a single file, using up to 10 letters of the Applicant's Organization Name as the file name (e.g., Company). If your organization is submitting more than one Application, you must identify an application number at the end of each file name (e.g., Company-1). If your organization is submitting more than one Application to different areas of interest, you must identify an application number and the Area of Interest Number at the end of each file name (e.g., Company-1-Area of Interest 1).

1. SF 424 – APPLICATION FOR FEDERAL ASSISTANCE

Complete this form first to populate data in other forms. Complete all required fields in accordance with the 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 project year, first phase or other subset of the project period. Save the SF-424 in a single PDF file using the title App424.

2. PROJECT/PERFORMANCE SITE LOCATION(S)

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

3. OTHER ATTACHMENTS FORM

Submit the following files with your application and attach them to the Other Attachments Form. Click on "Add Optional Other Attachment," to attach the Technical Volume and other files.

SUBMISSION		COMPONENTS	FILE NAME (IF NECESSARY)
Full Application (PDF, unless stated otherwise)	1	SF-424 Application for Federal Assistance- Part of Adobe Application Package (no page limit)	
	2	Project/Performance Site Location(s)- Part of Adobe Application Package	
	3	Other Attachments Form:- (Part of the Adobe Application Package) Attach the following files to this form:	
	i	State Energy Assessment (Microsoft Word Format)	State_Energy_Assessment
	ii	Technical Volume (See Chart in Section IV.D.2) (EXCEPTION: The Workplan component of the Technical Volume should be submitted in Microsoft Word Format).	TechnicalVolume
	iii	Letters of Commitment if applicable (Include with Technical Volume)	Include in Technical Volume
	iv	SF-424A Excel – Budget Information for Non-Construction Programs File	SF424A Budget
	v	Budget Justification (PMC 123.1) (no page limit, Microsoft Excel format.	Budget_Justification
	vi	Summary for Public Release (1 page max)	Summary
	vii	Summary Slide (1 page limit, Microsoft PowerPoint format)	Slide
	viii	Resume File	Resume
	ix	Subaward Budget Justification if applicable (PMC 123.1) (no page limit, Microsoft Excel format)	Subawardee_Budget_Justification
	x	SF-LLL Disclosure of Lobbying Activities	
	xi	Implementation Model Plan (if applicable and included)	IM Plan

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

i. State Energy Assessment

A successful application will include completion of the questions listed below in the State Energy Assessment Section. Please note that DOE may use this information publicly, but before doing so, DOE will communicate with the responding State(s) about making information public.

Category 1: Energy Planning and Using Energy Efficiency (EE) and Renewable Energy (RE) as an Energy Resource

1. State Energy Plans
   a. Does your state have a state energy plan that recognizes energy efficiency as a high-priority resource, includes specific savings targets/goals, and that has been completed in the last 10 years?
      - ☐ Yes
      - ☐ No
   b. Does your state energy plan establish clear and measurable goals and recommended actions for achieving them within a specific timeframe?
      - ☐ Yes
      - ☐ No
   c. Does your state energy plan include an action-oriented discussion of each of the following? (Select all that apply)
      - ☐ Energy efficiency
      - ☐ Distributed generation
      - ☐ Distributed generation grid integration
      - ☐ Financing energy efficiency and clean energy
      - ☐ Energy assurance and emergency response planning
      - ☐ Electric grid resiliency
      - ☐ Environmental consideration (e.g., consideration of air and water pollutant emissions
      - ☐ Renewable energy
      - ☐ No, key elements are missing and the state energy plan could be improved by adding one or more of the above elements

2. Energy Resource Planning
   a. Do one or more utilities in your state evaluate demand-side resources as an alternative to new supply side resources (e.g. generation, transmission and distribution) based on a transparent energy resource planning process that has been completed in the last 10 years?
      - ☐ Yes
      - ☐ No

b. Has your state identified the potential for cost-effective, achievable energy efficiency over the long term?
   - ☐ Yes
   - ☐ No

c. In the resource planning process for your state, are the expected emissions from the addition of various energy supply and demand reduction scenarios considered in decision-making?
   - ☐ Yes
   - ☐ No

d. In the resource planning process for your state, are all stakeholders, including end-users, given the opportunity to participate?
   - ☐ Yes
   - ☐ No

3. <u>Alignment of customer and utility incentives for energy efficiency</u>
   a. Does your EE program administrator/s receive sufficient cost recovery from the state regulatory agency to deliver ratepayer-funded EE programs to achieve energy savings goals / targets?
      - ☐ Yes
      - ☐ No

   b. Has the throughput incentive[24] been mitigated or removed for your state's utilities?
      - ☐ Yes
      - ☐ No
      - ☐ My state utility regulator is currently considering mechanisms to mitigate the throughput incentive in a regulatory process.

   c. Does your state utility regulator offer performance incentives for successful achievement of EE goals as part of a regulatory process?
      - ☐ Yes
      - ☐ No
      - ☐ My state utility regulator is currently considering offering performance incentives for successful achievement of EE goals as part of a regulatory process

[24]The "throughput incentive" is the incentive for utilities to promote sales growth, which is created when fixed costs are recovered through volumetric charges. National Action Plan for Energy Efficiency (2007). *Aligning Utility Incentives with Investment in Energy Efficiency*. Prepared by Val R. Jensen, ICF International. http://www.epa.gov/cleanenergy/documents/suca/incentives.pdf

d. Do your investor-owned utilities' rates value the price of electricity at different times of the day and send these signals to customers?
   - ☐ Yes
   - ☐ No

4. Statewide energy efficiency and renewable energy targets/goals
   a. Does your state have targets / goals that require utilities[25] to achieve energy savings (including EERS, target as part of an IRP, part of an RPS, or portfolio of programs that will provide defined savings) :
      - ☐ Yes, 0.5%-1% savings (relative to annual retail sales)
      - ☐ Yes, 1-1.5% savings (relative to annual retail sales)
      - ☐ Yes, 1.5-2%% savings (relative to annual retail sales)
      - ☐ Yes, 2% or higher (relative to annual retail sales)
      - ☐ No, but a statewide savings target/goal is under consideration within a regulatory process
      - ☐ No
   b. Are the utilities in your state currently achieving[26] the required energy savings targets / goals? (Select all that apply)
      - ☐ Yes
      - ☐ No
      - ☐ The date for meeting the required target / goal has not yet occurred.
   c. Does your state have targets / goals that require utilities to provide a certain portion of electricity sales through renewable energy
      - ☐ Yes
      - ☐ No

[25] The term utility is used broadly to include public and private organizations that may be responsible for administering organized energy efficiency programs within the state.

[26] Achieving for this question is defined as the utilities have met interim savings targets; or the utilities have met the savings targets; or the utilities' reported savings are on track to achieving the savings target (as measured by the utilities being in good standing relative to any penalties for not meeting these targets).

5. Distributed energy resources
    a. Are there standardized interconnection rules across your state's utilities' for distributed resources regardless of fuel? (Select all that apply)
        - ☐ Yes, up to 10 kW
        - ☐ Yes, up to 100 kW
        - ☐ Yes, up to 20MW
        - ☐ Yes, up to a defined capacity larger than 20 MW
        - ☐ No, there are not standardized interconnection rules for distributed resources regardless of fuel.

6. Utility or third-party administered energy efficiency programs
    a. Are energy customers in your state across **ALL** customer classes including residential, commercial and industrial offered **electricity** ratepayer-funded energy efficiency programs? (Select all that apply)
        - ☐ Yes, by investor-owned utilities
        - ☐ Yes, by municipally-owned utilities
        - ☐ Yes, by cooperatively-owned utilities
        - ☐ Yes, by other energy efficiency program administrator
        - ☐ No, utilities do not offer electricity ratepayer-funded programs across all customer classes, but do offer programs at least in one customer class[27]
        - ☐ No, utilities do not offer electricity ratepayer-funded energy efficiency programs in my state
    b. Are energy customers in your state across **ALL** customer classes including residential, commercial and industrial offered **natural gas** ratepayer-funded energy efficiency programs? (Select all that apply)
        - ☐ Yes, by investor-owned utilities
        - ☐ Yes, by municipally-owned utilities
        - ☐ Yes, by cooperatively-owned utilities
        - ☐ Yes, by other energy efficiency program administrator
        - ☐ No, utilities do not offer gas ratepayer-funded energy efficiency programs across all customer classes, but do offer programs at least in one customer class
        - ☐ No, utilities do not offer gas ratepayer-funded energy efficiency programs in my state

[27] Example customer classes include residential, commercial, and industrial customer classes as well as important parts of these classes such as multifamily, small/medium industrial, and small/medium commercial.

c. Are energy customers in your state across customer classes including residential, commercial and/or industrial customer classes offered **other fuel (e.g. heating oil)** ratepayer-funded energy efficiency programs? (Select all that apply)
   - ☐ Yes, by investor-owned utilities
   - ☐ Yes, by municipally-owned utilities
   - ☐ Yes, by cooperatively-owned utilities
   - ☐ Yes, by other energy efficiency program administrator
   - ☐ No, other fuels are not significant in my state
   - ☐ No, utilities do not offer other fuel ratepayer-funded programs in my state

d. Does your state evaluate ratepayer-funded programs using **more than one** cost-effectiveness test[28] to reflect the long-term resource value of energy efficiency? (Select all that apply)?
   - ☐ Participant Cost Test
   - ☐ Utility/Program Administrator Cost Test
   - ☐ Ratepayer Impact Measure Cost Test
   - ☐ Total Resource Cost Test **without** non-energy benefits
   - ☐ Total Resource Cost Test **with** non-energy benefits (e.g., emissions reductions)
   - ☐ Societal Cost Test.
   - ☐ No, my state uses just one test to evaluate energy efficiency programs as selected above
   - ☐ No, my state does not use cost-effectiveness tests to reflect the long-term resource value of energy efficiency

7. <u>Evaluation, Measurement and Verification</u>

a. Does your state use an EM&V framework or plan that uses commonly accepted protocols or methodologies and is transparent in order to determine energy and emissions reductions from ratepayer-funded efficiency programs? (Select all that apply)
   - ☐ Yes, our state uses an independent, third-party statewide evaluator
   - ☐ Yes, our state uses the Uniform Methods Project M&V protocols for relevant programs
   - ☐ Yes, our state is part of a regional group that works together to determine savings
   - ☐ No

[28] National Action Plan for Energy Efficiency (2008). *Understanding Cost-Effectiveness of Energy Efficiency Programs: Best Practices, Technical Methods, and Emerging Issues for Policy-Makers*. Energy and Environmental Economics, Inc. and Regulatory Assistance Project. http://www.epa.gov/cleanenergy/documents/suca/cost-effectiveness.pdf

Category 2: Adopting Codes & Standards

1. Code Adoption
   a. Has your state adopted the IECC (or equivalent) for **residential** buildings?
      - ☐ Yes, a stretch code beyond the 2012 IECC has been adopted.
      - ☐ Yes, 2012 IECC or equivalent has been adopted.
      - ☐ Yes, 2009 IECC or equivalent has been adopted.
      - ☐ Yes, 2006 IECC, earlier edition, or equivalent has been adopted.
      - ☐ No, IECC or equivalent residential building energy code has not been adopted.
      - ☐ My state is home rule, but most municipalities in my state have adopted some form of the IECC or equivalent.
   b. Has your state adopted Standard 90.1 (or equivalent) for **commercial** buildings?
      - ☐ Yes, a stretch code beyond Standard 90.1-2010 has been adopted.
      - ☐ Yes, Standard 90.1-2010 or equivalent has been adopted.
      - ☐ Yes, Standard 90.1-2007 or equivalent has been adopted.
      - ☐ Yes, Standard 90.1-2004, earlier edition, or equivalent has been adopted.
      - ☐ No, Standard 90.1 or equivalent commercial building energy code has not been adopted.
      - ☐ My state is home rule, but most municipalities in my state have adopted some form of Standard 90.1 or equivalent.

2. Code enforcement
   a. How would you characterize building energy code enforcement in your state?
      - ☐ The state is responsible for enforcement.
      - ☐ The state is responsible for enforcement when local authorities are unwilling or unable to enforce the code.
      - ☐ Local authorities are responsible for enforcement, but my state provides resources and training.
      - ☐ Local authorities are responsible for enforcement.
      - ☐ Code enforcement is not mandatory but my state provides resources and training.
      - ☐ Code enforcement is not mandatory.

b. Does your state measure and verify compliance with energy codes (Select all that apply)?
    - ☐ Yes, my state has a program in place to measure and verify compliance.
    - ☐ Yes, my state has piloted a measurement and verification program and is exploring options for M&V.
    - ☐ No, my state has not piloted a measurement and verification program, but is exploring options for M&V.
    - ☐ No, my state has not yet considered code compliance measurement and verification.

Category 3: States Leading by Example

1. <u>Energy management of public facilities</u>
    a. Does your state have a long-term energy savings goal for public facilities (passed through legislation or an executive order)?
        - ☐ Yes, less than 1% a year (or the equivalent of less than 10% over ten years)
        - ☐ Yes, 1-1.9% per year (or the equivalent of 10 to 19% over ten years)
        - ☐ Yes, 2% or higher per year (or the equivalent of 20% or higher over ten years)
        - ☐ No, my state does not have a long-term savings goal for public facilities.
    b. Does your state routinely benchmark building energy use across the portfolio of public buildings as part of managing the energy use of public facilities? (Select all that apply)
        - ☐ Yes, a data collection mechanism is being developed or is in place and data is being received across a portfolio of public buildings/facilities.
        - ☐ Yes, data actively collected, and is used to make decisions on energy investment activities.
        - ☐ Yes, and data results are transparently published to the general public.
        - ☐ No, there is not a data collection process for routinely benchmarking public buildings.

c. Does your state have other (non-financing related) policies or initiatives to help capture energy savings throughout public facilities? (Select all that apply)
   - ☐ Yes, my state requires retrocomissioning[29] as part of the retrofit process.
   - ☐ Yes, state agencies are required to complete audits and upgrades by specific dates
   - ☐ Yes, a building asset score is incorporated in the retrofit process.
   - ☐ Yes, my state requires new state buildings to meet building codes at the level of Standard 90.1-2010 or equivalent or better.
   - ☐ No

2. Financing Retrofits for Public Facilities
   a. Does your state have mechanisms beyond annual appropriations for energy efficiency and other clean energy or low carbon investments? (Select all that apply).
      - ☐ Yes, energy savings performance contracts (ESPC).
      - ☐ Yes, revolving loan funds.
      - ☐ Yes, a loan loss reserve fund.
      - ☐ Yes, QECBs, or other bonds that can be allocated to retrofit investments.
      - ☐ Yes, an established green/infrastructure bank that can be used for retrofit investments.
      - ☐ No, my state depends on annual appropriations for energy efficiency investments.
   b. Does your state have a self-sustaining ESPC program? (Select all that apply).
      - ☐ Yes, enabling legislation that authorizes the use of ESPC for public buildings.
      - ☐ Yes, a centralized ESPC program exists at the state level that provides guidance for all state ESPC projects.
      - ☐ Yes, a centralized ESPC program exists that requires the use of standardized contracts and procedures.
      - ☐ Yes, a fee-based centralized ESPC program.
      - ☐ No, my state does not use ESPCs on public retrofit projects.

[29] Retrocommissioning is a process to help identify no- and low-cost technical measures for improving energy efficiency and can result in energy cost savings between $0.11 and $0.72 per square foot (Mills et al., 2004). See http://evanmills.lbl.gov/pubs/pdf/cx-costs-benefits.pdf.

3. Working with Local Governments and Others
    a. Does your state have a program that supports your local governments in their efforts toward an energy efficiency target?
        - ☐ Yes, a defined suite of support services and/or partnership opportunities for local governments including financial support is offered.
        - ☐ Yes, a defined suite of support services to local governments, without financial support.
        - ☐ No, local governments are eligible to access our technical assistance, but we do not have a formal program.
    b. Has your state helped provide financing options or incentives for clean energy investments? (Select all that apply)
        - ☐ Yes, the state has passed legislation in support of commercial PACE
        - ☐ Yes, the state has established a clean energy fund to support loans for energy efficiency and renewable energy[30]
        - ☐ Yes, the state has established one or more incentives in support of energy efficiency and renewable energy[31]
        - ☐ No, the state has not established legislation or financing options

[30] A "yes" answer indicates these clean energy loans are administered by the state and does not include ratepayer-funded financing programs.
[31] A "yes" answer indicates these energy efficiency and renewable energy incentives are administered by the state and does not include ratepayer-funded financing programs.

c. Does your state have policies that support low carbon vehicles? (Select all that apply)
   - ☐ Yes, my state has financial incentives for PEVS and/or charging equipment (i.e. tax credits, rebates, voucher programs and/or grants)
   - ☐ Yes, my state has financial incentives for natural gas vehicles and/or refueling infrastructure (i.e. tax credits, rebates, voucher programs and/or grants)
   - ☐ Yes, my state has adopted financial incentive for use of biofuels in vehicles and/or infrastructure incentives to switch to higher biofuels blends.
   - ☐ Yes, my state has adopted a zero emission vehicle policy or mandate for state and/or other fleets.
   - ☐ Yes, my state utilities commission has approved electricity utility-based incentives such as separate rates applicable to PEV recharging or Time of Use rates and/or reduction or elimination of demand charges for businesses to incentivize PEV recharging.
   - ☐ Yes, my state has addressed regulatory barriers to PEVs (such as allowing for the re-sale of electricity).
   - ☐ No, my state has not adopted policies that support the adoption of low carbon vehicles.

4. <u>Procurement Policies</u>
   a. Has the state energy office adopted clean energy purchasing policies? (Select all that apply)
      - ☐ Yes, energy efficient procurement policies have been adopted based on ENERGY STAR and U.S. DOE Federal Energy Management Program criteria and implemented
      - ☐ Yes, low carbon vehicle procurement policies have been adopted and implemented
      - ☐ Yes, renewable energy procurement policies have been adopted and implemented
      - ☐ No, such clean energy procurement policies have been adopted

Category 4: Providing Greater Access to Building Energy Performance Information for Decision Making

1. Building Energy Performance Benchmarking and Disclosure
   a. Does your state or communities within your state have a law or regulation that requires benchmarking or disclosure of energy use for **non-public** buildings?
      - ☐ Yes, **all** commercial buildings of a certain size must be benchmarked regularly and results disclosed publicly
      - ☐ Yes, homeowners must disclose energy performance data on their homes at some frequency or at key transaction points (e.g. time of sale).
      - ☐ No, state-level benchmarking and disclosure laws have not been passed for non-public buildings
      - ☐ No, state-level benchmarking and disclosure laws have not been passed, but one or more local government has passed a local ordinance
      - ☐ No, state-level benchmarking and disclosure laws have not been passed, but one or more local government is engaged in a voluntary program
   b. Does one or more of your investor-owned utilities provide direct data exchange with benchmarking tools such as ENERGY STAR Portfolio Manager (automated benchmarking services)?
      - ☐ Yes
      - ☐ No

2. Whole-Building Data
   a. Does one or more investor-owned utilities provide aggregated whole-building energy usage data to building owners for purposes of benchmarking and energy management without requiring consent of each individual tenant?
      - ☐ Yes
      - ☐ No
   b. Has your state utility regulator established a rule describing what constitutes sufficiently aggregated customer energy usage data that can be given to building owners without explicit consent from each individual tenant while addressing privacy concerns?
      - ☐ Yes
      - ☐ Rules are under consideration or pending
      - ☐ No

3. Data Access
    a. Does one or more of your investor-owned utilities allow customers to access their energy usage data in a standardized format (e.g. Green Button)?
        - ☐ Yes
        - ☐ Utilities have committed to this but are still implementing
        - ☐ No
    b. Does one or more of your investor-owned utilities allow customers to designate one or more service providers who can access their energy usage data in a standardized format (e.g. Green Button)?
        - ☐ Yes
        - ☐ Utilities have committed to this, but are still implementing
        - ☐ No
    c. Does your state have guidelines or rules regarding third party access to customer energy usage data?
        - ☐ Yes
        - ☐ Rules are under consideration or pending
        - ☐ No

ii. Technical Volume

Except where otherwise specified, the Technical Volume must be submitted in Adobe PDF format. The Technical Volume must conform to the following content and form requirements, including maximum page lengths. If Applicants exceed the maximum page lengths indicated below, EERE will review only the authorized number of pages and disregard any additional pages. This volume must address the Merit Review Criteria as discussed in Section V.A.1 of the FOA. Save the Technical Volume in a single PDF file using the following convention for the title: "TechnicalVolume".

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

The Technical Volume to the Full Application may not be more than 30 pages, including the cover page, table of contents, and all citations, charts, graphs, maps, photos, or other graphics, and must include all of the information in the table below. The State Energy Assessment is excluded from this page limit. The applicant should consider the weighting of each of the evaluation criteria (see Section V.A.1 of the FOA) when preparing the Technical Volume.

SECTION/PAGE LIMIT	DESCRIPTION
Cover Page	The cover page should include the project title, the specific FOA Area of Interest being addressed, both the technical and business points of contact, names of all team member organizations, and any statements regarding confidentiality.
Project Overview (This section should constitute approximately 10% of the Technical Volume)	The Project Overview should contain the following information: • Background: The Applicant should discuss the background of their organization, including the history, successes, and current technical baseline relevant to the technical topic being addressed in the Full Application. • Project Goal: The Applicant should explicitly identify the targeted improvements to the technical baseline and the critical success factors in achieving that goal. • DOE Impact: The Applicant should discuss the impact that DOE funding would have on the proposed project. Applicants should specifically explain how DOE funding, relative to prior, current, or anticipated funding from other public and private sources, is necessary to achieve the project objectives.
Technical Description (This section should constitute approximately 25% of the Technical Volume)	The Technical Description should contain the following information: • Merit Review Criterion Discussion: This section should be formatted to address each of the merit review criterion and sub-criterion listed in Section V.A.1 and submit any additional attachments referenced, if applicable. Provide sufficient information so that reviewers will be able to evaluate the application in accordance with these merit review criteria. EERE WILL EVALUATE AND CONSIDER ONLY THOSE APPLICATIONS THAT ADDRESS SEPARATELY EACH OF THE MERIT REVIEW CRITERIA AND SUB-CRITERIA.
Workplan (This section should constitute approximately 50% of the Technical Volume, and should be submitted in Microsoft Word format)	The Workplan should contain the following information: • Project Objectives: The Applicant should provide a clear and concise (high-level) statement of the goals and objectives of the project as well as the expected outcomes. • Project Narrative: The Project Strategy/Plan should, to the extent practical, follow the outline below in its organization and content; however, additional topics may be covered as necessary for the applicant to deliver a full explanation of the proposal. o Area of Interest One: 1. Objective, goals and potential impacts and outcomes 2. Approach and strategies to achieve objective(s), goal(s) and impact(s) 3. Existing efforts & how they will be leveraged (if applicable) 4. Identification of possible barriers and how they will be overcome

5. Project team, roles and structure, including partners and capabilities
6. Stakeholders & plan for engagement
7. Information and data needs, including any modeling resources

- Area of Interest Two:
  1. Project Overview/Executive Summary
  2. Project strategy/plan
  3. Objective, goals and potential impacts and outcomes
  4. Approach and strategies to achieve objective(s), goal(s) and impact(s)
  5. Existing efforts & how they will be leveraged (if applicable)
  6. Project team, roles and structure, including partners and capabilities
  7. Stakeholders & plan for engagement
  8. Information and data needs

- Summary Table: A complete application will include a table summarizing the project. An example Summary Table for Area of Interest 1 and Area of Interest 2 is provided below. **Applicants in Area of Interest 2 need only complete the tables related to the questions for which they are applying. Summary tables do not count towards the page limit.**
- Technical Scope Summary: The Applicant should provide a summary description of the overall work scope and approach to achieve the objective(s).
- Work Breakdown Structure (WBS) and Task Descriptions: The Workplan should fully describe the work to be accomplished and how the applicant will achieve the milestones, will accomplish the final project goal(s), and will produce all deliverables. The Workplan is to be structured with a hierarchy of performance period (approximately annual), task and subtasks, which is typical of a standard work breakdown structure (WBS) for any project. The Workplan shall contain a concise detailed description of the specific activities to be conducted over the life of the project. "Detailed" is defined as a full explanation and disclosure of the project being proposed (i.e., a statement such as "we will then complete a proprietary process" is unacceptable). It is the Applicant's responsibility to prepare an adequately detailed task plan to describe the proposed project and the plan for addressing the objectives of this FOA. To this end each task and subtask is to have a unique number and title and an indication of the duration of the task or subtask in months. Each task and subtask is to have a task summary that describes the objectives, what work is to be accomplished, and relationship to project deliverables or expected results. Appropriate milestones should be incorporated into the task and subtask structure. Each task and subtask is to have a technical details section, as appropriate, to

	discuss how the work will be done, anticipated problems or uncertainties, and any further clarification, such as why a specific approach is being taken. An example Work Breakdown Structure is provided below. • Milestones: The Applicant should provide appropriate milestones throughout the project to demonstrate success, where success is defined as technical achievement rather than simply completing a task. To ensure that milestones are relevant, Applicants should follow the SMART rule of thumb, which is that all milestones should be **S**pecific, **M**easurable, **A**chievable, **R**elevant, and **T**imely. Unless otherwise specified in the FOA, the minimum requirement is that each project must have at least one milestone per quarter for the duration of the project (depending on the project, more milestones may be necessary to comprehensively demonstrate progress). The Applicant should also provide the means by which the milestone will be verified. In addition to describing milestones in the Workplan text and including them in the schedule, the Applicant is required to complete the Milestone Summary Table shown below. **The Milestone Summary Table does not count towards the page limit.** • Project Schedule (Gantt Chart or similar): The Applicant should provide a detailed schedule for the entire project, including task and subtask durations, and milestones. **The project schedule does not count towards the page limit.** • Project Management: The Applicant should discuss the team's proposed management plan, including the following: o The overall approach to and organization for managing the work o The roles of each Project Team member o Any critical handoffs/interdependencies among Project Team members o The technical and management aspects of the management plan, including systems and practices, such as financial and project management practices o The approach to project risk management o A description of how project changes will be handled o If applicable, the approach to Quality Assurance/Control o How communications will be maintained among Project Team members

Example Summary Table, Milestone Summary Table, and Work Breakdown Structure are provided on following two pages, after which the Technical Volume requirements will continue.

Summary Table: Area of Interest 1						
Applicant State	**States Involved in Project**	**Sectors Covered**	**Potential Impact**	**Electric utility profile**	**Inclusion of Renewables**	**Stakeholders and Partners**
	List which States are partners, if applicable.	Indicate which sectors the project is targeting for energy efficiency measures – residential, commercial and/or industrial as well as any specific subsectors	Indicate what the State projects to achieve in the project.	Indicate the number and type of electric generating units in the State/region (e.g., X coal-fired units representing Y% of generation; X natural gas units representing Y% of generation; X oil-fired units representing Y% of generation; X units of renewable energy representing Y% or MW of generation	Indicate whether your strategy will include increasing renewable generation.	List stakeholders with whom the State will partner with as part of project implementation.

Summary Table: Area of Interest 2				
Regarding Category 1, Question 4: Statewide energy efficiency and renewable energy targets/goals				
State	**Target Markets**	**Impact/Savings**	**Existing Programs and Policies**	**Stakeholders (not including contractors)**
	List types of utilities targeted and sectors (residential, commercial and industrial).	Potential dollar and energy savings or energy use reductions per year in the State as a result of implementation of the policy or program.	Existing programs, state legislation, policies, executive orders, and relevant regulations.	List the stakeholders with whom the State will partner as a result of implementation of the policy or program.

Summary Table: Area of Interest 2				
Regarding Category 1, Question 5: Distributed energy resources				
State	**Target Markets**	**Impact/Savings**	**Existing Programs and Policies**	**Stakeholders (not including contractors)**
	List type and size of distributed energy resources market State is targeting for developing standardized interconnection rules (e.g., industrial units up to 100kW, which represent X% of State's electricity use)	Potential dollar and energy savings or energy use reductions per year in the State as a result of implementation of the policy or program.	Existing programs, state legislation, policies, executive orders, and relevant regulations.	List the stakeholders with whom the State will partner as a result of implementation of the policy or program.

Summary Table: Area of Interest 2						
Regarding Category 1, Question 6: Utility or third-party administered energy efficiency programs						
State	**Target Markets**	**Cost-Effectiveness Test**	**Impact/Savings**	**Existing Programs and Policies**	**Potential Leverage and/or Financing**	**Stakeholders (not including contractors)**
	List types of utilities targeted (IOU, municipally-owned, or cooperatively-owned), type of fuel (electricity, natural gas, or other fuel) and sectors (residential, commercial and industrial).	List of type of cost-effectiveness test applicant proposes to adopt.	Potential dollar and energy savings or energy use reductions per year in the State as a result of implementation of the policy or program.	Existing programs, state legislation, policies, executive orders, and relevant regulations, including existing cost-effectiveness tests.	List potential for leveraging private capital and sources of this capital.	List the stakeholders with whom the State will partner as a result of implementation of the policy or program.

Summary Table: Area of Interest 2				
Regarding Category 1, Question 7: Evaluation, Measurement and Verification				
State	**EM&V Framework Being Pursued**	**Impact/Savings**	**Existing Programs and Policies**	**Stakeholders (not including contractors)**
	Type of EM&V framework being pursued (e.g., independent, third-party statewide evaluator; Uniform Methods Project M&V; regional group approach; or other)	Potential dollar and energy savings or energy use reductions per year in the State as a result of implementation of the policy or program (i.e., by more accurately measuring energy savings).	Existing programs, state legislation, policies, executive orders, and relevant regulations, including any existing EM&V framework.	List the stakeholders with whom the State will partner as a result of implementation of the policy or program.

Summary Table: Area of Interest 2						
Regarding Category 3, Question 2: Financing Retrofits for Public Facilities						
State	**Target Markets**	**Baseline Energy Use**	**Impact & Potential Savings**	**Stakeholders and Partners (not including contractors)**	**Potential Leverage and/or Financing**	**Existing Programs and Policies**
	Target market size of the sector(s) addressed (relevant information may include number of buildings, square footage, and aggregate energy consumption).	Total energy used/year (KWh/yr and therms/yr) in the sector targeted. Include percent of State total.	Anticipated number and square footage of projects. Estimated dollar and energy savings (absolute value & %) as a result of program implementation.	List the stakeholders with whom the State will partner as a result of implementation of the policy or program.	List potential for leveraging private capital and sources of this capital.	Existing programs, state legislation, policies, executive orders, and relevant regulations, including existing financing programs.

Summary Table: Area of Interest 2						
Regarding Category 3, Question 3: Working with Local Governments						
State	**Target Markets**	**Programs**	**Impact & Potential Savings**	**Existing Programs and Policies**	**Potential Leverage and/or Financing**	**Stakeholders and Partners (not including contractors)**
	Areas to be addressed under the partnership with local governments (e.g., types of facilities and technologies). If relevant, include target market size of the sector(s) addressed (relevant information may include number of buildings, square footage, and aggregate energy consumption).	List the types of programs the State intends to adopt to support local governments in their efforts toward an energy efficiency target.	Potential dollar and energy savings or energy use reductions per year in the State as a result of implementation of the policy or program.	Existing programs, state legislation, policies, executive orders, and relevant regulations related to local governments and energy efficiency.	List potential for leveraging private capital and sources of this capital.	List the local governments and other stakeholders with whom the State will partner as a result of implementation of the policy or program.

Summary Table: Area of Interest 2				
Regarding Category 4, Question 1: Building Energy Performance Benchmarking and Disclosure				
State	**Target Markets**	**Type of Program and Potential Impact**	**Existing Programs and Policies**	**Stakeholders (not including contractors)**
	Target market size of the non-public building sector addressed (e.g., residential and/or commercial sector; other relevant information may include number of buildings, square footage, aggregate energy consumption).	An explanation of the type of policy or program to be pursued (mandatory, voluntary, or some hybrid) and the scope of the policy/program; description of potential impact of adopting energy performance benchmarking and disclosure requirements.	Existing programs, state legislation, policies, executive orders, and relevant regulations related to benchmarking or disclosure of energy use for non-public buildings.	List the stakeholders with whom the State will partner as a result of implementation of the policy or program.

Summary Table: Area of Interest 2				
Regarding Category 4, Question 2: Whole-Building Data				
State	**Target Markets**	**Type of Program and Potential Impact**	**Existing Programs and Policies**	**Stakeholders (not including contractors)**
	Target market size of the non-public building sector addressed (e.g., residential and/or commercial sector; other relevant information may include number of buildings, square footage, aggregate energy consumption).	An explanation of the type of policy or program to be pursued (mandatory, voluntary, or some hybrid) and the scope of the policy/program; description of potential impact of adopting energy performance benchmarking and disclosure requirements.	Existing programs, state legislation, policies, executive orders, and relevant regulations related to benchmarking or disclosure of energy use for non-public buildings.	List the stakeholders with whom the State will partner as a result of implementation of the policy or program.

Summary Table: Area of Interest 2				
Regarding Category 4, Question 3: Data Access				
State	**Target Markets**	**Type of Program and Potential Impact**	**Existing Programs and Policies**	**Stakeholders (not including contractors)**
	Target market size of the building sector addressed (relevant information may include number of buildings, square footage, and aggregate energy consumption).	A description of the process by which the applicant will develop policies regarding building energy usage data access; description of potential impact of adopting such policies.	Existing programs, state legislation, policies, executive orders, and relevant regulations related to access to energy usage data in a standardized format.	List the stakeholders with whom the State will partner as a result of implementation of the policy or program.

Milestones Summary Table						
Recipient Name:						
Project Title:						
Task Number	**Task or Subtask Title**	**Milestone Number**	**Milestone Description**	**Deliverable(s)**	**Anticipated Date (months from start of project)**	**Anticipated Quarter (quarters from start of project)**

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

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

Note 2: All milestones should follow the SMART rule of thumb: Specific, Measureable, Achievable, Relevant, and Timely

Example Work Breakdown Structure

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

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

Task 1: Distinctive Title, Date range of the task in months (Month 1-Month 4)

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

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

Milestone 1.1 (if applicable) **(Quarter 1; note that each milestone should be assigned a Quarter(s)**

Milestone 1.2 (if applicable)
Etc.

Subtask 1.1: Date range (Month 1-Month 2)

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

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

Milestone 1.1.1 (if applicable)
Milestone 1.1.2 (if applicable)
Etc.

Subtask 1.2:
(Continue until all Task 1 subtasks are listed)

Task 2: (continue in the format above until all tasks and subtasks are listed)
Subtask 2.1: Description and Discussion
Subtask 2.2: Description and Discussion

Technical Qualifications and Resources (Approximately 15% of the Technical Volume)	The Technical Qualifications and Resources should contain the following information: • Describe the Project Team's unique qualifications and expertise, including those of key subrecipients • Describe the Project Team's existing equipment and facilities that will facilitate the successful completion of the proposed project; include a justification of any new equipment or facilities requested as part of the project • This section should also include relevant, previous work efforts, demonstrated innovations, and how these enable the Applicant to achieve the project objectives. • Describe the time commitment of the key team members to support the project. • Attach one-page resumes for key participating team members as an appendix. **Resumes do not count towards the page limit.** Multi-page resumes are not allowed. • Attach any letters of support from partners/end users as an appendix (1 page maximum per letter). **Letters of support do not count towards the page limit.** • For multi-organizational or multi-investigator projects, describe succinctly: o The roles and the work to be performed by each PI and Key Participant; o Business agreements between the Applicant and each PI and Key Participant; o How the various efforts will be integrated and managed; o Process for making decisions on scientific/technical direction; o Publication arrangements; o Intellectual Property issues; and o Communication plans

iii. Letters of Commitment

If cost match is required, you must have a letter from each third party contributing cost match (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 match. All Letters of Commitment must be attached as an Appendix to the Technical Volume File. Identify the following information for each third party contributing cost match: (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 match – cash, services, or property. Letters of Commitment from parties participating in the project, exclusive of vendors, who will not be contributing cost match, but will be integral to the success of the project must be

included as part of this Appendix to the Technical Volume. Letters of Commitment will not count towards the Technical Volume page limit.

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

You must provide budget for the total project period. Use the SF 424 A Excel, "Budget Information – Non Construction Programs" form on the DOE Financial Assistance Forms Page at http://energy.gov/management/downloads/budget-information-non-construction-programs You may request funds under any of the Object Class Categories as long as the item and amount are necessary to perform the proposed work, meet all the criteria for allowability under the applicable Federal cost principles, and are not prohibited by the funding restrictions in this announcement (see Section IV, H). Save the information in a single file named "SF424A.xls," and click on "Add Optional Other Attachment" to attach.

v. PMC 123.1-Budget Justification File

You must justify the costs proposed in each Object Class Category/Cost Classification category using the PMC 123.1 Budget Justification File. See Appendix C. Save the budget justification information in a single file named "BudgetJustification.pdf," and click on "Add Optional Other Attachment" to attach.

You must justify the costs proposed in each Object Class Category/Cost Classification category (e.g., identify key persons and personnel categories and the estimated costs for each person or category; provide a list of equipment and cost of each item; identify proposed subaward/consultant work and cost of each subaward/consultant; describe purpose of proposed travel, number of travelers and number of travel days; list general categories of supplies and amount for each category; and provide any other information you wish to support your budget). Provide the name of your cognizant/oversight agency, (if known) and the name and phone number of the individual responsible for negotiating your indirect rates. If cost match is required, you must have a letter from each third party contributing cost match (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 match. In the budget justification, identify the following information for each third party contributing cost match: (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 match – cash, services, or property. This form can be found on the DOE Project Management Center Recipient Resources Forms Page at https://www.eere-pmc.energy.gov/Forms.aspx.

vi. Summary/Abstract for Public Release

Applicants are required to submit a one-page summary/abstract of their project. The project summary/abstract must contain a summary of the proposed activity suitable for dissemination to the public. It should be a self-contained document that identifies the name of the applicant, the project director/principal investigator(s), the project title, the objectives of the project, a

description of the project, including methods to be employed, the potential impact of the project (i.e., benefits, outcomes), and major participants (for collaborative projects). This document must not include any proprietary or sensitive business information as the Department may make it available to the public after selections are made. The project summary must not exceed 1 page when printed using standard 8.5 x 11 paper with 1" margins (top, bottom, left, and right) with font not smaller than 12 point. Save the Summary for Public Release in a single PDF file named Summary and click on "Add Optional Other Attachment" to attach.

vii. Summary Slide

Applicants are required to provide a single PowerPoint slide summarizing the proposed project. The slide must be submitted in Microsoft PowerPoint format. This slide is used during the evaluation process. Save the Summary Slide in a single file using the following convention for the title Slide and click on "Add Optional Other Attachment" to attach.

The Summary Slide template requires the following information:

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

viii. Resume File

Provide a resume for each key person proposed, including subawardees and consultants if they meet the definition of key person. A key person is any individual who contributes in a substantive, measurable way to the execution of the project. Save all resumes in a single file named "resume.pdf" and click on "Add Optional Other Attachment" to attach. The biographical information for each resume must not exceed 2 pages when printed on 8.5" by 11" paper with 1-inch margins (top, bottom, left, and right), single spaced, with font not smaller than 12 point and should include the following information, if applicable:

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

Professional Experience. Beginning with the current position list, in chronological order, professional/academic positions with a brief description.

Publications. Provide a list of up to 10 publications most closely related to the proposed

project. For each publication, identify the names of all authors (in the same sequence in which they appear in the publication), the article title, book or journal title, volume number, page numbers, year of publication, and website address, if available electronically.

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

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

- Of the key personnel identified in this file, indicate the Principal Investigator(s) (PI).

- For Multiple Principal Investigators:
  The applicant, whether a single organization or team/partnership/consortium, must indicate if the project will include multiple PIs. The decision to use multiple PIs for a project is the sole responsibility of the applicant. If multiple PIs will be designated, the application must identify the Contact PI/Project Coordinator and provide a "Coordination and Management Plan" that describes the organization structure of the project as it pertains to the designation of multiple PIs. This plan should, at a minimum, include:

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

The resume file does not have a page limitation

ix. Subaward Budget Justification File

You must provide a separate budget) for each subawardee that is expected to perform work estimated to be more than $250,000 or 25 percent of the total work effort (whichever is less). Use the SF 424 A Excel for Non Construction Programs or the SF 424 C Excel for Construction Programs. These forms are found on the DOE Financial Assistance Forms Page at http://energy.gov/management/office-management/operational-management/financial-assistance/financial-assistance-forms. Save each Subaward budget in a separate file. Use up to 10 letters of the subawardee's name (plus 424.xls) as the file name (e.g., company424.xls or energyres424.xls). Click on "Add Optional Other Attachment" to attach each file.

A PMC 123.1, Budget Justification file for the subaward budget is also required for each subawardee that is expected to perform work estimated to be more than $100,000 or 50 percent of the totals work effort (whichever is less. The budget justification must include the same justification information described in paragraph 6, "SF 424 A Excel, Budget Information – Non-Construction Programs File" above.

x. SF-LLL: Disclosure of Lobbying Activities

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

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

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

The form is available in the optional document box on the Adobe Application Package attached to this FOA.

xi. Implementation Model Plan

Applicants in Area Two may elect to submit an Implementation Model Plan with their Full Application. EERE defines an "implementation model" as a replicable pathway for the deployment of energy efficiency in a state or organization. More specifically, the implementation model identifies a solution to a key barrier to energy efficiency deployment and provides a step-by-step detailed approach your organization took to create a replicable and sustainable solution, including the development of or changes to policies, processes, outreach efforts, and tools/resources. The Implementation Model Plan is a document that outlines the proposed plan for developing the Implementation Model. Guidance for preparing an Implementation Model Plan is included in Appendix D of the FOA.

D. POST-AWARD INFORMATION REQUESTS

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

- Indirect cost information
- Other budget information
- Name and phone number of the Designated Responsible Employee for complying with national policies prohibiting discrimination (See 10 CFR 1040.5)
- Representation of Limited Rights Data and Restricted Software, if applicable
- Environmental Questionnaire

E. SUBMISSION DATES AND TIMES

Full Applications must be submitted no later than 5p.m. Eastern on the dates provided on the cover page of this FOA.

F. INTERGOVERNMENTAL REVIEW

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

G. FUNDING RESTRICTIONS

1. ALLOWABLE COSTS

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.

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

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

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

2. PRE-AWARD COSTS

Selectees may charge pre-award costs incurred within the 90-day period immediately preceding the effective date of the award. If the Selectee is a for-profit, non-profit, or University, prior

approval by the CO to incur pre-award costs is not required unless the costs are more than $25,000.

If the Selectee is a governmental entity, it must request prior approval from the CO to incur pre-award costs, regardless of the amount.

Pre-award costs cannot be incurred prior to the Selection Official signing the Selection Statement and Analysis. Pre-award costs can only be incurred if such costs would be reimburseable under the agreement if incurred after award.

Pre-Award expenditures are made at the Selectee's risk; EERE is not obligated to reimburse costs: (1) in the absence of appropriations; (2) if an award is not made; or (3) if an award is made for a lesser amount than the Selectee anticipated.

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

EERE does not guarantee or assume any obligation to reimburse costs where the Prime Recipient incurred the costs prior to receiving written authorization from the Contracting Officer. If the Applicant elects to undertake activities that may have an adverse effect on the environment or limit the choice of reasonable alternatives prior to receiving such written authorization from the Contracting Officer, the Applicant is doing so at risk of not receiving Federal funding and such costs may not be recognized as allowable cost match. Likewise, if a project is selected for negotiation of award, and the Prime Recipient elects to undertake activities that are not authorized for Federal funding by the Contracting Officer in advance of EERE completing a NEPA review, the Prime Recipient is doing so at risk of not receiving Federal Funding and such costs may not be recognized as allowable cost match. 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.

Please note foreign travel is not allowed.

3. PERFORMANCE OF WORK IN THE UNITED STATES

a. Requirement

All work performed under EERE Awards must be performed in the United States. This requirement does not apply to the purchase of supplies and equipment; however, the Recipient should make every effort to purchase supplies and equipment within the United States. The Recipient must flow down this requirement to its subrecipients.

b. Failure to Comply

If the Recipient fails to comply with the Performance of Work in the United States requirement, EERE may deny reimbursement for the work conducted outside the United States and such costs may not be recognized as allowable Recipient cost match. The Recipient is responsible should any work under this Award be performed outside the United States, absent a waiver, regardless of if the work is performed by the Recipient, subrecipients, vendors or other project partners.

c. Waiver

There may be limited circumstances where it is in the interest of the project to perform a portion of the work outside the United States. To seek a waiver of the Performance of Work in the Unites States requirement, the Recipient must submit a written waiver request to EERE, which includes the following information:

- The countries in which the work is proposed to be performed;
- A description of the work to proposed to performed outside the U.S.;
- Proposed budget of work to be performed; and
- The rationale for performing the work outside the U.S.

For the rationale, the Recipient must demonstrate to the satisfaction of EERE that a waiver would further the purposes of the FOA that the Award was selected under and is otherwise in the interests of EERE and the United States. EERE may require additional information before considering a waiver request. Save the waiver request(s) in a single PDF file titled "PerformanceofWork_Waiver".

4. CONSTRUCTION

EERE generally does not fund projects that involve major construction (i.e., construction of new buildings, major renovations, or additions to existing buildings). Recipients are required to obtain written authorization from the Contracting Officer before incurring any major construction costs.

5. EQUIPMENT AND SUPPLIES

To the greatest extent practicable, all equipment and products purchased with funds made available under this FOA should be American-made. This requirement does not apply to used or leased equipment.

Property disposition will be required at the end of a project if the property is no longer used by the Prime Recipient for the objectives of the project, and the fair market value of property exceeds $5,000. The rules for property disposition are set forth in the following sections of 10 CFR Part 600:

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

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.

V. APPLICATION REVIEW INFORMATION

Applicants working to prepare a successful application package are advised to review and all provisions outlined in items A through C in this section, and to respond fully to the State Energy Assessment and merit review criteria. Prior to a comprehensive merit evaluation, DOE will perform an initial review to determine that (1) the applicant is eligible for an award; (2) the information required by the announcement has been submitted; (3) all mandatory requirements are satisfied; and (4) the proposed project is responsive to the objectives of the funding opportunity announcement. If an application fails to meet these requirements, it may be deemed non-responsive and eliminated from full Merit Review.

A. TECHNICAL REVIEW CRITERIA

1. FULL APPLICATIONS

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

Area of Interest 1 – State Energy Planning

Criterion 1: Program Strategy and Plan Weight: [40%]

- Reasonableness, completeness and feasibility of the proposed approach to meet the objectives of the Funding Opportunity Announcement.
- Degree to which the proposed approach contains clear goals, metrics, tasks and methods, deliverables, schedule, and budget.
- Degree to which applicant's approach identifies and adequately addresses applicant's previous roadmapping experiences.
- Degree to which applicant's approach incorporates best practices.

Criterion 2: Potential Impact Weight: [30%]

- Degree to which the applicant demonstrates that the proposed approach will lead to continuing dialogue among state energy offices, state and local environmental agencies, public utility commissioners and utilities to address energy, environmental and economic issues.
- Degree to which the applicant will use analytical tools (modeling, etc.) to inform the development of the roadmap.
- Degree to which the proposed programs and activities will lead to the development of a plan that is likely to achieve increased levels of energy efficiency and renewable energy in the State/region, increases economic development opportunities associated with promoting energy efficiency and renewable energy, enhances the resiliency and reliability of energy supplies and the electric grid, complies with current and future environmental regulations, and addresses other economic pressures that will have an impact on the energy sector.
- Degree to which the proposal will focus on regional or multi-State (as opposed to State-specific) challenges and develop regional solutions and outlines a coherent proposal for such an approach.
- Degree to which the proposal focuses on creating mechanisms for accurately and rigorously measuring, tracking, and reporting energy savings and emissions reductions.

Criterion 3: Capabilities and Partnership Structure Weight: [30%]

- Appropriateness of the credentials, capabilities, and experience of the project team and key personnel.
- Degree to which the roles, responsibilities, and level of effort of each of the project team members has been identified, and to which the described management approach allows for successful management and implementation of the proposed project.
- Ability of the applicant to achieve cooperation among and between state and local environmental agencies and public utility commissioners; utilities; and nonprofits.
- Degree of demonstrated commitment of the project team (for example, letters of commitment/support from local and state government officials (especially state and local environment agencies and public utility commissions), utilities, educational institutions, non-profit organizations, and other critical participants).

Area of Interest 2 - Innovative Opportunities for Energy Efficiency and Renewable Energy Practices

Criterion 1: Program Strategy and Plan Weight: [40%]

- Reasonableness, completeness and feasibility of the proposed approach to meet the objectives of the Funding Opportunity Announcement.
- Degree to which the proposed approach contains clear goals, metrics, tasks and methods, deliverables, schedule, and budget.
- In the case of a proposal addressing more than one question, the degree to which the proposal presents an integrated approach to addressing these questions.
- Degree to which applicant's approach identifies and adequately addresses applicant's previous experiences that have impeded progress in the selected policy/program area(s).
- Degree to which applicant's approach incorporates best practices and continuous improvement feedback mechanisms.
- Degree of project sustainability that will result from policies.
- While not required, DOE will give additional weight to applications that include an Implementation Model Plan (see Appendix D for guidelines on developing an Implementation Model Plan).
- *For proposals regarding Category 3, Question 2 (Financing Retrofits for Public Facilities) ONLY*:
    - Extent to which hard-to-reach sectors are addressed.
- *For proposals regarding Category 3, Question 3 (Working with Local Governments and Others) ONLY*:
    - Extent to which hard-to-reach sectors and applications are addressed;
    - Extent to which the proposals will seek to leverage financing sources to implement projects; and
    - Degree of innovation in the proposal's approach. Examples of innovative approaches include:
        - Methodologies to overcome first-cost bias, e.g., life cycle cost analysis;

- Use of unconventional financing mechanisms (e.g., but not limited to QECBs, PPPs);
- Inclusion of local government projects in State financing mechanisms;
- Assistance to local governments in preparation of bankable project proposals to internal and/or external financing sources;
- Integration of local government water and energy planning/programs;
- Training and integration of local government line departments in addressing energy efficiency; and
- Development of local government climate mitigation plans.

- *For proposals regarding Category 4, Questions 1, 2 and 3 (Building Energy Performance Benchmarking and Disclosure, Whole Building Data and Data Access) ONLY:*
  - Extent to which proposal capitalizes on existing momentum in both specific local communities within the State's (or States') jurisdiction as well as Statewide (or Statewide in the applicant States).

Criterion 2: Potential Impact Weight: [30%]

- Degree to which success in moving from "No" to "Yes" in the selected policy/program area(s) will significantly increase energy savings through energy efficiency and/or increase renewable energy as a percent of total electricity generation and use in the State(s).
- Degree to which success in moving from "No" to "Yes" in the selected policy/program area(s), or success in expanding efforts in the selected policy/program area(s), will move state (or States) toward leadership in reducing electricity consumption, e.g., as measured by the ACEEE Scorecard.
- Degree to which the applicant demonstrates that the proposed approach can be replicated in or expanded to other markets, States or regions.
- *For proposals regarding Category 3, Question 2 (Financing Retrofits for Public Facilities) ONLY*:
  - The percent of market segment reached by the proposed policy/program.
- *For proposals regarding Category 4, Questions 1, 2 and 3 (Building Energy Performance Benchmarking and Disclosure, Whole Building Data and Data Access) ONLY:*
  - The percent of market segment reached by the proposed policy/program.

Criterion 3: Capabilities and Partnership Structure Weight: [30%]

- Appropriateness of the credentials, capabilities, and experience of the project team, key personnel and partners.
- Degree to which the roles, responsibilities, and level of effort of each of the project team members has been explained and fits the project, and to which the described management approach allows for successful management and implementation of the proposed project.

- Ability of the applicant to achieve cooperation among and between States, local governments, industry, commissioners, stakeholder groups and other relevant organizations.
- Degree of demonstrated commitment of the project team (for example, letters of commitment/support from local and state government officials, financial institutions, community colleges and/or universities, public utility commissions, energy service companies, program sponsors, non-profit organizations, and other critical participants).

B. STANDARDS FOR APPLICATION EVALUATION

Applications that are determined to be eligible will be evaluated in accordance with this FOA, by the standards set forth in EERE's Notice of Objective Merit Review Procedure (76 Fed. Reg. 17846, March 31, 2011) and the guidance provided in the "Department of Energy Merit Review Guide for Financial Assistance," which is available at: http://energy.gov/sites/prod/files/meritrev.pdf.

C. OTHER SELECTION FACTORS

1. PROGRAM POLICY FACTORS

In addition to the above criteria, the Selection Official may consider the following program policy factors in determining which Full Applications to select for award negotiations:

- The desire to select a mix of projects which achieves the strategic goals of EERE.

- The desire to select projects which represent a diverse portfolio of policies and strategies.

- The desire to select programs which maximize the geographic diversity (considering past awards and current applications).

- The desire to select for award a group of programs with a broad or specific geographic distribution because of the nature of the energy source, the type of programs envisioned, or limitations of past efforts.

- The extent that the prime applicant represents an underserved eligible entity under the FOA. For purposes of this FOA, underserved is defined as an eligible applicant that has not received DOE competitive funding in the previous three years (2011, 2012 and 2013) for projects identical or similar in nature to the project it proposed under this FOA.

D. Evaluation and Selection Process

1. Overview

The evaluation process consists of multiple phases that each include an initial eligibility review and a thorough technical review. Rigorous technical reviews are conducted by reviewers that are experts in the subject matter of the FOA. Ultimately, the Selection Official considers the recommendations of the reviewers, along with other considerations such as program policy factors, in determining which applications to select.

2. Selection

The Selection Official may consider the technical merit, the Federal Consensus Board's recommendations, program policy factors, and the amount of funds available in arriving at selections for this FOA.

VI. Award Administration Information

A. Anticipated Notice of Selection and Award Dates

EERE anticipates notifying applicants selected for negotiation of award by mid-September 2014 and making awards by the end of December 2014.

B. Award Notices

1. Rejected Submissions

Organizations whose applications are incomplete will be advised as promptly as possible. This notice will explain why the application was rejected.

2. Successful Applicants

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

The award negotiation process will take approximately 60 to 90 days. The Applicant must be responsive during award negotiations (e.g., provide requested documentation) and meet the negotiation deadlines. If the Applicant fails to do so or negotiations are otherwise unsuccessful, EERE will cancel award negotiations and rescind the Selection. EERE reserves the right to terminate award negotiations at any time for any reason.

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

3. 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.

4. UNSUCCESSFUL APPLICANTS

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

C. ADMINISTRATIVE AND NATIONAL POLICY REQUIREMENTS

1. REGISTRATION REQUIREMENTS

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

The registration requirements below could take several weeks to process and are necessary for a potential applicant to receive an award under this FOA. Therefore, all potential applicants lacking a DUNS number, or not yet registered with SAM or FedConnect should complete those registrations as soon as possible.

i. DUNS Number

Obtain a Dun and Bradstreet Data Universal Numbering System (DUNS) number (including the plus 4 extension, if applicable) at http://fedgov.dnb.com/webform.

ii. System for Award Management

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.

iii. Fedconnect

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.

iv. Grants.gov

Register in Grants.gov (http://www.grants.gov) to receive automatic updates when Amendments to this FOA are posted. However, please note Full Applications will be accepted through Grants.gov.

v. 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 Grants.gov and fedconnect.net, constitutes the authorized representative's approval and electronic signature.

2. AWARD ADMINISTRATIVE REQUIREMENTS

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

3. FOREIGN NATIONAL INVOLVEMENT

All applicants that ultimately enter into an award resulting from this FOA will be subject to the following requirement concerning foreign national involvement. Upon DOE's request, Prime Recipients must provide information to facilitate DOE's responsibilities associated with foreign national access to DOE sites, information, technologies, and equipment. Foreign national is defined as any person who was born outside the jurisdiction of the United States, is a citizen of a foreign government, and has not been naturalized under U.S. law. If the Prime Recipient or subrecipients, contractors or vendors under the award, anticipate utilizing a foreign national person in the performance of an award, the Prime Recipient is responsible for providing to the Contracting Officer specific information of the foreign national(s) to satisfy compliance with all of the requirements for access approval.

4. LIMITATIONS ON COMPENSATION COSTS

The annual compensation costs for an individual allowable under this Award are limited to $250,000 (i.e., $250,000 is the maximum amount that EERE will reimburse a Recipient for any one individual's annual compensation and EERE will not recognize such costs above $250,000 as Recipient cost match).

This limitation does not restrict the Recipient or its subrecipients from providing annual compensation to an individual that exceeds $250,000. However, any amount above $250,000 cannot be included in the total project costs (i.e., Federal share or Recipient cost match).

For purposes of this requirement only, the term "annual compensation costs" is defined to include the total amount of wages and salary paid to the employee, which have been approved by the Contracting Officer.

5. 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 Recipients must register with the new FFATA Subaward Reporting System database and report the required data on their first tier Subrecipients. Prime Recipients must report the executive compensation for their own executives as part of their registration profile in SAM.

6. NATIONAL POLICY REQUIREMENTS

The National Policy Assurances that are incorporated as a term and condition of award are located at: http://energy.gov/management/downloads/national-policy-assurances-be-incorporated-award-terms.

7. ENVIRONMENTAL REVIEW IN ACCORDANCE WITH NATIONAL ENVIRONMENTAL POLICY ACT (NEPA)

DOE has determined the following activities that are funded by DE-FOA-0001073 are categorically excluded from further NEPA review, absent extraordinary circumstances, cumulative impacts, or connected actions that may lead to significant impacts on the environment, or any inconsistency with "integral elements" (as contained in 10 C.F.R. Part 1021, Appendix B) as they relate to a particular project:

Area of Interest 1 - State Energy Planning:

- Assist State/regional energy planning by funding efforts to facilitate stakeholder and interagency discussions and related activities concerning (1) the future direction of the energy sector in the region/State, with emphasis on the electric power sector and natural gas supply and transport and (2) how energy efficiency and renewable energy fit into the vision for the future

Area of Interest 2 - Innovative Opportunities for Energy Efficiency and Renewable Energy Practices:

- Assist States in developing and implementing a plan to advance specific clean energy policies tailored to a State's specific resources and energy profiles.

The State is responsible for:

- Identifying and promptly notifying DOE of extraordinary circumstances, cumulative impacts, or connected actions that may lead to significant impacts on the environment, or any inconsistency with the "integral elements" (as contained in 10 C.F.R. Part 1021, Appendix B) as they relate to a particular Project; and
- Compliance with Section 106 of the National Historic Preservation Act (NHPA), as applicable.

This FOA-wide categorical exclusion does not apply if DOE funding would be used for:

- Ground-breaking activities;
- New construction;
- Installation of energy efficient retrofits; or
- Installation of onsite renewable energy technology that generate electricity from renewable resources.

For projects requiring additional NEPA review. States must complete the environmental questionnaire (https://www.eere-pmc.energy.gov/NEPA.asp). Recipients are restricted from taking any action using Federal funds, which would have an adverse effect on the environment or limit the choice of reasonable alternatives prior to DOE providing a final NEPA determination. If the recipient moves forward with activities that are not authorized for Federal funding by the DOE Contracting Officer in advance of the NEPA determination, the recipient is doing so at risk of not receiving Federal funding and such costs may not be recognized as allowable cost match.

8. APPLICANT REPRESENTATIONS AND CERTIFICATIONS

i. Lobbying Restrictions

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

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

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

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

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

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

For purposes of these representations, the following definitions apply:

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

9. STATEMENT OF FEDERAL STEWARDSHIP

EERE will exercise normal Federal stewardship in overseeing the project activities performed under EERE Awards. Stewardship Activities include, but are not limited to, conducting site visits; reviewing performance and financial reports, providing assistance and/or temporary intervention in usual circumstances to correct deficiencies that develop during the project; assuring compliance with terms and conditions; and reviewing technical performance after project completion to ensure that the project objectives have been accomplished.

10. STATEMENT OF SUBSTANTIAL INVOLVEMENT

EERE has substantial involvement in work performed under Awards made following this FOA. EERE does not limit its involvement to the administrative requirements of the Award. Instead, EERE has substantial involvement in the direction and redirection of the technical aspects of the project as a whole. Substantial involvement includes, but is not limited to, the following:

1. EERE may intervene in the conduct or performance of work under this Award for programmatic reasons. Intervention includes the interruption or modification of the conduct or performance of project activities.

2. EERE participates in major project decision-making processes.

3. ERRE may provide technical assistance to help States and their partners achieve the goals of their project.

4. EERE shares responsibility with the Recipient for the management, control, direction, and performance of the Project in the areas outlined below:

Area of Interest 1 - State Energy Planning: DOE involvement will include, but not be limited to, co-chairing stakeholder meetings with Awardees to provide insight and guidance; facilitating agreements amongst participating organizations; developing and validating overall program approaches; participating in project management planning activities; integrating the work effort to ensure that project results address critical system and programmatic goals established by DOE EERE, in coordination with the Awardee; and promoting and facilitating best practice sharing.

DOE Involvement:

- Participating in meetings or conference calls with States and their partners to provide insight and guidance in developing successful roadmapping strategies;
- Working with the States to facilitate partnerships amongst and between various government agencies at the state and local levels so that Awardees can take advantage of the national reach of DOE;
- Participating in project management planning activities to ensure DOE's program requirements and/or limitations are considered in performance of the work elements;
- May include providing technical assistance to help States and their partners achieve the goals of their project; and
- Integrating the work effort to ensure that project results address critical system and programmatic goals established by DOE EERE, in coordination with the State Energy Program. Additionally, DOE will coordinate with the States to ensure that the plans are represented in their yearly state energy plan submitted to DOE, as deemed appropriate.

Recipient Responsibilities:

- Performing the project activities supported by the award in accordance with the program/strategic plan, including providing the required personnel, facilities, equipment, supplies and services;
- Managing and controlling project activities in accordance with its own established processes and procedures to ensure tasks and subtasks are completed within schedule and budget constraints defined by the program/strategic goal;
- Notifying the DOE point of contact (POC) of all critical decision points and major meetings in sufficient time to allow the POC to participate in person or via the phone;
- Coordinating with DOE, and holding stakeholder meetings to develop successful road-mapping strategies;
- Implementing an approach to identify, analyze and respond to project risk that is commensurate with the complexity of the project;
- Defining and revising approaches and plans, submitting the plans to DOE for review and incorporating DOE comments;

- Coordinating related project activities with team members and external stakeholders to ensure effective integration of work elements (e.g., working collaboratively with DOE and other state awardees during project implementation, including attending periodic peer-to-peer meetings and participating in conference calls to share resources, barriers and solutions, as well as lessons learned); and
- Submitting progress reports, providing data, tools, other documentation and addressing DOE concerns and comments.

Area of Interest 2 – Opportunities for Innovative Energy Efficiency and Renewable Energy Practices: DOE involvement will include, but not be limited to, co-chairing stakeholder meetings with Awardees to provide insight and guidance; facilitating agreements amongst participating organizations; developing and validating overall program approaches that are replicable and appropriate to other areas of the country; participating in project management planning activities; integrating the work effort to ensure that project results address critical system and programmatic goals established by DOE EERE, in coordination with the Awardee; and promoting and facilitating best practice sharing.

DOE Involvement:

- Participating in meetings or conference calls with States and their partners to provide insight and guidance in developing successful strategies;
- Working with the States to facilitate partnerships amongst and between various government agencies at the state and local levels (in areas such as financing, marketing and outreach) so that Awardees can take advantage of the national reach of DOE;
- Working with awardees in the development of consistent best practices and implementation of those best practices in other similar programs, which will involve collaboration with other States in developing standardized tools, including contract templates, terms, methodologies, etc. as applicable to the project;
- Participating in project management planning activities to ensure DOE's program requirements and/or limitations are considered in performance of the work elements;
- May include providing technical assistance to help States and their partners achieve the goals of their project; and
- Integrating the work effort to ensure that project results address critical system and programmatic goals established by DOE EERE, in coordination with the State Energy Program. Additionally, DOE will coordinate with the States to ensure that the plans are represented in their yearly state energy plan submitted to DOE, as deemed appropriate.

Recipient Responsibilities:

- Performing the project activities supported by the award in accordance with the program/strategic plan, including providing the required personnel, facilities, equipment, supplies and services;
- Managing and controlling project activities in accordance with its own established processes and procedures to ensure tasks and subtasks are completed within schedule and budget constraints defined by the program/strategic goal;
- Notifying the DOE point of contact (POC) of all critical decision points and major meetings in sufficient time to allow the POC to participate in person or via the phone;
- Coordinating with DOE, and holding stakeholder meetings to develop successful road-mapping strategies;
- Implementing an approach to identify, analyze and respond to project risk that is commensurate with the complexity of the project;
- Defining and revising approaches and plans, submitting the plans to DOE for review and incorporating DOE comments;
- Coordinating related project activities with team members and external stakeholders to ensure effective integration of work elements (e.g., working collaboratively with DOE and other state awardees during project implementation, including attending periodic peer-to-peer meetings and participating in conference calls to share resources, barriers and solutions, as well as lessons learned); and
- Submitting progress reports, providing data, tools, other documentation and addressing DOE concerns and comments.

11. Intellectual Property Provisions

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

12. Reporting

Reporting requirements are identified on the Federal Assistance Reporting Checklist, DOE F 4600.2, attached to the award agreement. The checklist can be accessed at http://energy.gov/sites/prod/files/2013/05/f0/Attch_FA_RepReqChecklist_COMBINED_FINAL_4-23-13%20%283%29_0.pdf.

VII. QUESTIONS/AGENCY CONTACTS

Questions regarding the content of the announcement must be submitted through the FedConnect system. You must register with FedConnect to respond as an interested party to submit questions, and to review responses to questions. It is recommended that you register as soon after release of the FOA as possible to have the benefit of all responses. More information is available at:
https://www.fedconnect.net/Fedconnect/PublicPages/FedConnect_Ready_Set_Go.pdf

DOE will try to respond to a question within 3 business days, unless a similar question and answer have already been posted on the website.

Questions and comments concerning this FOA shall be submitted not later than 3 calendar days prior to the application due date. Questions submitted after that date may not allow the Government sufficient time to respond.

Questions relating to the registration process, system requirements, how an application form works, or the submittal process must be directed to Grants.gov at 1-800-518-4726 or support@grants.gov. The Grants.gov Helpdesk is available 7:00 a.m. to 9:00 p.m. Eastern Time. DOE cannot answer these questions.

VIII. OTHER INFORMATION

A. FOA MODIFICATIONS

Notices of any amendments to this announcement will be posted on Grants.gov. When you download the application at Grants.gov, you can register to receive notifications of changes through Grants.gov.
Notices of any amendments to this announcement will also be available in the FedConnect system. You can receive an email when an amendment or an announcement message is posted by registering with FedConnect as an interested party for this FOA. It is recommended that you register as soon after the release of the FOA as possible to ensure you receive timely notice of any amendments or other announcements. More information is available at http://www.fedconnect.net and
https://www.fedconnect.net/Fedconnect/PublicPages/FedConnect_Ready_Set_Go.pdf

B. INFORMATIONAL WEBINAR

EERE will conduct one informational webinar during the FOA process. It will be held after the initial FOA release but before the due date for the Full Application.

The purpose of this webinar is to give applicants a chance to ask questions about the FOA process generally. Attendance is not mandatory and will not positively or negatively impact the overall review of any Applicant submissions. As the webinar will be open to all Applicants who wish to participate, Applicants should refrain from asking questions or communicating information that would reveal confidential and/or proprietary information specific to their project. Specific dates for the webinar can be found on the cover page of the FOA.

C. 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.

D. COMMITMENT OF PUBLIC FUNDS

The Contracting Officer is the only individual who can make awards or commit the Government to the expenditure of public funds. A commitment by anyone other than the Contracting Officer, express or implied, is invalid.

E. TREATMENT OF APPLICATION INFORMATION

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

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

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

> Notice of Restriction on Disclosure and Use of Data:
> Pages [list applicable pages] of this document may contain trade secrets or commercial or financial information that is privileged or confidential,

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

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

In addition, each line or paragraph containing trade secrets or commercial or financial information that is privileged or confidential must be enclosed in brackets.

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.

Subject to the specific FOIA exemptions identified in 5 U.S.C. 552(b), all information submitted to EERE by a FOA applicant is subject to public release under the Freedom of Information Act, 5 U.S.C. §552, as amended by the OPEN Government Act of 2007, Pub. L. No. 110-175. It is the applicant's responsibility to review FOIA and its exemptions to understand (1) what information may be subject to public disclosure and (2) what information applicants submit to the Government that are protected by law. In some cases, DOE may be unable to make an independent determination regarding which information submitted by an applicant is releasable and which is protected by an exemption. In such cases, DOE will consult with the applicant, in accordance with 10 C.F.R. §1004.11, to solicit the applicant's views on how the information should be treated.

F. 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.

G. Notice Regarding Eligible/Ineligible Activities

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

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

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

I. 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.

J. Requirement for Full and Complete Disclosure

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

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

K. Retention of Submissions

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

L. 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 Patent Waiver: Under 42 U.S.C. § 5908, title to subject inventions vests in the U.S. Government and large businesses and foreign entities do not have the automatic right to elect to retain title to subject inventions. However, EERE may issue "class patent waivers" under which large businesses and foreign entities that meet certain stated requirements may elect to retain title to their subject inventions.

- Advance and Identified Waivers: Applicants may request a patent waiver that will cover subject inventions that may be invented under the award, in advance of or within 30 days after the effective date of the award. Even if an advance waiver is not requested or the request is denied, the recipient will have a continuing right under the award to request a waiver for identified inventions, i.e., individual subject inventions that are disclosed to EERE within the timeframes set forth in the award's intellectual property terms and conditions. Any patent waiver that may be granted is subject to certain terms and conditions in 10 CFR 784.

M. GOVERNMENT RIGHTS IN SUBJECT INVENTIONS

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

1. GOVERNMENT USE LICENSE

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

2. MARCH-IN RIGHTS

The U.S. Government retains march-in rights with respect to all subject inventions. Through "march-in rights," the Government may require a Prime Recipient or Subrecipient who has elected to retain title to a subject invention (or their assignees or exclusive licensees), to grant a

license for use of the invention to a third party. In addition, the Government may grant licenses for use of the subject invention when a Prime Recipient, Subrecipient, or their assignees and exclusive licensees refuse to do so.

DOE may exercise its march-in rights only if it determines that such action is necessary under any of the four following conditions:

1) 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;

2) The owner or licensee has not taken action to alleviate health or safety needs in a reasonably satisfied manner;

3) The owner has not met public use requirements specified by Federal statutes in a reasonably satisfied manner; or

4) The U.S. Manufacturing requirement has not been met.

- Any determination that march-in rights are warranted must follow a fact-finding process in which the recipient has certain rights to present evidence and witnesses, confront witnesses and appear with counsel and appeal any adverse decision. To date, DOE has never exercised its march-in rights to any subject inventions.

N. RIGHTS IN TECHNICAL DATA

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

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

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

O. COPYRIGHT

The Prime Recipient and Subrecipients may assert copyright in copyrightable data, such as software, first produced under the award without EERE approval. When copyright is asserted, the Government retains a paid-up nonexclusive, irrevocable worldwide license to reproduce,

prepare derivative works, distribute copies to the public, and to perform publicly and display publicly the copyrighted work. This license extends to contractors and others doing work on behalf of the Government.

P. PROTECTED PERSONALLY IDENTIFIABLE INFORMATION

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

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

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

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

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

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

- Social Security Numbers in any form
- Place of Birth associated with an individual
- Date of Birth associated with an individual
- Mother's maiden name associated with an individual
- Biometric record associated with an individual
- Fingerprint
- Iris scan
- DNA
- Medical history information associated with an individual
- Medical conditions, including history of disease
- Metric information, e.g. weight, height, blood pressure
- Criminal history associated with an individual
- Employment history and other employment information associated with an individual

- Ratings
- Disciplinary actions
- Performance elements and standards (or work expectations) are PII when they are so intertwined with performance appraisals that their disclosure would reveal an individual's performance appraisal
- Financial information associated with an individual
- Credit card numbers
- Bank account numbers
- Security clearance history or related information (not including actual clearances held)

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

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

Q. ANNUAL COMPLIANCE AUDITS

If an educational institution, non-profit organization, or state/local government is a Prime Recipient or Subrecipient and has expended greater than $500K of Federal funds in a respective

fiscal year, then an A-133 audit is required. For additional information, please refer to OMB Circular A-133 through the link below.
http://www.whitehouse.gov/sites/default/files/omb/assets/omb/circulars/a133/a133.pdf.

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

APPENDIX A – DEFINITIONS

"**Applicant**" means the legal entity or individual signing the Application. This entity or individual may be one organization or a single entity representing a group of organizations (such as a Consortium) that has chosen to submit a single Application in response to a FOA.

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

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

"**Award**" means the written documentation executed by a Contracting Officer, after an Applicant is selected, which contains the negotiated terms and conditions for providing Financial Assistance to the Applicant. A Financial Assistance Award may be a Grant, Cooperative Agreement, or Technology Investment Agreement.

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

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

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

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

"**Cooperative Agreement**" means a Financial Assistance instrument used by EERE to transfer money or property when the principal purpose of the transaction is to accomplish a public purpose of support or stimulation authorized by Federal statute, and Substantial Involvement (see definition below) is anticipated between EERE and the Applicant during the performance of the contemplated activity. Refer to 10 CFR 600.5 for additional information regarding cooperative agreements.

"**Cost Sharing**" means that portion of the project or program's costs not borne by the Federal Government. The percentage of Applicant Cost Match is to be applied to the Total Project Cost (i.e., the sum of Applicant plus EERE Cost Match) rather than to the EERE contribution alone. Cost sharing information can be found in the Code of Federal Regulations at 10 CFR 600.123 (non-profit and university), 600.224 (State and Local Governments), and 600.313 (for profit entities).

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

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

"**E-Find**" is a Grants.gov webpage where you can search for Federal Funding Opportunities in FedGrants. It can be found at www.grants.gov/web/grants/search-grants.html.

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

"**FedConnect**" is where federal agencies make awards via the web. It can be found at https://www.fedconnect.net/FedConnect/.

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

"**Funding Opportunity Announcement (FOA)**" is a publicly available document by which a Federal agency makes known its intentions to award discretionary grants or cooperative agreements, usually as a result of competition for funds. FOAs may be known as FOAs, notices of funding availability, solicitations, or other names depending on the agency and type of program. See 10 CFR 600.8 for more information.

"**Grant**" means a Financial Assistance instrument used by EERE to transfer money or property when the principal purpose of the transaction is to accomplish a public purpose of support or stimulation authorized by Federal statute, and no Substantial Involvement is anticipated between EERE and the Applicant during the performance of the contemplated activity.

"**Grants.gov**" is the "storefront" web portal which allows organizations to electronically find grant opportunities from all Federal grant-making agencies. Grants.gov is THE single access

point for over 900 grant programs offered by the 26 Federal grant-making agencies. It can be accessed at http://www.grants.gov.

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

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

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

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

"**Participant**" for purposes of this FOA only, means any entity, except the Applicant substantially involved in a Consortium, or other business arrangement (including all parties to the Application at any tier), responding to the FOA.

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

"**Project**" means the set of activities described in an Application, State plan, or other document that is approved by EERE for Financial Assistance (whether such Financial Assistance represents all or only a portion of the support necessary to carry out those activities).

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

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

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

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

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

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

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

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

"**Total Project Cost**" means all the funds to complete the effort proposed by the Applicant, including EERE funds plus all other funds that will be committed by the Applicant as Cost Match.

“**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 MATCH INFORMATION

Cost Sharing or Cost Matching

The terms "cost sharing" and "cost matching" are often used synonymously. Even the DOE Financial Assistance Regulations, 10 CFR Part 600, use both of the terms in the titles specific to regulations applicable to cost sharing. EERE almost always uses the term "cost sharing," as it conveys the concept that non-federal share is calculated as a percentage of the Total Project Cost. An exception is the State Energy Program Regulation (SEP), 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 Matching Is Calculated

As stated above, cost match is calculated as a percentage of the Federal dollars requested. The following is an example of how to calculate cost match amounts for a project with $1,000,000 in federal funds with a minimum 20% non-federal cost match requirement:

> Formula: Federal share requested ($) divided by cost match (%) = Non Federal Share ($)
> Example: $1,000,000 multiplied by 20% (.2) = $200,000 or Amount of Cost Match Required

What Qualifies For Cost Matching

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

The rules associated with what is allowable as cost match 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 match. Only the value for the five years of donated maintenance that corresponds to the project period is allowable and may be counted as cost match.

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

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

DOE Financial Assistance Rules (10 CFR 600)

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

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

(1) They are verifiable from the recipient's records.

(2) They are not included as contributions for any other federally-assisted project or program.

(3) They are necessary and reasonable for proper and efficient accomplishment of project or program objectives.

(4) They are allowable under the cost principles applicable to the type of entity incurring the cost as follows:

a. For-profit organizations. Allowability of costs incurred by for-profit organizations and those nonprofit organizations listed in Attachment C to OMB Circular A–122 is determined in accordance with the for-profit cost principles in 48 CFR Part 31 in the Federal Acquisition Regulation, except that patent prosecution costs are

not allowable unless specifically authorized in the award document. (v) Commercial Organizations. FAR Subpart 31.2—Contracts with Commercial Organizations

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

i. Institutions of higher education. Allowability is determined in accordance with: 2 CFR 220 Cost Principles for Educational Institutions

ii. Other nonprofit organizations. Allowability is determined in accordance with: 2 CFR 230 Cost Principles for Nonprofit Organizations

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

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

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

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

(B) Valuing and documenting contributions

- 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.

- 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.

- 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.

- 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 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.

- 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.

The basis for determining the valuation for personal services and property must be documented

APPENDIX C –BUDGET JUSTIFICATION

Using the "Object Class Categories" in the SF-424A Budget form and the PMC123.1 Budget Justification form, justify the costs in each category for each budget period of the project.

The SF424A Budget form and the PMC 123.1 Budget Justification form must include both Federal (DOE), and Non-Federal (cost match) funds, thereby reflecting TOTAL PROJECT COSTS proposed. Below is further detail that may help applicants in completing these forms.

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

All costs incurred by the Applicant's sub-recipients, vendors, contractors, and consultants should be entered only in section 6, Contractual. All other sections are for the costs of the Applicant only.

1. PERSONNEL

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

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

2. FRINGE

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

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

3. TRAVEL

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

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

4. EQUIPMENT

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

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

5. SUPPLIES

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

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

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

6. CONTRACTUAL

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

Sub-recipients (partners, sub-awardees):
For each sub-recipient with total project costs of $100,000 or more, a separate SF-424A budget and budget justification form must be submitted. For sub-recipients with estimated

costs less than $100,000, provide what Statement of Project Objectives task(s) are being performed, the purpose/need for the effort, and a basis of the estimated costs that is considered sufficient for DOE evaluation.

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

Sub-Recipient Name/Organization	Purpose/Tasks in SOPO	Budget Period 1 Costs	Budget Period 2 Costs	Budget Period 3 Costs	Project Total
EXAMPLE ONLY!!! XYZ Corp.	Partner to develop optimal fresnel lens for Gen 2 product - Task 2.4	$48,000	$32,000	$16,000	$96,000
	Sub-total	$48,000	$32,000	$16,000	$96,000
Vendor Name/Organization	Product or Service, Purpose/Need and Basis of Cost (Provide additional support at bottom of page as needed)	Budget Period 1 Costs	Budget Period 2 Costs	Budget Period 3 Costs	Project Total
EXAMPLE ONLY!!! ABC Corp.	Vendor for developing custom robotics to perform lens inspection, alignment, and placement (Task 4). Required for expanding CPV module mfg. capacity. Cost is from competitive quotes.	$32,900	$86,500		$119,400
	Sub-total	$32,900	$86,500	$0	$119,400
Total Contractual		$80,900	$118,500	$16,000	$215,400

7. CONSTRUCTION

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

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

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

8. OTHER DIRECT COSTS

Other direct costs are direct cost items required for the project which do not fit clearly into

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

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

9. INDIRECT COSTS

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

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

10. COST MATCH

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

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

Funds from other Federal sources MAY NOT be counted as cost match. Non-Federal sources include private, state or local Government, or any source not originally derived from Federal funds.

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

APPENDIX D - IMPLEMENTATION MODEL PLAN

An Implementation Model Plan explains how work performed under an EERE award will be shared. More specifically, the implementation model identifies a solution to a key barrier to energy efficiency deployment and provides a step-by-step detailed approach your organization took to create a replicable and sustainable solution, including the development of or changes to policies, processes, outreach efforts, and tools/resources. The following framework is a tool to help you define and develop your Implementation Model Plan. Critical components of the model include the approach, execution, outcomes, and measuring success. Please consider the following questions as you think through your organization's implementation model.

1. OVERVIEW

1. What was your organization's goal or desired outcome(s)?

2. What were the barriers to achieving your organization's goal or desired outcome(s)?

3. What was your solution to overcoming this barrier (ultimately leading towards using energy efficiency as a resource in your state)? This is not intended to be an exhaustive explanation, but rather a high-level summary.

2. APPROACH

Please provide documentation of any policies, process changes, outreach efforts, or tools /resources that were developed by your organization as part of this approach.

Your approach may encompass one or any combination of the following areas:

- Policies (Changes that impact Stakeholder "Buy-in" and participation)
- Process (Changes in how your organization is working to reach its goals)
- Outreach Efforts (Initiatives to garner support, build consensus, educate, or market your approach)
- Tools/Resources (Specific materials that were used or created to meet your desired outcome)

3. EXECUTION

Please provide the approximate timeline, estimated costs/budget, and required staff/outside support to execute each aspect of your approach highlighted in the previous section.

1. Specifically, what was the:
- Timeline to develop/create and execute the policies, process changes, outreach efforts or tools/resources identified above?
- Estimated cost/budget to develop/create and execute the policies, process, outreach efforts, or tools/resources identified above?
- Staff or outside support required develop/create and executing the policies, process, outreach efforts, or tools/resources identified above?

2. What were the pre-requisites for successful execution of the approach described above? (e.g. stakeholder consensus)

4. MEASURING PROGRESS AND SUCCESS

1. What are the milestones and key success metrics for this approach that describe your progress?

2. How is your organization assessing these metrics? Please share any data collection tools or templates that may be essential to track the success of this approach.

3. What resources, if any, are needed to make this assessment (e.g., staff, funding, other?)

5. OUTCOMES

What are the outcomes of your solution to using energy efficiency as a resource and thereby increasing investments in cost effective energy efficiency in your State.