Department of Energy (DOE) Office of Energy Efficiency and Renewable Energy (EERE)

STATE ENERGY PROGRAM 2017 COMPETITIVE AWARDS

Funding Opportunity Announcement (FOA) Number: DE-FOA-0001644

FOA Type: Initial

CFDA Number: 81.119

FOA Issue Date:	October 16, 2017
Informational Webinars:	October 24, 2017 –
	2pm - 3:30pm ET
	October 25, 2017 –
	4pm – 5:30pm ET
	October 26, 4pm –
	5:30pm ET
Submission Deadline for Applications:	January 11, 2018
	5:00pm ET
Expected Date for EERE Selection Notifications:	April 27, 2018
Expected Timeframe for Award Negotiations	April 28, 2018 –
	December 13, 2018

- To apply to this FOA, applicants must register with and submit application materials through EERE Exchange at https://eere-exchange.energy.gov, EERE's online application portal.
- Applicants must designate primary and backup points-of-contact in EERE Exchange with whom EERE will communicate to conduct award negotiations. If an application is selected for award¹ 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.

¹ Awards are defined as "financial assistance that provides support or stimulation to accomplish a public purpose..... The term does not include: technical assistance, which provides services instead of money; other assistance in the form of loans, loan guarantees, interest subsidies, or insurance; direct payments of any kind to individuals; and contracts which are required to be entered into and administered under federal procurement laws and regulations" (www.grants.gov).

Table of Contents

I.	Funding Opportunity Description	1
Α	. Description/Background	1
В	. Topic Areas/Technical Areas of Interest	2
С	. Applications Specifically Not of Interest	9
D	. Authorizing Statutes	9
II.	Award Information	10
Α	. Award Overview	10
	i. Estimated Funding	
	ii. Period of Performance	
	iii. New Applications Only	
В	· · · · · · · · · · · · · · · · · · ·	
	i. Cooperative Agreements	
	ii. Funding Agreements with FFRDCs	
III.	Eligibility Information	11
Α	. Eligible Applicants	12
В	. Cost Match	12
	i. Legal Responsibility	12
	ii. Cost Match Allocation	13
	iii. Cost Match Types and Allowability	13
	iv. Cost Match Contributions by FFRDCs	14
	v. Cost Match Verification	14
	vi. Cost Match Payment	15
С	. Compliance Criteria	15
D	. Responsiveness Criteria	15
Ε	. Other Eligibility Requirements	15
	i. Requirements for DOE/NNSA and non-DOE/NNSA Federally Funded Research and Development	
	Centers Included as a Subrecipient	15
F.	Limitation on Number of Applications Eligible for Review	16
G	. Questions Regarding Eligibility	17
IV.	Application and Submission Information	17
Α	. Application Process	17
	i. Additional Information on EERE Exchange	18
В		19
С	. Content and Form of the Application	19
	i. Project Plan	22
	ii. SF-424 Application for Federal Assistance	25
	iii. Budget Justification Workbook (EERE 335)	25
	iv. Summary/Abstract for Public Release	25
	v. Subaward Budget Justification (EERE 335) (if applicable)	26
	vi. Budget for DOE/NNSA FFRDC (if applicable)	26
	vii. Authorization for non-DOE/NNSA or DOE/NNSA FFRDCs (if applicable)	26
	viii. SF-LLL: Disclosure of Lobbying Activities (if applicable)	
	ix. Resume File	
	x. Letters of Commitment	28

	xi.	2017 State Energy Assessment(s) (SEA)	29
	xii.	Statements of Support from Key Partners	29
D		ost-Award Information Requests	
Ε.	D	un and Bradstreet Universal Numbering System Number and System for Award Management	30
F.	S	ubmission Dates and Times	31
G	. Ir	ntergovernmental Review	31
H	. F	unding Restrictions	31
	i.	Allowable Costs	
	ii.	Pre-Award Costs	
	iii.	Performance of Work in the United States	
	iv.	Construction	
	٧.	Foreign Travel	
	vi.	Equipment and Supplies	
	vii.	Lobbying	
	viii.	Risk Assessment	
	ix.	Invoice Review and Approval	34
V.	App	lication Review Information	35
A		1erit Review Criteria	35
В.	S	tandards for Application Evaluation	40
C.	C	ther Selection Factors	41
	i.	Program Policy Factors	41
D	. Е	valuation and Selection Process	41
	i.	Overview	
	ii.	Recipient Integrity and Performance Matters	
	iii.	Selection	
Ε.	Д	nticipated Notice of Selection and Award Dates	42
VI.	Awa	rd Administration Information	42
A.	. A	ward Notices	42
	i.	Ineligible Submissions	42
	ii.	Application Notifications	42
	iii.	Successful Applicants	
	iv.	Alternate Selection Determinations	43
	٧.	Unsuccessful Applicants	43
В.	Д	dministrative and National Policy Requirements	
	i.	Registration Requirements	
	ii.	Award Administrative Requirements	
	iii.	Foreign National Access to DOE Sites	
	iv.	Subaward and Executive Reporting	
	٧.	National Policy Requirements	
	vi.	Environmental Review in Accordance with National Environmental Policy Act (NEPA)	
	vii.	Applicant Representations and Certifications	
	viii.	Statement of Federal Stewardship	
	ix.	Statement of Substantial Involvement	
	х.	Intellectual Property Provisions	
	xi.	Reporting	
	xii.	Conference Spending	49
VII.	Que	stions/Agency Contacts	50
\/III	Oth	or Information	E

A.	FOA Modifications	50
В.	Informational Webinar	50
C.	Government Right to Reject or Negotiate	51
D.	Commitment of Public Funds	51
E.	Treatment of Application Information	
F.	Evaluation and Administration by Non-Federal Personnel	52
G.	Notice Regarding Eligible/Ineligible Activities	52
Н.	Notice of Right to Conduct a Review of Financial Capability	52
l.	Notice of Potential Disclosure Under Freedom of Information Act (FOIA)	52
J.	Requirement for Full and Complete Disclosure	53
K.	Retention of Submissions	53
L.	Rights in Technical Data	53
M.	Copyright	
N.	Personally Identifiable Information (PII)	54
Ο.	Annual Compliance Audits	54
Appen	dix A – Cost Match Information	56
Appen	dix B – Roadmapping - Area of Interest 1	60
Appen	dix C – Implementation Models - Area of Interest 2	63
Appen	dix D - Executive Summary- Area of Interest 3	64
Appen	dix E – Work Breakdown Structure	65
Appen	dix F – Questions for Area of Interest 2	66
Appen	dix G - Working with Local Governments to Advance Energy Resilience and EE/RE	72

I. Funding Opportunity Description

A. Description/Background

Description

The Office of Energy Efficiency and Renewable Energy's (EERE) State Energy Program (SEP) seeks applications to advance policies, programs, and market strategies that advance affordable and reliable energy to promote economic growth and energy security for the nation. This competitive Funding Opportunity Announcement (FOA) allows States (defined as the 50 states, the District of Columbia and five territories) to compete for funding designed to meet SEP's goals to enhance energy security, advance state-led energy initiatives, and maximize the benefits of decreasing energy waste. Specifically, this FOA includes three Areas of Interest: State Energy Planning, Innovative Opportunities for Energy Efficiency and Renewable Energy (EE/RE) Practices, and Technical Assistance to Advance SEP Formula Grant EE/RE Activities. These areas are described in greater detail below.

Background

The U.S. Department of Energy's SEP provides funding and technical assistance to states, territories, and the District of Columbia to enhance energy security, advance state-led energy initiatives, and maximize the benefits of decreasing energy waste. SEP emphasizes the state's role as the decision maker and administrator for program activities within the state that are tailored to their unique resources, delivery capacity, and energy goals. These state-led initatives improve energy affordability for all U.S. citizens by planning and implementing strategies to meet future energy needs in cost-effective ways, and by decreasing utility bills through efforts to reduce waste in comfortably heating, cooling, and lighting homes and other buildings. State-led efforts also increase resilience by enhancing grid reliability through energy savings technology or distributed generation that, for example, could serve as an operational microgrid during times of emergency.

Congress authorized DOE to allow for formula and competitive grants and/or cooperative agreements to the States under SEP.

B. Topic Areas/Technical Areas of Interest

Area of Interest 1 - State Energy Planning

Number of Projects	Up to 5
Potential Award Funding	Up to \$2,500,000
Awards Range	Approximately \$200,000 to \$300,000
	for single State applications;
	approximately \$500,000 for multi-state
	applications that include other State(s)
	as Key Partners ²
Award Duration	Up to 24 months
Required Deliverable	Road Map (See Appendix B)

State energy plans help improve energy affordability by strategically planning for the future energy needs to be met in cost-effective ways. State plans also address energy infrastructure needs and ways to minimize burdens on the nation's energy infrastructure, thus increasing resilience. Under Area of Interest 1, DOE seeks 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 State/region, with emphasis on the electric power sector and natural gas supply and transport and (2) how EE/RE fit into an affordable and reliable energy vision for the future. These discussions will help States explore and enhance economic development and energy affordability opportunities associated with promoting EE/RE as options for consumers, 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 policies and other economic pressures that will have an impact on the energy sector, and conduct related activities. DOE encourages Applicants to consider distribution and transmission related policies at the State/regional level in scoping their state energy planning projects, but states should not make transmission the primary focus of the proposal.

The review criteria for Area of Interest 1 will focus on (1) Program Strategy and Plan, (2) Potential Impact on affordability, reliability and resiliency, (3) Energy Impact and (4) Capabilities and Partnership Structure.

Please note that all applicants and State Energy Office Key Partners are required to

² Key Partners are defined as entities that will significantly contribute to project tasks and overall project success with significant roles, responsibilities, and tasks clearly defined in the Work Breakdown Structure of the Project Plan. See Section IV. C. xii of FOA.

complete and submit the full 2017 State Energy Assessment (SEA). The SEA is downloadable from EERE Exchange under "Required Application Documents" (https://eere-exchange.energy.gov).

Area of Interest 2 – Innovative Opportunities for Energy Efficiency and Renewable Energy Practices that Improve Energy Affordability, Reliability and Resiliency

Number of Projects	Up to 12
Potential Award Funding	Up to \$2,500,000
Awards Range	Approximately \$200,000 to \$300,000 for single State applications; approximately \$500,000 for multi-state applications that include other State(s) as Key Partners
Award Duration	Up to 36 months
Required Deliverable	Implementation Model (See Appendix C)

Under Area of Interest 2, DOE will offer funding to States for the development of new, or the expansion of existing, programs or policies that advance the affordability and reliability of EE/RE within the following four <u>Topics of Emphasis</u>:

- 1. Enabling Financing Mechanisms for Public or Private Sector Energy Investment.
- 2. Deploying Energy Performance Benchmarking and Disclosure.
- 3. Standardizing Evaluation, Measurement & Verification (EM&V) Processes.
- 4. Partnering with Local Governments.

DOE is interested in proposals that promote strategies or policies that represent innovative and replicable models of action to tackle current barriers in the EE/RE marketplace. Of particular interest are proposals that address energy affordability, reliability, and resilience. For example, states may wish to work with electric utilities to create or expand programs that target low to moderate income customers in order to decrease the energy burden of these customers as an energy affordability strategy. Projects that make distributed generation more affordable could enable continuous operation of communities after extreme weather or other events that could orhave already disrupted their power systems, thereby creating a more energy resilient community whenever such extreme weather events occur. States may wish to pursue projects with local governments that improve the energy efficiency and enhance both the energy affordability and reliability of schools, hospitals or other community infrastructure, as lowering

energy demand reduces the need for higher cost peak electricity and reduces cost for all electricity consumers.

Of note, this year DOE has added a subfocus in Topic of Emphasis #4 (Partnering with Local Governments), under which states may submit proposals to partner with local governments to advance energy resilience. Per federal regulations, project funds (federal funds and matching funds) cannot be used to 1) implement specific project-level energy efficiency retrofits or upgrades or 2) be used to directly capitalize financing programs. However, project funds can be used to design and develop programs that could lead to the implementation of retrofits using non-award funds and/or could be used to develop the framework for financing programs.

The following Topics of Emphasis are based on questions in Appendix F. In their proposals, States should identify which specific policies they will work to advance, including, but not limited to:

- Changing a "No" answer to a "Yes" for one or more of the questions; or,
- Expanding the applicability, or enhancing the effectiveness or scope of an existing State regulation, program or policy.

States may choose to address a single Topic of Emphasis or submit proposals that address multiple Topics of Emphasis. Proposals that address multiple Topics of Emphasis will also be scored on how well the topics are integrated into a uniform policy or program strategy leading to greater energy affordability, reliability and resiliency. However, no additional weighting will be given to an application solely based on a state addressing multiple Topics of Emphasis.

The merit review criteria for Area of Interest 2 will focus on (1) Program Strategy and Plan, (2) Potential Impact on affordability, reliability and resiliency, (3) Energy Impact and (4) Capabilities and Partnership Structure.

Please note that all applicants and State Key Partners are required to complete and submit the full SEA. The SEA is downloadable from EERE Exchange under "Required Application Documents" (https://eere-exchange.energy.gov).

TOPIC OF EMPHASIS 1: Enabling Financing Mechanisms for Public or Private Sector Energy Investment

Under Topic of Emphasis 1, applicants may submit proposals identifying strategies to develop or expand an energy-specific financial policy or initiative to incent public or private EE/RE investment. More specifically, applicants may propose to address one or more of the following subtopics and should discuss how the strategies improve energy reliability, affordability and/or resiliency:

- a) Design templates for the creation or improvement of financing programs; including energy savings performance contracts (ESPC), a revolving loan fund, a credit enhancement (e.g., loan loss reserve), qualified energy conservation bonds (QECBs) or other bonds for which proceeds can be used on retrofit investments, lease purchase agreements, and/or an energy investment partnership (e.g., green bank);
- b) Develop and implement financing policies to incent private sector EE/RE investments by enacting legislation in support of commercial property assessed clean energy (PACE), an energy loan fund, on-bill financing, residential PACE, or credit enhancements; or
- c) Develop policies and programs that support self-sustaining ESPC programs, including developing legislation that authorizes the use of a centralized State ESPC program for public buildings and infrastructure, developing a fee-based ESPC program, or developing a centralized ESPC support program that provides guidance or standardized contracts and procedures.

The questions covered by Topic of Emphasis 1 are described in Appendix F.

TOPIC OF EMPHASIS 2: Deploying Energy Performance Benchmarking and Disclosure

Under Topic of Emphasis 2, applicants may submit proposals identifying strategies to develop or expand laws or regulations, executive orders, utility data collection processes or energy use data exchange mechanisms related to benchmarking and disclosure of energy use in public or private buildings. More specifically, applicants may propose to address one or more of the following subtopics and should discuss how the strategies improve energy reliability, affordability and/or resiliency:

- a) Develop and implement mechanisms such that all commercial buildings of a certain size will be benchmarked and the data made publicly available or work with local governments in your State to adopt such mechanisms;
- b) Develop and implement mechanisms such that homeowners disclose energy performance data on their homes at key transaction points (e.g., time of sale);

- Work with utility regulators to define what constitutes sufficiently aggregated customer energy usage data that can be given to building owners while addressing privacy concerns;
- d) Develop and implement a mechanism for investor-owned utilities (IOUs) to 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;
- e) Develop and implement energy use data exchange mechanisms by utilizing standardized benchmarking platforms (e.g., Energy Star Portfolio Manager); and,
- f) Work with IOUs to develop and implement a platform where customers and/or third party service providers can access energy usage data in a standardized format (e.g., Green Button).

The questions covered by Topic of Emphasis 2 are described in Appendix F.

TOPIC OF EMPHASIS 3: Standardizing Evaluation Measurement & Verification (EM&V) Processes

Under Topic of Emphasis 3, applicants may submit proposals identifying strategies to develop or expand processes related to EM&V practices to determine energy and emissions reductions from ratepayer and/or non-ratepayer funded efficiency programs. More specifically, applicants may propose to address the following subtopic and should discuss how the strategies will help validate improved energy reliability, affordability and/or resiliency:

Implementing an EM&V process for ratepayer-funded programs and/or non-ratepayer-funded programs that is:

- a. Transparent and driven by an independent, third-party evaluator;
- b. Transparent and driven by commonly accepted protocols or methodologies (e.g., the Uniform Methods Project); and/or,
- c. Transparent, collaborative, and driven by a regional group that works together to determine savings.

The questions covered by Topic of Emphasis 3 are described in Appendix F.

TOPIC OF EMPHASIS 4: Partnering with Local Governments

Under Topic of Emphasis 4, applicants may submit proposals identifying strategies to develop or expand policies and programs to assist local governments to design and implement internal and/or public facing programs to make EE/RE more affordable, reliable, and resilient. More specifically, applicants may propose

Questions about this FOA? Email <u>SEPCompetitive2017@ee.doe.gov</u>. Problems with EERE Exchange? Email <u>EERE-ExchangeSupport@hq.doe.gov</u>. Include FOA name and number in subject line. strategies that lead to the development of services that address one or more of the following subtopics and should discuss how the strategies improve energy reliability, affordability and/or resiliency:

- a) Provide local governments with financial support to implement internal and/or publicly facing programs that make EE/RE more affordable, reliable, or resilient;
- b) Provide local governments with a defined suite of comprehensive technical assistance resources;
- c) Support local governments in targeting underserved sectors (multifamily, small business, community centers, wastewater treatment facilities, hospitals, schools, rural communities, etc.) for energy efficiency improvements through the mechanisms described in a) and b) and/or;
- d) Work with local governments to advance the affordability, reliability, and resilience of EE/RE. (See Appendix G for further details on this subtopic)

The questions covered by Topic of Emphasis 4 are described in Appendix F.

Area of Interest 3 - Technical Assistance to Advance SEP Formula Grant EE/RE Activities

Recipient cost match is NOT required for Area of Interest 3.

Number of Projects	Up to 10
Potential Award Funding	Up to \$1,000,000
Awards Range	Up to \$100,000
Award duration	Up to 24 months
Required Deliverable	Executive Summary (see Appendix D)

Under Area of Interest 3, DOE will offer funding to states for technical assistance activities that maximize the impact of their formula grant funded work related to EE/RE for purposes of enhancing energy affordability, reliability and resiliency. In order to better serve all states, Area of Interest 3 is open to only those states that have not been selected to receive a competitive award in the last four years (FY13-FY16). Eligible states include: AS, AZ, CA, DE, DC, GA, GU, IN, KS, LA, MP, NV, NJ, ND, OH, OK, PA, PR, SD, UT, VI, and WY.

Under Area of Interest 3, states may request technical assistance related to increasing the impact or expanding the scope of an existing area of their formula work, **OR** they may request technical assistance to explore new areas for possible inclusion in future annual formula award applications. If tied to an existing area of formula work, states must show how the technical assistance will lead to greater

impact of the project as conceived while providing assurance that current work will be able to continue as planned and is not dependent on the technical assistance. If the State has already identified its preferred technical assistance provider/s, the provider/s should be listed in the application, and can include DOE-funded national laboratories. However, DOE recognizes that states may be unable to list potential sub-recipients prior to selection due to their procurement rules. If that is the case, states should describe the type of technical assistance provider the State seeks and what the scope of work will entail.

Please note that technical assistance activities must be related to the expansion of existing, or adoption of new formula work specific to EE/RE policies and programs. Travel and training expenses are capped at 15% of federal funds. Technical assistance proposals can be related to any activity allowable within SEP formula award guidelines and can include but are not limited to:

- 1. Development of program level guidance documents;
- 2. Energy market assessments;
- 3. Technical analysis of new or existing EE/RE programs;
- 4. Expansion of EE/RE programs to underserved sectors (multifamily, small business, community centers, hospitals, schools, rural communities, etc.)
- 5. Facility benchmarking and auditing;
- 6. Development of facility energy load monitoring practices;
- 7. Evaluation, measurement and verification;
- 8. Development of policies to promote energy efficient new construction standards (such as LEED or stretch codes);
- 9. Development of retro commissioning practices;
- 10. Resource planning and scheduling; and/or,
- 11. Development of long term energy plans.

Area of Interest 3 is designed to assist states with existing or new work in their SEP formula awards. Accordingly, DOE will assess the value of the proposed project only, and will not use the state's current formula work as a basis for determining the value of the proposed project.

The merit review criteria for Area of Interest 3 will focus on 1) Program Strategy and Plan, 2) Potential Impact on affordability, reliability and resiliency, 3) Capabilities and Partnership Structure.

Recipient cost match is NOT required for Area of Interest 3 awards.

Please note that all Area of Interest 3 applicants are required to complete and submit the full SEA. The SEA is downloadable from EERE Exchange under "Required Application Documents" (https://eere-exchange.energy.gov).

Questions about this FOA? Email <u>SEPCompetitive2017@ee.doe.gov</u>. Problems with EERE Exchange? Email <u>EERE-ExchangeSupport@hq.doe.gov</u>. Include FOA name and number in subject line.

C. Applications Specifically Not of Interest

Applications that fall outside the parameters specified here and in Section I.B of the FOA will be deemed nonresponsive and will not be reviewed or considered (See Section III.D of the FOA). Proposals specifically not of interest include:

- a) Proposals that seek to support or expand state Renewable Portfolio Standards;
- b) Construction, such as construction of mass transit systems and exclusive bus lanes, or for construction or repair of buildings or structures;
- c) Purchase of land, a building, or a structure or any interest therein;
- d) Subsidizing fares for public transportation;
- e) Subsidizing utility rate demonstrations or State tax credits for energy conservation or renewable energy measures;
- f) The purchase of equipment to conduct research, development or demonstration of EE/RE technologies not commercially available;
- g) Loan guarantees or loan forgiveness (10 CFR section 420.18);
- h) Programs that include government assets other than buildings and facilities, such as fleets;
- i) Programs targeted at making new construction energy-efficient;*
- j) Programs that use award funds to implement specific project-level energy efficiency retrofits and upgrades;
- k) Programs that use project funds to capitalize financing programs;
- Proposals that establish new voluntary national energy efficiency (EE) registries
 to increase transparency and standardize the methodology to track and report
 projected and realized energy savings.
- m) Proposals in which improving the transmission of electricity or natural gas is the primary focus.

D. Authorizing Statutes

The programmatic authorizing statute is 42 USC §7101; 42 USC §6321.

Awards made under this announcement will fall under the purview of 2 CFR Part 200 as amended by 2 CFR Part 910.

^{*}Please note that technical assistance related to the development of energy efficient new construction standards (such as LEED or stretch codes) as related to SEP formula grant work is allowable under Area of Interest 3.

II. Award Information

A. Award Overview

i. Estimated Funding

EERE expects to make up to \$5,000,000 of Federal funding available for new awards under this FOA, subject to the availability of appropriated funds. EERE anticipates making up to approximately 25 awards under this FOA. EERE may issue one, multiple, or no awards. Award amounts may vary, as shown below.

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 five awards in this topic area with award amounts ranging from approximately \$200,000 to \$300,000 for single State applications and up to \$500,000 for multi-state applications that include one or more other States as Key Partners.

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

EERE may issue up to twelve awards in this topic area with award amounts ranging from approximately \$200,000 to \$300,000 for single State applications; and up to \$500,000 for multi-state applications that include one or more other States as Key Partners.

Area of Interest 3 - Technical Assistance to Advance SEP Formula Grant EE/RE Activities

EERE may issue up to ten awards in this topic area with award amounts up to \$100,000.

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.

ii. Period of Performance

EERE anticipates making awards that will run up to 24 months in length for Area of Interest 1, 24 to 36 months for Area of Interest 2, and 24 months for Area of Interest 3.

iii. New Applications Only

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

B. EERE Funding Agreements

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

i. Cooperative Agreements

EERE generally uses Cooperative Agreements to provide financial and other support to Prime Recipients.³

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.B.ix of the FOA for more information on what substantial involvement may involve.

ii. Funding Agreements with FFRDCs

In some cases, Federally Funded Research and Development Centers (FFRDC) are funded independently of the remainder of the Project Team. The FFRDC then executes an agreement with any non-FFRDC Project Team members to arrange work structure, project execution, and any other matters. Regardless of these arrangements, the entity that applied as the Prime Recipient for the project will remain the Prime Recipient for the project.

III. Eligibility Information

To be considered for substantive evaluation, an applicant's submission must meet the criteria set forth below. If the application does not meet these initial requirements, it will be considered non-responsive, removed from further evaluation, and ineligible for any award.

³ The terms "Prime Recipient" and "Recipient" will be defined as a non-Federal entity that receives a Federal award directly from a Federal awarding agency to carry out an activity under a Federal program. The term recipient does not include subrecipients. See 2 CFR 200 §200.86 and §200.69 Non-Federal entity recipient."

A. Eligible Applicants

State entities are eligible to apply for funding as a Prime Recipient or participate as a Subrecipient.⁴ In accordance with 2 CFR Part 910.126(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 under Areas of Interest 1, 2 and 3 is restricted to the 50 States, the District of Columbia, American Samoa, Guam, the Northern Mariana Islands, Puerto Rico, and the US Virgin Islands. Eligibility for award under Area of Interest 3 is further restricted to States and U.S. Territories that have not been selected to receive a SEP Competitive award in the past four years (FY13-FY16).⁵

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 SEO must contact that SEO.

B. Cost Match

For Areas of Interest 1 and 2, the recipient cost match must be at least 20% of the total Federal share. Recipient cost match is NOT required for projects under Area of Interest 3.

Total Estimated Project Cost is the sum of the Federal government share and recipient match (if applicable). 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 further information in Appendix A.

i. 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 Federal share (cost match percentage). If

⁴ The term *Subrecipient* is defined as "a non-Federal entity that receives a subaward from a pass-through entity to carry out part of a Federal program; but does not include an individual that is a beneficiary of such program. A subrecipient may also be a recipient of other Federal awards directly from a Federal awarding agency". See 2 CFR §200.93.

⁵ Eligible states include: AS, AZ, CA, DE, DC, GA, GU, IN, KS, LA, MP, NV, NJ, ND, OH, OK, PA, PR, SD, UT, VI, WY.

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 federal expenditures incurred through the date of termination.

The Prime Recipient is solely responsible for managing cost match contributions by the Project Team⁶ and enforcing cost match obligation assumed by Project Team members in subawards or related agreements.

ii. 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.

iii. Cost Match Types and Allowability

Every cost match contribution must be allowable under the applicable Federal cost principles, as described in Section IV.H.i of the FOA. In addition, cost match must be verifiable upon submission of the 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: rental value of buildings or equipment, the value of a donated service or 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 of an activity;
- Federal funding or property (e.g., Federal grants, equipment owned by the Federal Government); or

⁶ The term "Project Team" for the purposes of this FOA means the team assembled by the Prime (State) Recipient to carry out the project. For purposes of cost match, this includes Key Partners, and all Partners who are being paid from federal funds, or who have pledged cost match.

 Expenditures that were reimbursed under a separate Federal Program.

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 Officer⁷ and incorporated into the project budget before the expenditures are incurred.

Applicants are encouraged to refer to 2 CFR 200.306 as amended by 2 CFR 910.130 & 10 CFR 603.525-555 for additional guidance on cost matching.

iv. Cost Match Contributions by FFRDCs

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

v. Cost Match Verification

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

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

⁷ The term "Contracting Officer" means a person with the authority to enter into, administer, and/or terminate contracts and make related determinations and findings. The term includes certain authorized representatives of the contracting officer acting within the limits of their authority as delegated by the contracting officer. See FAR -- Part 2 Subpart 2.1 – Definitions 2.101 http://farsite.hill.af.mil/regs/far2afmcfars/fardfars/far/02.htm#P9 576

vi. 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. For SEP awards, the Prime Recipients must meet the cost match requirement on a budget-period basis.

C. Compliance Criteria

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

Applications are deemed compliant if:

- The 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 EERE Exchange by the deadline stated in the FOA.

D. Responsiveness Criteria

All "Applications Specifically Not of Interest," as described in Section I.C of the FOA, are deemed nonresponsive and are not reviewed or considered.

E. Other Eligibility Requirements

i. Requirements for DOE/NNSA and non-DOE/NNSA Federally Funded Research and Development Centers Included as a Subrecipient DOE/NNSA and non-DOE/NNSA FFRDCs may be proposed as a Subrecipient on another entity's application subject to the following guidelines:

1. Authorization for non-DOE/NNSA FFRDCs

The Federal agency sponsoring the FFRDC must authorize in writing the use of the FFRDC on the proposed project and this authorization must be submitted with the application. The use of a FFRDC must be consistent with its authority under its award.

2. Authorization for DOE/NNSA FFRDCs

The cognizant Contracting Officer for the FFRDC must authorize in writing the use of the FFRDC on the proposed project and this authorization must

be submitted with the application. The following wording is acceptable for this authorization:

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

3. Value/Funding

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

4. Cost Share

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

5. Responsibility

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

F. Limitation on Number of Applications Eligible for Review

States that have not been selected to receive an award in the past four years (FY13-FY16)⁸ may submit up to two applications as a Prime Recipient – one under Area of Interest 3 **and** one under Area of Interest 1 **or** Area of Interest 2. States that do not apply under Area of Interest 3 (due to eligibility restrictions or otherwise) may submit one application as a Prime Recipient – one under Area of Interest 1 **or** one under Area of Interest 2.

⁸ States eligible to apply for Area of Interest 3 include: AS, AZ, CA, DE, DC, GA, GU, IN, KS, LA, MP, NV, NJ, ND, OH, OK, PA, PR, SD, UT, VI, WY.

Multistate applications where other States are listed as Key Partners, or subrecipients, are encouraged under Area of Interest 1 and Area of Interest 2. Multistate applications will not be accepted under Area of Interest 3.

As long as each proposal is unique and non-duplicative, there is no limit on the number of times a State can be listed as a Key Partner or a subrecipient on multistate applications in Area of Interest 1 and Area of Interest 2. Key Partners are entities that significantly contribute to project tasks and overall project success with significant roles, responsibilities, and tasks clearly defined in the Work Breakdown Structure of the Project Plan. Additionally, proposals must identify whether the Key Partners' work will be used as match, or will be reimbursed from Federal Funds. The work and tasks the Key Partners will perform MUST be clearly defined in the Work Breakdown Structure, and the cost of the work MUST be listed in the budget. In addition, each Key Partner must submit a Statement of Support. See Section IV.C.xii of the FOA.

G. 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 submissions that do not meet the eligibility requirements of Section III. All submissions must conform to the following form and content requirements, including maximum page lengths (described below) and must be submitted via EERE Exchange at https://eere-exchange.energy.gov/.

than EERE Exchange, submissions submitted after the applicable deadline, and/or incomplete submissions. EERE will not extend deadlines for applicants who fail to submit required information and documents due to server/connection congestion. A control number will be issued when an applicant begins the application process in Exchange. This control number must be included with all Application documents, as described below.

Applications must conform to the following requirements:

- Each must be submitted in Adobe PDF format unless stated otherwise.
- Each must be written in English.
- All pages must be formatted to fit on 8.5 x 11 inch paper with margins not less than one inch on every side.
- Use Times New Roman typeface, a black font color, and a font size of 12
 point or larger (except in figures 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.
- The Control Number must be prominently displayed on the upper right corner of the header of every page. Page numbers must be included in the footer of every page.
- Each submission 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. <u>Applicants are</u> <u>strongly encouraged to submit their Applications at least 48 hours in advance of the submission deadline</u>. Applicants may revise or update that submission until the expiration of the applicable deadline. If changes are made, the applicant must resubmit the Application before the applicable deadline.

EERE urges applicants to carefully review their Applications and to allow sufficient time for the submission of required information and documents. All applications that pass the initial eligibility review will undergo comprehensive merit review according to the criteria identified in Section V.A. of the FOA.

i. Additional Information on EERE Exchange

EERE Exchange is designed to enforce the deadlines specified in this FOA. The "Apply" and "Submit" buttons will automatically disable at the defined submission deadlines. Should applicants experience problems with Exchange, the following information may be helpful.

Applicants that experience issues with submission <u>PRIOR</u> to the FOA deadline: In the event that an applicant experiences technical difficulties with

a submission, the Application should contact the Exchange helpdesk for assistance (EERE-ExchangeSupport@hq.doe.gov). The Exchange helpdesk and/or the EERE Exchange system administrators will assist Applicants in resolving issues.

Applicants that experience issue with submissions that result in late submissions: In the event that an applicant experiences technical difficulties so severe that they are unable to submit their application by the deadline, the applicant should contact the Exchange helpdesk for assistance (EERE-ExchangeSupport@hq.doe.gov). The Exchange helpdesk and/or the EERE Exchange system administrators will assist the applicant in resolving all issues (including finalizing submission on behalf of and with the applicant's concurrence). PLEASE NOTE, however, those applicants who are unable to submit their application on time due to their waiting until the last minute when network traffic is at its heaviest to submit their materials will not be able to use this process.

B. Application Forms

The application forms and instructions are available on EERE Exchange. To access these materials, go to https://eere-exchange.energy.gov and select funding opportunity number DE-FOA-0001644.

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

```
For example:
```

```
{{ControlNumber}}_{{LeadOrganization}}_AOI x_Part_1 
{{ControlNumber}}_{{LeadOrganization}}_AOI x_Part_2, etc.
```

<u>EERE will not accept late submissions that resulted from technical difficulties due</u> to uploading files that exceed 10MB.

C. Content and Form of the Application

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

Applicants will receive a Control Number when an application is initiated in Exchange. The Control Number must be prominently displayed on the upper right

Questions about this FOA? Email <u>SEPCompetitive2017@ee.doe.gov</u>. Problems with EERE Exchange? Email <u>EERE-ExchangeSupport@hq.doe.gov</u>. Include FOA name and number in subject line. corner of the header of every page and must be included in the file name of the Application. The applicable Area of Interest must also be identified in the file name.

For example: {{ControlNumber}}_{{LeadOrganization}}_AOI1

Applications to Area of Interest 2 must also include the applicable Topic of Emphasis in the file name.

For example: {{ControlNumber}}_{{LeadOrganization}} _AOI2_ToE1

Please Note: Exchange requires double brackets to contain {{ControlNumber}} and {{LeadOrganization}} terms.

Application Content Requirements

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

Each Application must be limited to a single project and must conform to the following requirements:

Submission	Components	File Name
Application (PDF, unless	i. Project Plan (See Chart in Section IV.C.i)	{{ControlNumber}}_{{LeadOrganization}}_ ProjectPlan_AOI1 (or)_AOI2_ToE1
stated otherwise)	ii. SF-424 Application for Federal Assistance (Applicants must use template in EERE Exchange.)	{{ControlNumber}}_{{LeadOrganization}}_ App424
	iii. Budget Justification Workbook (EERE 335) (Microsoft Excel format. Applicants must use the template available in EERE Exchange)	{{ControlNumber_{{LeadOrganization}}_ Budget_Justification
	iv. Summary/Abstract for Public Release (1 page limit) *NOT required for applications to Area of Interest 3	{{ControlNumber}}_{{LeadOrganization}}_ Summary
	v. Subaward Budget Justification, if applicable (EERE 335) (Microsoft Excel format. Applicants must use the template available in EERE Exchange)	{{ControlNumber}}_{{LeadOrganization}}_ Subawardee_Budget_Justification
	vi. Budget for DOE/NNSA FFRDC, if applicable	{{ControlNumber}}_{{LeadOrganization}}_ FWP
	vii. Authorization for non-DOE/NNSA or DOE/NNSA FFRDCs (if applicable)	{{ControlNumber}}_{{LeadOrganization}}_ FFRDCAuth
	viii. SF-LLL Disclosure of Lobbying Activities, if applicable	{{ControlNumber}}_{{LeadOrganization}}_ SF-LLL
	ix. Resume File	{{ControlNumber}}_{{LeadOrganization}}_ Resumes
	x. Letters of Commitment	{{ControlNumber}}_{{LeadOrganization}}_ Commitment
	xi. 2017 State Energy Assessment(s) (also required from State Energy Office Key Partners)	{{ControlNumber}}_{{LeadOrganization}}_ SEA; and, {{ControlNumber}}_{{LeadOrganization}}_ SEA_Key Partner State Name
	xii. Statements of Support from Key Partners *NOT required for applications to Area of Interest 3	{{ControlNumber}}_{{LeadOrganization}}_ Support

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

i. **Project Plan**

The Project Plan must be submitted in Adobe PDF format and conform to the following requirements. The maximum overall length is limited to 35 pages, and EERE will disregard any additional pages. Except for the cover page, the section page lengths below are suggested lengths only. Applicants must provide sufficient citations and references to justify the claims and approaches made in the Project Plan. However, EERE and reviewers are under no obligation to review cited sources. Save the Project Plan in a single PDF file using the following convention for the title:

{{ControlNumber}}_{{LeadOrganization}}_ProjectPlan (or)_AOI2_ToE1.

SECTION	DESCRIPTION	
Cover Page (1 page max)	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 Key Partners, and any statements regarding confidentiality. Area of Interest 2 applications must also specify the Topic(s) of Emphasis being addressed.	
Project Overview (approximately 2 pages)	 The Project Overview should contain the following information: Background: The Applicant should discuss the background of their organization, including the history, successes, and current status relevant to the topic being addressed in the Application. Project Goal: The Applicant should explicitly identify the:	
Work plan (approximately 15 pages)	 The Work 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 fully explain the proposal. Area of Interest 1: Approach and strategies to achieve objective(s), goal(s) and measureable impact(s) Existing efforts and how they will be leveraged (if applicable) Identification of possible barriers and how they will be overcome Qualifications and resources (see section 2 below) Management Plan (see section 3 below) 	
	 f. Stakeholders and plan for engagement g. Information and data needs, including any modeling resources h. Summary Table (see section 4 below) 	

Questions about this FOA? Email SEPCompetitive2017@ee.doe.gov. Problems with EERE Exchange? Email <u>EERE-ExchangeSupport@hg.doe.gov</u>. Include FOA name and number in subject line.

Area of Interest 2:

- a. Approach and strategies to achieve objective(s), goal(s) and measureable impact(s)
- b. If more than one Topic of Emphasis is being addressed within this Area of Interest, identify how the topics are complementary and integrated into a single strategy
- c. Existing efforts and how they will be leveraged (if applicable)
- d. Identification of possible barriers and how they will be overcome
- e. Qualifications and resources (see section 2 below)
- f. Management Plan (see section 3 below)
- g. Stakeholders and plan for engagement
- h. Information and data needs
- i. Summary Table (see section 4 below)

Area of Interest 3:

- a. Objective, goals, potential impacts, and expected outcomes for the SEP technical assistance activity aligned with the formula award
- b. Approach and strategies to achieve objective(s), goal(s), and measureable impact(s) of the technical assistance activity
- c. Qualifications and resources (see section 2 below)
- d. Management Plan (see section 3 below)
- **2.** The proposal should explain the **Qualifications and Resources** to accomplish the project, as follows:
 - a. Describe the Project Team's unique qualifications, expertise, and facilities, including those of Key Partners and subrecipients.
 - b. Discuss how previous work efforts and demonstrated innovations will enable the Applicant to achieve the project objectives.
 - c. Describe the time commitment of the team members (including Key Partners) to support the project. Letters of Commitment are **required** from Key Partners or other entities providing cost match. Statements of Support are required from Key Partners, and strongly encouraged from secondary partners. Applicants will provide these documents as attachments to the application package.

PLEASE NOTE: A resume file (as described below) is a required component of applications, and is to be included separate from the Project Plan. The resume file will not count toward the above page limit.

- **3.** The Applicant should discuss the team's proposed **Management Plan**, including the following:
 - a. The overall approach to and organization for managing the work;
 - b. The roles and the work to be performed by each Key Partner and other participants;
 - c. Business agreements between the Applicant and each Key Partner and other participants;
 - d. Any critical handoffs/interdependencies among Project Team members

	e. The technical aspects of the management plan including systems and practices such as financial and project tracking practices;
	f. The approach to project risk management
	g. A description of how project changes will be handled
	h. If applicable, the approach to Quality Assurance/Control
	i. Publication arrangements; and,
	j. How communications will be maintained among Project Team members.
	4. Summary Table: A complete Project Plan will include a table summarizing the project. Example Summary Tables for each Area of Interest are provided as fillable templates in EERE Exchange. Applicants in Area of Interest 2 need only complete the tables related to the applicable 'Topics of Emphasis' for which they are applying.
Work Breakdown	The WBS should fully describe the work to be completed and how the Applicant will
Structure (WBS)	achieve milestones and accomplish final project goal/s. The WBS should be structured
and Task	with a hierarchy of task and subtasks, and shall contain a concise, detailed description
Descriptions	of the specific activities to be conducted over the life of the project, and by whom.
(approximately 5	"Detailed" is defined as a full explanation and disclosure of the project being
pages)	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 their project.
	To this end, each task and subtask should have a unique number and title and an
	indication of the duration of the task or subtask in months. Each task and subtask
	should 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 should 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.
	A template for the Work Breakdown Structure is provided in Appendix E of the FOA.
Milestones	Milestones: The Applicant should provide appropriate milestones throughout the
(approximately 3	project to demonstrate success where success is defined as a significant project
pages)	accomplishment, or technical achievement rather than simply completing a task.
	All milestones should be S pecific, M easurable, A chievable, R elevant, and T imely. The
	minimum requirement is that each project must have at least one milestone per
	quarter for the duration of the project. The Applicant should also provide the means
	by which the milestone will be verified. In addition to describing milestones in the
	WBS text, please complete a Milestone Summary Table.
	A fillable Milestone Summary Table template is provided in EERE Exchange under "Required Application Documents".
Project Schedule	The Applicant should provide a detailed schedule for the entire project, including task
(Gantt chart or	and subtask durations, and milestones.
similar)	
(approximately 1	
page)	
Direct Responses	This section should be formatted to respond to each of the Merit Review Criteria and
Direct Responses to Merit Review	This section should be formatted to respond to each of the Merit Review Criteria and subcriteria listed in Section V.A.i. Provide sufficient information so that reviewers will
· ·	·

Questions about this FOA? Email <u>SEPCompetitive2017@ee.doe.gov</u>. Problems with EERE Exchange? Email <u>EERE-ExchangeSupport@hq.doe.gov</u>. Include FOA name and number in subject line. (approximately 8 pages)

Interest you are proposing. Your responses in this section must be supported by the rest of the application.

PLEASE NOTE THAT MERIT REVIEWERS WILL BE EVALUATING APPLICATIONS BASED ON HOW WELL THE APPLICATION ADDRESSES <u>ALL</u> OF THE MERIT REVIEW CRITERIA AND SUBCRITERIA.

ii. SF-424 Application for Federal Assistance

Complete all required fields in accordance with the instructions on the SF-424. 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 following convention for the title {{ControlNumber}}_{{LeadOrganization}}_App424

iii. Budget Justification Workbook (EERE 335)

Applicants are required to complete the Budget Justification Workbook. This form is available on the EERE Exchange at https://eere-Exchange.energy.gov/. Prime Recipients must complete each tab of the Budget Justification Workbook for the project as a whole, including all work to be performed by the Prime Recipient and its Subrecipients and Contractors, and provide all requested documentation (e.g., a Federallyapproved rate agreement, and vendor quotes). Applicants should include costs associated with required annual audits and incurred cost proposals in their proposed budget documents. The "Instructions and Summary tab" included with the Budget Justification Workbook will auto-populate as the applicant enters information into the Workbook. Applicants must carefully read the "Instructions and Summary" tab provided within the Budget Justification Workbook. Remember that travel and training expenses in Area of Interest 3 are capped at 15%. Save the Budget Justification Workbook in a single Microsoft Excel file using the following convention for the title {{ControlNumber}} {{LeadOrganization}} Budget Justification.

iv. Summary/Abstract for Public Release

Applicants to Area of Interest 1 and Area of Interest 2 are required to submit a one-page summary/abstract of their project. A summary/abstract for public release is not required from applicants to Area of Interest 3. 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

Questions about this FOA? Email <u>SEPCompetitive2017@ee.doe.gov</u>. Problems with EERE Exchange? Email <u>EERE-ExchangeSupport@hq.doe.gov</u>. Include FOA name and number in subject line.

project, a description of the project, including methods to be employed, the potential impact of the project (e.g., benefits and outcomes), and major participants (for collaborative projects). This document must not include any proprietary or sensitive business information as DOE may make it available to the public 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 using the following convention for the title: {{ControlNumber}}_{{LeadOrganization}_{{LeadOrganization}}_{{LeadOrganization}_{{LeadOrganization}_{{LeadOrganization}_{{LeadOrganization}_{{LeadOrganization}_{{LeadOrganization}_{{LeadOrganization}_{{LeadOrgani

v. Subaward Budget Justification (EERE 335) (if applicable)

Applicants must provide a separate budget justification, EERE 335 (i.e., budget justification for each budget year and a cumulative budget) for each subawardee that is expected to perform work estimated at more than \$250,000 or 25 percent of the total work effort (whichever is less). The budget justification must include the same justification information described in the "Budget Justification" section above. Save each subaward budget justification in a Microsoft Excel file using the following convention for the title:

{{ControlNumber}}_{{LeadOrganization}}_Subawardee_Budget_Justification.

vi. Budget for DOE/NNSA FFRDC (if applicable)

If a DOE/NNSA FFRDC contractor is to perform a portion of the work, the applicant must provide a DOE Field Work Proposal (FWP) in accordance with the requirements in DOE Order 412.1, Work Authorization System. DOE Order 412.1 and DOE O 412.1 (Field Work Proposal form) area available at the following link, under "DOE Budget Forms": (https://www.directives.doe.gov/directives-documents/400-series/0412.1-

BOrder-a-admchg1/@@images/file). Save the FWP in a single PDF file using the following convention for the title

{{ControlNumber LeadOrganization}} FWP.

vii. Authorization for non-DOE/NNSA or DOE/NNSA FFRDCs (if applicable)

The Federal agency sponsoring the FFRDC must authorize in writing the use of the FFRDC on the proposed project and this authorization must be submitted with the application. The use of a FFRDC must be consistent with the contractor's authority under its award. Save the Authorization in a single PDF file using the following convention for the title {{ControlNumber_LeadOrganization}}_FFRDCAuth.

viii. SF-LLL: Disclosure of Lobbying Activities (if applicable)

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"

(https://eere-exchange.energy.gov/FileContent.aspx?FileID=1f070437-acfc-46ac-92e9-53ecd8eec920) Only when any non-Federal funds have been paid or will be paid to any person for influencing or attempting to influence any of the following in connection with your application:

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

Save the SF-LLL in a single PDF file using the following convention for the title: {{ControlNumber}}_{{LeadOrganization}}_SF-LLL.

ix. Resume File

Provide a resume for each key team member proposed, including Key Partners, subrecipients, and consultants if they meet the definition of key team member, which is any individual who contributes in a substantive, measurable way to the execution of the project. The biographical information for each resume 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.
- Principal Investigator. Of the personnel identified in this file, indicate the Principal Investigator(s). The applicant (whether a single organization or team/ partnership/ consortium) must indicate if the project will include multiple Principal Investigators (PIs). The decision to use multiple PIs for a project is the sole discretion of the applicant. If multiple PIs will be designated, the application must identify contacts 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 project direction;
 - Publications;
 - Intellectual property issues;
 - Communication plans;
 - Procedures for resolving conflicts; and,
 - PIs' roles and administrative and technical responsibilities for the project.

Save all Resumes as a single PDF file using the following convention for the title: {{ControlNumber}} {{LeadOrganization}} Resumes.

x. Letters of Commitment

Applicants must include a Letter of Commitment from each third party – including Key Partners – contributing cost match (i.e., a party other than the State submitting the application) stating that the third party is committed to providing a specific minimum dollar amount of cost match. Identify the following information for each third party contributing cost match and all Key Partners: (1) the name of the organization; (2) the proposed dollar amount to be provided; (3) the amount as a percentage of total Federal funds allocated; and (4) the proposed type of cost match. Save all Letters of Commitment as a PDF using the following convention for the title:

{{ControlNumber}}_{{LeadOrganization}}_Commitment

xi. 2017 State Energy Assessment(s) (SEA)

All applicants to this FOA (along with Key Partners that are State Energy Offices) are required to complete and submit the fillable 2017 SEA found in EERE Exchange or equivalent. The SEA will provide DOE an understanding about the "state of play" in each State's energy space. 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.

All SEAs must be signed, confirming that the State Energy Office Director has reviewed and approved the responses provided in the SEA. Save the SEA(s) as a PDF file using the following convention for the title: {{ControlNumber}}_{{LeadOrganization}}_SEA; and, {{ControlNumber}}_{{LeadOrganization}}_SEA_Key Partner State Name

xii. Statements of Support from Key Partners

Statements of Support are required for applications in Area of Interest 1 and Area of Interest 2 from Key Partners. Key Partners are entities that will significantly contribute to project tasks and overall project success with significant roles, responsibilities, and tasks clearly defined in the Work Breakdown Structure. In the case of multistate applications, States identified as Key Partners are required to submit statements of support. Tasks performed under a Federal award must be tied to the project budget, either as reimbursable work, or cost match. Note that work performed under, or personnel funded by other federally funded grants cannot be charged to this project and cannot be used as cost match. Project budgets are proposed, negotiated and finalized with DOE by the Prime Recipient.

SEP requires Statements of Support from Key Partners to verify that they have agreed to participate in and contribute to the project. **Applications will not be selected for review if Statements of Support are not included from all Key Partners.**

Statements of Support from secondary partners are optional in Area of Interest 1 and Area of Interest 2. Secondary partners are entities that the Applicant intends to involve in the project but do not have specific tasks identified in the proposal.

'Statements of Support' differ from 'Letters of Commitment' in that Statements of Support identify the Key Partners and stakeholders that intend to play an integral role in the project. Letters of Commitment are required to verify cost match pledged to the project. All Key Partner Statements of Support should contain the following information:

- The reasons the Key Partner has chosen to contribute to the project.
- The ways in which the Key Partner will add value to the project.
- A brief summary of the tasks the Key Partner will perform.
- The budget for the Key Partners' contribution.
- A statement that the Key Partner will have the capability and resources available to perform the tasks.
- A signature from a person authorized to commit the Key Partner to provide the support described in the application.

Save Statements of Support as a PDF file using the following convention for the title: {{ControlNumber}}_{{LeadOrganization}}_Support.

D. Post-Award Information Requests

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

- Indirect cost information
- Other budget information
- Letters of Commitment from Third Parties Contributing to Cost Match, if applicable
- Name and phone number of the Designated Responsible Employee for complying with national policies prohibiting discrimination (See 10 CFR 1040.5)
- Representation of Limited Rights Data and Restricted Software, if applicable
- Environmental Questionnaire
- Statement of Project Objectives
- Statements of Support from Secondary Partners (AOI1 and AOI2)
- Statement(s) of Support from technical assistance provider(s) (AOI 3), if available

E. Dun and Bradstreet Universal Numbering System Number and System for Award Management

Each applicant (unless the applicant is an individual or Federal awarding agency that is excepted from those requirements under 2 CFR §25.110(b) or (c), or has an exception approved by the Federal awarding agency under 2 CFR §25.110(d)) is required to: (1) Be registered in the System for Award Management (SAM) at https://www.sam.gov before submitting its application; (2) provide a valid Dun

and Bradstreet Universal Numbering System (DUNS) number in its application; and (3) continue to maintain an active SAM registration with current information at all times during which it has an active Federal award or an application or plan under consideration by a Federal awarding agency. DOE may not make a Federal award to an applicant until the applicant has complied with all applicable DUNS and SAM requirements and, if an applicant has not fully complied with the requirements by the time DOE is ready to make a Federal award, DOE may determine that the applicant is not qualified to receive a Federal award and use that determination as a basis for making a Federal award to another applicant.

F. Submission Dates and Times

Applications must be submitted in EERE Exchange no later than 5 p.m. Eastern on the date provided on the cover page of this FOA.

G. Intergovernmental Review

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

H. Funding Restrictions

i. Allowable Costs

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

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

- FAR Part 31 for For-Profit entities; and
- 2 CFR Part 200 Subpart E Cost Principles for all other non-federal entities.

ii. Pre-Award Costs

Selectees must request prior written approval to charge pre-award costs. Pre-award costs are those incurred prior to the effective date of the Federal award for activities directly pursuant to the negotiation and in anticipation of the Federal award where such costs are necessary for efficient and timely performance of the scope of work. Such costs are allowable only to the extent that they would have been allowable if incurred after the date of the Federal award and **only** with the written approval of the Federal awarding agency, through the Contracting Officer assigned to the award.

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 reimbursable 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.

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.

iii. Performance of Work in the United States

1. 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 Prime Recipient should make every effort to

Questions about this FOA? Email <u>SEPCompetitive2017@ee.doe.gov</u>. Problems with EERE Exchange? Email <u>EERE-ExchangeSupport@hq.doe.gov</u>. Include FOA name and number in subject line. purchase supplies and equipment within the United States. The Prime Recipient must flow down this requirement to its Subrecipients.

2. Failure to Comply

If the Prime 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 Prime 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 Prime Recipient, Subrecipients, contractors or other project partners.

3. 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 United States requirement, the applicant must submit a written waiver request to EERE.

The applicant must demonstrate to the satisfaction of EERE that a waiver would further the purposes of the FOA and is in the economic interests of the United States. EERE may require additional information before considering a waiver request. Save the waiver request(s) in a single PDF file titled:

{{ControlNumber}}_{{LeadOrganization}}_PerformanceofWork_Waiver. The applicant does not have the right to appeal EERE's decision concerning a waiver request.

iv. Construction

Construction costs are not allowable under this FOA.

v. Foreign Travel

Foreign travel costs are not allowable under this FOA.

vi. 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 current fair market value of property exceeds \$5,000. The rules for property disposition are set forth in 2 CFR 200.310 – 200.316 as amended by 2 CFR 910.360.

vii. 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" (https://eere-exchange.energy.gov/FileContent.aspx?FileID=1f070437-acfc-46ac-92e9-53ecd8eec920) 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.

viii. Risk Assessment

Prior to making a Federal award, DOE is required by 31 U.S.C. 3321 and 41 U.S.C. 2313 to review information available through any OMB-designated repositories of government-wide eligibility qualification or financial integrity information, such as SAM Exclusions and "Do Not Pay."

In addition, DOE evaluates the risk(s) posed by applicants before they receive Federal awards. This evaluation may consider: results of the evaluation of the applicant's eligibility; the quality of the application; financial stability; quality of management systems and ability to meet the management standards prescribed in this part; history of performance; reports and findings from audits; and the applicant's ability to effectively implement statutory, regulatory, or other requirements imposed on non-Federal entities.

In addition to this review, DOE must comply with the guidelines on government-wide suspension and debarment in 2 CFR 180, and must require non-Federal entities to comply with these provisions. These provisions restrict Federal awards, subawards and contracts with certain parties that are debarred, suspended or otherwise excluded from or ineligible for participation in Federal programs or activities.

ix. Invoice Review and Approval

DOE employs a risk-based approach to determine the level of supporting documentation required for approving invoice payments. Recipients may be required to provide some or all of the following items with their requests for reimbursement:

- Summary of costs by cost categories
- Timesheets or personnel hours report
- Invoices/receipts for all travel, equipment, supplies, contractual, and other costs
- UCC filing proof for equipment acquired with project funds by for-profit recipients and subrecipients
- Explanation of cost match for invoicing period
- Analogous information for some subrecipients
- Other items as required by DOE

V. Application Review Information

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

A. Merit Review Criteria

Area of Interest 1: State Energy Planning

Criterion 1: Program Strategy and Plan

The degree to which the proposal:

- demonstrates the likelihood that the project will be successful and leads to increased energy affordability, reliability and resiliency;
- describes current EE/RE market conditions in the State or region;
- discusses and demonstrates strong understanding of the key barriers to achieving project goals and the strategies to overcome them;
- contains clear, detailed, timely, and reasonable goals, metrics, task descriptions, implementation strategies, schedules, budgets and deliverables;
- identifies key stakeholders in the marketplace (e.g. local governments, utilities, state regulatory agencies, third party administrators, etc.), and describes how partnerships with them will be successfully created or expanded through engagement in the project;
- includes a description of modeling or analyses used to develop the state's energy or other goals, and/or includes plans for such assessments during the project;
- integrates and coordinates with existing state or regional planning efforts in the utility, environmental, reliability, resiliency, energy assurance, and

Weight: 30%

- economic development arenas; with the intention to build off of those efforts, including incorporating lessons learned;
- expresses a coordinated vision for energy planning that can help meet
 State environmental, reliability, resiliency, and economic development goals;
- demonstrates that resources are invested by all Key Partners, as
 evidenced by scope, budget, and task descriptions assigned in the work
 breakdown structure (if proposing a multi-state project); and,
- identifies major project risks by assessing the probability of occurrence and severity of impact, and describes viable strategies for managing them.

Weight: 20%

Weight: 20%

Criterion 2: Potential Impact

The degree to which the proposal:

- demonstrates the likelihood of project success, resulting in significant improvement in use of EE/RE practices and programs and leads to increased affordability, reliability and resiliency;
- supports existing or enhanced State or regional environmental policy goals;
- improves State or regional reliability and resiliency goals;
- demonstrates how the project will promote economic development or increase energy affordability in the State or region;
- demonstrates that the approach will lead to continuing dialogue among public and private stakeholders after the grant period; and,
- demonstrates how the project will be sustainable; and made replicable by standardization and information sharing.

Criterion 3: Energy Impact

- Estimated amount of energy waste reductions and cost savings;
- Extent to which efforts will enhance affordability, reliability, and resilience of the energy system;
- Sufficiency of technical detail to assess whether estimated energy impacts are likely, valid and attainable; and,
- Degree to which the proposal incorporates and describes mechanisms for accurately baselining, measuring, tracking, and reporting energy savings impacts.

Criterion 4: Capabilities and Partnership Structure

The degree to which the proposal:

• identifies the roles, responsibilities, and level of effort of each of the project's team members (including Key Partners); and demonstrates a management approach that supports project success;

Weight: 30%

Weight: 30%

- demonstrates appropriate credentials, experience and abilities of the Principal Investigator(s), key personnel, and Key Partners to complete the proposed tasks with a high probability of success, including development and deployment of the proposed policies or programs;
- demonstrates capability and sufficient time commitment of the Principal Investigator(s) and the proposed team; and
- clearly demonstrates that Key Partners add value, as evidenced by the overall proposal, and by letter(s) of commitment and support.

Area of Interest 2: Innovative Opportunities for Energy Efficiency and Renewable Energy Practices that Improve Energy Affordability, Reliability and Resiliency

Criterion 1: Program Strategy and Plan

The degree to which the proposal:

- demonstrates the likelihood that the project will be successful and leads to increased energy affordability, reliability and resiliency;
- describes current EE/RE market conditions in the State or region;
- contains sufficient technical detail to assess whether the proposed strategies are innovative;
- demonstrates an understanding of the key market barriers, and demonstrates how the proposed strategies will overcome them;
- demonstrates how the proposed strategy will advance the State or region in the Topics of Emphasis identified by the State;
- clearly describes how all Topics of Emphasis will be integrated into a single strategy (if the proposal addresses more than one Topic of Emphasis);
- identifies key stakeholders in the marketplace (e.g., local governments, state regulatory agencies, utilities, third party administrators, etc.) and describes how partnerships with them will be successfully created or expanded;

- contains task descriptions that are clear, detailed, timely, and reasonable;
- demonstrates that resources are invested by all Key Partners, as
 evidenced by scope, budget, and task descriptions assigned in the work
 breakdown structure (if proposing a multi-state project); and,
- identifies major risks by assessing the probability of occurrence and severity of impact, and describes viable strategies for managing them.

Criterion 2: Potential Impact Weight: 20%

The degree to which the proposal:

- demonstrates that the project fills a current market need and/or gap and leads to increased energy affordability, reliability and resiliency, and identifies the targeted markets and/or consumer sectors and the steps that will be taken;
- demonstrates that success in initiating or expanding efforts in the selected policy/programs will increase energy affordability, reliability and/or resiliency;
- contains a clear description of how baselines will be created; and of the metrics and milestones used to measure impacts;
- demonstrates that the approach will lead to continuing dialogue among State Energy Offices and other key stakeholders; and,
- ensures the project will be sustainable; and be made replicable by standardization and information sharing.

Criterion 3: Energy Impact

- Estimated impacts, including energy waste reductions, and cost savings resulting from the project;
- Estimated impacts regarding improvements in energy affordability, reliability and/or resilience;
- Sufficiency of technical detail to assess whether impact estimates are valid and attainable; and,
- Degree to which the proposal incorporates and describes mechanisms for accurately baselining, measuring, tracking, and reporting energy savings impacts.

Weight: 20%

Criterion 4: Capabilities and Partnership Structure

The degree to which the proposal:

- identifies the roles, responsibilities, and level of effort of each of the project's team members, including those from key partners; and demonstrates a management approach that supports project success;
- demonstrates appropriate credentials, experience and abilities of the Principal Investigator(s), key personnel, and key partners to complete the proposed tasks with a high probability of success, including development and deployment of the proposed policies or programs;
- demonstrates capability and sufficient time commitment of the Principal Investigator(s) and the proposed team, and;
- clearly demonstrates that key partners add value, as evidenced by the overall proposal, and by letter(s) of commitment and support.

Area of Interest 3: Technical Assistance to Advance SEP Formula Award EE/RE Activities

Criterion 1: Program Strategy and Plan

Weight 40%

Weight: 30%

The degree to which the proposal:

- demonstrates the likelihood that the project will be successful and leads to increased energy affordability, reliability and resiliency;
- clearly describes plans to use Technical Assistance (TA) to maximize the impact of an existing area of the State's formula work, OR clearly describes plans to use the TA to develop a new impactful area of formula work;
- clearly demonstrates understanding of the key barriers that have hindered maximizing the impact of an existing area of formula work, OR of the key barriers that have prevented the development of the new impactful area of formula work (the discussion should go beyond internal resource constraints to include market barriers that the needed TA will help to overcome);
- demonstrates high quality strategies sufficient to overcome the barriers;
- describes previous State efforts and how the proposed approach intends to build off of those efforts, including incorporating lessons learned;
- contains clear goals, metrics, tasks and methods, deliverables, and schedule;

- demonstrates that current formula grant work and milestones can be achieved, and will not be hindered if a new grant is awarded; and,
- contains task descriptions that are clear, detailed, timely, and reasonable;

Criterion 2: Potential Impact

Weight 30%

The degree to which the proposal:

- demonstrates that the TA leads to increased energy affordability, reliability and resiliency;
- demonstrates the project will be made sustainable; and made replicable by standardization and information sharing; and,
- creates mechanisms for accurately evaluating and measuring program impact.

Criterion 3: Capabilities and Partnership Structure

Weight 30%

The degree to which the proposal:

- identifies the roles, responsibilities, and level of effort of each of the project team members (including State personnel);
- demonstrates that the credentials, capabilities, and experience of the project team are appropriate, particularly the proposed TA provider (if one has been identified); and,
- coordinates efforts and shares duties between State participants and the TA provider.

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/management/downloads/merit-review-guide-financial-assistance.

C. Other Selection Factors

i. Program Policy Factors

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

- The desire to select a mix of projects that achieve the goals of EERE.
- The desire to select projects that represent a diverse portfolio of policies and strategies that lead to increased energy affordability, reliability and resiliency, including projects that address underserved sectors or address policies or issues that have not been addressed by previous awards.
- The desire to select programs that 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 eligible applicant that has not received DOE competitive funding in the previous four years (2013-2016) for projects identical or similar in nature to the project it proposed under this FOA.

Cost match in excess of minimum requirements will **not** be considered in the evaluation.

D. Evaluation and Selection Process

i. Overview

The evaluation process consists of an initial eligibility review and a thorough merit review. Rigorous merit reviews of eligible submissions are conducted 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.

ii. Recipient Integrity and Performance Matters

DOE, prior to making a Federal award with a total amount of Federal share greater than the simplified acquisition threshold, is required to review and consider any information about the applicant that is in the designated integrity and performance system accessible through SAM (currently FAPIIS) (see 41 U.S.C. 2313).

The applicant, at its option, may review information in the designated integrity and performance systems accessible through SAM and comment on any information about itself that a Federal awarding agency previously entered and is currently in the designated integrity and performance system accessible through SAM.

DOE will consider any written comments by the applicant, in addition to the other information in the designated integrity and performance system, in making a judgment about the applicant's integrity, business ethics, and record of performance under Federal awards when completing the review of risk posed by applicants as described in 2 C.F.R. § 200.205.

iii. Selection

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

E. Anticipated Notice of Selection and Award Dates

EERE anticipates notifying applicants selected for negotiation of award by April 2018 and making awards by December 2018.

VI. Award Administration Information

A. Award Notices

i. Ineligible Submissions

Ineligible applications will not be further reviewed or considered for award. The Contracting Officer will send a notification letter by email to the technical and administrative points of contact designated by the applicant in EERE Exchange. The notification letter will state the basis upon which the Application is ineligible and not considered for further review.

ii. Application Notifications

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

iii. Successful Applicants

Receipt of a notification letter selecting an 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 by EERE to issue an award. Applicants do not receive an award until award negotiations are complete and the Contracting Officer executes the funding agreement, accessible by the Prime Recipient in FedConnect (https://www.fedconnect.net)

The award negotiation process will take approximately 90 days. Applicants must designate a primary and a backup point-of-contact in EERE Exchange with whom EERE will communicate to conduct award negotiations. The applicant must be responsive during award negotiations (i.e., provide requested documentation) and meet the negotiation deadlines. If the applicant fails to do so or if award negotiations are otherwise unsuccessful, EERE will cancel the 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.ii. of the FOA for guidance on pre-award costs.

iv. Alternate Selection Determinations

In some instances, an applicant may receive a notification that its application was not selected for award and EERE designated the application to be an alternate. As an alternate, EERE may consider the Application for Federal funding in the future. A notification letter stating the Application is designated as an alternate does not authorize the applicant to commence performance of the project. EERE may ultimately determine to select or not select the Application for award negotiations.

v. 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.

B. Administrative and National Policy Requirements

i. Registration Requirements

There are several one-time actions before submitting an application in response to this 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:

1. EERE Exchange

Register and create an account on EERE Exchange at https://eere-exchange.energy.gov.

This account will then allow the user to register for any open EERE FOAs that are currently in EERE Exchange. It is recommended that each organization or business unit, whether acting as a team or a single entity, use only one account as the contact point for each submission. Applicants should also designate backup points of contact so they may be easily contacted if deemed necessary. This step is required to apply to this FOA.

The EERE Exchange registration does not have a delay; however, <u>the</u> <u>remaining registration requirements below could take several weeks to process and are necessary for a potential applicant to receive an award under this FOA.</u>

2. 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.

3. 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.

4. 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 http://www.fedconnect.net/FedConnect/Marketing/Documents/FedConnect Ready Set Go.pdf.

5. Grants.gov

Register in Grants.gov (http://www.grants.gov) to receive automatic updates when Amendments to this FOA are posted. However, please note that Applications will not be accepted through Grants.gov.

6. Electronic Authorization of Applications and Award Documents
Submission of an application and supplemental information under this
FOA through electronic systems used by the Department of Energy,
including EERE Exchange and FedConnect.net, constitutes the authorized
representative's approval and electronic signature.

ii. Award Administrative Requirements

The administrative requirements for DOE grants and cooperative agreements are contained in 2 CFR Part 200 as amended by 2 CFR Part 910.

iii. Foreign National Access to DOE Sites

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. A 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.

iv. Subaward and Executive Reporting

Additional administrative requirements necessary for DOE grants and cooperative agreements to comply with the Federal Funding and Transparency Act of 2006 (FFATA) are contained in 2 CFR Part 170. Prime Recipients must register with the new FFATA 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.

v. National Policy Requirements

The National Policy Assurances that are incorporated as a term and condition of award are located at: http://www.nsf.gov/awards/managing/rtc.jsp.

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

EERE's decision whether and how to distribute federal funds under this FOA is subject to the National Environmental Policy Act (42 USC 4321, et seq.).

NEPA requires Federal agencies to integrate environmental values into their decision-making processes by considering the potential environmental impacts of their proposed actions. For additional background on NEPA, please see DOE's NEPA website, at http://nepa.energy.gov/.

While NEPA compliance is a Federal agency responsibility and the ultimate decisions remain with the Federal agency, all recipients selected for an award will be required to assist in the timely and effective completion of the NEPA process in the manner most pertinent to their proposed project. If DOE determines certain records must be prepared to complete the NEPA review process (e.g., biological evaluations or environmental assessments), the costs to prepare the necessary records may be included as part of the project costs.

DOE has categorically excluded applications to DE-FOA-0001644 from further NEPA review under DOE Categorical Exclusions A.9 'information gathering, analysis and dissemination,' and A.11 'technical advice and assistance to organizations.' If funding will be used for projects or activities that fall outside categorically excluded activities, additional NEPA review is required and States are responsible for informing DOE of any 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. Prohibited actions include: construction; implementing or paying directly for energy efficient retrofits; implementing or paying for renewable energy projects; repair of buildings or structures; purchase of land, buildings or structures; purchase of equipment to conduct research, development or demonstration of energy efficiency or renewable energy techniques and technologies.

States shall comply with Section 106 of the National Historic Preservation Act (NHPA).

vii. Applicant Representations and Certifications

1. Lobbying Restrictions

By accepting funds under this award, the Prime 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.

- 2. Corporate Felony Conviction and Federal Tax Liability Representations In submitting an application in response to this FOA, the applicant represents that:
 - a. It is **not** a corporation that has been convicted of a felony criminal violation under any Federal law within the preceding 24 months, and
 - b. 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 forprofit and non-profit organizations.

- **3.** Nondisclosure and Confidentiality Agreements Representations In submitting an application in response to this FOA the applicant represents that:
 - a. It does not and will not require its employees or contractors to sign internal nondisclosure or confidentiality agreements or statements prohibiting or otherwise restricting its employees or contactors from lawfully reporting waste, fraud, or abuse to a designated investigative or law enforcement representative of a Federal department or agency authorized to receive such information.
 - b. It does not and will not use any Federal funds to implement or enforce any nondisclosure and/or confidentiality policy, form, or agreement it uses unless it contains the following provisions:
 - (1) "These provisions are consistent with and do not supersede, conflict with, or otherwise alter the employee obligations, rights, or liabilities created by existing statute or Executive order relating to (1) classified information, (2) communications to Congress, (3) the reporting to an Inspector General of a violation of any law, rule, or regulation, or mismanagement, a gross waste of funds, an

abuse of authority, or a substantial and specific danger to public health or safety, or (4) any other whistleblower protection. The definitions, requirements, obligations, rights, sanctions, and liabilities created by controlling Executive orders and statutory provisions are incorporated into this agreement and are controlling."

- (2) The limitation above shall not contravene requirements applicable to Standard Form 312, Form 4414, or any other form issued by a Federal department or agency governing the nondisclosure of classified information.
- (3) Notwithstanding the provision listed in paragraph (a), a nondisclosure or confidentiality policy form or agreement that is to be executed by a person connected with the conduct of an intelligence or intelligence-related activity, other than an employee or officer of the United States Government, may contain provisions appropriate to the particular activity for which such document is to be used. Such form or agreement shall, at a minimum, require that the person will not disclose any classified information received in the course of such activity unless specifically authorized to do so by the United States Government. Such nondisclosure or confidentiality forms shall also make it clear that they do not bar disclosures to Congress, or to an authorized official of an executive agency or the Department of Justice, that are essential to reporting a substantial violation of law.

viii. 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.

ix. Statement of Substantial Involvement

EERE has substantial involvement in work performed under awards made as a result of 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 shares responsibility with the recipient for the management, control, direction, and performance of the Project.
- 2. 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.
- 3. EERE may provide technical assistance to help states and their partners achieve the goals of their project.
- 4. EERE participates in major project decision-making processes.

x. Intellectual Property Provisions

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

xi. Reporting

Reporting requirements are identified on the Federal Assistance Reporting Checklist, attached to the award agreement. The checklist can be accessed at https://energy.gov/sites/prod/files/2016/07/f33/eere 110 model cooperative agreement.pdf.

xii. Conference Spending

The recipient shall not expend <u>any</u> funds on a conference not directly and programmatically related to the purpose for which the grant or cooperative agreement was awarded that would defray the cost to the United States Government of a conference held by any Executive branch department, agency, board, commission, or office for which the cost to the United States Government would otherwise exceed \$20,000, thereby circumventing the required notification by the head of any such Executive Branch department, agency, board, commission, or office to the Inspector General (or senior ethics official for any entity without an Inspector General), of the date, location, and number of employees attending such conference.

VII. Questions/Agency Contacts

Upon the issuance of a FOA, EERE personnel are prohibited from communicating (in writing or otherwise) with applicants regarding the FOA except through the established question and answer process as described below. Specifically, questions regarding the content of this FOA must be submitted to: SEPCompetitive2017@ee.doe.gov. Questions must be submitted not later than 3 business days prior to the application due date and time.

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

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

VIII. Other Information

A. FOA Modifications

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

B. Informational Webinar

EERE will conduct three informational webinars during the FOA process. Webinars will be held after the initial FOA release. The first two applicant webinars describe the FOA requirements. In addition, a SEP competitive FOA Grant Application workshop will be offered for the purpose of providing guidance on how to develop responsive applications. This workshop will utilize an interactive discussion format.

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. Dates for the webinar will be announced on EERE Exchange.

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, either express or implied, is invalid.

E. Treatment of Application Information

In general, EERE will only use data and other information contained in applications for evaluation purposes, 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.

The use of protective markings such as "Do Not Publicly Release – Trade Secret" or "Do Not Publicly Release – Confidential Business Information" is encouraged. However, applicants should be aware that the use of protective markings is not dispositive as to whether information will be publicly released pursuant to the Freedom of Information Act, 5 U.S.C. §552, et. seq., as amended by the OPEN Government Act of 2007, Pub. L. No. 110-175. (See the "Notice of Potential Disclosure Under the Freedom of Information Act (FOIA)" below for additional information regarding the public release of information under the Freedom of Information Act.

Applicants are encouraged to employ protective markings in the following manner:

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 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.

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 FOA include those that 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 (FOIA)

Under the Freedom of Information Act, (FOIA), 5 U.S.C. §552, et. seq., as amended by the OPEN Government Act of 2007, Pub. L. No. 110-175, any information

received from the Applicant is considered to be an agency record, and as such, subject to public release under FOIA. The purpose of the FOIA is to afford the public the right to request and receive agency records unless those agency records are protected from disclosure under one or more of the nine FOIA exemptions. Decisions to disclose or withhold information received from the Applicant are based upon the applicability of one or more of the nine FOIA exemptions, not on the existence or nonexistence of protective markings or designations. Only the agency's designated FOIA Officer may determine if information received from the Applicant may be withheld pursuant to one of the nine FOIA exemptions. All FOIA requests received by DOE are processed in accordance with 10 C.F.R. Part 1004.

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 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 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. 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.

M. Copyright

The Prime Recipient and Subrecipients may assert copyright in copyrightable works, 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.

N. Personally Identifiable Information (PII)

All information provided by the Applicant must to the greatest extent possible exclude Personally Identifiable Information (PII). The term "personally identifiable information" refers to information which can be used to distinguish or trace an individual's identity, such as their name, social security number, biometric records, etc. alone, or when combined with other personal or identifying information which is linked or linkable to a specific individual, such as date and place of birth, mother's maiden name, etc. (See OMB Memorandum M-07-16 dated May 22, 2007, found at:

https://www.whitehouse.gov/sites/whitehouse.gov/files/omb/memoranda/2007/m07-16.pdf.)

By way of example, Applicants must screen resumes to ensure that they do not contain PII such as personal addresses, phone/cell numbers, personal emails and/or SSNs. In short, if the PII is not essential to the application, it should not be in the application.

O. Annual Compliance Audits

If a for-profit entity is a Prime Recipient and has expended \$750,000 or more of DOE awards during the entity's fiscal year, an annual Compliance Audit performed by an independent auditor is required. For additional information, please refer to 2 C.F.R. § 910.501 and Subpart F.

If an educational institution, non-profit organization, or state/local government is a Prime Recipient or Subrecipient and has expended \$750,000 or more of Federal awards during the non-Federal entity's fiscal year, then a Single or Program-Specific Audit is required. For additional information, please refer to 2 C.F.R. § 200.501 and Subpart F.

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

Appendix A – Cost Match Information

*Cost match is only applicable to Areas of Interest 1 and 2, and is not required in Area of Interest 3.

Cost Sharing or Cost Matching

The terms "cost sharing" and "cost matching" are often used synonymously. Even the DOE Financial Assistance Regulations, 2 CFR 200.306, use both of the terms in the titles specific to regulations applicable to cost sharing. EERE almost always uses the term "cost sharing," as it conveys the concept that non-federal share is calculated as a percentage of the Total Project Cost. An exception is the State Energy Program Regulation, 10 CFR 420.12, State Matching Contribution. Here "cost matching" for the non-federal share is calculated as a percentage of the Federal funds only, rather than the Total Project Cost.

How Cost Match Is Calculated

As stated above, cost matching is calculated as a percentage of the Federal Funds requested, including any federal funds paid to the FFRDC. 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 match requirement:

Formula: Federal share requested (\$) multiplied by cost match (%) = Non Federal Match (\$)

Example: \$1,000,000 multiplied by 20% = \$200,000 Cost Match requirement

What Qualifies For Cost Matching

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:

- FAR Part 31 for For-Profit entities, (48 CFR Part 31); and
- 2 CFR Part 200 Subpart E Cost Principles for all other non-federal entities.

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.

DOE Financial Assistance Rules 2 CFR Part 200 as amended by 2 CFR Part 910

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 the 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. For all other non-federal entities, allowability of costs is determined in accordance with 2 CFR Part 200 Subpart E.

- (5) They are not paid by the Federal Government under another award unless authorized by Federal statute to be used for cost sharing or matching.
- (6) They are provided for in the approved budget.
- (B) Valuing and documenting contributions
 - (1) Valuing recipient's property or services of recipient's employees. Values are established in accordance with the applicable cost principles, which mean that amounts chargeable to the project are determined on the basis of costs incurred. For real property or equipment used on the project, the cost principles authorize depreciation or use charges. The full value of the item may be applied when the item will be consumed in the performance of the award or fully depreciated by the end of the award. In cases where the full value of a donated capital asset is to be applied as cost sharing or matching, that full value must be the lesser or the following:
 - a. The certified value of the remaining life of the property recorded in the recipient's accounting records at the time of donation; or
 - b. The current fair market value. If there is sufficient justification, the Contracting Officer may approve the use of the current fair market value of the donated property, even if it exceeds the certified value at the time of donation to the project. The Contracting Officer may accept the use of any reasonable basis for determining the fair market value of the property.
 - (2) Valuing services of others' employees. If an employer other than the recipient furnishes the services of an employee, those services are valued at the employee's regular rate of pay, provided these services are for the same skill level for which the employee is normally paid.
 - (3) Valuing volunteer services. Volunteer services furnished by professional and technical personnel, consultants, and other skilled and unskilled labor may be counted as cost sharing or matching if the service is an integral and necessary part of an approved project or program. Rates for volunteer services must be consistent with those paid for similar work in the recipient's organization. In those markets in which the required skills are not found in the recipient organization, rates must be consistent with those paid for similar work in the labor market in which the recipient competes for the kind of services involved. In either case, paid fringe benefits that are reasonable, allowable, and allocable may be included in the valuation.
 - (4) Valuing property donated by third parties.
 - a. Donated supplies may include such items as office supplies or laboratory supplies. Value assessed to donated supplies included in the match 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:
 - The value of donated space must not exceed the fair rental value of comparable space as established by an independent appraisal of comparable space and facilities in a privately-owned building in the same locality.
 - ii. The value of loaned equipment must not exceed its fair rental value.
- (5) Documentation. The following requirements pertain to the recipient's supporting records for in-kind contributions from third parties:
 - a. Volunteer services must be documented and, to the extent feasible, supported by the same methods used by the recipient for its own employees.
 - b. The basis for determining the valuation for personal services and property must be documented.

Appendix B - Roadmapping - Area of Interest 1

Awardees under Area of Interest 1 will be required to develop a 'Roadmap' as a key post-award deliverable. Applicants should consider using the Roadmap guidance here as a framework for their proposals.

About Roadmaps

A Roadmap is a strategic plan that outlines actions needed to achieve a defined set of goals within a specified time frame. Within the energy sector, Roadmaps are used to identify policy, regulatory, financial and organizational actions needed to accelerate research, development and deployment of energy technologies. They can also identify market opportunities through SWOT (strength, weakness, opportunity and threat) analyses.

DOE does not require the utilization of any particular roadmapping methodology. However, nearly all Roadmaps incorporate the following three areas:

- Baselining;
- Time-Horizons and Regional Development Goals; and
- Action/Implementation Plans.

Baselining

A critical first step to road mapping is a rigorous baselining of the current landscape of the State or regional energy market and factors that affect it. These could include 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. Rigorous detailed baselining allows participants to brainstorm a State or regional future that acknowledges and addresses existing structural weaknesses or expands upon successes.

Time-Horizon and Regional Development 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 5 and 10 years hence. For states that have already established goals, this step represents a chance to revisit, redefine, refocus, or re-prioritize their goals.

Action/Implementation Plans

The real measure of a roadmap is how well it serves to connect a present baseline with future goals. Bridging the gap requires analysis to forecast broad market trends and evaluate the State or region's capacity to adapt to and capitalize on broader movements. 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 alternative actions or paths that can be taken to overcome these obstacles. State Roadmaps should also describe how the action/implementation plan was developed.

Other considerations

- Stakeholders: The best roadmaps are produced by teams that engage diverse stakeholders throughout the entire process. States should engage representatives from industry, government, academia, consulting and the public. Building strong stakeholder consensus also helps ensure effective implementation of the Roadmap's strategies and goals.
- Implementation: Where possible, Roadmaps should also define metrics or monitoring practices to track implementation progress 5 and 10 years out.

Resources

State Energy Planning Roadmaps Created Using SEP Competitive Funds:

Minnesota

Minnesota's 2025 Energy Action Plan outlines goals for the energy sector.

• See: https://mn.gov/commerce/policy-data-reports/energy-data-reports/mn-action-plan.jsp

North Carolina /South Carolina

North Carolina and South Carolina collaborated on "CAROLINAS ENERGY- PLANNING FOR THE FUTURE" for bi-state energy planning.

See: https://www.advancedenergy.org/wp-content/uploads/2016/12/SCEO Carolina Energy Report FINAL-WEB.pdf

Idaho

The Idaho Roadmap defined opportunities for multistate collaboration in a regional energy market.

 See: http://westernenergyboard.org/wieb-board/projects/idaho-wieb-state-energyplanning/documents/http://westernenergyboard.org/wieb-board/projects/idaho-wiebstate-energy-planning/documents/%20

Clean Energy and Economic Opportunity Roadmaps Created Using SEP Competitive Funds

Michigan

Collaborative effort with Northeast Ohio to identify market strengths for energy technologies.

• See: http://nextenergy.org/cleanenergyroadmap/

North Carolina

North Carolina developed an analysis of energy storage opportunities.

• See: https://energync.org/wp-content/uploads/2017/03/NC-DOE-Roadmap-Project-Storage.pdf

Please note that the following examples of roadmaps may not be directly related to the state energy policy Roadmaps that Area of Interest 1 awardees will be expected to prepare as a deliverable. They are not endorsed by the Department of Energy, and are provided here merely as a resource for States.

- Building Bridges to Growth: A Roadmap for Advanced Manufacturing in Massachusetts: http://www.mass.gov/hed/docs/eohed/building-bridges-to-growth.pdf
- lowa's Advanced Manufacturing Strategic Roadmap: http://www.iowainnovationcouncil.com/documents/filelibrary/publication reports/low
 http://www.iowainnovationcouncil.com/documents/filelibrary/publication reports/low
 https://www.iowainnovationcouncil.com/documents/filelibrary/publication reports/low
 https://www.iowainnovationcouncil.com/documents/filelibrary/publication reports/low
 https://www.iowainnovationcouncil.com/documents/filelibrary/publication reports/low
 https://www.iowainnovationcouncil.com/documents/filelibrary/publication
 https://www.iowainnovationcouncil.com/documents/filelibrary/publication
 https://www.iowainnovationcouncil.com/documents/filelibrary/publication
 https://www.iowainnovationcouncil.com/documents/filelibrary/publication
 https://www.iowainnovationcouncil.com/documents/filelibrary/publication
 https://www.iowainnovationcouncil.com/documents/filelibrary/publication
 <a href="https://www.iowainnovationcouncil.com/documents
- Roadmap to Zero Net Energy Public Building: http://www.neep.org/sites/default/files/resources/Report zne-public-buildings-neep-2012.pdf

Appendix C – Implementation Models - Area of Interest 2

If selected for award under Area of Interest 2, States will be required to create a Solution Summary that can be used to prepare an Implementation Model as a post award deliverable. An Implementation Model ranges from approximately 6-8 pages in length and explains the development of or changes to policies, processes, outreach efforts, tools, resources, etc. More specifically, the Implementation Model will describe:

- a. The State's goal(s) for the project;
- b. The necessary background information and context to explain the reasons behind the goal(s);
- c. The key policy, regulatory, organizational or market barrier(s) to energy efficiency that was addressed;
- d. The solution(s) developed or methods used to overcome the specific energy efficiency policy barriers or market barriers identified;
- e. The execution and step-by-step approach that your team took to develop solutions to overcoming the barriers;
- f. The outreach efforts, and the tools and resources used;
- g. The methodology for measuring progress and success, and,
- h. The outcomes/results achieved by the project.

DOE guidance on Implementation Model Development is located at: http://energy.gov/eere/wipo/downloads/state-energy-program-notice-14-2-implementation-model-guidance.

Implementation Models from completed SEP competitive awards include:

- https://energy.gov/eere/slsc/downloads/enhancing-energy-efficiency-states-stateillinois-implementation-model-2012
- https://energy.gov/eere/slsc/downloads/advancing-energy-efficiency-states-state-mississippi-implementation-model
- https://energy.gov/eere/slsc/downloads/advancing-energy-efficiency-states-state-iowa-implementation-model
- https://energy.gov/eere/slsc/downloads/state-rhode-island-public-energy-partnership-implementation-model-2012

Appendix D - Executive Summary- Area of Interest 3

Work under Area of Interest 3 awards will be managed in conjunction with SEP formula award work. The primary project deliverable will be an *Executive Summary* detailing how the technical assistance provided either 1) increased the impact of existing SEP formula work or 2) contributed to the creation of new SEP formula activity.

The Executive Summary must be uploaded into the Performance and Accountability for Grants in Energy (PAGE) system during the final three months of the competitive award's period of performance. It will be treated as an internal document unless DOE receives approval from the State to distribute or share it with outside audiences. If the technical assistance activity leads to the creation of new formula activity, the State will work with its formula award Project Officer to incorporate the additional activity into the formula award.

Appendix E – Work Breakdown Structure

Technical Summary: Provide a high-level overview of the anticipated 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 tasks have been organized in this way.

Task 1: Distinctive Title, Date range of the task in months

Task Summary: Task summaries shall explicitly describe what work is to be accomplished 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, 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)

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)

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

Appendix F – Questions for Area of Interest 2

The four Topics of Emphasis eligible for Area of Interest 2 proposals are related to the following subset of questions derived from the '2017 State Energy Assessment.' Applicants should familiarize themselves with these questions prior to crafting proposals and consider how the proposal could change an answer from a 'no' to a 'yes', or expand the applicability, or enhance the effectiveness, of a program or policy identified in a question.

TOPIC OF EMPHASIS 1: Enabling Financing Mechanisms for Public or Private Sector EE/RE Investment

Under this topic area, applicants may submit proposals with strategies to develop or expand an energy specific financial policy or initiative to incent public or private EE/RE investment.

Applicants should consider the following questions when crafting proposals under Topic of Emphasis 1:

Does your State use or have mechanisms beyond annual appropriations for energy efficiency and other EE/RE or low carbon investments?

	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.
Does y	our State have a self-sustaining ESPC program?
	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.
Has yo	our State helped provide financing options or incentives for EE/RE investments?
	Yes, the State has passed legislation in support of commercial PACE.

	Yes, the State has established a fund to support loans for energy efficiency and renewable energy.
	Yes, the State has established one or more incentives in support of energy efficiency and
	renewable energy.
	No, the State has not established legislation or financing options.
TOPIC	OF EMPHASIS 2: Deploying Energy Performance Benchmarking and Disclosure
	this topic area, applicants may submit proposals with strategies to develop or expand r regulations related to benchmarking and disclosure of energy use in public or private ags.
	ants should consider the following questions when crafting proposals under Topic of
<u>Empha</u>	asis 2:
•	our State or communities within your State have a law or regulation that requires marking 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.
to buil	e or more investor-owned utilities provide aggregated whole-building energy usage data ding owners for purposes of benchmarking and energy management in cases where ual tenants in a building have separate utility meters and accounts?
	Yes
Ц	No
	ne or more of your investor-owned utilities provide direct data exchange with automated marking tools such as ENERGY STAR Portfolio Manager?
	Yes No

Has your state utility regulator established a aggregated customer energy usage data tha privacy concerns?	rule describing what constitutes sufficiently t can be given to building owners while addressing
☐ Yes☐ Rules are under consideration or pen☐ No	ding
Does one or more of your investor-owned ut data in a standardized format (e.g. Green Bu	lities allow customers to access their energy usage tton)?
☐ Yes☐ Utilities have committed to this but a☐ No	re still implementing
	ilities allow customers to designate one or more y usage data in a standardized format (e.g. Green
☐ Yes☐ Utilities have committed to this, but☐ No	are still implementing
Does your State have guidelines or rules regadata?	arding third party access to customer energy usage
☐ Yes☐ Rules are under consideration or pen☐ No	ding

TOPIC OF EMPHASIS 3: Standardizing Evaluation Measurement Verification (EM&V) Processes

Under this topic area, applicants may submit proposals with strategies to develop or expand process related to standardized evaluation, measurement and verification (EM&V) practices to determine energy and emissions reductions from ratepayer and/or non-ratepayer funded efficiency programs.

Applicants should consider the following questions when crafting proposals under Topic of Emphasis 3:

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 NON-ratepayer-funded efficiency programs?

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

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?

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

TOPIC OF EMPHASIS 4: Partnering with Local Governments

Under this topic, applicants may submit proposals with strategies to develop or expand policies and programs to support local governments to design and implement internal and/or publicly facing EE/RE programs.

Applicants should consider the following questions when crafting proposals under Topic of Emphasis 4:

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.
sectors or hea	our State have a program that supports your local governments in targeting underserved (such public housing, multifamily housing, small businesses, rural communities, hospital lithcare facilities, wastewater treatment facilities, or community facilities) for energy ncy improvements?
	Yes, a defined suite of support services and/or partnership opportunities for local governments including financial support is offered for efforts to target underserved sectors. Yes, a defined suite of support services to local governments, without financial support, is offered for efforts to target underserved sectors. Yes, a collection of discrete services and programs not managed as a defined suite. No, we do not have a formal program.
	our State have a statewide plan for enhancing energy resilience that includes local nments? (Select all that apply)
	Yes, my State has a plan for energy resilience that addresses all sectors (e.g., buildings, transportation) and engages both state and local government entities (e.g., cities, towns, counties, etc.). Yes, my State has an energy assurance plan or state energy plan that includes action items on energy resilience across sectors and between levels of government. Yes, my State has a plan for energy resilience focused on a specific sector. No, my State does not have an energy resilience plan that identifies state and local partnership opportunities.
-	ur state conducted an analysis of investment needs to support energy resilience efforts at mmunity level (e.g., a micro grid siting study)
	Yes No
•	our State energy office collaborate with public and / or private partners on energy nce planning, including local governments (Select all that apply)
	Yes, my State collaborates with other states and local governments in my region

	Yes, my State coordinates across state agencies (GSA, treasury, emergency
	management/homeland security) and with comparable public agencies in local
	communities (i.e., cities, towns, counties)
	Yes, my State collaborates or partners with utilities (investor-owned, cooperatives or
	municipal)
	Yes, my State collaborates or partners with local governments
	Yes, my State collaborates with business at the state and local level
	No, my state does not currently collaborate or partner with other state or local entities
Has yo	our State developed any policies or programs that might benefit energy resilience efforts?
	Yes, my State has adopted EE/RE financing programs that may support greater energy
	resilience at the state and local levels (e.g., Green Banks, PACE)
	Yes, my State has adopted state and local procurement policies or guidance that support
_	energy resilience
Ц	e,
	Yes, my State has adopted water or wastewater programs for state and local

APPENDIX G - WORKING WITH LOCAL GOVERNMENTS TO ADVANCE ENERGY RESILIENCE AND EE/RE

Area of Interest 2, Topic of Emphasis 4. Partnering with Local Governments on Energy Resilience:

The nation's energy sector is subject to an increasing number of disruptions due to natural and human events. Confronting these risks requires a more resilient U.S. energy system, one with the capacity to respond to and recover from a disruptive event while maintaining its core functions. Investments in resilience, when properly aligned with EE/RE efforts, can provide energy stability, environmental and other benefits to communities.

Energy efficiency is one way local governments can invest in energy resilience. Efforts include the development of plans and policies that help reduce energy waste in buildings or support deployment of energy-saving technologies that enhance the reliability of the electric grid and water supply.

Under this subtopic States will assist local governments with strengthening their energy resilience through EE/RE programs. Specific opportunities include:

- Drafting a comprehensive plan (i.e., multi-sector, interagency) that outlines short and longterm strategies for energy resilience and EE/RE;
- Forming regional and cross-jurisdictional partnerships to identify interdependencies across infrastructure systems, share data, prioritize investments or set shared resiliency goals;
- Partnering with utilities and others to:
 - Create or enhance building-sector programs (e.g., building design, energy codes, intelligent controls, etc.);
 - o Identify pathways to foster emerging technologies (e.g., vehicle-to-grid, energy storage, Internet of Things, etc.) to support EE/RE goals; and
 - Create energy efficiency plans or policies that improve resilience and provide air quality or economic benefits.
- Using analyses or planning tools¹⁰ to:
 - Conduct risk-based assessments of energy sector or system needs for EE/RE; and/or
 - o Identify optimal placement for deployment of distributed energy resources, such as combined heat and power, micro-grids, energy storage, etc.
- Structuring energy finance options such as Property Assessed Clean Energy (PACE), Energy Saving Performance Contracts (ESPCs), or Revolving Loan Funds (RLF) to incentivize energy

⁹ For more information, see: http://energy.gov/epsa/initiatives/us-energy-sector-vulnerability-report

¹⁰ For examples of tools see: https://www.whitehouse.gov/the-press-office/2016/10/31/fact-sheet-obama-administration-highlights-opportunities-building

resilience; and developing incentives or other policies to support green infrastructure to mitigate urban heat islands or to reduce energy needs at water and wastewater treatment plants.