Request for Information (DE-FOA-0002291) on the Building Technologies Office's Draft Connected Communities Funding Opportunity Announcement

DATE: March 27, 2020
SUBJECT: Request for Information (RFI)

Description

This RFI pertains to a draft Funding Opportunity Announcement (FOA) planned to be issued by the Office of Energy Efficiency and Renewable Energy (EERE), Building Technologies Office (BTO), in collaboration with the Vehicle Technologies Office (VTO), Solar Energy Technologies Office (SETO) and the Office of Electricity (OE) on Connected Communities of Grid-interactive Efficient Buildings.

Background

BTO has a mission to develop and accelerate the adoption of cost-effective technologies, techniques, tools, and services that enable high-performing, energy-efficient, and demand-flexible residential and commercial buildings in both the new and existing buildings markets. The Office's overall goal is to improve the energy productivity of buildings without sacrificing occupant comfort or product performance – in other words to use energy more productively and efficiently, not simply to use less energy. Progress towards achieving this goal will make building energy costs more affordable to the benefit of American households and businesses.

In support of this goal, BTO has developed a Grid-interactive Efficient Buildings (GEB) strategy which aims to advance the role buildings can play in energy system operations and planning by optimizing across distributed energy resources (DERs), such as flexible loads, energy generation, and storage. The GEB strategy drives towards greater affordability, efficiency, resiliency, and reliability, recognizing that:

• Building end uses can be dynamically managed to reduce energy cost, consumption, help meet grid needs, and minimize electricity system costs, while meeting occupants' comfort and productivity requirements;

• Technologies such as photovoltaics (PV), electrochemical and thermal energy storage, combined heat and power (CHP), electric vehicles (EVs), other DERs, and microgrids can be co-

---

*This is a Request for Information (RFI) only. EERE will not pay for information provided under this RFI and no project will be supported as a result of this RFI. This RFI is not accepting applications **for** financial assistance or financial incentives. EERE may or may not issue a Funding Opportunity Announcement (FOA) based on consideration of the input received from this RFI.*

optimized with buildings to provide greater value and resiliency to both utility customers and the electricity system; and

• The value of energy efficiency, demand response, and other services provided by behind-the-meter DERs can vary by building type, location, hour, season, and year.

A key part of this strategy includes utilizing efficient building design and operational strategies coupled with smart technologies (sensors, actuators, controllers, etc.) and highly efficient building equipment for building energy management. These are areas of core technological investment for BTO.

The vision of GEB is the integration and continuous optimization of DERs for the benefit of the buildings' owners, occupants, and the electric grid. Improving the energy efficiency and demand flexibility of buildings alleviates pressure on the electric grid and extends our domestic energy resources. Given the importance of DER integration in this future funding opportunity announcement, BTO is collaborating on a core set of research questions with SETO, VTO, and OE. Each of these program offices has unique perspective and expertise that will contribute to the Connected Communities effort.

Collaborating Offices

SETO supports research and development to improve the affordability, performance, and value of solar technologies on the grid. A number of SETO programs, including ongoing collaborations with OE, BTO and VTO, explore opportunities to integrate solar generation with other energy technologies to improve total system value and flexibility while maintaining or improving system affordability, reliability and security. For example, the Sustainable and Holistic Integration of Energy Storage and Solar PV (SHINES) program integrated solar generation and energy storage with technologies such as dynamic load management, advanced forecasting techniques, utility communication and control systems, and smart buildings and smart appliances to meet both consumer needs and the demands of the electricity grid. The Connected Communities FOA is an opportunity to further extend these efforts in system design and operations optimization.

VTO supports a sustainable transportation system through research and technology development to enable a broad range of affordable, efficient and clean transportation choices. Both light and medium/heavy duty vehicle electrification are a significant change to the transportation of people and goods, but also to the electric grid and to the consumer experience. Plug-in electric vehicle charging represents both a potentially large new load but also one that has some level of flexibility. The idea of flexible loads may be key to managing a future grid that is more dynamic and based on more intermittent generation. Almost all EV

This is a Request for Information (RFI) only. EERE will not pay for information provided under this RFI and no project will be supported as a result of this RFI. This RFI is not accepting applications for financial assistance or financial incentives. EERE may or may not issue a Funding Opportunity Announcement (FOA) based on consideration of the input received from this RFI.

charging currently happens in or connected to a building complex and is supported by the buildings overall electrical delivery system and infrastructure. A key part of any EV smart charging management must therefore be tied to the overall building's energy strategy.

DOE's Office of Electricity (OE), collaborating with BTO on this RFI, recognizes a secure and resilient power grid is vital to national security, economic security, and the services Americans rely upon. OE works closely with the private and public sectors to ensure the nation's critical energy infrastructure is secure and able to recover rapidly from disruptions. OE has an interest in the ability of Connected Communities to demonstrate how next-generation technologies, policy tools and technical assistance partnerships with the private sector and at all levels of government can improve the security and resilience of the grid and in particular the nation's critical energy infrastructure. OE has a mission to support R&D for a secure, resilient and adaptive power grid. OE is actively collaborating with BTO on Connected Communities, recognizing that building optimization is improved by extending into the grid, and grid optimization is improved by extending into buildings. The GEB strategy reflects that shared priorities across OE and EERE and will benefit from this partnership.

Purpose

The purpose of this RFI is to solicit feedback from utilities, industry, academia, EV service providers, research laboratories, government agencies, and other stakeholders on issues related to Grid-interactive Efficient Buildings in Connected Communities. EERE is specifically interested in information on the draft Connected Communities FOA goals and design. **This is solely a request for information and not a Funding Opportunity Announcement (FOA). EERE is not accepting applications.**

Draft FOA Topic Area: Connected Communities

DOE plans to make a significant investment in Connected Communities because of the potential for high-performance buildings and managed EV charging that effectively leverage smart technology, distributed energy resources, flexible loads and grid integration to cost-effectively reduce energy use and peak demand while improving the occupant experience.

The goal of this potential FOA is to demonstrate, through regional pilots, the ability of groups of efficient buildings, including some level of EV charging infrastructure, to provide additive benefits to the electricity system including peak demand reduction, reduced capacity and energy needs, and other grid services through demand flexibility. This includes the ability to reduce, shift and modulate load or generate energy in both existing and new communities across diverse climates, geographies, building types and grid/regulatory structures, while maintaining (if not enhancing) occupant satisfaction and productivity. For the purpose of this

---

This is a Request for Information (RFI) only. EERE will not pay for information provided under this RFI and no project will be supported as a result of this RFI. This RFI is not accepting applications for financial assistance or financial incentives. EERE may or may not issue a Funding Opportunity Announcement (FOA) based on consideration of the input received from this RFI.

topic, a "connected community" is a group of grid-interactive efficient buildings with diverse, flexible end use equipment that collectively work to maximize building and grid efficiency without compromising occupant needs and comfort. Connected communities builds on BTO's current Grid-interactive Efficient Buildings (GEB) research: https://www.energy.gov/eere/buildings/grid-interactive-efficient-buildings and Zero Energy Ready (ZE/R) strategies.

Current connected communities take advantage of highly efficient homes and commercial buildings and multi-disciplinary partnerships between utilities, building developers/owners and researchers. These communities leverage innovation in high performance building design, operation and technology (i.e. dynamic windows, heat pumps, and smart thermostats). In addition, the growing number of installed smart devices and advanced data-analytics greatly increases flexibility of buildings to respond to grid needs. Connected communities include smart connected neighborhoods and co-managed multi-use developments with shared infrastructure.[1]

Connected communities have demonstrated new energy, reliability, affordability, and resilience benefits for homeowners and businesses. For example, through work funded by the Building Technologies Office, ORNL researchers have found that the actual energy consumption of the homes in the Reynolds Landing Smart Neighborhood™ consumed 44% less energy (kWh) as compared to similar homes built to minimum code requirements in Alabama. Researchers are also learning that these homes can reduce their peak winter heating demand (kW) by ~34% from what a traditional, all-electric community would have otherwise needed because of the highly efficient envelope and capability to shift heating and cooling loads. In addition to coordination of diverse, flexible building loads, connected communities can potentially share infrastructure and energy assets to achieve economies of scale, improve system efficiency, reduce operations, maintenance and capital costs, and to island as part of a microgrid that stages loads to operate during power outages.

A key advantage to connected communities is that load diversity, storage and generation across buildings and EVs can be leveraged to create more economic value per unit of installed capacity while reducing emissions. This is especially true for physically connected communities with shared systems. A simple example of the advantage gained from load diversity is to consider two buildings subject to high demand charges with peak electric load occurring at different times. One battery or other storage device, installed for both buildings, can be used to effectively reduce the peak demand of both buildings, whereas in a single-building approach, each building would likely install its own battery to achieve the same benefit. Extending the example to more than two buildings can increase the value of the battery even further.

[1] https://www.mandalayhomes.com/community/jasper, https://aec.epri.com/home, https://penastationnext.com/

Similarly, in a multi-building complex with a shared central thermal plant, to the extent that the buildings' heating and cooling loads are not coincident with each other, the capacity of the shared plant can be less than the sum of the capacities if each building were to install its own thermal plant.

A key objective of the planned Connected Communities FOA is to have a coordinated and diverse set of validation projects that demonstrate the ability of large groups of buildings in aggregation to improve their energy efficiency, resilience, and productivity while serving as reliable grid assets to meet specific and quantifiable grid needs. A coordinated research approach, in which projects serve as a cohort to share challenges and best practices between each other and publicly, will allow DOE to synthesize information across many projects that include multiple building types, applications, vintages and sectors, climates, electricity regulatory and market environments, occupancy/programmatic approaches, business models and occupant impact in an effort to scale innovation.

BTO also plans to select one National Laboratory to serve as the Connected Communities National Coordinator to support planning, implementation, communications, stakeholder engagement, pilot evaluations and publishing of research findings. The National Coordinator will facilitate communication across awardees during pilot implementation stages (e.g. quarterly cohort webinars, annual summit, website with relevant tools and resources) and provide technical assistance with common challenges. BTO envisions a primary role of the National Coordinator to be to support the regional projects, synthesize project results to identify lessons learned and best practices for replicability of both individual technologies and integration of DERs across multiple buildings. The National Coordinator will also play a key role in development of the overall research and evaluation plan, including data collection process, methods to evaluate pilot performance, analysis to answer research questions, and detailed case studies of all pilots. The National Lab selected as the National Coordinator will not be eligible to apply for this FOA.

Applicants are required to explain how they will communicate and share research results and lessons learned on projects to improve replicability and increase grid reliability, resilience, security, affordability and energy integration well into the future.

When the FOA is announced, DOE will seek applications for diverse regional pilots to demonstrate, evaluate and share data on scalable strategies necessary to replicate connected community projects across the United States.

DOE intends for applications to:

This is a Request for Information (RFI) only. EERE will not pay for information provided under this RFI and no project will be supported as a result of this RFI. This RFI is not accepting applications for financial assistance or financial incentives. EERE may or may not issue a Funding Opportunity Announcement (FOA) based on consideration of the input received from this RFI.

- Include both demand flexibility and energy efficiency, with a to-be-determined minimum level of energy efficiency;
- Include at least a to-be-determined total square footage of building space and a to-be-determined number of buildings;
- Include at least two DERs (such as solar PV, electric vehicles, thermal energy storage, microgrid, etc.), in addition to flexible/efficient building load, that support demand flexibility, affordability, and resiliency;
- Focus proposed pilots on groups of buildings that when aggregated demonstrate measurable added value to both the occupants and the grid beyond what can be achieved on an individual building basis;
- Articulate pilot's value to the power grid in terms of defined and quantifiable grid services, considering both transmission and distribution operational domains;
- Form teams composed of critical stakeholders representing, at a minimum, grid resources/assets (e.g. utility), buildings owners/assets (e.g. home builder, building owner, developer, building manager), and researchers (e.g. national lab, university); Additional collaborators may include relevant technology manufacturers, regional, state and local governments, and others;
- Include demonstration of innovative technology or approaches;
- Demonstrate pathways that quantifiably decrease the set up time and challenges associated with the design, installation, and integration and commissioning of hardware, software, controls and communications to make buildings grid interactive;
- Collect data supporting occupant interactions with smart technologies and improved comfort levels;
- Include a plan to address cybersecurity and privacy challenges both in demonstration and at scale;
- Pilot new business models for demand flexibility and DER coordination, aggregation and optimization across buildings that can be scaled, recognizing technological, business and contractual approaches that will be potentially attractive to customers, utilities, builders and other key stakeholders; and
- Communicate to and educate relevant industries, public officials, professionals, the public and stakeholders regarding the pilot's value in terms of the goals described earlier.

Preferred applications will:

- Integrate technologies, building infrastructure, and/or contractual arrangements that are broadly replicable across the U.S. building stock and electricity business and regulatory environments;
- Demonstrate EVs and managed charging as part of the overall building system load;

This is a Request for Information (RFI) only. EERE will not pay for information provided under this RFI and no project will be supported as a result of this RFI. This RFI is not accepting applications for financial assistance or financial incentives. EERE may or may not issue a Funding Opportunity Announcement (FOA) based on consideration of the input received from this RFI.

- Scale or stage energy supply and consumption using load control, storage and generation in order to operate the community at varied levels of service during multi-day power outages;
- Include a greater number of buildings and additional behind the meter DER assets;
- Consider building- as well as community-based assets to maximize system value to community members, asset owners and grid operators; and
- Provide a plan for replication in other communities.

All projects are required to produce and collect data to demonstrate the ability of the pilot to reduce load as well as shift load, modulate load and/or generate energy and participate with a BTO-designated third party for measurement and verification. In order to measure quantity and "quality" of actual load change and or energy services, it is anticipated that all buildings will be equipped with advanced metering infrastructure and analytics, and comparable infrastructure on the grid side. We anticipate each project will produce the following types of data:

a) Quantity (e.g. kW, kWh) and quality (e.g. duration, response time, power quality/tolerance, persistence) of actual energy load and/or generation during periods of interest;
b) Voltage and reactive power measurements and others, as required to support proposed grid services value streams;
c) Building occupant benefits (e.g. comfort, productivity, health, convenience);
d) Financial costs and benefits (e.g. capital costs, energy costs, disruption, etc.) for both building owners or occupants and the grid; and
e) Case studies that will include data trends, research questions and findings, and operational promising practices.

Applicants should explain their planned approach to measure, collect, and analyze data to demonstrate the ability of the pilot to reduce load as well as shift load, modulate load, or generate energy. Applications selected for award negotiations will be required to submit a Data Management Plan and a Measurement & Verification Plan. These plans will be reviewed for scientific rigor and adherence to best practices and industry standards. Verification of compliance with approved plans will be carried out through on-site and remote review of records.

Desired outcomes from the portfolio of pilots and other activities conducted under this FOA are as follows:

- Data from projects in several regions showing if/how groups of buildings, both new and existing, can reliably and cost-effectively serve as significant grid assets by strategically deploying efficiency and demand flexibility in conjunction with DERs;

This is a Request for Information (RFI) only. EERE will not pay for information provided under this RFI and no project will be supported as a result of this RFI. This RFI is not accepting applications for financial assistance or financial incentives. EERE may or may not issue a Funding Opportunity Announcement (FOA) based on consideration of the input received from this RFI.

- Analysis on the interaction between energy efficiency and demand flexibility measures and how grid-interactive efficient buildings improve energy affordability, grid reliability and congestion, offer environmental benefits and enhanced grid services;
- Proven pathways that decrease the set up time and potential disruption to occupants of installing hardware, software and communications to make buildings grid interactive;
- Insights on occupant impact and comfort levels resulting from equipment with advanced controls and changing operation of equipment to meet grid needs;
- Perspective into the amount and duration that occupants are willing to change the timing of their energy use, and any necessary level of compensation;
- Demonstrate new business models for demand flexibility and DER coordination, aggregation and optimization across buildings that can be scaled throughout a region, and beyond, recognizing technological, business and contractual approaches that will be potentially attractive to customers, utilities, builders and other key stakeholders; and
- Provide an online solutions portal with case studies of each pilot project, synthesized best practices, successful approaches and lessons learned, analysis and associated analytical tools.

DOE will seek to select a portfolio of pilot projects with a fulsome balance of factors including, but not necessarily limited to, the following:

1. Climate and Geography;
2. Utility conditions and type (e.g. variance among whether capacity constrained, level of variable renewables penetration, typical rates, investor- or publicly owned, etc.);
3. Regulatory environment and market structure;
4. Building type (residential, commercial, mixed use, mixed community); and
5. Vintage (new, existing).

Draft Award Information

i. Estimated Funding

Under this FOA, EERE envisions awarding 4-6 financial assistance awards of up to $7M each in the form of cooperative agreements. Individual awards may vary between $3 million and $7 million. DOE may issue one, multiple, or no awards.

ii. Period of Performance

This is a Request for Information (RFI) only. EERE will not pay for information provided under this RFI and no project will be supported as a result of this RFI. This RFI is not accepting applications for financial assistance or financial incentives. EERE may or may not issue a Funding Opportunity Announcement (FOA) based on consideration of the input received from this RFI.

DOE anticipates making awards that will run from 3-5 years, comprised of 2-5 budget periods. Project continuation will be contingent upon several elements, including satisfactory performance and Go/No-Go decision review.

iii. Cost Share

The cost share must be at least 50% of the total allowable costs for demonstration projects (i.e., the sum of the government share, including FFRDC costs if applicable, and the recipient share of allowable costs equals the total allowable cost of the project) and must come from non-federal sources unless otherwise allowed by law. (See 2 CFR 200.306 and 2 CFR 910.130 for the applicable cost sharing requirements.)

Request for Information Categories and Questions

Category 1: Technical Requirements

1.1.) Will the proposed FOA requirements support demonstrations that explore the smart load controls and building design load reduction strategies (e.g. high performance envelope, shading, etc.) in combination with other DERs that provide the best options for demand flexibility to meet specific grid needs?

1.2.) How can the FOA be designed to enable future scaling of connected communities beyond pilots?

1.3.) What should be the required minimum energy efficiency level or efficiency improvement? How should minimum requirements differ for new versus existing commercial and residential buildings?

1.4.) What should be the minimum square feet or number of buildings requirement for each project to demonstrate buildings can contribute as reliable grid resources? Is there a different way to require a minimum project size (e.g. load size)?

1.5.) Is the requirement of including at least two DERs in addition to energy efficiency the right approach to exploring demand flexibility solutions to support grid needs, customer service, environmental and resiliency goals or other considerations and priorities? Should there be a minimum amount of demand flexibility resulting from the combined DERs? If yes what should it be and why? Should it be different for new and existing commercial and residential buildings; if yes how?

1.6.) For the proposed FOA "grid resilience" is defined as *the functional preservation of the electric grid operations in the face of natural and man-made threats and hazards*[2] and "grid services" is defined as *services that support the generation, transmission, and distribution of electricity and provide value through avoided electricity system*

[2] U.S. DOE, Office of Electricity (November 2015). *Grid Modernization Multi-year Program Plan* (page 83). Retrieved from https://www.energy.gov/sites/prod/files/2016/01/f28/Grid%20Modernization%20Multi-Year%20Program%20Plan.pdf

costs (generation and/or delivery costs).[3] Are these definitions appropriate for this FOA or should FOA applicants define grid resilience or grid services in a manner that addresses both building and grid perspectives? If so, how?

1.7.) Are the required teams "composed of critical stakeholders representing grid resources/assets (e.g. utility), buildings owners/assets (e.g. home builder, building owner, developer, building manager), and researchers (e.g. national lab, university)" and suggested additional collaborators such as "relevant technology manufacturers and local governments" appropriate to meeting outcomes of the anticipated FOA? If not, are there other important partners that should be included?

1.8.) Should natural gas technologies be considered in the pilots? If yes, how should they be included?

1.9.) What technical communication (e.g. data access, data transport, network technologies, interoperability) requirements should be included for maximum project effectiveness and future scaling of the technologies? What cybersecurity and privacy requirements should be included?

1.10.) Do any of the outlined criteria present limitations to emerging business models? Should other criteria be considered?

1.11.) Are there new or emerging technologies or strategies that support DER optimization that could leapfrog the outcomes of the anticipated FOA that should be incorporated into pilot design and implementation?

Category 2: Funding, Cost share, and Period of Performance

2.1.) Is the proposed DOE funding level per project (i.e. up to $7 million) reasonable to achieve the drafted FOA objectives? If not what would be more appropriate and why? Note that all demonstration projects must meet a minimum cost share requirement of 50%.

2.2.) Is a period of performance of 3-5 years reasonable? If not what is appropriate and why?

Category 3: Data Sharing/Measurement and Verification

3.1.) How can these pilots best consider, measure, and document energy, building occupant/tenant, and financial impacts?

3.2.) Are the proposed types of data for measurement and verification consistent with current industry practice and supportive of utility, customer, and other relevant stakeholder decision making? If not, what additional data should be required?

[3] U.S. DOE, Building Technologies Office (December 2019). *Grid-interactive Efficient Buildings Technical Report Series: Overview of Research Challenges and Gaps* (page vii). Retrieved from https://www1.eere.energy.gov/buildings/pdfs/75470.pdf

3.3.) How feasible is it for potential applicant teams to collect the required types of data and share at an aggregated level between project teams and publicly? What privacy policies and cybersecurity standards, guidelines, and practices are applicable to the proposed data collection and sharing requirements? What data sharing platforms or mechanisms would be appropriate for sharing data among project teams and with the public?

3.4.) What are the critical issues that need to be addressed to successfully evaluate, measure and verify impact of multiples DERs?

Category 4: Other

4.1.) How can DOE best design the FOA to allow applicant teams to form and provide strong proposals? What additional aspects should be considered for successful pilot design and implementation?

4.2.) Is there any other feedback on the FOA goals, design, requirements, etc. you would like to provide?

Disclaimer and Important Notes

This RFI is not a Funding Opportunity Announcement (FOA); therefore, DOE is not accepting applications at this time. DOE may issue a FOA in the future based on or related to the content and responses to this RFI; however, DOE may also elect not to issue a FOA. There is no guarantee that a FOA will be issued as a result of this RFI. Responding to this RFI does not provide any advantage or disadvantage to potential applicants if DOE chooses to issue a FOA regarding the subject matter. Final details, including the anticipated award size, quantity, and timing of DOE funded awards, will be subject to Congressional appropriations and direction.

Any information obtained as a result of this RFI is intended to be used by the Government on a non-attribution basis for planning and strategy development; this RFI does not constitute a formal solicitation for proposals or abstracts. Your response to this notice will be treated as information only. DOE will review and consider all responses in its formulation of program strategies for the identified materials of interest that are the subject of this request. DOE will not provide reimbursement for costs incurred in responding to this RFI. Respondents are advised that DOE is under no obligation to acknowledge receipt of the information received or provide feedback to respondents with respect to any information submitted under this RFI. Responses to this RFI do not bind DOE to any further actions related to this topic.

Proprietary Information

This is a Request for Information (RFI) only. EERE will not pay for information provided under this RFI and no project will be supported as a result of this RFI. This RFI is not accepting applications for financial assistance or financial incentives. EERE may or may not issue a Funding Opportunity Announcement (FOA) based on consideration of the input received from this RFI.

Because information received in response to this RFI may be used to structure future programs and FOAs and/or otherwise be made available to the public, **respondents are strongly advised to NOT include any information in their responses that might be considered business sensitive, proprietary, or otherwise confidential.** If, however, a respondent chooses to submit business sensitive, proprietary, or otherwise confidential information, it must be clearly and conspicuously marked as such in the response.

Responses containing confidential, proprietary, or privileged information must be conspicuously marked as described below. Failure to comply with these marking requirements may result in the disclosure of the unmarked information under the Freedom of Information Act or otherwise. The U.S. Federal Government is not liable for the disclosure or use of unmarked information, and may use or disclose such information for any purpose.

If your response contains confidential, proprietary, or privileged information, you must include a cover sheet marked as follows identifying the specific pages containing confidential, proprietary, or privileged information:

> **Notice of Restriction on Disclosure and Use of Data:**
> Pages [List Applicable Pages] of this response may contain confidential, proprietary, or privileged information that is exempt from public disclosure. Such information shall be used or disclosed only for the purposes described in this RFI DE-FOA-0002291. The Government may use or disclose any information that is not appropriately marked or otherwise restricted, regardless of source.

In addition, (1) the header and footer of every page that contains confidential, proprietary, or privileged information must be marked as follows: “Contains Confidential, Proprietary, or Privileged Information Exempt from Public Disclosure” and (2) every line and paragraph containing proprietary, privileged, or trade secret information must be clearly marked with double brackets or highlighting.

Evaluation and Administration by Federal and Non-Federal Personnel

Federal employees are subject to the non-disclosure requirements of a criminal statute, the Trade Secrets Act, 18 USC 1905. The Government may seek the advice of qualified non-Federal personnel. The Government may also use non-Federal personnel to conduct routine, nondiscretionary administrative activities. The respondents, by submitting their response, consent to EERE providing their response to non-Federal parties. Non-Federal parties given access to responses must be subject to an appropriate obligation of confidentiality prior to

---

This is a Request for Information (RFI) only. EERE will not pay for information provided under this RFI and no project will be supported as a result of this RFI. This RFI is not accepting applications for financial assistance or financial incentives. EERE may or may not issue a Funding Opportunity Announcement (FOA) based on consideration of the input received from this RFI.

being given the access. Submissions may be reviewed by support contractors and private consultants.

Request for Information Response Guidelines

Responses to this RFI must be submitted electronically to **CCPilotsRFI@ee.doe.gov** no later than 5:00pm (ET) on May 12, 2020. Responses must be provided as attachments to an email. It is recommended that attachments with file sizes exceeding 25MB be compressed (i.e., zipped) to ensure message delivery. Responses must be provided as a Microsoft Word (.docx) attachment to the email, and no more than 10 pages in length, 12 point font, 1 inch margins. Only electronic responses will be accepted.

Please identify your answers by responding to a specific question or topic if applicable. Respondents may answer as many or as few questions as they wish.

DOE will not respond to individual submissions or publish publicly a compendium of responses. A response to this RFI will not be viewed as a binding commitment to develop or pursue the project or ideas discussed.

Respondents are requested to provide the following information at the start of their response to this RFI:

- Company / institution name;
- Company / institution contact;
- Contact's address, phone number, and e-mail address.

Teaming Partner List

In addition to responding to the RFI questions above, EERE is compiling a Teaming Partner List to facilitate the widest possible participation for this anticipated FOA. The list allows organizations with expertise in the topic and wish to participate in an application, but may not wish to apply as the Prime applicant to the FOA, to express their interest to potential applicants and to explore potential partnerships. EERE strongly encourages teams from different organizations, scientific disciplines, and technology sectors to form interdisciplinary and cross-sector teams that span organizational boundaries in order to enable and accelerate the achievement of scientific and technological outcomes that were previously viewed as extremely difficult, if not impossible.

The Teaming Partner List will be available on https://eere-Exchange.energy.gov under this RFI (DE-FOA-0002291) until the FOA is posted. After the FOA is posted the Team Partner List will be

---

This is a Request for Information (RFI) only. EERE will not pay for information provided under this RFI and no project will be supported as a result of this RFI. This RFI is not accepting applications for financial assistance or financial incentives. EERE may or may not issue a Funding Opportunity Announcement (FOA) based on consideration of the input received from this RFI.

available under the Connected Communities FOA (DE-FOA-0002206). The Teaming Partner List will be updated at least weekly until the close of the Full Application period, to reflect new Teaming Partners who have provided their information. **Any organization that would like to be included on this list should submit the following information to the Teaming List email CCPilotsTeamingList@hq.doe.gov with the subject line "Teaming Partner Information":**

- **Organization Name,**
- **Generic Organization Contact Email,**
- **Generic Contact Phone,**
- **Organization Type,**
- **Area of Technical Expertise (bulleted list less than 25 words), and**
- **Brief Description of Capabilities (less than 100 words).**

By submitting a request to be included on the Teaming Partner List, the requesting organization consents to the publication of the above-referenced information. **Each organization should provide a generic point of contact e-mail address to receive queries. Direct personal e-mail addresses will not be posted.** By facilitating this Teaming Partner List, EERE does not endorse or otherwise evaluate the qualifications of the entities that self-identify themselves for placement on the Teaming Partner List. EERE will not pay for the provision of any information, nor will it compensate any applicants or requesting organizations for the development of such information.

This is a Request for Information (RFI) only. EERE will not pay for information provided under this RFI and no project will be supported as a result of this RFI. This RFI is not accepting applications for financial assistance or financial incentives. EERE may or may not issue a Funding Opportunity Announcement (FOA) based on consideration of the input received from this RFI.