Business & Technology Advisory

May 2020



DOE Issues Request for Information (RFI) On Potential Funding for Grid-interactive Efficient Buildings and Connected Communities

Comments Deadline: May 12

Key Highlights

- The U.S. Department of Energy's (DOE's) Building Technology Office (BTO) has issued a Request for Information (RFI): Connected Communities Funding Opportunity

 Announcement that is relevant to the cooperative community.
- Connected communities 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 DOE will use the responses from the RFI to help develop the Funding Opportunity Announcement (FOA) expected to be released this summer. The DOE is specifically interested in information on the draft Connected Communities FOA goals and design.
- Deadline for submitting comments for the RFI is May 12, 2020.

What has changed?

The U.S. Department of Energy's (DOE) Building Technology Office (BTO) has issued a Request for Information (RFI) DE-FOA-0002291: <u>Connected Communities Funding Opportunity Announcement</u> (March 27, 2020) that is relevant to the cooperative community.

The DOE intends to invest roughly \$42 million into "connected communities," defined as "a group of grid-interactive efficient buildings (GEBs) with diverse, flexible end use equipment that collectively work to maximize building and grid efficiency without compromising occupant needs and comfort."

The key characteristics of a GEB include:

- Efficient: persistent low energy use that minimizes demand on grid resources and infrastructure
- Connected: two-way communication with flexible technologies, the grid, and occupants
- **Smart:** analytics supported by sensors and controls to optimize efficiency, flexibility, and occupant preferences

• **Flexible:** flexible loads and distributed generation/storage that can be used to reduce, shift or modulate energy usage

The information and feedback collected from this RFI will be used by the DOE BTO to help develop the FOA expected to be released this summer. The DOE is specifically interested in information on the draft Connected Communities FOA goals and design.

What is the impact on cooperatives?

Cooperatives may be interested in applying for funds under the FOA and provide comments into the RFI process for consideration by DOE. NRECA is preparing a reply to the RFI, and co-ops may be interested in submitting their own comments.

The FOA is scheduled to be released this summer. NRECA may also respond to the FOA and may look to coordinate an application among interested co-ops. Cooperatives that may be interested in pursing a project should consider DOE's desired outcomes, as noted below, and determine if they match current or future co-op initiatives. Currently, participants in a project are expected to provide 50% of the cost of the project in cost share. Co-ops should consider this as they plan their budgets for the next 3-5 years, if they would like to participate.

The DOE highlighted the desired outcomes from the portfolio of pilots and other activities conducted under the planned FOA on their web site:

- 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 distributed energy resources (DERs);
- Analysis on the interaction between energy efficiency and demand flexibility measures and how gridinteractive 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.

What do cooperatives need to know or do about it?

Interested parties may submit DOE's requested input **through May 12**. If you would like to see a draft of NRECA's comments to the RFI or would like to receive future information on possible participation in a joint project NRECA may coordinate with cooperatives related to the upcoming FOA, please contact <u>Brian Sloboda</u>.

Additional Resources

- <u>DE-FOA-0002291: REQUEST FOR INFORMATION: FUNDING OPPORTUNITY</u> ANNOUNCEMENT 2206 "CONNECTED COMMUNITIES"
- DOE Reynolds Landing Connected Community Project
- PLMA Webinar Recording: US Department of Energy's Future Connected Communities
- Consumer Expectations of the Connected Home
- The Potential Role of the Co-op in Smart Home Technology
- <u>Utility Connected Home: The Value to the Co-op</u>
- The Utility Connected Home: A Primer

Contacts for Questions

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