

Adam Klich, TWX:

Good morning or good afternoon everyone. Thank you for joining the webinar. This is the webinar about the Connected Communities Data Opportunity informational webinar. This is a new opportunity that's funded by the Building Technologies Office (BTO) at the Department of Energy. Next slide, please.

My name is Adam Klich. I'm with the TechWerx team. Techwerx is a new DOE innovation hub that's managed by RTI International and our goal is really to connect academia, the federal government, nonprofits, startups, and small businesses across the US towards an equitable and resilient energy transition. Next slide, please.

So, I'm going to pass it over, and we're very excited about this new opportunity to Nick Ryan, who is with the Building Technologies Office, and he's going to walk us through the details of this opportunity. Nick.

Nicholas Ryan, DOE BTO:

Excellent. Thank you very much, Adam. All right. So, I'm just going to run through these slides. And we will keep it going.

So, the Building Technologies Office conducts research and development and demonstration activities to accelerate the adoption of technologies and techniques that enable high performing affordable buildings that meet Americans' needs for resiliency and health while also supporting a reliable energy system. That's our mission statement here.

So, bit of background, the grid edge is a segment of the electricity utility system between the distribution feeder line and appliance plugs. Grid edge technical measures include a wide range of technologies, such as low power appliances, managed electric vehicle charging demand, flexible building systems, thermal energy networks with energy storage, and other distributed energy resources, such as batteries and rooftop solar.

This is especially necessary for low-income communities that face limited distribution capacity, deficiencies in service, reliability, and often face high energy bills.

The Connected Communities Data Opportunity is intended to help make the grid more efficient, flexible, and resilient by further validating the use of technical measures located at the grid edge. This opportunity will help increase the acceptance of grid edge technical measures and innovative planning strategies by utilities, communities, and regulators as viable approaches towards efficient infrastructure investment for decarbonization.

So, purpose is, we'll support the collection analysis of existing pilot program data focused on validating grid edge technical measures and innovative planning strategies as viable strategies for efficient infrastructure investment.

Ideal candidates will have both proven capacity to deliver quality, insightful analysis, and existing access to the data of interest. The select awardees are anticipated to each receive around a million dollars per award with no required cost share. BTO is seeking applications from R & D organizations, universities, small and independent consulting firms, and community based organizations for projects to aid in the analysis of data collected on the following topics, which are include, include, but are not limited to: the assessment of readiness for new loads and demand flexibility for users within buildings and distributed systems, as well as evaluation of grid edge technical measures that reduce the necessary level of future investment into distribution, infrastructure and leverage, existing distribution facilities

So, continuing on, analysis on the increased customer and grid resilience, using grid edge technical measures both in front of and behind the meter and evaluation of potential, sorry evaluation of the potential for distributed energy resources, solar, wind, hydro, batteries, and others storage EVs, etc, to provide resilience and reliability to the expanding grid, especially smart charge management from electric vehicles.

Specifically, we're interested in analysis that utilizes data at the at the building feeder and substation level. Ideally, all three would be great, but we'll take data from any of these. We want to represent a diverse region/geographies, and market regions. We lay out here specific instances in New York, Texas, the Midwest and in the Northwest. Note that the application may also provide gas data in addition to electric data but gas data without electric data is not of interest for this opportunity. Right? So, we really want to focus on that electrical focus data.

Potential activities. Applicant organizations must have identified existing pilot programs and or field validation work already ongoing in the space and can demonstrate a prior existing relationship to the utility that is running that program. The opportunity is intended to further support and increase the scope of existing work, especially to increase data collection, data analysis, and reporting of those products.

The data and analysis do not necessarily need to be new work, but must be previously unpublished products equal in scope and of quality. Right? If there are historical products that have occurred, feel free to reuse that data for this opportunity, if it has not already been publicly made available.

Proposed projects under this opportunity cannot be used for the following. This is a really critical point for this particular opportunity. All information collected under this opportunity must, to the greatest extent possible, exclude personally identifiable information, or PII. PII refers to information that can be used to distinguish or trace an individual's identity, such as their name, social security, number, biometric records, alone, or combined with other

personal or identifying information, linked, or linkable to specific individuals, such as a date and place of birth or mother's maiden name.

Applicants must be able to obtain anonymized data from parties such as utilities. Applicants must also provide data storage and transition security plan to mitigate potential misuse. It is a very important part of this opportunity, right? All products delivered as part of this of this award should have no PII information in it whatsoever. Right, if you have it internally, that is fine. It is important part of submission that all that information is completely removed. And there's a plan in place to lay out how you're going to keep that data, safe.

Potential activities. Continued, applicants may not, under any circumstances or conditions, control or manage any element of the indoor environment in which people are present. This includes, but is not limited to actions like resetting thermostats or controlling lighting that affects indoor behavior. No collection of PII data and management of indoor environments can be handled by the utility in the project if it is not the performer funded by DOE, so the money that is, the funds that are coming from this particular ward cannot go to conditions that were you know, around thermostats and lighting, right. But if that information is already available through those existing pilots and demonstrations, that information is allowed to be used in in this opportunity, here.

Eligibility, criteria. Have an existing or prior relationship with the utility from which data is collected as demonstrated through a letter of recommendation or partnership from that utility. Have a letter of legal counsel ensuring the ability to share data within the DOE ecosystem. Qualify as a domestic entity. Applicants must certify they're not owned, controlled, or subject to jurisdiction or direction by a government of any country of risk.

Ineligible entities are individuals, foreign entities, persons participating in a Foreign Government-Sponsored Talent or Recruitment Program of a foreign country of risk are prohibited from participating in projects selected for federal funding under this opportunity.

Should an award result from this opportunity, the recipient must exercise ongoing due diligence to reasonably ensure that no individuals participating on the daily funded project are participating in a Foreign Government-Sponsored Talent or Recruitment Program of a foreign country of risk. Consequences for violation of this prohibition will be determined according to applicable law regulations and policy. Further, the recipient must notify DOE within 5 business days upon learning that an individual on the project team is or is believed to be, participating in a Foreign Government-Sponsored Talent or Recruitment Program of a foreign country of risk.

DOE may modify and add requirements related to this prohibition to the extent required by law.

DOE retains the prerogative to require additional information from the applicants to verify the applicant meets the eligibility requirements. Further, DOE retains the prerogative to decide whether to fund the proposed project entirely, partially, or not at all.

Applications will be reviewed by the following criteria: existing or prior relationship with utility, from which data is collected as demonstrated through a letter of recommendation or partnership from said utility; demonstration of the ability to share data within the DOE ecosystem as documented in the letter from legal counsel as well as details about what level of data can be shared; degree to which the proposed analysis is applicable and demonstrates the inclusion of grid dynamics, specifically, new loads, resiliency measures distributed and systems upgrades, planned infrastructure upgrades, DERS such as solar, wind, hydropower, batteries, storage systems, or electric vehicles, and focuses on data sets of interest, as stated above, from building feeder and or substation level within preferred geographic areas; access to data that comes from both the distributed and operational side of a utility and can bridge the communication gap between the two. Generation data is not required; is real, not modeled, joinable, and is timestamp geolocated over the distribution network typology and temporal relationship; demonstrated prior experience executing work of similar scope and quality, such as past projects using utility level data, past energy modeling products and projects published high quality data, analytic products record of safe data management and robustness of data management storage and or transfer; ability of team to execute the proposed work within the given timeframe.

So this is the timeline that this opportunity is operating on. Applications will open December 9th. We will be hosting our first office hours December 18th, followed by second office hours being on January 7th. The application deadline is January 9th. We are anticipating review and selection by February of 2025, and negotiations should proceed around a month after selections have been made with announcements being in April of 2025, where activities will then begin.

Thank you very much for attending this this webinar. We are looking forward to answering your questions during office hours and appreciate your time applying for this opportunity.