Community Clean Energy Resiliency Initiative

PON-ENE-2014-035

TECHNICAL ASSISTANCE APPLICATION INFORMATION

A. Background

Predicted climate change impacts—in particular, sea level rise and more frequent extreme storm events — have the potential to impair public and private services and business operations across the Commonwealth of Massachusetts. Preparing for these future impacts will take a coordinated effort of private and public sectors, non-profit organizations, and managers and users of infrastructure resources.[1] To increase energy infrastructure resiliency and reliability will also require investments in new technologies. Realizing this, Governor Patrick announced a multi-dimensional strategy to help Massachusetts prepare for climate change and the increasing incidence of severe weather.[2]

B. Clean Energy Resiliency Initiative

As part of the Administration's Climate Change Preparedness Initiatives, the Governor directed the Department of Energy Resources (DOER) to administer a $40 million grant program to ensure energy resiliency at critical facilities in municipalities using clean energy technology.

As such, DOER's "Community Clean Energy Resiliency Initiative" (Initiative) recognizes that climate change-induced events impact our entire Commonwealth and that municipalities and other public entities (as defined in the Eligible Applicants sub-section below) are at the forefront of responding when such events occur. Therefore, the Commonwealth's municipalities and other public entities are eligible to apply for these grants. DOER anticipates geographic distribution of these funds across the Commonwealth.

Applicants can request support for eligible projects by completing and submitting DOER's Technical Assistance (TA) Application through this PON or a Project Implementation (PI) Application through PON-ENE-2014-036. These opportunities are related in that there will be two rounds of PI Applications; the first will fund projects that do not require technical assistance; the second will serve as the process by which plans coming out of the TA Application awards can subsequently apply for project implementation funding. It is important to understand both parts of the Initiative so please review both this solicitation and the PI Application solicitation, and apply for the opportunity that best suits your needs.

[1] Massachusetts Climate Change Adaptation Report, Part II, Chapter 5, Key Infrastructure, September 2011
[2] EOEEA Press Release, "Governor Patrick Announces $50M for Comprehensive Climate Change Preparedness Initiatives, Includes $40M to harden energy services," January 14, 2014.

1. Eligible Applicants

Massachusetts municipalities are eligible to apply for the Initiative, regardless of Green Community designation status or electric utility provider. Eligible applicants also include regional school districts, regional water districts, regional sewerage districts and regional planning agencies (RPAs).

Municipal Applications – A municipality may submit one application that includes one or more projects involving one or more facilities.

Public/Private Partnerships – Municipalities or other public entities as described above may partner with private entities as the project host, as described in the "Eligible Critical Facilities" section below or as project developers under agreement with the municipality or other public entity. The municipality or other public entity must serve as the lead applicant.

Joint Applications by Multiple Municipalities - Multiple municipalities may submit a joint application to share an energy resilient critical facility project. One municipality must be designated the lead, and if the application is awarded funds, DOER will contract with the lead municipality to manage the funding.

Regional Planning Agencies - RPAs may apply for the Initiative funding on behalf of at least 2 municipalities intending to share an energy resilient critical facility project.

- A single RPA may submit more than 1 application, but no more than 3 applications for multiple municipalities.
- If DOER awards funds for a RPA submitted application, DOER will contract with the RPA to manage the funding.
- To the extent that the facility(ies) addressed in an RPA application is in a municipality that has also applied for support through the Initiative, the RPA facility(ies) must demonstrate serving a regional need.

2. Eligible Critical Facilities

For this grant, DOER defines critical facilities as: *buildings or structures where loss of electrical service would result in disruption of a critical public safety life sustaining function.* DOER has prioritized these critical facilities and provided examples of critical facilities in the list below, but DOER does not limit the critical facilities to only these examples.

1. ***Life safety resources*** – e.g., police, fire, hospitals, wastewater treatment plants, emergency communication resources and shelters;

2. ***Lifeline resources*** – e.g., food and fuel supply, and transportation facilities and resources; and

3. ***Community resources*** – e.g., city/town halls, senior centers, schools and/or multi-family housing developments capable of acting as alternative shelters.

Critical facilities may be publicly or privately owned and operated. The lead eligible applicant, however, must demonstrate to DOER that any private facilities (e.g. hospitals, fueling stations, grocery stores, or housing) have entered into or are pursuing entry into a Memorandum of Understanding to provide the applicant critical functions for public benefit in the case of an emergency event. Such a Memorandum of Understanding must be completed prior to any award being made by DOER.

3. Eligible Clean Energy Technologies

DOER may support projects that incorporate the eligible clean energy technologies ***at critical facilities.*** These eligible technologies may be strategically integrated with existing or new conventional back-up generation (such as diesel generator), and the technical assistance provided through this PON will consider such strategies. But, funds from this Initiative, awarded through a second round PI Application, cannot be expended on such conventional technologies. Eligible clean energy technologies include:

Clean Energy Generation, such as:

- Renewable electric energy generation
- Renewable thermal energy generation
- Combined heat and power (CHP) and district energy systems utilizing natural gas and renewable energy fuels
    - CHP or Fuel Cell systems with waste heat utilization must achieve annual system efficiency of at least 65%
- High efficiency (at least 50%) fuel cells

Energy Storage, such as:

- Batteries, flywheels, electric vehicles with vehicle to grid capabilities, thermal storage including hot/cold water, ice, and other phase change storage

Energy management systems that enable load shedding used to isolate and serve critical loads during an event, such as:

- Advanced controls, switches, load management software and critical load panels

Islanding Technology, such as:

- Advanced controls, switches, inverters and other grid stability technologies

Microgrids

- Defined as multiple buildings on one or more meter that are interconnected with electric and/or thermal distribution infrastructure, are served by distributed generation, and can operate either in parallel with or islanded from the broader utility grid.

4. Technical Assistance (TA) Application

The Initiative allows eligible applicants to pursue either technical assistance **OR** project implementation. This solicitation is for the Technical Assistance (TA) Application. The solicitation under PON-ENE-2014-036 describes the Project Implementation (PI) Application.

DOER anticipates providing technical assistance, **at no cost**, to about 40-80 eligible applicants who demonstrate that they have satisfactorily considered and are committed to pursue energy resiliency. DOER has procured a consulting team for this technical assistance.[3] DOER will allow applicants the opportunity to use the resulting plan to apply for a follow-up round of project implementation funding. Only applicants who have used the planning technical assistance offered through this PON will be eligible to submit for this follow-up, second round PI Application, and not all projects are guaranteed to be funded (see Section E below for details on the second round PI Application procurement calendar).

[3] On February 26, 2014 DOER issued RFQQ-ENE-2014-029: Consulting Services for Technical Assistance for the Community Clean Energy Resiliency Initiative. The Cadmus Group, Inc., in partnership with MCFA and HOMER Energy, was awarded the Technical Assistance contract. This 18 member team will work under DOER's guidance to complete the tasks laid out in the RFQQ.

For TA Applications, DOER will begin to review technical assistance applications on June 16, 2014, and will continue to receive applications through 5:00 p.m. on July 15, 2014. Awards will be made on a rolling basis beginning June 30, 2014.

5. Applications Criteria and Submittal

Number of Facilities - Applications may consist of a project at a single building project, multiple independent buildings, or multiple interconnected buildings (a microgrid). In an application looking at multiple independent buildings, technical assistance will be provided by the consulting team for up to two buildings with more buildings considered if funding is available.

Incomplete Applications - Applications must contain, at a minimum, the information requested in the application. DOER will reject incomplete applications.

Submittal Process - All applications are to be submitted via the submission process outlined below in the "Instructions" section. All applications or supporting documents received after these dates and times will not be considered.

6. Funding Guidelines

Applicants may request technical assistance from the consulting team procured by DOER for project planning at no cost to them with a **Technical Assistance (TA) Application.**

Awarded TA Applications will result in a project plan that can then be converted into a second round Project Implementation (PI) Application (see PON-ENE-2014-036). DOER will award up to $20 million of the grant funding in the first round of PI Applications. The remaining $20 million or more will be available to follow-on round TA applicants (moving to PI Applications) as well as any PI Application projects that scored well in their evaluation but went un-funded in the first round.

7. Potential Project Outcomes

A broad range of projects are possible under this Initiative. Samples of projects across this range are listed below. These projects are not prescriptive or comprehensive of the possible options, but an example of projects of varying complexity, cost and benefit.

a. ***Single Facility, Electrical: A municipal fire house (single building project)*** – Retrofit of an existing rooftop solar PV system adding battery storage, a critical load panel to allow the system to just serve critical loads, an inverter that will allow for islanded operation, and any necessary interconnection upgrades to satisfy utility requirements.

b. ***Single Facility, Thermal: School serving as community shelter during an emergency (single building project)*** – Installation of an islandable and black-start capable gas-fired CHP system with a thermal storage system to serve critical electric loads and provide building heating or cooling.

c. ***Multiple Facilities: Waste water treatment plant (WWTP) and a municipal police station (multiple building project)*** – Retrofit of an existing anaerobic digestion system at the WWTP to make the system islandable and black start capable; the addition of solar PV, battery storage, a

critical load panel, an inverter that will allow for islanded operation, and any necessary interconnection upgrades to satisfy utility requirements at the WWTP; and a similar islandable solar PV and storage system at the municipal police station. These would be projects at two independent sites within one municipality, submitted under the same application.

d. ***Microgrid: Health services and shelter microgrid project*** – The incorporation of an islandable, black-start capable CHP system at a hospital with an islandable solar PV system and battery storage (as described in numbers 1 and 3 above) at a neighboring school that can serve as a shelter. This project requires working with the local utilities to allow the distribution of electricity across public ways.

C. Evaluation Criteria

Geographic Diversity:

In recognition that climate events are known to affect all regions of the Commonwealth, DOER will make awards, to the extent possible, in a manner that fairly distributes this public support across all regions of the Commonwealth.

Proposal Content*:*

- Thoroughness of the entire proposal package;
- High quality and realistic project plan;
- Comprehensive reasoning behind project site selection:
    - Identification of critical services to be supported,
    - Prioritization of critical facilities that will provide those services,
    - Anticipated outage duration being addressed;
- Demonstrated effort to address the primary vulnerabilities and needs of the community including, but not limited to: high population density, high-need populations, and specific environmental hazards and risks to the community; and
- Demonstrated past and ongoing commitment to addressing climate change and emergency response and recovery such as participation in the Green Communities program, energy efficiency audits and measure implementation at critical facility(ies), deep energy retrofit at critical facility(ies), and comprehensive emergency planning .

Project Commitment:

- Demonstrated willingness to engage with technical assistance consulting team and commitment to provide all necessary information for expeditious execution of the technical assistance offered.

D. Webinars and Outreach

DOER will host webinars on Thursday, May 22, 2014 at 1 p.m., Tuesday, May 27, 2014 at 3 p.m., and Wednesday, May 28, 2014 at 11:00 a.m. to provide an opportunity to more thoroughly explain the Initiative and answer questions from potential applicants. The first webinar will provide an overview of the solicitation. The second will provide a more in-depth look at the requirements for TA Application, as well as an in depth discussion of the technical assistance services offered by the consulting team procured by DOER and the potential for applying for second round PI funding. The third webinar will cover the PI Application.

E. Procurement Calendar and Asking Questions

DOER issues PON-ENE-2014-035	May 15, 2014
DOER begins to review TA Applications (DOER will review on a rolling basis through final TA Application deadline)	June 16, 2014
Deadline for submitting TA Application questions	June 30, 2014
DOER begins TA Application awards	June 30, 2014
FINAL TA APLICATION DEADLINE	July 15, 2014
Final TA Application awards announced (subject to change)	August 15, 2014
ROUND TWO PI APPLICATION DEADLINE (DOER will review PI Applications coming from TA Applications awardees AND re-evaluate previously un-funded Round One PI Applications)	October 15, 2014
Final Round 2 PI Application awards announced (subject to change)	November 15, 2014

For reference, the full Project Implementation (PI) Application calendar is available in Section E of the solicitation document for PON-ENE-2014-036. The most important piece for Technical Assistance (TA) applicants is the "Final Round Two PI Application Deadline" of October 15, 2014, noted above.

F. Contact Information

For further information, questions and submissions please contact:

Amy McGuire
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Renewable Energy Project Coordinator - Community Clean Energy Resiliency Initiative
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Questions and answers will be posted periodically on the DOER website at http://www.mass.gov/eea/grants-and-tech-assistance/guidance-technical-assistance/agencies-and-divisions/doer/doer-procurements.html.

G. Instructions

- Applicants must complete all required application forms and attach all requested documents. Incomplete applications will not be accepted.
- Applications must be submitted via email to Amy McGuire at Amy.McGuire@state.ma.us.
- All TA Applications are due to DOER by 5:00 p.m. on July 15, 2014.
- All follow-on Round Two PI Applications are due to DOER by 5:00 p.m. on October 15, 2014.
- Milestone reporting is required for all awarded Project Implementation Applications. DOER will provide grant recipients with detailed requirements after a grant award is executed.
- This application information is available at www.commBuys.com as PON-ENE-2014-035.