



Request for Information
Regarding Partners for Clean Energy Community Microgrid Technical and
Commercial Feasibility Assessment Grants
(RFI MACEC-FY16-001MG)
February 1, 2016

1. SUMMARY

The Massachusetts Clean Energy Center (“MassCEC”) seeks to obtain information from parties who may be interested in providing assistance to future Community Microgrid Technical and Commercial Feasibility Assessment Grant Applicants (“Applicants”) and/or joining a project team pursuing feasibility assessment funding through this Request for Information (“RFI”).

Applicants will serve as the feasibility study project lead and will apply for funding on behalf of a project team. Applicants for funding will be required to either a) have the capacity to carry out a feasibility study or b) include as part of their project team a proposed consultant to carry out this work.

The information submitted in response to this RFI may be publicly available on the MassCEC website to help feasibility assessment grant Applicants facilitate project team formation.

2. PROGRAM OVERVIEW

MassCEC seeks to catalyze the development of community microgrids throughout Massachusetts to lower customer energy costs, reduce greenhouse gas emissions and provide increased resiliency. For the purposes of this RFI, community microgrids are defined as multi-user microgrids supported by the local community, relevant utility(ies), and relevant building or site owners. MassCEC is providing funding for community microgrid feasibility assessments in order to advance microgrid projects through the early development stages and attract third party investment to these opportunities. MassCEC seeks to support feasibility assessments for prospective community microgrid projects which:

- Are community, multi-user microgrids (as opposed to single owner or campus-style microgrids);
- Are located in Massachusetts;
- Have the active and engaged support of the local utility (either investor-owned or municipal light plants);
- Demonstrate a strong potential to reduce GHG emissions through the integration of energy efficiency, Combined Heat and Power (“CHP”), renewable energy systems, electric and/or thermal storage technologies, demand management, and other relevant technologies;
- Encompass a public or private critical facility including but not limited to schools, hospitals, shelters, libraries, grocery stores, service (gas) stations, fire/police stations or waste water treatment plants;
- Attract third party investment;

- Highlight Massachusetts-based clean energy/microgrid technology;
- Support the distribution system by addressing capacity concerns, providing black start capability, facilitating renewables integration, or providing other services that are meaningful to the local utility.

Feasibility assessment grants will be provided through a competitive solicitation open to municipalities and their public works departments, electric distribution companies, municipal light plants, emergency services departments, owners of critical infrastructure such as hospitals and financial institutions, self-organized groups of commercial building owners, developers or any other entity that either owns property within a proposed microgrid or can demonstrate that they represent stakeholders with the capability of developing a multi-user microgrid addressing the criteria listed above. A sample Feasibility Assessment Scope of Work outline is attached in Appendix A.

3. WHO SHOULD RESPOND?

MassCEC is seeking information from parties that can assist in the development of community microgrid feasibility studies for various Massachusetts communities. Respondents may include microgrid project developers, technology vendors, manufacturers, engineering or design firms, property owners/developers, software developers, financial institutions or lending partners, research institutions, nonprofits and others. Both potential lead Applicants and potential supporting team members are encouraged to respond.

4. REQUESTED INFORMATION

Please limit RFI responses to no more than five pages. Please note that some information supplied may be posted publicly on the MassCEC website. Other portions of the information submitted may be used to inform program design. Staff reserves the right to edit responses for length and clarity, or not post a particular response.

1. Respondent's company name
 - a. Primary point of contact
 - b. Contact information
 - i. Email address
 - ii. Telephone number
 - iii. Address
 - c. Service territory (if applicable)
 - d. Company website
2. Describe your type of business/product, e.g. utility, project developer/systems integration, generation, control/EMS/SCADA, storage and management, switching/protection, modeling/simulation, financier, project facilitator, etc. Please provide information in a paragraph or less. If you have more than one product/service that is applicable, please indicate.
3. Describe:
 - a. your potential role on a feasibility study project (lead Applicant, support role, etc.) and;
 - b. your preferred level of engagement (cost share support, in-kind support, etc.) in supporting a feasibility study for a community microgrid in Massachusetts. (MassCEC

will provide up to \$75,000 in support of a feasibility study; applicant teams will be required to provide a 25% cost share.)

4. Describe other specific entities or types of entities you might choose to integrate in a potential feasibility study applicant team.
5. Describe any current experience with microgrids and/or microgrid feasibility studies, including:
 - a. Location(s)
 - b. Single-user versus multi-user
 - c. Mix of fossil-fueled and renewable power generation sources
 - d. Experience integrating storage
 - e. Utility engagement
6. If applicable, describe any policy levers that you believe might help accelerate the adoption of community/multi-user microgrids in Massachusetts.
7. Do you have any suggestions for other resources to help potential applicants?
8. What other comments or questions do you have?

5. RFI PROCESS

MassCEC has planned two phases for the RFI process. The first phase includes the release of this RFI and the accumulation of responses from as many potential feasibility study partners as possible. Upon receiving and reviewing the responses, MassCEC may initiate the second phase in which an internal team of MassCEC members will review the responses and post relevant information to the MassCEC website on a page dedicated to providing resources for potential feasibility study Applicant Teams.

A tentative schedule is provided below:

Activity	Date
Release RFI	January 29, 2016
Responses due	February 22, 2016
RFI responses posted to MassCEC webpage	On a rolling basis; All responses posted by February 29, 2016
Multi-user microgrid Feasibility Study Program Offering released	February 29, 2016

Dates listed are anticipated dates. All dates are subject to change.

6. HOW TO RESPOND TO THIS RFI

Please submit an electronic file of your RFI response by **5:00 PM EST on Monday, February 22, 2016** to the RFI Coordinator listed below. Submit responses to:

Subject: RFI MACEC-FY16-001MG
To: Maeghan Lefebvre (mlefebvre@masscec.com)
Massachusetts Clean Energy Center

Written questions – All questions pertaining to this RFI must be submitted in writing to Maeghan Lefebvre by email by **Wednesday, February 17, 2016**.

7. WHO IS MASSCEC?

The Massachusetts Clean Energy Center (“MassCEC”) is an independent public instrumentality of the Commonwealth of Massachusetts. MassCEC was created by the Green Jobs Act of 2008 to serve as the state’s lead agency supporting the clean energy sector. The priorities of MassCEC include advancement of clean energy and water technology, increased deployment of clean energy and water technology projects, job creation in the Commonwealth, investments in infrastructure, and workforce development. MassCEC is issuing this RFI to further those priorities.

8. NO OBLIGATION

This RFI does not commit MassCEC to (a) post the information received to the MassCEC website, (b) issue a Request for Proposals, (c) award any funds or pay any costs incurred in preparing a response, or (d) procure or contract for any services or products. MassCEC will, in its sole discretion, determine what, if any, next steps might be taken. MassCEC reserves the right to cancel or modify this RFI in part or in its entirety at any time.

9. NOTICE OF PUBLIC DISCLOSURE

As a public entity, MassCEC is subject to Massachusetts’ Public Records Law, codified at Chapter 66 of the Massachusetts General Laws. Thus, any documentary material, data, or other information received by MassCEC from a respondent is a public record subject to disclosure. In responding to this RFI, please do not include any confidential or sensitive information or any information or materials that are not requested.

APPENDIX A – SCOPE OF WORK OUTLINE

The outline provided below is for informational purposes only. Any awarded funds will be reimbursed upon the receipt of certain deliverables outlined in the final project scope of work.

PROJECT MANAGEMENT AND PROGRESS REPORTING

Project Management and Progress Reporting

- Project Team and Related Responsibilities
- Progress Reporting
- Project Kick-off Meeting
- Project Completion Meeting
- Project Metrics Reporting

PROJECT TASKS

Description of Microgrid Capabilities

- Minimum Required Capabilities
- Preferable Microgrid Capabilities

Preliminary Assessment of Microgrid's Technical Design Costs and Configuration

- Proposed Microgrid Infrastructure and Operations
- Load Characterization
- Distributed Energy Resources Characterization
- Electrical and Thermal Infrastructure Characterization
- Microgrid and Building Controls Characterization
- Information Technology (IT)/Telecommunications Infrastructure Characterization
- Distribution System Impacts
- Capacity Impacts and Ancillary Services
- Islanded Operation Costs and Characteristics
- Critical Services/Facilities Supported by the Microgrid

Assessment of Microgrid's Commercial and Financial Feasibility

- Anchor Loads/Customers Characterization
- Core Value Proposition
- Project Economics: One Time and Ongoing Costs
- Project Economics: Revenues
- Regulatory/Energy Market Considerations
- Capital Stack/Resources
- Financing Strategies/Options
- Legal Viability

PROJECT RESULTS – FINAL DOCUMENTATION AND TECHNOLOGY TRANSFER

Final Written Documentation

- Project Funding
- Budget
- Milestone/Deliverable Schedule