



Request for Proposals

Developing a Resilience-Based Siting and Valuation Framework for Solar+Storage and MicroGrids

Proposals Due by 4:00 PM, June 24, 2020

The Tampa Bay Regional Planning Council is seeking qualified consultants to provide technical support for a new project funded by an award from the National Renewable Energy Laboratory Solar Energy Innovation Network Round 2.

Background

The Tampa Bay Regional Planning Council (TBRPC) is an association of local governments and gubernatorial representatives whose mission is to serve the citizens and member governments of the Tampa Bay Area, consisting of Citrus, Hernando, Hillsborough, Manatee, Pasco and Pinellas Counties, by providing a forum to foster communication, coordination, and collaboration in identifying and addressing issues and needs regionally.

Project Description

The TBRPC has been awarded a subcontract by the National Renewable Energy Laboratory (NREL) to develop the *“Clear Sky Project: Developing a Resilience Framework for Assessing Solar+Storage”*. The use of solar+storage and microgrids in municipal and commercial buildings to improve disaster preparedness and public safety is an emerging area of research and practice. [Recent NREL reports](#) have identified the need to establish a consistent framework for valuing potential resilience benefits.

The Clear Sky project will address these needs by developing new resources for local governments and community partners to assess the use of solar+storage and microgrid technologies in critical facilities to support public safety, disaster preparedness and post-disaster recovery objectives. This project will build on the FEMA Community Lifelines and THIRA processes and Local Mitigation Strategy plan processes used by local governments to create a model process and template. The toolkit will define high-value buildings and systems, and the related socio-economic risks, impacts and categories of resilience costs and benefits. The project includes creation of a resilience siting and valuation toolkit and a User Guide which defines the

steps and processes for local governments to conduct their own assessments.

The TBRPC mission is to support decision-making processes and empower local government staff who are not solar or energy experts. The project will produce resources which can be deployed in conjunction with the NREL [ReOPT Lite calculator](#) and other tools used by energy managers and sustainability managers.

The Project Team seeks consultants to lead the development of the following:

1. **Siting Framework:** Using the FEMA framework, develop a standardized, resilience-based assessment framework (methodology and process) and supporting template (Forms/Excel-Based) for local governments to identify and prioritize critical infrastructure (building categories) and operation systems in which solar-plus-storage and microgrid installations would provide extensive resilience benefits. Review key programs and prioritize critical infrastructure (building categories) and operation systems. The site identification and prioritization process will have two levels: questions that focus on municipal operations and external community sites or private sector buildings to support disaster mitigation, emergency preparedness and resilience priorities.
2. **Valuation-Template:** Following the assessment framework, define disaster and building-specific hazards and community impacts caused by power outages. Define metrics for measuring community impacts, define potential costs and benefits (qualitative and quantitative) associated preventing long-duration outages. Develop the process (questions) and create a template which enables local governments staff in multiple departments conduct analyses of solar-plus-storage and microgrids. The model and template will identify the different contribution to local resilience and emergency preparedness efforts, and define how impacts, costs and benefits accrue to different stakeholders.
3. **Case studies:** Work with Hillsborough, Pinellas, and Manatee County and City of Largo to assess the resilience benefits and impacts associated with their municipal case studies, based on the tools. Results of the findings will be shared with the entire membership of the Tampa Bay Regional Planning Council.
4. **User Guide:** Work with Energy experts, Utilities and stakeholders to review the Resilience Siting framework and prioritization process;

5. **Stakeholder Engagement and Education:** Define local government needs, engage energy stakeholders on technical and policy gaps, and conduct training sessions.

This RFP is offered to Consultants who will provide extensive support to the Project Team in the implementation of specific project tasks. This is a Fixed Price Contract; not to exceed \$70,000, including travel.

Scope of Services

The successful proposal shall include a description of how the proposing firm will, at minimum, fulfill the following tasks and expected roles:

A. Create the Resilience Framework and Valuation Toolkit

- The Toolkit includes the Assessment Methodology, Template (Excel or Forms) & User Guide
- Tasks include:
 1. Participating on planning calls with NREL, reviewing NREL tools and reports on resilience metrics and economic evaluation;
 2. Using the FEMA THIRA / Community Lifeline, THIRA processes and disaster preparedness best practices, develop an assessment methodology for identifying and prioritizing the potential use of solar+storage and microgrids in: a) municipal buildings and critical infrastructure, and b) community centers and private facilities. Methodology should consider public safety objectives and reducing risk to vulnerable communities (i.e. LMI areas or demographic populations) and define magnitude of potential impacts caused by a long-duration power outage.
 3. Define community and economic threats, impacts, resilience metrics (quantitative or qualitative) for high priority building/system/facilities and define which resilience metrics can be monetized.
 4. Conduct interviews with key disaster experts and public works staff to identify information needed for decision support questions and use-scenarios for different building types and systems. Work with engineers and NREL experts to define high priority subsystems and potential hazards/impacts.

5. Coordinate calls with Project Team and experts to collect input on the siting framework, categories of resilience metrics, and define specific user needs and documents at key project stages;
6. Once assessment framework is approved, develop the Resilience Siting and Valuation decision-tree and template(s) for Users (Excel or Forms etc.)
7. Create a User Guide to support the Decision Tree/Template for local government staff. Manage the document review process, oversee the design and overall quality assurance;
8. Prepare a short report to document/summarize the Tool Development and engagement process.

B. Technical and Policy Analysis

- Tasks include:
 1. Review Florida DEM programs and State Local Mitigation Strategy to define opportunities for aligning solar-storage energy and disaster-preparedness program objectives and policy;
 2. Prepare a policy brief (memo) defining recommendations for integrating the Resilience Siting and Valuation Framework into state emergency programs.

C. Stakeholder Engagement

- Tasks include:
 1. User Input Meetings: Conduct virtual meetings to collect local government input on the tools and guide. Develop agenda and presentations to review tools and collect input on recommendations, changes;
 2. Energy Stakeholder meetings: Develop and work with NREL/Rocky Mountain Institute to implement one or more virtual meeting to discuss Florida energy resilience needs, policy gaps and regulatory gaps and solutions.
 3. Tool Training Workshops: Work with NREL Team and Project Team to develop technical training meetings (2 dates/times) for local governments.
 4. Document responses and prepare summary for each set of engagement meetings.

Deliverables

Proposals should include proposed deliverables and itemized costs for the activities listed in the

scope of services. This project has a short timeframe. Key product deliverables must be substantially completed by December 2020 and engagement/user training by February 2021.

Qualifications

Qualifications include demonstrated experience in the following:

- Conducting assessments, developing plans and/or advising on FEMA Community Lifelines, THIRA emergency preparedness and disaster plans.
- Working with governments, private sectors, utilities and energy regulators.
- Providing technical guidance, assessing and defining solar and energy resilience needs,
- Evaluating energy-resilience policy barriers and developing recommendations for potential policy, technology and market solutions.
- Planning and conducting technical assistance training workshops for municipal staff.
- Conducting stakeholder meetings, synthesizing input and preparing guidance documents or reports.
- Experience NREL technical tools and resources, Solar Energy Innovation Network (SEIN) goals and processes.
- Participation in or providing support to other U.S. DOE or U.S. DOD funded projects.

Qualifications Documentation

1. Firm's experience in emergency management, energy resilience and relevant categories.
2. Resume of principals and key staff;
3. References; and
4. Contract will be fixed fee; however, general information related to cost structure in the form of wages, multipliers and other expenses should be included.

Proposals

Proposals should include a draft scope that includes activities, timeframes and deliverables in a manner that can be included, as negotiated, in the subsequent contract. The scope, timeline, and deliverables will be finalized after consultant selection

Proposals will be evaluated by TBRPC using the following rubric:

Category	Category Percent of Total Evaluation
Proposer's understanding of the project's needs	20%
Proposer's approach to providing the services, including procedures/techniques	20%
Proposer's probability of success, detailed and logical work plan and project management approach	20%
Qualifications of key personnel	20%
Cost effectiveness/value for money	20%
Total	100%

Award Selection Timeline and Start Date

TBRPC may elect to interview the top ranked firms, in which case interviews will take place in late-June 2020. TBRPC would like to select a consultant in early-July with a commencement date of mid-July 2020.

Anticipated Budget

TBRPC anticipates the budget for this Request to be **no more than \$70,000**.

Submittal

Provide a signed (scanned and emailed is acceptable) cover letter that indicates the proposing entity's authorized representative. If the proposal includes a multi-organizational team, please provide a commitment letter from any sub-consultants.

Proposals (not including cover letter(s)) should not exceed 30 pages. Selected firms will be required to provide proof of insurance and other usual and customary documentation upon contract execution.

Parties intending to submit a Proposal should register their contact information with Ms. Wren Krahl, via email at wren@tbrpc.org. You will be contacted with any updates. All questions to Ms. Krahl must be received via email by **June 17, 2020**. TBRPC reserves the right to reject any and all proposals at its sole discretion.

Proposals should be submitted in PDF format via electronic mail by **4:00 p.m. June 24, 2020** to Wren Krahl (wren@tbrpc.org), Deputy Executive Director, 4000 Gateway Centre Blvd., Suite 100, Pinellas Park, FL 33782.