



2014 MICROGRID CASE STUDIES

Introduction

The New York State Smart Grid Consortium brings together the world's leading utilities, technology providers, policy makers, and research institutions to identify opportunities that show the most promise for broader smart grid technology deployment. The Consortium provides an ideal convening point to develop, test, and implement the best solutions and a forum to work with policy makers to identify beneficial regulatory enhancements. In addition to serving as an advocate for the best technology and policies, the Consortium serves as a resource and collection of experts when it comes to the future of New York State's grid. Incorporated on July 22, 2009, the Consortium is a not-for-profit 501(c)6 corporation.

Project Objective

The New York State Smart Grid Consortium hereby requests proposals for research, analysis, and documentation of successful microgrid projects. Microgrids are defined as self-contained electricity distribution systems, typically within a larger electrical distribution network, that have "islanding" capability and that coordinate and distribute energy supplied from one or more generation sources to a network of users.

Scope of Services

The consultant will identify leading examples of successful microgrid projects both nationally and internationally, with an emphasis on projects operating economically and with significant private sector investment.

- Identify key technical and financial characteristics including:
 - Business model that forms the basis for the project
 - Associated regulatory oversight
 - Spatial extent of microgrids including number of end use points and metered points, use of public rights of way, and whether multiple buildings are served
 - The role of the local community in the design and implementation of the microgrid
 - Environmental impact of the microgrid, including embedded generation
 - Services provided to participating customers and corresponding pricing models for participating customers
 - Apparent keys to the project success (e.g., business aspects, customer mix, incentives, etc.)
 - Use of utility-provided services in support of microgrids
 - Impact of microgrids on utility operations or utility business models
 - Interactions with wholesale power markets
 - Technical protocols for islanding and history of performance
- Recommend microgrid business models that exhibit the greatest potential for spurring innovation and private sector investment in future New York State microgrid projects. Such recommendations shall include strategies to leverage existing utility services and customer assets in developing microgrids.
- Identify any administrative or regulatory changes that are needed to advance the adoption of the most promising microgrid business models in New York State.



- Identify what other jurisdictions are doing to encourage microgrids and , if possible, assess the costs and benefits of these measures
- Identify State and Federal incentives available for state-of-the-art Smart Grid and microgrid projects

A Draft Report will be submitted to the Consortium in digital format not later than **May 1, 2014**, and Consortium comments will be provided in time for a Final Report to be submitted in digital format not later than **July 1, 2014**.

The consultant will manage this project in accordance with the agreed-upon schedule and budget. Detailed progress reports should accompany monthly invoices.

Proposal Requirements

Respondents should submit their proposals in accordance with the following requirements and in the order provided:

- 1. Cover Letter**
Summarize the key credentials of the responding organization or individual, demonstrate commitment to the project, and provide full contact information for an authorized representative of the respondent.
- 2. Statement of Qualifications**
Present a narrative summary of relevant experience and credentials, including resumes for key personnel and no fewer than three professional references. This section should not exceed five pages, excluding resumes.
- 3. Research Methodology**
Demonstrate familiarity with successful national and international microgrid projects and provide a detailed work plan and list of deliverables to accomplish the scope of services in the timeframe allotted. This section should not exceed ten pages.
- 4. Project Schedule**
Present a detailed schedule of tasks and activities that coincides with the work plan and deliverables described in the Research Methodology.
- 5. Cost Proposal**
Provide a not-to-exceed budget for this project, inclusive of all meetings and direct expenses. The cost proposal should include a task-by-task estimate of hours for all staff, as well as hourly rates.

Proposals should be submitted in digital format (via email or CD-ROM) not later than 11:00 a.m. on Friday, January 31, 2013. Late proposals will not be opened or considered.

Presentations/interviews may be conducted with one or more respondents at the Consortium's discretion.

Questions and Clarifications



New York State Smart Grid Consortium
Request for Proposals | January 10, 2014

Please submit all questions and requests for clarification to James Gallagher, Executive Director, New York State Smart Grid Consortium (jgallagher@nyssmartgrid.com) and Nancy Doon, Senior Manager, New York State Smart Grid Consortium (NDoon@vhb.com). All questions and answers will be distributed to interested respondents.

Timetable

Request for Proposals Released: January 10, 2014
Proposals Due: January 31, 2014 by 11:00 a.m.
Award Notification: February 15, 2014 (anticipated)