Scope of Work

Overview and Purpose of the Project

Ocala Electric Utility (OEU) provides electric service to customers within the City of Ocala and portions of Marion County, Florida. OEU is a public electric utility with over 42,600 residential customers, 8,300 commercial customers and 1,048 large industrial customers in a 160-square mile service area.

To continue to serve its customers with affordable and reliable power, OEU is looking to implement a plan to drive a successful Smart Grid. OEU is currently seeking proposals from professional electric design firms to research and analyze OEU's current technological infrastructure and to deliver a five (5) year plan that will set the foundation, and direct the implementation for a successful Smart Grid. The Consultant must possess at least five (5) years of experience with the preparation and implementation of smart grid technologies. OEU is subject to the NERC (North American Electric Reliability Corporation) and CIP (Critical Infrastructure Protection) reliability standard. Consultant must be able to demonstrate understanding and deployment experience with the standards, as part of the RFP proposal. The awarded consultant will also provide the OEU project team a comprehensive and detailed Statement of Work (SOW) at project kick-off. The SOW will contain the project plan, and schedule which will include dates for milestones and deliverables.

Contractor and all representatives of the contractor shall be required to pass a Level II background screening which includes fingerprinting. The City shall be responsible for conducting the background check.

The selected contractor's project team and that of any sub-contractors, will be required to sign a Non-Disclosure agreement with the City of Ocala.

Specifications

A. Current Infrastructure

1. The consultant will meet with each division of OEU to determine:
    a. Current hardware being utilized
    b. All software and programs being utilized
    c. Status of the Advanced Metering Infrastructure (AMI)
    d. Status of the Meter Data Management (MDM) System
    e. Status of the SCADA (Supervisory Control and Data Acquisition) Network
    f. OEU's current means of reliability and asset monitoring.
2. The consultant will review and analyze the information to determine OEU's current infrastructure and what steps are required to ensure OEU has the technological foundation to implement Smart Grid technologies. The consultant will determine:
    a. OEU's current data routing and/or gaps in data flow
    b. Use of any redundant and/or unneeded software programs
    c. Software or programs that are necessary for the Smart Grid foundation
    d. If a software or program can streamline the amount of different software and programs OEU currently utilizes
    e. Capabilities of AMI and data flow between divisions
    f. Capabilities of MDM and data flow between divisions
    g. Capabilities of the SCADA network
    h. OEU's needs for improving reliability and asset monitoring
3. The consultant will conduct a meeting with OEU by **September 1, 2017** to present and deliver the following:
    a. The status of OEU's current technological infrastructure to include a data flow diagram of all software and programs as well as from the AMI and MDM
    b. OEU's requirements for implementing a Smart Grid to include:
        i. Hardware

ii. Software and programs
iii. Cost effectiveness/ Return on Investment
iv. Any software or programs that can be streamlined
v. Optimum data utilization of the AMI and MDM
vi. Optimum utilization of the SCADA network
vii. Approximate financial costs associated with the implementation of the technological infrastructure for the Smart Grid
viii. Use of encryption technology for communication between all field devices to the point of network connection with firewall or other network communication equipment within physically secured facilities.
ix. Use of an isolated network (fiber, wireless, cellular…) for all Smart Grid Field devices.

c. Information will be delivered both electronically and printed.

B. System Plan Document

1. Consultant will develop a five (5) year Capital Improvement Plan Document which plans the implementation of Smart Grid Components.
2. 5-Year Capital Improvement Plan document will cover Fiscal Year 2019 through Fiscal Year 2023 and include a phased approach for implementation with focus on:
    a. Automation
    b. System reliability including but not limited to:
        i. Outage locations
        ii. Self-healing circuits
        iii. Voltage levels
        iv. Var control
    c. Asset Management including but not limited to:
        i. Transformer loading
        ii. Lighting management
    d. Efficient and effective use of data sharing between divisions

e. Efficient and effective use of data from the AMI and MDM
f. Efficient and effective use of the SCADA Network

3. The consultant will conduct a meeting with OEU to collect feedback on the draft report and incorporate into the final document
4. The System Plan will include the following (at a minimum):
    a. Planning criteria and assumptions
    b. Implementation plan
    c. Cost effectiveness/ Return on Investment
    d. Basic financial assumptions for each fiscal year
    e. Analysis and mitigation proposals for cyber security risks associated with any of the proposed Smart Grid hardware/software/connectivity.
5. The printed report will be delivered both electronically and as a bound and printed document by **February 1, 2018.**

C. Additional Services

1. The awarded firm shall enter into an agreement for additional services, as needed, for a term of five (5) years. During the term of the agreement, the City may request additional services related to its smart grid implementation. Such services will not be conducted until authorized by the City as mutually agreed upon between the City and the Consultant. The City will be billed for such additional services based on the direct hourly labor rates as set forth in the Agreement and any direct out of pocket expenses associated with such additional work. Alternatively, the City and the Consultant may negotiate a separate all-inclusive fee for each additional scope of service requested. Such additional services may include but not be limited to:
    a. Periodic updates of the 5-Year plan of new technologies and or methodologies as the plan is executed
    b. Preparing and/or assisting with the preparation of documentation for procurement

c. Additional meetings and/or presentations related to Smart Grid implementation