



Developing a Specification for Distribution Automation (DA) Implementation

Advanced Distribution Automation Concepts for
Reliability Improvement Panel Session

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Overview

- Pre-Bid Activities
 - Example RFP Table of Contents
- Procurement Assistance
- Project Implementation Assistance
- Installation Support

Pre-Bid Activities

- Task 1 – Project Mobilization and Familiarization
 - Face-to-face meeting or conference call
 - Discuss project objectives and goals
 - Review work plan details
 - Agree on any necessary changes
 - Review customer's existing plans

Pre-Bid Activities...continued

- Task 2 – DA Technologies Seminar
 - Update stakeholders on recent trends, current vendor offerings, and lessons learned by other utilities
 - Enables stakeholders to participate effectively in project
 - Gives stakeholders feeling of “buy-in” to project
 - Review customer’s existing plans

Pre-Bid Activities...continued

- Task 3 – Needs Assessment
 - Consultant interviews project stakeholders following seminar
 - Gain thorough understanding of customer's needs in preparation for Task 4

Pre-Bid Activities...continued

- Task 4 – Prepare Request For Proposal (RFP) or Specification
 - Emphasis on functional requirements
 - Describes the equipment, hardware and software, and services required to implement the DA systems at the customer's substations and feeders

Example RFP Table of Contents

Main

- 1. Introduction
- 2. RFP Instructions
- 3. Overview of Requirements
- 4. General System Requirements
- 5. DA System Functional Requirements
- 6. DA Master Station Hardware Requirements
- 7. DA Field Devices
- 8. DA Communication Facilities
- 9. Software and Security Requirements
- 10. Documentation and Training
- 11. Quality Assurance and Testing
- 12. Project Services

Appendices

- A. Bidder Background Response Form
- B. Questionnaire
- C. DA System Input/Output Data
- D. Substation One-Line Diagrams
- E. Pricing Forms

Exhibits

- A. Customer Standard Terms and Conditions
- B. Milestone Payment Schedule
- C. Software License Agreement

Procurement Assistance

- Task 5 – Bid Evaluation Methodology
 - Includes technical and commercial issues, risk, proposed and evaluated costs
 - Enables scoring each proposal in a fair and efficient manner
 - Consistent across all bidders

Procurement Assistance...continued

- Task 6 – Bid Evaluation/Vendor Selection
 - In addition to scoring proposals, may also include:
 - Pre-bid and post-bid meetings
 - Preparation of bid clarification question sets and evaluation of bidder responses
 - Visits to vendor and/or customer sites

Procurement Assistance...continued

- Task 7 – Contract Negotiations
 - Typically, the highest rated bidder is invited to participate in a “contract negotiation” meeting to discuss and agree on open issues to bid process
 - Results of meeting are a signed contract and a detailed statement of work for the project

Project Implementation Assistance

- Task 8 – Design/Documentation Review
 - Review and approve on a timely basis many technical documents pertaining to design of new system(s)
- Task 9 – Participation in Project Meetings
 - Participate in periodic project meetings to review progress, action items and other issues affecting the project

Project Implementation Assistance... continued

- Task 10 – Factory Testing Support
 - Carefully review vendor supplied test plans and procedures
 - Ensure planned testing is sufficient to determine that the system satisfies customer's requirements
 - Effective factory testing ensures problems will be detected and corrected prior to shipment and installation

Installation Support

- Task 11 – Support of Field Testing Activities
 - After system has been shipped and installed in field
 - Testing performed to determine that the facilities have been properly installed and to demonstrate those functions that could only be simulated in the factory (such as interfaces to the Corporate wide area network and system performance while communicating with a full complement of field equipment)

Installation Support...continued

- Task 12 – Pilot Project Planning and Assessment
 - Establish criteria for measuring the success of the project and methods of monitoring the results
 - Determine whether expansion of the pilot system wide is warranted

Installation Support...continued

- Task 13 – Pilot Project Evaluation Report
 - Prepare Evaluation Report to evaluate project results with respect to success criteria established in Task 12