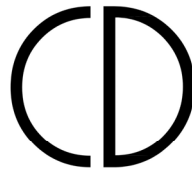


SECTION A-1:

GENERATION IMPLEMENTATION DESIGN-BUILD PROJECT OVERVIEW AND SCOPE



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PART 1 GENERAL

1.01 PROJECT OVERVIEW

- A. The City of Kimball (Owner) has procured four 2005 Caterpillar (CAT) 2MW 3516B generators and is pursuing an agreement with a design-build contractor (Contractor) for the Generation Implementation Design-Build Project (Project) to install, interconnect, commission and place the equipment in service.
- B. The new generators will provide utility parallel generation capacity and emergency backup power in the event of transmission source loss. The generators will operate in either of two modes:
 - 1. In parallel with the transmission source
 - 2. Isolated (island mode)
- C. The procured generators provided backup power for a data center. These units are clean, maintained per manufacturer recommendations, and will include CAT extended service coverage. The generators will be delivered and stored off-site.
- D. The procured generators are indoor units and will require a new generator building. The generator building will house the generators and new switchgear. The planned location of the new generator building is adjacent to the existing power plant and substation.
- E. The existing power plant facilities will be abandoned in place and will be decommissioned by others at some point following completion of the Project.
- F. The existing 34.5kV to 12.5kV transformer and two 12.5kV feeders will be integrated into the new generation switchgear lineup. The existing 15kV metal-clad switchgear including main breaker with transformer protection and two distribution feeder breakers will be abandoned in place and will be decommissioned by others at some point following completion of the Project.
- G. The new generator engines will require an air permit amendment to be furnished by Contractor.
- H. The existing power plant includes two below grade 10,000 gallon fuel tanks. The Contractor will be responsible for adapting the existing tanks to serve the new generators.
- I. Geotechnical investigation and survey plat have been completed for the site.

1.02 BID DOCUMENT ORGANIZATION

- A. The Request for Proposal (RFP) bid documents are organized as follows:
 - Section A:
 - A-1 Project Overview and Scope
 - A-2 Bidder Instructions
 - A-3 Price Proposal
 - Section B: Civil-Structural Specifications
 - Section C:
 - C-1 Drawings
 - C-2 Power Supply Specification
 - C-3 Switchgear Specification
 - Section D:
 - D-1 Existing Air Permit
 - D-2 Existing Basis of Permit
 - D-3 Air Permitting Specification
 - Section E: Fuel System Specification

- Section F:
 - F-1 Survey Plat
 - F-2 Survey Detailed Vicinity Map
- Section G: Generator Data-Drawings
- Section H: Geotechnical Report
- Section I:
 - I-1 Stipulated Price Agreement
 - I-2 Performance Bond
 - I-3 Payment Bond
 - I-4 General Conditions
 - I-5 Work Change Directive
 - I-6 Change Order

PART 2 PROJECT SCOPE OF WORK

2.01 CONTRACTOR SCOPE

- A. Installation of the procured generators resulting in a fully functional power plant.
- B. Civil-Structural:
 - 1. Foundation and building engineering, procurement, and construction per the Civil-Structural Specifications detailed in Section B.
 - 2. The building foundation shall include conduit stub outs to accommodate integration of main and feeder breaker cabling.
- C. Electrical:
 - 1. Integration engineering, procurement, construction and commissioning of new switchgear, generators, existing 34.5kV-12.5kV transformer and two (2) 12.5kV feeders per the Electrical Specifications included in Section C.
- D. Acquire an air permit amendment per the Air Permit Specification detailed in Section D.
- E. Install fuel system to integrate the existing below grade fuel tanks per the requirements of Section E.
- F. Transportation of the generators from offsite storage and installation on pad.
- G. Contractor may store materials at City Facilities within the City limits to be made available by the Owner.

2.02 WORK TO BE PERFORMED BY OTHERS

- A. Site clearing to provide a clear work space.
- B. Main interconnection to the existing 34.5kV-12.5kV transformer, and 12.5kV feeder cable installation and termination at new switchgear will be completed by Owner.
- C. Relay setting calculations.
- D. Removal of existing, abandoned equipment upon Project completion.

2.03 STANDARDS

- A. The generation implementation shall be designed, installed, and commissioned in accordance with the latest applicable standards.

2.04 WARRANTY

- A. The Contractor shall transfer all warranties to the Owner.
- B. The contractor shall provide a fully functional plant at project completion.

2.05 SUBMITTALS

- A. Submittals shall be sent to the OWNER and ENGINEER for review. With the exception of the Operations and Maintenance Manuals and the Record Drawings (see 2.05C.9 and 2.05B.2 below), submittals shall be electronic (Adobe pdf and AutoCAD latest version) and distributed as follows:

OWNER:

City of Kimball
Attn. Ms. Annette Brower
223 South Chestnut Street
Kimball, NE 69145
abrower@kimballne.org

ENGINEER:

Exponential Engineering Company
Attn. Mr. Mike Mansour
2950 East Harmony Road, Suite 265
Fort Collins, CO 80528
mansourm@exponentialengineering.com

- B. Provide document submittals at the following intervals:
 - 1. Engineering: 30% (prior to equipment orders), 60%, 90%, and 100% (Issue for Construction)
 - 2. Complete Record Drawings (Electronic plus Hard Copies included in Operation and Maintenance Manuals)
- C. Document submittals shall be well organized and include, at a minimum:
 - 1. Drawing list
 - 2. Foundation drawings
 - 3. Building drawings
 - 4. Switchgear drawings
 - a. Wiring and schematic diagrams: wiring diagrams shall be of the point-to-point type. Terminal point tabulations are not acceptable.
 - 5. Manufacturer drawings
 - 6. Equipment data and ratings
 - 7. Equipment test reports
 - 8. Material Data Sheets for hazardous materials.
 - 9. Operation and Maintenance Manuals: submit electronic copies to the Owner and Engineer and three (3) hard copies to the Owner.
 - a. Safety precautions.
 - b. Installation, start-up, and initial test instructions.
 - c. Operating instructions, including but not limited to safety precautions, and operating limits.
 - d. Maintenance procedures, routine adjustments, and preventive maintenance schedule.
 - e. Maintenance instructions, which shall include detailed assembly drawings and part numbers, parts lists, instructions for ordering spare parts, and complete preventive maintenance instructions required to help ensure satisfactory performance and longevity of the equipment involved.
 - f. Lubrication instructions, which shall list points to be greased or oiled, shall recommend type, grade, and temperature range of lubricants, and shall recommend frequency of lubrication.

2.06 SCHEDULE

- A. The Contractor shall submit a preliminary project schedule with its proposal.
- B. The Contractor shall maintain an ongoing project schedule.
- C. The Contractor shall conduct regularly scheduled meetings with the Owner and Owner's Engineer throughout engineering and construction. The meeting interval shall be dictated by Project requirements.

END OF SECTION