CONTRACT AND SPECIFICATIONS FOR CONSTRUCTION OF ELECTRIC SUBSTATION #6 ADDENDUM #1

01/03/12

Changes, corrections, and clarifications that comprise Addendum #1 to the Contract and Specifications for Construction of Electric Substation #6 are provided in this document.

Revisions/Clarifications of Contract and Specifications Documents are as follows:

1. The completion date for the project has been changed from May 31, 2013 to **June 30, 2013**.

2. The date for opening of Sealed Proposals has been changed from 2:00PM, January 20, 2012 to **2:00PM, January 26, 2012**.

3. System impedance of the Looper's Farm – Oostanaula 230kV line that will be tapped for the substation is Z = 0.001842 +j0.01633 p.u. on 100MVA base.

4. The following items involve changes, corrections and clarifications related to Section 10 Project Scope of the RFP:

    a. Stormwater infrastructure for the substation will be required on site. Stormwater infrastructure for the substation site may connect into the stormwater facilities on the Engineered Floors industrial plant south of the substation property. This industrial plant's stormwater infrastructure was designed to accommodate runoff from the substation site. The following design drawings for the Engineered Floors site will be provided:

        i. Engineered Floors - Stormwater Design - Plan View
        ii. Engineered Floors - Stormwater Design - Profiles
        iii. Engineered Floors - Stormwater Design – Plan and Profiles - .pdf version

    b. If a contractor's transmission line improvement design should change any physical loading on adjacent transmission line structures, the contractor shall perform necessary research and/or testing associated with qualifying those structures safe for their design.

    c. Transmission line improvements shall be designed such that transmission network connectivity passes through the substation bus, providing for transmission isolation on either the Loopers Farm or Oostanaula side of the new substation via the station transmission line switches. Those switches shall be motor operated rated load break (RLB) switches, ground mounted on steel structures and SCADA

controlled. Power for SCADA and switch motors will be supplied from substation batteries.

d. A section of stranded or rigid bus, in the area between the main bus and each power transformer protective device, shall be installed to facilitate a manual safety clearance in the event of a failed device.

e. The power transformer protective devices, low side bank protection and bus tie breaker shall have bypass switches installed. Additionally, the 25kV distribution buses shall include a transfer bus.

f. Revenue metering will be optimally designed between the transformer bank and low-side bus breaker or low-side bus breaker and 25kV bus. Revenue metering CT's will be of such a type to allow for the bus being metered to be disconnected in such a manner as to facilitate the replacement of the CT's. Acceptable manufacturers for metering CT's and PT's are Astra, GE, ABB, Howard and ERMCO. The contractor will install all of the revenue metering wiring and equipment except the actual revenue meter. Revenue metering will be required for each power transformer bank.

g. The contractor will be responsible for the installation of (2) 6 inch conduits for each distribution circuit exit to riser pole locations designated by Dalton Utilities. Dalton Utilities will be responsible for pulling underground conductors for each distribution circuit exit.

h. Additional SCADA requirements are as follows:

    i. (2) 6 inch conduits to each SCADA enclosure.
    ii. (1) 2 inch conduit to the northeast corner of the substation fence and (1) 2 inch conduit to the southwest corner of the substation fence. These conduit runs are intended to facilitate security camera installations by Dalton Utilities' personnel.

i. As part of the engineering design, the contractor will be responsible for establishing settings for all substation relaying. All relay sheets and program settings shall be reviewed and approved by Dalton Utilities prior to implementation.