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**AGENDA INFORMATION SHEET**

**DEPARTMENT:** Procurement  
**DCM:** David Gaines  
**DATE:** August 8, 2022

**SUBJECT**

Consider recommending adoption of an ordinance of the City of Denton, a Texas home-rule municipal corporation, authorizing the approval of Change Order No. 1 to the Design-Build Agreement between the City of Denton and Beta Engineering, LLC, for the design and construction of the Hickory Gas Insulated Substation for Denton Municipal Electric; providing for the expenditure of funds therefor; and providing an effective date (RFQ 7670 – Change Order No. 1 in the not-to-exceed amount of \$811,000.00, for a total contract award aggregated to \$41,280,000.00).

**INFORMATION/BACKGROUND**

During the design phase for the Hickory GIS Substation project, Beta Engineering and Denton Municipal Electric determined it necessary to amend the existing contract (7670) to ensure the project is completed on time and to ensure the successful operation of this facility for its service life.

As Beta Engineering initiated substation transformer procurement, they were notified by Waukesha that the lead time for delivery increased from 6 months to over two years and would significantly delay the project. To ensure the project schedule, DME and Beta Engineering propose utilizing two existing, already procured, spare substation transformers owned by DME for the Hickory GIS Substation. These transformers are located at McKinney Substation within the city limits but will require disassembly and relocation to the Hickory GIS Substation site. Due to this scope change, Beta Engineering is entitled to a change order according to Article V of the Design-Build Agreement for costs to move DME's two existing substation transformers to the Hickory GIS Substation project site in an amount of \$372,000.00. These costs are shown in items A1, B1, and B3 in Figure 1. Beta will continue to purchase two new substation transformers from Waukesha to replace the DME units at McKinney Substation.

Secondly, the Design-Build Agreement requires Beta Engineering to provide DME a credit for changes in copper material if it is less than 95% of the Reference Price for this commodity agreed to in the contract. Beta determined that Reference Pricing for underground copper transmission cable was 94.2% of the agreed amount and results in a credit of \$9,000. This cost is shown in item A2 in Figure 1.

The third change is the cost to modify relay and control drawings after the designs were complete. The changes are estimated to be 182 labor hours for a total cost of \$22,000. This cost is shown in item A3 in Figure 1.

Lastly, to guarantee the gas insulated equipment inside the substation operates below its maximum design temperature, DME and Beta Engineering have determined air conditioning is needed to maintain a constant temperature to ensure the gas insulated equipment operates safely and effectively for the life of this

equipment. Due to this scope change, Beta engineering is entitled to a change order according to Article V of the Design-Build Agreement for design and procurement costs in the amount of \$426,000. This cost is shown in item B4 in Figure 1.

DME’s owner engineer Black and Veatch has reviewed these changes and agrees with the change order costs.

Item	Description	Cost
A1	Use DME supplied transformers from McKinney Substation instead of two new units Already purchased by Beta from Waukesha	\$0.00
A2	Reduce cost of underground transmission cable due to copper index pricing changes	-\$9,000.00
A3	Cost to redesign relaying drawings after design was completed.	\$22,000.00
B1	Direction to Beta to delivery two new Waukesha transformers to McKinney or Underwood Substation	\$0.00
B3	Cost for Beta to disassemble, move, reassemble, and test the McKinney transformers. Beta has agreed to assume responsibility for these two transformers while they are in possession in accordance with Section 2.12 and 2.20 of the contract. DME's costs using existing contracts to perform these tasks was slightly higher.	\$372,000.00
B4	Cost to add air conditioning to GIS room to ensure GIS equipment and other electronics operate below maximum designed temperature.	\$426,000.00
<b>Total</b>		<b>\$811,000.00</b>

\$426,000 of this Change Order is attributable to the transmission category and will ultimately be recovered through the Public Utility Commission transmission cost of service program (TCOS). The proposed Change Order will not increase CIP costs.

**PRIOR ACTION/REVIEW (COUNCIL, BOARDS, COMMISSIONS)**

On December 14, 2021, City Council approved a contract with Beta Engineering, LLC, in the not-to-exceed amount of \$40,469,000.00 (Ordinance 21-2701).

**RECOMMENDATION**

Award Change Order 1 with Beta Engineering, LLC, for the design and construction of the Hickory Gas Insulated Substation (GIS) for Denton Municipal Electric, in a not-to-exceed amount of \$811,000, for a total amended contract amount of \$41,280,000.

**PRINCIPAL PLACE OF BUSINESS**

Beta Engineering, LLC  
Pineville, LA

**ESTIMATED SCHEDULE**

Project designs will begin (or continue) immediately upon approval by the City Council and will proceed in accordance with project needs.

## **FISCAL INFORMATION**

These services will be funded from account 603234500. Purchase Order #198980 will be revised to include the first change order amount of \$811,000. The total amount of this contract is \$41,280,000.

## **EXHIBITS**

Exhibit 1: Agenda Information Sheet

Exhibit 2: Original Ordinance and Design-Build Agreement

Exhibit 3: LLC Members

Exhibit 4: Ordinance and Change Order 1

Respectfully submitted:  
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Purchasing Manager

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Legal point of contact: Marcella Lunn at 940-349-8333.