City of Grand Island

Tuesday, June 26, 2012

Council Session

Item G6

#2012-159 - Approving Change Order #1 - Kiewit Power Engineers - Air Quality Control System Engineering Services at Platte Generating Station

Staff Contact: Tim Luchsinger, Utilities Director

Council Agenda Memo

From: Timothy Luchsinger, Utilities Director
Jason Eley, City Attorney/Purchasing

Meeting: June 26, 2012

Subject: Change Order #1 – Air Quality Control System Engineering Services at Platte Generating Station - Kiewit Power Engineers

Item #'s: G-6

Presenter(s): Timothy Luchsinger, Utilities Director

Background

On December 21, 2011, EPA released the Mercury and Air Toxics Standards (MATS), requiring the maximum achievable control technology for mercury and other hazardous pollutants from electric generating units, with a compliance date of March, 2015, although an additional one year for compliance may be granted by individual states.

To achieve long-term compliance for MATS, it was anticipated that GIUD would need to install a fabric filter, carbon injection system, and, depending on the amount of reduction needed, either a dry sorbent injection or a dry scrubber at Platte Generating Station, along with associated by-product removal systems and disposal sites, in the next three to four years. It is estimated that these modifications will cost the utility approximately $35 Million and take 3 to 5 years for financing, design, and construction. Although this equipment will result in additional operating costs that may affect rates, the City has proceeded with refinancing of current electric bonds to avoid rate impacts due to debt service and capital expenditures. Current plans are to complete this installation during the last quarter of 2014 to coincide with a scheduled plant maintenance outage. This will provide a margin for the implementation of the system and minimize plant downtime.

For large capital improvement projects of this type, the Department had traditionally used the Design-Build approach, where proposals are solicited for a consulting engineer, who then proceeds with detailed design and developing multiple specifications for bids to acquire equipment and contractors to complete the project. This type of approach can achieve more control of the details of the project, but can also take more time to complete and final project costs are not known until the final contract is awarded. A project approach being used more by utilities for capital projects is the Engineer-Procure-

Construct (EPC) method. Specifications are developed emphasizing final system performance and operating parameters instead of technical features, and consortiums of engineers, suppliers, and construction contractors then team together to provide bids for a total system package. The project is awarded to the lowest compliant bid, normally with provisions of penalties for not meeting guarantees or incentives for exceeding requirements. The EPC approach is recommended by the Department for the air emission control equipment project as we do not have a preference for the various air emission control technologies, and this method will allow for the market to determine the most cost effective and timely implementation. Project costs will also be known early and enable financing methods to be determined to minimize rate impacts to customers.

Utilities and other entities performing EPC projects normally retain the services of an Owner's Engineer to develop the EPC specifications and provide third party project administrative functions. Utilities staff drafted project requirements for an Owner's Engineer and solicited proposals in accordance with City procurement procedures. The services for the Owner's Engineer included the following.

- A high level determination of emission reduction limits and system components.
- Preparation of specifications for bids.
- Evaluation of bids.
- Financial analysis and preparation of pro-formas for bond underwriters.
- Assistance in air emission permitting with EPA and NDEQ.
- Final system testing and determination of compliance with contract conditions.

Respondents were required to provide not-to-exceed pricing for each task, with payments made on actual costs up to that amount. Proposals were also to be based on a system requiring dry sorbent technology, with an optional price of a dry scrubber is determined to be needed, as a dry scrubber will require more extensive specification and contract compliance evaluation. On March 26, 2012, Council awarded the Owner's Engineer contract to Kiewit Power Engineers for a base not-to-exceed cost of $349,040.00 for a dry sorbent system and an additional not-to-exceed cost of $82,992.00 ($432,032.00), if a dry scrubber is required.

Discussion

Kiewit Power Engineers has completed the task of the technology screening and determination of the system required to meet the required emission reduction levels. The system will need to include a dry scrubber, carbon injection system, and a fabric filter. Results of this study were reviewed by Department technical and management staff and they concur with the recommendations reached by KPE. As a result of these recommendations, KPE is proceeding with the dry scrubber system design and a contract change order for an additional not-to-exceed cost of $82,992.00 is recommended to allow progress to continue with the EPC specifications.

Alternatives

It appears that the Council has the following alternatives concerning the issue at hand. The Council may:

1. Move to approve
2. Refer the issue to a Committee
3. Postpone the issue to future date
4. Take no action on the issue

Recommendation

City Administration recommends that the Council approve a contract change order to the contract for Air Quality Control System Engineering Services at Platte Generating Station with Kiewit Power Engineers of Lenexa, Kansas for an additional not-to-exceed cost of $82,992.00 for the dry scrubber system design.

Sample Motion

Move to approve a contract change order to the contract for Air Quality Control System Engineering Services at Platte Generating Station with Kiewit Power Engineers of Lenexa, Kansas for an additional not-to-exceed cost of $82,992.00 for the dry scrubber system design.

CITY OF GRAND ISLAND

Working Together for a Better Tomorrow. Today.

TO: Kiewit Power Engineers
ATTN: Dan Witt, Project Manager
9401 Renner Blvd.
Lenexa KS 66219

PROJECT: Air Quality Control System Engineering Services at Platte Generating Station

You are hereby directed to make the following change in your contract:

1 Additional payment per the Original Contract

ADDITION: $82,992.00

The original Contract Sum	$349,040.00
Previous Change Order Amounts	$ -
The Contract Sum is increased by this Change Order	$ 82,992.00
The Contract Sum is decreased by this Change Order	$
The total modified Contract Sum to date	$ 432,032.00

Approval and acceptance of this Change Order acknowledges understanding and agreement that the cost and time adjustments included represent the complete values arising out of and/or incidental to the work described therein.

APPROVED: **CITY OF GRAND ISLAND**

By:_____ Date _____

Attest: _____ _____
Approved as to Form, City Attorney

ACCEPTED: **Kiewit Power Engineers**

By: _____ Date _____

R E S O L U T I O N 2012-159

WHEREAS, Kiewit Power Engineers of Lenexa, Kansas was awarded the contract for Air Quality Control System Engineering Services at Platte Generating Station, at the March 26, 2012 City Council meeting; and

WHEREAS, Kiewit Power Engineers has completed the task of technology screening and determined the system required to meet the required emission reduction levels required by EPA; a dry scrubber, carbon injection system, and a fabric filter; and

WHEAREAS, because it was determined that a dry scrubber system design would be needed, Change Order #1 was prepared for a contract adjustment of an additional $82,992.00, resulting in a final contract amount of $432,032.00. This not-to-exceed amount was included in the original contract (depending on which system would be needed at the power plant).

NOW, THEREFORE, BE IT RESOLVED BY THE MAYOR AND COUNCIL OF THE CITY OF GRAND ISLAND, NEBRASKA, that Change Order #1 with Kiewit Power Engineers of Lenexa, Kansas, resulting in an additional cost of $82,992.00, for a final contract price of $432,032.00, is hereby approved.

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Adopted by the City Council of the City of Grand Island, Nebraska, June 26, 2012.

_____
Jay Vavricek, Mayor

Attest:

_____
RaNae Edwards, City Clerk

Approved as to Form ¤ _____
June 26, 2012 ¤ City Attorney