



City of Grand Island

Tuesday, February 12, 2013

Council Session

Item G5

**#2013-28 - Approving Change Order #2 - Kiewit Power Engineers
- Air Quality Control System Engineering Services at Platte
Generating Station**

Staff Contact: Tim Luchsinger, Utilities Director

Council Agenda Memo

From: Timothy G. Luchsinger, Utilities Director
Robert Sivick, City Attorney

Meeting: February 12, 2013

Subject: Air Quality Control System Engineering Services at
Platte Generating Station – Kiewit Power Engineers
Change Order #2

Item #'s: G-5

Presenter(s): Timothy G. 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 and 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 bidders 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, supplies, 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 if determined to be needed, as a dry scrubber will require more extensive specification and contract compliance evaluation. One 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. Kiewit Power Engineers completed the task of the technology screening and determination of the system required to meet the required emission reduction levels. 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 proceeded with the dry scrubber system design and Contract Change Order 1 for an additional not-to-exceed cost of \$82,992.00 was approved by Council on June 26, 2012. Kiewit issued specifications for bid for the PGS MATS Compliance Retrofit Project and completed the bid evaluation which resulted in an award of the EPC contract to AMEX on January 8, 2013.

Discussion

To ensure all technical specifications were met and assist in the contract negotiations, Kiewit was directed to attend an additional meeting in Grand Island with AMEC and

Department staff. As a result of this additional time and expenses, a contract change order for an additional \$14,502.00 is required, for a total contract cost of \$446,534.00.

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 Change Order 2 to the contract for Air Quality Control System Engineering Services at Platte Generating Station with Kiewit Power Engineers of Lenexa, Kansas for an additional cost of \$14,502.00 for assisting with negotiations of the PGS MATS Compliance Retrofit Project contract with AMEC.

Sample Motion

Move to approve Change Order 2 to the contract for Air Quality Control System Engineering Services at Platte Generating Station with Kiewit Power Engineers of Lenexa, Kansas for an additional cost of \$14,502.00 for assisting with negotiations of the PGS MATS Compliance Retrofit Project contract with AMEC.

INTEROFFICE MEMORANDUM



*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.

ADD: \$14,502.00

The original Contract Sum	<u>\$432,032.00</u>
Previous Change Order Amounts	<u>\$0.00</u>
The Contract Sum is increased by this Change Order	<u>\$14,502.00</u>
The Contract Sum is decreased by this Change Order	<u>\$</u>
The total modified Contract Sum to date	<u>\$446,534.00</u>

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 _____

RESOLUTION 2013-28

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, on January 8, 2013, Council awarded the bid for Mercury Air Toxic Standards Compliance Retrofit Project to AMEC, of Tucker, Georgia; and

WHEAREAS, to assist with negotiations of the contract for the Mercury Air Toxic Standards Compliance Retrofit Project with AMEC, and as a result of this additional time, a contract change order for an additional \$14,502.00 was required for a total contract cost of \$446,534.00.

NOW, THEREFORE, BE IT RESOLVED BY THE MAYOR AND COUNCIL OF THE CITY OF GRAND ISLAND, NEBRASKA, that Change Order #2 with Kiewit Power Engineers of Lenexa, Kansas, resulting in an additional cost of \$14,502.00, for a final contract price of \$446,534.00, is hereby approved.

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Adopted by the City Council of the City of Grand Island, Nebraska, February 12, 2013.

Jay Vavricek, Mayor

Attest:

RaNae Edwards, City Clerk

Approved as to Form	☐ _____
February 8, 2013	☐ City Attorney