

**COUNCIL ACTION FORM**

**SUBJECT: POWER PLANT FUEL CONVERSION – AWARD OF TURBINE CONTROL SYSTEMS (TCS) ON UNITS 7 AND 8**

**BACKGROUND:**

In November 2013 the City Council voted to convert the City’s Power Plant from coal to natural gas. Implementing this decision requires a significant amount of engineering, installation of equipment, and modification and construction in the Power Plant.

On January 13, 2015, City Council approved preliminary plans and specifications for the Turbine Controls System. **This specific phase of the conversion project is to purchase new Turbine Control Systems (TCS) for both Unit 7 and Unit 8. Additionally, the steam seal regulator on Unit 8 is to be replaced.**

Bid documents for this project were issued to ten companies. The bid was advertised on the Current Bid Opportunities section of the Purchasing webpage and a legal notice was published in the Ames Tribune. The bid was also sent to one planroom.

On February 25, 2015, four bids were received as shown below:

BIDDER	BID 1: TURBINE CONTROL SYSTEM	BID 2: TURBINE STEAM SEAL SYSTEM FOR UNIT 8	OVERALL
*GE Energy Control Solutions, Inc. Longmont, CO	\$814,920	N/A	\$1,001,240
*General Electric International, Inc. Omaha, NE	N/A	\$186,320	
HPI-LLC Houston, TX	\$953,973	\$48,538	\$1,002,511
Schneider Electric Houston, TX	\$997,185	\$32,850	\$1,030,035
Emerson Process Management Power & Water Solutions, Inc. Pittsburgh, PA	\$1,400,337	\$45,750	\$1,400,337
* Two separate divisions of General Electric submitted bids for this project.			

City staff worked with our engineering firm, Sargent & Lundy (S&L), to perform a careful and extensive evaluation of the bids and determined that the apparent low bid submitted by General Electric is acceptable. As noted on the above, table two separate divisions of General Electric submitted bids so the recommended award needs to be broken down as follows:

- Bid No. 1 Turbine Control System – GE Energy Control Solutions, Inc., Longmont, CO for \$814,920.
- Bid No. 2 Turbine Steam Seal System for Unit 8 – General Electric International, Inc., Omaha, NE for \$186,320.

**The overall amount is \$1,001,240.**

**The Engineer’s estimate of the cost for this phase of the project is \$1,064,728.** These costs will be covered from funding identified in the approved FY 2015/16 Capital Improvements Plan, which includes \$26,000,000 for the Unit 7 and Unit 8 fuel conversion.

To date, the overall project budget has the following items encumbered:

\$26,000,000	FY 2015/16 CIP amount budgeted for project
\$1,995,000	Encumbered not-to-exceed amount for Engineering Services (power plant conversion engineering services)
\$2,395,000	Engineering Services Contract Change Order No. 1 (For DCS engineering services)
\$3,355,300	Contract cost for Natural Gas Conversion Equipment (burners)
\$29,869	Equipment Contract Change Order No. 1
(-\$321,600)	Equipment Contract Change Order No. 2
\$1,595,000	Approved Contract cost for DCS equipment
<b>\$1,001,240</b>	<b>Actual cost for TCS equipment (pending City Council approval of award for this agenda item)</b>
<b><u>\$10,049,809</u></b>	<b>Costs committed to date for conversion</b>
<b>\$15,950,191</b>	<b>Remaining Project Balance</b> to cover the installation of natural gas burners, natural gas piping into the power plant from the gas gate, DCS installation, Control/DCS room, and other miscellaneous equipment and modifications to the power plant needed for the fuel conversion

**ALTERNATIVES:**

1. a. Award a contract to GE Energy Control Solutions, Inc., Longmont, CO, for the Bid No. 1 Turbine Control System in the amount of \$814,920.  
  
b. Award a contract to General Electric International, Inc., Omaha, NE, for the Bid No. 2 Turbine Steam Seal System for Unit 8 in the amount of \$186,320.
2. Approve a contract with one of the other bidders.
3. Reject all bids and direct staff to rebid.

**MANAGER'S RECOMMENDED ACTION:**

The Power Plant's existing turbine controls for Units 7 and 8 are 48 and 33 years old, respectively. Up-to-date turbine controls are needed to maintain, and to reliably and safely operate the Unit 7 and 8 turbine-generators over the long term. Funding to purchase and install these systems is available from the approved project budget.

Therefore, it is the recommendation of the City Manager that the City Council adopt Alternative No. 1 as stated above.