

COUNCIL ACTION FORM

**SUBJECT: POWER PLANT FUEL CONVERSION – ELECTRICAL INSTALLATION
GENERAL WORK CONTRACT CHANGE ORDER NO. 4**

BACKGROUND:

In November of 2013 the City Council decided to convert the City's Power Plant from coal to natural gas. In May of 2014 the City Council selected Sargent & Lundy of Chicago, Illinois, to provide engineering and construction oversight services for the conversion project.

On September 22, 2015, City Council awarded a contract to FPD Power Development, LLC, Minneapolis, MN for the Power Plant Fuel Conversion – Electrical Installation General Work Contract in the amount of \$3,145,149. This specific phase of the conversion project was to hire a contractor to perform the electrical installation work.

The action now being requested is to approve Change Order No. 4 to the Electrical Installation Contract. This \$64,743.87 change order provides for the extra labor, equipment, and other relevant and associated costs necessary to extend the electrical installation work by 13 weeks due to circumstances beyond the control of FPD Power Development, LLC.

CHANGE ORDER HISTORY:

Three change orders have previously been issued for this contract.

Change Order No. 1 for \$12,044.24 was for FPD to purchase and provide twenty Type K pneumatic positioners for the Unit 7 wind box dampers.

Change Order No. 2 for \$41,265.65 was for FPD to: 1) locate and install prefabricated equipment pedestals in the DCS equipment room for the mounting of DCS network cabinets, plus install an underfloor cable tray system for the routing of cables to the cabinets; 2) provide and install the necessary grounding of the natural gas piping system, starting at our meter/regulation station just outside the Power Plant and continuing along the piping system's route as it traverses through the Power Plant; and 3) source and supply three relay coils and one lock-out relay as spares for Unit 8.

Change Order No. 3 for \$123,893.91 was for FPD to accomplish the following three tasks:

- Convert soot blowing systems from the one-of-a-kind in-house designed PLC system to the new integrated DCS system. Originally, due to an error in the specification and drawings, cables for this system were routed to and terminated in the wrong electrical cabinet. New cables had to be pulled and terminated into the correct electrical cabinet.
- Perform the electrical installation of the excitation systems provided by General Electric (GE). This scope of work was not included in the specification and drawings for the electrical installation contract work. The decision to install new generator excitation systems was made too late to be included in the electrical installation contract.
- Reimburse FPD Power Development, LLC, for sales taxes paid on materials they purchased to fulfill the obligations of their contract with the City. It was the intention that FPD include sales taxes in their bid, but they did not due to unclear instructions regarding sales taxes in the City's Invitation to Bid.

The total cost of all three previous change orders was \$177,203.80.

PROJECT COST HISTORY:

With this change order, the total costs for the Electrical Installation General Work Contract within the project will be increased to \$3,387,096.67.

Overall, the total project dollar amount committed to date (inclusive of this Change Order No. 4) is \$17,959,259.01. The approved FY 2015/16 Capital Improvements Plan included \$26,000,000 for the fuel conversion project. This was subsequently adjusted to \$18,112,011. The complete project budget to date is shown on page 3.

ALTERNATIVES:

1. Approve contract Change Order No. 4 with FPD Power Development, LLC, Minneapolis, MN, for the Power Plant Fuel Conversion - Electrical Installation General Work Contract in the amount of \$64,743.87.
2. Reject contract Change Order No. 4.

MANAGER'S RECOMMENDED ACTION:

Due to problems encountered during the conversion project, especially with Unit 8, the electrical installation portion of the conversion took considerably more time than originally estimated. Contributing factors include the initial failure to gain bids for the new control room, incomplete historical drawings, and COA equipment issues at the Resource Recovery bin. After careful review of additional work FPD needed to perform to overcome these obstacles, staff has confirmed that this additional change order should be paid.

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

PROJECT BUDGET

The overall project budget and commitments to date are summarized below. To date, the project budget has the following items encumbered:

\$17,475,000	FY 2015/16 CIP amount budgeted for project \$26,000,000 less reduced bonds issuance by \$8,525,000 based on a new project estimate
\$637,011	Unspent Funds from the Power Plant Cooling Tower CIP
\$18,112,011	
	<u>Sargent & Lundy, LLC</u>
\$1,995,000	Encumbered not-to-exceed amount for Engineering Services
\$2,395,000	Engineering Services Contract Change Order No. 1
\$174,000	Engineering Services Contract Change Order No. 2
\$154,000	Engineering Services Contract Change Order No. 3
	<u>GE Power Inc.</u>
\$3,355,300	Contract cost for Natural Gas Conversion Equipment
\$29,869	Equipment Contract Change Order No. 1
(-\$321,600)	Equipment Contract Change Order No. 2
(-\$51,000)	Equipment Contract Change Order No. 3
\$1,620	Equipment Contract Change Order No. 4
\$0	Equipment Contract Change Order No. 5
\$32,679	Equipment Contract Change Order No. 6
\$62,310	Equipment Contract Change Order No. 7
\$121,360	Equipment Contract Change Order No. 8
	<u>Emerson Process Management Power & Water Solutions, Inc.</u>
\$1,595,000	Contract cost for DCS equipment
\$39,377	DCS Contract Change Order No. 1
\$12,611	DCS Contract Change Order No. 2
\$0	DCS Contract Change Order No. 3
	<u>GE Energy Control Solutions, Inc.</u>
\$814,920	Contract cost for TCS equipment Bid 1
\$244,731	TCS Bid 1 Contract Change Order No. 1
\$34,000	TCS Bid 1 Contract Change Order No. 2
\$0	TCS Bid 1 Contract Change Order No. 3
\$16,854	TCS Bid 1 Contract Change Order No. 4
\$41,760	TCS Bid 1 Contract Change Order No. 5

General Electric International, Inc.

\$186,320	Contract Cost for Turbine Steam Seal System - TCS Bid 2
\$24,536	TCS Bid 2 Contract Change Order No. 1
\$150,000	TCS Bid 2 Contract Change Order No. 2
\$0	TCS Bid 2 Contract Change Order No. 3
\$9,208.42	TCS Bid 2 Contract Change Order No. 4

Henkel Construction Co.

\$898,800	Contract cost for Control Room Installation General Work Contract
\$66,782	Control Room Contract Change Order No. 1
\$17,683.54	Control Room Contract Change Order No. 2

TEI Construction Services, Inc.

\$1,572,019	Contract cost for Mechanical Installation General Work Contract
\$8,750	Mechanical Contract Change Order No. 1
\$156,131	Mechanical Contract Change Order No. 2
\$187,984	Mechanical Contract Change Order No. 3
\$9,785.37	Mechanical Contract Change Order No. 4
\$3,032.17	Mechanical Contract Change Order No. 5
\$7,725.98	Mechanical Contract Change Order No. 6
\$3,032.16	Mechanical Contract Change Order No. 7
\$21,673.58	Mechanical Contract Change Order No. 8
\$175,496.89	Mechanical Contract Change Order No. 9
\$48,486.22	Mechanical Contract Change Order No. 10
\$12,539.88	Mechanical Contract Change Order No. 11

FPD Power Development, LLC

\$3,145,149	Contract cost for Electrical Installation General Work Contract
\$12,044.24	Electrical Contract Change Order No. 1
\$41,265.65	Electrical Contract Change Order No. 2
\$123,893.90	Electrical Contract Change Order No. 3
\$64,743.87	Electrical Contract Change Order No. 4

Graybar Electric

\$98,560	Contract cost for UPS System
(-\$1,010)	UPS System Contract Change Order No. 1

Hertz Equipment Rental Corporation

<u>\$166,835.50</u>	Contract cost for Portable Electric Space Heaters
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\$17,959,259.01

Costs committed to date for conversion

\$152,751.99

Remaining Project Balance to cover miscellaneous equipment and modifications to the power plant needed for the fuel conversion