ITEM # <u>27</u> DATE: 07-26-16

COUNCIL ACTION FORM

SUBJECT: POWER PLANT FUEL CONVERSION – ELECTRICAL INSTALLATION GENERAL WORK CONTRACT CHANGE ORDER NO. 2

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 is to hire a contractor to perform the electrical installation work.

The action being requested is to approve Change Order No. 2 to the Electrical Installation Contract. This Change Order in the amount of \$41,265.65 is for the following work:

- Install an under-floor cable tray system and prefabricated equipment pedestals.
 The control room/DCS room was initially delayed by nearly two months to rebid
 the construction. This Change Order work allowed the electrical contractor early
 access to the DCS room to minimize the delay to their portion of the work. Cost
 \$12,943.81
- Provide and install necessary grounding of the natural gas piping not originally included in the original bid scope of work. This is a safety requirement with the purpose of dissipating static electricity created by the flow of gas in the piping system. Cost - \$21,948.65
- Source and supply three relay coils which failed during the testing of the exciter and generator protections circuits of Unit #8. Also, source and supply one lockout relay to replace the existing one found to be unreliable. Cost - \$6,373.19

CHANGE ORDER HISTORY:

One change order was previously issued for this project. 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.

PROJECT COST HISTORY:

The Engineer's estimate of the cost for this phase of the project was \$3,272,793. With this change order, the total costs for the Electrical Installation General Work Contract within the project will be increased to \$3,198,458.89. The project budget to date for the overall conversion project is shown on page 3.

ALTERNATIVES:

- 1. Approve contract Change Order No. 2 with FPD Power Development, LLC, Minneapolis, MN, for the Power Plant Fuel Conversion Electrical Installation General Work Contract in the amount of \$41,265.65.
- 2. Reject contract Change Order No. 2.

MANAGER'S RECOMMENDED ACTION:

This conversion is needed in order for the Power Plant to remain in compliance with state and federal air quality regulations. This major phase will provide for the electrical work necessary to install the electrical equipment, including the work associated with the DCS upgrade and the electrical modifications to the control room.

This change order is needed in order to proceed with installation of the floor cabling, natural gas pipe grounding, and sourcing/supplying critical equipment.

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
	Sargent & Lundy, LLC
\$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
	GE Power Inc. (formally know as Alstom Power Inc.)
\$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
	Emerson Process Management Power & Water Solutions, Inc.
\$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
	GE Energy Control Solutions, Inc.
\$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
	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

	Henkel Construction Co.
\$898,800	Contract cost for Control Room Installation General Work
4000,000	Contract
\$66,782	Control Room Contract Change Order No. 1
\$17,683.54	Control Room Contract Change Order No. 2
	TEL Construction Consises Inc.
Φ4 E70 040	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
	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 (This Council
	Action Form)
	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
\$17,383,266.72	Costs committed to date for conversion
\$91,733.28	Remaining Project Balance to cover miscellaneous equipment and modifications to the power plant needed for the fuel conversion