ITEM # <u>28</u> DATE: 05-14-13

COUNCIL ACTION FORM

SUBJECT: POWER PLANT UNIT 8 STEAM TURBINE PARTS CHANGE ORDER #4

BACKGROUND:

This project is for the procurement of critical and miscellaneous parts for the Power Plant's Unit #8 turbine-generator that is currently being overhauled. The overall project is required to replace worn parts discovered after the opening and inspection of the Power Plant's Unit No. 8 turbine and generator for repairs that may be needed to avoid more serious damage. Repairs and replacement of worn parts are completed as the inspection progresses and work is defined.

On October 9, 2012, City Council awarded a contract to ARGO Turboserve Corporation, Lyndhurst, NJ, Unit 8 Steam Turbine Parts in the amount of \$526,086.90 (inclusive of sales-tax) plus freight. The City will reimburse the contractor for the actual delivery costs.

Council authorization for a fourth change order is now needed.

Description: During inspection of the turbine, the drive assembly for the turning gear was found with excessive wear. The drive assembly includes one pinion gear, one bull gear, and a chain. To assure reliability of the Turning gear, all three parts need to be replaced. The power plant had a spare pinion gear but needs to order a new bull gear and chain.

Cost: The cost is \$2,009.46.

CHANGE ORDER HISTORY:

Three change orders have already been approved for this contract by City staff per the Purchasing Policy. The inclusion of Change Order #4 requires staff gain City Council approval before moving forward.

Change Order No. 1 for \$19,260.00 Change Order No. 2 for \$ 2,086.50 Change Order No. 3 for \$27,207.96

All three change orders were for the purchase of additional parts needed to complete this project.

PROJECT COST:

This change order will increase this portion of the Steam Turbine No. 8 Overhaul project cost by an additional \$2,009.46. As a result, this would bring costs for this portion of the project to \$576,650.82. Overall, the <u>total</u> project dollar amount committed to date (inclusive of Change Order No. 4) is \$1,888,079.77.

The engineer's estimate for parts is \$533,000 based on preliminary quotes received from General Electric, the turbine supplier. The approved FY 2012/13 Budget includes \$2,000,000 for parts in the Unit #8 Blading and Diaphragm/Parts project associated with the Unit #8 Turbine Generator Overhaul.

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

| | \$1,888,079.77 | Total committed to date |
|----|----------------|--|
| 9. | \$256,870.00 | Cost-not-to-exceed time and materials for GE representative to provide technical direction for this overhaul |
| 8. | \$ 75,276.95 | Contract Change Order No. 2 to Steam Turbine No. 8 Overhaul (Approved by City Council on April 16, 2013) |
| 7. | \$171,482.00 | Contract Change Order No. 1 to Steam Turbine No. 8 Overhaul (Approved by City Council on April 9, 2013) |
| 6. | \$807,800.00 | Actual cost of Base Bid, plus cost-not-to-exceed Options for Steam Turbine No. 8 Overhaul |
| 5. | \$ 2,009.46 | Contract Change Order No. 4 to Unit #8 Steam Turbine Parts (this item) |
| 4. | \$ 27,207.96 | Contract Change Order No. 3 to Unit #8 Steam Turbine Parts (Approved by Bob Kindred on April 30, 2013) |
| 3. | \$ 2,086.50 | Contract Change Order No. 2 to Unit #8 Steam Turbine Parts (Approved by Donald Kom on April 23, 2013) |
| 2. | \$ 19,260.00 | Contract Change Order No. 1 to Unit #8 Steam Turbine Parts (Approved by Donald Kom on April 15, 2013) |
| 1. | \$526,086.90* | Actual cost for Unit #8 Steam Turbine Parts (This total did not include freight) |

ALTERNATIVES:

- 1. Approve contract Change Order No. 4 to ARGO Turboserve Corporation of Lyndhurst, NJ, in the amount of \$2,009.46 for Unit 8 Steam Turbine Parts.
- 2. Reject contract Change Order No. 4 an attempt to re-install the existing warn parts.

MANAGER'S RECOMMENDED ACTION:

The Unit No. 8 Turbine-Generator is currently down for a major overhaul. These overhauls are typically performed in the industry about every five years to restore unit efficiency and to maintain good unit life and reliability. We are now into our 8th year since the last overhaul, which has contributed to the number and cost of repairs identified after the turbine and generator are disassembled.

Therefore, it is the recommendation of the City Manager that the City Council adopt Alternative No. 1 thereby approving contract Change Order No. 4 to ARGO Turboserve Corporation of Lyndhurst, NJ, in the amount of \$2,009.46 for Unit 8 Steam Turbine Parts.

.