ITEM # <u>19</u> DATE: 10-22-19

# **COUNCIL ACTION FORM**

<u>SUBJECT</u>: POWER PLANT MAINTENANCE SERVICES CONTRACT – CHANGE

**ORDER NO. 2** 

# **BACKGROUND**:

The combustion of Refuse-Derived Fuel (RDF) at the Power Plant produces fly ash and bottom ash. The fly ash is captured by the electrostatic precipitators and conveyed through piping outdoors to a fly ash silo outside the plant. The fly ash from the silo is emptied into trucks for disposal as it accumulates.

Because the temperature decreases significantly from where the ash is captured to where it is stored, condensation can build up in the ash handling system and cause the ash to cake together. This results in ash lines becoming plugged and the silo becoming difficult to empty, particularly in the cold. During winter months, the ash lines must be jetted by a contractor every ten days on average. Additionally, one or two times per winter, a separate contractor must be retained to clean out ash from the silo, at a cost of \$9,000 per cleaning. Several times per year, six staff members must spend a week cleaning ash handling equipment.

To address these maintenance issues, Electric Services staff has developed a plan for a new fly ash conveyance system. Instead of accumulating in the silo, the new system will use water to convey the fly ash through the interior of the Power Plant and ultimately into the ash pond. This system will require significantly less maintenance.

The City regularly contracts with a firm to provide a variety of power plant maintenance services, including structural steel, pump and piping work, and other miscellaneous mechanical Power Plant work. The contract is based on time and materials rates established at the time of bidding. Power Plant staff then directs the areas of work to be completed up to the authorized amount of funding.

On July 23, 2019, the City Council approved the renewal of a contract with TEI Construction Services Inc. of Duncan, SC. for Power Plant Maintenance Services Contract for a period through June 30, 2020 in the amount not to exceed \$100,000.

One change order has been issued to this contract. Change Order #1, in the amount of \$19,000, was for TEI to complete the installation of the fly ash removal line.

### THIS ACTION:

Plant staff would like for TEI to install water supply piping, for the new fly ash transport system shared by both Unit 7 and Unit 8. The new 8" water supply piping will travel from

the basement to the 6<sup>th</sup> floor of the Power Plant in a labyrinth path going around equipment, building structure, and between floors. The water piping will supply the new, indoor fly ash transport system to sluice the fly ash to the ash pond.

The action being requested is to approve Change Order No. 2 to the Power Plant Maintenance Services Contract. This change order will add an additional \$120,000 to the current contract for FY 2019/20. This will bring the total contract amount to \$239,000.

Actual payments are calculated on unit prices that were bid and work performed limited by the available budget amount. It should be noted that completing this project under the current contract will take advantage of time and materials rates under the contract already bid. These rates typically escalate each year. The Council should understand the additional funds authorized in this change order will not be spent unless needed.

The FY 2019/20 operating budget for Electric Production includes \$100,000 for this contract. The additional funding for this change order will come from postponing a \$120,000 project to rebuild and replace auger, blower, and chain equipment at the RDF Bin. Because of the reduced rate of RDF consumption at the Power Plant in the past year, these moving parts have not been worn as much as anticipated. Therefore, this equipment will not require replacement until next year at the earliest.

#### **ALTERNATIVES**:

- Approve Change Order No. 2 in the not to exceed amount of \$120,000 to TEI Construction Services, Inc., of Duncan, SC, for Power Plant Maintenance Services Contract. This will bring the total FY 2019/20 contract value to an amount not-to-exceed \$239,000.
- 2. Do not approve Change Order No. 2.

### **CITY MANAGER'S RECOMMENDED ACTION:**

This change order is necessary to install water pipe that will allow for pulling fly ash during winter months. Without this piping, operations will be subject to unplugging ash lines, cleaning out separation equipment, and bringing in bin whipping contractors throughout the winter. Funds will be expended only as work is required and in accordance with approved invoices.

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