

ITEM: 31
DATE 02-14-23
DEPT Electric

COUNCIL ACTION FORM

SUBJECT: BOILER TUBE SPRAY COATING AND RELATED SERVICES AND SUPPLIES CONTRACT FOR THE POWER PLANT–CHANGE ORDER NO. 1

BACKGROUND:

This contract is to provide and install new boiler tube coating and surface preparation in Unit #8 boiler at the City’s Power Plant. This coating is required in order to protect the boiler tubes against the corrosive wear brought on by burning Refuse Derived Fuel (RDF). Portions of the Unit 8 boiler tube walls require routine spray coatings to maintain protection. This contract addresses that routine application of protective coating. Failure to maintain the coating will cause the boiler tubes to wear much more quickly, resulting in premature failure and costly repair and replacements.

The Power Plant benefits from having an ongoing service contract with a firm that provides routine and emergency boiler tube spray coating services. This process reduces the City’s exposure to market forces regarding prices and availability for labor, travel, and supplies for these services. By having a contract in place, City staff saves considerable time obtaining quotes, evaluating proposals, and preparing specifications and other procurement documentation.

On July 26, 2022, City Council awarded a contract to Integrated Global Services Incorporated, of Richmond, VA, (IGS) in the amount of \$435,000.

Planned boiler maintenance generally takes place in the fall and spring each year. During the planned fall 2022 maintenance outage, the boiler was taken off-line to allow for internal inspection of the protective spray coating. It was found that the previously applied spray coating did not perform as well as desired. During the maintenance outage, IGS proposed an alternative spray protective product that had a different chemistry, which the contractor believed would perform better. This new product was applied to 10% of the existing coated area. The other 90% received a ceramic coating that is much less costly, but is expected to only last for 6-12 months. The fall 2022 application exhausted the \$435,000 funding approved in this FY 2022/23 contract.

In the upcoming spring 2023 outage, the ceramic coating will need to be reapplied to the 90% area that was covered with ceramic last fall to provide a further six months of protection. In addition, plant staff plans to perform a full inspection of the portion of the boiler that received the new IGS product. The cost to perform the inspection and apply a new ceramic coating over the remaining 90% area is \$151,000.

The spring inspection will reveal how the IGS coating product performed compared to the less costly ceramic product. Staff will be able to analyze that performance and perform a cost-benefit evaluation. The analysis will determine which product will be specified for repairs taking place in the fall 2023 outage, when a new FY 2023/24 contract for boiler tube spray coating services is in place.

THIS ACTION:

Staff is requesting City Council to approve Change Order No. 1 to the Boiler Tube Spray Coating and Related Services and Supply contract. **This action will add an additional \$151,000 to the original \$435,000 contract for FY 2022/23 (inclusive of sales tax), bringing the total contract amount to \$586,000.** The change order will ensure the boiler tubes exposed to the corrosive RDF combustion atmosphere are continually protected until at least the fall 2023 outage.

Funding for Change Order No. 1 will come from both Unit 7 and Unit 8 Steam Turbine/Generator Maintenance accounts. Money was budgeted in both of these accounts to be used for cleaning. The equipment has not required as much industrial cleaning as budgeted. Therefore, \$75,500 will be taken from each of these accounts and be used to fund this change order.

ALTERNATIVES:

1. Approve Change Order No. 1 to Integrated Global Services Inc, of Richmond, VA, in the amount of \$151,000.
2. Do not approve the change order and delay needed additional maintenance until the next fiscal year.

CITY MANAGER'S RECOMMENDED ACTION:

The protection of the boiler tubes is essential to the reliability of the boiler and to maintain the ability to burn the RDF created from the county's municipal solid waste. Therefore, it is the recommendation of the City Manager that the City Council adopt Alternative No. 1.