

**COUNCIL ACTION FORM**

**SUBJECT: SPECIALIZED HEAVY DUTY CLEANING SERVICES CONTRACT FOR POWER PLANT BOILERS – CHANGE ORDER NO. 2**

**BACKGROUND:**

The Power Plant Boilers require regular professional maintenance and repair. This consists of emergency service, as well as regularly scheduled planned repairs. The repair of the boilers on these generation units requires professional trade crafts such as boilermakers, steam/pipe fitters, and millwrights, to list a few.

The boiler units operate under environmental conditions with high heat and high pressure. Due to the operational conditions and fuel burned, the internal surfaces of the boilers are often covered with hardened ash, molten glass, and other substances, which coat the internal boiler tubes and boiler walls. Because of the conditions resulting from burning Refuse Derived Fuel (RDF), a reducing atmosphere exists in portions of the boiler and there are chlorides present from burning plastics. As a result, parts of the boiler units such as the superheat tubes and boiler wall tubes would eventually fail due to tube wasting.

When tube failures occur, the City contracts with private firms who have the expertise to perform the emergency repairs needed to bring the unit back into operation. Prior to the professional crafts entering the boilers to carry out inspections and repairs, the surfaces must be cleaned of ash coating and debris. **This “heavier duty” cleaning process requires high-pressure water washing, grit blasting, or use of explosives to loosen and remove the materials. After loosening or breaking up these substances, they are removed from the boiler using the sluice system or by large industrial vacuums.**

On June 9, 2015, Council awarded the contract for the Specialized Heavy Duty Cleaning Services Contract for Power Plant Boilers to Bodine Services of Clinton, LLC, Clinton, Iowa, for hourly rates and unit prices bid, in an amount not to exceed \$175,000. Change Order #1 in the amount of \$34,999 recently was approved administratively to cover "detonation blasting" to clean the back pass in Unit #7. Funding for this change order was identified from unspent monies carried forward to the FY 2015/16 budget in the boiler maintenance account.

**The action being requested is to approve Change Order No. 2 in the amount of \$287,480 to the current contract for FY 2015/16. There are two major events this year that have caused the very large cost increase in specialized heavy duty cleaning. First, it has been a past practice that materials removed during the cleaning process are sent to the ash pond. Following EPA’s Coal combustion**

**Residuals rule, this practice has stopped and all water and material must now be collected and disposed of offsite. Second, with the conversion from coal to natural gas, the level of cleaning and the “completeness” of the cleaning is much more extensive than in previous years. These two events combined will significantly increase the equipment, disposal, and labor costs by an additional \$287,480. The Council should understand the additional funds authorized in this change order will not be spent unless needed.**

**Funding to cover this change order will be transferred from other portions of the existing Unit 8 Boiler operating budget - \$150,000 from Unit #8 NOx Allowances and \$137,480 from the Cooling Tower replacement project. Invoices will be based on contract rates for time and materials for services actually received.**

**ALTERNATIVES:**

1. Approve contract Change Order No. 2 to Bodine Services of Clinton, LLC, in the amount of \$287,480. This will bring the total FY2015/16 contract value to a not-to-exceed amount of \$497,479.
2. Do not approve the change order.

**MANAGER'S RECOMMENDED ACTION:**

Change Order #2 is necessary to provide additional heavy duty specialized cleaning in the Power Plant. The inability to place the boiler material removed during the cleaning process in the ash pond, together with the complete removal of coal ash in all systems of the plant, will result in additional cleaning expenses.

Therefore, it is the recommendation of the City Manager that the City Council adopt Alternative #1 as stated above.