

**COUNCIL ACTION FORM**

**SUBJECT: CHANGE ORDER FOR SPRING 2014 POWER PLANT BOILER REPAIRS**

**BACKGROUND:**

This project is for labor and materials for replacement of the primary superheater attemperator, disassembly/reassembly of the boiler ash grates, replacement of the boiler water seal box/trough and box/trough seal plates, ash grate shafts and bearings, ash hopper refractory, undergrate air metal bellows expansion joint, and designated undergrate air ductwork in the Unit No. 8 Boiler. Council should note that the purchase of the attemperator itself was approved by Council on Oct. 8, 2013.

**On December 10, 2013, City Council awarded a contract to ProEnergy Services, LLC, Sedalia, MO, for the Spring 2014 Boiler Repairs in the amount of \$331,069.50 plus applicable sales taxes to be paid directly by the City of Ames to the State of Iowa.**

On April 15, 2014, staff administratively approved Change Order No. 1 in the not-to-exceed amount of \$23,000 for additional funds to cover miscellaneous repair work as uncovered during demolition. Now that demolition is nearly complete the necessary repair scope is much clearer. All of the items below were anticipated and shown as options on the bid document as needing repair. Since the work scope was undetermined the contractor could only state that they would complete repairs on a time materials basis and did not bid the options. Removal of insulation, refractory, and steel ductwork shows deteriorated sections requiring repair due to corrosion heat and ash build up.

**Council authorization for a second change order covering these items is now needed to increase the purchase order to cover these expenses and keep the project moving. Unit No. 8 will be inoperable until these repairs are made.**

**Item 1:**

**Description:** The steel hopper and inlet deck were found to be severely corroded and warped. Repair and replacement will be made with stainless steel to better resist the heat and corrosion being encountered.

**Cost:** Estimated at \$60,000.

**Item 2:**

**Description:** The under refractory concrete was found to be cracked and requires replacement.

**Cost:** Estimated at \$55,000.

**Item 3:**

**Description:** The airfoil in the undergrate air duct was found to be cracked, corroded and full of ash. The airfoil measures air flow and inputs into the combustion controls system. Replacement of the airfoil is required.

**Cost:** Estimated at \$28,000.

The total cost of all three items in Change Order No. 2 is \$133,000.

**This change order will increase this portion of the Spring 2014 Boiler Repairs project cost by an additional \$133,000. As a result, the total costs for this portion of the project will increase to \$487,069.50. Overall, the total project dollar amount committed to date (inclusive of Change Order No. 2 and the attemperator) is \$650,475.85.**

**Council should note that there is still one other known area requiring repair. The T bar that supports the entire grate assembly is warped and corroded. A repair method has not yet been determined therefore no cost estimate is yet available. This repair will most likely require Council authorization in the near future.**

The engineer's estimated for the base portion of the project (labor and materials other than the attemperator) was \$461,000. The engineer's estimate for the purchase of the attemperator was \$155,000. Funding is available in the approved FY2013/14 Electric Production operating budget, which contains \$475,000 in the Unit No. 8 Boiler Maintenance account. Additional funding in the amount of \$180,000 has been made available from the Unit No. 8 Boiler Maintenance account to cover this change order.

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

\$163,406.35	Bid award amount* for Replacement Superheater Attemperator (Awarded by City Council on October 8, 2013) * Inclusive of Iowa sales tax
\$331,069.50	Bid award amount** for Spring 2014 Boiler Repairs (Awarded by City Council on December 10, 2013) ** This total did not applicable sales tax which the City will pay directly to the state of Iowa.)

\$23,000.00	Contract Change Order No. 1 to Spring 2014 Boiler Repairs (Approved by Donald Kom on April 15, 2013)
<b>\$133,000.00</b>	<b>Contract Change Order No. 2 (this item)</b>
<b><u>\$650,475.85</u></b>	<b>Total committed to date</b>

**ALTERNATIVES:**

1. Approve contract Change Order No. 2 to ProEnergy Services, LLC, Sedalia, MO, for the Spring 2014 Boiler Repairs in the amount of \$133,000 plus applicable sales taxes to be paid directly by the City of Ames to the State of Iowa.
2. Reject contract Change Order No. 2 and Unit 8 will remain inoperable until repaired.

**MANAGER'S RECOMMENDED ACTION:**

With disassembly of the boiler bottom nearly complete these areas of repair requiring additional work have been identified. **Approval of Change Order No. 2 is required in order to properly return Unit No. 8 to service as quickly as possible for the summer season.**

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