

COUNCIL ACTION FORM

SUBJECT: SPRING 2014 POWER PLANT BOILER REPAIRS – CHANGE ORDER NO. 4

BACKGROUND:

Upon inspection of the boiler following the Unit 8 tube replacement project in 2013, two major issues were noted. One was that the attemperator's internal liner was found to be dislocated and needed to be replaced, and the other was that the bottom of the boiler was pulling away from the ash handling system and needed to be repaired.

This portion of the project is for labor and materials for the following work:

- 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
- designated undergrate air ductwork in the Unit No. 8 Boiler

City Council approved purchase of the attemperator itself on October 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. Council should note that change orders were anticipated with the original scope of work, but the extent and scope of work was unknown until disassembly.

CHANGE ORDER HISTORY:

Three change orders have previously been issued for this project based on estimates received from ProEnergy.

Change Order No. 1 for \$23,000 increased funds to cover miscellaneous repair work uncovered during demolition.

Change Order No. 2 for \$133,000 was for (1) repair and replacement of steel hopper and inlet deck with stainless steel; (2) replacement of under refractory concrete; and (3) replacement of the airfoil.

Change Order No. 3 for \$23,500 increased funds to cover replacement of the structural connection between the boiler bottom and the grate support system.

The total cost of the base contract plus the previous three change orders listed and described above is \$510,569.50.

CHANGE ORDER NO. 4:

City Council authorization for a fourth change order is now requested. This change order is for the additional costs for the work required to complete the work items listed in Change Order No's. 2 and 3 above.

ProEnergy's on-site manager did not provide updated cost estimates or cost tracking information to the City despite almost daily urging from plant management and staff. When queried about the need for additional spending authorization, ProEnergy's continued response was that "we should be okay". ProEnergy demobilized on June 3, 2014 with the work completed, and Unit No. 8 was returned to service.

After the project work was done, ProEnergy's management determined and subsequently advised City staff that the authorized amounts were insufficient, since their actual costs were substantially higher due to several weeks of additional labor. **ProEnergy recognized that it was their responsibility to track costs and keep City staff informed, and that expenditures by them without gaining prior City authorization were completely at their own risk.**

In order for staff to consider payment of the extra costs, ProEnergy opened their project financial data, time sheets, etc., to staff for review. Extensive documentation was provided for the work, including the lump sum base portion of the project and the change orders.

Since completion of the work this past June, staff has spent months reviewing the provided documentation consisting of timesheets, material and consumable supply invoices, equipment costs, and subcontractor bills associated with the project. The documentation was well presented, organized, accurate, and provided backup and justification for the extra costs, albeit not authorized or approved by the City before the work was completed. Based on staff's review, ProEnergy removed \$28,329.40 of equipment rentals assigned to the extra work.

Separately, Council should note that there was a typographical error made by staff in the total amount that needed to be approved for Change Order No. 2. At the May 6, 2014 meeting Council approved Change Order No. 2 in the amount of \$133,000. The change order consisted of three components: 1) repair and replacement of steel hopper and inlet deck with stainless steel in the amount of \$60,000; 2) replacement of under refractory concrete in the amount of \$55,000; and (3) replacement of the airfoil in the amount of \$28,000. Although the total dollar amount of the three items was **\$143,000**, staff mistakenly recommended that Council approve only **\$133,000** for that work. That leaves a **\$10,000 discrepancy** that needs to be corrected. Therefore, the total for

Change Order No. 4 includes paying ProEnergy the additional \$10,000 from Change Order No. 2.

The total cost of Change Order No. 4 is \$155,493.00. Upon Council action, the project will then be closed.

PROJECT COST HISTORY:

This fourth change order would increase this phase of the Spring 2014 Boiler Repairs project cost by an additional \$155,493, bringing costs for this phase of the project to \$666,062.50. The overall project cost committed to date (inclusive of the attemperator purchased separately and Change Order No. 4) is \$829,468.85.

The original engineer's estimate for the base portion of the project (labor and materials other than the attemperator) was \$461,000. There were several options included in the bid specifications that could be added to the base portion of the bid through the City's Change Order process if it was found that the work was needed after the boiler was opened up. The work completed under Change Order #4 does fall into these categories and staff believe the work and resulting payment for the work is justified.

The cost of the attemperator was covered using FY 2013/14 operating funds budgeted for power plant boiler parts and supplies. The engineer's estimate for the boiler repairs work (labor and materials) was \$461,000, and the original funding identified from the FY2013/14 Electric Production operating budget was \$475,000 from the Unit #8 Boiler Maintenance account. Additional funding exists to cover the balance now requested by ProEnergy, including Change Order #4, from the approved FY14/15 Electric Production operating budget, which contains \$536,000 in the Unit No. 8 Boiler Maintenance account.

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

Attemperator (purchased separately):

\$163,406.35* Bid award amount for Replacement Superheater Attemperator
* Inclusive of Iowa sales tax

Spring 2014 Boiler Repairs:

\$331,069.50** Bid award amount for Spring 2014 Boiler Repairs

\$23,000.00** Contract Change Order No. 1 to Spring 2014 Boiler Repairs

\$133,000.00** Contract Change Order No. 2 to Spring 2014 Boiler Repairs

\$23,500.00** Contract Change Order No. 3 to Spring 2014 Boiler Repairs

\$155,493.00** **Contract Change Order No. 4 (pending Council approval of**

this agenda item)

**** These amounts do not include applicable sales tax which the City will pay directly to the state of Iowa.**

\$666,062.50 Total for Spring 2014 Boiler Repairs committed to date

Overall:

\$829,468.85 Attenuator and Spring 2014 Boiler Repairs

ALTERNATIVES:

1. Approve contract Change Order No. 4 to ProEnergy Services, LLC, Sedalia, MO, for the Spring 2014 Boiler Repairs in the amount of \$155,493 plus applicable sales taxes to be paid directly by the City of Ames to the State of Iowa.
2. Reject contract Change Order No. 4.

MANAGER'S RECOMMENDED ACTION:

This unfortunate situation stemmed from ProEnergy Services' failure to adequately inform the City of additional needed work on the Unit 8 boiler. It could be argued that the City has no legal obligation to pay this additional amount, although ProEnergy may feel otherwise. However, the City did actually benefit from the work performed.

All of the work performed by ProEnergy Services was needed for the continued reliable operation of Unit 8, and was done in a satisfactory manner. The costs associated with the additional work were expended by ProEnergy and have been substantiated. If ProEnergy had advised staff during the course of the work when the change order was required, staff would have immediately sought authorization from the City Council to complete the work.

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