

COUNCIL ACTION FORM

**SUBJECT: POWER PLANT BOILER RETUBE ENGINEERING SERVICES
CONTRACT CHANGE ORDER NO. 4**

BACKGROUND:

Unit No. 8 at the City of Ames Power Plant is a 65 megawatt (nameplate rated) electric generating unit fired by coal and refuse derived fuel (RDF) that was placed into service in 1982. In recent years, Unit 8's boiler has been plagued with tube failures in the lower waterwall and in the superheater sections of the boiler, resulting in numerous forced outages and unit downtime.

As Council is aware, a plan is in place to address the tube failure issues pertaining to the lower waterwall section of the boiler. A plan also needs to be developed to address the tube failure issues of the superheater section of Unit 8 boiler. The first step is to engage an engineering firm to assist the City in development of a strategy for repair, which would result in a scope of work along with a material and installation specification (including drawings) that would be used by the City to bid the necessary work.

Back in 2007, the City contracted with Utility Engineering of Minneapolis, Minnesota (now known as Zachry Engineering) for engineering services to prepare a scope of work and specification (including drawings) for Unit 8's boiler lower waterwall tube repair/replacement project. This was commonly referred to as Phase I. Phase II, as an option (for Zachry Engineering), had essentially the same scope of engineering work as Phase I, except it would address the superheater tube failure problems of Unit 8 boiler.

The original purchase order (P.O.) with Zachry Engineering for Phase I work was for a not-to-exceed amount of \$80,000. Subsequently, the following three change orders have been made to that contract:

Change Order #1	No charge	To change the contract name of the company from Utility Engineering to Zachry Engineering
Change Order #2	\$28,000	To expand the material specification from 2 to 4 boiler walls. (The \$28,000 was a not-to-exceed price.)
Change Order #3	No charge	To develop a specification for installation and on-site supervision of the work.

At this time, staff proposes a contract change order be issued to Zachry Engineering to perform engineering services to develop a scope of work and a material and installation

specification (including drawings) for the repair/replacement of the superheater for Unit 8 boiler. The engineering services as described will be referred to as Phase II work.

This proposed change order would be Change Order No. 4, and will allow Zachry Engineering to complete the engineering for Phase II. The cost of this change order will be for the not-to-exceed amount of \$49,500.

The approved FY 2010/11 Capital Improvements Plan includes \$300,000 for engineering of the repair work on the superheaters.

ALTERNATIVES:

1. Approve Contract Change Order No. 4 in an amount not to exceed \$49,500 to Zachry Engineering, Minneapolis, MN, for Phase II of the boiler retube engineering services.
2. Reject contract change order No. 4 and direct staff to issue request for proposals for the Phase II portion of the project.

MANAGER'S RECOMMENDED ACTION:

It is essential to keep the Unit No. 8 boiler tube repair project at the Power Plant moving forward. Because of statutory requirements and practical need, the services of an outside mechanical engineering firm are a necessity for the Phase II portion of this project. It is in the utility's best interest to continue with Zachry Engineering in lieu of bidding the professional services work again. The City has a good history with Zachry and the company has done much of the research and information gathering work required for the superheater repair project design during the initial phases of the work for the waterwalls repair. As a result, the engineering cost for this phase is much less than 10% of the value of the work to be completed.

Therefore, it is the recommendation of the City Manager that the City Council adopt Alternative No. 1, thereby approving contract Change Order No. 4 in an amount not to exceed \$49,500 to Zachry Engineering, Minneapolis, MN, for Phase II of the boiler retube engineering services. This will bring the total cost of the contract with Zachry Engineering to \$157,500.