ITEM # <u>/5</u>
DATE: October 28, 2008

COUNCIL ACTION FORM

SUBJECT: APPROVE A CONTRACT CHANGE ORDER FOR MECHANICAL ENGINEERING SERVICES FOR THE POWER PLANT

BACKGROUND:

Unit No. 8 is the primary generating unit at the Power Plant, accounting for a capacity of 70 MW. Unit No. 8 has been experiencing boiler tube wall thinning and wall tube failures. The tube failures cause the unit to be brought down for emergency repairs forcing the utility to then buy power on the open market.

The Electric Staff in conjunction with outside professional engineering firms believes that corrosion of the tube walls is likely due to chlorides and reducing atmosphere reacting with the tubes at high temperatures. Because of the dynamics of the internal boiler chemical reactions, staff has determined that there exists an immediate need to undertake a project to re-tube the damaged boiler tube sections.

On July 10, 2007, City Council approved a contract for engineering services with Utility Engineering Inc, Minneapolis, MN, in a not to exceed amount of \$80,000 for work on this project. During the initial phase staff believed that two walls of the Unit No. 8 boiler would need to be re-tubed. It has now become apparent that four walls of the boiler will need to be re-tubed. The Electric Services staff has negotiated a revised scope of work with the contract engineers to change the scope and account for four walls being re-tubed.

One change order has been previously approved for this contract, changing the name of the firm from Utility Engineering Inc., to Zachry Engineering (which results in no change in cost). This change order would be Change Order No. 2, and would be a not to exceed amount of \$28,000 to revise the scope of work.

ALTERNATIVES:

- 1. Approve contract change order no. 2 in an amount not to exceed \$28,000 to Zachry Engineering, Minneapolis, MN, for mechanical engineering services.
- 2. Post pone the pending maintenance projects at the Power Plant.

MANAGER'S RECOMMENDED ACTION:

It is essential to keep the Unit No. 8 boiler tube repair project at the Power Plant moving forward. The re-tubing of parts of the Unit # 8 boiler is necessary to maintain reliable service to our customers. Because of statutory requirements and practical need, the

services of a mechanical engineer are a necessity for this maintenance work. In addition, the forced outages at Unit No. 8 are costly to the City and staff now believes it is a better use of time and funding to address the problem as a whole at one major outage.

Therefore, it is the recommendation of the City Manager that the City Council adopts Alternative No. 1, approving contract change order no. 2 in an amount not to exceed \$28,000 to Zachry Engineering, Minneapolis, MN, for mechanical engineering services and design work for the Unit # 8 re-tubing project.