

COUNCIL ACTION FORM

SUBJECT: POWER PLANT UNIT 8 WATERWALL INSTALLATION

BACKGROUND:

The approved 2009/10 Capital Improvements Plan includes \$4,876,106 for Unit No. 8 waterwall tube materials purchase and installation at the City's power plant. The proposed project will address tube wastage by replacing the waterwall tubes below the 165 feet and 150 feet elevations to the lower weld lines.

On April 28, 2009, City Council approved the procurement of the waterwall tube material required for this project. The material has been, and continues to be, delivered to the Power Plant, at a cost (with change orders 1-4) of \$1,681,052. The portion of the project that is the subject of this Council Action Form is for the installation of the purchased material and the field application of AmStar 888c coating to the uncoated areas in the lower furnace. This coating will help reduce the deterioration of the tubes due to the burning of Refuse Derived Fuel, and the reducing atmosphere and corrosive chlorides found at the bottom of the boiler.

The Engineer's estimate of the cost of the installation is \$3,575,000, which includes a contingency amount of \$260,000. City Council should note that a total of \$3,142,492 remains in the current project budget for the completion of this work. Should the bids exceed the amount available for this work, Electric Utility staff will revisit the schedule of other projects planned for 2009/10 and identify additional funding. This is a priority project for the Utility, so as a part of reporting bids to the City Council, Electric staff will identify projects to be delayed or cut to provide the funding necessary to complete this installation.

Timing of materials delivery, receipt of installation bid responses, and the determination letter from the Iowa Department of Natural Resources (DNR) to move forward, are all critical to complete this project prior to the summer peaking season. Staff expects that the DNR will issue its letter in the early spring, and at that point all aspects of the project must be in place to begin immediately. However, it should be noted that, should the DNR have concerns or require additional information, the project could be delayed or costs could increase further. With eleven outages of Unit #8 last year, this project must move forward at some point in order for the Utility to remain a reliable source of power.

Upon City Council approval and receipt of favorable bids, this work would begin during the spring outage, which is scheduled from April 16 to May 31, so that the plant is operational for the summer season. It is anticipated that this work will take approximately 6 weeks to complete, and the goal is to have this portion of the project completed by May 31, 2010.

ALTERNATIVES:

1. Approve the preliminary plans and specifications for the Unit 8 Waterwall Installation and set March 10, 2010, as the bid due date and March 23, 2010, as the date of hearing and award of contract.
2. Delay the installation of the lower Unit 8 Waterwall Installation Project. This will mean that the Utility may run a higher risk of tube failure during the peaking season, and incur higher purchased power costs as a result.

MANAGER'S RECOMMENDED ACTION:

This project will address Unit No. 8 tube wastage by replacing the lower waterwalls in the Unit 8 boiler. The majority of the tube material is on site. It is crucial to do the installation during the spring outage to minimize downtime of the Unit 8 boiler during summer loads.

Therefore, it is the recommendation of the City Manager that the City Council adopt Alternative No. 1, thereby approving the preliminary plans and specifications for the Waterwall Installation, and establishing March 10, 2010, as the bid due date and March 23, 2010, as the date of public hearing.