

COUNCIL ACTION FORM

SUBJECT: POWER PLANT UNIT #8 FEEDWATER PUMP INSPECTION AND REPAIR CHANGE ORDER NO. 1

BACKGROUND:

Feedwater pumps are required for operation of the Power Plant, as they are the primary pumps used to pump water through the boiler for conversion to steam to drive the plant turbine. The work in this project includes furnishing all services, equipment, materials, labor, supervision and management necessary for a contractor to disassemble, document as-found conditions, repair or replace components, reassemble, document as-repaired conditions, and return the Unit 8 feedwater pump to the City.

On September 13, 2016, City Council awarded this contract to Superior Industrial Equipment, Grimes, IA in the amount of \$92,559.96 (inclusive of Iowa sales tax).

This proposed Change Order No. 1 in the amount of \$68,668.04 is for additional repairs needing to be performed on the Unit 8 Feedwater Pump. After removing the pump from service and transporting it to the repair shop, the pump was further disassembled and additional items were found that need to be addressed. These items include a new pump shaft, new 1st and 2nd stage pieces, new case rings, and new 1st and 2nd stage sleeves. These pump issues were not known until the pump was taken apart and inspected. This \$68,668.04 is inclusive of applicable Iowa sales tax. The total contract amount with this change order will be \$161,228. Several things worth noting are that: 1) Unit #8 has only two feedwater pumps, 2) the plant cannot operate without a feedwater pump in-service, and 3) a new pump can cost between \$500,000 and \$1,000,000.

The engineer's estimate for this project was \$102,000. It should be noted that the engineer's estimate was created before the pump was opened and inspected. The approved FY 2016/17 operating budget for Unit #8 Auxiliary Equipment contains \$123,000 which will be utilized to cover this project. An additional \$40,000 will be transferred from the Unit #7 Auxiliary Equipment account to cover the difference.

ALTERNATIVES:

1. Approve contract Change Order No. 1 with Superior Industrial Equipment, Grimes, IA, for the Unit 8 Feedwater Pump Inspection and Repair in the amount of \$68,668.04 (inclusive of Iowa sales tax).
2. Reject contract Change Order No. 1 which will delay the needed repairs.

MANAGER'S RECOMMENDED ACTION:

This project is necessary because boiler feed pump reliability is crucial for plant operation. The loss of a boiler feed pump would result in reduced unit capacity or unit shutdown for an extended period of time. The work under Change Order #1 will provide additional repairs needing to be performed that were not known until the pump was taken apart and inspected.

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