ITEM # __31__
DATE: 05-24-16

COUNCIL ACTION FORM

SUBJECT: ENGINEERING SERVICES FOR UNIT 7 SUPERHEATER, FURNACE WALL AND DUMP GRATE REPLACEMENT

BACKGROUND:

A Unit 7 boiler tube study conducted by M&M Engineering Associates, Inc. in 2014 determined that the boiler tubes in the vicinity of the Power Plant's furnace displayed severe thinning. The degradation of these tubes has resulted in an increase in tube repairs required on the Unit 7 boiler to maintain operation. In addition to resolving the tube thinning issue, this contract will call for the redesign of the lower tube sections to allow for better combustion of refuse derived fuel (RDF). Historically Unit 7 boiler has not combusted RDF as efficiently as the Unit 8 boiler. This has led to "unburned" amounts of RDF, which has caused plugs in plant piping and accelerated wear on plant components.

Electric Services staff desires to hire an engineering firm to provide engineering services to address these issues. The selected firm will be required to supply certified technical specifications and detailed cost estimates for the replacement of Unit 7 superheater, redesign of the lower furnace walls, new dump grates, and any other approved component recommended by the firm.

On February 24, 2016, a Request for Proposal (RFP) was issued to twenty-seven firms for proposals. The RFP was advertised on the Current Bid Opportunities section of the Purchasing webpage, and was also sent to one plan room. On March 24, 2016, staff received proposals from seven firms. Staff evaluated the proposals and independently evaluated and scored all seven proposals in the following two steps:

STEP 1:

The proposals were evaluated based on compliance with proposal documents. This criterion was rated on a Pass / Fail basis.

STEP 2:

The proposals were evaluated based on: 1) knowledge, capabilities, skills, and abilities of the proposed project team based on the resumes submitted; 2) firm's experience and references for similar projects; 3) described work approach/plan with proposed schedule; 4) experience and familiarity with the Ames plant; and 5) price and rates.

Based on the matrix used to quantify these proposals, the averaged scores in this step are shown below:

Offerors	Average Scores	Not-to-Exceed Amount
Zachry Engineering Corporation Minneapolis, MN	**856**	**$93,500**
Burns & McDonnell Kansas City, MO	803	$117,500
Lutz, Daily & Brain, LLC Consulting Engineers Overland Park, KS	785	$77,900
Sargent & Lundy, LLC Chicago, IL	741	$265,000
Karges-Faulconbridge, Inc. Iowa City, IA	712	$89,700
Brown Engineering Des Moines, IA	699	$270,864
Valdes Engineering Company Lombard, IL	619	$145,200

Each score was based on a scale of 1 to 10. Overall, 1,000 possible points were available cumulatively for each firm that responded. The overall weighted score was a function of the aforementioned factors evaluation factors.

Based on the averaged scores and a unanimous decision by the evaluation committee, staff is recommending that a contract be awarded to Zachry Engineering Corporation of Minneapolis, MN, for an amount not to exceed $93,500. Payments would be calculated on unit prices bid for actual work performed.

The approved FY2016/17 CIP for Unit #7 Boiler Tube Repair includes $3,850,000 for engineering, materials and installation on this project.

ALTERNATIVES:

1. Award a contract to Zachry Engineering Corporation, Minneapolis, MN, for the Engineering Services for Unit 7 Superheater, Furnace Wall, and Dump Grate Replacement in an amount not-to-exceed $93,500.

2. Award a contract to another bidder for the Engineering Services for Unit 7 Superheater, Furnace Wall, and Dump Grate Replacement.

3. Reject all proposals and delay the Engineering Services for Unit 7 Superheater, Furnace Wall and Dump Grate Replacement.

MANAGER'S RECOMMENDED ACTION:

This project will increase the reliability of the Unit # 7 and increase the life expectancy of the boiler at it begins to use natural gas as a fuel source. Therefore, it is the recommendation of the City Manager that the City Council adopt Alternative No. 1 as stated above.