ITEM # 16a-c
DATE: 06-14-11

COUNCIL ACTION FORM

SUBJECT: POWER PLANT LEVEL DETECTION SYSTEMS

BACKGROUND:

This project involves the purchase of three level detection systems for the Power Plant. Staff consolidated the required systems into a single request for proposal (RFP) that allows the City to procure these parts more efficiently since each one is supplied by similarly qualified firms. Additionally, the City still reserved the option to award the contract in whole or in parts depending on the evaluated scores for each firm on each part listed on the RFP.

These detection systems will serve as replacements for current nuclear style level detectors used in existing coal and ash handling systems. Electric Services staff desires to eliminate the nuclear detectors and replace them with reliable, accurate technologies for level detection. The detectors will serve as an input to the Programmable Logic Controller (PLC) control system operating the coal and ash handling systems. Power Plant staff will install, calibrate, and integrate these detectors into the existing PLC control system when received.

On April 18, 2011, the RFP document was issued to nine firms for proposals. On May 5, staff received competitive proposals from four firms. These proposals were then evaluated by a committee consisting of the Power Plant Engineer, Power Plant Maintenance Superintendent, Electric Administration Technical Assistant, Utility Engineer, and Power Plant Manager. The committee members independently evaluated and scored all four of the proposals. Each proposal was evaluated based on satisfaction of technical specifications, price, lead time / delivery, and references.

Part 1: Radio Frequency Point Level Detection System

This is for the purchase of sixteen radio frequency (RF) point level detection systems. These detection systems will serve as replacements for current nuclear style high level detectors used in an existing fly ash handling system. The detectors will serve as an input to the PLC control system operating the ash handling system.

Two firms submitted proposals for this detection system:

OFFERERS	AVERAGED SCORE
Venture Measurement Co. LLC, Minnetonka, MN	886.00
Enpro, Inc., Ankeny, IA	519.90

Each score was based on a scale of 1 to 10, with a maximum of 1,000 points possible. Based on the averaged scores and a unanimous decision by the evaluation committee, staff recommends that a contract be awarded to Venture Measurement Co. LLC, Minnetonka, Minnesota, in the amount of $21,613.76, plus shipping costs. Venture Measurement is not licensed to collect sales taxes for the State of Iowa, so the City would pay applicable Iowa Sales Taxes directly to the State.

The approved FY 2011/12 operating budget for #8 Ash System contains $20,000 for equipment parts/supplies. Additional funds to cover the balance come from the approved FY 2011/12 operating budget for Fuel Handling Equipment which contains $30,000 for equipment parts/supplies.

Part 2: Microwave Point Level Detection System

This is for the purchase of eleven microwave point level detection systems. These detection systems will serve as replacements for current nuclear style level detectors used in an existing coal handling system. The detectors will serve as an input to a PLC control system used to operate and protect the coal handling system during all phases of operation.

A single firm submitted a proposal for this detection system:

OFFERER	AVERAGED SCORE
L & J Technologies, Hillside, IL	674.00

Based on the single proposal received and a unanimous decision by the evaluation committee, staff recommends that this contract be awarded to L & J Technologies, Hillside, Illinois, in the amount of $19,645.18, plus shipping costs. L & J Technologies is not licensed to collect sales taxes for the State of Iowa, so the City would pay applicable Iowa Sales Taxes directly to the State.

The approved FY 2011/12 operating budget for Fuel Handling Equipment contains $30,000 for equipment parts/supplies to cover this purchase.

Part 3: Tilt Switch Level Detection System

This is for the purchase of four tilt switch level detection systems. These detection systems will serve as replacements for current nuclear style level detectors used in an existing coal handling system. The detectors will serve as an input to a PLC control system used to operate and protect the coal handling system during all phases of operation.

A single firm submitted a proposal for this detection system:

OFFERER	AVERAGED SCORE
Electro-Sensors, Inc., Minnetonka, MN	726.00

Based on the single proposal received and a unanimous decision by the evaluation committee, staff recommends that this contract be awarded to Electro-Sensors, Inc., Minnetonka, Minnesota, in the amount of $4,685.00, plus shipping costs. Again, the City of Ames would directly pay applicable Iowa Sales Taxes directly to the State of Iowa.

The approved FY 2011/12 operating budget for Fuel Handling Equipment contains $30,000 for equipment parts/supplies to cover this purchase.

ALTERNATIVES:

1. a. Award a contract to Venture Measurement Co. LLC, Minnetonka, MN, for radio frequency point level detection system, in the amount of $21,613.76, plus applicable sales taxes to be paid directly by the City to the State of Iowa, with shipping costs to be prepaid and added to their invoice.

   b. Award a contract to L & J Technologies, Hillside, IL, for microwave point level detection system, in the amount of $19,645.18, plus applicable sales taxes to be paid directly by the City to the State of Iowa, with shipping costs to be prepaid and added to their invoice.

   c. Award a contract to Electro-Sensors, Inc., Minnetonka, MN, for tilt switch level detection system, in the amount of $4,685.00, plus applicable sales taxes to be paid directly by the City to the State of Iowa, with shipping costs to be prepaid and added to their invoice.

2. Reject all proposals and delay the purchase of the level detection systems.

MANAGER'S RECOMMENDED ACTION:

The purchase of these detection systems is advisable because it takes care of several issues and limits liability of having nuclear devices in operation. The nuclear devices currently in operation were installed twenty-nine years ago and are starting to require more attention by certified repair personnel. There are also a number of leak tests required each year along with ongoing personnel training and reporting. Although these devices have served the Power Plant well, staff believes that the new devices will provide more than adequate service and are much easier to maintain. The removal of the nuclear devices also is an important safety issue that in itself would warrant this change. Total cost of this award is $45,943.94, and the available budget is $50,000.

Therefore, it is the recommendation of the City Manager that the City Council adopt the Alternative #1 for the reasons stated above.