COUNCIL ACTION FORM

SUBJECT: POWER PLANT SCADA SYSTEM UPGRADE

BACKGROUND:

The City of Ames Power Plant has a Supervisory Control and Data Acquisition (SCADA) system to monitor and control electric generation, distribution and transmission from the Power Plant to critical power substations throughout the City and interconnection points with neighboring electric utility systems. The existing system was installed in 2001 and had the last software update in 2003. No software updates have been done since 2003 due to hardware and operating system constraints.

Upgrading the SCADA system is necessary at this time to comply with interconnection requirements of the Midwest Independent System Operator (Midwest ISO or MISO) regional transmission organization. MISO is the organization that manages the high voltage electric transmission system in the upper Midwest and oversees the importation of power into Ames. MISO will require the Ames Power Plant to use an Inter-Control Center Communication Protocol (ICCP) by Fall 2008 to be able to exchange real time information between Ames and MISO. Our current SCADA system will not support the required ICCP functionality, so the City's existing SCADA system must be upgraded at this time to accommodate the ICCP protocol.

In addition to complying with this ICCP requirement, upgrading the SCADA system will allow for a number of improvements to operations:

- Installation of a new operating system (Microsoft no longer supports our existing system, Windows NT 4.0)
- Better management and accounting of daylight savings time changes
- USB functionality which is the current preferred method for peripheral devices, such as new monitors, printers, keyboards, scanners, etcetera
- Updating of SCADA system software to take advantage of recent operational improvements and security enhancements
- Position the Ames Power Plant to better respond to anticipated NERC (North American Electric Reliability Corporation) requirements in the near future

Upgrading our existing SCADA system is more cost effective than replacing the entire system, as was contemplated in previous CIP's. Another municipal electric utility in lowa recently replaced its older SCADA system with a new system from our current supplier, Open Systems International, Inc. (OSI) at a cost in the \$800,000 - \$900,000 range. That utility chose OSI over several competing proposals.

Electric Utility Staff researched equipment from six suppliers, including OSI, for possible system replacement. The cost estimates for a SCADA master upgrade of necessary system components from the suppliers other than OSI was estimated to be between \$205,000 and \$770,000. Time for completion varies greatly.

Upgrading our existing SCADA system is the most practical and cost-effective solution to meeting the new MISO requirements while gaining more functionality. Accomplishing this would require a single-source purchasing arrangement with our current SCADA software supplier, OSI, The 2007/08 CIP contains \$150,000 for this project.

Due to these factors, Electric Services staff requests that the City Council waive the City's purchasing policies requiring formal competitive bids and award a contract to Open Systems International, Inc., Minneapolis, MN.

ALTERNATIVES:

- 1. The City Council may waive the purchasing policy requirement for formal bidding procedures and award a contract in an estimated amount of \$126,674.00 plus applicable sales taxes and approved travel expenses, to Open Systems International, Inc., Minneapolis, MN, for the Power Plant SCADA Upgrade project.
- 2. Postpone the SCADA upgrade and secure competitive bids for a new system.

MANAGER'S RECOMMENDED ACTION:

The Electric Utility is required to improve the SCADA system by regulatory authorities. In addition, it is in the City's best interest to improve the SCADA system in a timely and cost effective manner. The best way to accomplish both of these objectives is to enter into an agreement with our current SCADA software supplier OSI.

Because software design and operation as well as security concerns may be proprietary in nature, the supplier, OSI, has obtained an injunction which prevents the City from making the information contained in the Contract Documents public information. Staff recognizes the public may voice some objection to portions of the contract being unavailable for review, and the City Attorney filed an answer with the District Court denying 5 of the 12 allegations of confidentiality in the company's petition for injunction to keep the agreement confidential. The City is bound to comply with the terms of the injunction, after considering the impact of complying with the terms of the injunction, staff feels that this remains the most cost-effective option for the City.

Therefore, it is the recommendation of the City Manager that the City Council adopts Alternative No. 1, waiving the purchasing policy requirement for formal bidding and awarding a contract in an amount of \$126,674.00 plus applicable sales taxes and approved travel expenses, to Open Systems International, Inc., Minneapolis, MN, for the Power Plant SCADA Upgrade project.

v.

JUDGMENT - INJUNCTION

CITY OF AMES, IOWA,

Defendant.

ON THIS 25th day of February, 2008, the above-entitled matter comes before this Court upon the Petition of the Plaintiff and Application for Hearing for permanent injunction, and the Court having inspected the file and records finds:

- That notice of hearing was duly given to all interested parties in accordance 1. with Order of Court, and proof thereof is on file herein.
- That no written objections have been filed by any third party with the Clerk of the above Court as required by Order of Court.
 - That this Court has jurisdiction. 3.

WHEREUPON, this matter proceeds to final hearing, and the Court having received and heard the evidence finds:

- That the Plaintiff has presented its evidence by Affidavit and verified Petition 1. in support of its allegations.
- That the Defendant, City of Ames, Iowa, has acknowledged that disclosure 2. of certain items as contained in the said "Quotation Sheets" do create security risks. In addition, the City of Ames, Iowa, does not resist nor present evidence contesting the remaining claims of the Plaintiff that the "Quotation Sheets" contain proprietary and confidential information.
- That the "Quotations Sheets" attached to the Agreement for SCADA System Upgrade Services for the City of Ames Electric Services, dated December 28, 2007 (the

2/25/2008

16:11

"Agreement") contain proprietary and confidential information and material of the Plaintiff which should be protected as trade secrets and, therefore, should not be disseminated, released, or disclosed to third parties or entities.

THEREFORE, IT IS HEREBY ORDERED, ADJUDGED AND DECREED by this Court that the said "Quotation Sheets" attached to the "Agreement" which have been specifically marked and identified as proprietary and confidential, are hereby deemed to be trade secrets of the Plaintiff, and the Defendant, City of Ames, Iowa, is hereby permanently enjoined from disclosing, divulging, disseminating, releasing, or making known such information to any person or entity other than authorized employees of the Defendant, City of Ames, Iowa.

JUDGE IN AND FOR THE SECOND JUDICIAL

DISTRICT OF IOWA

Approved as to Form:

City of Ames Iowa

COURTE 25 AM ID: 15
DIANE LA JOTT CLERK

CITY OF AMES, IOWA

Ph: 515-239-5125 * Fax: 515-239-5325 Michael Sibert, Procurement Specialist Budget Quote - SCADA Master Upgrade

RFI 2008-133

Electric Production

SCADA Master Station Upgrade



	Equipment	Software	Training	Database	Lead	TOTAL COST
RESPONDING						
	Estimate Cost	Estimate Cost	Estimate Cost	Conversion	time	ESTIMATE
C3 ilex, LLC					90-120	
Fremont, CA	\$122,000.00	\$70,000.00	\$57,000.00	\$23,000.00	Days	\$272,000.00
Advanced Control Systems, Inc.						
Norcross, GA	\$110,000.00	\$250,000.00	\$200,000.00	*High Estimate	4 months	\$560,000.00
Advanced Control Systems, Inc.					i	
Norcross, GA	\$80,000.00	\$150,000.00	\$10,000.00	*Low estimate	4 months	\$240,000.00
Siemens Power Trans & Dist.				All Number +/-		
Minnetonka, MN	\$60,000.00	\$45,000.00	\$100,000.00	15%	24 wks	\$205,000.00
Control Automation/Crescent Des						
Moines, IA	\$108,290.00	\$97,379.00	\$14,550.00		8-10 wks	\$220,219.00
Wesco Distribution						
Des Moines, IA	\$120,000.00	\$120,000.00	\$530,000.00		6 months	\$770,000.00
				ļ		
L			<u> </u>			