

COUNCIL ACTION FORM

SUBJECT: POWER PLANT SCADA SYSTEM SOFTWARE UPGRADE

BACKGROUND:

Electric Services uses a Supervisory Control and Data Acquisition (SCADA) System to monitor status and to control power flows, electric generation, interconnections to neighboring utilities, distribution, and transmission. Data from the SCADA is also used as the basis for billing energy transactions.

The existing SCADA system was installed in 2000 and has had routine software and hardware updates. The SCADA system was supplied and is supported by Open Systems International, Inc. (OSI) from Medina, MN, and the software is based on Microsoft “.NET” technology. Advancements have continued to be made to the software to meet changing industry standards and regulations. The City has historically entered into a support services agreement with OSI to keep pace with those changes and to provide maintenance services at a reasonable price.

There are two levels of support service plan available for this software: “Diamond” and “Gold.” For the past six years, the Power Plant has performed a software upgrade every two years. It has financially benefited the plant to hold a higher level “Diamond” support service plan during the years of the software upgrade (including software, project engineering and design, and project management), and then downgrade to a “Gold” support service plan during the off years. This rotation of support service plans saves the Power Plant approximately \$30,000 annually.

On March 22, 2022, the City Council awarded a contract for the support service plan for the Power Plant SCADA system to OSI, for a term of four years (subject to future budget appropriations). The four-year contract provides for Diamond level support in FY 2022/23. In addition to obtaining the higher “Diamond” level support this year, there are other items associated with the software upgrade that need to be performed at an additional cost. **Since the Diamond level service is already under contract for this year, this action is to authorize the additional items only. The additional services being obtained are:**

1. **Third-party software patch assistance - \$20,160** Updating the operating systems on all servers and workstations
2. **Factory Acceptance Testing – \$21,600** OSI temporarily setting up system at their location and COA spending 3 days at OSI verifying the new software before it is installed at the Power Plant
3. **Purchase of Security Hardware - \$17,850** Additional hardware and service to improve the security of the SCADA system
4. **OSI Travel expenses - \$5,000** Expenses for OSI to travel to and from COA power plant. This is a not-to-exceed dollar amount.

Total cost for all items - \$64,610

Staff is requesting that the City Council waive the City's purchasing policies requiring formal competitive bids, and award this additional work to Open Systems International, Inc., of Medina, MN in the amount of \$64,610. The FY 2022/23 operating budget includes \$65,000 for items supporting the SCADA system that are not included in the Diamond Support Service Plan.

ALTERNATIVES:

1. Waive the City's purchasing policy requirement for formal bidding procedures and award this work to Open Systems International, Inc., Medina, MN, for additional software upgrade support in the amount of \$64,610.
2. Do not perform the additional work supporting the software upgrade and operate the SCADA system with increased risk of poor reliability.

CITY MANAGER'S RECOMMENDED ACTION:

Regulatory authorities require the Electric Utility to maintain a functional SCADA system. In addition, it is in the City's best interest to maintain the SCADA system with the most up-to-date software, and to do this in a timely and cost-effective manner. The most effective way to maintain the SCADA system is to continue regular software upgrades on all Third-party software supporting SCADA and continue to maintain a high level of security around the system

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