

ITEM #:	18
DATE:	05-26-26
DEPT:	ELEC

COUNCIL ACTION FORM

SUBJECT: REQUEST TO REALLOCATE FUNDING FOR ELECTRIC SERVICES SCADA SYSTEM UPDATE

BACKGROUND:

The Combustion Turbine Controls Upgrade Capital Improvement Project has seen significant savings as the result of favorable bids and a scope change involving using a Programmable Logic controller (PLC)-based platform instead of a Distributed Control System (DCS) platform extension. Approximately \$800,000 is estimated to be saved at the conclusion of the project compared to the budgeted funds.

The electric utility's Supervisory Control and Data Acquisition (SCADA) system is used to monitor status and control power flows for interconnections to neighboring utilities, local distribution, and transmission. Data from SCADA is also used as the basis for billing energy transactions. The capabilities SCADA provides are crucial to the function of the electric utility.

The existing SCADA system was installed in 2000. Since then, SCADA software and hardware have advanced to meet evolving industry standards and regulatory requirements.

Historically, the City maintained the system through support agreements with the current vendor, which provided routine maintenance and periodic software and hardware updates at a reasonable cost. Recently, however, the vendor's business practices have changed, making ongoing maintenance and updates more complex and more costly.

Staff is particularly concerned that the vendor no longer supplies the hardware needed to support the current system or complete future upgrades. The SCADA system is currently due for updates, but completing those updates with the current vendor would be significantly more difficult and costly. Future updates are expected to present the same challenges. For these reasons, staff proposes using savings from the Combustion Turbine Controls Upgrade Capital Improvement Project to pursue a replacement of the current SCADA system.

To begin securing a replacement SCADA system, staff will issue an RFP for engineering services. The selected engineering firm will develop the work scope, specifications and other supporting documents for a SCADA system with Automatic Generation Control (AGC), define evaluation criteria to assess each vendor's proposal, provide an engineering cost estimate, provide standard terms and conditions for the procurement of a SCADA system, and assist City staff during bidding and project execution. The specification and relevant supporting documents will be used in an RFP process to select a vendor.

The selected SCADA vendor will be capable of providing hardware, software, and integration services required for a functional SCADA platform. Their solution will also be scalable and

architecturally flexible to accommodate additional generating stations such as the Ames Municipal Energy Center, upgrades to the transmission and distribution system, and integration of third-party systems such as Advanced Metering Infrastructure (AMI), Outage Management System (OMS), and Advanced Distribution Management System (ADMS). It is estimated that the engineering services and the new system will cost \$800,000. Staff would like to use the \$800,000 savings from the Combustion Turbine Controls Upgrade Capital Improvement Project to fund this project.

ALTERNATIVES:

1. Approve the request to reallocate savings from the Combustion Turbine Controls Upgrade CIP project to a new SCADA upgrade CIP project.
2. Do not approve the request.

CITY MANAGER'S RECOMMENDED ACTION:

The electric utility's Supervisory Control and Data Acquisition (SCADA) system is used to monitor status and control power flows for interconnections to neighboring utilities, local distribution, and transmission. Data from SCADA is also used as the basis for billing energy transactions. The capabilities SCADA provides are crucial to the function of the electric utility.

The existing SCADA system is in need of update, but completing those updates and any future updates with the current vendor will be significantly more difficult and costly due to their changing business practices. Pursuing a replacement system will allow City staff to identify other cost effective and functional SCADA solutions.

The initial step regarding the SCADA project will be to hire an engineer at a later date to develop the specifications for a future proposal. Since no funding currently exists for this new project, before initiating this project the staff would like the Council's approval for the reallocation of the savings from the Combustion Turbine Controls project to this new SCADA project. Therefore, it is the recommendation of the City Manager that the City Council adopt Alternative No. 1, as described above.