



RIVERSIDE PUBLIC UTILITIES

Board Memorandum

BOARD OF PUBLIC UTILITIES

DATE: AUGUST 26, 2024

SUBJECT: ELECTRIC SUPERVISORY CONTROL AND DATA ACQUISITION NETWORK INFRASTRUCTURE PROCUREMENT; WORK ORDER NO 2427164 IN THE AMOUNT OF \$1,052,362 WITH AN ADDITIONAL 10% CONTINGENCY IN THE AMOUNT OF \$105,236; TOTAL PROCUREMENT COST OF \$1,157,598

ISSUE:

Approve the expenditure for the Electric Supervisory Control and Data Acquisition network infrastructure procurement.

RECOMMENDATION:

That the Board of Public Utilities approve the expenditures of \$1,157,598 for the Electric Supervisory Control and Data Acquisition network infrastructure procurement and approve Work Order No. 2427164 in the amount of \$1,052,362.

BACKGROUND:

Riverside Public Utilities (RPU) Energy Delivery personnel use a Supervisory Control and Data Acquisition (SCADA) system to operate our electric transmission and distribution equipment in a safe and reliable manner. It is part of a sophisticated software-based environment which leverages a variety of networking devices, security appliances, and application servers, which have been specifically engineered to facilitate the real-time monitoring and control of our grid infrastructure. In order to keep the Electric SCADA system and all of its components dependable and secure, this equipment must be updated and/or replaced as it reaches end of life.

In September 2022, the Board of Public Utilities approved the Electric SCADA Upgrade Project, authorizing Open Systems International Incorporated (OSI Inc.) to provide the necessary hardware, software, and engineering services to update the Electric SCADA application and its core. However, this project did not include the ancillary networking infrastructure needed to exchange data between our secure substations and the City's corporate environment. Supply chain issues and pricing fluctuations hindered RPU and OSI's effort to produce a detailed network design prior to the SCADA Upgrade Project's approval. Staff recognized that delaying this project would increase our costs substantially, and thus opted to procure the ancillary networking infrastructure as a separate initiative from the SCADA Upgrade Project. Once the RPU-OSI implementation team had the resources to develop a detailed network design and equipment specification, RPU was able to secure contract pricing for the required networking infrastructure through our trusted vendors.

DISCUSSION:

The Electric SCADA network infrastructure procurement will bring the system up to date with the latest release of the hardware and associated software. The goal is to maintain all functionality present in the current system while taking advantage of the enhancements and standard features available with the new hardware and software. We are utilizing the National IPA contract to receive the lowest cost on the hardware and software.

RPU staff will procure, configure, and test the new equipment in a secure environment so it can be integrated with our upgraded SCADA application. Once it has been validated, staff will work with OSI Inc. to cutover to the new Electric SCADA system and decommission the old equipment so it can be removed from service.

Electric SCADA network Upgrade and Services

The procurement with CDW Government, LLC. is through a cooperative agreement with Omnia Partners, formerly known as National Intergovernmental Purchasing Alliance (National IPA), Contract #2018011 expiring on August 21, 2025. Per Purchasing Resolution 24101, Section 702 (f) states, “Competitive Procurement through the Informal Procurement and Formal Procurement process shall not be required (f) When Cooperative Purchasing is available and undertaken or when Services can be obtained through Federal, State, and/or other public entity contracts or price agreements.”

Item	Cost
Work Order No. 2427164	
Check Point Firewalls w/3yr Support	\$807,708
Cisco Networking Equipment	\$183,155
HP Gen10 DL380 Servers	\$39,885
Windows Data Center	\$21,614
10% Contingency	\$105,236
Total Electric SCADA Network Upgrade	\$1,157,598

The Purchasing Manager concurs that the recommended actions are in compliance with Purchasing Resolution No. 24101.

STRATEGIC PLAN ALIGNMENT:

This item contributes to Strategic Priority No. 6 Infrastructure, Mobility and Connectivity and Goal 6.2 – Maintain, protect, and improve assets and infrastructure within the City’s built environment to ensure and enhance reliability, resiliency, sustainability, and facilitate connectivity.

This item aligns with each of the five Cross-Cutting Threads as follows:

1. **Community Trust** – RPU is committed to the highest quality water and electric services at the lowest possible rates to benefit the community. This procurement helps ensure that we have up-to-date technology to continue delivering safe and reliable service to our customers.

2. **Equity** – The Electric SCADA system is critical to the delivery of reliable power and ensures equitable distribution of services to every member of the community so that all have equal access to share the benefits of community progress.

3. **Fiscal Responsibility** – Reliable systems that track and monitor system performance help prevent system outages, therefore keeping operating costs low for the utility and customers.

4. **Innovation** – This procurement ensures that RPU’s most critical electric operating and monitoring system is up to date with the most current technology and security settings available.

5. **Sustainability & Resiliency** – This procurement was designed with the future in mind, to include on-going system patching and upgrades to remain current with the industry’s prevailing versions to enhance system reliability, sustainability, and resiliency.

FISCAL IMPACT:

The total fiscal impact is \$1,157,598. Sufficient funds are available in Public Utilities Electric Capital Account No. 6130200-470826.

Prepared by:	Daniel Honeyfield, Utilities Assistant General Manager/ Energy Delivery
Approved by:	David A. Garcia, Interim Utilities General Manager
Certified as to availability of funds:	Kristie Thomas, Finance Director/Assistant Chief Financial Officer
Approved by:	Rafael Guzman, Assistant City Manager
Approved as to form:	Phaedra A. Norton, City Attorney

Attachment:

1. Presentation