



RIVERSIDE PUBLIC UTILITIES

Board Memorandum

BOARD OF PUBLIC UTILITIES

DATE: APRIL 27, 2026

SUBJECT: PURCHASE OF EIGHTEEN (18) GAS TURBINE ENGINE CONTROL SYSTEM COMPONENTS FOR ALL FOUR UNITS AT RIVERSIDE ENERGY RESOURCE CENTER FROM GE VERNOVA OPERATIONS, LLC. OF HOUSTON, TEXAS IN THE AMOUNT OF \$335,465.14

ISSUE:

Consider approving the purchase of eighteen (18) gas turbine control system components for all four units at the Riverside Energy Resource Center from GE Vernova Operations, LLC. of Houston, Texas in the amount of \$335,465.14.

RECOMMENDATION:

That the Board of Public Utilities approves the purchase of eighteen (18) gas turbine control system components for all four units at the Riverside Energy Resource Center from GE Vernova Operations, LLC. of Houston, Texas in the amount of \$335,465.14.

BACKGROUND:

The Riverside Energy Resource Center (RERC) is equipped with four General Electric LM6000 gas turbine engines, which can collectively provide up to 30 percent of Riverside's daily electric power demands during the summer months. This facility was constructed in two phases: Units 1 and 2 were commissioned in 2006, followed by Units 3 and 4 in 2011. Each of these fast-start gas turbine units can generate 50 megawatts (MW) of electricity in less than ten minutes and are strategically located within the city limits providing local generation capacity. The availability of these units is critical to ensure that Riverside Public Utilities (RPU) can meet peak electricity demand and reliability needs.

Each gas turbine has a control system that integrates the use of 16 controllers, 4 per unit. These serve as the turbine's primary control system, continuously monitoring its condition and enabling operators to run it safely and efficiently. They process information from various sensors throughout the turbine, display real-time data to operators, and automatically respond to changing conditions to keep the turbine operating properly or shut it down safely if necessary.

Image 1 – RERC Unit 1:

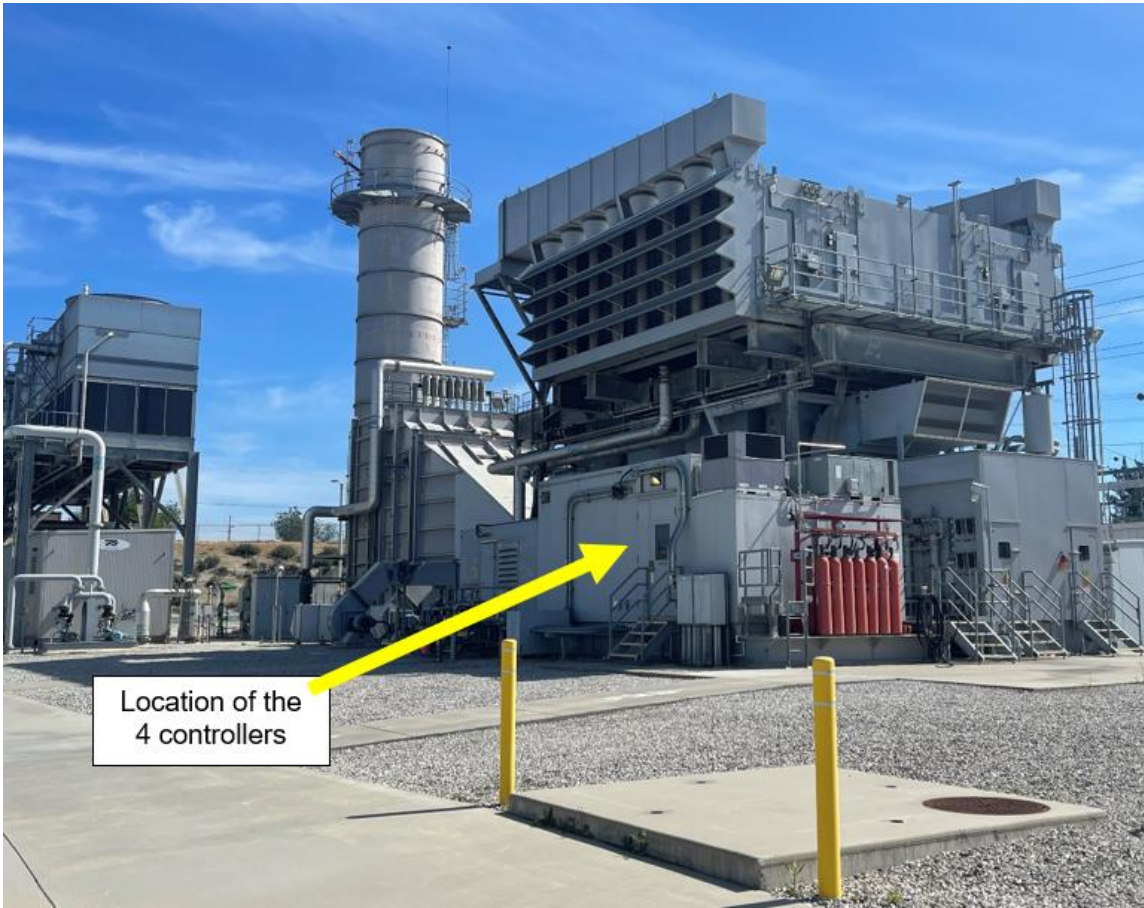
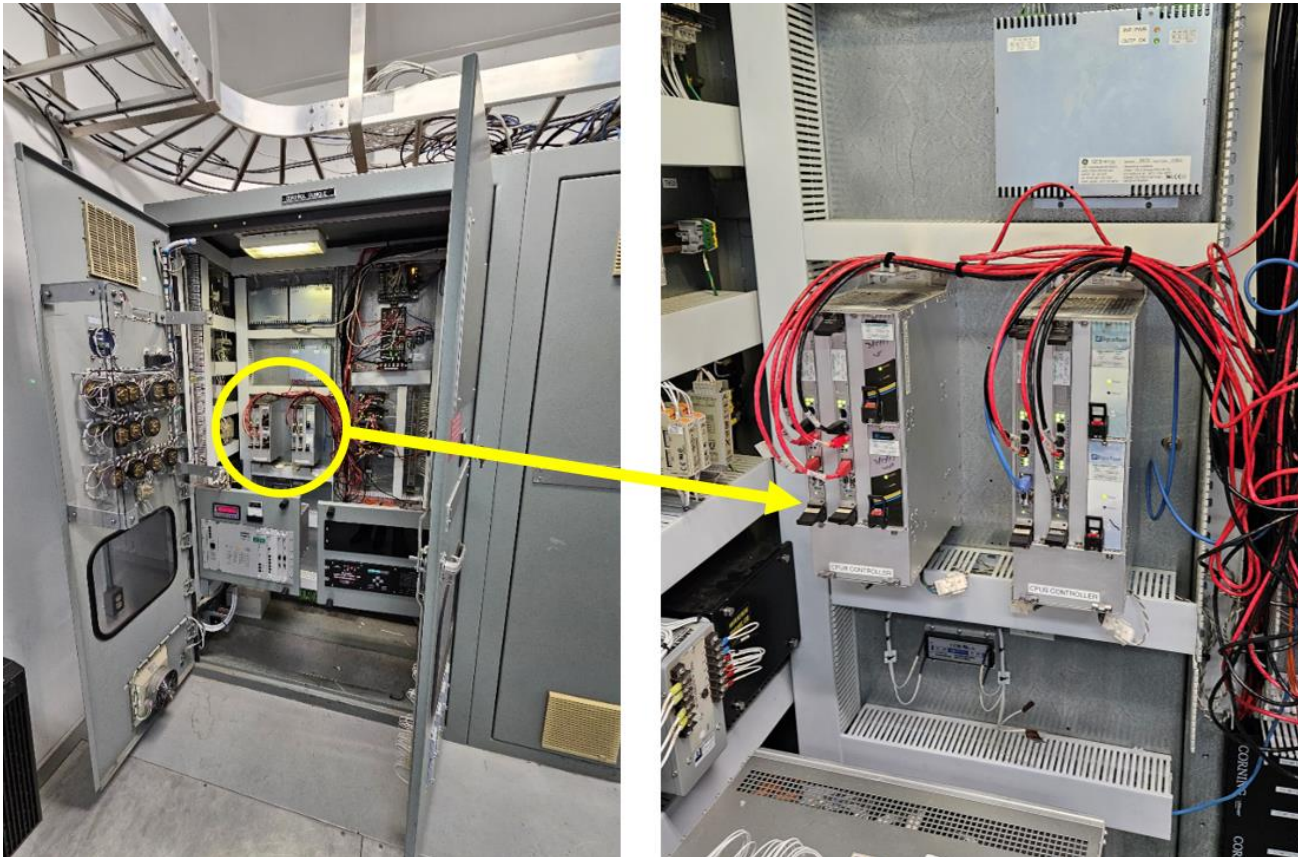


Image 2 – Obsolete Controllers Installed on RERC Unit 1:



The existing controllers have been in service since the turbines were commissioned and have been obsolete since 2014. As spare parts are no longer available and the software operating systems are outdated, repairs and maintenance are becoming more difficult. This continued reliance on unsupported equipment significantly increases maintenance challenges and operational risk. Replacement of these controllers is necessary to ensure continued operations of the gas turbines.

DISCUSSION:

GE Vernova Operations, LLC. (GE Vernova) is the original equipment manufacturer (OEM) for the GE LM6000 gas turbines at RERC and is the sole authorized provider of the required controller hardware, licensing, and proprietary software. Only GE Vernova is able to perform the required OEM-authorized testing, validation, and software enhancements necessary to maintain unit operation, efficiency, life-cycle maintenance, performance, and overall reliability. Procuring controllers from any other source would result in incompatibility issues with the existing control system and increase operational risk.

GE Vernova proposed to retrofit the existing control system, which reduces the total number of required controllers from sixteen to eight. This approach entails significant reengineering efforts and numerous modifications to the current design. The estimated cost for this retrofit, including parts, labor, and engineering, was approximately \$700,000.

Given the high cost of the retrofit and the proven reliability of the existing design, staff concluded that GE Vernova’s proposal is not economically feasible.

The best overall approach for this project is to replace the sixteen obsolete controllers with newer, fully supported models utilizing in-house labor. This project provides an excellent opportunity to leverage RPU staff expertise while significantly reducing total costs.

GE Vernova provided a separate proposal in the amount of \$380,186 for eighteen new controllers, including two spares. After negotiations, the final cost was reduced to \$335,465.14.

This option allows the City to replace all required controllers at a lower cost, as detailed in the table below.

Table 1 – Cost Comparison:

	GE Retrofit	New Controllers and RPU Labor
Approach	Reconfigure existing control system design	Purchase all 16 controllers including 2 spares
Number of Controllers	8	18
Proposals	\$700,000	\$380,186
Final Cost	\$700,000	\$335,465.14*

*Target budget = \$250,000. Final cost includes spares, software licensing, and unanticipated price increases.

Per Purchasing Resolution No. 24101, Section 602 states, “Competitive procurement through the Informal Procurement or Formal procurement process shall not be required... (c) When the procurement can only be obtained timely from a sole source and the Manager is satisfied that the best price, terms and conditions for the Procurement thereof have been negotiated.” In this case, GE Vernova is the OEM for the gas turbines at RERC and the procurement can only be obtained from a sole source and complies with all the requirements under this section.

The Purchasing Manager concurs that the recommended action complies with Purchasing Resolution No. 24101.

FISCAL IMPACT:

The total fiscal impact is \$335,465.14. Sufficient funds are available in Public Utilities RERC Maintenance Generating Plants Account No. 6120130-424131.

Prepared by:	Scott Lesch, Utilities Assistant General Manager/Power Resources
Approved by:	David A. Garcia, Utilities General Manager
Certified as to availability of funds:	Julie Nemes, Interim Finance Director
Approved by:	Gilbert Hernandez, Interim Assistant City Manager
Approved as to form:	Rebecca McKee-Reimbold, Interim City Attorney

- Attachments:
1. Quote
 2. Presentation