GAS TURBINE CONTROL SYSTEM COMPONENTS FOR ALL FOUR UNITS AT RIVERSIDE ENERGY RESOURCE

Riverside Public Utilities

Board of Public Utilities
April 27, 2026

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BACKGROUND

Riverside Energy Resource Center (RERC)

1. 196 MW - Four General Electric (GE) LM6000 gas turbine engines
2. Units 1 & 2 Commissioned in 2006
3. Units 3 & 4 Commissioned in 2011
4. Provide up to 30% of Riverside's daily electric power demands during summer months
5. Availability is critical to ensuring RPU can meet minimum electricity demand and reliability needs

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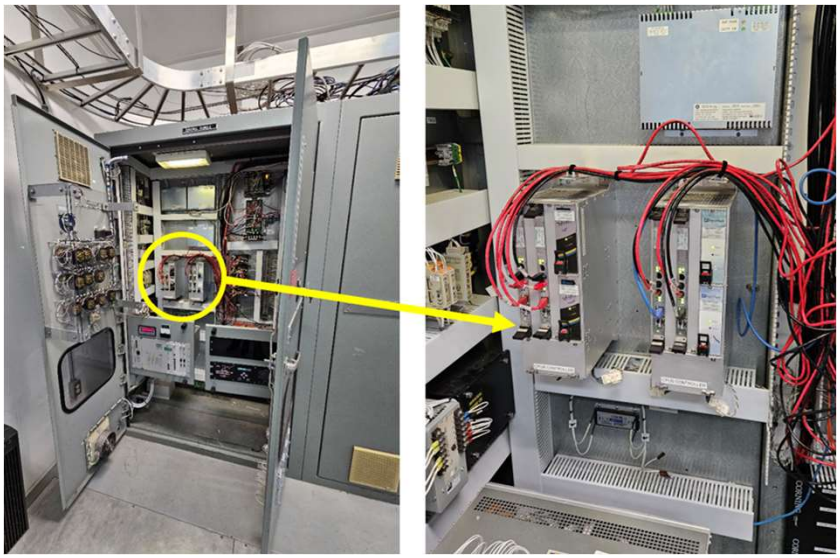
BACKGROUND

1. Gas Turbine Control System Components
   a. Four (4) controllers per turbine – sixteen (16) total
   b. Continuously monitors turbine conditions
   c. Processes information from various sensors
   d. Displays real-time data to operators
   e. Automatically responds to changing conditions
2. Existing Controllers
   a. In service since commissioning
   b. Obsolete since 2014
   c. Spare parts are no longer available
   d. Software operating systems are outdated
   e. Repairs and maintenance are becoming more difficult

BACKGROUND – RERC UNIT 1

BACKGROUND – OBSOLETE CONTROLLERS



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DISCUSSION

1. Replacement of these obsolete controllers is necessary to ensure continued operations
2. GE Vernova Operations, LLC.
   a. Original equipment manufacturer for the gas turbines
   b. Sole authorized provider of the controller hardware, licensing, and proprietary software
   c. Significantly reduce the risk of incompatibility issues with existing control system

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DISCUSSION – PROJECT OPTIONS

1. Retrofit of Existing Control System
   a. From 16 to 8 controllers
   b. Significant reengineering efforts
   c. Numerous modifications to existing design
   d. $700,000
2. New Controllers
   a. Replace the 16 obsolete controllers with newer fully supported models
   b. In-house labor leveraging RPU staff expertise
   c. $380,186 negotiated down to a final cost of **$335,465.14**
   d. Pricing for 18 controllers – 2 spares

DISCUSSION – SOLE SOURCE JUSTIFICATION

According to 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 is in compliance with Purchasing Resolution No. 24101

RECOMMENDATIONS

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.