



RIVERSIDE PUBLIC UTILITIES

Board Memorandum

BOARD OF PUBLIC UTILITIES

DATE: JULY 11, 2022

SUBJECT: AGREEMENT WITH CORMETECH, INC. OF DURHAM, NORTH CAROLINA TO PERFORM SELECTIVE CATALYTIC REDUCTION MAINTENANCE ON RIVERSIDE ENERGY RESOURCE CENTER UNITS 3 AND 4 FOR \$288,900

ISSUE:

Consider approval of an agreement with Cormetech, Inc. of Durham, North Carolina to perform selective catalytic reduction maintenance on Riverside Energy Resource Center Units 3 and 4 for \$288,900.

RECOMMENDATIONS:

That the Board of Public Utilities:

1. Approve an agreement with Cormetech, Inc. of Durham, North Carolina to perform selective catalytic reduction maintenance on Riverside Energy Resource Center Units 3 and 4 for \$288,900; and
2. Authorize the City Manager, or designee, to execute the agreement with Cormetech, Inc. including making minor and non-substantive changes.

BACKGROUND:

Riverside Energy Resource Center Units 3 and 4 (RERC 3&4) began operations in April 2011 and generate 96 megawatts of electricity to support Riverside's energy needs. Both units operate in compliance with the Environmental Protection Agency (EPA) and South Coast Air Quality Management District (SCAQMD) regulations.

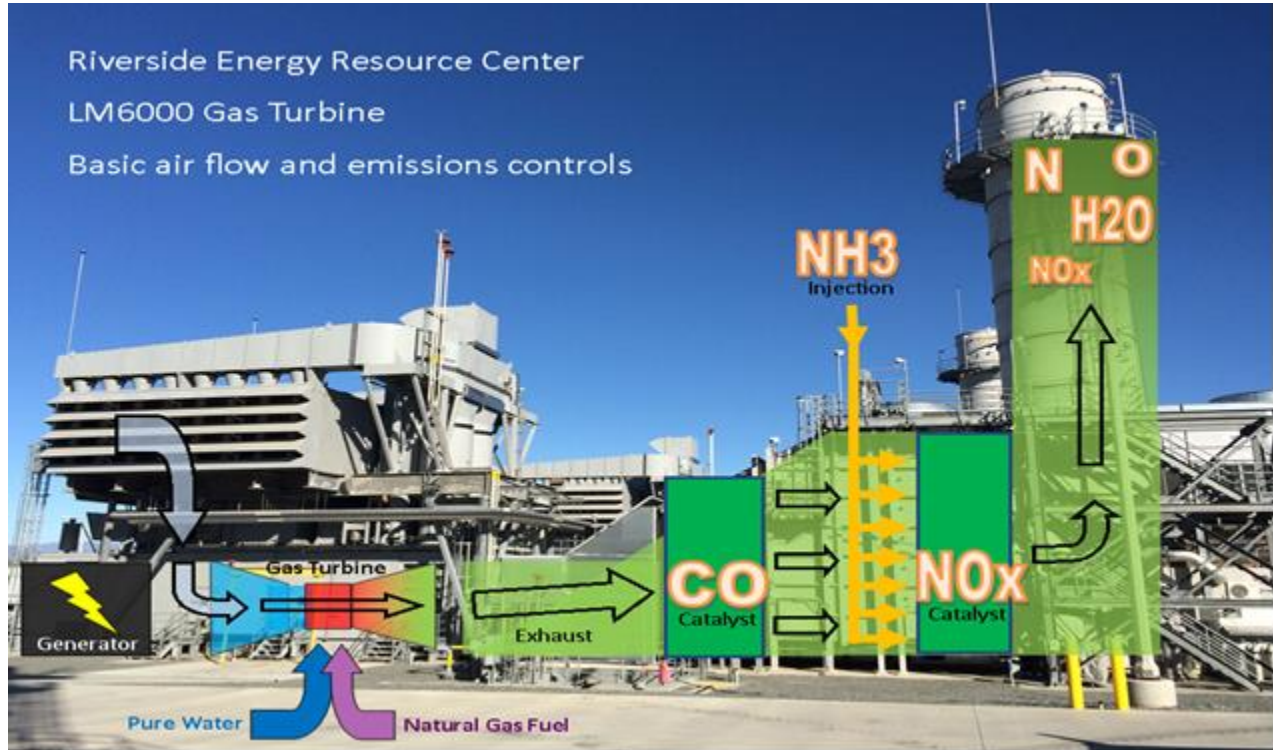
Stringent air emissions limits for Nitrogen Oxide (NOx) concentration levels are part of the required operating permit for RERC 3&4. Each unit must maintain an hourly concentration average of 2.3 parts per million or less. This is achieved by the incorporation of Selective Catalytic Reduction (SCR) modules in the exhaust systems for each of the units. The SCR modules used at RERC 3&4 are the best available control technology and reduce 90% of NOx emissions.

During a recent inspection on RERC 3&4, staff identified deficiencies with the sealing integrity on the SCR modules. Through normal use, elements within the module make-up have shifted, resulting in leakage of untreated emissions through the SCR. Staff detected this condition at an early stage and recommend performing standard maintenance. The air emissions leakage and

element damage will continue to worsen with normal operations eventually resulting in higher costs.

Performing the required SCR maintenance is vital for environmental compliance and to maintain plant operations.

The following illustration outlines the flow of emissions on a gas turbine engine at RERC.



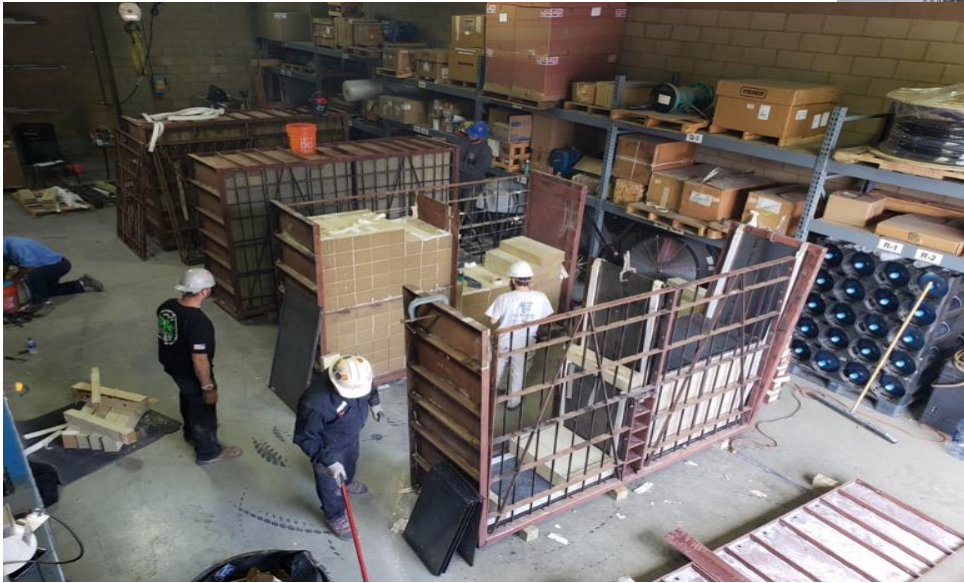
DISCUSSION:

This is a single source procurement due to the specialized services needed. Cormetech, Inc. (Cormetech) is the only vendor that readily meets Riverside's requirements for SCR maintenance on RERC 3&4. Proven alternatives are unavailable and reverse engineering Cormetech's proprietary SCR design poses significant risks to the catalyst performance and would jeopardize environmental compliance. The negotiated price for the SCR maintenance on RERC 3&4 is reasonable compared to Riverside's historical costs and when compared to other power plants.

Cormetech is the original equipment manufacturer (OEM) for the SCRs installed on RERC 3&4. They maintain the proprietary engineering knowledge for the SCR design and construction. Replacement elements and specialized sealing materials can also only be purchased through Cormetech.

The maintenance requires the removal, disassembly, and rebuilding of eight SCR modules from each unit. Proper execution of these procedures requires factory trained technicians who possess the experience with Cormetech's design. The standard price for this maintenance is \$220,000 per unit. Staff negotiated with Cormetech to reach a final proposal price of \$288,900 for RERC 3&4. This negotiated price saves an estimated amount of \$150,000 compared to Cormetech's average price for this type of maintenance.

In 2019, staff completed the same maintenance on RERC 1&2 and achieved satisfactory results. The photos illustrate the identical maintenance required on RERC 3&4. The eight (8) modules in each generation unit are removed by crane and moved to suitable working area. The maintenance work is then performed by the trained technicians before being returned to the units.



This is a single source procurement. Purchasing Resolution No. 23812, Section 602(d) provides an exception to formal and informal procurement when the procurement can only be obtained timely from a single source and the [Purchasing] Manager is satisfied that the best price, terms, and conditions for the procurement have been negotiated. In this case, the procurement can only be obtained from a single source, for the reasons noted above, and complies with all the requirements under this section.

The Purchasing Manager concurs that the recommended actions are in compliance with Purchasing Resolution No. 23812.

STRATEGIC PLAN ALIGNMENT:

This item contributes to the following strategic priorities and goals from the Envision Riverside 2025 Strategic Plan:

Strategic Priority 4 - Environmental Stewardship

Goal 4.2 Sustainably manage local water resources to maximize reliability and advance water reuse to ensure safe, reliable, and affordable water to our community.

Goal 4.3. Implement local and support regional proactive policies and inclusive decision-making processes to deliver environmental justice and ensure that all residents breathe healthy and clean air with the goal of having zero days of unhealthy air quality per the South Coast Air Quality District's Air Quality Index (AQI).

Strategic Priority 5 - High Performing Government

Goal 5.4. Achieve and maintain financial health by addressing gaps between revenues and expenditures and aligning resources with strategic priorities to yield the greatest impact.

Strategic Priority 6 - Infrastructure, Mobility & Connectivity

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.

The item aligns with each of the five cross-cutting threads as follows:

1. **Community Trust** – Ensuring that Riverside's power plants comply with all environmental regulations and provide electricity to the entire City demonstrates a commitment to environmental stewardship and serves the greater public good.
2. **Equity** – This item ensures that RPU's power plants can safely and effectively operate and provide reliable electricity benefitting the entire City and all customers.
3. **Fiscal Responsibility** – Riverside negotiated price saves an estimated amount of \$150,000 compared to Cormetech's average price for this type of maintenance. The standard price for this maintenance is \$220,000 per unit. The final proposal for the two units, RERC 3&4, is \$288,900.
4. **Innovation** – The SCR on RERC 3&4 is recognized by the SCAQMD as the best available control technology for NOx emissions reduction.
5. **Sustainability & Resiliency** – RERC 3&4 operate during the most critical need for electricity. Having a well-maintained SCR is essential to environmental stewardship and sustaining a highly reliable power plant.

FISCAL IMPACT:

The total fiscal impact is \$288,900. Sufficient funds are available in the RERC Maintenance Generating Plants Account No. 6120130-424131.

Prepared by:	Daniel E. Garcia, Utilities Deputy General Manager/Power Resources
Approved by:	Todd M. Corbin, Utilities General Manager
Approved by:	Kris Martinez, Assistant City Manager
Approved as to form:	Phaedra A. Norton, City Attorney

Certifies availability of funds:	Edward Enriquez, Interim Assistant City Manager/Chief Financial Officer/City Treasurer
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Attachments:

1. SCR Maintenance Agreement for RERC Units 3&4
2. Single Source Justification
3. Presentation