



RIVERSIDE PUBLIC UTILITIES

Board Memorandum

BOARD OF PUBLIC UTILITIES

DATE: DECEMBER 13, 2021

SUBJECT: REQUEST FOR PROPOSAL NO. 2051 – PROFESSIONAL CONSULTANT SERVICES AGREEMENT WITH C.E. MECHANICAL INC. OF CHINO, CALIFORNIA FOR AIR COMPRESSOR MAINTENANCE AT RIVERSIDE ENERGY RESOURCE CENTER, UNITS 1 AND 2, FOR A TERM THROUGH DECEMBER 31, 2029 THE AMOUNT OF \$482,640

ISSUE:

Consider approval of the Professional Consultant Services Agreement from Request for Proposal No. 2051, with C.E. Mechanical Inc. of Chino, California for air compressor maintenance at Riverside Energy Resource Center, Units 1 and 2, for a term through December 31, 2029 in the amount of \$482,640.

RECOMMENDATIONS:

That the Board of Public Utilities:

1. Approve the Professional Consultant Services Agreement with C.E. Mechanical Inc. of Chino, California for air compressor maintenance at Riverside Energy Resource Center, Units 1 and 2, for a term through December 31, 2029 in the amount of \$482,640;
2. Authorize the City Manager, or his designee, to execute the agreement with C.E. Mechanical Inc., including making any minor non-substantive changes; and
3. Authorize the City Manager or his designee, to terminate the agreement during the last three years of the agreement if such services are no longer needed.

BACKGROUND:

Riverside Energy Resource Center Units 1 and 2 (RERC 1&2) were commissioned in June 2006. Collectively, both units produce 96 megawatts of electricity and serve a critical role in meeting daily customer demands for electricity.

RERC 1&2, like all power plants, utilize a wide array of equipment and technologies that must work together to generate electricity. Normal gas turbine operations at RERC 1&2 utilize air compressors to provide a constant supply of clean and pressurized air to operate numerous plant equipment, even when the power plant is not generating electricity. Using pneumatically operated

Figure 1: Three Air Compressors for RERC 1&2



equipment is typical for all power plants and is an essential part of the process of generating electricity. Because of the constant, 24/7 requirement of pressurized air, three air compressors and two dryers are installed on RERC 1&2. This provides the redundancy needed to perform maintenance on equipment without interrupting the supply of pressurized air.

Each of the three air compressors have been in operation since 2006 and operated over 45,000 hours with traditional standard and preventative maintenance. Previously, staff conducted preventive maintenance by obtaining competitive pricing for each recommended maintenance interval. This approach supported equipment reliability while keeping maintenance cost low.

Based on the duty cycle and operation trend of the air compressors, staff anticipates an increase of recommended maintenance that could include overhaul or costly component replacements. To offset some of the anticipated increase in maintenance cost, staff decided to implement a more organized and predictive approach for air compressor maintenance and leverage pricing with a five-year term.

Air compressors are highly specialized equipment and obtaining proposals from vendors who have the specific expertise is extremely difficult. Historically, attempts to obtain competitive pricing through the Request for Proposal (RFP) process have typically resulted in a single proposal from the Original Equipment Manufacturer (OEM). This issue is not limited to the air compressors at RERC 1&2 but extends to all the different brands of air compressors used

throughout Riverside’s generating facilities. Due to the lack of competitive options and the potential variability of proposed air compressor maintenance programs, staff did not prepare an engineer’s estimate for this project.

DISCUSSION:

RFP 2039 was posted from August 13 to September 8, 2020. Two proposals were received, and both were deemed non-responsive. One proposal did not meet the industrial air compressor experience requirement. The second proposal did not meet the prerequisites specified in the RFP and was not registered with Department of Industrial Relations. Being highly specialized equipment, this is not an uncommon result when obtaining competitive pricing for air compressor maintenance.

A second attempt was made to obtain proposals and RFP 2051 was posted from October 20 to November 18, 2020. Staff received two proposals that were deemed responsive.

Table 1. RFP 2051 Notification Summary

Action	Number of Vendors
Vendors Notified	49
Vendors Who Downloaded the RFP	21
Proposals Received	2

Table 2. Proposals Received

Vendors	Location	Bid Amount	Rank
C.E. Mechanical Inc.	Chino, CA	\$151,654	1
California Air Compressor	Compton, CA	\$143,253	2

Originally, staff selected and started direct negotiations with California Air Compressor. Unfortunately, negotiation efforts ended due to the inability to reach mutual agreement with Riverside’s professional consultant services standard terms and conditions.

C.E. Mechanical’s proposal was considered a viable back-up option for air compressor maintenance. The company was awarded a separate RFP in August 2020 to perform maintenance on the different air compressors at RERC 3&4 and the Springs Power Plant. They are performing well under that agreement and demonstrated the maintenance experience for the specific brand of air compressors installed on RERC 1&2. After successful negotiations under RFP 2051, staff recommends the proposal from C.E. Mechanical.

During this stage of the lifecycle on RERC 1&2 air compressors, staff expects additional maintenance will be uncovered when performing preventive maintenance inspections. Staff recommends a budget of \$30,000 per year for as-needed maintenance services that are not covered in the preventive maintenance program. Addressing the as-needed maintenance at the earliest stage is the most cost-effective approach that ensures plant reliability. All additional maintenance recommendations will be reviewed, and the urgent repairs will be authorized by staff. Only the approved maintenance expenditures will be encumbered, and unused amounts will remain in the generation budget.

The preventative maintenance program and as-needed maintenance fiscal breakdown is as follows:

Table 3: Fiscal Breakdown

	Annual Cost Years 2022 - 2029	Total Cost
Preventive Maintenance	\$30,330	\$242,640
As-Needed Repairs	\$30,000	\$240,000
Total	\$60,330	\$482,640

The Purchasing Manager concurs that the recommended actions are in compliance with Purchasing Resolution No. 23256.

STRATEGIC PLAN ALIGNMENT:

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

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

1. Community Trust – Ensuring that RERC Units 1&2 can safely and effectively provide electricity, benefits the entire City and its communities and results in greater public good. In total, both units produce 96 megawatts of electricity that is critical to meeting customer demands during summer peak periods.
2. Equity – This item ensures that RERC Units 1&2 can safely and effectively operate and provide reliable electricity to the City and all utility customers.
3. Fiscal Responsibility – The agreement with C.E. Mechanical saves \$10,000 over the five-year term compared to historical expenditures for preventive maintenance. In addition, staff was able to negotiate favorable fixed costs for the five-year term and the three optional one-year extensions.
4. Innovation – A five-year preventive maintenance program for critical equipment at the current age and duty cycle is a best practice in the industry. It allows staff to keep maintenance cost low by addressing repairs at an earlier stage while providing the information needed to plan and budget for major maintenance work.
5. Sustainability & Resiliency – RERC Units 1&2 operate during the most critical times when the demand for electricity is high. Having an air compressor maintenance program for the next five years is essential to sustaining a highly reliable power plant.

FISCAL IMPACT:

The total fiscal impact of the Agreement with C.E. Mechanical is \$482,640. This fiscal impact for

Fiscal Year 2021/2022 is \$60,330. Sufficient funds are available in the Public Utilities Maintenance-Generating Plants Account No. 6120130-424131. Future funding will be included as a part of the biennial budget process for the respective budget years.

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

Certifies availability
of funds: Edward Enriquez, Chief Financial Officer/City Treasurer

Attachments:

1. Professional Consultant Services Agreement with C.E. Mechanical Inc.
2. City of Riverside, Purchasing Division Bid Award Recommendation
3. Presentation