



RIVERSIDE PUBLIC UTILITIES

Board Memorandum

BOARD OF PUBLIC UTILITIES

DATE: August 26, 2019

ITEM NO: 15

SUBJECT: PURCHASE ORDER WITH TRANE U.S. INC. FOR EMERGENCY REPAIRS ON AIR INLET CHILLER AT RIVERSIDE ENERGY RESOURCE CENTER UNITS 1 AND 2 IN THE AMOUNT OF \$322,538

ISSUE:

Approve the issuance of a purchase order with Trane U.S. Inc. of Brea, California, in the amount of \$322,538 for the emergency repairs on the air inlet chiller at Riverside Energy Resource Center Units 1 and 2.

RECOMMENDATION:

That the Board of Public Utilities approve the issuance of a purchase order with Trane U.S. Inc., of Brea, California, in the amount of \$322,538 for the emergency repairs on the air inlet chiller at Riverside energy Resource Center Units 1 and 2.

BACKGROUND:

Riverside Public Utilities (RPU) commissioned Riverside Energy Resource Center Units 1 and 2 (RERC 1 and 2) in June 2006. These fast-start gas turbine energy generation units generate 96 megawatts of electricity, collectively, are strategically located in the city limits and achieve maximum power output in less than 10 minutes. RERC 1 and 2 are very reliable units that serve a critical role in meeting customer demands during peak periods.

RERC 1 and 2 rely on a 3,500-ton chiller system to achieve maximum power production. The chiller cools the ambient air entering each gas turbine to 47 degrees Fahrenheit (°F). During summer peak months, the colder air represents at least 20 percent of the overall electrical output generated from each turbine.

On May 02, 2019, Riverside staff encountered a compressor motor failure on the air inlet chiller for RERC 1 and 2. The loss of the chiller would significantly reduce RERC 1 and 2's production during this upcoming summer, when ambient temperatures are expected to be higher than 95°F.

In order to maintain reliable plant operations, staff sought approval for emergency work under Riverside City Charter, Article XII, Section 1202(b), which provides that "[A] purchase, or acquisition, construction, extension, enlargement, diminution or curtailment may be made without prior approval... (2) if there is an urgent necessity to preserve life, health or property (i) as determined by the Director of Public Utilities or (ii) if the amount exceeds \$100,000 by the Director of Public Utilities and the City Manager. As soon as practicable thereafter, the Director of Public Utilities shall take the matter under Section 1202(b)(2) to the Board of Public Utilities for ratification."



RERC Units 1 & 2

Air Inlet Chiller Assembly



Damaged Impeller

RERC 1 and 2 play a crucial role in meeting the City's daily capacity and electricity demands. More importantly, they also provide peaking and emergency power to the City. Deferring the maintenance repair period on these units could have a substantial impact on the City's ability to provide emergency power. The City currently has one (1) interconnection to the State grid to import electricity into the City; this interconnection is the Vista Substation, owned and operated by Southern California Edison (SCE). If that connection were to be disrupted, RERC 1 and 2 would be one of the City's key sources of power.

Such disruption occurred in 2007, when the Vista Substation was damaged and the entire City went into a blackout. RERC 1 and 2 were immediately activated and provided emergency power to the City until SCE could repair the interconnection. If RERC 1 and 2 had been in an extended maintenance outage period, the City would have limited access to emergency power should the interconnection at Vista Substation again be disrupted.

DISCUSSION:

On May 3, 2019, the City Manager and the RPU General Manager (referred to in the Charter as "Director") approved the emergency inlet chiller repairs in order to preserve, life, health and property from damage caused by an electricity shortage. Staff contacted Trane U.S. Inc. (Trane) for a proposal and issued a purchase order for \$250,000 to conduct a maintenance assessment and perform compressor motor repairs on the air inlet chiller at RERC 1 and 2.

During the disassembly and inspection, Trane identified additional repairs. The impeller, a major component on the inlet chiller compressor assembly, was damaged and required replacement. Trane submitted a proposal for the additional impeller work and a change order increasing the purchase order amount to \$320,922 was issued on May 16, 2019. Major components, like the impeller, are not readily available and need to be manufactured. Staff opted for Trane to perform vibration analysis and verify proper operation after repairs. Trane submitted a proposal for vibration analysis and a second change order increasing the total amount to \$322,538 was issued on June 19, 2019. Trane completed repairs and vibration analysis on June 25, 2019.

Trane has an existing contract under the U.S. Communities Cooperative Agreement RFP No. 15-JLP-023 (U.S. Communities). Trane was able to provide pricing in accordance with U.S. Communities in the amount of \$322,538. U.S. Communities is a national cooperative purchasing program, providing government procurement resources and solutions to local and state government agencies, school districts, higher education institutions and nonprofits looking for the best overall pricing. Under this program, the City is able to access pricing obtained by other public agencies through a competitive procurement process.

Purchasing Resolution 23256, Section 702(e) provides that competitive procurement through the informal and formal procurement process shall not be required when cooperative purchasing is available and undertaken or when services can be obtained through federal, state and/or other public entity pricing contracts or price agreements. In this case, the Purchasing Department has verified that the quote provided by Trane is under the U.S. Communities agreement.

The Purchasing Manager concurs that the recommended actions comply with Purchasing Resolution No. 23256.

FISCAL IMPACT:

The total fiscal impact is \$322,538. Sufficient funds are available in the RERC Maintenance-Generating Plants Account No. 6120130-424131.

Approved by: Todd M. Corbin, Utilities General Manager
Approved by: Al Zelinka, FAICP, City Manager
Approved as to form: Gary G. Geuss, City Attorney

Certifies availability
of funds: Brian Seinturier, Utilities Fiscal Manager

Attachments:

1. US Communities Cooperative Agreement with Trane U.S. Inc
2. Trane U. S. Inc. Proposal