

# RIVERSIDE PUBLIC UTILITIES

## Board Memorandum

**BOARD OF PUBLIC UTILITIES**

**DATE: APRIL 12, 2021**

**SUBJECT: PURCHASE OF 30 LM6000 FUEL NOZZLES FROM SCORE ENERGY, LLC. OF HOUSTON, TEXAS IN THE AMOUNT OF \$52,029**

**ISSUE:**

Consider approval of the expenditure for purchase of 30 LM6000 fuel nozzles from Score Energy, LLC. of Houston, Texas in the amount of \$52,029.

**RECOMMENDATION:**

That the Board of Public Utilities approve the expenditure for the purchase of 30 LM6000 fuel nozzles from Score Energy, LLC. of Houston, Texas, in the amount of \$52,029.

**BACKGROUND:**

The Riverside Energy Resource Center (RERC) is comprised of four fast start gas turbine generators that were manufactured by GE Packaged Power, LLC (GE). The facility produces a maximum output of 195 megawatts of electricity in less than 10 minutes and serves a critical role in meeting customer energy demands.

Each gas turbine unit utilizes 30 gaseous fuel nozzles that are vital to generating electricity and maintaining compliance with air emissions. Each nozzle is manufactured to deliver a very fine atomized mist that creates a precise flame pattern. Improper flame patterns create an imbalance of heat that can cause an exceedance of our air emission limits and costly damage to engine components.

Fuel nozzles are exposed to temperatures as high as 1,500 degrees Fahrenheit and their performance is closely monitored during each turbine operation. Fuel nozzles are subject to normal wear and periodic replacement is sound maintenance practice that ensures the safe and reliable operations.

A total of 120 fuel nozzles are in use throughout the four units at RERC. Staff keeps an inventory of 30 spare fuel nozzles to support their maintenance with the capability of replacing a full set on one unit if needed. During a recent maintenance activity, staff replaced a full set of fuel nozzles and the overhauled fuel nozzles will support future maintenance requirements on the gas turbine engines at RERC.

## **DISCUSSION:**

Staff inspected the condition of the old fuel nozzles that were removed from operation and opted to overhaul them instead of replacing them with new ones. A new fuel nozzle costs \$7,500, which would be a total of \$225,000 for a set of 30. The existing fuel nozzles have normal wear and they can be overhauled to meet factory specifications at a much lower cost.

The Purchasing Resolution No. 23256 offers the option to conduct informal proposals under Section 404 titled Utilities Exception. Under this section, it is recognized that the water, electric and sewer utilities have a need for compatibility within their respective systems for uniform operation, maintenance, and replacement. As such, this need can be met by procuring certain supplies, equipment, and materials supplies through Informal Procurement or Negotiated Procurement.

Fuel nozzles can only be obtained from the original equipment manufacturer or an authorized repair facility. Because they are highly specialized parts necessary for compatibility at the RERC generation units, this expenditure met the requirements for an informal procurement process under the Purchasing Resolution. Staff conducted the informal procurement by contacting and requesting bids from three credible companies and received three quotations for the repair of fuel nozzles.

### *Summary of Quotes (sorted lowest to highest):*

<b>Company</b>	<b>Location</b>	<b>Quotation</b>
Score Energy LLC	Houston, TX	\$52,028.75
OEM Parts Network	Rancho Cucamonga, CA	\$63,900.00
AP+M	Boynton Beach, FL	\$73,125.00

Staff recommends the lowest bidder, Score Energy LLC.

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

## **FISCAL IMPACT:**

The total fiscal impact for the fuel nozzle purchase is \$52,028.75. 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: Al Zelinka, FAICP, City Manager  
Approved as to form: Kristi Smith, Interim City Attorney

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

### Attachments:

1. Score Energy proposal
2. Presentation