

# RIVERSIDE PUBLIC UTILITIES

## Board Memorandum

**BOARD OF PUBLIC UTILITIES**

**DATE:** JUNE 11, 2018

**ITEM NO:** 11

**SUBJECT:** AWARD REQUEST FOR PROPOSAL NO. 1797 FOR DESIGN-BUILD AGREEMENT FOR THE ARC FLASH MITIGATION PROJECT AT THE POWER GENERATION FACILITIES WITH SIEMENS INDUSTRY, INC., OF CYPRESS, CALIFORNIA, FOR \$388,239 – APPROVE WORK ORDER NO. 1826061 FOR \$497,000

**ISSUES:**

Award Request for Proposal No. 1797 the Design-Build Agreement for the Arc Flash Mitigation Project at Riverside's power plants – Riverside Energy Resource Center, Springs Generation Plant, and Clearwater Cogeneration Power Plant – with Siemens Industry, Inc., of Cypress, California for \$388,239 and approve Work Order No. 1826061 for \$497,000.

**RECOMMENDATIONS:**

That the Board of Public Utilities:

1. Award Request for Proposal No. 1797 for Design-Build Agreement in the amount of \$388,239 with Siemens Industry, Inc. for the Arc Flash Mitigation Project;
2. Authorize the City Manager, or his designee, to execute the Design-Build Agreement with Siemens Industry, Inc.; and
3. Approve Work Order No. 1826061 for \$497,000.

**BACKGROUND:**

Arc flash is the rapid release of heat energy due to an electrical fault. These faults are most prevalent when energizing or de-energizing high-voltage equipment, which can result in a blast of energy, excessive heat and fire.

Federal Occupational Safety and Health Administration regulations address the protection of employees against arc flash hazards. Employers are required to assess the workplace for potential flame and electric-arc conditions, identify attainable heat energy exposure from electrical arcs, and ensure employees wear the required personal protective equipment.

In June 2015, the Board of Public Utilities granted approval to Power Engineers to conduct the arc flash energy analysis on over 500 electrical circuit breakers throughout Riverside's three power generation facilities: Riverside Energy Resource Center (RERC), Springs Generation Plant (Springs), and Clearwater Cogeneration Power Plant (Clearwater). The findings resulted in 53 circuit breakers that did not meet Riverside's safety standards for arc flash hazards.

Staff prioritized the findings and addressed issues on 41 circuit breakers. The 12 remaining circuit breakers require equipment redesign, upgrades, and additional protective relay devices.



**RERC 1 & 2**



**RERC 3 & 4**



**Clearwater**



**Springs**

## **DISCUSSION:**

Staff posted Request for Proposal (RFP) No. 1797 for the Arc Flash Mitigation Project on February 15, 2018, and closed on March 16, 2018. Two proposals were submitted and staff selected Siemens Industry, Inc. as the most responsive. The proposals are summarized in the table below:

<b>Vendors:</b>	<b>Location</b>	<b>Bid Amount</b>	<b>Rank</b>
1. Siemens Industry, Inc.	Cypress, CA	\$388,239	1
2. MASTEK	Commerce, CA	\$728,260	2

The project breakdown is proposed as follows:

<b>Project Breakdown</b>	
Engineering Performed By:	Siemens Industry, Inc.
Construction Work Performed By:	Siemens Industry, Inc.
Anticipated Start Date:	August 1, 2018
Anticipated Duration:	16 Months
Coordination Required With:	RPU and California Independent System Operator

The breakdown of the total capital expenditure is as follows:

<b>DESCRIPTION</b>	<b>AMOUNT</b>
Siemens Industry, Inc.	\$388,239
RPU Engineering	\$50,000
RPU Field Inspection	\$19,937
10% Siemens Agreement Contingency	\$38,824
<b>Work Order Total</b>	<b>\$497,000</b>

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

### **FISCAL IMPACT:**

The total fiscal impact is \$497,000. Sufficient funds are available in Public Utilities Capital Account No. 613000-470616.

Prepared by: Daniel E. Garcia, Utilities Assistant General Manager/Power Resources  
 Approved by: Todd L. Jorgenson, Interim Utilities General Manager  
 Approved by: Marianna Marysheva, Assistant City Manager  
 Approved as to form: Gary G. Geuss, City Attorney

Certifies availability of funds: Laura M. Nomura, Utilities Assistant General Manager/Finance & Administration

### **Attachments:**

1. Design-Build Agreement Siemens Industry Inc.
2. RFP Award Recommendation
3. Presentation