



Agenda Report

19-225

Agenda Date: 6/25/2019

REPORT TO COUNCIL

SUBJECT

Action on an Agreement with Emerson Process Management Power & Water Solutions, Inc. for the Donald Von Raesfeld Power Plant Control System Upgrade Project

BACKGROUND

The City of Santa Clara's Electric Utility, Silicon Valley Power (SVP) operates three power generation facilities within the city limits: the Donald Von Raesfeld Power Plant (DVR), the City of Santa Clara Cogen, and the Gianera Generating Station. The DVR facility is the main plant and is a 2x1 combined cycle power plant rated at 147 Megawatts of electrical power. The control systems at the DVR Power Plant are at end of life and require replacement. These control systems are original equipment installed in 2005, during plant construction.

DISCUSSION

On February 19, 2019, staff issued a Request for Proposal (RFP) to solicit proposals from qualified firms to replace the existing control systems at the Donald Von Raesfeld Power Plant. The RFP was published on BidSync, the City's e-procurement system. A total of 97 companies viewed the RFP, and nine companies subsequently participated in the mandatory pre-proposal conference and site visit held on March 4, 2019.

The RFP closed on March 18, 2019. The City received three proposals from ABB Inc. (Cleveland, OH), Emerson Process Management Power & Water Solutions, Inc. (Pittsburg, PA) and Rockwell Automation (Mayfield Heights, OH).

Evaluation Process: Proposals were evaluated and scored independently by a three-member evaluation team against the criteria and weights published in the RFP. Emerson and Rockwell Automation were invited to oral presentations to demonstrate their knowledge and understanding of the City's requirements, provide a comprehensive demonstration of their solution, and provide detailed information on their project delivery approach to ensure that the City's requirements are met. Following oral presentations, staff conducted a Best and Final Offer (BAFO) to obtain final pricing.

Evaluation scores for the two finalists are summarized below:

Criteria	Maximum Points	Emerson	Rockwell Automation
Experience	20	19	16
Technical Capability	35	31	25
Safety Record	10	8	8
Specification Compliance	10	7	6
Cost	25	23	25
Total	100	88	80

Award Recommendation: Staff recommends award of contract to Emerson Process Management Power & Water Solutions, Inc as the most advantageous and best value proposal per the evaluation criteria set forth in the RFP. Their proposal met or exceeded all of the RFP specifications, and their solution was rated superior in the following key areas:

- **Reliability.** Emerson has 92% market share in power plant control system replacement projects which equates to high availability of trained professionals and spare parts. Emerson's solution is also the only solution that met the specification of having 100% redundancy in all controllers and associated hardware. The DVR Power Plant requires specific technical capabilities for proper and appropriate control of the GE LM6000. Emerson's ability to meet the foregoing technical requirements enables SVP to meet its commitment to providing high reliability with the City's Generation Assets.
- **Risk.** Emerson's solution is proven and poses the least amount of risk to the City with multiple successful control systems installation projects similar to the City's requirements.
- **Value.** Emerson's solution allows the DVR Power Plant to be controlled from a single platform reducing the need for vendor support, spare parts, training, and contracts from multiple parties.

Staff conducted reference checks with San Diego Gas & Electric (Escondido, CA) and Hoosier Energy (Switz City, IN). Both references were positive.

Notice of Intended Award: A Notice of Intended Award (NOIA) announcing the City's recommended vendor was issued on April 17, 2019. The RFP process included a ten day protest period which commenced with the issue of the NOIA and ended on April 27, 2019. No protests were received.

Term of Agreement: The term of the proposed agreement will be six years covering system installation and five years of support after final system acceptance.

Summary of Agreement: The proposed agreement with Emerson includes provision of all hardware components necessary for the control system to function, including but not limited to controllers, cabinets, communication network hardware, and other related hardware; all software including Emerson's proprietary Ovation software and other third-party software installed as part of the system; and labor for project management, implementation, configuration, commissioning, training, and support.

Cost Summary: The proposed agreement will include a detailed scope of services, a general project plan, a compensation schedule with milestone payments tied to the successful completion of key project deliverables, and a final system acceptance process that triggers final payment and start of warranty and support services. Full system warranty is one year from City's final system acceptance.

Pricing for system implementation and post-warranty support services are fixed for the term of the contract as set forth below.

System Implementation

Hardware	\$682,214
Software	\$476,116
Labor	\$1,300,495
Documentation	\$3,400
Training	\$32,775
Estimated Sales Tax	\$62,000
Subtotal	\$2,557,000

Ongoing Support (after final system acceptance)

Year 1 Support	Included
Year 2 Support	\$34,233
Year 3 Support	\$35,946
Year 4 Support	\$37,743
Year 5 Support	\$39,630
Subtotal	\$147,552

CONTRACT NOT TO EXCEED TOTAL (6-year term)	\$2,704,552
Contingency	\$500,000
TOTAL	\$3,204,552

ENVIRONMENTAL REVIEW

The action being considered does not constitute a "project" within the meaning of the California Environmental Quality Act ("CEQA") pursuant to CEQA Guidelines section 15378(a) as it has no potential for resulting in either a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment. Furthermore, the action being considered does not constitute a "project" within the meaning of the California Environmental Quality Act ("CEQA") pursuant to CEQA Guidelines section 15378(b)(5) in that it is a governmental organizational or administrative activity that will not result in direct or indirect changes in the environment.

FISCAL IMPACT

Total cost of the Donald Von Raesfeld Power Plant Control System Upgrade Project, including contingency and five-year support agreement, shall not exceed \$3,204,552, inclusive of the \$500,000 contingency, over a six year period. Electric Department Capital Improvement Program (CIP) Projects 2425 (DVR Gas Turbine Control System Upgrade) and 2434 (Replace Balance of Plant Control System) were developed and funded in support of this project and have available funds of \$1,291,840 and \$1,600,000 for a total of \$2,891,840 starting FY 2019/20. In the event that the contingency value of \$500,000 must be realized, Electric Department CIP project 2119 (Generation Capital Maintenance and Betterments), an ongoing project for City-owned generation facilities which has budgeted and planned annual appropriations of \$750,000 will be utilized to cover remaining balance.

COORDINATION

This report has been coordinated with the Finance Department and City Attorney's office.

PUBLIC CONTACT

Public contact was made by posting the Council agenda on the City's official-notice bulletin board outside City Hall Council Chambers. A complete agenda packet is available on the City's website and in the City Clerk's Office at least 72 hours prior to a Regular Meeting and 24 hours prior to a Special Meeting. A hard copy of any agenda report may be requested by contacting the City Clerk's Office at (408) 615-2220, email clerk@santaclaraca.gov <<mailto:clerk@santaclaraca.gov>> or at the public information desk at any City of Santa Clara public library.

RECOMMENDATION

1. Authorize the City Manager to negotiate and execute an agreement for the Donald Von Raesfeld Power Plant Control System Upgrade Project with Emerson Process Management Power & Water Solutions, Inc., subject to final review by the City Attorney, for a term starting on or about July 1, 2019 and ending on or about June 30, 2025 for total maximum amount not-to-exceed \$2,704,552; and
2. Authorize the City Manager to execute amendments not-to-exceed \$500,000 for contingencies related to implementation and system requirements, subject to the appropriation of funds.

Reviewed by: Manuel Pineda, Interim Chief Electric Utility Officer

Approved by: Deanna J. Santana, City Manager