



Agenda Report

19-963

Agenda Date: 10/8/2019

REPORT TO COUNCIL

SUBJECT

Action on the Award of Purchase Order to RWG USA, Inc. for Turbine Engine Major Overhaul Services for Silicon Valley Power

BACKGROUND

The City of Santa Clara's Electric Utility, Silicon Valley Power (SVP) operates three gas fired power generation facilities within the city limits. The Donald Von Raesfeld Power Plant (DVR), the main facility, is a 2x1 combined cycle power plant rated at 147 Megawatts of electrical power generation. The Gianera Generating Station, the City's peaking generation facility, is rated at 49.5 Megawatts of electrical power generation. The Cogeneration Plant, rated at 7 Megawatts, utilizes two Allison 501-KB5 gas turbine engines for power generation.

The turbine engines at the Cogeneration Plant require periodic inspections, repairs, and replacement of parts to maintain optimum availability and reliability. Engine number ASP-758 was removed from service in 2009 due to an extension shaft bearing failure. The extension shaft bearing was replaced, and repairs were also made to the turbine section due to impact damage. However, in 2010 another extension shaft bearing failure occurred and all engine mainline bearings were replaced. Repairs were also made to the turbine section to repair impact damage found during disassembly. In 2014, all engine bearings were replaced, and the extension shaft was upgraded to a high torque configuration. A mid-life repair was also completed in 2016.

The engine was recently removed from service due to vibration and further bearing failure issues; the engine shut down on multiple magnetic material detection alarms and the magnetic plug has progressively collected more metallic debris. SVP performed an evaluation with an outside consultant and determined the engine requires a major overhaul.

DISCUSSION

On May 7, 2019, the City published a Request for Proposal (RFP) for turbine engine major overhaul services, using BidSync, the City's e-procurement system. A total of 28 companies viewed the RFP and the City received proposals from two companies by the June 13, 2019 deadline:

- RWG USA, Inc. (Houston, TX)
- Standard Aero Limited-Energy Services (Manitoba, Canada)

The selected Contractor shall be expected to provide all labor, materials and equipment required to perform a major overhaul of SVP's Allison 501-KB5 turbine engine.

Evaluation:

The proposals were evaluated by a three-member team from SVP. Each team member independently evaluated and scored the proposals.

Proposal Responsiveness: Staff determined that all proposals were responsive and met the initial pass/fail review of the stated minimum qualifications.

Project Approach (20% weight): The evaluation team evaluated the proposers' project approach including the major tasks and services to be provided, list of materials to be used, and proposed subcontractors.

Project Schedule (20% weight): A thorough review of each company's proposed project schedule including the timing of each task and deliverable, and the identification of any hold points during the overhaul.

References (10% weight): The proposers were required to submit with their proposal three references for similar engine overhauls performed.

Cost (50% weight): Cost proposals were opened and scored at the end of the technical proposal evaluation.

Best and Final Offer (BAFO): A Best and Final Offer was issued to the proposers in order to make clarifications to the City's requirements, and obtain best and final pricing.

The evaluation results are summarized in the table below.

| Criteria | Maximum Points | RWG (Houston, TX) | Standard Aero (Manitoba, Canada) |
|------------------|-----------------------|--------------------------|---|
| Project Approach | 20 | 13 | 13 |
| Project Schedule | 20 | 13 | 12 |
| References | 10 | 6 | 6 |
| Cost | 50 | 50 | 49 |
| Totals | 100 | 82 | 80 |

Notice of Intended Award:

A Notice of Intended Award (NOIA) announcing the City's recommended contractor was published on August 8, 2019. The RFP process included a ten-day protest period which ended on August 18, 2019. No protests were received.

Turbine Engine Major Overhaul Services - Staff Recommendation:

Staff recommends award of Purchase Order to RWG USA, Inc. The evaluation team unanimously agreed that the proposed solution is the most advantageous and provides the best value to the City. Their solution included the following key attributes:

- Over 45 years of demonstrated experience working on similar engines.
- Lowest cost.
- Capacity to support 50 engine overhauls per year.

References were checked with Aera Energy (California), LAISD Olive View Medical Center (California), and DTE Energy, LLC (Ohio). The references checked positive.

The purchase order not-to-exceed amount is \$844,635, which includes a 20% contingency for additional as-needed labor and materials.

The major cost elements of the overhaul project are summarized below:

| COST ELEMENTS: | |
|-----------------------|------------------|
| Labor | \$ 97,000 |
| Materials | \$479,889 |
| Outside Services | \$106,835 |
| Testing | \$ 16,575 |
| Freight | \$ 8,636 |
| Contingency (20%) | \$135,700 |
| GRAND TOTAL | \$844,635 |

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.

FISCAL IMPACT

Total cost of the turbine engine major overhaul services, including contingency, shall not exceed \$844,635. Funds are available in Electric Department Capital Improvement Program's Major Engine Overhaul and Repair Project.

COORDINATION

This report has been coordinated with the Finance Department and the 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 execute a Purchase Order with RWG USA, Inc., for an amount not to exceed \$844,635; and
2. Authorize the City Manager to execute an option for a major overhaul of the second Alison 501-KB5 gas turbine engine at the Cogeneration Plant, subject to the same terms and the appropriation of funds.

Reviewed by: Manuel Pineda, Chief Electric Utility Officer

Approved by: Deanna J. Santana, City Manager

ATTACHMENTS

1. Purchase Order with RWG USA, Inc.