



## Agenda Report

21-442

Agenda Date: 5/4/2021

### REPORT TO COUNCIL

#### SUBJECT

Action on an Agreement for Services with AECOM Technical Services, Inc. for Renewable Energy Microgrid Feasibility Study and Design Services

#### COUNCIL PILLARS

Promote Sustainability and Environmental Protection  
Deliver and Enhance High Quality Efficient Services and Infrastructure

#### BACKGROUND

Silicon Valley Power (SVP) intends to install renewable energy microgrids at two City fire stations. Renewable energy microgrids are defined as a group of interconnected load(s) and distributed energy resources within clearly defined electrical boundaries that act as a single controllable entity with respect to the grid. A microgrid can connect and disconnect from the grid to enable it to operate in both grid-connected or island mode.

The microgrids will help protect the City's most critical sites from experiencing operational downtime, increase electrical infrastructure resiliency, and reduce diesel generator run-times. Additionally, the daily operations and standby power from the microgrids will reduce criteria pollutants and greenhouse gas (GHG) emissions, in support of the City's Climate Action Plan.

One microgrid each will be located at Fire Station #1 and Fire Station #2. SVP is partnering with the Santa Clara Fire Department to prioritize Fire Station #1, with the potential to co-locate the Fire Station #2 microgrid with additional critical public site(s) to enable a community microgrid concept. The installed microgrids will allow the two fire stations to operate off-grid in an islanded mode using solar photovoltaic and energy storage systems.

Before the microgrids can be constructed and installed, SVP requires a qualified and experienced contractor to perform a feasibility study and design process. The feasibility study and design shall determine the benefits, risks, and costs, as well as the final specifications and placement of the planned microgrids.

#### DISCUSSION

In July 2020, the City issued a Request for Proposals (RFP) for renewable energy microgrid feasibility study and design services, using the City's e-procurement system. A total of 150 companies viewed the RFP and the City received proposals from seven companies:

- AECOM Technical Services, Inc. (San Jose, CA)
- Black & Veatch Corporation (Overland Park, KS)
- breitGrid (Wilmington, NC)

- Integral Group, LLC (Oakland, CA)
- Optony, Inc. (Santa Clara, CA)
- P2s, Inc. (Long Beach, CA)
- Willdan Energy Solutions (San Francisco, CA)

The written proposals were evaluated and scored by a three-member evaluation team consisting of staff from SVP and the Santa Clara Fire Department against the criteria and weights published in the RFP. The proposals were evaluated on proposer qualifications and experience; approach to conducting feasibility studies; designing renewable energy microgrids; preparing post-design construction plans; and proposer's approach to innovation and environmental performance. Cost proposals for each proposer were reviewed following the technical evaluation.

Staff recommends award of contract to AECOM Technical Services, Inc. (AECOM) as the most advantageous and best value proposal based upon the final evaluation ranking. Their proposal met or exceeded all of the RFP specifications, and their solution was rated superior in the following key areas:

- Demonstrated experience providing solar photovoltaics (PV) and energy storage system microgrid services to municipal agencies;
- Experience designing the microgrid controller logic and integration architecture to play an integral role in islanding and resynchronization routines, analyzing different operating scenarios based on solar energy output, energy storage status, and grid status, in addition to advanced protection schemes and cybersecurity operations;
- Demonstrated expertise in bidding distributed energy resources and participating in the California Independent System Operator (CAISO) wholesale energy market;
- Proven impact on reducing criteria pollutants and GHG emissions from microgrid operations.

The term of the proposed agreement will be a two-year initial term with two additional one-year options to extend at the discretion of the City. The agreement includes provision of all labor, materials, and technical expertise to provide renewable energy microgrid feasibility study and design services. The proposed agreement also includes a detailed scope of services, and a compensation schedule that includes milestone payments to be made upon acceptance of completed microgrid feasibility study and design tasks.

Additionally, an estimated not-to-exceed amount of \$200,000 is included in the agreement for additional services, such as land surveys, geotechnical studies, or additional microgrid designs.

AECOM's estimated compensation under the agreement is as follows:

<b>Renewable Energy Microgrid Feasibility Study and Design Services</b>	
Project Buildup and Kickoff Meeting	\$5,410
Two Site Visits	\$9,793
Renewable Energy Microgrid Feasibility Study	\$162,020

Design of Two Renewable Energy Microgrids	\$84,341
<b>Subtotal</b>	<b>\$261,564</b>
<b>Additional Services</b>	<b>\$200,000</b>
<b>CONTRACT NOT TO EXCEED TOTAL</b>	<b>\$461,564</b>

### **ENVIRONMENTAL REVIEW**

The action being considered is part of a feasibility study designed to reduce environmental impacts from diesel back-up generators by substituting energy storage as a back-up power source to delay and/or avoid the activation of diesel back-up generators. The project is therefore statutorily exempt under CEQA Guidelines section 15262, Feasibility and Planning studies.

### **FISCAL IMPACT**

The agreement has a not-to-exceed amount of \$461,564 for the initial two-year term. Funds are available in the Electric Utility Capital Fund as part of the Electric Department Public Benefits Program in the Renewable Energy Microgrid project, CIP 2446, to support the financing of the Feasibility Study and Design Services.

### **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) <<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 an Agreement with AECOM Technical Services, Inc. for renewable energy microgrid feasibility study and design services, for an initial term starting on or about May 1, 2021 and ending on April 30, 2023 for total maximum amount not-to-exceed \$461,564, subject to the annual appropriation of funds; and
2. Authorize the City Manager to execute up to two one-year options to extend the term of the Agreement after the initial term, ending April 30, 2025 assuming all options are exercised, subject to the annual appropriation of funds.

Reviewed by: Manuel Pineda, Chief Electric Utility Officer

Approved by: Deanna J. Santana, City Manager

### **ATTACHMENTS**

1. Agreement for Services