



City of Santa Clara

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Agenda Report

22-859

Agenda Date: 7/12/2022

REPORT TO COUNCIL

SUBJECT

Action to Delegate Authority to the City Manager to Either A) Enter Into a Third Phase Agreement With Northern California Power Agency (NCPA), or B) Complete Negotiations and Execute a Renewable Energy Purchase and Sale Agreement With Calpine Corporation (Calpine) to Purchase Renewable Energy From a Portfolio of Geothermal Projects Owned by Calpine

COUNCIL PILLAR

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

BACKGROUND

The City of Santa Clara's Electric Department, Silicon Valley Power (SVP), purchases energy to supply the residents and businesses within the City of Santa Clara. With the passage of Senate Bill 100 (SB 100), SVP must meet the State of California Renewable Portfolio Standards (RPS) where SVP must procure a specified percentage of its retail sales from renewable energy resources by a particular year.

SB 100 requires retail sellers and local publicly owned electric utilities to procure a minimum percentage of 44% of retail sales by December 31, 2024, 52% by December 31, 2027, and 60% by December 31, 2030, of electricity retail sales from eligible renewable energy resources. The recently adopted Climate Action Plan also has a target to reduce greenhouse gas emissions by 80% by 2035.

In conformance with the City's Municipal Code and Council Policy, the purchase or sale of electrical power and fuels for the generation is not subject to the City's centralized purchasing process but is procured by SVP. SVP procures electrical power either by a) entering into Power Purchase Agreements (PPA) with project developers through their direct offerings and/or through a request for proposal (RFP) process, or b) participating in power purchase opportunities through the Northern California Power Agency (NCPA). Each potential PPA project may have unique characteristics that impact the value of the resource to SVP customers. Staff evaluates potential projects on locational value, shape of the generation output, environmental attributes, capacity attributes, viability, and operational flexibility.

NCPA is a not-for-profit Joint Powers Agency whose membership includes municipalities, a rural electric cooperative, and other publicly owned entities including the City of Santa Clara. The mission of NCPA is to provide members cost effective wholesale power, energy-related services and advocacy on behalf of public power consumers through joint action.

Calpine Corporation (Calpine) was founded in 1984 and is the largest owner of geothermal plants in The Geysers area in Northern California with geothermal plants providing 725 MW of green energy

capacity around the clock. The Geysers area is known as the world's largest geothermal field spanning an area of 30 square miles in Sonoma, Lake, Mendocino, Marin, and Napa counties.

In May 2020, Calpine submitted a proposal to NCPA's Renewables RFP for the purchase of energy and associated attributes from Calpine's existing portfolio of geothermal projects located in The Geysers area. At the time the proposal was received, NCPA members and SVP were evaluating more cost-effective projects that participated in NCPA's Renewables RFP. Since then, the price of renewable projects in general has significantly increased due to several different factors including supply chain constraints, inflation, labor shortages, CAISO interconnections delays, transmission project delays, and competition from other energy providers. During that time, SVP staff began experiencing these challenges with other renewable projects that SVP was in the process of evaluating and negotiating. In September 2021, staff worked with NCPA to request a project proposal update from Calpine to see if the geothermal projects were still available and if there was a change in price and/or terms. After receiving the updated information from Calpine, staff reviewed and analyzed the project again and determined the geothermal output from Calpine would further diversify SVP's Renewable Energy portfolio, aid SVP to achieve the current State of California RPS requirements, meet the goals of the City's Climate Action Plan, and meet the needs of SVP's expected load growth.

NCPA, working closely with SVP staff, have been leading the negotiations of a power purchase agreement with Calpine on behalf of SVP and the other interested NCPA members. To enable NCPA to enter into the PPA with Calpine on behalf of its members, the participating members, including SVP, will need to execute a Third Phase Agreement with NCPA which specifies the rights and obligations of NCPA and participating members regarding governance and administration of the PPA and obligates the participating members to pay their assigned contract percentage share of all project costs, including but not limited to, administrative services costs, scheduling coordination costs, and all other costs related to the PPA.

DISCUSSION

SVP and the other NCPA members have expressed interest in purchasing up to 100 MWs of generating capacity for a term of 10-15 years. The geothermal project is expected to generate up to 876,000 MWh annually. In the event no other NCPA member is interested in participating in this project, SVP would be able to take the full output. This project will increase and further diversify SVP's renewable energy portfolio in accordance with the Council's Adopted Policy on Environmental Stewardship and Renewable Portfolio Standards. The proposed Calpine geothermal output is equivalent to 22% of SVP's 2021 retail sales.

Due to increased demand for renewable energy generation resources, Calpine is limiting the amount of time it would reserve the quantity, price and terms of a PPA for perspective buyers. Therefore, staff recommends authorizing the City Manager to either A) enter into a Third Phase Agreement with NCPA to purchase renewable energy, or B) complete negotiations and execute a renewable energy purchase and sale agreement directly with Calpine to purchase renewable energy from a portfolio of geothermal projects owned by Calpine in The Geysers area for a total not-to-exceed amount of \$73.5 million per year. The decision to contract directly with Calpine or to contract through NCPA's Third Phase Agreement will be determined based on which method allows SVP to meet Calpine's time limit and interest from other NCPA members.

The benefits of the Calpine project are: 1) the units are fully constructed and are already in operation;

2) geothermal generation is a baseload generator which prefers to generate energy on a 24-hour basis; and 3) the generation profile matches the load profile of the data centers in the City of Santa Clara. Unlike many other new projects, this project doesn't carry any development risk.

If approved, the parties intend to execute the agreement at the end of July 2022. SVP would begin receiving energy from Calpine beginning 2025. SVP will provide Council with updates as needed through the SVP quarterly update or informational reports to Council.

ENVIRONMENTAL REVIEW

This action to purchase power generated by existing geothermal generating facilities does not constitute a "project" within the meaning of the California Environmental Quality Act ("CEQA") pursuant to CEQA Guidelines section 15378(a). No subsequent or supplemental environmental review will be required of these facilities as (1) there are no substantial changes to these facilities which will require major revisions of any applicable environmental impact report; (2) there are no substantial changes that will occur with respect to the circumstances under which the facilities are being undertaken which will require major revisions in any applicable environmental impact report; and (3) there was no new information, which was not known and could not have been known at the time the applicable environmental impact reports were certified as complete, became available with respect to these facilities.

FISCAL IMPACT

SVP will purchase up to 876,000 MWh per year for a total not-to-exceed amount of \$73.5 million per year during the contract term. Funding for the purchase of the renewable energy will be included in the Resource and Production budget in the Electric Utility Fund beginning in the FY 2024/25 Operating Budget.

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, or designee, to either (a) enter into a Third Phase Agreement with the Northern California Power Agency (NCPA), or (b) complete negotiations and execute a renewable energy purchase and sale agreement directly with Calpine Corporation (Calpine) to purchase renewable energy from a portfolio of geothermal projects owned by Calpine, subject to budget appropriations;
2. Authorize the City Manager, or designee, to execute all related documents or agreements, including, but not limited to, collateral assignment agreements; and take any and all actions as are necessary or advisable to implement and administer either the Third Phase Agreement or renewable energy purchase and sale agreement; and
3. Authorize the City Manager, or designee, to approve and execute amendments to the either the

Third Phase Agreement or renewable energy purchase and sale agreement, as may be required from time to time, so long as the contract price and length of the agreement remain unchanged.

Reviewed by: Manuel Pineda, Chief Electric Utility Officer

Approved by: Rajeev Batra, City Manager