



Agenda Report

21-871

Agenda Date: 9/28/2021

REPORT TO COUNCIL

SUBJECT

Action on Silicon Valley Power Three-Year System Growth Plan Strategy, Related Budget Amendment (Five Affirmative Votes Required), and Addition of New Positions

COUNCIL PILLAR

Deliver and Enhance High Quality Efficient Services

BACKGROUND

The City of Santa Clara's Electric Utility, Silicon Valley Power (SVP), has provided dependable electric service for 125 years. SVP's current peak load is about 600 MW and provides nearly 4,110 Gigawatt-hours (GWh) a year to SVP's customers. Currently, eight additional projects have received entitlements with the City of Santa Clara which represents an increase of 618 MW. There is an additional 114 MW of planned Commercial and Residential development. This represents 732 MW of expansion over the next ten years. In addition, new developments have made initial requests for more than 400 MW of new load. Based on SVP's experience with how new load develops, SVP is preparing for its system peak load to double over the next 10 years and increase the number of substations from twenty-three (23) to up to thirty-three (33) by 2026.

Previous Council Discussion and April 6, 2021 Quarterly Report

On November 2019, SVP management met to discuss the strategic priorities for SVP. At this time, it was identified that the City was going to experience significant continued growth, and SVP needed to develop a capital improvement strategy to meet the City's potential load growth. Staff determined the need to develop a near-term and long-term strategy to accommodate approved growth and develop the necessary infrastructure plan options. Although there were delays due to shifting priorities to respond to the Covid-19 pandemic, staff continued to move forward with the growth needs strategy and provided updates to the Council as part of the SVP quarterly report. On April 6, 2021 staff provided a comprehensive review to the City Council of upcoming load growth, capital projects, and next steps.

April 6, 2021 Council Discussion

The attached April 6, 2021 presentation provides a summary of the comprehensive Council discussion on this item. In summary staff presented on the following:

- Previous Council discussions
- Load Growth Projects
- Power Procurement
- CAISO Transmission Planning Process
- System Growth Plan
 - 3-year near-term strategy plan

- 20-year long-term strategy plan
- Summary of projects

The discussion in April concluded with next steps, including this report on the System Growth Strategy. This report provides a summary of the three-year near-term strategy plan and a long-term growth plan strategy will follow at a later date.

DISCUSSION

As presented to Council on April 6, 2021, SVP has developed a strategy to identify the necessary electric infrastructure projects required to replace aging infrastructure and meet new possible load growth for approved development.

SVP's participation in the Transmission Planning Process (TPP) and Load Forecasting is an annual process coordinated internally in SVP's Transmission & Distribution Planning and Resource Divisions. The purpose of this process is to project SVP's load growth over the next ten years and apply it to an electric system model to simulate load growth impacts on SVP's electric system. SVP then submits its forecast to the California Energy Commission (CEC) for inclusion in the California Independent System Operators (CAISO) Transmission Planning Process where the load growth is included in CAISO's electric system model to evaluate the impact of the load growth on Pacific Gas & Electric's (PG&E) System Grid. Based on these projections, SVP anticipates a peak system load of 879 MW in 2024 and a peak system load of 1,125 MW in 2031.

The attached Three-Year System Growth Strategy Plan, prepared by Electrical Consultants Inc. (ECI) for SVP, presents an analysis of SVP's transmission system. The purpose of the study is to identify Near-Term and Long-Term improvements for SVP to consider in order to maintain electric service reliability with consideration of significant load growth.

While the report provides additional information, details and technical basis for the analysis that was completed, there are no significant changes in the proposed infrastructure projects from what has previously been presented to Council. Attached is a comprehensive project list with conceptual estimates (these estimates will change in the future as designs are developed) for the projects. It is important to note that the three largest projects would be moving forward regardless of load growth. As examples and as presented on April 6, 2021, the Battery Energy Storage System (BESS) system provides many benefits beyond serving peak load growth, and SRS and KRS Substations are reaching end of life and need to be replaced. As described in the attached list there are over \$300 million of proposed projects.

In summary, the identified work will replace aged infrastructure with new higher capacity when needed and also install new facilities. The combined projects will accommodate SVP' Load Service Capacity (LSC) from 720 MW's to 1,090 MW's. The costs and timelines will be updated as the overall program and projects are developed. The Three-Year Growth Strategy is intended to be a living document and will be reviewed and changed in the future to adapt for a number of factors including load ramp, project feasibility, delivery capacity, shifting needs, priorities, and finances.

Project Delivery, Consultant Support, and New Positions

This System Growth Plan is a significant undertaking for the City and significantly increases SVP's capital improvements program (CIP). To put it in perspective, SVP's FY 2020/21 and FY 2021/22

Adopted 5-year CIP is \$291.1 million. With these new near-term projects the CIP nearly doubles in value. It is not feasible for SVP to complete this work with current staff, but it would not be reasonable to add sufficient staff to manage all these projects in-house. Staff is proposing to do a combination of an outside Project Management Firm, and minimal additional positions in engineering, operations, and purchasing to manage and contract the required work.

Project Management Firm

To assist SVP with this effort, on October 13, 2020 Council approved actions on Master Agreements with a number of consultants on System Capacity Expansion Planning, including Delegation of Authority for Capital Project Implementation and General Engineering Support Meeting. Staff is currently completing an interview process to select a firm that will provide support with Program Management and Project Management. The types of services that this firm will provide for SVP includes the following:

- Establishment of Program standards, policies, procedures to achieve consistent approach across projects.
- Develop Strategic Procurement Management Plan to standardize the selection and procurement of long lead equipment and materials to meet project timelines.
- Provide owner's engineering, constructability review and value engineering services.
- Provide Program Risk Management including risk assessment, response strategy and monitoring.
- Project Reporting and Controls utilizing e-Builder to monitor performance, project cost and schedule.
- Compliance Monitoring of CEQA mitigation and reporting program and labor compliance audits.

New Positions

Staff is also recommending to add new positions to account for the additional work load, to support participation in the yearly CAISO TPP process, and for the management and implementation of the new projects.

In order to support the increase of Transmission Planning and Management of CIP activities staff recommends the addition of the following staff (all funded by Utility Funds): one (1) Principal Electric Utility Engineer, one (1) Senior Electric Utility Engineer, two (2) Service Coordinators or equivalent, one (1) Senior Business Analyst or similar position in Electric Department, and (1) Contracts Manager in the Purchasing Division of the Finance Department.

- The two engineering positions will be lead on the Transmission Planning Process and CAISO coordination. They will also oversee the Project Management Firm and deliver on some individual projects.
- The two Service Coordinators or equivalent are needed for the review and support of these projects from an operations perspective. Current staff does not have enough capacity to perform their current work and support the new projects.
- The two contracts positions are needed to be able to complete all the appropriate design and construction contracts and purchasing of equipment and materials. Current staff does not have enough capacity to perform their current work and support these new projects.

Staff believes this combination of new minimal staff and a consultant team to provide Program and

Project Management support provides the best approach for success.

ENVIRONMENTAL REVIEW

Council action on this item is not a project as defined by the California Environmental Quality Act Guidelines section 15378(b)(2), continuing administrative activities. The three-year system growth strategy is an informational document that address system growth resulting from private development that has completed CEQA and has already received City approvals. When and if Capital projects included in the growth strategy move forward appropriate CEQA will be completed as required prior to construction.

FISCAL IMPACT

These costs will be funded by the Electric Utility Operating Fund using developer contributions supporting new capital improvement projects and customer service revenue supporting ongoing maintenance with no impact to the General Fund.

A portion of funding for projects associated with the three-year plan is funded by the Load Development Fees and Customer Service Fees. The Load Development Fee recovers the portion of the Bulk Electric System reinforcement work that SVP will need to do as a result of the additional load required by that customer. Staff will recommend adjustments to those fees, as needed, through subsequent action.

Staffing

The cost to add one (1) Principal Electric Utility Engineer, one (1) Senior Electric Utility Engineer, two (2) Service Coordinators, one (1) Contracts Specialist in the Electric Department, and (1) Contracts Manager in the Purchasing Division of the Finance Department is a total of \$1,600,000.

A budget amendment to appropriate funds for new positions from the Electric Utility Operating Fund and the General Fund (paid by transfer from the Electric Utility Operating Fund) is detailed below:

Budget FY 2021/2022

	Current	Increase/ (Decrease)	Revised
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Electric Utility Operating Fund (091)

Expenditures

Electric Department	\$475,918,224	\$1,350,000	\$474,568,224
Operating Transfer Out	\$809,733	\$250,000	\$1,059,733
General Fund			
Ending Fund Balance	\$83,161,789	(\$1,850,000)	\$81,561,789

General Fund

Revenues

Transfer In from Electric Utility	\$809,733	\$250,000	\$1,059,733
Fund			

Expenditures

Finance Department	\$16,363,472	\$250,000	\$16,613,472
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Appropriations needed in future years will be requested as part of the regular biannual budget process.

COORDINATION

This report has been coordinated with the Human Resources Department, 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>>.

RECOMMENDATION

1. Accept a report on the Three-Year Growth Plan Strategy;
2. Consistent with City Charter Section 1305, *"At any meeting after the adoption of the budget, the City Council may amend or supplement the budget by motion adopted by the **affirmative votes of at least five members** so as to authorize the transfer of unused balances appropriated for one purpose to another purpose, or to appropriate available revenue not included in the budget,"* approve the following FY 2021/22 budget amendments:
 - A. In the Electric Utility Operating Fund, increase the transfer to the General Fund by \$250,000 and the Electric Department budget by \$1,350,000 and decrease the unrestricted ending fund balance by \$1,600,000 (**five affirmative Council votes required for the use of unused balances**); and
 - B. In the General Fund, increase the transfer in from the Electric Utility Operating Fund by \$250,000 and the Finance Department budget by \$250,000. (**five affirmative Council votes required to appropriate additional revenue**); and
3. Approve the addition of one (1) Principal Electric Utility Engineer, one (1) Senior Electric Utility Engineer, two (2) Service Coordinators or equivalent, one (1) Senior Business Analyst or similar position in the Electric Department, and (1) Contracts Manager in the Purchasing Division of the Finance Department.

Reviewed by: Manuel Pineda, Chief Electric Utility Officer

Approved by: Deanna J. Santana, City Manager

ATTACHMENT

1. April 6, 2021 Council Presentation
2. Silicon Valley Power - Three Year System Growth Plan Strategy
3. Project List and Conceptual Estimates