



Agenda Report

24-751

Agenda Date: 10/8/2024

REPORT TO COUNCIL

SUBJECT

Action on a Mitigated Negative Declaration and Mitigation Monitoring and Reporting Program and Route Approval for the Silicon Valley Power 115 kilovolt Transmission Line from the Northern Receiving Station to the Kifer Receiving Station

BACKGROUND

On September 28, 2021, City Council accepted Silicon Valley Power's (SVP) Three-Year System Growth Strategy Plan (RTC 21-871). The Three-Year System Growth Strategy Plan identified proposed projects for both near-term and long-term capital improvement projects needed to support anticipated system growth and to replace end-of life equipment to ensure system reliability. One of the necessary near-term projects is the construction of a new 115 kilovolt (kV) transmission line between the Northern Receiving Station (NRS) and Kifer Receiving Station (KRS). Constructing the 115kV transmission line will allow energy to be balanced and redistributed within SVP's transmission receiving stations and allow SVP to serve the new load growth projected based on the SVP Resource Load Forecast. The three receiving stations [NRS, Scott Receiving Station (SRS), and KRS] within the City of Santa Clara (City) are all interconnected. As approved by the City Council, SRS and KRS are being fully rebuilt and NRS is being upgraded and expanded to replace obsolete infrastructure and accommodate future growth.

The NRS and SRS sites are currently directly connected via two 115kV lines, which are owned by PG&E. The NRS site is connected to PG&E's system via three 115kV transmission lines and one 230kV transmission line. The KRS site has two 115kV transmission lines connected with PG&E. A second 230kV transmission line is being designed to connect to NRS which will be owned and operated by LS Power and rated for 500MW (recently updated to a 1000MW line that will be considered for approval November 2024). To transfer this additional power and balance loads between the receiving stations, a new 115kV transmission line between NRS and KRS is required. **If this new 115kV transmission line is not constructed or delayed, SVP future peak capacity would be reduced from approximately 1300 MW to approximately 819 MW.**

On March 19, 2024, the City Council received an informational Report to Council (Attachment 1, RTC 24-1614) regarding the new 115kV transmission line from NRS to KRS. This informational report identified three possible routes which SVP evaluated. The preferred alignment, Route A, begins at NRS exiting southeast toward Lafayette Street, continuing southeast within the median of Lafayette Street to Agnew Road, where it transitions to the east side of Lafayette Street until Montague Expressway, there the route shifts and enters Bassett Street proceeding southeast down the west side of Bassett Street to Bayshore Freeway, where the route crosses Bayshore Freeway and continues south along Duane Avenue interconnecting to KRS from the north side (the New 115kV Transmission Line).

The SVP evaluation team for the New 115kV Transmission Line consisted of internal SVP staff, design, and environmental engineering consultants, and program management staff for the System Expansion Program. The SVP evaluation team conducted a comprehensive analysis and evaluation, employing various methodologies such as potholing and GPR surveys. This in-depth assessment took into consideration SVP's load growth and system planning projections, schedule, cost estimation, required easements and permits, and engineering judgment. The goal was to determine feasible route alignments, identify a preferred route, and explore potential overhead and underground options within the preferred route.

The findings favored the New 115kV Transmission Line/Option 1 which is the all-overhead option set forth in Attachment 2 of RTC 24-1614. These findings were based on the following key items:

- Ability to meet the schedule
- Flexibility in power delivery
- Ability to accommodate future growth

In addition, the following items were also considered:

- Ease of maintaining the system
- Reduced construction disruption to the public
- Reduction in total cost

DISCUSSION

The preferred project, which was analyzed under the California Environmental Quality Act (CEQA), is the proposed all-overhead option for the New 115kV Transmission Line ("Project"). The environmental review of the Project was conducted by the City as the lead agency under CEQA. The City held a 50-day public scoping period. There are no CEQA requirements for a public scoping period for an Initial Study/Mitigative Negative Declaration (IS/MND), however, SVP chose to conduct public scoping to provide an opportunity for the public and agencies to comment on the scope of the environmental review of the Project. A Mitigation Monitoring and Reporting Program (MMRP) was also prepared with the IS/MND to mitigate and reduce any significant environmental impacts to less than significant. The CEQA document also analyzed a hybrid option which includes undergrounding the northern segment of the New 115kV Transmission Line, but this option is not preferred as further discussed below.

Community Outreach, Noticing, and Scoping

The scoping process and results are an initial step in the environmental review process. The City issued a notice of a public scoping meeting on April 10, 2024, that outlined the Project, stated the City's intention to prepare an IS/MND, and requested comments from interested parties. The notice was mailed to 3,626 people (using a list compiled with GIS data) within a 1,000+ foot radius around the proposed Project route. Prior to the scoping meeting, on April 25, 2024, SVP's project manager was notified that some residents near the Project did not receive the notice. The decision was made to have an additional public scoping meeting, extend the scoping period an additional three weeks, re-send the notices, and electronically notify people as well.

The second notice was mailed out on May 7, 2024, to 3,626 addresses. The second notification also included electronic notification, which sent out notices to (1) news email lists for SVP (8,177 subscribers) and the City (7,552 subscribers), (2), City/SVP Facebook subscribers (2,400), and (3) Nextdoor members (52,860). Additionally, as part of the AB 52 process, two Native American tribes

on the City's tribal consultation list were contacted; however, we received no responses from them. The notice was also posted on the City and SVP's webpages.

The first meeting was attended by eight (8) people and the second meeting was attended by 18 people.

Comments Received

In total, 87 comment letters were received during the scoping period. Most of these comments (83 out of 87) were identical "form" letters, which included the same text in the body of the comment but were signed by the sender. Eleven individuals sent in more than one comment letter, several comments were received from the same address, and 50 comments were submitted from different addresses within the noticed area. 86 comments were received from residents, and one comment was received from a nearby business.

These letters are included in the Scoping Report of the Final IS/MND (Appendix F, Scoping Report). Oral and written comments were considered in the drafting of the IS/MND. The comments fell into five categories:

- (1) Health concerns - electromagnetic fields (EMF) further discussed below and Section 4.15, Electric and Magnetic Fields Summary of the Final IS/MND;
- (2) Increased risk for catastrophic accidents and fire hazards - see Final IS/MND Section 5.9 (Hazards and Hazardous Materials), Section 5.17 (Transportation), and Section 5.20 (Wildfire);
- (3) Impact on home insurance costs and property value - not within the scope of CEQA, see Final IS/MND, Appendix F, Scoping Report;
- (4) Aesthetics - see IS/MND Section 5.1 (Aesthetics); and
- (5) Complexity and inconvenience - see Final IS/MND Section 5 for a discussion of constructions impacts for each environmental resource.

EMF Analysis

The main concern from commentors was related to EMF emitted by transmission lines. They expressed concern about the health risks correlated with EMF exposure, especially due to the proximity of the line to residential communities along Lafayette Street. The commentors stated that even a small risk should not be ignored. Impacts from electromagnetic fields are not analyzed under CEQA. However, due to the concern from the public, SVP conducted an EMF study. This study is included in the Final IS/MND (Appendix G, EMF Report). The EMF Report broke up the Project into 19 segments and presents EMF calculations for the current year modeling existing conditions, 2024, and for the anticipated in-service year, 2028, for normal and peak loads. The EMF Report measured EMF 60 feet east of the Project centerline. Segments 1 through 3 are located adjacent to the residential community where the majority of comments were sent from.

The EMF Report analyzes the increase in EMF (measured in milliGauss (mG)) when the new 115kV Transmission Line is in-service. According to the report, Segments 1 through 6 in the new 115kV Transmission Line will increase EMF from approximately 8 mG to 16 mG during normal loads. During peak loads, it is projected that EMF will increase from 10 mG to 16 mG. Over the entire 19 segments in the alignment, the largest increase in EMF is 24.4 mG during normal loads and 30.5 mG during peak loads. There is no defined or adopted threshold for EMF impacts, since there is no agreement among scientists that EMF creates a potential health risk. It should be noted that the

estimated EMF values of average household appliances exceed the amount of EMF from the proposed Project (that is, at 60 feet from the proposed Project centerline). For example, EMF levels approximately range: (1) 20 mG near portable heaters and (2) 60 mG near vacuum cleaners for measurements at 1 foot distance. The Final IS/MND also includes recommended EMF Design Guidelines by the California Public Utilities Commission (CPUC) to be considered during final engineering. Based on these guidelines to reduce the magnetic field strength levels from the proposed transmission line, SVP considered and implemented the following measures in project design development:

- (1) Increase the distance from electrical facilities by:
 - (a) Increasing structure height or trench depth
 - (b) Locating power lines closer to the centerline of the corridor;
- (2) Reduce conductor (phase) spacing; and
- (3) Phase circuits to reduce magnetic fields.

Initial Study/Mitigated Negative Declaration

The Draft IS/MND was published and circulated for review on July 31, 2024. Based upon the Initial Study, the Project will not have a significant effect on the environment because mitigation measures have been incorporated into the MMRP.

A Notice of Availability (NOA) was mailed out and noticed to the same lists as the public scoping document. The NOA was also published on the State Clearinghouse Website, which initiated the 30-day public review period that ended on August 30, 2024.

During the comment period for the Draft IS/MND, SVP held an in-person public meeting on August 22, 2024, at the Northside Branch Library. The meeting was attended by twelve people. Verbal comments, which were received during the public meeting, were similar to those received during the Project scoping. SVP staff and SVP's engineering and environmental design consultants were all in attendance to answer questions.

During the public review period, the City received 78 total comments on the Draft IS/MND. This included four agency comments from the San Jose International Airport, Caltrans, California Department of Fish and Wildlife (CDFW), and the San Francisco Public Utilities Commission (SFPUC), and 74 comments from individuals.

Although Section 15088 of the CEQA Guidelines does not require a Lead Agency to prepare written responses to comments received, the City prepared a "Responses to Comments" document, which is included in Section 7 of the Final MND. This document addresses all comments received during the Draft IS/MND 30-day review period. Minor changes were made to the IS/MND in response to these comments, which are identified in the "Response to Comments" section and are tracked in the Final IS/MND. The comments received during the public comment period from individuals generally fell into seven categories and were similar to comments received during the scoping period. In response, the City prepared seven general responses to address the comments.

- (1) General Response #1 - Human Health and Scope of CEQA - not within the scope of CEQA, see Final IS/MND Section 7 (Response to Comments);
- (2) General Response #2 - Electric and Magnetic Fields - see Final IS/MND Section 4.15

- (3) (Electric and Magnetic Fields Summary), and Appendix G (EMF Report);
General Response #3 - Corona and Induced Currents - see Final IS/MND Section 5.21 (Corona and Induced Current Effects);
- (4) General Response #4 - Property Values and Costs - not within the scope of CEQA, see Final IS/MND Section 7 (Response to Comments);
- (5) General Response #5 - Aesthetics - see IS/MND Section 5.1 (Aesthetics);
- (6) General Response #6 - Noise - see Final IS/MND Section 5.13 (Noise); and
- (7) General Response #7 - Hazards - see Final IS/MND Section 5.7 (Geology and Soils), Section 5.9 (Hazards and Hazardous Materials), Section 5.15 (Public Services), Section 5.17 (Transportation), and Section 5.20 (Wildfire)

Most of these comments were addressed in the Draft IS/MND. The Response to Comments section summarizes the comments and explains where the comments are addressed in the Final IS/MND. None of the comments identified additional environmental effects that may be significant.

All-Overhead Alignment Recommendation

Based on the analysis and evaluation completed to date, staff recommends the all-overhead alignment (Project Route A, Option 1, from the informational report, RTC 24-1614) for the following key reasons:

Schedule

The overhead alignment has an anticipated energization date of the first quarter of 2028. On the other hand, the conceptual underground alignment would require relocation of two transmission gas lines (one SVP and one Pacific Gas and Electric [PG&E] owned). The underground option will require a shutdown of Donald Von Raesfeld (DVR) power plant and coordination with PG&E to relocate. In addition to the two gas transmission lines, there are 23 utility relocations or crossings that would need to be coordinated to meet minimum vertical and horizontal clearances. In some instances, the depth of the transmission line would need to be 20 plus feet deep to accommodate required clearances. Therefore, for these reasons, the underground option has an unknown energization date, and it is certain energization would not occur in 2028.

Flexibility in Power Delivery

The overhead transmission line option can deliver more power due to better heat dissipation than the underground alternative. Overhead systems can be designed to satisfy any current rating requirements by changing variables such as conductor type, structure/pole height, etc. The underground transmission line option is anticipated to be able to deliver only about 83% of the power that the overhead option would be able to provide at 115kV. This value drops to 79.9% at 230kV.

Future Growth

New pole locations for the overhead option will be able to accommodate a future underbuilt 60kV transmission line, and these poles will be designed to accommodate voltages of 230kV but energized for 115kV. Future upgrades in voltage would allow for more power transfer through the proposed route without major additional capital investment or disruptions. The underground option could also be designed to accommodate voltages of 230kV. That said any future 60kV lines would necessitate a new alignment and trench, leading to additional disturbances and costs at a later date. For the underground option, a new alignment with separation from the existing trench would be required to

accommodate the necessary heat dissipation emitted from the multiple sets of cables at the different voltage levels. This may not be feasible due to the number of existing utilities and minimum vertical and horizontal clearances required.

ENVIRONMENTAL REVIEW

The MND and MMRP were prepared for the Project in conformance with CEQA. These documents and Notice of Availability were posted on the City's website at <<http://www.santaclaraca.gov/ceqa>> and circulated for 30-day review from July 31, 2024, to August 30, 2024.

The MND examined environmental impacts associated with the Project. The MND identified potentially significant impacts to air quality, biological, cultural resources, geology and soils, hazards and hazardous materials, hydrology and water, noise, and traffic/transportation. However, the MND and MMRP incorporates mitigation measures to reduce the potentially significant impacts to less-than-significant.

FISCAL IMPACT

There is no fiscal impact to the City for adopting the MND and MMRP other than administrative staff time and expense. The anticipated construction costs for the Project are currently budgeted within the Electric Utility Capital Fund.

COORDINATION

This report has been coordinated with the Finance Department, City Manager's Office, 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. Adopt a Resolution adopting the Mitigated Negative Declaration and the Mitigation Monitoring and Reporting Program for the New 115kV Transmission Line Project between the Northern Receiving Station and Kifer Receiving Station; and
2. Approve Route A, Option 1, for an entirely overhead alignment of the New 115kV Transmission Line, with authorization to Silicon Valley Power staff to make minor alignment adjustments based on final project engineering and design.

Reviewed by: Manuel Pineda, Chief Electric Utility Officer

Approved by: Jovan D. Grogan, City Manager

ATTACHMENTS

1. RTC 24-1614 with Attachments
2. Final Mitigated Negative Declaration and Mitigation Monitoring and Reporting Program
3. Resolution