



System Expansion Plan Update

January 16, 2025



System Expansion Plan Update

Agenda

- Scott and Kifer Receiving Stations
- Northern Receiving Station
- Material Procurement
- PG&E Coordination
- 115 kV Transmission Line
- CAISO Transmission Line
- Battery Energy Storage Project
- Operational Improvements and Developer Options
- Northwest Loop Capacity Upgrade project
- PG&E Series Compensation Project
- Next Steps



SVP Receiving Stations Projects to Increase Reliability and Capacity

Scott and Kifer Receiving Stations (SRS & KRS):

- Finalizing Issue for Bid set – will be bid as one project for both sites
- Ordered Transformers January 2024
- Recommendation to authorize purchase circuit breakers May 7, 2024
- Recommendation to purchase disconnect switches, SSVT's, VT's and CVT's, combination revenue metering on May 28, 2024
- Recommendation to purchase Control Enclosure and P&C Panels on November 12, 2024
- Recommendation to purchase Insulators, and Surge Arrestors on November 19, 2024
- SVP will continue to seek Council action on additional procurements through early 2025



Scott Receiving Station



Kifer Receiving Station



SRS and KRS Schedule

- 100% Design Package – 3rd quarter 2024
- Advertise Projects – 1st Quarter 2025
- Start Construction – mid-2025
- 115 kV Completion – 3rd Quarter 2027
- 60 kV Completion – 4th Quarter 2028
- Close out and demo existing – 1st quarter 2029
- Key Schedule Consideration
 - Material Procurement
 - PG&E Coordination



Scott Receiving Station



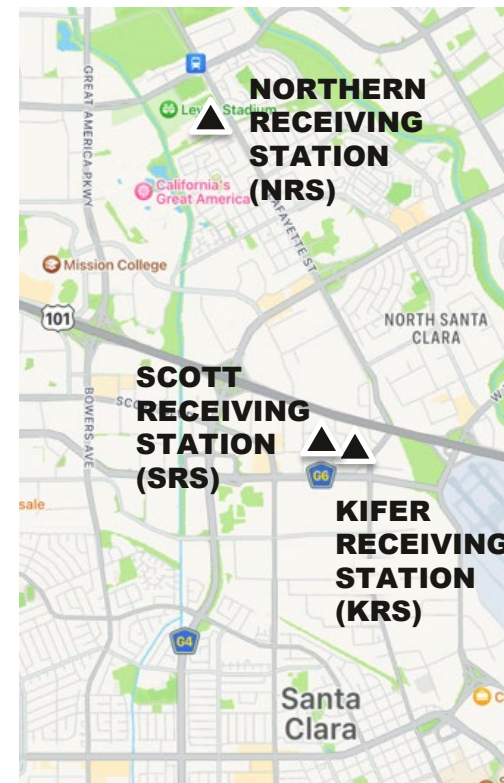
Kifer Receiving Station



SVP Receiving Stations Projects to Increase Reliability and Capacity

Northern Receiving Station (NRS):

- Reviewing Issue for Bid set
- Ordered Transformers January 2024
- Recommendation to authorize purchase circuit breakers May 7, 2024
- Recommendation to purchase disconnect switches, VT's and CVT's, combination revenue metering on May 28, 2024
- Recommendation to purchase Neutral Grounding Resistors on November 12, 2024
- Recommendation to purchase P&C Panel and Capacitor Banks, Insulators, and Surge Arrestors on November 19, 2024
- SVP will continue to seek Council action on additional procurements through early 2025





NRS Schedule

- 100% Design Package – 4th Quarter 2024
- Advertise Projects – 1st Quarter 2025
- Start Construction – 3rd Quarter 2025
- Work Completion – 1st Quarter 2028
- Key Schedule Considerations
 - 2026 Superbowl
 - 2026 World Cup
 - Material Procurement
 - PG&E Coordination



Northern Receiving Station



Material Procurement

	Circuit Breakers	Disconnect Switches	Station Service Voltage Transformers	Combination Revenue Metering Transformer	VTs, CVTs	P&C Panels (NRS)	Control Enclosure & P&C Panels (SRS/KRS)	Capacitor Banks (NRS)	Neutral Grounding Reactors (NRS)
Current Status	PO's Issued	PO Issued	PO Issued	Reviewing Bids	PO Issued	Issued for Bid	Reviewing Bids	Issued for Bid	Reviewing Bids
Estimated Bid Release Date	--	--	--	--	--	--	--	--	--
Actual Bid Release Date	1/26/2024	3/13/2024	3/22/2024	5/9/2024	4/2/2024	1/14/2025	8/19/2024	1/15/2025	9/20/2024
Estimated Bid Deadline	4/3/2024	4/24/2024	4/19/2024	6/5/2024	4/30/2024	October	9/30/2024	December	11/1/2024
Target Council Meeting Date	May	May	May	May	May	November	November	November	November
Estimated PO Date	September/November	October	August	January	November	December	January	December	December
Estimated Lead Time from RPO (weeks)	89-176	60	90	49	58	52	52	52	24
Required on Site Date	Q1 2026 thru Q2 2027	Q4 2025	Q3 2027	Q3 2025	Q3 2025	Q3 2025	Q4 2025	Q1 2027	Q3 2025
Projected on Site Date	Q1 2026 thru Q4 2027	Q3 2025	Q2 2027	Q4 2025	Q3 2025	Q1 2026	Q4 2025	Q1 2026	Q3 2025



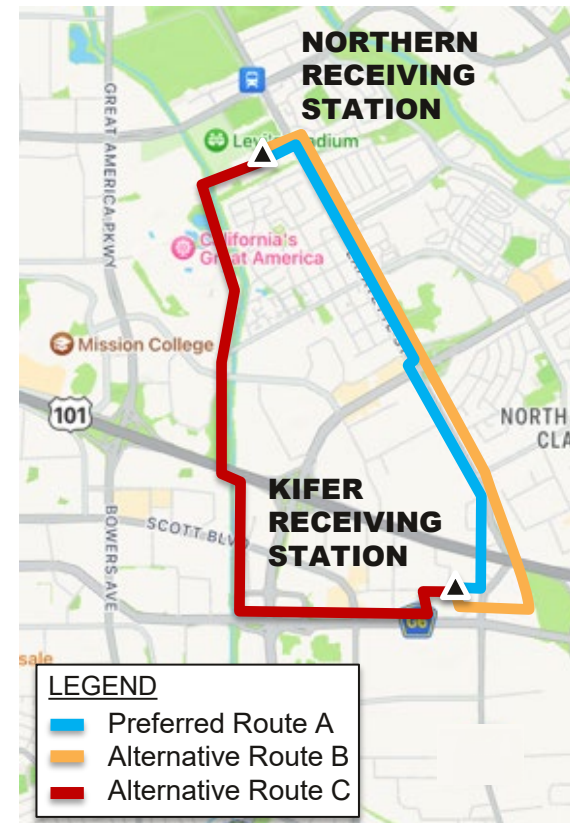
PG&E Coordination

- Comprehensive data/information request sent to PG&E in January **2024**
- **Issue for bid** design packages by Engineers of Record developed based on assumptions of what PG&E will require. Designs may need to be revised upon receipt of missing information from PG&E and or PG&E staff review of proposed designs which could impact project schedules
- **Biweekly meetings are continuing**
- Technical input on our design and the data requested in January **2024** has begun to trickle in and breakout focus calls are being scheduled
- New PM assigned 10/16



115kV Transmission Line Northern to Kifer Receiving Station

- Project Scope: Construct a new 115kV overhead transmission line of approximately 2.24 miles between Northern Receiving Station and Kifer Receiving Station
- Council approved the IS/MND and preferred Route A on November 12, 2024
- 60% design underway which includes input from San Jose Airport on pole height requirements in proximity to the airport





115kV Transmission Schedule Assuming Overhead Option

Task	Timeframe
Planning	Jul. 2021 – Jul. 2022
Call for Proposals	Jul. 2022 – Jan. 2023
Design	Oct. 2022 – Nov. 2026
Easement Acquisition	Jan. 2024 – May 2026
CEQA	Jan. 2024 – Nov. 2024
Community Outreach	Apr. 2024 – Jun. 2024
Permits	Feb. 2024 – Nov. 2025
Material Procurements	Oct. 2024 – Nov. 2026
Construction Advertising & Awards	Mar. 2026 – Aug. 2026
Construction/Close Out	Aug. 2026 – Mar. 2028

CAISO Transmission Line from PG&E Newark Station to SVP Northern Receiving Station

- LS Power will own and operate.
- Target in-service date by mid 2028
- Monthly Project Coordination Meetings
- Developing Interconnection Agreement between LS Power and SVP for Council Action.
- The estimated project costs have increased from \$510 million (CAISO 2021-2022 Transmission Plan) to \$959 million.





Battery Energy Storage Project

- Capacity up to 50MW/200MWh (4 hours daily)
- Completed:
 - 60% Site BESS Design (Electrical)
 - 60% Transmission Line Design
 - 90% SVP Control Enclosure Design
 - 100% Civil Site Design
- In progress:
 - Complete BESS IFC Design Packages
 - Site Grading began December 2024
 - Long Lead Equipment Procurement by Ameresco has been placed for the following items:
 - Transformer
 - Inverter transformers
 - Switchgear
 - Disconnect switches
 - Battery
 - Control building
 - Main breaker
- Expected Completion Date:
 - 1st Quarter 2026



Example of a Tesla Megapack



Interim Operational Improvements and Developer Options

Near Term Operational Improvements

- Operational enhancements
 - SRS and KRS Transformer Re-Ratings
 - Spare Transformer Program development
- Existing 60kV Loop System
- Modeling underway
 - Summer 2025 Readiness coordination with PG&E & CAISO
 - NRS T2 and SSS PST emergency rating implementations
 - PG&E NOR/NRS 115kV T-Line Re-Rate analysis
 - CAISO Resource Procedure in Development

Developer Options for Additional Capacity

- Self-Generation (possible option to explore)





Northwest Loop Capacity Upgrade Project

- SVP identified opportunity to increase capacity on NW Loop.
- Reconductor of approximately 2.62 miles of the 60 kV Northwest Loop to provide additional capacity for projected load growth within the City.
- 90% design. **2nd submittal was due last week.**
- Once design is complete, RFP for materials will follow.
 - Tentative Target date for Energization: Q1 2026. (Delays due to material procurement, unforeseen conditions, etc. will impact date.



PG&E Series Compensation Project No changes

- Series Compensation Project on Los Esteros-Nortech 115 kV line
- Part of PG&E Grid-Enhancing Technologies program that provide an alternative to capital expenditures
- This is a brand-new technology that PG&E is implementing into their systems for the first time
- Project has already been designed and modelled from the CAISO TPP process
- PG&E is targeting in service date of Q4 2025 and will be available for summer 2026 peak
- Vendor: Smart Wires
- **SVP has no authority over this project.**



Next Steps

- Meeting every two months on the last Tuesday of the month – **Next meeting 2/25/25 at 10:00 AM**
 - Highlight changes/updates from previous meeting
- SVP webpages with this presentation and project updates
 - Email with website updates
- Council Actions per this presentation

Visit **[SiliconValleyPower.com/GrowthPlan](https://www.siliconvalleypower.com/growthplan)** for more information.