
Appendix N

Electrical Engineering Analysis Report

Cordova

Cordova Road and Navajo Road, CA

ENGINEERING ANALYSIS REPORT

Prepared by

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August 11, 2023



SOUTHERN CALIFORNIA
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BACKGROUND

VVLIG US Holdings LP submitted a request for a capacity study to the necessary upgrades (if any) required to serve the requested 3.5 MVA by Q4, 2026. The project is located at Cordova Road and Navajo Road, CA.

The customer provided electrical demand projections shown in Table 1:

Table 1- Proposed Total Load Ramp – 3.5 MVA, received from customer on 5/15/2023

CORDOVA SITE	Q2 2025	Q1 2026	Q4 2026
	ANTICIPATED DEMAND LOAD	ANTICIPATED ADDITIONAL DEMAND LOAD	ANTICIPATED ADDITIONAL DEMAND LOAD
(1) BUILDING	1 MVA	1.5 MVA	1.0 MVA
TOTAL LOAD	1 MVA	2.5 MVA	3.5 MVA

Customer requested energization date(s) are shown in Table 2.

Table 2 - Energization Phases, received from customer on 5/15/2023

Load Type	Demand	Energization Date
Commercial Bldg	1.0 MVA	Q2 2025
Commercial Bldg	1.5 MVA	Q1 2026
Commercial Bldg	1.0 MVA	Q4 2026
Total	3.5 MVA	

The project site is located approximately 17 miles from Victor Substation.

At the time of this report, the most suitable distribution feeder that will be in proximity to the customer site is the Burnetta 33 kV circuit.

PROJECT ASSUMPTIONS

SCE studies the impact to the distribution system accounting for existing connected and forecasted load, distribution system capacity limitations, and based on the load schedule as shown in Table 1 provided by the customer in their study request.

ANALYSIS

Phases 1, 2, & 3 (Q2 2025 - Q4 2026): 3.5 MVA

At the time of this report, the distribution feeder system has the capacity to serve the requested 3.5 MVA demand. Upgrades would be required which will take approximately 18-24 months to complete from the time the project is initiated. SCE will not commence the distribution upgrades until SCE has a full submittal of required documents and the project certainty is adequate.

- Install 33 kV Line Extension from Burnetta 33 kV, ~1 mile
- Install (1) Pole Top Substation with respective equipment

SCE is supportive of working collaboratively, and in coordination with Cordova to achieve the completion of the project. Given the stated limitations in this report, if Cordova provides a full submittal package¹ to SCE's planning department for this request, SCE can perform additional detailed analysis to determine if other options to provide full or partial capacity are available while the stated system upgrades are completed.

¹ The details of what a full submittal package includes can be provided by contacting SCE's planning department. Generally, the full submittal package includes, but is not limited to, a Customer Project Information Sheet (CPIS), Single Line Diagram (SLD), Detailed Load Schedule outlining connected and demand load values, Plot Plan, CAD File, and Design Option Letter.

Note: Any additional line extensions not previously mentioned per Rule 15 are not included in this study. Customers are encouraged to work with SCE's planning department on any line extension requirements.

SUMMARY

Engineering analysis has determined that SCE can accommodate 3.5 MVA of the total requested amount as of the day of this report.

It has been determined that Cordova can be served from the Burnetta 33 kV for up to 3.5 MVA as of the time of this report. Upgrades would be required which will take 18-24 months to complete from the time the project is initiated.

This report **does not reserve** the noted available capacity for Cordova. Capacity can only be reserved upon **completing an approved complete design package** to the SCE planning department.

DISCLAIMERS, DISCLOSURE OF STUDY ASSUMPTIONS

- This study assumes that the developer's distribution infrastructure will be in place by the requested energization date.
- Any delays in the project by the developer could delay SCE's ability to meet the requested energization date.
- The thermal rating of any conductor, connector, apparatus, and/or substation shall not exceed 100% of its rated capacity or loading limit.
- Circuit voltage profiles shall be maintained to comply with SCE's CPUC Jurisdictional Rule 2 tariff requirements.
- Operational flexibility and reliability of the distribution system shall be maintained at all times.
- For all Rule 15/16 scope, the customer will need to work with SCE's planning department, and in doing so will get the most accurate information on timelines and potential financial responsibilities. Details pertaining to costs are not included in this report as its intent is to provide the customer with SCE's method of service and approximate timelines for energization.
- The results outlined in this report are based on available information at the time of analysis which may change at any time after the analysis is performed.
- SCE does not guarantee that at the time of the customer submitting the service request, the information provided in this report will be valid.
- Upon the customer submitting the service request, SCE may elect to re-evaluate this study which will be used to determine the requirement for the service request. Additional information will be required when requesting electrical service to the facility. Customers are encouraged to contact the planning office as outlined in [SCE's Electrical Service Requirements](#) or by using the General Service number (800)-655-4555.
- The distribution system is dynamic and may undergo changes from the time this study is performed to the time the customer submits request for service which may require changes to the method of service from what is indicated in this report.
- The proposed manner of service in this report is subject to change based on final design and may be required to comply with SCE's distribution design standards.
- Changes to the customer demand values, schedules, or other requests may require restudies which may cause delays to ongoing SCE engineering, planning and construction activities, and ultimately impact the customer's energization date.
- This report does not include costs for which the customer may be responsible for. In addition to costs for the proposed scope, additional costs associated with environmental studies may be required for the licensing or permitting of the proposed SCE facilities.
- This study does not evaluate rights-of-way or easements which may be needed to provide service to the project. This study assumes that all easements and rights-of-way required for the construction of distribution upgrades and/or facilities will be secured in a timely manner to accommodate the requested in-service date.
- This report does not consider potential milestone setbacks that could result from the local jurisdiction requiring underground construction of distribution facilities. SCE encourages the customer to consult with the local jurisdiction to identify existing underground ordinance to reduce the risk of complication associated with said ordinance.
- Applicable to projects requesting primary service: This study does not include analysis related to coordination of system protection equipment. A coordination study may be required during final engineering. The coordination study may identify additional requirements such as installing new protection equipment, reprogramming and/or relocating existing protection equipment. The additional scope of work may impact the customer's requested in-service date.
- This report does not reference the applicable tariff(s) that may apply to this installation. As line routes and further construction details are defined, SCE will evaluate each individual project and identify the appropriate tariff. The choice of tariffs will better define the customer's responsibilities as well as each party's potential financial responsibilities. Service requests must follow SCE's new service requirements and PUC approved tariff provisions.

Quarry
Quarry Road and Flint Road, CA

ENGINEERING ANALYSIS REPORT

Prepared by

*Maricel Calma
Distribution System Planning*

*Timothy Christian Perkins
Distribution Engineering*

August 11, 2023



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BACKGROUND

VVLIG US Holdings LP submitted a request for a capacity study to the necessary upgrades (if any) required to serve the requested 3.5 MVA by Q4, 2026. The project is located at Quarry Road and Flint Road, CA.

The customer provided electrical demand projections shown in Table 1:

Table 1- Proposed Total Load Ramp – 3.5 MVA, received from customer on 5/15/2023

QUARRY SITE	Q2 2025	Q1 2026	Q4 2026
	ANTICIPATED DEMAND LOAD	ANTICIPATED ADDITIONAL DEMAND LOAD	ANTICIPATED ADDITIONAL DEMAND LOAD
(1) BUILDING	1 MVA	1.5 MVA	1.0 MVA
TOTAL LOAD	1 MVA	2.5 MVA	3.5 MVA

Customer requested energization date(s) are shown in Table 2.

Table 2 - Energization Phases, received from customer on 5/15/2023

Load Type	Demand	Energization Date
Commercial Bldg	1.0 MVA	Q2 2025
Commercial Bldg	1.5 MVA	Q1 2026
Commercial Bldg	1.0 MVA	Q4 2026
Total	3.5 MVA	

The project site is located approximately 18 miles from Victor Substation.

At the time of this report, the most suitable distribution feeder that will be in proximity to the customer site is the Burnetta 33 kV circuit.

PROJECT ASSUMPTIONS

SCE studies the impact to the distribution system accounting for existing connected and forecasted load, distribution system capacity limitations, and based on the load schedule as shown in Table 1 provided by the customer in their study request.

ANALYSIS

Phases 1, 2, & 3 (Q2 2025 - Q4 2026): 3.5 MVA

At the time of this report, the distribution feeder system has the capacity to serve the requested 3.5 MVA demand. Upgrades would be required which will take approximately 18-24 months to complete from the time the project is initiated. SCE will not commence the distribution upgrades until SCE has a full submittal of required documents and the project certainty is adequate.

- Install 33 kV Line Extension from Burnetta 33 kV, ~1 mile
- Install (1) Pole Top Substation with respective equipment

SCE is supportive of working collaboratively, and in coordination with Quarry to achieve the completion of the project. Given the stated limitations in this report, if Quarry provides a full submittal package¹ to SCE's planning department for this request, SCE can perform additional detailed analysis to determine if other options to provide full or partial capacity are available while the stated system upgrades are completed.

¹ The details of what a full submittal package includes can be provided by contacting SCE's planning department. Generally, the full submittal package includes, but is not limited to, a Customer Project Information Sheet (CPIS), Single Line Diagram (SLD), Detailed Load Schedule outlining connected and demand load values, Plot Plan, CAD File, and Design Option Letter.

Note: Any additional line extensions not previously mentioned per Rule 15 are not included in this study. Customers are encouraged to work with SCE's planning department on any line extension requirements.

SUMMARY

Engineering analysis has determined that SCE can accommodate 3.5 MVA of the total requested amount as of the day of this report.

It has been determined that Quarry can be served from the Burnetta 33 kV for up to 3.5 MVA as of the time of this report. Upgrades would be required which will take 18-24 months to complete from the time the project is initiated.

This report **does not reserve** the noted available capacity for Quarry. Capacity can only be reserved upon **completing an approved complete design package** to the SCE planning department.

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