

San Manuel Landing Phase (2)

N/E corner of W 5th St. and Sterling Ave., San Bernardino, CA

ENGINEERING ANALYSIS REPORT

Prepared by

*Narcy Gonzalez
Distribution System Planning*

*Anthony Fitch
Distribution Engineering*

*Cristina Huerta
Distribution Engineering*

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BACKGROUND

Newport Utility Consulting, LLC on behalf of SBABP I, LLC submitted a request for a capacity study to the necessary upgrades (if any) required to serve the total requested load of 2 MVA by Q4, 2026 (0.5 MVA by Q4 2025, 0.5 MVA by Q2 2026, and 1.0 MVA by Q4 2026). The project is located at the N/E corner of W. 5th St. and Sterling Ave in San Bernardino, CA.

The customer provided electrical demand projections shown in Table 1:

Table 1- Proposed Total Load Ramp – Total Requested, received from customer on 7/13/23

SAN MANUEL STERLING SITE	Q4 2025	Q2 2026	Q4 2026
	ANTICIPATED DEMAND LOAD	ANTICIPATED ADDITIONAL DEMAND LOAD	ANTICIPATED ADDITIONAL DEMAND LOAD
BUILDING (1) 542k sq. ft.	0.5 MVA	0.5 MVA	1.0 MVA
TOTAL LOAD	0.5 MVA	1.0 MVA	2.0 MVA

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

Table 2 - Energization Phases, received from customer on 7/13/23

Load Type	Demand	Energization Date
Spec Building	0.5 MVA	Q4 2025
Spec Building	0.5 MVA	Q2 2026
Spec Building	1.0 MVA	Q4 2026
Total	2.0 MVA	

The project site is located approximately 2.3 miles from the Cardiff Substation.

At the time of this report, the most suitable Distribution feeder that will be in proximity to the customer site is the Harlem Springs 12 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

Phase 1: 0.5 MVA Demand

The most suitable distribution feeder in the area, is the Harlem Springs 12 kV out of Cardiff Substation.

At the time of this report, the distribution and subtransmission systems have the capacity to serve the requested 0.5 MVA demand by Q4 2025.

A study was performed to see the impacts on operational flexibility with the increase of load on the Harlem Springs 12kV, no concerns identified with addition of load.

Per our study the voltage at the point of service is within our Rule 2. There is adequate protection at the substation with the addition of this customer. Therefore, there is no need for further system upgrades regarding voltage and protection.

SCE will not commence the Distribution upgrade until SCE has a full submittal of required documents and the project certainty is adequate.

Phase 2 and Phase 3: 2.0 MVA Demand

No possible load transfers were found from the study that would increase the criteria projected load to accommodate for the project on the Harlem Springs 12kV.

The most suitable distribution feeder in the area, is the Guthrie 12kV circuit out of the Del Rosa substation.

The following upgrades would be required which will take approximately 28-36 months to complete from the time the project is initiated:

- A 0.64-mile line extension to energize the project on the next closest circuit, which is the Guthrie 12kV circuit out of the Del Rosa substation.

A study was performed to see the impacts on operational flexibility with the increase of load on the Guthrie 12kV and no concerns identified with the additional load.

Per our study the voltage at the point of service is within our Rule 2. There is adequate protection at the substation with the addition of this customer. Therefore, there is no need for further system upgrades regarding voltage and protection.

SCE will not commence the Distribution upgrade until SCE has a full submittal of required documents and the project certainty is adequate.

¹ The details of what a full submittal package includes can be provided by contacting SCE's local 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 Scheduled outlining connected and demand load values, Plot Plan, CAD File, and Design Option Letter.

Note: Any line extensions per Rule 15 are not included in this study.

Customers are encouraged to work with local planning on any line extension requirements.

SUMMARY

Engineering analysis has determined SCE can accommodate 0.5 MVA of the total requested amount as of the day of this report.

It has been determined that the San Manuel Landing Phase (2) can be served from the Harlem Springs 12kV for up to 0.5 MVA as of the time of this report due to grid constraints.

Additional upgrades as stated above will be required to accommodate the remaining requested capacity for a total of 2.0 MVA to be served on the Guthrie 12kV, which will take approximately 18-36 months to design and construct.

This report does not reserve the noted available capacity for San Manuel Landing Phase (2), capacity can only be reserved upon completing an approved complete design package to the SCE planning department. SCE strongly recommends submitting a complete design package. The complete design submittal package includes, but is not limited to, a Customer Project Information Sheet (CPIS), Single Line Diagram (SLD), Detailed Load Scheduled outlining connected and demand load values, Plot Plan, CAD File, and Design Option Letter.

SCE will gladly schedule an optional result meeting to discuss any concerns or questions the customer may have about this report.

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 timeline and potential financial responsibilities. Details pertaining to cost 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 customer submitting the service request, the information provided in this report will be valid
- Upon 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 local planning office at 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 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 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 energize 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 right-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.