

California Public Utilities Commission

July 25, 2023

VIA EMAIL

Rey Gonzalez Southern California Edison Company 2244 Walnut Grove Avenue Post Office Box 800 Rosemead, California 91770

SUBJECT: Cal City Substation 115 kV Upgrade Project - Data Request 2

Dear Mr. Gonzalez,

As the California Public Utilities Commission (CPUC) proceeds with the environmental review for SCE's Cal City Substation 115 kV Upgrade Project (Project), we have identified additional information that is needed to adequately conduct the California Environmental Quality Act (CEQA) review. Please provide the information requested below (Data Request 2) by August 4, 2023, and submit your response in electronic format to the CPUC and to our consultant, Environmental Science Associates (ESA).

Please do not hesitate to call me at (408) 915-7434 if you have any questions.

Sincerely,

Boris Sanchez Energy Division Project Manager

cc: Mary Jo Borak, CPUC Energy Division Supervisor Tammy Jones, Senior Attorney, SCE Matthew Fagundes, ESA Michael Manka, ESA



Data Request 2 Cal City 115 kV Substation Upgrade Project CEQA Evaluation

SCE Application

- 1. Section II, *Background*, Footnote 1: Provide SCE's 2022-2031 Distribution Substation Plan forecast values that became available 1st Quarter 2023.
- 2. Section II, *Background*, last sentence of paragraph two, first sentence of paragraph 3: Are the *future* electrical needs based on "Load Interconnection" applications? What is the electrical demand based on? Does SCE build infrastructure based on future projections?

PEA Chapter 1, Executive Summary

- 3. Section 1.1.1, *Purpose and Objectives*: The end of the second paragraph indicates that SCE personnel are restricted from accessing Edwards Airforce Base. Provide historical data relative to how often, or what frequency over a defined period of time, SCE has been denied access to Edwards Substation.
- 4. Section 1.1.1, *Purpose and Objectives*: Is the South Base Substation load included in the Electric Needs Area (ENA) demand? What is that load/demand?
- 5. Section 1.1.1, *Purpose and Objectives*: The Project includes two 115 kV source lines that would reduce reliance on Edwards Substation to serve non-military base load in the ENA. Please provide the MVA current and forecasted demand for the military base load as well as for the non-base load.
- 6. Section 1.1.2.1, *Subtransmission*: Please verify there is currently a 115 kV line from Holgate to Edwards (Kramer-Edwards-Holgate 115 kV) to support the new Cal City-Edwards-Holgate 115 kV Subtransmission Line. Refer to attached map display.



Area map display of Kramer, Holgate, Edwards stations and 115 kV.

7. Section 1.1.2.2, *Substation*: The Cal City Substation configuration identifies five furnished positions. Please provide upgraded Cal City Substation configuration and/or single line diagram for the 115 kV bussing. Would there be a position for each of the two 115 kV lines as well as one each for the 115/33 kV transformers, the 115/12 kV transformers, and the capacitor bank? Would the station be a "breaker and ½" scheme?

PEA Chapter 2, Introduction

8. Section 2.1.1.3.1, *Distribution System Need*, regarding Table 2-2, Note 1: Please provide the actual/historical metered load data for Cal City Substation for 2021 and 2022.



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- 9. Section 2.1.1.1, *Project Purpose*: Regarding the last sentence: "the Proposed Project would also improve system reliability and operational flexibility in the ENA by providing a second 115 kV subtransmission source line to Edwards Substation consistent with SCE's reliability criteria to ensure safe and reliable electrical service to EAFB," please clarify if a 115 kV bus failure/contingency at Kramer Substation (the source of both proposed 115 kV lines) would constitute a single point of failure and disengage the 115 kV feeds to Cal City and Edwards substations.
- 10. Section 2.1.1.2, *Project Need*: This section references recent load growth at Edwards Substation. Please provide annual peak megawatt values for both historical and forecast load growth at Edwards Substation for the period from 2019 through 2032.
- 11. Section 2.1.1.2.1, *Planning Processes*: The California Energy Commission (CEC)'s California Energy Demand Forecast Update 2022 Baseline Forecast peak load for a 1 in 10-year extreme Temperature Peak Demand shows less than a one percent growth rate for 2023 through 2035 (SCE Planning Area). Please provide the calculations and resulting megawatt values derived from the disaggregation of the CEC's Integrated Energy Policy Report forecast. Include a description (type, size, project status) of any large planned new loads that are not part of the historical local load growth.
- 12. Section 2.1.1.2.1, *Planning Processes*: Along with providing the 10-year planning period demand growth projections, including the model files used to support SCE's forecasts of electrical demand, please also provide the Outage Contingency file(s) and any sensitivity and/or alternatives model files (presumed in PSLF format). This information may be used for the screening of alternatives relative to meeting the objectives identified for the Project.
- 13. Section 2.1.1.3.1, *Distribution System Need*: The operating capacity of Cal City Substation to serve the ENA is currently limited to 18 MVA under a normal system configuration. While the substation has a total transformer capacity of 36.4 MVA, the full utilization of this is unachievable because the 33 kV source lines. Given the MVA capacity level of the 33 kV lines supporting the Cal City Substation (from Randsburg and Edwards stations), was/is there consideration for increasing the capacity via reconductoring the lines?
- 14. Section 2.1.1.3.1, *Distribution System Need*: Regarding the statement in the 3rd paragraph: "SCE identified several distribution system improvements, including reconductoring an existing 33 kV line, installing a new 33 kV line, ...," please verify there are currently two 33 kV lines. Would the new 33 kV line be a third?
- 15. Section 2.1.1.3.1, *Distribution System Need*: Regarding the sentence midway through the third paragraph: "Expected to be complete in 2023, the installation of temporary distribution pad mount substations along the 33 kV source lines will provide an additional 54 MVA, bringing the total amount of capacity in the ENA to 90.4 MVA," please provide the current status of these temporary system improvements. Please also clarify if SCE requires a Load Interconnection Agreement (or equal) before SCE interconnection facilities are designed and built for a new and significant load, such as impending horticulture and cannabis grow/operations.
- 16. Section 2.1.1.3.2, Subtransmission System Need: The current subtransmission facilities that serve Edwards Substation consist of a single 115 kV source line that originates from SCE's Holgate Switchyard. Please verify that the source of the 115 kV at Holgate Switchyard is from Kramer Substation and provide the status/operation of the U.S. Borax generating facilities connected to Holgate Switchyard.

Project Description

17. Section 3.5.4.6.1, *Earth Moving or Substantial Grading Activities Description*: Please provide a grading and drainage plan for the proposed expansion of the Cal City Substation. If it has not yet been prepared, please provide timeline for its preparation.



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18. Section 3.3.4.2.1, *Subtransmission and Telecommunication*: Regarding the pole structure design, especially in areas with suitable Desert Tortoise habitat, describe how the structures would be designed to limit their use for nesting or perching predators (i.e., common ravens).

Aesthetics

- 19. Key Observation Points (KOPs): An additional KOP to be located along the north edge of North Edwards along Claymine Road and Hillcrest Avenue is recommended to provide another option for evaluating representative views from public residential areas proximal to the Project site. This location (herein called KOP X) would more clearly show the changed visual conditions of the Project from residential areas for the following reasons:
 - The proposed transmission line would be closer to the residences at KOP X, as compared to KOP 3. The distance from KOP X would be approximately 470 feet to the transmission line upon project completion. During construction, the distance would 370 feet to the edge of the pull site. The distance from KOP 3 to the transmission line would be approximately 1,300 feet.
 - In the field, the CPUC review team noted the residences that comprised the viewer group for KOP 3 were each surrounded by block walls of approximately 8 feet in height that blocked any views. The same would be true for publicly-accessible areas in these neighborhoods (i.e., public streets). At KOP X, roughly half of the residences either did not have such a barrier or they have a shorter one that would not block views of the Project.
 - KOP X, along Claymine Road, would be more accessible to the public and potentially yield a larger number of viewers. To access KOP 3, a viewer would need to go off-road and not be as accessible.
 - KOP 3 should be supplemented with an additional option such as KOP X (described above) that would provide additional representative views from residences.

Please prepare an additional simulation of the project from the perspective of KOP X.

Energy

20. Section 5.6.1.1.1, *Electricity Consumption*: Given CEC's data for electricity consumption for Kern and San Bernardino counties (shown in Table 5.6-2), and since SCE is the presumed holder of metered load data for California City, please provide the residential and non-residential kilowatt-hours (or gigawatt-hours) consumption for California City for the most recent full year (e.g., 2021 or 2022).

Geotechnical Evaluation

- 21. Geotechnical evaluation: Data Request 1, Question 21 stated PEA Appendix P is the most recent geotechnical report: "This geotechnical report covers Proposed Project components at Cal City Substation and is appended to the PEA as Appendix P. Geotechnical reports prepared in support of other Proposed Project components (e.g., subtransmission scope elements) will be provided to Energy Division upon completion." Please provide an estimate as to when the revised Geotechnical report will be prepared and available for review.
- 22. Clarify which areas of the transmission and subtransmission alignment are anticipated to have corrosive soils and describe the preferred approach for handling this issue. Would wood poles be proposed in those areas? If steel poles are proposed, clarify how the presence of corrosive soils might change calculations for area of disturbance assumptions.

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