

Southern California Edison
A.23-03-005 – Cal City PTC

DATA REQUEST SET E D - S C E - 0 0 2

To: Energy Division
Prepared by: Jonathan Samson
Job Title: Project Engineer
Received Date: 7/25/2023

Response Date: 8/9/2023

Question 07:

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?

Response to Question 07:

The proposed Cal City Substation 115 kV switchrack is designed with the required dimensions to accommodate breaker-and-a-half positions and double-bus-double-breaker positions, depending on the required configuration of each position. Please refer to the file titled “A.2303005-ED-SCE-002-Q07” attached to this response, which provides the line and bus arrangement for the 115 kV switchrack.

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To: Energy Division
Prepared by: Sheridan Mascarenhas
Job Title: Senior Advisor
Received Date: 7/25/2023

Response Date: 8/9/2023

Question 09:

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.

Response to Question 09:

An outage of a single 115 kV bus at Kramer Substation would not result in any unserved load as the switchrack design accommodates single contingencies without interruption. The Kramer Substation 115 kV switchrack is designed with dimensions to accommodate a breaker-and-a-half configuration; however, some positions are configured as double-breaker-double-bus, as needed. The switchrack has two operating buses and every element (e.g., line or transformer) is protected with two circuit breakers (one on each side of the point of connection of the element). As such, the proposed 115 kV source lines to Cal City and Edwards Substations would not be impacted by a single 115 kV bus outage/failure.

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To: Energy Division
Prepared by: Sheridan Mascarenhas
Job Title: Senior Advisor
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Response Date: 8/9/2023

Question 13:

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?

Response to Question 13:

Yes, as detailed in SCE's PEA Sections 2.1.1.3.1 and 2.1.2.3, SCE has considered the possibility of increasing the capacity via reconductoring the 33 kV source lines and has completed partial reconductoring. The overall capacity available to the ENA is a combination of the capacity available from Cal City Substation and that of the temporary 33/12 kV distribution pad mount substations. SCE has completed reconductoring of the existing 33 kV source line from Edwards Substation to increase the capacity available and continues construction activities associated with extending the 33 kV line from Randsburg Substation and the installation of several temporary 33/12 kV distribution pad mount substations. Each of these activities contributes to the overall capacity of the ENA; however, as noted in the PEA, this increased capacity is not sufficient to meet all of the projected demand and the temporary 33/12 kV distribution pad mount substations are not substitutes for the substation upgrade project.

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To: Energy Division
Prepared by: Haroun Idris
Job Title: Engineer 3
Received Date: 7/25/2023

Response Date: 8/9/2023

Question 16:

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.

Response to Question 16:

The single 115 kV source line to Edwards Substation is a three-terminal line connecting Holgate Switchyard, Edwards Substation, and Southbase Substation. Kramer 220/115 kV Substation is the transmission source substation connecting the downstream substations/switchyards (i.e., Holgate, Edwards, and Southbase) to the transmission grid. The U.S. Borax generating facilities are customer-owned co-generation facilities owned and operated by the customer. SCE has an effective Generation Interconnection Agreement with the customer. Data regarding the status and operation of those facilities should be directed to the customer.

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DATA REQUEST SET E D - S C E - 0 0 2

To: Energy Division
Prepared by: Chad Packard
Job Title: Transmission Estimator
Received Date: 7/25/2023

Response Date: 8/9/2023

Question 18:

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)

Response to Question 18:

The Proposed Project includes steel monopole 115 kV structures with a crossarm-less design of horizontal post insulators. This design reduces the opportunity for desert tortoise predators, such as common ravens, by providing limited stable surfaces for perching or nesting. Horizontal post insulators are typically successful in deterring common ravens and other avian predators from utilizing structures for perching and nesting.

Per PEA Section 3.3.4, the Proposed Project subtransmission facilities would be designed consistent with Suggested Practices for Avian Protection on Power Lines: The State of the Art in 2006 (Avian Power Line Interaction Committee [APLIC] 2006), where feasible. Upon completion of construction, the Proposed Project would also be included in SCE's programmatic raven management plan, which seeks to minimize the effects of raven predation on desert tortoises as a result of SCE infrastructure.

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Question 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.

Response to Question 21:

SCE plans to perform the subtransmission geotechnical study during final engineering, after the Environmental Impact Report (EIR) is completed.

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Question 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.

Response to Question 22:

SCE will not know which areas are anticipated to have corrosive soils until the geotechnical study is performed. The geotechnical study will mainly be performed for TSP sites. SCE does not anticipate proposing wood poles.

All lightweight steel (LWS) poles would have a polyurethane or approved equivalent barrier coating to further protect the steel from corrosion. No additional areas for disturbance are anticipated.