

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

DATA REQUEST SET E D - S C E - 0 0 7

To: Energy Division
Prepared by: Jonathan Samson
Job Title: Project Engineer
Received Date: 6/30/2025

Response Date: 7/18/2025

Question 01:

To inform CPUC's screening of alternatives to be evaluated in the Environmental Impact Report being prepared pursuant to CEQA, CPUC requests that SCE provide the following information regarding the BLM-identified potential alignment modifications:

1. Given the limited traffic levels and relatively short length of segment 72 (i.e., 2.6 miles), evaluate the feasibility of placing both the Kramer-Cal City subtransmission line under Alternative Route 1 and the proposed Cal City-Edwards-Holgate line on TSPs in a double-circuit configuration along segment 72. In the response, consider the decreased exposure for a contingency event from a car striking a TSP as opposed to a LWS pole. If there are other potential issues such as corrosion potential that could render the suggested alternatives infeasible, please describe.

Response to Question 01:

While feasible from a constructability standpoint, placing both the Kramer-Cal City and Cal City-Edwards-Holgate Line on TSPs in a double-circuit configuration along segment 72 would impact project reliability, operational flexibility, and cost.

To ensure system reliability and operational flexibility, electric utilities design their systems to handle single contingency events (i.e. events which can cause one electrical component, such as a pole, transformer, or source line, to lose service during unplanned outages) without a service interruption or resulting public safety concerns. SCE's planning criteria¹ require the provision of two source lines to mitigate the risk of service interruption from a single contingency event affecting a source line. The exposure for a contingency event from a car striking a TSP as opposed to an LWS pole would be the same because the alignment for both options would typically be installed on only one side of the road. However, a parallel circuit configuration (i.e., traversing the same route but on separate structures) would be more reliable in the event of a car strike because the 2nd source line would be isolated from the event.

Risk of service interruption in a double-circuit configuration is greater because there are currently no neighboring distribution circuit ties that could pick up the Cal City Substation load if a contingency event occurred in this area. Therefore, under Alternative 1, circuits should be placed on separate structures along Lindbergh Boulevard to maintain circuit diversity and consequently,

¹ Subtransmission Planning Criteria and Guidelines: Section 2.3.8.1 of SCE's Subtransmission Planning Criteria and Guidelines state that when a substation either (1) serves more than 28 MVA of load or (2) when more than a single 28 MVA transformer is installed, two subtransmission source lines should be provided to ensure sufficient capacity, reliability, and operational flexibility. Edwards Substation meets both criteria in support of adding a second subtransmission source line; therefore, a new 115 kV subtransmission project is proposed.

reliability. This is consistent with the design of SCE's proposed Sequoia Boulevard Alternative in the same corridor.

With respect to cost, replacing LWS poles with TSPs in the proposed 2.6-mile segment would cost roughly two and a half times more than constructing parallel LWS circuits along Segment 72, thus increasing the overall project cost. There is also a risk of increased future costs, because if any future road widening is required along this Segment, the cost to relocate a double circuit TSP would be much higher than relocating two parallel single circuit pole lines.

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Question 02:

2. Given the limited traffic levels and relatively short length of segments 52 and 29 (i.e., 2.6 miles), evaluate the feasibility of placing both the Kramer-Cal City subtransmission line under Alternative Route 2 and the proposed Cal City-Edwards- Holgate line on TSPs in a double-circuit configuration along segments 52 and 29. In the response, consider the decreased exposure for a contingency event from a car striking a TSP as opposed to a LWS pole. Describe any other options for placement of either or both of the lines in segments 52 and 29.

Response to Question 02:

Please see SCE's response to Question 1 regarding placing both the Kramer-Cal City and Cal City-Edwards-Holgate Lines on TSPs in a double-circuit configuration along segments 52 and 29. Segment 29 follows Mendiburu Road along the northern edge of the urban core of California City. As outlined in the Routing Report, the Proposed Project was designed to avoid the urban areas of California City. Siting the segment of the Kramer-Cal City 115 kV Subtransmission Line along Mendiburu Road within the urban core of California City presents additional technical concerns and may introduce new potential environmental effects, such as interaction with other utilities, increased visual and noise impacts, increased pole-car interface, and increased disruptions to traffic and public services during construction and maintenance activities.

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Question 03 - 06:

3. Evaluate the feasibility of transferring the existing Pappas line onto the new Kramer-Cal City line poles that would be associated with the BLM Alternative Route 1 as underbuild along segment 46 and removing the associated existing Pappas line distribution wood poles.

4. Evaluate the feasibility of transferring the existing Pappas line onto the new Kramer-Cal City line poles that would be associated with the BLM Alternative Route 2 as underbuild and removing the associated existing Pappas line distribution wood poles.

5. Evaluate the feasibility of transferring the existing Pappas line onto the new poles that would be associated with a double circuit configuration that includes the Kramer- Cal City line under BLM Alternative Route 2 with the Cal City-Edwards-Holgate line as underbuild and removing the associated existing Pappas line distribution wood poles.

6. Provide the height of the existing Pappas line conductors and poles along each of the alternative route segments.

Response to Question 03 - 06:

3. SCE confirms that transferring the existing Pappas line onto the new Kramer-Cal City line poles as underbuild in the areas described above would be feasible. However, the Pappas line would add approximately 15' of height to the Kramer-Cal City line in areas of underbuild, increasing cost and resulting in greater aesthetic impacts.
4. Same response as that to Question 03 above.
5. SCE confirms that transferring the existing Pappas line onto the new Kramer-Cal City and Cal-Edwards-Holgate double circuit configuration as underbuild along segments 52 and 29 would be feasible. However, there would be significant cost implications due to the nature of underbuild construction. Typically, the subtransmission poles would replace each distribution pole in place. Because the existing distribution poles are spaced closer than subtransmission poles, TSPs would need to be installed approximately every 200 feet, as opposed to every 300-350 feet for subtransmission without underbuild. The 2.6 mile segment with distribution poles that would be replaced by TSPs would cost roughly 3.7 times more than constructing parallel LWS circuits along Segment 72 (BLM Alternative 1), thus increasing the overall project cost. In addition, the

Pappas line would add approximately 15' of height to the Kramer-Cal City line in areas of underbuild, increasing cost and resulting in greater aesthetic impacts.

6. The height of the existing Pappas line poles and conductors ranges from 38-46 feet above grade.