

## PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE  
SAN FRANCISCO, CA 94102-3298



October 8, 2015

Ian Forrest, Senior Attorney  
Southern California Edison Company  
Post Office Box 800  
Rosemead, CA 91770  
Email: ian.forrest@sce.com

**RE: Application Deficiency Report #2 - Certificate of Public Convenience and Necessity  
for the Riverside Transmission Reliability Project – Application No. A.15-04-013**

Dear Mr. Forrest,

The California Public Utilities Commission's (CPUC) Energy Division CEQA Unit has completed its review of Southern California Edison's (SCE's) Application (A. 15-04-013) for a Certificate of Public Convenience and Necessity (CPCN) for the Riverside Transmission Reliability Project (RTRP) and responses to CPUC's Deficiency Report #1. The Energy Division finds that the information contained in SCE's responses to Deficiency Report #1 is incomplete and does not resolve all deficiencies in SCE's application. The attached report identifies the outstanding deficiencies in SCE's application.

Information provided by SCE in response to the Energy Division's finding of deficiency should be filed as supplements to Application A. 15-04-013. One set of responses should be sent to the Energy Division and one to our consultant Panorama Environmental, in both hardcopy and electronic format. We request that SCE respond to this report no later than December 7, 2015.

We will review the information within 30 days and determine if it is adequate to accept the application as complete. We will be available to meet with you at your convenience to discuss these items.

The Energy Division reserves the right to request additional information at any point in the application proceeding and during subsequent construction of the project should SCE's CPCN be approved.

Please direct questions related to this application to me at (415) 703-5484 or [Jensen.Uchida@cpuc.ca.gov](mailto:Jensen.Uchida@cpuc.ca.gov).

Sincerely,

A handwritten signature in blue ink that reads "Jensen Uchida".

Jensen Uchida  
Project Manager

Energy Division, CEQA Unit

Mr. Ian Forrest, Southern California Edison  
October 8, 2015  
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cc: **Mary Jo Borak, Supervisor**  
**Jack Mulligan, CPUC Attorney**  
**Jeff Thomas, Project Manager, Panorama Environmental, Inc.**

# DEFICIENCY REPORT #2 FOR THE RIVERSIDE TRANSMISSION RELIABILITY PROJECT APPLICATION (A. 15-04-013)

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## REPORT OVERVIEW

The California Public Utilities Commission (CPUC) has identified deficiencies in Southern California Edison’s (SCE’s) Application (A.15-04-013) for a Certificate of Public Convenience and Necessity for the Riverside Transmission Reliability Project (RTRP). Deficiencies were identified according to requirements of the CEQA (Public Resources Code Section 21000 *et seq.*), General Order 131-D, and the Commission’s Rules of Practice and Procedure for a CPCN. Deficiencies are presented in Table 1.


**Table 1: SCE Riverside Transmission Reliability Project Application 15-04-013 Deficiencies**

| Number | Deficiency and Information Needed                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1      | <p><b>Provide preliminary engineering plans and a detailed route map for the entire RTRP 230 kV alignment and substations. The preliminary engineering and detailed route maps need to include the locations of all temporary and permanent work spaces including:</b></p> <ul style="list-style-type: none"> <li>• Pole work areas (e.g., crane pads)</li> <li>• Lattice steel tower work areas</li> <li>• Conductor stringing pull and tension areas</li> <li>• Guard structures</li> <li>• 230-kV conductor field snub areas</li> <li>• Temporary downline, access and spur roads</li> <li>• Permanent access roads</li> <li>• Temporary staging yards</li> </ul> <p>The Final EIR provides a calculated area of disturbance for each work area in Table 2.5-3a; however, there is no mapping of these work areas that show the maximum limits of the area of disturbance. Further engineering details and mapped locations of the disturbance area are required to verify the impacts to environmental resources and determine the conflicts with recent developments. As an example, the pole and work area at Wineville Avenue and Landon Drive appear to conflict with recent development in the area.</p> |
| 2      | <p><b>Provide additional data for daytime and night-time ambient noise levels in the proposed project area, including the existing homes and development along Wineville Avenue and Landon Drive. Provide noise level measurements at similar 230-kV transmission lines near the project area. Provide noise level planning contours at distances of 50-, 100-, and 200-feet from the proposed project for construction and operation of the proposed RTRP. The planning contours for construction should include cumulative noise generated from multiple pieces of construction equipment operating simultaneously.</b></p> <p>SCE Response to the Deficiency Report and the Final EIR both state the following with regard to construction noise, “noise would be short-term, occurring during daylight hours when the ambient noise levels are higher within the [RTRP] area”. Further information is needed to define existing ambient noise levels in the project area and calculated noise</p>                                                                                                                                                                                                             |

**Table 1: SCE Riverside Transmission Reliability Project Application 15-04-013 Deficiencies**

| Number | Deficiency and Information Needed                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|        | <p>levels at sensitive receptors along the alignment (i.e., at approved developments along the alignment).</p> <p>The RTRP EIR Volume 2 at pages 3-282 and 3-285 states that “Although corona noise varies widely with weather conditions and may be audible, no significant corona should be produced by lines energized below 345 kV (EPRI 1987). There would neither be a substantial nor a permanent increase in noise level.” The Final EIR for the RTRP defines maximum corona noise levels during wet weather at 28 dBA; however the estimated noise level was not supported by noise measurements at similar 230-kV transmission lines in the area. Corona noise from a transmission line operating at 230-kV was measured at 29 dBA at 100 feet from the 230-kV transmission line during dry weather conditions in San Diego (SDG&amp;E 2014). The maximum corona noise level may exceed 28 dBA at sensitive receptors.</p> <p>Corona noise impacts would affect a larger number of sensitive receptors than considered in the Final EIR. Sensitive receptors to noise, such as residents of the new Riverbend housing project, were not contemplated in the Final EIR impact analysis, as this housing development was not constructed or approved at the time of the Final EIR.</p>                  |
| 3      | <p><b>Provide an updated Aesthetics and Visual Resources Technical Report for the 230-kV Transmission Corridor.</b></p> <p>The 2010 Aesthetics and Visual Resources Technical Report prepared by Power Engineers needs to be updated to reflect current and future development projects along the proposed 230-kV transmission corridor. This includes updating the inventory results (scenic quality and visual integrity, sensitivity analysis), impact methods (viewshed analysis, number and location of key observation points, and photo-simulations), and impact results.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| 4      | <p><b>Provide GIS data for utility lines in the roads that are shown as underground alternative routes. Define the size of each utility line and the spacing of existing utilities. Define utility separation requirements for the underground 230-kV transmission line.</b></p> <p>The Deficiency Response #1, Part 6 <i>Riverside Transmission Reliability Project (RTRP) 230 kV Underground Alternatives Desktop Study July 2015</i>, identifies three potential underground alternatives and possible challenges to implementation of the alternatives. The document states, “no survey of underground utilities has been completed to date. The presence of existing underground utilities would likely impact the technical and environmental challenges associated with each undergrounding alternative.” Information is required on the type and location of existing utilities to assess the feasibility of constructing an underground transmission line in any of the three alternative alignments.</p> <p>Provide this data for the entire transmission line alignment as it traverses Jurupa Valley, including within the Riverbend development through the existing commercial/industrial developments of the Vernola Marketplace and the business park at Landon Drive and Wineville Avenue.</p> |
| 5      | <p><b>Provide mapped locations and GIS data for any utility lines that have been constructed within the RTRP alignment and utilities that are expected to be installed as part of the approved developments.</b></p> <p>The Riverbend housing development is currently under construction within the RTRP Alignment. Utilities may be installed prior to NOP. Photo 1 (below) from August 18, 2015, provides evidence that infrastructure is being installed on the site. A development has already been constructed at the Wineville Avenue and Landon Drive. The locations of all utilities within the RTRP alignment is needed to evaluate impacts on utilities.</p> <p><b>Photo 1: Riverbend Housing Development Construction</b></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |

Table 1: SCE Riverside Transmission Reliability Project Application 15-04-013 Deficiencies

| Number | Deficiency and Information Needed                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
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|        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| 6      | <p><b>Provide an assessment of the effects to population and housing from construction of the proposed route through approved Riverbend, Vernola Marketplace Apartment, William Lyon/Turnleaf and Stratham/Harmony Trails subdivisions. What is the maximum number of homes that would be displaced in these approved subdivisions?</b></p> <p>Item #8 of the Deficiency Response #1 states:</p> <p>“RTRP is not expected to displace substantial numbers of existing homes necessitating the construction of homes elsewhere, and is not expected to displace substantial numbers of people.” This statement is misleading because Final Maps and Grading Permits have been approved within the RTRP alignment, and in the case of William Lyon/Turnleaf, houses have been built and are occupied. The project would displace approved and constructed residential units depending on the timing of construction for RTRP and the housing developments within the RTRP alignment.</p> |
| 7      | <p><b>Provide copies of cultural resource survey reports for the 230 kV RTRP alignment. Provide the results of a current record search through the California Historical Resources Information System (CHRIS).</b></p> <p>The Final EIR and Administrative Record do not include the full cultural resource survey reports for the RTRP. This information is needed to verify that eligibility determinations have been made for all cultural resources consistent with the decision in Madera Oversight Coalition v. County of Madera.</p> <p>A current historical resources record search is required because additional resources may have been encountered and documented in the RTRP alignment during recent earthwork and mass grading for the projects within the RTRP alignment.</p>                                                                                                                                                                                           |

**Table 1: SCE Riverside Transmission Reliability Project Application 15-04-013 Deficiencies**

| Number | Deficiency and Information Needed                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 8      | <p><b>Provide a current EDR Report for the 230 kV RTRP alignment and substations.</b></p> <p>The previous Phase I Environmental Site Assessment (ESA) is over 1 year old and is no longer valid for the Subsequent EIR. Provide an updated Phase I ESA that documents the current status of hazardous material sites within the RTRP alignment and substations.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| 9      | <p><b>Provide updated air quality and greenhouse gas emissions modeling for the SCE project components including the 230-kV transmission lines. Provide the model assumptions to support the model output. Provide updated air quality dispersion modeling using current air quality models and meteorological data.</b></p> <p>The Final EIR uses old out-of-date air quality models, air quality data, and emissions factors to calculate RTRP construction emissions and evaluate impacts. The air quality and greenhouse gas emissions modeling needs to use current EMFAC2014 emissions factors. SCE's model assumptions (e.g., use of Tier 2, Tier 3, or Tier 4 equipment) and helicopter emissions modeling are also required.</p> <p>The Final EIR analysis of localized effects of air quality on sensitive receptors relies on ISCST3 modeling to define pollutant levels at sensitive receptors. ISCST3 is out-of-date and the California Air Resources Board (CARB) recommends use of AERMOD for dispersion modeling. The USEPA Guideline on Air Quality Models recommend that the most recent five years of consecutive meteorological data should be used for air quality modeling. Provide updated dispersion modeling using the AERMOD model and recent meteorological data.</p> |
| 10     | <p><b>Provide information on existing and proposed right-of-way (ROW) and easements in the area where the RTRP alignment intersects with the approved projects. Identify the type of ROW (i.e., owned in fee or easement), the width of the proposed ROW, the location of the ROW relative to the property boundaries for the approved projects, and the location of the transmission line within the ROW. Identify any limitations on uses within the ROW.</b></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| 11     | <p><b>Clarify how rights for access and temporary construction areas outside of the ROW will be secured.</b></p> <p>SCE states the following regarding hazards during construction, "SCE anticipates that it will be able to construct the foundations for the tubular steel pole (TSP) and lattice steel towers (LSTs) within a 100-foot ROW". This statement appears to conflict with the work space requirements defined on page 13, where SCE indicates "Typical laydown areas for construction and assembly of TSPs are approximately 200 feet by 100 feet."</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| 12     | <p><b>Provide the basis for the 100-foot right-of-way width used for the RTRP. Does SCE have any narrower rights-of-way for 230-kV transmission lines?</b></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| 13     | <p><b>Provide GIS data for the following:</b></p> <ul style="list-style-type: none"> <li>• <b>Project alignment, substations, and all temporary and permanent impact areas defined in response to Item 1 above</b></li> <li>• <b>Biological resources including</b> <ul style="list-style-type: none"> <li>○ <b>Vegetation communities</b></li> <li>○ <b>Special status species locations</b></li> <li>○ <b>Jurisdictional resources</b></li> </ul> </li> <li>• <b>Cultural resources including</b> <ul style="list-style-type: none"> <li>○ <b>Resource locations and boundaries</b></li> <li>○ <b>Survey boundaries</b></li> </ul> </li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |

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| 14     | <p><b>Provide a current aerial image (georeferenced TIFF file) for the 230-kV transmission line and substations that reflects site conditions as they exist today.</b></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| 15     | <p><b>Please clarify if the duct bank separation included in the desktop study is based on heat calculations using the proposed project power flow or if there is some other basis for the separation. Assuming there are no heat generating utilities adjacent to the underground duct banks, please identify the minimum ROW width (i.e., no buffer) required for the two 230-kV underground circuits.</b></p> <p>Page 26 to 27 of the Underground Desktop Study dated July 2015 indicates that the ROW for the two 230-kV circuits would be approximately 50 feet. The study then goes on to illustrate a minimum ROW that is 40 feet; however, this width includes 10 feet of buffer on each side of the proposed duct banks. These ROW requirements appear excessive since many of the existing utilities in roadways are not heat generating.</p>                                                                                                                          |
| 16     | <p><b>Please provide a layout of the cable vault with dimensions explaining the 48-foot length. In addition, please explain why two splice vaults are needed per circuit.</b></p> <p>The cable vault longitudinal dimension appears excessive in view of the practices of other utilities (e.g., PG&amp;E utilizes 25-foot long vaults for 230 kV). It appears that SCE is indicated that a separate vault would be used for each set of three cables. The reasoning for this separation is not explained and the additional vaults result in a very large amount of excavation. The additional vaults are understandable where the cables are different circuits; however, it is not clear why this is needed for the RTRP where each circuit is made up of six cables. From a worker safety perspective, when the circuit is de-energized all six cables would be out of service so it would seem there is no safety issue with locating all six cables in the same vault.</p> |
| 17     | <p><b>Provide an explanation of the 557 MW capacity limit from Vista to serve Riverside Public Utility (RPU) demand. How many transformers at Vista are for Riverside load?</b></p> <p>The system Information that we have for Vista shows that there are four (4) 220/66 kV transformers with a combined capacity of 1,120 MVA (4 banks at 280 MVA each). The combined capacity is increased to 1,204 (3 banks at 308 MVA + 1 bank at 280 MVA) in planning models for 2019 and beyond. What is the limiting factor or contingency? It is not clear from the 2006 Transmission Plan.</p>                                                                                                                                                                                                                                                                                                                                                                                         |
| 18     | <p><b>Please provide a specific memo or report documenting that the CAISO directed SCE to build the RTRP in June 2006.</b></p> <p>The CPUC has not seen any reports or documents stating that the project was approved by CAISO or that SCE was directed to build it.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| 19     | <p><b>Please provide the SCE 2006-2027 Transmission Expansion Plan.</b></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |