STATE OF CALIFORNIA Gavin Newsom, Governor

PUBLIC UTILITIES COMMISSION
505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3298

November 19, 2020

Ms. Lori Charpentier
Licensing/Regulatory Affairs
Southern California Edison
2244 Walnut Grove Ave.
Rosemead, CA 91770

Re: Data Request #8 for the SCE Ivanpah-Control (I-C) Project (A.19-07-015)

Dear Ms. Charpentier:

Southern California Edison Company (SCE) submitted its Amended Permit to Construct (PTC) application and Proponent's Environmental Assessment (PEA) on April 13, 2020.

The attached excerpts from the previously filed documents show that the end of construction date has slipped more than two years since the filing of the 2018 Draft PEA. The 2018 Draft PEA stated that the project would be operational in 2024. The 2019 PTC Application and PEA stated an operational date of 2025. In the 2020 Amended PTC Application, SCE stated that the project would be operational by second quarter of 2026 (Project Schedule; page C-1).

SCE's application material states that the initial identification of clearance discrepancies was in 2006, with a mitigation plan filed with the Western Electricity Coordinating Council (WECC) in 2007. Given that the current PTC schedule now shows compliance (end of construction) occurring in 2026, we are trying to understand the extent to which this project's implementation is urgent, and what factors define the flexibility with various regulatory requirements.

We would like to better understand the project need and schedule. Please answer the following questions:

1. SCE has stated its need to comply with the requirements of CPUC's General Order (G.O.) 95 and with requirements of the North American Electric Reliability Corporation (NERC).
    a. What are the specific CPUC G.O.95 requirements related to schedule or compliance timing?
    b. What are the specific requirements and timelines with which SCE is complying for NERC?
2. What date was defined in SCE's mitigation plan for addressing its identified discrepancies, as filed with and accepted by WECC in 2007?

3. The April 2020 Amended PEA states "*SCE is committed to undertaking all reasonable efforts to correct these discrepancies prior to January 1, 2025*" (PTC Application, Section II), but the schedule attached to the PTC Application (Attachment C) and PEA Table 3.7-10 state that the project would be operational by April 2026. Please explain the apparent inconsistency between the 2025 and 2026 dates.

4. We note that the 2020 Amended PTC schedule shows construction starting in January of 2023. However, the NEPA schedule provided to SCE and the CPUC by the Bureau of Land Management (BLM) in August of 2020 shows that the BLM would issue its Record of Decision (ROD) in March of 2023.

    a. Please describe the effect on the construction schedule and expected construction start date if SCE does not obtain a decision on the project until March of 2023

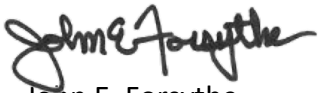
    b. Please describe the effects on SCE's compliance with CPUC, NERC, and WECC requirements if construction is delayed based on BLM issuance of a ROD in March of 2023.

    c. It is apparent that the BLM schedule may be further delayed with a ROD issued after March of 2023 due to SCE's later than anticipated submittal of the Plan of Development, and due to the late completion of Cultural Resources reports. Please describe the effect on SCE's compliance with CPUC, NERC, and WECC requirements if a decision is issued after March 2023 and construction is delayed further than identified in item 4.a, above.

Please provide this information within 2 weeks, by December 4, 2020. Please provide a copy of the response to me and one to Susan Lee at Aspen Environmental Group, in electronic format only.

Additional data requests may be necessary to address other issues as we move forward with EIR preparation. Any questions on this data request should be directed to me at (916) 217-5073 or by email at john.forsythe@cpuc.ca.gov.

Sincerely,



John E. Forsythe
Project Manager for I-C Project
Energy Division CEQA Unit

cc: Rosalie Barcinas, Southern California Edison
Christine Root, CPUC Energy Division, CEQA Group Supervisor
Joan Patrovsky, Project Manager, BLM
Susan Lee, Sandra Alarcón-Lopez, and Beth Bagwell, Aspen Environmental Group
Susanne Heim, Panorama Environmental
Peter Rocco, Jo Render, Galileo
Jace Fahnestock and Kelly Green, Northwind
Paul Callahan, Burns and McDonnell

Excerpts from 2018 Draft PEA, July 2019 PTC Application and PEA, and April 2020 Amended PTC Application and PEA

A. 2018 Draft PEA

2018 Draft PEA, Section 2.1, Overview

In 2006, SCE identified that the clearances along some of its circuits were not compliant with the clearances required by CPUC GO 95 due to a combination of line rating changes; the installation of additional infrastructure under SCE lines over time; and survey, engineering, and construction inaccuracies. This information was communicated to both the CPUC and the California Independent System Operator (CAISO). SCE then initiated a Light Detection and Ranging (LiDAR) study and engineering modeling work to confirm these discrepancies.[1] [2]The discrepancies were reported to the North American Electric Reliability Corporation (NERC) by SCE, and a mitigation plan to address these discrepancies was filed with and accepted by the Western Electricity Coordinating Council (WECC).

The scope of remediation activities to address discrepancies can range from minor repairs (e.g., adding or lowering a crossarm) to more complex work (e.g., conversion from overhead to underground, line relocations, etc.). The collective effort to identify and remediate these findings is referred to as the Transmission Line Rating Remediation (TLRR) Program. Based on the LiDAR and engineering modeling work, SCE's TLRR Program is developing a remediation plan for each discrepancy to ensure compliance with CPUC GO 95. These plans are being developed to meet the commitments that SCE made in 2011 to the CPUC's Safety and Enforcement Division. SCE agreed to fix all discrepancies on its bulk power facilities by 2025 and to fix all discrepancies on its 115 kV radial lines by 2030.

The purpose of the Proposed Project is to ensure compliance with CPUC GO 95 by remediating approximately 2,950 discrepancies identified through SCE's TLRR Program…

2018 Draft PEA, Section 2.2 Project Objectives

Ensure compliance with CPUC General Order 95 and NERC Facility Ratings. The purpose of the Rules contained within CPUC GO 95 is to "formulate, for the State of California, requirements for overhead line design, construction, and maintenance, the application of which will ensure adequate service and secure safety to persons engaged in the construction, maintenance, operation or use of overhead lines and to the public in general." The base objective of the Proposed Project is to remediate the identified discrepancies in order to ensure compliance with CPUC GO 95 by 2024.

Remediating the identified discrepancies will bring the lines into compliance with the NERC Facility Rating for the lines, including NERC Standard FAC-009-1, which requires that SCE ensure that Facility Ratings used in the reliable planning and operation of the Bulk Electric System (BES) are determined based on an established methodology or methodologies. Remediating the identified discrepancies will also ensure

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[1] An individual instance of non-compliance with CPUC GO 95 is referred to as a discrepancy. Discrepancies are defined as potential clearance problems between an energized conductor and its surroundings, such as the structure, another energized conductor on the same structure, a different line, or the ground, among others.

[2] Light Detection and Ranging (LiDAR) technology uses ultraviolet or near infrared light to image objects and map physical features. SCE uses aircraft equipped with LiDAR equipment to identify locations throughout SCE's service territory that do not meet the minimum required clearances for overhead lines established in CPUC GO 95

compliance with applicable WECC reliability planning criteria: the work will be completed as detailed in the mitigation plan filed by SCE and accepted by WECC in 2007.

Continue to provide safe and reliable electrical service. Under the Federal Energy Regulatory Commission (FERC), NERC, WECC, and CPUC rules, guidelines and regulations, SCE has the responsibility to ensure that electrical transmission, subtransmission, and distribution systems have sufficient capacity to maintain safe, reliable, and adequate service to customers. To ensure the availability of safe and reliable electric service, SCE has established a set of criteria by which it determines when new projects are needed. The safety and reliability of the systems must be maintained under normal conditions when all facilities are in service, and also maintained under abnormal conditions when facilities are out of service due to equipment or line failures, maintenance outages, or outages that cannot be predicted or controlled which are caused by weather, earthquakes, traffic accidents, and other unforeseeable events.

The Proposed Project would provide safe and reliable electrical service by remediating the identified discrepancies. Discrepancies may contribute to unplanned outages and thus decreased electric service reliability; remediating the identified discrepancies will thus allow SCE to continue to provide reliable electric service to its customers. Further, the engineering solutions employed to remediate the identified discrepancies, including installation of new poles, towers, and conductor that meet current SCE standards, will serve to increase safety and reliability by modernizing the lines' infrastructure.

3.3 Project Objectives

As described further in *Chapter 2 – Project Purpose and Need and Objectives*, the Proposed Project is being proposed to meet the following objectives:

- Ensure compliance with CPUC General Order 95 and NERC Facility Ratings for this project by 2024

B. July 2019 PTC Application and PEA

PTC Application, section I (Introduction), page 2

In 2006, SCE identified discrepancies along many of its circuits where minimum clearances are not being met compared to what is required by GO 95. In response, SCE established its Transmission Line Rating Remediation ("TLRR") Program. The TLRR Program is focused on developing and implementing engineering solutions for each identified discrepancy, and thereby bringing the circuits into compliance with CPUC G.O. 95 by meeting the California Independent System Operator ("CAISO") 2008 ampere rating registry. SCE is planning to remediate all discrepancies on its bulk electric system facilities by 2025 and to fix all discrepancies on its 66 kV and 115 kV radial lines by 2030. Pursuant to the TLRR Program, SCE identified approximately 2,950 discrepancies along the following 115 kV subtransmission line circuits, among others:

- Control-Haiwee-Inyokern
- Control-Coso-Haiwee-Inyokern
- Kramer-Inyokern Randsburg No. 1
- Coolwater - Kramer
- Kramer-Tortilla
- Coolwater-SEGS2-Tortilla
- Ivanpah-Baker-Coolwater-Dunn Siding-Mountain Pass

These circuits are located in portions of unincorporated Inyo County, Kern County, and San Bernardino County, and within the City of Barstow, and the remediation of discrepancies along these specific circuits constitutes the scope of the IC Project. Because all of these circuits are 115 kV rated and also a part of the bulk transmission system, they are expected to be corrected by 2025.

II. BACKGROUND AND SUMMARY OF REQUEST

As described further in PEA *Chapter 2 – Project Purpose and Need and Objectives*, the IC Project is being proposed to meet the following objectives:

- Ensure compliance with CPUC General Order 95 and North American Electric Reliability Corporation (NERC) Facility Ratings for the components associated with the IC Project by 2025.

Construction of the IC Project is scheduled to begin in 3rd quarter 2022 and scheduled to be completed by 2nd quarter 2025. A detailed schedule for the IC Project is included in this Application as APPENDIX C.

SCE Proposed Schedule (PTC Application page 18 and Appendix C):

- Draft EIR: April 2020
- Final EIR: September 2020
- Final Decision: May 2021
- Construction Start: April 2022
- Commence Operations: June 2025

C. April 2020 Amended PTC Application and PEA

PTC Application, Section II. PROJECT SCOPE AND BACKGROUND

The purpose of the IC Project is to remediate physical clearance discrepancies identified on some of SCE's existing 115 kilovolt ("kV") subtransmission lines.[1] CPUC General Order 95 ("G.O. 95") Rules 37 through 39 specify minimum vertical and horizontal clearances to be maintained between an electrical conductor and other conductors, or between a conductor and the ground, buildings, and a variety of other objects. In 2006, SCE identified discrepancies along many of its circuits where minimum clearances are not being met compared to G.O. 95 standards.

In response, SCE established its Transmission Line Rating Remediation ("TLRR") Program. The TLRR Program is focused on developing and implementing engineering solutions for each identified discrepancy to bring the circuits into compliance with standards contained in G.O. 95 and the California Independent System Operator ("CAISO") 2008 Transmission Register. SCE is committed to undertaking all reasonable efforts to remediate all discrepancies on its bulk electric system facilities by 2025 and to fix all discrepancies on its 115 kV radial lines by 2030. All subtransmission lines which make up the IC Project are 115 kV and are also a part of the bulk electric system, and SCE is committed to undertaking all reasonable efforts to correct these discrepancies prior to January 1, 2025.

III. SUMMARY OF REQUEST

As described further in April 2020 PEA Chapter 2 – Project Purpose and Need and Objectives, the IC Project is being proposed to meet the following objectives:

- Ensure compliance with CPUC General Order 95 and North American Electric Reliability Corporation ("NERC") Facility Ratings for the components associated with the IC Project.

SCE suggests the following proposed schedule for this Amended Application:

Date	Event
April 2020	Amended Application Filed
September 2020	Initial Study Issued
November 2020	Amended Application Deemed Complete
April 2021	Draft CEQA Document Issued
August 2021	Final CEQA Document Issued
December 2021	Proposed Decision Issued
February 2022	Final Decision

PTC Application Appendix C

Proposed Ivanpah-Control Project Schedule

Date	Event
April 2020	Amended Application Filed
September 2020	Initial Study Issued
November 2020	Amended Application Deemed Complete
April 2021	Draft CEQA Document Issued
August 2021	Final CEQA Document Issued
December 2021	Proposed Decision Issued
February 2022	Final Decision
January 2023	Construction Start
April 2026	Commence Operation

Appendix D: Notice of Amended Application for a Permit to Construct

Proposed Project: Southern California Edison Company (SCE) has filed an amended application (Amended Application) with the California Public Utilities Commission (CPUC) for a Permit to Construct (PTC) the Ivanpah-Control Project (IC Project). The primary purpose of the IC Project is to ensure compliance with CPUC General Order 95 (G.O. 95) and North American Electric Reliability Corporation (NERC) Facility Ratings through remediating physical clearance discrepancies identified on existing 115 kilovolt (kV) subtransmission lines. In particular, G.O. 95 Rules 37 through 39 specify minimum vertical and horizontal clearances that must be maintained between an electrical conductor and other conductors, or between a conductor and the ground, buildings, and a variety of other objects. In 2006, SCE identified discrepancies along many of its circuits where minimum clearances are not being met compared to what is required by G.O. 95. The IC Project will rectify approximately 2,950 such discrepancies…

PEA Section 1.3 Project Objectives and Alternatives

In 2006, SCE identified discrepancies along many of its circuits where minimum clearances are not being met compared to what is currently required by GO 95. In response, SCE established its Transmission Line Rating Remediation (TLRR) Program. The TLRR Program is focused on developing and implementing engineering solutions for each identified discrepancy to bring the circuits into compliance with standards contained in CPUC GO 95 and the California Independent System Operator (CAISO) 2008 Transmission Register. SCE is committed to undertaking all reasonable efforts to correct discrepancies on the IC Project 115 kV subtransmission lines prior to January 1, 2025.

PEA Section 2.1, Overview

In 2006, SCE identified that the clearances along some of its circuits were not compliant with the clearances set forth in CPUC GO 95 due to: the installation of additional infrastructure under SCE lines over time; survey, engineering, and construction inaccuracies; the growth of vegetation; and changes in topography. This information was communicated to both the CPUC and the California Independent System Operator (CAISO). SCE then initiated a Light Detection and Ranging (LiDAR) study and engineering modeling work to confirm these discrepancies. The discrepancies were reported to the North American Electric Reliability Corporation (NERC) by SCE as the GO 95 discrepancies result in reduction to line ratings, and a mitigation plan to address these discrepancies was filed with and accepted by the Western Electricity Coordinating Council (WECC).

3.7.6 Construction Schedule

SCE anticipates that construction of the IC Project would take approximately 36 months.[14] Construction would commence following CPUC approval, final engineering, procurement activities, land rights acquisition, and receipt of all applicable permits.

Table 3.7-10: Proposed Construction Schedule

Project Activity	Approximate Duration (Months)	Approximate Start Date
PTC	—	July 2019
Revised PEA Submission	22	April 2020
Final Engineering	8	September 2022
Right-of-Way/ Property Acquisition	18	March 2022
Acquisition of Required Permits	16	April 2021
Subtransmission Line Construction	39	January 2023
Cleanup	8	August 2025
Project Operational	—	April 2026