

PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE
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December 9, 2024

SA2024-1211

Melvin Stark
Principal Manager, T&D Compliance Integration
Southern California Edison
1 Innovation Way
Pomona, CA 91768

SUBJECT: Substation Audit of Southern California Edison Orange County AOR

Mr. Stark:

On behalf of the Electric Safety and Reliability Branch of the California Public Utilities Commission (CPUC), Calvin Choi of my staff conducted a substation audit of Southern California Edison (SCE) Orange County AOR from November 4, 2024 to November 8, 2024. The audit included a review of SCE's records and field inspections of SCE's substation facilities.

During the audit, my staff identified violations of one or more General Orders (GOs). A copy of the audit findings itemizing the violations is enclosed. Please advise me no later than January 9, 2025, by electronic or hard copy, of all corrective measures taken by SCE to remedy and prevent such violations.

Please note that ESRB will be posting the audit report and your response to our audit on the CPUC website. If there is any information in your response that you would like us to consider as confidential, we request that in addition to your confidential response, you also provide us with a public or redacted version of your response that can be posted publicly on our website.

If you have any questions concerning this audit, you can contact Calvin Choi at (213) 266-4730 or Calvin.Choi@cpuc.ca.gov.

Sincerely,

A handwritten signature in blue ink that reads "Fadi Daye".

Fadi Daye, P.E.
Program and Project Supervisor
Electric Safety and Reliability Branch
Safety and Enforcement Division
California Public Utilities Commission

Enclosures: Audit Findings

Cc: Lee Palmer, Director, Safety and Enforcement Division, CPUC
Calvin Choi, Utilities Engineer, ESRB, SED, CPUC

AUDIT FINDINGS

I. Records Review

During the audit, my staff reviewed the following records:

- SCE GO 174 Substation Inspection Practices
- SCE Operators Manual, Section 6.9: Substation Inspections
- SCE's Substation Procedures
- Summary of SCE Orange County AOR Substation Operators Training Records
- Summary of Substation Inspections
- Inspection Checklists and One-Line Diagrams
- Pending and Completed Workorders
- Summary of results of Infrared Testing
- Summary of results from Substation Dissolved Gas Analysis

II. Records Review – Violations List

My staff observed the following violations during the records review portion of the audit:

GO 174, Rule 12, General, states in part:

Design, construction, and maintenance should be performed in accordance with accepted good practices for the given local conditions known at the time by those responsible.

Between December 2023 and August 2024, SCE failed to complete 38 work orders by SCE's assigned due date.

III. Field Inspections

My staff inspected the following facilities during the field inspection:

No.	Substation Name
1	Serrano
2	Canyon
3	Brea
4	Olinda
5	La Habra
6	Parkwood
7	Burris Pit
8	Lewis
9	Titans
10	Fullerton
11	Basta
12	Gilbert
13	Sunnyhills
14	Ellis
15	Hamilton
16	Orcogen
17	Recovery
18	Soco
19	Oceanview
20	Brookhurst
21	Team
22	Cedarwood
23	Lampson
24	Las Lomas
25	Irvine
26	Limestone
27	Chiquita
28	Niguel
29	Moulton

IV. Field Inspection - Violations List

My staff observed the following violations during the field inspections portion of the audit:

GO 174, Rule 12, General, states in part:

Substations shall be designed, constructed, and maintained for their intended use, regard being given to the conditions under which they are to be operated, to promote the safety of workers and the public and enable adequacy of service.

Design, construction and maintenance should be performed in accordance with accepted good practices for the given local conditions known at the time by those responsible.

Facilities at the following substations were not maintained for their intended use:

Brea

- One cooling fan on the No. 2 Bank South Unit transformer was not starting.

Olinda

- 2 bushings on the West Bus 66kV potential transformers had low oil readings.

Titans

- There were no warning signs on the West side perimeter wall.

Fullerton

- One cooling fan on the No. 3 Bank South Unit transformer was not starting.

Gilbert

- 2 cooling fans on the No. 1 Bank North Unit transformer were not starting.

Oceanview

- The Clearance Required gate bar was not securing the gate as intended on the No. 1 Cap Bank perimeter fence.

Brookhurst

- There was an oil leak from the radiator on the No. 1 Bank transformer. Additionally, one cooling fan was not starting.
- There was an oil leak from the radiator on the No. 2 Bank transformer.

Limestone

- The Clearance Required gate bar was not securing the gate as intended on the 66kV Transfer Bus perimeter fence.

Chiquita

- There was an oil leak from a valve near the top of the radiator on the No. 3 Bank West Unit transformer.

Niguel

- One cooling fan on the No. 2 Bank transformer was not starting.
- The Clearance Required gate bar was not securing the gate as intended on the 66kV Operating Bus perimeter fence.

Limestone

- The Santiago-Limestone Transfer Bus potential transformer was leaking oil.