

PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3298



May 16, 2023

SA2023-1046

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

SUBJECT: Substation Audit of Southern California Edison El Nido Switching Center

Mr. Stark:

On behalf of the Electric Safety and Reliability Branch of the California Public Utilities Commission (CPUC), Mily Vaidya of my staff conducted a substation audit of Southern California Edison (SCE) El Nido Switching Center from February 27 to March 3, 2023. 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 June 19, 2023, by electronic or hard copy, of all corrective measures taken by SCE to remedy and prevent such violations.

If you have any questions concerning this audit, you can contact Mily Vaidya at (213) 999-8528 or Mily.Vaidya@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
Nika Kjensli, Program Manager, ESRB, SED, CPUC
Mily Vaidya, 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 Section 6.09 Substation Inspections, Operators Manual
- SCE Substation Policies and Procedures (oil testing, battery, counter results, infrared testing, fire extinguisher inspections, electrical testing, updated ground grid testing GGT Rev 1).
- SCE RMP-02, Protection System Maintenance Program
- SCE SC&M Maintenance and Inspection Manual Sections 4, 5, and 6 (Oil Testing)
- Summary of SCE El Nido District Substation Inspector Training Records
- Summary of Substation Inspections in the El Nido District
- Pending and Completed Work orders for 2022
- Summary of results of infrared testing in 2022

II. Field Inspections

My staff inspected the following facilities during the field inspection:

| No. | Substation Name |
|------------|--------------------------|
| 1 | COSMIC SUBSTATION |
| 2 | HOWARD SUBSTATION |
| 3 | ROSECRANS SUBSTATION |
| 4 | DOUGLAS SUBSTATION |
| 5 | SERVER SUBSTATION |
| 6 | SEPULVEDA SUBSTATION |
| 7 | FELTON SUBSTATION |
| 8 | BRIDGE SUBSTATION |
| 9 | MARINE SUBSTATION |
| 10 | OCEAN PARK SUBSTATION |
| 11 | TAHITI SUBSTATION |
| 12 | MANHATTAN SUBSTATION |
| 13 | REDONDO SUBSTATION |
| 14 | TORRANCE SUBSTATION |
| 15 | PALOS VERDES SUBSTATION |
| 16 | MARYMOUNT SUBSTATION |
| 17 | BLUFF COVE SUBSTATION |
| 18 | ROLLING HILLS SUBSTATION |

III. 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:

Cosmic Substation

- Along an interior substation fence, staff discovered a gate that was not locked and secured because of a damaged foundation footing.

Rosecrans Substation

- A potential transformer associated with the Sepulveda line had corrosion on the secondary side.

Douglas Substation

- A fire extinguisher was not inspected as required.

Server Substation

- Warning signs were faded and not easily readable.

Sepulveda Substation

- There was no chemical hazard warning sign at the entrance of a room that stored batteries.
- A transformer fan cabinet door was not functional because the hinge was broken and corroded.

Felton Substation

- Vegetation and other debris were found under the radiator of the “4 Bank 16/4kV” Transformer.
- The No. 1-2-3-4 16kV bank circuit breaker grounding cover was loose.
- There was no chemical hazard sign for the battery storage unit.

Tahiti Substation

- There was no chemical hazard sign for the battery storage unit.
- There was a bird nest in circuit breaker CB44 on line CB503.
- There was corrosion in a 3-phase AC panel cabinet.

Manhattan Substation

- There was no chemical hazard sign for the battery storage unit.

Redondo Substation

- There was no chemical hazard sign for the battery storage unit.

Torrance Substation

- There was no chemical hazard sign for the battery storage unit.
- A fire extinguisher was missing from the substation.

Palos Verdes Substation

- There was a beehive in the entrance to the control room.
- There was no chemical hazard sign for the battery storage unit.

Bluff Cove Substation

- There was no chemical hazard sign for the battery storage unit.