

## PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE  
SAN FRANCISCO, CA 94102-3298



November 9, 2023

SA2023-1094

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

**SUBJECT:** Substation Audit of Southern California Edison Vincent Switching Center

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) Vincent Switching Center from October 2, 2023 to October 6, 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 December 11, 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 Calvin Choi at (213) 266-4730 or [Calvin.Choi@cpuc.ca.gov](mailto: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  
Nika Kjensli, Program Manager, ESRB, SED, 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
- Section 6.9 Substation Inspections, of SCE's Operators Manual
- SCE's Substation Procedures
- Summary of SCE Vincent AOR Substation Operators Training Records
- Summary of Substation Inspections in the Vincent AOR
- 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 July 2021 and July 2023, SCE failed to complete 6 work orders by SCE's assigned due date.

### III. Field Inspections

My staff inspected the following facilities during the field inspection:

No.	Substation Name	Address
1	Anaverde	TBD City Ranch Rd., 1/2 Mi. W/O Tierra Subida Ave.
2	Ritter Ranch	TBD RANCH CENTER DR & WESTLAND DR
3	Palmdale	TBD 40Th St. And Avenue "R",
4	Little Rock	TBD 90Th St. East And "O" St. (N/E Corner)
5	Wilsona	TBD C/O Palmdale Blvd. & 230Th St., 23 Miles E/O Town
6	Piute	TBD 90Th East., And Avenue 'J', 9 Mi. E/O Town
7	Oasis	TBD Ave. "M"., And 20Th St.
8	Shuttle	TBD 20Th West., And Ave M-4,
9	Quartz Hill	TBD Ave "L" And 55Th St. West.
10	Rite Aid	TBD C/O Ave H & 30th St.
11	Purify	TBD 2000 BLOCK OF WEST AVENUE D, B/T FWY 14 & SIERRA HWY
12	Redman	TBD 90Th St. East., And Avenue 'E', 15 Mi. N/E Of Town
13	Gorman	TBD Lancaster Rd. (Hwy 138)., 1 Mi. S/O Town
14	Bailey	TBD Lancaster Rd. (Hwy 138). & Gorman Post Rd.
15	Frazier Park	TBD Lockwood Valley Rd., S/O Frazier Mtn Rd.
16	Elizabeth Lake	3152 Lake Hughes Rd.
17	Colossus	Next to Six Flag Parking Lot
18	Saugus	25100 Magic Mountain Pkwy.
19	Goldtown	TBD Oak Creek Ro., 1/2 Mi. W/O Mojave
20	Cal Cement	TBD Oak Creek Rd., 9 Mi. West Of Town
21	Banducci	TBD Highline Rd & Pellisier Rd
22	Monolith	TBD 3 Mi. E/O Tehachapi Blvd., 1 Mi. W/O Cement Plant
23	Rosamond	TBD Rosamond Blvd. And 60Th St.
24	Del Sur	TBD 90Th St. West And Avenue 'H'.

#### **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:

##### **Ritter Ranch**

- There were nests in the bushings of the following circuit breakers: Anaverde 66kV, Actin 66kV, Antelope No. 2 66kV, and Bus Tie 66kV.

##### **Palmdale**

- The maximum temperature needle on the winding temperature gauge was too far to the left of the current temperature needle for the No. 1 Bank 66/12kV North Unit transformer. The maximum temperature needle should be to the right of the current temperature needle.
- The counter (that counts the number of circuit breaker operations) on the No. 2 Bank 12kV Bus Side circuit breaker was not legible.

##### **Piute**

- There was a hole cut into the perimeter fence, compromising security of the substation.
- The ground wires were cut and stolen from the following equipment: No. 2 Bank 66/12kV transformer, No. 2 Bank Metering ROTO switch box, Switchboard SP1.

##### **Oasis**

- One cooling fan on the No. 2 Bank 66/12kV transformer was not functioning.

##### **Quartz Hill**

- There was a nest in the A phase bushing of the Antelope No. 2 66kV Bus Side circuit breaker.

##### **Elizabeth Lake**

- There was a nest in the C phase bushing of the Bus Tie 66kV circuit breaker.

## **Monolith**

- One cooling fan on the No. 1 Bank 66/12kV transformer was not functioning.
- The counter on the Bus Tie 12kV circuit breaker was missing.