



**Melvin Stark**  
Principal Manager  
OE-T&D Compliance & Quality

December 12, 2023

Fadi Daye, P.E.  
Program & Project Supervisor  
Electric and Safety Reliability Branch  
Safety and Enforcement Division  
California Public Utilities Commission  
320 West 4th St., Ste. 500  
Los Angeles, California 90013

SA2023-1094

Subject: Substation Audit of Southern California Edison Vincent Switching Center

Dear Mr. Daye:

Your letter, dated November 9, 2023, requested that we advise you of actions taken by Southern California Edison Company (SCE) to address conditions identified during the Safety and Enforcement Division's (SED's) substation audit of Vincent Switching Center from October 2, 2023 to October 6, 2023.

Your letter requested a response by December 11, 2023. Attached are the conditions mentioned in your letter, and our responses and corresponding actions.

Sincerely,

A handwritten signature in black ink, appearing to read "Mel Stark", enclosed in a rectangular box.

Mel Stark  
Principal Manager, OE-T&D Compliance & Quality  
1 Innovation Way  
Pomona, CA 91768

Enclosures: SED Audit Findings and SCE's Responses

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.

#### ***SCE Response:***

*Without admitting that SCE violated GO 174, Rule 12, SCE responds as follows. Based on SCE's records, SCE completed 6 work orders past their scheduled due date for corrective action. Work orders may be pending or completed past their due dates for valid reasons including but not limited to Outage Constraints, System Emergencies, and Customer Issues.*

### 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.

##### ***SCE Response:***

*The conditions listed above have been recorded in SCE's Work Management System and will be addressed in accordance with SCE's maintenance program.*

- *Bird nest in the bushings of the Anaverde 66kV circuit breaker. **SCE Response:** Due Date 6/4/2024.*
- *Bird nest in the bushings of the Acton 66kV circuit breaker. **SCE Response:** Due Date 6/4/2024.*
- *Bird nest in the bushings of the Antelope No. 2 66kV circuit breaker. **SCE Response:** Due Date 6/4/2024.*
- *Bird nest in the bushings of the Bus Tie 66kV circuit breaker. **SCE Response:** Due Date 6/4/2024.*

##### **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.

##### ***SCE Response:***

*The conditions listed above have been recorded in SCE's Work Management System and will be addressed in accordance with SCE's maintenance program.*

- *Maximum temperature needle on the winding temperature gauge of the current temperature needle for the No. 1 Bank 66/12kV North Unit transformer positioned incorrectly. **SCE Response:** Due Date 9/27/2029.*

- *Illegible counter on the No. 2 Bank 12kV Bus Side circuit breaker. **SCE Response: Due Date 5/29/2027.***

### **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.

#### ***SCE Response:***

*The conditions listed above have been recorded in SCE's Work Management System and were addressed in accordance with SCE's maintenance program.*

- *Hole cut into the perimeter fence. **SCE Response: Completed on 10/9/2023.***
- *Cut and stolen ground wires from the following equipment: No. 2 Bank 66/12kV transformer, No. 2 Bank Metering ROTO switch box, Switchboard SP1. **SCE Response: Completed on 11/18/2023.***

### **Oasis**

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

#### ***SCE Response:***

*The condition listed above has been recorded in SCE's Work Management System and will be addressed in accordance with SCE's maintenance program.*

- *Cooling fan on the No. 2 Bank 66/12kV transformer was not functioning. **SCE Response: Due Date 6/22/2024.***

### **Quartz Hill**

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

#### ***SCE Response:***

*The condition listed above has been recorded in SCE's Work Management System and will be addressed in accordance with SCE's maintenance program.*

- *Bird nest in the A phase bushing of the Antelope No. 2 66kV Bus Side circuit breaker. **SCE Response: Due Date 11/28/2029.***

### **Elizabeth Lake**

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

#### ***SCE Response:***

*The condition listed above has been recorded in SCE's Work Management System and was addressed in accordance with SCE's maintenance program.*

- *Bird nest in the C phase bushing of the Bus Tie 66kV circuit breaker. **SCE Response: Completed on 10/05/23.***

## **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.

### ***SCE Response:***

*The conditions listed above were previously recorded in SCE's Work Management System and will be addressed in accordance with SCE's maintenance program.*

- *Cooling fan on the No. 1 Bank 66/12kV transformer was not functioning. **SCE Response:** Due Date 5/2/2024.*
- *Missing counter on the Bus Tie 12kV circuit breaker. **SCE Response:** Completed on 11/2/2023.*