

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

April 26, 2024

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

SA2024-1116 SUBJECT: Substation Audit of Southern California Edison's Ventura Switching Center

Dear Mr. Daye:

Your letter, dated March 26, 2024, 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 Ventura Switching Center from January 29, 2024 to February 2, 2024.

Your letter requested a response by April 26, 2024. Attached are the conditions mentioned in your letter, and our responses and corresponding actions.

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, Electric Safety and Reliability Branch, CPUC Stacey Ocampo, Utilities Engineer, Electric Safety and Reliability Branch, CPUC

# **AUDIT FINDINGS**

### I. Records Review

During the audit, my staff reviewed the following records:

- Map of the Ventura Switching Center AOR
- Listing of addresses of all substations in SCE Ventura AOR
- GO 174 Sub Inspection Program Summary 2022 Final Signed
- Section 6.9 Substation Inspections, of SCE's Operators Manual
- SCE Substation Policies and Procedures
- SCE Ventura Substation Inspector Training Records
- SCE Substation Inspection Records from December 2020 to November 2023
- Visual inspection checklist, substation equipment list, one-line diagrams and most recent electrical test for six selected substations
- Four most recent oil sample test results
- Pending and Completed Workorders for the year 2023
- Infrared testing for three selected substations in 2023

# II. Field Inspections

No.	Substation Name	City
1	SATICOY	Saticoy
2	PIERPONT	Ventura
3	SAN MIGUEL	Ventura
4	GONZALES	Oxnard
5	CAMGEN	Camarillo
6	ONSHORE	Ellwood
7	ISLA VISTA	Goleta
8	COLEGIO	Isla Vista
9	SANTA BARBARA	Santa Barbara
10	MONTECITO	Santa Barbara
11	ORTEGA	Summerland
12	CARPINTERIA	Carpinteria
13	TAPIA	Malibu
14	RECLAIM	Calabasas
15	CRATER	Agoura
16	MALIBU	Agoura
17	OAK PARK	Thousand Oaks
18	THOUSAND OAKS	Thousand Oaks
19	PHARMACY	Thousand Oaks
20	NEWBURY	Conejo

My staff inspected the following facilities during the field portion of the audit:

# **III. Field Inspection - Violations List**

My staff observed the following violations during the field 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:

### **Saticoy Substation**

• The insulator on Highway 16 kV C-phase jack bus was chipped.

### 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.

• Chipped insulator on Highway 16 kV C-phase jack bus. SCE Response: Due Date 3/20/2030.

# San Miguel Substation

• The 66/16 kV transformer bank no. 2 was leaking oil from the tank bottom valve.

### SCE Response:

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

• 66/16 kV transformer bank No. 2 leaking oil. SCE Response: Due Date 12/31/2025.

### Isla Vista Substation

- The 66 kV B-phase operating bus potential transformer had a very low oil pressure gauge reading.
- The no. 1 transformer bank 16 kV circuit breaker had a very low oil level indication.

### SCE Response:

One of the conditions listed above was previously recorded in SCE's Work Management System at the time of the audit and it will be addressed in accordance with SCE's maintenance program. The remaining condition has been recorded in SCE's Work Management System and will be addressed in accordance with SCE's maintenance program.

• 66 kV B-phase operating bus potential transformer low oil pressure gauge reading.

SCE Response: Due Date 3/20/2030.

• No. 1 transformer bank 16 kV circuit breaker low oil level indication. SCE Response: Completed on 4/6/2024.

# **Montecito Substation**

- The chemical hazard warning sign was missing at the entrance of the room where batteries are stored.
- The Miramar 4 kV step voltage regulator was leaking oil from the side cover.
- The 16/4 kV C-phase transformer was leaking oil under the radiator.

# SCE Response:

Two of the conditions listed above were previously recorded in SCE's Work Management System at the time of the audit and they will be addressed in accordance with SCE's maintenance program. The remaining condition has been recorded in SCE's Work Management System and will be addressed in accordance with SCE's maintenance program.

- Missing chemical hazard warning sign. SCE Response: Due Date 3/20/2030.
- *Miramar 4 kV step voltage regulator leaking oil. SCE Response: Due Date 12/31/2026.*
- 16/4 kV C-phase transformer leaking oil. SCE Response: Completed on 4/21/2024.

# **Ortega Substation**

• The chemical hazard warning sign was missing at the entrance of the room where batteries are stored.

# 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.

• Missing chemical hazard warning sign. SCE Response: Due Date 3/20/2030.

# **Carpinteria Substation**

- The chemical hazard warning sign was missing at the entrance of the room where batteries are stored.
- The insulator on Shefield 16 kV A-phase line side circuit breaker was chipped.

# SCE Response:

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

- Missing chemical hazard warning sign. SCE Response: Due Date 3/20/2030.
- Chipped insulator on Shefield 16 kV A-phase line side circuit breaker. SCE **Response:** Due Date 3/20/2030.

# **Crater Substation**

• The Plateau 16kV line side circuit breaker had a very low oil level indication.

### SCE Response:

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

• *Plateau 16kV line side circuit breaker low oil level.* **SCE Response:** *Due Date* 3/7/2025.

### Malibu Substation

- A bird nest was found under the no. 2 bank 66 kV bus side circuit breaker A-phase current transformer.
- A bird nest was found under the Crater-Valdez 66 kV bus side circuit breaker C-phase current transformer.
- A bird nest was found under the no. 1 bank 66 kV transfer bus circuit breaker C-phase current transformer.

### SCE Response:

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

- Bird nest under the no. 2 bank 66 kV bus side circuit breaker A-phase current transformer. SCE Response: Due Date 3/20/2030.
- Bird nest under the Crater-Valdez 66 kV bus side circuit breaker C-phase current transformer. **SCE Response:** Due Date 3/20/2030.
- Bird nest under the No. 1 bank 66 kV transfer bus circuit breaker C-phase current transformer. SCE Response: Due Date 3/20/2030.

### **Oak Park Substation**

- The chemical hazard warning sign was missing at the entrance of the room where batteries are stored.
- One of the cooling fans on the North side of 66/16 kV transformer bank no. 4 failed to start as expected.

# SCE Response:

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

- Missing chemical hazard warning sign. SCE Response: Due Date 3/20/2030.
- 66/16 kV transformer bank No. 4 cooling fan failed to start. SCE Response: Due Date 9/3/2024.

# **Pharmacy Substation**

• The chemical hazard warning sign was missing at the entrance of the room where batteries are stored.

### 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.

• Missing chemical hazard warning sign. SCE Response: Due Date 3/20/2030.

### **Newbury Substation**

- The 66/16 kV transformer bank no. 1 (North unit) had an opaque and broken window for internal gas pressure gauge.
- The 66/16 kV transformer bank no. 1 (South unit) had an opaque and broken window for internal gas pressure gauge.

### SCE Response:

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

- 66/16 kV transformer bank no. 1 (North unit) opaque and broken window for internal gas pressure gauge. SCE Response: Due Date 3/20/2030.
- 66/16 kV transformer bank no. 1 (South unit) opaque and broken window for internal gas pressure gauge. SCE Response: Due Date 3/20/2030.