



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

April 12, 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

SA2023-1106
SUBJECT: Substation Audit of SCE Orange County switching Center

Dear Mr. Daye:

Your letter, dated February 16, 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 SCE Orange County Switching Center from December 11-15, 2023.

Your letter requested a response by March 18, 2024, and in a subsequent email you granted SCE's request for an extension to April 12, 2024. Attached are the conditions mentioned in your letter, and our responses and corresponding actions.

A handwritten signature in black ink, appearing to read "Mel Stark".

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

Enclosures: SED Audit Findings and SCE's Responses

Cc: Leslie Palmer, Director, Safety and Enforcement Division, CPUC
Nika Kjensli, Program Manager, ESRB, SED, CPUC
Derek Fong, Senior Utilities Engineer Supervisor, ESRB, SED, CPUC
Kyle King, Utilities Engineer, ESRB, SED, CPUC

AUDIT FINDINGS

I. Records Review

During the audit, my staff reviewed the following records:

- SCE GO 174 Substation Inspection Process
- SCE GO 174 Substation Inspection Program
- SCE SOP Protection System Maintenance Program.
- Substation Operators Training Records
- Summary of Substation Inspections
- Inspection Checklists and One-Line Diagrams for ten substations
- Recent open and completed work orders
- Summary of results of Infrared Testing in 2022
- Oil sample testing results
- Infrared inspection records

II. Field Inspections

My staff inspected the following substation facilities during the field inspection:

No.	Substation ID	Location
1	Modena	4725 E. Chapman Ave.
2	Bryan	2031 Bryan St.
3	Orange	233 N. Batavia St.
4	Placentia	200 S. Placentia Ave.
5	Burris Pit (Burpit)	14899 Ball Road., Taft Ave. E/O 57 Fwy
6	Moulton	24731 Bridger Rd.
7	Limestone	2541 Trabuco Rd.
8	Irvine	6921 Trabuco Rd.
9	Las Lomas	TBD C/O Jeffrey Rd & Portola Pkwy (Northwood Area)
10	Estrella	16932 Murphy St.
11	Apollo	TBD Rancho Rd., Between Bolsa Chica Rd. & South Pacific R/R
12	Bolsa	1597 Graham St.
13	Oceanview	8081 E. Warner Ave.
14	Slater	18751 Edwards St.
15	Recovery	20101 Goldenwest St., N/W C/O Of Pch(Hwy1) & Goldenwest
16	Soco	20101 Goldenwest St., N/W C/O Of Pch(Hwy1) & Goldenwest
17	La Habra	1151 Lambert Rd.
18	Parkwood	1530 Imperial Hwy.
19	Sunnyhills	901 W. Malvern Ave.
20	Fullerton	218 Walnut Ave.
21	Titans	800 N. State College Blvd.

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:

Modena Substation

- The Arabia 12 kV Circuit Breaker Bus was leaking oil.

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.

- *Arabia 12 kV Circuit Breaker Bus leaking oil. **SCE Response:** Due Date 11/5/2027.*

Bryan Substation

- The No. 1 South Bank 66/12 kV Bank had an inoperable fan.

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.

- *No. 1 South Bank 66/12 kV Bank inoperable fan. **SCE Response:** Due Date 04/29/2026.*

Orange Substation

- The No. 1 Bank 66/12 kV North Unit Transformer was leaking oil.

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.

- *No. 1 Bank 66/12 kV North Unit Transformer leaking oil. **SCE Response:** Due Date 03/27/2030.*

Placentia Substation

- The No. 1 South Bank 66/12 kV Unit Transformer had an inoperable fan.

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.

- *No. 1 South Bank 66/12 kV Unit Transformer inoperable fan. **SCE Response:** Due Date 09/27/2027.*

Moulton Substation

- The Santiago Limestone 66 kV Potential Transformer Circuit Breaker spigot was leaking oil down a 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.

- *Santiago Limestone 66 kV Potential Transformer Circuit Breaker leaking oil. **SCE Response:** Due Date 11/20/2029.*

Limestone Substation

- The No. 3 Bank Transformer 66/12 kV East Unit confined space permit sign was missing.
- The "Do Not Enter" signage needs to be replaced.

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.

- *No. 3 Bank Transformer 66/12 kV East Unit confined space permit sign missing. **SCE Response:** Due Date 3/27/2030.*
- *Replace "Do Not Enter" signage. **SCE Response:** Due Date 3/27/2030.*

Irvine Substation

- The No. 1 Bank Transformer 66/12 kV North Unit confined space permit sign was missing.
- The "Do Not Enter" signage needs to be replaced.
- The No. 2 Bank Transformer North Unit 66/12 kV confined space permit sign was missing.

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.

- *No. 1 Bank Transformer 66/12 kV North Unit confined space permit sign missing. **SCE Response:** Due Date 3/27/2030.*
- *Replace "Do Not Enter" signage. **SCE Response:** Due Date 3/27/2030.*
- *No. 2 Bank Transformer North Unit 66/12 kV confined space permit sign was missing. **SCE Response:** Due Date 3/27/2030.*

Slater Substation

- The No. 4 West Bank Transformer 66/12 kV West Unit was leaking oil.

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.

- *No. 4 West Bank Transformer 66/12 kV West Unit leaking oil. **SCE Response:** Due Date 3/27/2030.*

La Habra Substation

- The No. 2 Bank Transformer 66/12 kV South Unit was leaking oil.
- The No. 2 Bank Transformer 66/12 kV North Unit was leaking oil.

SCE Response:

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

- *No. 2 Bank Transformer 66/12 kV South Unit leaking oil. **SCE Response:** Due Date 12/05/2024.*
- *No. 2 Bank Transformer 66/12 kV North Unit leaking oil. **SCE Response:** Due Date 12/05/2024.*

Fullerton Substation

- The No. 4 Bank 66/12 kV North Unit was leaking oil.

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.

- *No. 4 Bank 66/12 kV North Unit leaking oil. **SCE Response:** Due Date 3/27/2030.*

Titans Substation

- The Transformer No. 1-2 66 kV Circuit Breaker had damaged signage.

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.

- *Transformer No. 1-2 66 kV Circuit Breaker damaged signage. **SCE Response:** Due Date 3/27/2030.*