

PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3298



May 8, 2023

SA2023-1048

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

SUBJECT: Substation Audit of Southern California Edison's Vista Switching Center

Mr. Stark:

On behalf of the Electric Safety and Reliability Branch of the California Public Utilities Commission (CPUC), Stacey Ocampo of my staff conducted a substation audit of Southern California Edison's (SCE) Vista Switching Center from March 6, 2023 to March 10, 2023. The audit included a review of SCE's records and field inspections of SCE's 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 8, 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 Stacey Ocampo at (213) 266-4712 or Stacey.Ocampo@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
Majed Ibrahim, Senior Utilities Engineer, ESRB, SED, CPUC
Stacey Ocampo, Utilities Engineer, ESRB, SED, CPUC

AUDIT FINDINGS

I. Records Review

During the audit, my staff reviewed the following records:

- Map of the Vista Switching Center AOR
- Listing of addresses of all substations in SCE Vista 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 Vista Substation Inspector Training Records
- SCE Substation Inspection Records from January 2020 to December 2022
- 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 2022
- Infrared testing for three selected substations in 2022

II. Field Inspections

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

Functional Location	Substation	Address	City
ES-8075	Highgrove	12700 Taylor St.	Colton
ES-5610	Colton	TBD Mt. Vernon And 'M' Streets,	Colton
ES-8021	Pepper	TBD Pepper St.	Rialto
ES-5636	Yucaipa	TBD Fourth St. & 'H' St. (Turn On 5Th St)	Yucaipa
ES-5628	Tennessee	TBD N/E C/O 18Th St. & Avenue 'E', S/O Yucaipa Blvd	Redlands
ES-5653	Smiley	TBD Henrietta St. 500 ft. S/W of Pepper Way	Redlands
ES-5629	Redlands	504 High Ave.	Redlands
ES-5604	Timoteo	TBD Mountain View Ave. & Redlands Blvd.	Redlands
ES-5650	Linde	TBD Slover Ave., E/O Etiwanda Ave.	Fontana
ES-5630	Grapeland	8996 ETIWANDA AVE	Rancho Cucamonga
ES-5654	Reduction	12550 Arrow Hwy.	Etiwanda
ES-5662	Arbors	8300 Rochester Ave (Orange Ave) B/T Foothill Bl. & Arrow Rou	Rancho Cucamonga
ES-5601	Randall	7700 Citrus Ave.	Fontana
ES-5139	Genamic	TBD Cleveland Ave., N/O 7Th. St.	Rancho Cucamonga
ES-8093	Shandin	TBD State St., Btwn. Kendall Dr. And Barstow Fwy.	San Bernardino
ES-5641	Mt. Vernon	TBD Orange St. S/O Baseline St., E/O Garner Ave.	San Bernardino
ES-8239	Sixteenth Street	TBD 16Th St. Off Mt. Vernon Ave.	San Bernardino
ES-5602	Arro	TBD 28Th St. And Arrowhead Ave.	San Bernardino
ES-5608	Cardiff	151 N. Waterman Ave.	San Bernardino
ES-5670	Del Rosa	TBD N/E C/O Del Rosa Ave. And Marshall Blvd.	San Bernardino

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:

Colton Substation

- The grounding tail located near the No. 3 Bank 66 kV was exposed on the ground and poses a tripping hazard.
- The cable trench cover in front of the No.3 Bank 66 kV was damaged.
- The grounding tail located near the No. 2 Bank 66kV CB was exposed on the ground and poses a tripping hazard.

Pepper Substation

- The No. 3 Bank 115/12 kV transformer was leaking oil from the main tank.
- The No.2 Bank, west unit had one inoperable cooling fan.

Yucaipa Substation

- A bushing on the ground side of the 66 kV Bus Pot SEC Knife Switch had a low temperature gauge reading.

Redlands Substation

- The No. 1 Bank 66/4 kV transformer was leaking oil from the lower radiator flange gasket between the radiator and the main tank.
- The No. 2 Bank 66/4 kV transformer was leaking oil from the lower radiator flange gasket between the radiator and the main tank.

Arbors Substation

- Two bushings on the Archline 66 kV Relay Pot SEC were missing temperature gauges.
- A bushing on the ET-Forge-Reduction Pot SEC Knife Switch was missing a temperature gauge.

Reduction Substation

- The danger sign on the outside perimeter of the entrance gate was damaged.

Mt. Vernon Substation

- The No. 2 Bank 33/4 kV had one inoperable cooling fan.

Cardiff Substation

- The No. 1 Bank 66/33 kV had two inoperable cooling fans.