STATE OF CALIFORNIA Gavin Newsom, *Governor*
PUBLIC UTILITIES COMMISSION
505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3298

February 16, 2023 SA2022-963

Jennifer Kaminsky
Manager – Electric Assets & Compliance
San Diego Gas and Electric (SDG&E)
8315 Century Park Court, Suite CP22B
San Diego, CA 92123

SUBJECT: Substation Audit of San Diego Gas and Electric Northeast

Ms. Kaminsky:

On behalf of the Electric Safety and Reliability Branch of the California Public Utilities Commission (CPUC), Eric Ujiiye, of my staff conducted a substation audit of San Diego Gas and Electric Northeast from December 5, 2022 to December 9, 2022. The audit included a review of SDG&E's Northeast records and field inspections of SDG&E's Northeast 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 March 17, 2023, by electronic or hard copy, of all corrective measures taken by SDG&E to remedy and prevent such violations.

If you have any questions concerning this audit, you can contact Eric Ujiiye at (213) 620-2598 or Eric.Ujiiye@cpuc.ca.gov.

Sincerely,

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
Eric Ujiiye, Utilities Engineer, ESRB, SED, CPUC

AUDIT FINDINGS

I. Records Review

During the audit, my staff reviewed the following records:

- SDG&E GO 174 Substation Inspection Process
- SDG&E GO 174 Substation Inspection Program
- SDG&E SOP Protection System Maintenance Program.
- Summary of SDG&E Substation Operators Training Records
- Summary of Substation Inspections in the SDG&E territory.
- Inspection Checklists and One-Line Diagrams for ten substations
- Pending and Completed Workorders for the year 2021
- Summary of results of Infrared Testing in 2021
- Summary of results from substation Dissolved Gas Analysis performed in 2021

II. Field Inspections

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

No.	Date Visited	Substation ID	Location
1	12/5/2022	POMERADO	13735 Stowe Dr. Poway
2	12/5/2022	POWAY	13700 E. Twin Peaks Rd. Poway
3	12/5/2022	RANCHO CARMEL	15337 Innovation Drive.
4	12/6/2022	CHICARITA	Azuga St. N/E Rancho Penasquitos Blvd
5	12/6/2022	ARTESIAN RANCH	16001 Camino Del Sur
6	12/6/2022	BERNARDO	10800 Rancho Bernardo Rd.
7	12/6/2022	OLIVEHAIN	Via Rancho Cielito 1/3 e/o Via Ambiente
8	12/6/2022	SAN MARCOS	126 W. Discovery Street
9	12/7/2022	FELICITA	S. Centre Pkwy, 400’ s/o Brotherton Rd.
10	12/7/2022	ESCO	700 W. 3rd Street
11	12/7/2022	ESCONDIDO	571 Enterprise Street
12	12/7/2022	ASH	E. Mission Ave and N Ash Street
13	12/7/2022	VALLEY CENTER	14435 Vesper Blvd.
14	12/7/2022	RINCON	Valley Center Rd. 200’ s/o HWY 76
15	12/7/2022	PALA	n/o Hwy 76 - 4 miles east of I15
16	12/8/2022	MONSERATE	1116 Via Encinos Drive
17	12/8/2022	AVOCADO	429 Industrial Way
18	12/8/2022	LILAC	Gabler Drive ½ mile s/o Castle Rd.

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:

Rancho Carmel Substation

- A bushing sight glass was damaged on Bank 32, making it illegible.
- The power indicator light on the Transformer Gas Analyzer panel on Bank 33 was not working.

Chicarita Substation

- A portion of buried ground wire attached to the 138kV BK41 GCB was protruding out of the ground.

Artesian Ranch Substation

- A cooling fan on transformer Bank 32 was not operating.

Bernardo Substation

- The power indicator lights on the Transformer Gas Analyzer panel on Bank 30, Bank 32, Bank 33 and Bank 34 were not working.

Olivehain Substation

- A cooling fan on transformer Bank 30 was not operating.

Felicita Substation

- The power indicator light on the Transformer Gas Analyzer panel on Bank 31 was not working.

Escondido Substation

- The power indicator light on the Transformer Gas Analyzer panel on Bank 30 and Bank 33 was not working.
- There was oil seepage from the cap located near the top of Transformer Bank 30.
- All the cooling fans on Transformer Bank 33 were found in the on position and could not be turned off.

Ash Substation

- A radiator showed oil seepage at a lower connection point on transformer Bank 30.
- The power indicator light on the Transformer Gas Analyzer panel on Transformer Bank 30 was not working.

Rincon Substation

- The power indicator light on the Transformer Gas Analyzer panel on Transformer Bank 30 and Bank 31 was not working.
- There was oil seepage from bolts securing an access panel cover on Transformer Bank 31.

Monserate Substation

- The power indicator light on the Transformer Gas Analyzer panel on Transformer Bank 30 and Bank 31was not working.

Avocado Substation

- The power indicator light on the Transformer Gas Analyzer panel on Transformer Bank 31 was not working.
- The outer and center phase pothead bushings on the 12kV VCB of transformer Bank 31 was leaking oil.

Lilac Substation

- The power indicator light on the Transformer Gas Analyzer panel on Transformer Bank 31 and Bank 32 was not working.
- A cooling fan on transformer Bank 31 was not operating.