

PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3298



September 30, 2019

CPUC ID: EA2019-831

Brian Prusnek
Director of Regulatory Affairs
San Diego Gas & Electric Company (SDG&E)
8316 Century Park Court CP51D
San Diego, CA 92123

SUBJECT: Electric Distribution Audit of SDG&E's Metro District

Mr. Prusnek:

On behalf of the Electric Safety and Reliability Branch of the California Public Utilities Commission, Saimon Islam and Eric Ujjiye of my staff conducted an electric distribution audit of San Diego Gas & Electric's (SDG&E's) Metro District from July 8, 2019 to July 12, 2019. The audit included a review of SDG&E's records and field inspections of SDG&E'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 October 30, 2019, 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 Ujjiye at (213) 620-2598 or eric.ujjiye@cpuc.ca.gov.

Sincerely,

A handwritten signature in blue ink that reads "Fadi Daye".

Fadi Daye, P.E.
Program Project Supervisor
Electric Safety and Reliability Branch
Safety and Enforcement Division
California Public Utilities Commission

Enclosure: Audit Findings

Cc: Elizaveta Malashenko, Director, Safety and Enforcement Division, CPUC
Lee Palmer, Deputy Director, Office of Utility Safety, CPUC
Charlotte TerKeurst, Program Manager, Electric Safety and Reliability Branch, CPUC
Lonny Saldivar, Compliance Management Manager, San Diego Gas & Electric
Eric Ujjiye, Utilities Engineer, Electric Safety and Reliability Branch, CPUC

AUDIT FINDINGS

I. Records Review

During the audit, my staff reviewed the following records:

- Overhead and underground detailed inspections records.
- Completed and pending corrective action work orders.
- Pole loading calculations.
- Safety hazard notifications.
- Intrusive test records
- SDG&E's documented inspection program.

II. Records Review – Violations List

My staff observed the following violations during the records review portion of the audit:

GO 95, Rule 31.1, Design, Construction and Maintenance, states in part:

For all particulars not specified in these rules, design, construction, and maintenance should be done in accordance with accepted good practice for the given local conditions known at the time by those responsible for the design, construction, or maintenance of communication or supply lines and equipment.

GO 95, Rule 31.2, Inspection of Lines, states in part:

Lines shall be inspected frequently and thoroughly for the purpose of ensuring that they are in good condition so as to conform with these rules. Lines temporarily out of service shall be inspected and maintained in such condition as not to create a hazard.

GO 165, Standard III-B, Distribution Facilities, Standards for Inspections, states in part:

Each utility subject to this General Order shall conduct inspections of its distribution facilities, as necessary, to ensure reliable, high-quality, and safe operation, but in no case may the period between inspections (measured in years) exceed the time specified in Table 1.

SDG&E's records indicated that the detailed inspection of the following structures passed the due date:

Structure ID	Inspection Type	Due Date	Complete Date
P281333	Overhead Detailed Inspection	12/31/2013	6/12/2014
P235043	Overhead Detailed Inspection	12/31/2013	6/12/2014
P235047	Overhead Detailed Inspection	12/31/2013	6/12/2014
P131759	Overhead Detailed Inspection	12/31/2013	6/12/2014
P2114371283	Overhead Detailed Inspection	12/31/2013	6/12/2014
P2117571225	Overhead Detailed Inspection	12/31/2013	6/12/2014
P235087	Overhead Detailed Inspection	12/31/2013	6/12/2014
P235088	Overhead Detailed Inspection	12/31/2013	6/12/2014
P203547	Overhead Detailed Inspection	12/31/2013	6/12/2014
P279573	Overhead Detailed Inspection	12/31/2013	6/12/2014
P181038	Overhead Detailed Inspection	12/31/2013	6/12/2014
P181039	Overhead Detailed Inspection	12/31/2013	6/12/2014
P281335	Overhead Detailed Inspection	12/31/2013	6/12/2014
P281334	Overhead Detailed Inspection	12/31/2013	6/12/2014
P281330	Overhead Detailed Inspection	12/31/2013	6/12/2014
P281331	Overhead Detailed Inspection	12/31/2013	6/12/2014
P281332	Overhead Detailed Inspection	12/31/2013	6/12/2014
P205353	Overhead Detailed Inspection	12/31/2014	1/21/2015
P2148571182	Overhead Detailed Inspection	12/31/2014	1/20/2015
P245860	Overhead Detailed Inspection	12/31/2014	3/25/2015
P86839	Overhead Detailed Inspection	12/31/2014	4/29/2015
P280322	Overhead Detailed Inspection	12/31/2014	4/29/2015
P87536	Overhead Detailed Inspection	12/31/2014	4/29/2015
D162773	Underground Detailed Inspection	12/31/2014	04/06/2015
M2218473259	Underground Detailed Inspection	12/31/2014	05/01/2015
M2215473085	Underground Detailed Inspection	12/31/2014	05/01/2015
M2215172805	Underground Detailed Inspection	12/31/2014	04/08/2015
M2215072667	Underground Detailed Inspection	12/31/2014	04/06/2015
U2127672914	Underground Detailed Inspection	12/31/2014	04/08/2015
M2141074897	Underground Detailed Inspection	12/31/2014	04/07/2015
D1990372876	Padmount Detailed Inspection	12/31/2014	4/9/2015
M2272772562	Underground Detailed Inspection	12/31/2015	5/9/2016

III. Field Inspections

My staff inspected the following facilities during the field inspection:

No.	Structure ID.	Type of Structure	Location
1	P89153	Pole	Otay Mesa
2	P89154	Pole	Otay Mesa
3	P89155	Pole	Otay Mesa
4	P185579	Pole	Otay Mesa
5	P185580	Pole	Otay Mesa
6	P186421	Pole	Otay Mesa
7	P186422	Pole	Otay Mesa
8	P283191	Pole	Otay Mesa
9	P284174	Pole	Otay Mesa
10	P34233	Pole	Otay Mesa
11	P164861	Pole	Otay Mesa
12	P164862	Pole	Otay Mesa
13	P181622	Pole	Otay Mesa
14	P164865	Pole	Otay Mesa
15	P164866	Pole	Otay Mesa
16	P204827	Pole	Otay Mesa
17	P204826s	Pole	Otay Mesa
18	86193	Pole	Otay Mesa
19	P188518	Pole	San Ysidro
20	P188517	Pole	San Ysidro
21	P80183	Pole	San Ysidro
22	P80185	Pole	San Ysidro
23	P84499	Pole	San Ysidro
24	P86451	Pole	San Ysidro
25	P737739	Pole	San Ysidro
26	P166831	Pole	San Ysidro
27	P180714	Pole	Chula Vista
28	P180715	Pole	Chula Vista
29	P180716	Pole	Chula Vista
30	P180717	Pole	Chula Vista
31	86932	Pole	Chula Vista
32	P161914	Pole	Chula Vista
33	P84189	Pole	Chula Vista
34	P83503	Pole	Chula Vista
35	P181229	Pole	Chula Vista
36	P184521	Pole	Chula Vista
37	P84255	Pole	Chula Vista
38	P84254	Pole	Chula Vista
39	P84253	Pole	Chula Vista
40	P181578J	Pole	Chula Vista
41	P835125	Pole	National City
42	P182727	Pole	National City
43	P835041	Pole	National City
44	P835151	Pole	National City

45	P835141	Pole	National City
46	P732962J	Pole	National City
47	P1830673829	Pole	National City
48	P835148	Pole	National City
49	P378677	Pole	San Diego
50	P378676	Pole	San Diego
51	JP378675	Pole	San Diego
52	P378674	Pole	San Diego
53	P374895	Pole	San Diego
54	JP378678	Pole	San Diego
55	378679	Pole	San Diego
56	P470013	Pole	San Diego
57	P204139	Pole	San Diego
58	P372983	Pole	San Diego
59	P372982	Pole	San Diego
60	P372977	Pole	San Diego
61	P372978	Pole	San Diego
62	P93033	Pole	San Diego
63	P2147174146	Pole	San Diego
64	P214774145	Pole	San Diego
65	930332	Pole	San Diego
66	P930331	Pole	San Diego
67	708974	Pad-mounted Switch	San Diego
68	D1853074710	Pad-mounted Transformer	San Diego
69	D205825	Pad-mounted fuse cabinet	San Diego
70	D198473	Coffin terminator	San Diego
71	D198498	Pad-mounted transformer	San Diego
72	D130952	Pad-mounted switch	San Diego
73	D126867	Pad-mounted transformer	San Diego
74	D101216	Pad-mounted terminator	San Diego
75	D101206	Pad-mounted transformer	San Diego
76	D101246	Pad-mounted transformer	San Diego
77	D101214	Pad-mounted transformer	San Diego
78	D101248	Pad-mounted transformer	San Diego
79	D101215	Pad-mounted transformer	San Diego
80	D197249	Pad-mounted transformer	San Diego
81	D1921074251	Pad-mounted fuse cabinet	San Diego
82	H192094256	Handhole	San Diego
83	V100548	Vault	San Diego
84	D2190720963	Pad-mounted transformer	San Diego
85	D1055446	Pad-mounted transformer	San Diego
86	D140552	Pad-mounted transformer	San Diego
87	D2127671077	Pad-mounted fuse cabinet	San Diego
88	D2128871059	Pad-mounted transformer	San Diego
89	D194904	Pad-mounted transformer	San Diego
90	D154669	Pad-mounted transformer	San Diego
91	D122969	Pad-mounted transformer	San Diego

IV. Field Inspection Violations List

My Staff observed the following violations during the field inspection portion of the audit:

GO 95, Rule 31.1, Design, Construction and Maintenance, states in part:

Electrical supply and communication systems shall be designed, constructed, and maintained for their intended use, regard being given to the conditions under which they are to be operated, to enable the furnishing of safe, proper, and adequate service.

GO 95, Rule 54.6-B, Ground Wires, states in part:

That portion of the ground wires attached on the face or back of wood crossarms or on the surface of wood poles and structures shall be covered by a suitable protective covering (see Rule 22.8).

- The ground molding on SDG&E pole number P34233 was missing a 3-inch section at the base of the pole, exposing the ground wire.
- The ground molding on SDG&E pole number P84253 was damaged near the base of the pole, exposing the ground wire.

GO 95, Rule 31.1, Design, Construction and Maintenance, states in part:

Electrical supply and communication systems shall be designed, constructed, and maintained for their intended use, regard being given to the conditions under which they are to be operated, to enable the furnishing of safe, proper, and adequate service.

A down guy anchor attached to a down guy wire on SDG&E pole number P164862 was completely buried in the ground, covering the attachment point between the down guy anchor and the down guy wire.

GO 95, Rule 31.6, Abandoned Lines, states:

Lines or portions of lines permanently abandoned shall be removed by their owners so that such lines shall not become a public nuisance or a hazard to life or property. For the purposes of this rule, lines that are permanently abandoned shall be defined as those lines that are determined by their owner to have no foreseeable future use

A down guy anchor (that did not support a down guy wire) located adjacent to SDG&E pole P181622 was abandoned, creating a tripping hazard.

GO 95, Rule 18-B, Notification of Safety Hazards, states:

If a company, while performing inspections of its facilities, discovers a safety hazard(s) on or near a communications facility or electric facility involving another company, the inspecting company shall notify the other company and/or facility owner of such safety hazard(s) no later than 10 business days after the discovery. To the extent the inspecting company cannot determine the facility owner/operator, it shall contact the pole owner(s), who shall be responsible for promptly notifying the company owning/operating the facility with the safety hazard(s), normally not to exceed five business days after being notified of the safety hazard. The notification shall be documented, and such documentation must be preserved by all parties for at least ten years.

A down guy wire – supported at the communications level of SDG&E pole number P188518 – was detached from the down guy anchor and dangling from its support on the pole.

GO 95, Rule 56.9, Guy Marker (Guy Guard), states:

A substantial marker of suitable material, including but not limited to metal or plastic, not less than 8 feet in length, shall be securely attached to all anchor guys. Where more than one guy is attached to an anchor rod, only the outermost guy is required to have a marker.

An SDG&E down guy wire on SDG&E pole number 184521 was missing a guy marker.

GO 95, Rule 51.6-A, High Voltage Marking of Poles, states in part:

Poles which support line conductors of more than 750 volts shall be marked with high voltage signs. This marking shall consist of a single sign showing the words “HIGH VOLTAGE”, or pair of signs showing the words “HIGH” and “VOLTAGE”, not more than six (6) inches in height with letters not less than 3 inches in height. A pair of signs may be stacked to a height of no more than 12 inches. Such signs shall be of weather and corrosion-resisting material, solid or with letters cut out therefrom and clearly legible.

- Pole number P1830673829: the “HIGH” and “VOLTAGE” markers on the transformer side on the uppermost crossarm were damaged and illegible.
- Pole number P2147174146: the “HIGH” and “VOLTAGE” markers on both sides of the uppermost crossarm were damaged and illegible.
- Pole number P930331: the “VOLTAGE” sign on the opposite side of the transformer of the uppermost crossarm was missing.

GO 95, Rule 38, Table 2, Case 19, Column C, requires the minimal radial clearance of “guys and span wires passing conductors supported on the same poles” from “communication conductors” to be 3 inches.

An SDG&E span guy wire installed at the primary level of SDG&E pole number P470013 was contacting and straining a communications cable.

GO 128, Rule 17.1, Design, Construction and Maintenance, states in part:

Electrical supply and communication systems shall be designed, constructed, and maintained for their intended use, regard being given to the conditions under which they are to be operated, to enable the furnishing of safe, proper, and adequate service.

The base of SDG&E pad-mounted transformer D140552 was corroded and leaking oil.