

PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3298



March 30, 2020

EA2019-832

Scott Hirashima, P.E.
Manager of Regulatory Standards and Compliance
Regulatory Standards and Compliance Section
City of Los Angeles, Department of Water and Power (LADWP)
111 North Hope Street, Room 1246
Los Angeles, CA 90012

SUBJECT: Audit of LADWP's Van Nuys District

Mr. Hirashima:

On behalf of the Electric Safety and Reliability Branch (ESRB) of the California Public Utilities Commission (CPUC), Eric Ujiiye and Howard Huie of my staff conducted an electric distribution audit of LADWP's Van Nuys District from September 16, 2019 to September 20, 2019. The audit included a review of LADWP's inspection and maintenance records and a field inspection of LADWP'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 May 1, 2020, by electronic or hard copy, of all corrective measures taken by LADWP 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,

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

Enclosure: Audit Findings

Cc: Lee Palmer, Director, Safety and Enforcement Division, CPUC
Nika Kjensli, Program Manager, ESRB, CPUC
Charlotte TerKeurst, ESRB, SED, CPUC
Eric Ujiiye, Utilities Engineer, ESRB

Audit Findings

I. Records Review

During the audit, my staff reviewed the following records:

- Overhead and underground detailed inspection records.
- Completed and pending corrective action work orders.
- Pole loading calculations.
- Intrusive test records.
- Diagnostic test records, e.g. infrared thermography inspections and oil insulation testing.
- LADWP's visual inspection program.
- ESRB's interview of two LADWP inspectors.

II. Records Review – Violations List

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

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

Lines shall be inspected frequently and thoroughly for the purpose of insuring that they are in good condition so as to conform with these rules.

GO 128, Rule 17.2, Inspection, states:

Systems shall be inspected by the operator frequently and thoroughly for the purpose of insuring that they are in good condition and in conformance with all applicable requirements these rules.

GO 165, Section III-B, Standards for Inspection, states:

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.

LADWP's records indicated that from 2013 to 2018, LADWP completed 20,538 overhead patrol inspections, 26 overhead detailed inspections, and 73 underground detailed inspections past their scheduled due date.

LADWP's records indicated that from 2016 to 2018, LADWP completed 1,592 work orders past their due date for corrective action. Additionally, as of the date of the audit, LADWP had 13 open work orders that were past their scheduled due date for corrective action.

III. Field Inspection

My staff inspected the following facilities during the field inspection:

No.	Structure ID.	Type of Structure	Location
1	434582M	Pole	Sylmar
2	434580M	Pole	Sylmar
3	438583M	Pole	Sylmar
4	434584M	Pole	Sylmar
5	433687M	Pole	Sylmar
6	434585M	Pole	Sylmar
7	434587M	Pole	Sylmar
8	391332M	Pole	Sylmar
9	434589M	Pole	Sylmar
10	434594M	Pole	Sylmar
11	143806M	Pole	Sylmar
12	387394M	Pole	Sylmar
13	434650M	Pole	Sylmar
14	434649M	Pole	Sylmar
15	434648M	Pole	Sylmar
16	GT203105	Pole	Sylmar
17	GT203099	Pole	Sylmar
18	GT203100	Pole	Sylmar
19	GT203101	Pole	Sylmar
20	GT203102	Pole	Sylmar
21	GT203103	Pole	Sylmar
22	434390M	Pole	Sylmar
23	39801M	Pole	Sylmar
24	331144M	Pole	Sylmar
25	331160M	Pole	Sylmar
26	GT8841	Pole	Sylmar
27	17019CWT	Pole	Sylmar
28	17020CWT	Pole	Sylmar
29	17021CWT	Pole	Sylmar
30	302088M	Pole	Sylmar
31	302089M	Pole	Sylmar
32	302090M	Pole	Sylmar
33	302091M	Pole	Sylmar
34	302092M	Pole	Sylmar
35	302093M	Pole	Sylmar
36	302094M	Pole	Sylmar
37	GT202525	Pole	Sylmar
38	GT92544	Pole	Sylmar
39	GT20252	Pole	Sylmar
40	GT202527	Pole	Sylmar
41	270161M	Pole	Sylmar
42	GT202528	Pole	Sylmar
43	GT202529	Pole	Sylmar

44	GT202530	Pole	Sylmar
45	GT202531	Pole	Sylmar
46	GT202524	Pole	Sylmar
47	GT92542	Pole	Sylmar
48	GT92541	Pole	Sylmar
49	202523GT	Pole	Sylmar
50	GT202522	Pole	Sylmar
51	1288810	Handhole	Sylmar
52	1445980	Pad mount	Pacoima
53	1445956	Pad mount	Pacoima
54	1445964	Pad Mount	Panorama City
55	1267061	Pad Mount	North Hollywood
56	1265396	Pad Mount	North Hollywood

IV. Field Inspection – Violations List

My staff observed the following violations during the field inspection:

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 51.6-A, Marking and Guarding, 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.

The high voltage sign on the following LADWP poles was damaged:

- 391332M – the “HIGH” and “VOLTAGE” signs on both sides of the upper and lower double crossarms were damaged and illegible
- GT203099 – the “HIGH” and “VOLTAGE” signs were missing on the outward facing sides of the double cross arm supported on the pole.
- GT203100 – the “HIGH” and “VOLTAGE” signs were missing from both sides of the crossarm supported on the pole.
- GT203101 – the “HIGH” and “VOLTAGE” signs were missing from both sides of the crossarm supported on the pole.
- GT203102 – the “HIGH” and “VOLTAGE” signs were missing from the outward facing sides of the double crossarm supported on the pole.
- 302092M – the “HIGH” and “VOLTAGE” signs were missing from both sides of the double crossarm supported on the pole.
- GT202525 – the “HIGH” sign was missing, and the “VOLTAGE” sign was damaged (showing only “VOL” on the side of the double crossarm where the transformer was located).
- 270161M - the “HIGH” and “VOLTAGE” signs were missing from both sides of both the upper and lower levels of the crossarm supported on the pole.
- GT202529 – the “VOLTAGE” sign was missing from one side of the crossarm supported on the pole.
- GT202524 – on one side of the crossarm, the “HIGH” and “VOLTAGE” signs were missing; on the other side of the crossarm, the word “HIGH” was missing and the word “VOLTAGE” was damaged and only showed “VOLTA”.

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 tree was causing strain on a down guy wire on pole 391332M, thus, causing the guy wire to deflect.

GO 95, Rule 54.8-B4a, Table 10, requires the minimum vertical clearance of “Insulated Conductors 0 – 750 Volts” above “All portions of buildings including metallic or non-metallic cornice, decorative appendage, eaves, roof or parapet wall of the building served” to be 0.5 inches.

A service drop supported on pole 331160M was contacting the roof of the home to which it was providing service located at 12782 Borden Avenue in the City of Sylmar.

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

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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 pole number GT202525 was damaged at 7 feet above the ground, exposing the ground wire.
- The ground moulding supported on pole GT202530 was split into two sections at 1 foot above the ground, 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.

The lower double cross-arm supported on pole 270161M had a crack running the length of the cross-arm.

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

- An abandoned riser that extended 10 feet above ground was still attached to pole 270161M.
- An abandoned riser that extended from the communications level to LADWP's primary level was still attached to pole GT202531.

GO 95, Rule 18.B, Reporting and Resolution of Safety Hazards Discovered by Utilities, Notifications of Safety Hazards, states in part:

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.

- Pole 37444CWT – an abandoned communication service drop was wrapped around the base of the pole.
- Pole GT202531 – communication cables (installed approximately three feet above the guard arm) had less than the minimum required vertical clearance from supply conductors of six feet. LADWP did not inform the communication company of this safety hazard.