

PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3298



February 7, 2019

CA2018-822

Lisa Ludovici
Director, Government Affairs
Charter Communications
270 Bridge Street
San Luis Obispo, CA 93401

SUBJECT: Audit of Charter Communications' Malibu District

Dear Ms. Ludovici:

On behalf of the Electric Safety and Reliability Branch (ESRB) of the California Public Utilities Commission, Eric Ujjiye of my staff conducted a Communication Infrastructure Provider (CIP) audit of Charter Communications' Malibu District from July 9, 2018 to July 13, 2018. The audit included a review of Charter Communications' records and field inspections of facilities.

During the audit, we identified violations of one or more General Orders. A copy of the audit findings itemizing the violations is enclosed. Please advise me no later than March 7, 2019, by electronic or hard copy, of all corrective measures taken by Charter Communications to remedy and prevent such violations.

If you have any questions concerning this audit, please 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 and Project Supervisor
Electric Safety and Reliability Branch
Safety and Enforcement Division
California Public Utilities Commission

Enclosures: CPUC Audit Findings

Cc: Elizaveta Malashenko, Director, Safety and Enforcement Division, CPUC
Leslie Palmer, Deputy Director, Safety and Enforcement Division, CPUC
Charlotte TerKeurst, Program Manager, Electric Safety and Reliability Branch, CPUC
Eric Ujjiye, Utilities Engineer, CPUC

AUDIT FINDINGS

Section 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.
- Charter Communications' documented inspection program.

Section II: Field Inspection

The following are the facilities we inspected during the field inspection:

No.	Structure Number	Type of Structure	Address
1	4704019E	Pole	Malibu
2	1269351E	Pole	Malibu
3	1269345E	Pole	Malibu
4	4704020E	Pole	Malibu
5	GT103584	Pole	Malibu
6	783009E	Pole	Malibu
7	783010E	Pole	Malibu
8	4545970E	Pole	Malibu
9	783012E	Pole	Malibu
10	1143220E	Pole	Malibu
11	920685E	Pole	Malibu
12	1330694E	Pole	Malibu
13	920686E	Pole	Malibu
14	920687E	Pole	Malibu
15	4241206E	Pole	Malibu
16	751017E	Pole	Malibu
17	751016E	Pole	Malibu
18	30604 Sicomoro Dr	Vault	Malibu
19	770763E	Pole	Malibu
20	770762E	Pole	Malibu
21	1210153E	Pole	Malibu
22	770761E	Pole	Malibu
23	3005574E	Pole	Malibu
24	4387737E	Pole	Agoura Hills

25	1000447H	Pole	Agoura Hills
26	844016E	Pole	Agoura Hills
27	2116296E	Pole	Agoura Hills
28	4493447E	Pole	Agoura Hills
29	844013E	Pole	Agoura Hills
30	844011E	Pole	Agoura Hills
31	4388668E	Pole	Agoura Hills
32	387736E	Pole	Agoura Hills
33	4493448E	Pole	Agoura Hills
34	4440850E	Pole	Ventura
35	4861150E	Pole	Ventura
36	4861149E	Pole	Ventura
37	17888Y	Pole	Ventura
38	1638440E	Pole	Ventura
39	31209 Pacific Coast Hwy.	Pole	Ventura
40	3004820E	Pole	Ventura
41	31824 Seafield Dr	Vault	Malibu
42	30980 Broad Beach Rd	Vault	Malibu
43	1638431E	Pole	Malibu
44	726887E	Pole	Malibu
45	4856960E	Pole	Malibu
46	7089 Birdview Ave	Pole	Ventura
47	11300 Yerba Buena Rd	Pedestal	Malibu
48	11300 Yerba Buena Rd	Handhole	Malibu
49	11300 Yerba Buena Rd	Handhole	Malibu
50	733358E	Pole	Malibu
51	11870 South Beach Club Way	Pedestal	Malibu
52	783032E	Pole	Malibu
53	783033E	Pole	Malibu
54	770764E	Pole	Malibu
55	821766E	Pole	Malibu
56	2054993E	Pole	Malibu
57	25299Y	Pole	Malibu
58	726885E	Pole	Malibu
59	GT113578	Pole	Malibu
60	770627E	Pole	Malibu
61	1264039E	Pole	Malibu
62	4416249E	Pole	Malibu
63	10730Y	Pole	Malibu

64	4416248E	Pole	Malibu
65	2171825E	Pole	Malibu
66	1638606E	Pole	Malibu
67	920684E	Pole	Malibu
68	936858E	Pole	Malibu
69	4216757E	Pole	Malibu
70	936857E	Pole	Malibu
71	936856E	Pole	Malibu
72	936855E	Pole	Malibu
73	821767E	Pole	Malibu
74	821768E	Pole	Malibu
75	29939 Eastvale Court	Handhole	Agoura Hills
76	2279840E	Pole	Agoura Hills
77	4843470E	Pole	Agoura Hills
78	4493446E	Pole	Agoura Hills
79	4387738E	Pole	Agoura Hills
80	4387740E	Pole	Agoura Hills
81	1000434H	Pole	Agoura Hills
82	4125091E	Pole	Agoura Hills
83	844022E	Pole	Agoura Hills
84	4847435E	Pole	Agoura Hills
85	844023E	Pole	Agoura Hills
86	4388669E	Pole	Agoura Hills
87	844025E	Pole	Agoura Hills
88	101176E	Pole	Ventura
89	4339515E	Pole	Ventura
90	2647 North Ventura Ave	Pole	Ventura
91	2068853E	Pole	Ventura
92	661495E	Pole	Ventura
93	661494E	Pole	Ventura
94	4638698E	Pole	Ventura
95	1909083E	Pole	Ventura
96	1311094E	Pole	Ventura
97	1311095E	Pole	Ventura

Section III: Field Inspection Violations

We observed the following violations during the field inspections:

GO 95, Rule 84.8-C3b, Service Drops, states in part:

Residential Premises: *Over areas accessible to pedestrians only, the vertical clearance shall not be less than 10 feet.*

The above-ground clearance of the service drop supported on pole 726887E was less than 10 feet.

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 following facilities were not maintained for their intended use:

- The bottom-most pole step supported on pole 1000434H was unsecure and installed within a split in the pole.
- The risers that are installed on pole located at 7089 Birdview Ave, Ventura were not protected by a conduit nor secured to the surface of the pole.
- A Charter Communications' lashing wire supported on poles 1330694E and 920685E was severed and contacting communications conductors supported at a lower level.

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 ground wire was folded and abandoned at the base of pole 821766E and was not servicing the facilities attached to the pole.

GO 95, Rule 91.3-B, Stepping, states in part:

The lowest step shall be not less than 8 feet from the ground line, or any easily climbable foreign structure from which one could reach or step.

The bottom-most pole step supported on the following poles was installed less than the minimum 8 feet from the groundline:

- 1000434H
- 751017E
- 783033E

GO 95, Rule 35, Vegetation Management, states in part:

When a supply or communication company has actual knowledge, obtained either through normal operating practices or notification to the company, that its circuit energized at 750 volts or less shows strain or evidences abrasion from vegetation contact, the condition shall be corrected by reducing conductor tension, rearranging or replacing the conductor, pruning the vegetation, or placing mechanical protection on the conductor(s).

The following spans of conductors were strained by vegetation:

- A span of overhead conductors supported by poles 1269345E and 4704020E.
- A span of overhead conductors supported by poles 387736E and 4493448E.

GO 95, Rule 38, Minimum Clearances of Wires from Other Wires, states in part:

The minimum vertical, horizontal or radial clearances of wires from other wires shall not be less than the values given in Table 2 and are based on a temperature of 60° F. and no wind.

GO 95, Rule 38, Table 2, Column C, Case 8 requires the minimum vertical clearance between a communication conductor and a communications service drop supported on different levels on the same pole and at midspan to be 12 inches. A Charter Communications' service drop supported by pole 1638431E was contacting communication conductors at mid span.

GO 95, Rule 38, Table 2, Column C, Case 19 requires the minimum radial clearance between a down guy wire and a communication conductor supported on the same pole to be 3 inches. A Charter Communications cable supported on pole 726885E was contacting a down guy wire.

GO 95, Rule 38, Table 2, Column C, Case 8 requires the minimum vertical clearance between communications conductors supported on the same pole and at mid span to be 12 inches.

- A Charter Communications cable supported on pole GT103584 and pole 783009E was contacting a CIP cable supported at a lower level.
- A Charter Communications cable supported on pole 783010E and pole 4545970E was contacting a CIP cable supported at the lower level.

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 56.2, Uses (Guy Wires), states in part:

Guys shall be attached to structures, as nearly as practicable, at the center of load. They shall be maintained taut and of such strength as to meet the safety factors of Rule 44.

Charter Communications down guy wire on the following poles was not taut:

- 783032E – The down guy wire was detached at the ground level as a result of a broken ground anchor.
- 844016E
- 3004820E

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 86.9, 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.

A Charter Communications down guy wire supported on pole 783033E has a partially attached wooden guy marker.

GO 95, Rule 84.7-A, Climbing Space, states in part:

Climbing space shall be maintained on one side or quadrant of all poles or structures supporting communications conductors excepting at the level of the one pair of conductors attached to the pole below the lowest crossarm (Rules 84.4–C1c , 84.4–D1 and 87.4–C3) and the top 3 feet of poles carrying communication conductors only which are attached directly to pole in accordance with the provisions of Rule 84.4–C1c.

The climbing space on the following poles were obstructed:

- 770764E – climbing space was obstructed by vegetation.
- Pole located at 7089 Birdview Ave. – climbing space obstructed by vegetation and incidental pole wiring.

GO 95, Rule 87.7, Covering and Guarding, states in part:

No communication antenna, conductor, cable or messenger shall be supported on or attached to the top or side surface of any guard arm except as permitted for service drops and their (vertical and lateral) runs by the provisions of Rules 84.6–C and 84.8–B2c .

Charter Communication cables on the following poles were installed on the top surface of the guard arm:

- 4704020E
- Unidentified pole located at 2647 North Ventura Ave.

GO 95, Rule 91.5, Marking, states in part:

Each communication cable and conductor as defined by Rules 20.4, 20.6(A), 20.9, 84.1, 87.4(C), and 89.1 that is attached to a joint-use pole shall be marked as to ownership. The marker shall (1) identify the owner of the cable and/or conductor; (2) provide a 24-hour contact number for emergencies or information; (3) be made of weather and corrosion resistant material; and (4) be clearly visible to workers who climb the pole or ascend by mechanical means. This marking requirement applies only to (A) new construction, (B) reconstruction of facilities, and (C) existing aerial communication cables and conductors that a technician works on when the technician ascends the joint-use pole for regular maintenance.

The conductors supported on the following poles did not have a marker identifying the ownership of the facility:

- 4704019E
- 1269351E
- 751016E

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 87.7-D1, Covered from Ground Level to 8 Feet above the Ground:

Risers shall be protected from the ground level to a level not less than 8 feet above the ground by:

b) Non-metallic conduit or rigid U-shaped moulding. Such conduit or moulding shall be of material as specified in Rule 22.8 .

The Charter Communications riser supported on the following poles was damaged:

- 4387740E – the riser is protruding out of the U-shaped moulding at 1 - 2 feet above ground.
- 920687E – the riser was broken near the base of the pole, exposing the conductor.