PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE SAN FRANCISCO, CA 94102-3298



February 16, 2023 CA2022-942

Lisa Ludovici Charter Communications Director, Government Affairs – Central and Northern California 270 Bridge Street San Luis Obispo, CA 93401

SUBJECT: Audit of Charter Communications Victorville Marketing Area

Ms. Ludovici:

On behalf of the Electric Safety and Reliability Branch (ESRB) of the California Public Utilities Commission (CPUC), Eric Ujiiye and Calvin Choi of my staff conducted a CIP audit of Charter Communications' Victorville Marketing Area from October 24, 2022 to October 28, 2022. The audit included a review of Charter Communications' inspection and maintenance records and a field inspection of Charter Communications' facilities.

During the audit, my staff identified violations of one or more General Orders (GOs). An itemized copy of the audit findings violations identified by Staff is enclosed along with this letter. Please advise me no later than March 17, 2023, 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 Ujiiye at (213) 620-2598 or Eric.Ujiiye@cpuc.ca.gov.

Sincerely,

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: Lee Palmer, Director, Safety and Enforcement Division, CPUC

Nika Kjensli, Program Manager, Electric Safety and Reliability Branch, CPUC

Eric Ujiiye, Utilities Engineer, ESRB, CPUC

AUDIT FINDINGS

I. Records Review

During the audit, my staff reviewed the following records:

- Overhead detailed and patrol inspections records
- Completed and pending corrective action work orders
- Pole loading calculations
- Charter Communications' Intrusive Inspection of Wood Poles
- Charter Communications' Overhead Lines Maintenance Plan
- Charter Communications' Visual Inspections of Overhead Lines

II. Records Review - Violations List

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 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 95, Rule 80.1-A.2, Statewide Inspection Requirements, states in part:

Each company shall prepare, follow, and modify as necessary, procedures for conducting patrol or detailed inspections for all of its Communication Lines throughout the State.

Charter Communications failed to complete 8 overhead detailed inspections by Charter Communications' required due date.

GO 95, Rule 18, Rule 18-B1, Maintenance Programs, states in part:

Companies shall undertake corrective actions within the time periods stated for each of the priority levels set forth below. Scheduling of corrective actions within the time periods below may be based on additional factors, including the following factors, as appropriate ...

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.

Charter Communications failed to complete the number of following overhead work orders by Charter Communications own scheduled due date for corrective action:

- 1 Priority Level 1
- 6 Priority Level 2

GO 128, Rules 12.2, Maintenance, state in part:

Systems shall be maintained in such condition as to secure safety to workmen and the public in general. Systems and portions thereof constructed, reconstructed, or replaced on or after the effective date of these rules shall be kept in conformity with the requirement of these rules.

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.

Charter Communications failed to complete the number of following underground work orders by Charter Communications' own scheduled due date for corrective action:

- 1 Priority Level 1
- 7 Priority Level 2
- 3 Priority Level 3

III. Field Inspection

My staff inspected the following structures during the field inspection portion of the audit:

No.	Structure ID	Type of Structure	Location
1	2085191E	Pole	Victorville
2	4988772E	Pole	Victorville
3	370130E	Pole	Victorville
4	4072301E	Pole	Victorville
5	4615101E	Pole	Victorville
6	226393E	Pole	Victorville
7	1782196E	Pole	Victorville
8	65329S	Pole	Victorville
9	1785933E	Pole	Victorville
10	65325S	Pole	Victorville
11	1591703E	Pole	Victorville
12	2171417E	Pole	Wrightwood
13	519201E	Pole	Wrightwood
14	24241-CIT	Pole	Wrightwood
15	1433990E	Pole	Wrightwood
16	519203E	Pole	Wrightwood
17	4426316E	Pole	Wrightwood
18	4135954E	Pole	Wrightwood
19	4878226E	Pole	Wrightwood
20	446739E	Pole	Wrightwood
21	1201316E	Pole	Wrightwood
22	4962865E	Pole	Wrightwood
23	2360620E	Pole	Wrightwood
24	4771846E	Pole	Wrightwood
25	1450707E	Pole	Wrightwood
26	4485285E	Pole	Wrightwood
27	1121422E	Pole	Wrightwood
28	4735688E	Pole	Wrightwood
29	465405E	Pole	Wrightwood
30	4670732E	Pole	Wrightwood
31	510370E	Pole	Wrightwood
32	519206E	Pole	Wrightwood
33	519202E	Pole	Wrightwood
34	4958295E	Pole	Wrightwood
35	33343	Pole	Wrightwood

36	4686642E	Pole	Wrightwood
37	4914333E	Pole	Wrightwood
38	1963162E	Pole	Wrightwood
39	2264171E	Pole	Wrightwood
40	1963030E	Pole	Wrightwood
41	4042288E	Pole	Wrightwood
42	2043349E	Pole	Wrightwood
43	2136018E	Pole	Wrightwood
44	2154567E	Pole	Wrightwood
45	4183344E	Pole	Wrightwood
46	2157442E	Pole	Wrightwood
47	2157443E	Pole	Wrightwood
48	66000S	Pole	Wrightwood
49	2360320E	Pole	Wrightwood
50	2360321E	Pole	Wrightwood
51	2233405E	Pole	Wrightwood
52	2360322E	Pole	Wrightwood
53	2360323E	Pole	Wrightwood
54	2224072E	Pole	Wrightwood
55	2360324E	Pole	Wrightwood
56	2360319E	Pole	Wrightwood
57	2325873E	Pole	Wrightwood
58	2363554E	Pole	Wrightwood
59	4715178E	Pole	Wrightwood
60	2363556E	Pole	Wrightwood
61	2363557E	Pole	Wrightwood
62	2263558E	Pole	Wrightwood
63	4846640E	Pole	Wrightwood
64	33344 CTC	Pole	Wrightwood
65	CIT 35521	Pole	Wrightwood
66	329277	Pole	Wrightwood
67	24137 CIT	Pole	Wrightwood
68	2347294E	Pole	Wrightwood
69	2347293E	Pole	Wrightwood
70	2347292E	Pole	Wrightwood
71	30963S	Pole	Wrightwood
72	4572945E	Pole	Wrightwood
73	4350569E	Pole	Wrightwood
74	330300	Pole	Wrightwood
75	1962412E	Pole	Wrightwood

76	4044929E	Pole	Wrightwood
77	4293312E	Pole	Wrightwood
78	CIT 35520	Pole	Wrightwood
79	329546	Pole	Wrightwood
80	329276	Pole	Wrightwood
81	4823761E	Pole	Hinkley
82	4823762E	Pole	Hinkley
83	4823764E	Pole	Hinkley
84	4823765E	Pole	Hinkley
85	329171	Pole	Hinkley
86	4840980E	Pole	Hinkley
87	329172S	Pole	Hinkley
88	4940069E	Pole	Hinkley
89	Across 940 Crescent Drive	Pole	Barstow
90	960 Crescent Drive	Pole	Barstow
91	930 Crescent Drive	Pedestal	Barstow
92	921 Crescent Drive	Pedestal	Barstow
93	920 Crescent Drive	Pedestal	Barstow
94	861 Crescent Drive	Pedestal	Barstow
95	860 Crescent Drive	Pedestal	Barstow
96	830 Crescent Drive	Pedestal	Barstow
97	810 Crescent Drive	Pedestal	Barstow
98	851 Chateau Way	Pedestal	Barstow
99	841 Chateau Way	Pedestal	Barstow
100	800 Crescent Drive	Pedestal	Barstow
101	901 Chateau Way	Pedestal	Barstow
102	910 Granada Hill Ave.	Pedestal	Barstow
103	921 Granada Hill Ave.	Pedestal	Barstow
104	930 Granada Hill Ave.	Pedestal	Barstow
105	960 Granada Hill Ave.	Pedestal	Barstow
106	2151 Sierra Linda Dr.	Pedestal	Barstow
107	2154 Sierra Linda Dr.	Vault	Barstow
108	2162 Sierra Linda Dr.	Vault	Barstow
109	2167 Sierra Linda Dr.	Vault	Barstow
110	2163 Sierra Linda Dr.	Vault	Barstow
111	2159 Sierra Linda Dr.	Vault	Barstow
112	2135 Sierra Linda Dr.	Vault	Barstow
113	2123 Sierra Linda Dr.	Vault	Barstow
114	2115 Sierra Linda Dr.	Pedestal	Barstow
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115	16420 Winona Street	Pedestal	Barstow
116	12785 Autumn Leaf Dr.	Pedestal	Barstow
117	14027 Driftwood Dr.	Pedestal	Victorville
118	12730 Pinehurst Trail	Pedestal	Victorville
119	18490 Colonial Ct.	Vault	Victorville
120	18495 Colonial Ct	Vault	Victorville
121	12715 Pinehurst Trail	Vault	Victorville
122	12710 Pinehurst Trail	Vault	Victorville
123	12700 Pinehurst Trail	Vault	Victorville
124	18495 Mountain Meadows	Vault	Victorville
125	18495 Mountain Meadows	Vault	Victorville
126	18465 Mountain Meadows	Vault	Victorville
127	18445 Mountain Meadows	Vault	Victorville
128	18440 Mountain Meadows	Vault	Victorville
129	18425 Mountain Meadows	Vault	Victorville
130	13416 Baylor Dr.	Pedestal	Victorville
131	13419 Baylor Dr.	Pedestal	Victorville
132	13425 Baylor Dr.	Pedestal	Victorville
133	13453 Baylor Dr.	Pedestal	Victorville
134	13450 Baylor Dr.	Pedestal	Victorville
135	13466 Baylor Dr.	Pedestal	Victorville
136	13480 Baylor Dr.	Pedestal	Victorville
137	13122 Baylor Dr.	Pedestal	Victorville
138	13131 Baylor Dr.	Pedestal	Victorville
139	13130 Fullerton Dr.	Pedestal	Victorville
140	13151 Fullerton Dr.	Pedestal	Victorville
141	13513 Fullerton Ln.	Pedestal	Victorville
142	13529 Fullerton Ln.	Pedestal	Victorville
143	13537 Fullerton Ln.	Pedestal	Victorville
144	13561 Fullerton Ln.	Pedestal	Victorville
145	13577 Fullerton Ln.	Pedestal	Victorville
146	13585 Fullerton Ln.	Pedestal	Victorville
147	13060 Evanston Street	Pedestal	Victorville
148	13152 Citrus Way	Pedestal	Victorville
149	13148 Citrus Way	Pedestal	Victorville
150	13112 Citrus Way	Vault	Victorville
151	13115 Citrus Way	Pedestal	Victorville

IV. Field Inspection - Violations List

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

GO 95, Rule 18-A3: Resolution of Potential Violations of General Order 95 and Safety Hazards, states in part:

(3) 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 entity of such safety hazard(s) no later than 10 business days after the discovery.

A third-party service drop supported on Pole 65325S was attached to Charter Communications' conductor span. Charter Communications did not report this during its latest 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.

The following Charter Communications facilities required maintenance:

- Pole 1785933E: a 12" section of ground wire near the base of the pole protruded from the ground, exposing the uninsulated ground wire to potential contact and snags.
- Pole 65325S: a riser was not fastened to the surface of the pole nor covered with a protective covering at the public level.
- Pole 465405E: a cable bundled on the conductor span was severed and hanging.
- Pole 465405E: a ground wire on was severed near the base of the pole.
- Pole 4846640E: a conductor had a broken lashing wire.
- Pole 329172S: a ground wire Charter Communications facilities were bonded to was severed at the public level and contacting a chain link fence.

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.

The following Charter Communications facilities were permanently abandoned and not removed:

- Pole 2043349E: an abandoned service drop was detached and hanging near the pole.
- Pole 4183344E: a conductor was severed, wound up, and left at the base of the pole.

- Pole 2157442E: a conductor was severed, wound up, and left on a pole step at the communication level of the pole.
- Pole CIT-35520: a riser was severed and abandoned.

GO 95, Rule 38 - Minimum Clearances of Wires from Other Wires, Table 2, Column C, Case 8, requires the minimum vertical clearance between "Communication Conductors (Including Open Wire, Cables and Service Drops)" and "Communication Conductors and Service Drops" supported on the same pole to be 12 inches.

Charter Communications facilities on the following poles had less than the minimum vertical clearance of 12 inches:

- Pole 226393E: a node attached to the conductor span was contacting the underbuilt third-party conductor span.
- Pole 519201E: a service drop was contacting a telephone service drop.
- Pole 4958295E: a service drop was contacting the underbuilt third-party conductor span.
- Pole 1963162E: multiple service drops and a node were contacting the underbuilt third-party conductor span.
- Pole 1963030E: a service drop was contacting the underbuilt third-party conductor span.
- Pole 2154567E: a service drop was contacting and attached to a telephone service drop.
- Pole 2360321E: a service drop was contacting the underbuilt third-party conductor span.
- Pole 2360323E: two service drops were contacting the underbuilt third-party conductor span.
- Pole 2363557E: a service drop was contacting the underbuilt third-party conductor span.
- Pole 4846640E: a conductor was contacting the underbuilt third-party conductor span.
- Pole 33344-CTC: multiple service drops were contacting the underbuilt third-party conductor span.
- Pole 4572945E: a service drop was entangled with a telephone service drop.

GO 95, Rule 38 - Minimum Clearances of Wires from Other Wires, Table 2, Column C, Case 9, requires the minimum vertical clearance between "Communication Conductors (Including Open Wire, Cables and Service Drops)" and "Supply Conductors Service Drops and Trolley Feeders, 0-750 Volts" supported on the same pole to be 48 inches.

The following Charter Communications facilities had less than the minimum required vertical clearance of 48 inches:

- Pole 4670732E: the conductor span was supported at approximately 36 inches below secondary connections that was feeding a riser.
- Pole 510370E: the conductor span was attached at approximately 36 inches below a secondary jumper going from a transformer to a secondary conductor span.
- Pole 510370E: a service drop was contacting a secondary supply drop.

GO 95, Rule 38 - Minimum Clearances of Wires from Other Wires, Table 2, Column C, Case 18 requires the minimum radial clearance between "Communication Conductors (Including Open Wire, Cables and Service Drops)" and "Guys passing conductors supported on other poles, or guys approximately parallel to conductors supported on the same poles" to be 3 inches.

- Pole 65329S: a Charter Communications service drop was touching a down guy wire.
- Pole 4823762E: a span conductor was contacting a supply down guy wire.
- Pole 4823762E: a service drop was contacting an underbuilt third-party down guy wire.

GO 95, Rule 84.6-B, Ground Wires, states in part:

Ground wires, other than lightning protection wires not attached to equipment or ground wires on grounded structures, shall be covered by metal pipe or suitable covering of wood or metal, or of plastic conduit material as specified in Rule 22.8–A...

The Charter Communications ground wire attached to each of the following poles was either damaged or missing suitable covering:

- Pole 1785933E
- Pole 4771846E
- Pole 4735688E
- Pole 2157442E
- Pole 329276
- Pole 4823765E

GO 95, Rule 86.9, Guy Marker (Guy Guard), states in part:

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.

The outer most down guy wire attached to pole 65329S did not have a guy marker.

GO 95, Rule 86.2, 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.

The down guy wire attached to each of the following poles was not maintained taut:

Pole 65325S

• Pole 4044929E

GO 95, Rule 87.7-D (1), Covered from Ground Level to 8 Feet above the Ground, states in part:

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

The following poles supported risers attached to the surface of the pole that were not protected by a covering from the ground level to 8 feet:

- Pole 2136018E
- Pole 2363556E
- Pole 33344-CTC
- Pole 2347293E
- Pole 2347292E
- Pole 4350569E

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 following Charter Communications facilities were not maintained for their intended use:

- The pedestal located at 921 Granada Hill Ave Barstow was missing a ground wire.
- The base of the pedestal located at 841 Chateau Way Barstow was damaged.
- The base of the pedestal located at 960 Granada Hill Ave Barstow was damaged being corroded and deteriorated.
- The base of the pedestal located at 2151 Sierra Linda Drive Barstow was completely buried below ground.
- The vault located at 2167 Sierra Linda Drive, Barstow had a damaged lid.
- The vault located at 2163 Sierra Linda Drive, Barstow had a damaged lid.
- The vault located at 2159 Sierra Linda Drive, Barstow had a damaged lid
- The base of the pedestal located at 2115 Sierra Linda Drive, Barstow was obstructed by vegetation and debris causing the lid to not close properly.
- The vault located at 18495 Colonial Ct., Victorville was damaged displaying a crack in the center of the lid.
- The vault located at 12710, Pinehurst Trail, Victorville was damaged displaying a crack in the center of the lid.
- The vault located at 12700, Pinehurst Trail, Victorville was damaged displaying a crack in the center of the lid.

- The vault located at 18495 Mountain Meadows Dr., Victorville was damaged displaying a 3" diameter hole in the center of the lid.
- The base of the pedestal located at 18465 Mountain Meadows Dr., Victorville was obstructed by vegetation and debris in addition to a damaged lid.
- The vault located at 18445 Mountain Meadows Dr., Victorville was filled with dirt that buried the contained facilities.
- The vault located at 18440 Mountain Meadows Dr., Victorville had a severely deteriorated lid creating a safety hazard.
- The vault located at 18425 Mountain Meadows Dr., Victorville had a crack in the center of the lid.
- The pedestal located at 13450 Baylor Drive, Victorville was detached from the base.
- The pedestal located at 13529 Fullerton Lane, Victorville was damaged from having cracks on onside of the cover.
- The base of the pedestal located at 13060 Evanston Street, Victorville was completely buried and obstructed by rocks that prevented the lid from closing.

GO 128, Rule 42.7, Covers, states in part:

Manholes and handholes, while not being worked in shall be securely closed by covers of sufficient strength to sustain such loads as may reasonably be imposed upon them, and arrangement shall be such that a tool or appliance shall be required for their opening and cover removal.

Charter Communications facilities at each of the following locations had locking system that were inoperable or damaged; therefore, no tool was required to access the structures:

- Pedestal located across 940 Crescent Drive, Barstow
- Pedestal located at 960 Crescent Drive, Barstow
- Pedestal located at 930 Crescent Drive, Barstow
- Pedestal located at 920 Crescent Drive, Barstow
- Pedestal located at 861 Crescent Drive, Barstow
- Pedestal located at 860 Crescent Drive, Barstow
- Pedestal located at 851 Chateau Way, Barstow
- Pedestal located at 841 Chateau Way, Barstow
- Pedestal located at 800 Crescent Drive, Barstow
- Pedestal located at 921 Granada Hill Ave, Barstow
- Pedestal located at 930 Granada Hill Ave, Barstow
- Vault located at 2162 Sierra Linda Drive, Barstow
- Vault located at 2154 Sierra Linda Drive, Barstow
- Pedestal located at 2135 Sierra Linda Drive, Barstow
- Pedestal located at 2123 Sierra Linda Drive, Barstow
- Vault located at 12700 Pinehurst Trail, Victorville
- Pedestal located at 13416 Baylor Drive, Victorville
- Pedestal located at 13453 Baylor Drive, Victorville
- Pedestal located at 13561 Fullerton Lane, Victorville

- Pedestal located at 13148 Citrus Way, Victorville
- Vault located at 13112 Citrus Way, Victorville