

PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3298



January 18, 2023

CA2022-951

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

Subject: Audit of Charter Communications' San Diego County District

Ms. Ludovici:

On behalf of the Electric Safety and Reliability Branch (ESRB) of the California Public Utilities Commission (CPUC), Richard Le and Mily Vaidya of my staff conducted a Communication Infrastructure Provider (CIP) audit of Charter's San Diego County District from December 5, 2022 to December 9, 2022. The audit included a review of Charter's inspection and maintenance records and a field inspection of Charter'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 February 20, 2023, by electronic or hard copy, of all corrective measures taken by Charter to remedy and prevent such violations.

If you have any questions concerning this audit, you can contact Richard Le at (213) 999 – 9053 or Richard.Le@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, SED, CPUC
Majed Ibrahim, Senior Utilities Engineer, ESRB, SED, CPUC
Richard Le, Utilities Engineer, ESRB, SED, CPUC
Mily Vaidya, Utilities Engineer, ESRB, SED, CPUC

Audit Findings

I. Records Review

During the audit, my staff reviewed the following records:

- Overhead and underground detailed inspection records
- Patrol records
- Completed and pending corrective action work orders
- Pole load calculations
- Intrusive test records
- Safety hazard notifications
- Charter'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 31.2, 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.

- Charter's records indicated that from October 2021 through September 2022, Charter completed 16 overhead patrol inspections past Charter's scheduled due date.
- Charter's records indicated that from October 2021 through September 2022, Charter completed 23 overhead detailed inspections past Charter's scheduled due date.

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.

- Charter's records indicated that from October 2021 through September 2022, Charter completed 2 underground patrol inspection past Charter's scheduled due date.

III. Field Inspection

My staff inspected the following facilities during the field inspection:

No.	Structure ID.	Type of Structure	Location
1	P26266	Pole	Carlsbad
2	P125908	Pole	Carlsbad
3	P20664	Pole	Carlsbad
4	P121630	Pole	Carlsbad
5	P20665	Pole	Carlsbad
6	P125907	Pole	Carlsbad
7	P26531	Pole	Carlsbad
8	P26532	Pole	Carlsbad
9	P122396	Pole	Carlsbad
10	P20962	Pole	Carlsbad
11	P20961	Pole	Carlsbad
12	Pole south of P20961	Pole	Carlsbad
13	Pole at the intersection of Ocean St. and Beech Ave.	Pole	Carlsbad
14	P29520	Pole	Carlsbad
15	P26063	Pole	Carlsbad
16	P27613	Pole	Carlsbad
17	P26064	Pole	Carlsbad
18	P27612	Pole	Carlsbad
19	P26065	Pole	Carlsbad
20	Pole west of 26065	Pole	Carlsbad
21	P26754	Pole	Carlsbad
22	P26755	Pole	Carlsbad
23	P124446	Pole	Carlsbad
24	P26756	Pole	Carlsbad
25	Pedestal in front of 2669 Bressi Ranch Way	Pedestal	Carlsbad
26	Pedestal in front of 2663 Bressi Ranch Way	Pedestal	Carlsbad
27	Vault in front of 2663 Bressi Ranch Way	Vault	Carlsbad
28	Pedestal in front of 7331 Bolero St	Pedestal	Carlsbad
29	Pedestal in front of 7323 Bressi Ranch Way	Pedestal	Carlsbad
30	P514462	Pole	Fallbrook
31	P417316	Pole	Fallbrook
32	P516051	Pole	Fallbrook
33	P312413	Pole	Fallbrook
34	710459	Pole	Fallbrook
35	P417315	Pole	Fallbrook
36	P813040	Pole	Fallbrook
37	Pole east of P813040	Pole	Fallbrook
38	P310711	Pole	Fallbrook

39	P310710	Pole	Fallbrook
40	Z115424	Pole	Fallbrook
41	P192115	Pole	Fallbrook
42	Z115425	Pole	Fallbrook
43	Pole east of Z115425	Pole	Fallbrook
44	825132H	Pole	Fallbrook
45	8301221H	Pole	Fallbrook
46	P63010	Pole	La Jolla
47	63011	Pole	La Jolla
48	P932820	Pole	La Jolla
49	P932822	Pole	La Jolla
50	P63007	Pole	La Jolla
51	P195817S	Pole	La Jolla
52	P63012	Pole	La Jolla
53	P195815S	Pole	La Jolla
54	P63013	Pole	La Jolla
55	P63014	Pole	La Jolla
56	P239756	Pole	La Jolla
57	P63015	Pole	La Jolla
58	P63016	Pole	La Jolla
59	P203680	Pole	La Jolla
60	Pole south of P203680	Pole	La Jolla
61	P37149	Pole	La Jolla
62	P37276	Pole	La Jolla
63	P834704	Pole	La Jolla
64	P191687	Pole	La Jolla
65	P834705	Pole	La Jolla
66	P834707	Pole	La Jolla
67	P191690	Pole	La Jolla
68	P68360	Pole	La Jolla
69	P834706	Pole	La Jolla
70	P836587	Pole	La Jolla
71	P239827	Pole	La Jolla
72	P836605	Pole	La Jolla
73	P68568	Pole	La Jolla
74	P37875	Pole	San Diego
75	P732678	Pole	San Diego
76	P834743	Pole	San Diego
77	P834744	Pole	San Diego
78	P834745	Pole	San Diego
79	P834746	Pole	San Diego
80	P735718	Pole	San Diego
81	P735719	Pole	San Diego
82	P735720	Pole	San Diego
83	P838489	Pole	San Diego
84	733844H	Pole	San Diego
85	JP94253	Pole	San Diego
86	P93856	Pole	San Diego
87	P93855	Pole	San Diego

88	P93854	Pole	San Diego
89	P93853	Pole	San Diego
90	P93852	Pole	San Diego
91	P93851	Pole	San Diego
92	P93845	Pole	San Diego
93	P93844	Pole	San Diego
94	P579492	Pole	San Diego
95	57941	Pole	San Diego
96	P179314	Pole	San Diego
97	P179315	Pole	San Diego
98	P179316	Pole	San Diego
99	P293548	Pole	San Diego
100	P179318	Pole	San Diego
101	P179319	Pole	San Diego
102	P179309	Pole	San Diego
103	P179305	Pole	San Diego
104	P179435	Pole	San Diego
105	P294055	Pole	San Diego
106	P729399	Pole	San Diego
107	P179433	Pole	San Diego
108	P205975	Pole	San Diego
109	P179436	Pole	San Diego
110	P833401	Pole	San Diego
111	P833400	Pole	San Diego
112	P833899	Pole	San Diego
113	P838752	Pole	San Diego
114	P733054	Pole	San Diego
115	P733055J	Pole	San Diego
116	707412H	Pole	San Diego
117	P833381	Pole	San Diego
118	P836251	Pole	San Diego
119	P932249	Pole	San Diego
120	P932248	Pole	San Diego
121	P932247	Pole	San Diego
122	P836301	Pole	San Diego
123	P933244	Pole	San Diego
124	Pedestal in front of 10115 Kibler	Pedestal	San Diego
125	Pedestal in front of 10093 Kibler	Pedestal	San Diego
126	Pedestal in front of 10083 Kibler	Pedestal	San Diego
127	Pedestal in front of 10053 Kibler	Pedestal	San Diego
128	Pedestal in front of 10043 Kibler	Pedestal	San Diego
129	Pedestal in front of 10013 Kibler	Pedestal	San Diego
130	Pedestal in front of 9963 Kibler	Pedestal	San Diego

131	Pedestal in front of 9963 Parkdale	Pedestal	San Diego
132	Pedestal in front of 9973 Parkdale	Pedestal	San Diego
133	Pedestal in front of 9983 Parkdale	Pedestal	San Diego
134	Pedestal in front of 4063 Avati	Pedestal	San Diego
135	Pedestal in front of 2163 Coast Ave	Pedestal	San Marcos
136	Pedestal in front of 2165 Coast Ave	Pedestal	San Marcos
137	Pedestal in front of 2173 Coast Ave	Pedestal	San Marcos
138	Pedestal in front of 2181 Coast Ave	Pedestal	San Marcos
139	Pedestal in front of 2185 Coast Ave	Pedestal	San Marcos
140	Pedestal in front of 2189 Coast Ave	Pedestal	San Marcos

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.

Charter's facilities on the following poles required maintenance:

- P124446 – Damaged strand wire
- P26754 – Damaged lashing wire
- P27613 – Damaged riser conduit
- 733844H – Damaged tree guard cover
- P834744 – Unsecured riser conduit
- 63011 – Unsecured service drop riser
- P26755 – Unsecured ground wire
- P93844 – The ground wire cover did not cover the base of the ground wire as intended.
- P20665 – Spectrum conductor in contact with third-party riser conduit

The ground wire covering on the following poles was damaged:

- P312413
- P63007
- P63012
- P37276
- P834704
- P834743
- P735720
- P838489
- JP94253
- P833400

GO 95, Rule 31.6, Abandoned Lines, states in part:

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.

- A permanently abandoned service drop was still attached to Pole P733054.

GO 95, Rule 37 - Minimum Clearances of Wires above Railroads, Thoroughfares, Buildings, Etc., Case 3, Column B, requires the minimum allowable vertical clearance for a communications conductor crossing or along thoroughfares in urban districts to be not less than 18 feet.

- A Spectrum service drop attached to pole P834705 was less than 18 feet above a throughfare in an urban district.

GO 95, Rule 38 - Minimum Clearances of Wires from Other Wires, Table 2, Case 8, Column C, requires the minimum vertical separation between communications conductors on separate crossarms or other supports at different levels on the same pole and in adjoining midspans to be 12 inches.

The separation between Charter communications facilities and a third-party communications conductor on each of the following poles had less than 12 inches of vertical separation:

- P26063
- P933244
- P312413
- P37276
- P834704
- P417316
- Z115424
- Pole south of P20961
- P932822
- P834706
- P836587
- P93856
- P68360

GO 95, Rule 38, Table 2, Case 19, Column C requires the minimum radial separation between communications conductors and guys supported on the same poles to be 3 inches.

- A Charter communications conductor on pole 1334932E was in contact with a down guy wire.

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

Service drops attached to crossarms supporting cables shall not be less than 15 inches from the center line of pole as required by Table 1, Case 8, Column B.

- A service drop attached to a crossarm on pole P417316 was less than 15 inches from the center line of the pole.

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 pedestal in front of 2163 Coast Ave had a damaged bracket.
- The pedestal in front of 2173 Coast Ave had a damaged bracket.

The pedestal cover at each of the following locations was not locked:

- Pedestal in front of 2165 Coast Ave
- Pedestal in front of 7331 Bolero St
- Pedestal in front of 10093 Kibler
- Pedestal in front of 10083 Kibler
- Pedestal in front of 9983 Parkdale

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.

GO 128, Rule 21.5, states in part:

Effectively Grounded (Effective Ground) means permanently connected to earth through a ground connection or connections of sufficiently low impedance and having sufficient current-carrying capacity to prevent the building up of voltages which may result in undue hazard to persons or to connected equipment.

GO 128, Rule 36.5-A, Grounding and Bonding of Conductors and Equipment, states in part:

Supply conductors and equipment of the following types shall be bonded in manholes and at other locations where conductors and equipment are accessible and in proximity to one another, and shall be grounded in accordance with Rule 36.5-C....

GO 128, Rule 36.5-C, Grounding Methods, states in part:

Conductors and equipment required by Rule 36.5-A to be grounded shall be effectively grounded...

GO 128, Rule 36.5-C, also lists the acceptable grounding methods. The following underground equipment, which is required to be effectively grounded by GO 128, Rule 36.5-A, was not effectively grounded:

- The pedestal in front of 2669 Bressi Ranch Way contained an ungrounded amplifier.