

PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3298



July 7, 2023

CA2023-1025

Kristen Camuglia
Cox Communications
27121 Towne Centre Dr.
Foothill Ranch, CA 92610

Subject: Audit of Cox's Orange County and Palos Verdes District

Ms. Camuglia:

On behalf of the Electric Safety and Reliability Branch (ESRB) of the California Public Utilities Commission (CPUC), Stacey Ocampo and Jose Lastra of my staff conducted a Communication Infrastructure Provider (CIP) audit of Cox's Orange County and Palos Verdes District from May 8, 2023 to May 12, 2023. The audit included a review of Cox's inspection and maintenance records and a field inspection of Cox'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 August 7, 2023, by electronic or hard copy, of all corrective measures taken by Cox to remedy and prevent such violations.

If you have any questions concerning this audit, you can contact Stacey Ocampo at (213) 266-4712 or Stacey.Ocampo@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
Stacey Ocampo, Utilities Engineer, ESRB, SED, CPUC
Jose Lastra, Utilities Engineer, ESRB, SED, 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
- Cox Communications' Intrusive Inspection of Wood Poles
- Cox Communications' Overhead Lines Maintenance Plan
- Cox Communications' Visual Inspections of Overhead Lines

II. Field Inspection

My staff inspected the following facilities during the field inspection:

No.	Structure ID	Type of Structure	Location
1	417216E	Pole	Silverado
2	2022745E	Pole	Silverado
3	2349979E	Pole	Silverado
4	1642713E	Pole	Silverado
5	2349980E	Pole	Silverado
6	2349981E	Pole	Silverado
7	2231918E	Pole	Silverado
8	2349982E	Pole	Silverado
9	2069708E	Pole	Silverado
10	2349983E	Pole	Silverado
11	2349984E	Pole	Silverado
12	2349985E	Pole	Silverado
13	4633860E	Pole	Silverado
14	2030355E	Pole	Trabuco Canyon
15	1326997E	Pole	Trabuco Canyon
16	1535281E	Pole	Trabuco Canyon
17	2318797E	Pole	Trabuco Canyon
18	1027657H	Pole	Trabuco Canyon
19	2148491E	Pole	Trabuco Canyon
20	1252958E	Pole	Trabuco Canyon
21	2195682E	Pole	Trabuco Canyon
22	4926560E	Pole	Trabuco Canyon
23	432968E	Pole	Trabuco Canyon
24	1253599E	Pole	Trabuco Canyon
25	2318800E	Pole	Trabuco Canyon
26	4884045E	Pole	Trabuco Canyon
27	4869761E	Pole	Trabuco Canyon
28	258546E	Pole	Trabuco Canyon
29	4747489E	Pole	Trabuco Canyon
30	4691603E	Pole	Trabuco Canyon
31	886219E	Pole	Trabuco Canyon
32	4691601E	Pole	Trabuco Canyon
33	1590750E	Pole	Trabuco Canyon
34	4678025E	Pole	Trabuco Canyon
35	2119868E	Pole	Trabuco Canyon
36	2318778E	Pole	Trabuco Canyon
37	4000420E	Pole	Trabuco Canyon
38	2318780E	Pole	Trabuco Canyon
39	4583407E	Pole	Trabuco Canyon
40	432976E	Pole	Trabuco Canyon

41	432975E	Pole	Trabuco Canyon
42	2258547E	Pole	Trabuco Canyon
43	4579833E	Pole	Rancho Palos Verdes
44	705926H	Pole	Rancho Palos Verdes
45	1036140E	Pole	Rancho Palos Verdes
46	1036139E	Pole	Rancho Palos Verdes
47	1036138E	Pole	Rancho Palos Verdes
48	1230561E	Pole	Rancho Palos Verdes
49	1230560E	Pole	Rancho Palos Verdes
50	1230559E	Pole	Rancho Palos Verdes
51	1156827E	Pole	Rancho Palos Verdes
52	1230558E	Pole	Rancho Palos Verdes
53	4752301E	Pole	Rancho Palos Verdes
54	862277E	Pole	Rancho Palos Verdes
55	4752302E	Pole	Rancho Palos Verdes
56	862279E	Pole	Rancho Palos Verdes
57	862285E	Pole	Rancho Palos Verdes
58	862280E	Pole	Rancho Palos Verdes
59	4752303E	Pole	Rancho Palos Verdes
60	862282E	Pole	Rancho Palos Verdes
61	4752304E	Pole	Rancho Palos Verdes
62	4755515E	Pole	Rancho Palos Verdes
63	890397E	Pole	Rancho Palos Verdes
64	890398E	Pole	Rancho Palos Verdes
65	890399E	Pole	Rancho Palos Verdes
66	944194E	Pole	Rancho Palos Verdes
67	1139353E	Pole	Rancho Palos Verdes
68	1139354E	Pole	Rancho Palos Verdes
69	4752305E	Pole	Rancho Palos Verdes
70	1082657E	Pole	Rancho Palos Verdes
71	4857438E	Pole	Rolling Hills
72	4857439E	Pole	Rolling Hills
73	4857440E	Pole	Rolling Hills
74	4836954E	Pole	Rolling Hills
75	3008205E	Pole	Rolling Hills
76	736 Bart Earle Way	Pole	Rolling Hills
77	4857441E	Pole	Rolling Hills
78	1810578E	Pole	Irvine
79	4687330E	Pole	Irvine
80	1810579E	Pole	Irvine
81	1838358E	Pole	Irvine
82	1810577E	Pole	Irvine
83	1810580E	Pole	Irvine
84	1810581E	Pole	Irvine
85	1810582E	Pole	Irvine

86	4394051E	Pole	Irvine
87	1810583E	Pole	Irvine
88	1810584E	Pole	Irvine
89	1810585E	Pole	Irvine
90	1810576E	Pole	Irvine
91	4197310E	Pole	Irvine
92	1810575E	Pole	Irvine
93	1810574E	Pole	Irvine
94	1810573E	Pole	Irvine
95	2295864E	Pole	Costa Mesa
96	1625947E	Pole	Costa Mesa
97	1625948E	Pole	Costa Mesa
98	1703279E	Pole	Costa Mesa
99	4681317E	Pole	Costa Mesa
100	1625949E	Pole	Costa Mesa
101	P194907	Pole	Dana Point
102	P22458	Pole	Dana Point
103	P22457	Pole	Dana Point
104	P22456	Pole	Dana Point
105	P22455	Pole	Dana Point
106	P22454	Pole	Dana Point
107	P22453	Pole	Dana Point
108	P327821	Pole	Dana Point
109	P24840	Pole	Dana Point
110	P24841	Pole	Dana Point
111	P24842	Pole	Dana Point
112	P24843	Pole	Dana Point
113	P25579	Pole	Dana Point
114	P24846	Pole	Dana Point
115	P27093	Pole	Dana Point
116	Pedestal in front of 14 Chickadee Lane	Pedestal	Aliso Viejo
117	Pedestal in front of 20 Chickadee Lane	Pedestal	Aliso Viejo
118	Pedestal in front of 24 Chickadee Lane	Pedestal	Aliso Viejo
119	Pedestal in front of 28 Chickadee Lane	Pedestal	Aliso Viejo
120	Pedestal in front of 34 Chickadee Lane	Pedestal	Aliso Viejo
121	Pedestal in front of 38 Chickadee Lane	Pedestal	Aliso Viejo
122	Pedestal in front of 43 Chickadee Lane	Pedestal	Aliso Viejo
123	Pedestal in front of 40 Chickadee Lane	Pedestal	Aliso Viejo
124	Pedestal in front of 12 Chickadee Lane	Pedestal	Aliso Viejo
125	Pedestal in front of 8 Chickadee Lane	Pedestal	Aliso Viejo
126	Pedestal in front of 4 Chickadee Lane	Pedestal	Aliso Viejo
127	Pedestal in the corner of Calle Corta/Chickadee Lane	Pedestal	Aliso Viejo
128	Pedestal in front of 21212 Foxtail	Pedestal	Mission Viejo
129	Pedestal in front of 21192 Foxtail	Pedestal	Mission Viejo

130	Pedestal in front of 21182 Foxtail	Pedestal	Mission Viejo
131	Pedestal in front of 21152 Foxtail	Pedestal	Mission Viejo
132	Pedestal in front of 21122 Foxtail	Pedestal	Mission Viejo
133	Pedestal in front of 21106 Foxtail	Pedestal	Mission Viejo
134	Pedestal in front of 21082 Foxtail	Pedestal	Mission Viejo
135	Pedestal in front of 21072 Foxtail	Pedestal	Mission Viejo
136	Pedestal in front of 21071 Foxtail	Pedestal	Mission Viejo
137	Pedestal in front of 28541 Big Springs Road	Pedestal	Lake Forest
138	Pedestal in front of 28561 Big Springs Road	Pedestal	Lake Forest
139	Pedestal in front of 28581 Big Springs Road	Pedestal	Lake Forest
140	Pedestal in front of 28595 Big Springs Road	Pedestal	Lake Forest
141	Pedestal in front of 28622 Big Springs Road	Pedestal	Lake Forest
142	Pedestal in front of 28602 Big Springs Road	Pedestal	Lake Forest
143	Pedestal in front of 19161 Willow Brook Lane	Pedestal	Lake Forest
144	Pedestal in front of 19182 Willow Brook Lane	Pedestal	Lake Forest
145	Pedestal in front of 28551 Brook Hill Road	Pedestal	Lake Forest
146	Pedestal in front of 28561 Brook Hill Road	Pedestal	Lake Forest
147	Pedestal in front of 28581 Brook Hill Road	Pedestal	Lake Forest
148	Pedestal in front of 28611 Brook Hill Road	Pedestal	Lake Forest
149	Pedestal in front of 28622 Brook Hill Road	Pedestal	Lake Forest
150	Pedestal in front of 19201 Willow Brook Lane	Pedestal	Lake Forest
151	Pedestal in front of 19231 Willow Brook Lane	Pedestal	Lake Forest
152	Pedestal in front of 28532 Chimney Rock Circle	Pedestal	Lake Forest

III. 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.

Cox's facilities on the following poles required maintenance:

- Pole 2030355E – Cox's riser conduit was damaged.
- Pole 4857438E – Cox's riser conduit was not properly secured to the pole.
- Pole 862277E – a Cox lashing wire was broken.

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 service drop attached to Pole 4583407E was strained by vegetation.

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

- Pole 2349984E – Cox's conductor was in contact with another communication conductor.
- Pole 4857441E – Cox's conductor was in contact with another communication conductor.

GO 95, Rule 38 - Minimum Clearances of Wires from Other Wires, Table 2, Column C, Case 19 requires the minimum radial clearance between guys and span wires passing communication conductors supported on the same poles to be 3 inches.

The radial clearance between a Cox down guy wire and a third-party communications conductor on Pole 1036139E was less than 3 inches.

GO 95, Rule 44.1, Installation and Reconstruction, states in part:

Lines and elements of lines, upon installation or reconstruction, shall provide as a minimum the safety factors specified in Table 4. The design shall consider all supply and communication facilities planned to occupy the structure. For purposes of this rule, the term “planned” applies to the facilities intended to occupy the structure that are actually known to the constructing company at the time of design.

The pole loading calculations supplied by Cox for the following pole contained incorrect information:

- 1082657E – The pole loading data did not include a transformer and guard arm which were present at the time of the field inspection.

GO 95, Rule 56.2 Overhead Guys, Anchor Guys and Span Wires, Use, 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 Cox down guy wire supporting each of the following poles was not taut:

- 1036138E
- 4836954E

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 at the corner of Calle Corta and Chickadee Lane was unsecured.
- The pedestal in front of 21071 Foxtail had a tap not mounted to the support bracket.
- The pedestal in front of 19201 Willow Brook Lane had a tap not mounted to the support bracket.

The lock securing the pedestal cover at each of the following locations was inoperable:

- Pedestal located in front of 24 Chickadee Lane
- Pedestal located in front of 28 Chickadee Lane