

## PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE  
SAN FRANCISCO, CA 94102-3298



February 17, 2021

CA2020-868

Amy Warshauer  
Manager – Government & External Affairs  
Frontier Communications  
2535 West Hillcrest Drive  
Newbury, CA 91320

Subject: Audit of Frontier's Goleta region

Ms. Warshauer:

On behalf of the Electric Safety and Reliability Branch (ESRB) of the California Public Utilities Commission, Derek Fong, Stacey Ocampo, and Mily Vaidya of my staff conducted a Communication Infrastructure Provider (CIP) audit of Frontier's Goleta region from November 30, 2020 to December 4, 2020. The audit included field inspections of Frontier'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 March 17, 2021, by electronic or hard copy, of all corrective measures taken by Frontier to remedy and prevent such violations.

If you have any questions concerning this audit, you can contact Derek Fong at (213) 576 – 6850 or [derek.fong@cpuc.ca.gov](mailto:derek.fong@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: Lee Palmer, Director, Safety and Enforcement Division, CPUC  
Nika Kjensli, Program Manager, Electric Safety and Reliability Branch, CPUC  
Derek Fong, Senior Utilities Engineer, Electric Safety and Reliability Branch, CPUC

## AUDIT FINDINGS

### Section I: Field Inspection

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

Number	Structure Number	Type of Structure	Location
1	GT62806	Pole	Goleta
2	VZ87230	Pole	Goleta
3	GT62804	Pole	Goleta
4	GT62807	Pole	Goleta
5	GT62808	Pole	Goleta
6	1413584E	Pole	Goleta
7	4875467E	Pole	Goleta
8	GT121331	Pole	Goleta
9	1413585E	Pole	Goleta
10	4912686E	Pole	Goleta
11	1256029E	Pole	Goleta
12	S170934	Pole	Goleta
13	1372039E	Pole	Goleta
14	GT85182	Pole	Goleta
15	4428704E	Pole	Goleta
16	108165E	Pole	Goleta
17	1345746E	Pole	Goleta
18	4669818E	Pole	Goleta
19	GT71721	Pole	Goleta
20	4867207E	Pole	Goleta
21	GT93490	Pole	Goleta
22	1946908E	Pole	Goleta
23	27033	Pole	Goleta
24	1523717E	Pole	Goleta
25	1481787E	Pole	Goleta
26	1947043E	Pole	Goleta
27	4041516E	Pole	Goleta
28	12751	Pole	Goleta
29	2178857E	Pole	Goleta
30	94559	Pole	Goleta
31	1664755E	Pole	Goleta
32	12753	Pole	Goleta
33	127547	Pole	Goleta
34	373968E	Pole	Goleta
35	1608887E	Pole	Goleta
36	S127564	Pole	Goleta
37	S12757	Pole	Goleta
38	661379E	Pole	Goleta
39	661380E	Pole	Goleta
40	661381E	Pole	Goleta

41	661382E	Pole	Goleta
42	1675524E	Pole	Goleta
43	1675522E	Pole	Goleta
44	1675521E	Pole	Goleta
45	528629Y	Pole	Goleta
46	674721E	Pole	Santa Barbara
47	1256457E	Pole	Santa Barbara
48	GT95903	Pole	Santa Barbara
49	1256458E	Pole	Santa Barbara
50	1256459E	Pole	Santa Barbara
51	208374E	Pole	Santa Barbara
52	4591576E	Pole	Santa Barbara
53	528268Y	Pole	Santa Barbara
54	4650022E	Pole	Santa Barbara
55	4458110E	Pole	Santa Barbara
56	2178513E	Pole	Santa Barbara
57	2178513E	Pole	Santa Barbara
58	2178536E	Pole	Santa Barbara
59	4453104E	Pole	Santa Barbara
60	4453103E	Pole	Santa Barbara
61	1345915E	Pole	Santa Barbara
62	1345914E	Pole	Santa Barbara
63	1345913E	Pole	Santa Barbara
64	1345912E	Pole	Santa Barbara
65	4890268E	Pole	Santa Barbara
66	4890269E	Pole	Santa Barbara
67		Manhole	813 E Pario Street, Santa Barbara
68		Manhole	Next to City of Santa Barbara, Cabrillo Pavilion
69		Manhole	Infront of Mar Monte Hotel, Santa Barbara
70		Manhole	In front of OKU (Blue Water Grill), Santa Barbara
71		Manhole	In front of (across) Surf & Wear's, Santa Barbara
72		Manhole	In front of 3801 White Rose Ln, Santa Barbara
73		Manhole	In front of 3807 White Rose Ln, Santa Barbara
74		Manhole	In front of 3809 White Rose Ln, Santa Barbara
75		Manhole	In front of 3813 White Rose Ln, Santa Barbara
76		Pole	In front of 130 De La Guerre, Santa Barbara
77	S29608Y	Pole	

78		Pole	In front of 210 De La Guerre, Santa Barbara
79	S28524Y	Pole	Santa Barbara
80	4795368E	Pole	Santa Barbara
81	160375E	Pole	Santa Barbara
82	1015355E	Pole	Santa Barbara
83	4572696E	Pole	Santa Barbara
84	4460135E	Pole	Santa Barbara
85	1015358E	Pole	Santa Barbara
86	1015357E	Pole	Santa Barbara
87	1015224E	Pole	Santa Barbara
88	2322023E	Pole	Santa Barbara
89	4611343E	Pole	Santa Barbara
90	4758260E	Pole	Santa Barbara
91	1675272E	Pole	Santa Barbara
92	4863203E	Pole	Santa Barbara
93	4863202E	Pole	Santa Barbara
94	4457899E	Pole	Santa Barbara
95	1372132E	Pole	Santa Barbara
96	1372131E	Pole	Santa Barbara

## Section II: Field Inspection Violations List

We observed the following violations during the field inspections:

**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.*

*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.*

Frontier facilities on each of the following poles required maintenance:

- Pole GT62808 – missing pole tag
- Pole 1413584E – incomplete pole transfer
- Pole 4875467E – the “eye” of the Frontier down guy anchor was buried in the dirt.
- Pole 1372039E – a Frontier aerial terminal was not properly attached.
- Pole 4428704E – a vertical run of Frontier communications conductor, supported on the surface of the wood pole, was not secured.
- Pole 108165E – a Frontier communications conductor was not properly secured to its messenger, such as with zip ties.
- Pole 1675524E – a Frontier lashing wire was broken.
- Pole 2178513E – a Frontier ground molding was damaged.
- Pole 4460135E – incomplete pole transfer
- Pole 4863202E – Frontier splice damaged
- Pole 1372132E – Frontier lashing wire was broken

**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 Frontier down guy wire supporting each of the following poles was not taut:

- Pole 1413584E
- Pole 1015355E
- Pole 1015224E

**GO 95, Rule 38, 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 Frontier communications conductors and a third-party communications conductor on each of the following poles had less than 12 inches of vertical separation:

- Pole 1413584E – Frontier and CATV communications conductors touching at mid-span.
- Pole 4428704E
- Pole 4669818E
- Pole 12753 – Frontier and CATV communications conductors touching.
- Pole 127547 – Frontier and CATV communications conductors touching.
- Pole 373968E – Frontier and CATV communications conductors touching.
- Pole 1608887E – Frontier and CATV communications conductors touching.
- Pole 4591576E
- Pole 4458110E
- Pole 2178513E
- Pole 4453104E
- Pole 4453103E
- Pole 1372132E
- Pole 108165E

**GO 95, 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. 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.*

Frontier communications conductors on each of the following poles were abandoned:

- Pole S170934
- Pole 4041516E
- Pole 94559
- Pole 1345914E – an abandoned Frontier communications service drop was wrapped around the pole.
- Pole 1015355 – a service drop has been cut and is dangling at mid-span.

**General Order 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).*

Frontier communications conductors on each of the following poles were strained by vegetation contact:

- Pole 4428704E
- Pole 4669818E
- Pole 528629Y
- Pole 2178536E

**General Order 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 Frontier communications conductor on each of the following poles was contacting a down guy wire.

- Pole 1481787E
- Pole 1664755E – a Frontier communications conductor was contacting a loose SCE down guy wire.

**General Order 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 , for a distance above ground sufficient to protect against mechanical injury, but in no case shall such distance be less than 7 feet.*

A Frontier ground wire supported on Pole 1675521E was not protected by a suitable covering.

**General Order 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 Frontier down guy wire attached to Pole 1015224E did not have a marker.

**General Order 95, Rule 84.8-D4, Clearances between Conductors**, states:

*The radial clearance between communication service drop conductors and supply service drop conductors may be less than 48 inches as specified in Table 2, Column C, Cases 4 and 9; Column D, Cases 3 and 8 , but shall be not less than 24 inches. Where within 15 feet of the point of attachment of either service drop on a building, this clearance may be further reduced but shall be not less than 12 inches.*

A Frontier communications service drop and an SCE supply service drop on each of the following poles had less than 12 inches of radial clearance at less than 15 feet away from the point attachment:

- Pole 1256458E
- Pole in front of 130 De La Guerre, Santa Barbara – a Frontier communications service drop had 2 inches of radial separation from an SCE supply service drop.

**General Order 95, Rule 84.6-D, Vertical Runs**, states in part:

*Vertical runs of communication wires or cables supported on the surface of wood poles or structures, shall be covered by a suitable protective covering (see Rule 22.8 ) where within a vertical distance of 3 feet above or 6 feet below unprotected supply conductors supported on the same pole or structure.*

A vertical run of Frontier communications conductor on the surface of each of the following poles was not covered by a suitable protective covering.

- Pole 1413585E – the Frontier communications conductor was neither secured nor protected with a riser guard.
- Pole 2322023E

**General Order 95, Rule 84.4-A6, Across or Along Public Thoroughfares**, states:

*Communication conductors over or across public thoroughfares shall have a clearance of 18 feet above ground (Table 1, Case 3, Column B ). A reduced clearance to 16 feet is permitted for the portions of communication conductors where no part of the line overhangs any part of the thoroughfare which is ordinarily traveled, or where the line is behind an established curb, ditch or berm that serves to protect such communication conductors from encroachment by vehicular traffic.*

The above ground clearance of Frontier communications conductors on pole 4867207 and along a public thoroughfare, was approximately 7 feet.

**General Order 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 Frontier manhole at 813 E Pario Street, Santa Barbara was not sealed to mitigate water intrusion.