

PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3298



April 28, 2022

CA2023-932

Charlie Born
Director – Government & External Affairs
Frontier Communications
2535 West Hillcrest Drive
Newbury, CA 91320

SUBJECT: Audit of Frontier’s San Bernardino Region

Mr. Born:

On behalf of the Electric Safety and Reliability Branch (ESRB) of the California Public Utilities Commission, Saimon Islam and Stacey Ocampo of my staff conducted a Communication Infrastructure Provider (CIP) audit of Frontier’s San Bernardino Region from March 21, 2022 to March 25, 2022. The audit included a review of Frontier’s records and 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 May 30, 2022 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, please contact Saimon Islam at (213) 266-4733 or Saimon.Islam@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
Majed Ibrahim, Senior Utilities Engineer, Electric Safety and Reliability Branch, CPUC
Saimon Islam, Utilities Engineer, Electric Safety and Reliability Branch, CPUC

AUDIT FINDINGS

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
- Frontier's Overhead Lines Maintenance Plan
- Frontier's Visual Inspections of Overhead Lines

II. Field Inspection

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

No.	Structure Number	Type of Structure	City
1	714593E	Pole	Upland
2	4593168E	Pole	Upland
3	H6381Y	Pole	Upland
4	493997E	Pole	Upland
5	1309340E	Pole	Upland
6	1309341E	Pole	Upland
7	1377814E	Pole	Upland
8	H30020Y	Pole	Upland
9	130940E	Pole	Upland
10	506131E	Pole	Upland
11	1566340E	Pole	Upland
12	1566341E	Pole	Upland
13	4408042E	Pole	Upland
14	1274137E	Pole	Upland
15	4227459E	Pole	Upland
16	H17012Y	Pole	Mt Baldy
17	57306GT	Pole	Mt Baldy
18	1733591E	Pole	Mt Baldy
19	20 Bear Drive	Pole	Mt Baldy
20	4505210E	Pole	Mt Baldy
21	1029306E	Pole	Mt Baldy
22	1892128E	Pole	Mt Baldy
23	882568E	Pole	Mt Baldy
24	882567E	Pole	Mt Baldy
25	882566E	Pole	Mt Baldy
26	4560519E	Pole	Mt Baldy
27	Across 1 Oak Drive	Pole	Mt Baldy
28	882569E	Pole	Mt Baldy
29	4796429E	Pole	Mt Baldy
30	1714543E	Pole	Mt Baldy
31	4505209E	Pole	Mt Baldy
32	4935868E	Pole	Mt Baldy
33	4593172E	Pole	Mt Baldy
34	H7307Y	Pole	Mt Baldy
35	4237509E	Pole	Chino Hills

No.	Structure Number	Type of Structure	City
36	4237508E	Pole	Chino Hills
37	4042824E	Pole	Chino Hills
38	4341578E	Pole	Chino Hills
39	4742408E	Pole	Chino Hills
40	4237510E	Pole	Chino Hills
41	1598109E	Pole	Chino Hills
42	1598108E	Pole	Chino Hills
43	1598107E	Pole	Chino Hills
44	1598106E	Pole	Chino Hills
45	4908676E	Pole	Chino Hills
46	2306343E	Pole	Chino Hills
47	2306332E	Pole	Chino Hills
48	2306333E	Pole	Chino Hills
49	2306334E	Pole	Chino Hills
50	4238186E	Pole	Chino Hills
51	682837E	Pole	Chino Hills
52	1044597E	Pole	Calimesa
53	1609895E	Pole	Calimesa
54	1298711E	Pole	Calimesa
55	4495590E	Pole	Calimesa
56	4250155E	Pole	Calimesa
57	4250157E	Pole	Calimesa
58	4250156E	Pole	Calimesa
59	4242231E	Pole	Calimesa
60	4732036E	Pole	Calimesa
61	539561E	Pole	Calimesa
62	1298749E	Pole	Calimesa
63	1571155E	Pole	Calimesa
64	1571156E	Pole	Calimesa
65	654192E	Pole	Calimesa
66	GT132266	Pole	Calimesa
67	397834E	Pole	Calimesa
68	1805793E	Pole	Calimesa
69	331237E	Pole	Calimesa
70	654194E	Pole	Calimesa
71	1910457E	Pole	Calimesa
72	1992609E	Pole	Calimesa
73	1910580E	Pole	Calimesa
74	1865471E	Pole	Calimesa

No.	Structure Number	Type of Structure	City
75	1865472E	Pole	Calimesa
76	1375597E	Pole	Redlands
77	1375596E	Pole	Redlands
78	4731183E	Pole	Redlands
79	1375595E	Pole	Redlands
80	4610907E	Pole	Redlands
81	4610908E	Pole	Redlands
82	4337908E	Pole	Redlands
83	4731912E	Pole	Redlands
84	1589138E	Pole	Redlands
85	1589101E	Pole	Redlands
86	1298625E	Pole	Redlands
87	1733512E	Pole	Redlands
88	792138E	Pole	Redlands
89	1298626E	Pole	Redlands
90	1298627E	Pole	Redlands
91	792136E	Pole	Redlands
92	2210546E	Pole	Redlands
93	GT1222846	Pole	Redlands
94	2190482E	Pole	Redlands
95	2190654E	Pole	Redlands
96	2190480E	Pole	Redlands
97	GT59614	Pole	Redlands
98	1998882E	Pole	Redlands
99	H1583Y	Pole	Redlands
100	1526695E	Pole	Rancho Cucamonga
101	91 W 9 th Street	Pole	Rancho Cucamonga
102	4772336E	Pole	Upland
103	H7297Y	Pole	Upland
104	H7296Y	Pole	Upland
105	1551918E	Pole	Pomona
106	GT126340	Pole	Pomona
107	2235616E	Pole	Highland
108	34.059448, -117.22276	Pole	Highland
109	T2778	Handhole	Coachella
110	84076 Calendula Ave	Handhole	Coachella
111	T2783	Handhole	Coachella
112	T27024	Handhole	La Quinta

No.	Structure Number	Type of Structure	City
113	T27026	Handhole	La Quinta
114	Ambassador Circle & Monticello Drive	Pedestal	La Quinta
115	Monticello Avenue & Hemings Way	Fiber distribution hub	La Quinta
116	T183079	Handhole	La Quinta
117	27584	Pedestal	Palm Desert
118	27585	Pedestal	Palm Desert
119	27586	Pedestal	Palm Desert
120	In front of 133 Traviso Drive	Pedestal	Palm Desert
121	127 Traviso Drive	Pedestal	Palm Desert
122	27683	Pedestal	Palm Desert
123	180601	Handhole	Palm Desert
124	77241 Olympic Way	Handhole	Palm Desert
125	T180569	Handhole	Palm Desert
126	40467 Bay Hill Way	Handhole	Palm Desert
127	180523	Handhole	Palm Desert
128	185192	Handhole	Palm Desert
129	180527	Handhole	Palm Desert
130	180532	Handhole	Palm Desert

III. Field Inspection – Violations List

My staff observed the following violations during the field inspections 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.

Frontier’s facilities on each of the following poles required maintenance:

- 4908676E – A Frontier service drop was attached to the weather head.
- 1598107E – Incomplete pole transfer
- 2210546E – The “eye” of the Frontier down guy anchor was buried in the dirt.
- 4250156E – A Frontier terminal was not properly attached.
- 714593E – A Frontier lashing wire was broken.
- 397834E – A Frontier tracer wire was not properly secured to the fiber drop.
- GT59614E – A Frontier lashing wire was broken.
- 1992609E – Frontier fiber coils were not properly attached.
- 4731183E – Frontier fiber coils were not properly attached.
- 1309341E – Insulation on a Frontier buried drop was damaged.

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.

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

- 714593E
- 1992609E
- 4610907E
- 4610908E

GO95, Rule 84.4, Clearances(A)(6), Across or Along Public Thoroughfares, states in part:

Communication conductors over or across public thoroughfares shall have a clearance of 18 feet above ground.

The above ground clearance over a public thoroughfare of a Frontier conductor on Pole 682837E was approximately 14 feet.

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).

Frontier communications conductors attached to following poles were strained by vegetation:

- 331237E
- 2210546E

General Order 95, Rule 38, Minimum Clearances of Wires from Other Wires, Table 2, Case 19, Column C, requires *a minimum of 3 inches radial separation between communication cables and guy wires.*

The radial separation between Frontier communications conductors and a third-party communications guy wire on each of the following poles was less than 3 inches:

- 714593E
- 4772336E

GO 95, Rule 84.8-C3b: Above Ground in Areas Accessible to Pedestrians Only, states in part:

Residential Premises: Over areas accessible to pedestrians only, the vertical clearance shall not be less than 10 feet. EXCEPTION: If the building served does not permit an attachment which will provide this 10 foot clearance without the installation of a structure on the building, the clearance shall be as great as possible but in no case less than 8 feet 6 inches.

Frontier service drops attached to each of the following poles had an above ground clearance of approximately 6 feet over areas accessible to pedestrians only:

- 331237E
- 2210546E

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 and not removed:

- 1566340E
- 4408042E
- 4227459E
- 2306343E
- 4732036E
- 1298749E
- 1589138E
- 91 W. 9th Street
- H7297Y
- 1551918E
- H7296Y

GO 95, Rule 87.7-D1, 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 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 conduit for Frontier riser attached to each of the following poles was damaged or missing:

- 4237510E
- 4610908E
- 792138E

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

The ground moulding attached to each of the following poles was damaged or missing:

- 4238186E
- 2235616E

GO 128, Rule 17.1, 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 [the] communication or supply lines and equipment.

The following Frontier underground facilities were not maintained for their intended use:

- The handhole cover on terminal 180601 was damaged.
- The handhole cover on terminal 180523 was damaged.

GO 128, Rule 12.2, Maintenance, states in part:

Systems shall be maintained in such condition as to secure safety to workmen and the public in general.

Frontier copper pedestal located on Ambassador Circle and Monticello Avenue was corroded and had accumulated buildup on the inside.