

## PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE  
SAN FRANCISCO, CA 94102-3298



June 30, 2016

CA2016-009

Dell Heintz  
Director, CA State Government Affairs  
Charter Communications  
4781 Irwindale Avenue  
Irwindale, CA 91706

Subject: Audit of Charter Communications' GLID 24704

Dear Mr. Heintz:

On behalf of the Electric Safety and Reliability Branch of the California Public Utilities Commission (CPUC), Jamie Lau of my staff conducted a Communication Infrastructure Provider (CIP) audit of Charter Communications' "GLID 24704" from June 6, 2016 to June 9, 2016. The audit included a review of Charter Communications' maintenance records and field inspections of the GLID 24704's facilities.

During audit, we 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 1, 2016, 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, please contact Jamie Lau at (415) 703-2233 or [jamie.lau@cpuc.ca.gov](mailto:jamie.lau@cpuc.ca.gov).

Sincerely,

A handwritten signature in blue ink that reads "Fadi Daye".

Fadi Day, P.E.  
Program and Project Supervisor  
Electric Safety and Reliability Branch  
Safety and Enforcement Division  
California Public Utilities Commission

Enclosures: CPUC Audit Findings

Cc: Elizaveta Malashenko, Director, Safety and Enforcement Division, CPUC  
Charlotte TerKeurst, Program Manager, Electric Safety and Reliability Branch, CPUC  
Jamie Lau, P.E., Utilities Engineer, CPUC

## AUDIT FINDINGS

### I. Records Review

During the audit, my staff reviewed the following records:

- Detailed inspection records from September 2009 to May 2016.
- Open and completed work orders resulting from third-party notifications, trouble calls and inspections.
- Construction records and pole loading calculations.

### II. Records Review – Violations List

**GO 95, Rule 42, Grades of Construction**, states in part:

*Supply and communication lines, where involved in crossings, conflicts or on poles jointly used, shall be constructed and maintained so as to conform with grades of construction not less than as specified in [Table 3](#).*

Charter Communications used an obsolete Construction Grade (Grade F) to calculate the safety factor of the following poles:

- Pole #3 from Project “7600 Monterey Rd, Gilroy,” dated on May 11, 2015
- Pole #9 from Project “250 Washburn Ave, Capitola,” dated November 17, 2014

**GO 95, Rule 44.2, Additional Construction**, states in part:

*...Such loading calculations shall be based on existing condition and proposed configuration, information provided under [Rule 44.4](#), conservative values of relevant parameters, industry recognized values of relevant parameters, or any combination thereof...*

Charter did not include all the installed facilities on the poles when performing loading calculations for the following poles:

- Pole #3 (or GT-1020170) from Project “8111 Swanston Ln, Gilroy” – calculations did not include three primary conductors.
- Pole #3 from Project “Hwy 152 Widening, Gilroy” – calculations did not include one primary conductor.

### III. Field Inspection

The following are the facilities we inspected during the field inspection:

Structure Number	Type of Structure	Approximate Address
N/A (Not Available)	Pedestal	275 Burnett Ave, Unit 93, Morgan Hill
N/A (Not Available)	Pedestal	275 Burnett Ave, Unit 97, Morgan Hill
N/A (Not Available)	Pedestal	275 Burnett Ave, Unit 136, Morgan Hill
GT-48729	Joint Pole	270 Burnett Ave, Morgan Hill
VZ-90572	Joint Pole	270 Burnett Ave, Morgan Hill
GT-48724	Joint Pole	270 Burnett Ave, Morgan Hill
GT-52034	Joint Pole	605 Baumann Ct, Morgan Hill
GT-216408	Joint Pole	T-intersection of Burnett Ave and Baumann Ct, Morgan Hill
GT-52033	Joint Pole	605 Baumann Ct, Morgan Hill
GT-85486	Joint Pole	605 Peebles Ave, Morgan Hill
GT-35599	Joint Pole	675 Peebles Ave, Morgan Hill
PGE Pole# 110015412	Joint Pole	500 Peebles Ave, Morgan Hill
N/A (Not Available)	Pedestal	19081 Clayton Ave, Morgan Hill
N/A (Not Available)	Pedestal	105 Angelica Way, Morgan Hill
N/A (Not Available)	Underground Handhole	95 Angelica Way, Morgan Hill
N/A (Not Available)	Pedestal	19240 Taylor Ave, Morgan Hill
N/A (Not Available)	Pedestal	19052 Taylor Ave, Morgan Hill
N/A (Not Available)	Pedestal	19062 Taylor Ave, Morgan Hill
N/A (Not Available)	Underground Handhole	19042 Taylor Ave, Morgan Hill
PGE Pole# 120017047	Joint Pole	T-intersection of Peebles Ave and Rose Ln, Morgan Hill
GT-250444	Joint Pole	1 <sup>st</sup> Pole on Rose Ln crossing Peebles Ave, Morgan Hill
N/A (Not Available)	Pedestal	18655 Madrone Pwky, Morgan Hill
N/A (Not Available)	Pedestal	511 Woodview Ave, Morgan Hill
N/A (Not Available)	Pedestal	Corner of Sutter Blvd and Woodview Ave, Morgan Hill
N/A (Not Available)	Pedestal	411 Woodview Ave, Morgan Hill
N/A (Not Available)	Underground Handhole	411 Woodview Ave, Morgan Hill
GT-214189	Joint Pole	Corner of W. Dunne Ave and Evergreen Dr, Morgan Hill
PGE Pole# 110366143	Joint Pole	17005 Peak Ave, Morgan Hill
GT-83450	Joint Pole	17005 Peak Ave, Morgan Hill
GT-34916	Joint Pole	16937 La Selva Dr, Morgan Hill
N/A (Not Available)	Pedestal	1390 W. Dunne Ave, Morgan Hill
N/A	Joint Pole	Ferguson Road and Hwy 152, Gilroy
N/A	Joint Pole	North Corner of Murray Ave and Lincoln Ct, Gilroy
N/A	Joint Pole	South Corner of Murray Ave and Lincoln Ct, Gilroy
GM-464974	Joint Pole	North Corner of Murray Ave and Kennedy Ct, Gilroy

<b>Structure Number</b>	<b>Type of Structure</b>	<b>Approximate Address</b>
N/A	Joint Pole	South Corner of Murray Ave and Kennedy Ct, Gilroy
GM-464974	Joint Pole	Murray Ave and Guvilan Ct, Gilroy
#19	Joint Pole	8091 Swanston Ln, Gilroy
N/A	Drop Pole	8110 Swanston Ln, Gilroy
N/A	Joint Pole	Alley of 8111 Swanston Ln, Gilroy
GT-1020170	Joint Pole	Alley of 8111 Swanston Ln, Gilroy
PGE Pole# 110468231	Joint Pole	79 Lewis Street, Gilroy
VZ-97407	Joint Pole	79 Lewis Street, Gilroy
N/A	Joint Pole	Rear of 7588 Monterey Rd, Gilroy
CTC-1022373	Joint Pole	Rear of 7588 Monterey Rd, Gilroy
CTC-1022617	Joint Pole	6310 Monterey Rd, Gilroy
CTC-1022618	Joint Pole	6320 Monterey Rd, Gilroy
CTC-1027180	Joint Pole	Monterey Rd and Luchessa Rd, Gilroy
CTC-1022621	Joint Pole	6400 Monterey Rd, Gilroy
CTC-1022622	Joint Pole	6400 Monterey Rd, Gilroy
#1828	Joint Pole	6470 Monterey Rd, Gilroy
N/A	Pedestal	25 Ervin Ct, Gilroy
N/A	Underground Handhole	47 Ervin Ct, Gilroy
N/A	Underground Handhole	6450 Sussex Pl, Gilroy
N/A	Underground Handhole	6435 Sussex Pl, Gilroy
N/A	Underground Handhole	6445 Sussex Pl, Gilroy
N/A	Underground Handhole	6430 Kensington Pl, Gilroy
N/A	Underground Handhole	6485 Kensington Pl, Gilroy
N/A	Pedestal	6555 Kensington Pl, Gilroy
N/A	Underground Handhole	6555 Kensington Pl, Gilroy
N/A	Pedestal	575 Victoria Dr, Gilroy
N/A	Joint Pole	24356 Main St, Gonzales
#563	Joint Pole	House #7, 24356 Main St, Gonzales
N/A	Joint Pole	25671 Main St, Gonzales
N/A	Joint Pole	25670 Main St, Gonzales
#24355	Joint Pole	24355 Washington St, Gonzales
N/A	Joint Pole	24332 Washington St, Gonzales
#24305	Joint Pole	24305 Jackson St, Gonzales
#25652	Joint Pole	25652 Jackson St, Gonzales
SM-15127	Joint Pole	25644 Jackson St, Gonzales
#25636	Joint Pole	25636 Jackson St, Gonzales
#25574	Joint Pole	25574 Jackson St, Gonzales

#### **IV. Field Inspection – Undocumented Violations List**

We observed the following violations during the field inspection. None of the violations were documented and/or addressed by Charter during its last inspections:

**GO 95, Rule 18-B, Notification of Safety Hazards**, states in part:

*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 company and/or facility owner of such safety hazard(s) no later than 10 business days after the discovery. To the extent the inspecting company cannot determine the facility owner/operator, it shall contact the pole owner(s), who shall be responsible for promptly notifying the company owning/operating the facility with the safety hazard(s), normally not to exceed five business days after being notified of the safety hazard. The notification shall be documented and such documentation must be preserved by all parties for at least ten years.*

- Pole #GT-52033 at 605 Baumann Court, Morgan Hill, had a third-party telephone service drop impeding the climbing space. Charter Communications did not create a third-party safety hazard notification for this condition.
- Pole #CTC-1022622 at 6400 Monterey Rd, Gilroy, had a third-party cable impeding the climbing space. Charter Communications did not create a third-party safety hazard notification for this condition.
- Pole #25574 at 25574 Jackson Street, Gonzales, had a third-party cable and down guy wires in contact with a Charter Communications down guy wire. Charter Communications did not create a third-party safety hazard notification for this condition.

**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.*

Pole #GT-85486 at 605 Peebles Avenue, Morgan Hill, had two bent pole steps.

**GO 95, Rule 34, Foreign Attachments**, states in part:

*Nothing in these rules shall be construed as permitting the unauthorized attachment, to supply, street light or communication poles or structures, of antennas, signs, posters, banners, decorations, wires, lighting fixtures, guys, ropes and any other such equipment foreign to the purposes of overhead electric line construction.*

- Pole #GT-52034 at 605 Baumann Court, Morgan Hill, had an unauthorized third-party “STOP Sign” attached.
- Pole #GT-216408 at the T- intersection of Burnett Avenue and Baumann Court, Morgan Hill, had an unauthorized third-party “NO PARKING” sign attached.
- Pole #GT-52033 at 605 Baumann Court, Morgan Hill, had an unauthorized third-party “STOP Sign” attached.

**GO 95, Rule 38, Table 2, Column C, Case 18**, requires the minimum separation between a communications cable and a guy wire to be 3 inches.

A Charter Communications cable was in contact with three down guy wires supported on Pole #25574 at 25574 Jackson Street, Gonzales.

**GO 95, Rule 38, Table 2, Column C, Case 8**, requires that the vertical separation between communication service drops of different companies to be no less than 12 inches.

A Charter Communications service drop was in contact with a telephone service drop; both service drops were attached to Pole #120017047 at the intersection of Peebles Avenue and Rose Lane, Morgan Hill.

**GO 95, Rule 84.7-A, Climbing Space**, states in part:

*Climbing space shall be maintained on one side or quadrant of all poles or structures supporting communications conductors excepting at the level of the one pair of conductors attached to the pole below the lowest crossarm (Rules [84.4-C1c](#), [84.4-D1](#) and [87.4-C3](#)) and the top 3 feet of poles carrying communication conductors only which are attached directly to pole in accordance with the provisions of [Rule 84.4-C1c](#).*

The following poles had their climbing space impeding by Charter Communications’ cables or guy wires:

- Pole #120017047 at the T-intersection of Peebles Avenue and Rose Lane, Morgan Hill.
- Pole #GT-34916 at 16937 La Selva Drive, Morgan Hill

**GO 95, Rule 86.2, Guys, 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](#) .*

Guy wires supported on the following poles were not taut:

- Pole #GT-34916 at 16937 La Selva Drive, Morgan Hill
- Pole #CTC-1022622 at 6400 Monterey Rd, Gilroy

**GO 95, Rule 87.7-D1, Risers, states:**

*Covered from Ground Level to 8 Feet above the Ground:*

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

- a) Securely or effectively grounded iron or steel pipe (or other covering at least of equal strength). When metallic sheathed cable rising from underground non-metallic conduit is protected by metallic pipe or moulding, such pipe or moulding shall be effectively grounded as specified in Rule 21.4-A , or*
- b) Non-metallic conduit or rigid U-shaped moulding. Such conduit or moulding shall be of material as specified in Rule 22.8.*

Charter Communications risers on the following poles had either broken riser covers or inadequate covering that exposed the risers:

- Pole #GT-48729 at 270 Burnett Avenue, Morgan Hill
- Pole #CTC-1027180 at Monterey Rd and Luchessa, Gilroy
- Pole #CTC-1022622 at 6400 Monterey Rd, Gilroy

**GO 95, Rule 84.4-D4, From Poles and Crossarms,** states:

*Conductors Passing Supply Poles and Unattached Thereto: The center line clearance between poles supporting supply conductors and any communication conductors which pass such poles unattached shall be not less than 22 1/2 inches (1 1/2 times the clearance specified in Table 1, Case 8 ), except where the supply pole is within 10 feet of the pole on which the communication conductors are supported. Where poles of the two lines are less than 10 feet apart, clearances not less than as specified in Table 1, Case 8, [15 inches] shall be maintained.*

A Charter Communications cable supported by a different pole was in contact with Pole #SM15127 without being attached to it.

**GO 95, Rule 84.8-C2b, Service Drops Clearance above Private Property**, states in part:

*Residential Premises: Over residential driveways, lanes or over property accessible to vehicles, service drops shall not be less than 12 feet.*

A Charter Communications service drop connected to structure #7, located at 24356 Main Street, and crossing over a residential parking lot, had an above ground clearance of 7 feet and 6 inches.

**GO 95, Rule 91.3-A1, Use of Steps**, states in part:

*Poles with Vertical Runs or Risers: All jointly used poles which support supply conductors shall be provided with pole steps if vertical runs or risers are attached to the surface of such poles.....*

The following jointly used poles with vertical runs did not have pole steps:

- Pole #GT-48724 at 270 Burnett Avenue, Morgan Hill
- Pole #GT-216408 at the T-intersection of Burnett Avenue and Baumann Court, Morgan Hill
- Pole #110366143 at 17005 Peak Avenue, Morgan Hill
- Pole #1828 at 6470 Monterey Rd, Gilroy

**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.*

*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.*

A Pedestal at 1090 W. Dunne Avenue, Morgan Hill, was buried in ground due to excessive foliage, while it was intended to be constructed and maintained above ground.



**GO 128, Rule 17.8, Identification of Manholes, Handholes, Subsurface and Self-contained Surface-mounted Equipment Enclosures**, states:

*Manholes, handholes, subsurface and self-contained surface-mounted equipment enclosures shall be marked as to ownership to facilitate identification by persons authorized to work therein and by other persons performing work in their vicinity.*

The following pedestals or handholes were not marked to ownership:

- Handhole at 19240 Taylor Avenue, Morgan Hill
- Pedestal at 19052 Taylor Avenue, Morgan Hill
- Pedestal at 19062 Taylor Avenue, Morgan Hill
- Handhole at 19042 Taylor Avenue, Morgan Hill
- Pedestal at 18655 Madrone Parkway, Morgan Hill
- Pedestal at 511 Woodview Avenue, Morgan Hill
- Pedestal at the corner of Sutter Blvd and Woodview Avenue, Morgan Hill
- Pedestal at 411 Woodview Avenue, Morgan Hill
- Handhole at 411 Woodview Avenue, Morgan Hill
- Pedestal at 1390 W. Dunne Avenue, Morgan Hill
- Pedestal at 25 Ervin Court, Gilroy
- Handhole at 47 Ervin Court, Gilroy
- Handhole at 6450 Sussex Place, Gilroy
- Handhole at 6435 Sussex Place, Gilroy
- Handhole at 6445 Sussex Place, Gilroy
- Handhole at 6430 Kensington Place, Gilroy
- Handhole at 6485 Kensington Place, Gilroy
- Handhole at 6555 Kensington Place, Gilroy
- Pedestal at 6555 Kensington Place, Gilroy
- Pedestal at 575 Victoria Drive, Gilroy

## V. Field Inspection – Documented Violations List

We observed the following violations during the field inspection that were documented and/or addressed by Charter Communications during its last inspection:

**GO 95, Rule 18-B, Notification of Safety Hazards**, states in part:

*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 company and/or facility owner of such safety hazard(s) no later than 10 business days after the discovery. To the extent the inspecting company cannot determine the facility owner/operator, it shall contact the pole owner(s), who shall be responsible for promptly notifying the company owning/operating the facility with the safety hazard(s), normally not to exceed five business days after being notified of the safety hazard. The notification shall be documented and such documentation must be preserved by all parties for at least ten years.*

- Pole #GT-85486 at 605 Peebles Avenue, Morgan Hill, had a third-party owned riser exposed below 8 feet above ground. Charter Communications created a third-party safety hazard notification for this condition.
- Pole #GT-250444 at Rose Lane, Morgan Hill, had a broken third-party owned riser exposed below 8 feet above ground. Charter Communications created a third-party safety hazard notification for this condition.
- Pole #GT-250444 at Rose Lane, Morgan Hill, had a broken third-party owned lashed wire. Charter Communications created a third-party safety hazard notification for this condition.

**GO 95, Rule 87.7-D1, Risers**, states:

*Covered from Ground Level to 8 Feet above the Ground:*

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

*a) Securely or effectively grounded iron or steel pipe (or other covering at least of equal strength). When metallic sheathed cable rising from underground non-metallic conduit is protected by metallic pipe or moulding, such pipe or moulding shall be effectively grounded as specified in Rule 21.4-A , or*

*b) Non-metallic conduit or rigid U-shaped moulding. Such conduit or moulding shall be of material as specified in Rule 22.8.*

Pole # GT-34916 at 16937 La Selva Drive, Morgan Hill, had a broken Charter Communications riser cover exposing the riser.