PUBLIC UTILITIES COMMISSION 505 VAN NESS AVENUE SAN FRANCISCO, CA 94102-3298



December 18, 2020

EA2020-875

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

Subject: Audit of Charter Communications' Santa Barbara County District

Ms. Ludovici:

On behalf of the Electric Safety and Reliability Branch of the California Public Utilities Commission (CPUC), James Miller, Richard Le and Stacey Ocampo of my staff conducted a Communication Infrastructure Provider (CIP) audit of Charter's Santa Barbara County District from October 12, 2020 to October 16, 2020. The audit included a review of Charter's records and field inspections of 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 January 18, 2021, 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 James Miller at (213) 266-4715 or James.Miller@cpuc.ca.gov.

Sincerely,

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

Enclosures: Audit Findings

Cc: Lee Palmer, Director, Safety and Enforcement Division, CPUC Nika Kjensli, Program Manager, ESRB, SED, CPUC James Miller, Utilities Engineer, ESRB, SED, CPUC

AUDIT FINDINGS

I. Records Review

My staff reviewed the following records during the audit:

- Overhead and underground detailed inspections records.
- Completed and pending corrective action work orders.
- Pole loading calculations.
- Safety hazard notifications.
- Charter's overhead and underground inspection and maintenance procedures.

II. Field Inspections

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

| | Structure No. or Location | Structure Type | Region |
|----|---------------------------|----------------|--------------------------|
| 1 | 120420079 | Pole | Downtown San Luis Obispo |
| 2 | 120420078 | Pole | Downtown San Luis Obispo |
| 3 | 120420077 | Pole | Downtown San Luis Obispo |
| 4 | 120420125 | Pole | Downtown San Luis Obispo |
| 5 | 120420123 | Pole | Downtown San Luis Obispo |
| 6 | 120420122 | Pole | Downtown San Luis Obispo |
| 7 | 110347490 | Pole | Downtown San Luis Obispo |
| 8 | 120420072 | Pole | Downtown San Luis Obispo |
| 9 | 120420069 | Pole | Downtown San Luis Obispo |
| 10 | 120420068 | Pole | Downtown San Luis Obispo |
| 11 | 120059084 | Pole | Downtown San Luis Obispo |
| 12 | 120420066 | Pole | Downtown San Luis Obispo |
| 13 | 120420065 | Pole | Downtown San Luis Obispo |
| 14 | 120420064 | Pole | Downtown San Luis Obispo |
| 15 | 120420063 | Pole | Downtown San Luis Obispo |
| 16 | 120420062 | Pole | Downtown San Luis Obispo |
| 17 | 120420061 | Pole | Downtown San Luis Obispo |
| 18 | 120420081 | Pole | Downtown San Luis Obispo |
| 19 | 120420082 | Pole | Downtown San Luis Obispo |
| 20 | 120420083 | Pole | Downtown San Luis Obispo |
| 21 | 120420145 | Pole | Downtown San Luis Obispo |
| 22 | 120477713 | Pole | Downtown San Luis Obispo |
| 23 | 120477714 | Pole | Downtown San Luis Obispo |
| 24 | 120477715 | Pole | Downtown San Luis Obispo |
| 25 | 120477716 | Pole | Downtown San Luis Obispo |
| 26 | 120477717 | Pole | Downtown San Luis Obispo |
| 27 | 110535635 | Pole | Downtown San Luis Obispo |
| 28 | 120477718 | Pole | Downtown San Luis Obispo |
| 29 | 120477719 | Pole | Downtown San Luis Obispo |
| 30 | 120477720 | Pole | Downtown San Luis Obispo |
| 31 | 131423 | Pole | Avila Beach |
| 32 | 154826 | Pole | Avila Beach |
| 33 | 110530674 | Pole | Avila Beach |
| 34 | 171 | Pole | Avila Beach |
| 35 | South of Pole 171 | Pole | Avila Beach |
| 36 | 81 | Pole | Avila Beach |

| 37 | 120045054 | Pole | Avila Beach |
|----|---|----------------------|------------------|
| 38 | SM19481 | Pole | Avila Beach |
| 39 | 119466 | Pole | Avila Beach |
| 40 | 120336291 | Pole | Avila Beach |
| 41 | East of 120336291 | Pole | Avila Beach |
| 42 | 120106322 | Pole | Avila Beach |
| 43 | 110327282 | Pole | Avila Beach |
| 44 | 110527282 | Pole | Avila Beach |
| 45 | 78B2 | Pole | Avila Beach |
| 46 | 77 | Pole | Avila Beach |
| 40 | 76 | Pole | Avila Beach |
| 48 | 75 | Pole | Avila Beach |
| 40 | Avila Beach Dr. & San Luis St. | Pole | Avila Beach |
| 50 | 72 | Pole | Avila Beach |
| 51 | East of Pole 72 | Pole | Avila Beach |
| 52 | SM23364 | Pole | Avila Beach |
| 53 | 110370891 | Pole | Avila Beach |
| 54 | 2248 | Pole | Avila Beach |
| 55 | 102B | | Avila Beach |
| 56 | South of Las Praderas Dr. on Higuera St. | Power Supply Pole | Avila Beach |
| 57 | 120177449 | Pole | Avila Beach |
| 58 | North of Tank Farm Rd. on Higuera St. | Pole | Avila Beach |
| 59 | 110315610 | Pole | Avila Beach |
| 60 | 1412 | Pole | Avila Beach |
| 61 | 941 | Pole | Avila Beach |
| 62 | Hind St. and Higuera St. | Pole | Avila Beach |
| 63 | North of Pole on Hind St. and Higuera St. | Pole | Avila Beach |
| 64 | 1413 | Pole | Avila Beach |
| 65 | North of pole 1413 | Pole | Avila Beach |
| 66 | 120769947 | Pole | Avila Beach |
| 67 | 7007 Del Rio Rd. | Pole | North Atascadero |
| 68 | 6086 | Pole | North Atascadero |
| 69 | 120777542 | Pole | North Atascadero |
| 70 | North of Pole 120777542 | Pole | North Atascadero |
| 70 | Two poles north of Pole 120777542 | Pole | North Atascadero |
| 72 | 220350 | Pole | North Atascadero |
| 73 | North of 220350 | Pole | North Atascadero |
| 74 | 220351 | Pole | North Atascadero |
| 75 | 7305 | Pole | North Atascadero |
| 76 | 7355 | Pole | North Atascadero |
| | | | |
| 77 | West of Pole 7355 | Pole | North Atascadero |

| 78 | 741 | Pole | North Atascadero |
|-----|-------------------------------------|--------------|------------------|
| 79 | 220352 | Pole | North Atascadero |
| 80 | 110449129 | Pole | North Atascadero |
| 81 | West of Pole 110449129 | Pole | North Atascadero |
| 82 | 7695 | Pole | North Atascadero |
| 83 | Across from 7505 Del Rio Rd. | Pole | North Atascadero |
| 84 | 7705 | Pole | North Atascadero |
| 85 | 7780 | Pole | North Atascadero |
| 86 | 780 | Pole | North Atascadero |
| 87 | 7855 | Pole | North Atascadero |
| 88 | 120116711 | Pole | North Atascadero |
| 89 | West of 2015 Alturas St. | Pole | North Atascadero |
| 90 | West of 2019 Alturas St. | Pole | North Atascadero |
| 91 | 110197784 | Pole | North Atascadero |
| 92 | 4514 Buena Vista Rd. | Vault | Guadalupe |
| 93 | 4548 Buena Vista Rd. | Vault | Guadalupe |
| 94 | 4578 Buena Vista Rd. | Vault | Guadalupe |
| 95 | 107 Las Flores Dr. | Amplifier | Guadalupe |
| 96 | 109 Las Flores Dr. | Vault | Guadalupe |
| 97 | 113 Las Flores Dr. | Vault | Guadalupe |
| 98 | 4580 Castillo Dr. | Vault | Guadalupe |
| 99 | 4574 Castillo Dr. | Vault | Guadalupe |
| 100 | 4568 Castillo Dr. | Vault | Guadalupe |
| 101 | Professional Pkwy. & Via Concha Rd. | Amplifier | Southern Nipomo |
| 102 | 1801 Louis Ln. | Vault | Southern Nipomo |
| 103 | 1804 Louis Ln. | Vault | Southern Nipomo |
| 104 | 1817 Louis Ln. | Vault | Southern Nipomo |
| 105 | 1820 Louis Ln. | Vault | Southern Nipomo |
| 106 | 1780 Louis Ln. | Vault | Southern Nipomo |
| 107 | 1775 Louis Ln. | Amplifier | Southern Nipomo |
| 108 | 1772 Louis Ln. | Junction Box | Southern Nipomo |
| 109 | 2135 Callender Rd. | Amplifier | Arroyo Grande |
| 110 | 515 Raptor St. | Amplifier | Arroyo Grande |
| 111 | 2525 Laurie Way | Pedestal | Arroyo Grande |
| 112 | 2540 Laurie Way | Pedestal | Arroyo Grande |
| 113 | 2555 Laurie Way | Pedestal | Arroyo Grande |
| 114 | 2560 Laurie Way | Amplifier | Arroyo Grande |
| 115 | 585 Monadella St. | Pedestal | Arroyo Grande |
| 116 | Monadella St. & Luke Way | Coupler | Arroyo Grande |
| 117 | Hodges Rd. & Equestrian Way | Block Splice | Arroyo Grande |
| 118 | Equestrian Way & James Way | Node | Arroyo Grande |

| 119 | 1005 Acorn Dr. | Amplifier | Arroyo Grande |
|-----|----------------------------|-----------|---------------|
| 120 | 1009 Acorn Dr. | Vault | Arroyo Grande |
| 121 | 1011 Acorn Dr. | Vault | Arroyo Grande |
| 122 | 11th St. & N St. | Vault | San Miguel |
| 123 | 1070 N St. | Vault | San Miguel |
| 124 | 518 Tema St. | Vault | San Miguel |
| 125 | 540 Tema St. | Vault | San Miguel |
| 126 | 562 Tema St. | Vault | San Miguel |
| 127 | 1055 Wimer Way | Vault | San Miguel |
| 128 | 1051 Wimer Way | Vault | San Miguel |
| 129 | 987 Makewe Ave. | Vault | San Miguel |
| 130 | 977 Makewe Ave. | Vault | San Miguel |
| 131 | 973 Makewe Ave. | Vault | San Miguel |
| 132 | 1170 Cortez Cir. | Vault | San Miguel |
| 133 | 1172 Cortez Cir. | Vault | San Miguel |
| 134 | 1190 Cortez Cir. | Vault | San Miguel |
| 135 | 1194 Cortez Cir. | Amplifier | San Miguel |
| 136 | Cortez Cir. & Velarde Cir. | Vault | San Miguel |
| 137 | 250 Wesley Avenue | Pole | Arroyo Grande |
| 138 | 1297 Royal Oak Place | Pole | Arroyo Grande |
| 139 | 1291 Mesa View Dr. | Pole | Arroyo Grande |
| 140 | North end of Wesley Avenue | Pole | Arroyo Grande |
| 141 | 4755 Garrett St. | Pedestal | Guadalupe |
| 142 | 415 Degasparis Ln. | Pedestal | Guadalupe |
| 143 | 363 Tognazzini Ave. | Pole | Guadalupe |
| 144 | 323 Tognazzini Ave. | Pole | Guadalupe |
| 145 | 323 Tognazzini Ave. | Pole | Guadalupe |
| 146 | 120507742 | Pole | Guadalupe |
| 147 | 120507792 | Pole | Guadalupe |
| 148 | 120507794 | Pole | Guadalupe |
| 149 | R2883Y | Pole | Guadalupe |
| 150 | 120055323 | Pole | Guadalupe |
| 151 | 120055324 | Pole | Guadalupe |
| 152 | 120055321 | Pole | Guadalupe |
| 153 | 120055320 | Pole | Guadalupe |
| 154 | 120199201 | Pole | Oceano |
| 155 | 120199202 | Pole | Oceano |
| 156 | 1485 Paso Robles St. | Pole | Oceano |
| 157 | Paso Robles St. & 15th St. | Pole | Oceano |
| 158 | 1517 Paso Robles St. | Pole | Oceano |
| 159 | 1525 Paso Robles St. | Pole | Oceano |

| 160 | 1561 Paso Robles St. | Pole | Oceano |
|-----|---|------|--------|
| 161 | 1661 Paso Robles St. | Pole | Oceano |
| 162 | NW corner of Paso Robles St. & 17th St. | Pole | Oceano |
| 163 | SW corner of Paso Robles St. & 17th St. | Pole | Oceano |
| 164 | 179 | Pole | Oceano |
| 165 | 1829 | Pole | Oceano |
| 166 | 1750 | Pole | Oceano |
| 167 | 1798 | Pole | Oceano |
| 168 | NW corner of 17th St. & 17th St. | Pole | Oceano |
| 169 | 1812 | Pole | Oceano |
| 170 | 19th St. & Beach St. | Pole | Oceano |
| 171 | SE corner of 19th St. & Beach St. | Pole | Oceano |
| 172 | 1920 19th St. | Pole | Oceano |
| 173 | 189 | Pole | Oceano |
| 174 | 1744 17th St. | Pole | Oceano |
| 175 | 120086102 | Pole | Oceano |
| 176 | Alley E/O 1700 15th St. | Pole | Oceano |
| 177 | 1501B | Pole | Oceano |
| 178 | 1659 15th St. | Pole | Oceano |
| 179 | SE of 1640 14th St. | Pole | Oceano |
| 180 | 1599 | Pole | Oceano |

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.

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.

- The jacket covering on a Spectrum conductor on pole 7305 was peeling off.
- A guy anchor on pole 6086 was buried.
- The ground wire on Pole 1599 was damaged.
- The guy guard on Pole number 7355 was damaged.

The riser on the following poles was outside of its riser cover:

- Pole 12042005
- Pole 1812

The ground wire on the following poles was not attached to its respective grounding rods:

- Pole 120507792
- Pole 120507794
- The pole at Paso Robles Street & 15th Street

GO95, 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. 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.

The following equipment was no longer in use but had not yet been removed:

- A service drop on Pole 120336291
- A riser tube on Pole 7705
- A riser on Pole 120199201

GO95, Rule 54.6, Vertical and Lateral Conductors, states in part:

Risers from underground cables or other conductors shall be encased from the ground level to a level not less than 8 feet above the ground

Risers on the following poles did not have riser covers:

- Pole 81
- Pole west of Pole 110449129
- Pole located at 1744 17th Street

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.

An overhead guy wire attached to Pole 171 was not taut.

GO 95, Rule 38 - Minimum Clearances of Wires from Other Wires, Table 2, Column C, Case 8 requires the minimum radial clearance between communication conductors and/or supply drops on the same pole to be twelve inches.

- A Spectrum conductor between poles numbered 120106322 and 110327282 was in contact with another communications conductor.
- A Spectrum service drop on the pole south of Pole 171 was in contact with another communications conductor.
- A Spectrum service drop on the pole across the street from 7505 Del Rio Rd. was in contact with an AT&T service drop.
- A Spectrum service drop on the pole located between Pole 120507742 and 301 Tognazzini Avenue was in contact with another communications conductor.

GO 95, Rule 56.4, Clearances, states in part:

The radial clearances between guys and conductors supported by or attached to the same poles or crossarms shall not be less than as specified in Table 2, Case 19.

Table 2, Column C, Case 19 requires guy wires and service drops supported on the same pole to maintain a clearance of three inches.

A guy wire was in contact with a service drop on Pole 110197784.

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 Spectrum conductor between poles numbered 110370891 and 2248 was approximately 14 feet.
- The above ground clearance over a public thoroughfare of a Spectrum conductor between poles numbered 780 and 7855 was less than 18 feet.
- The above ground clearance over a public thoroughfare of a Spectrum conductor on pole 120199202 was approximately 11 feet.

GO95, Rule 84.6, Vertical and Lateral Conductors, (D), Vertical Runs, states in part:

Runs of bridled conductors, attached to surface of pole, need not be covered provided such runs are below the guard arm an in the same quadrant as the longitudinal cable, or where such runs are below and on the same side of pole with a cable arm and are not in the climbing space, or are connected to service drops which are placed in accordance with the provisions of Rule 84.8-B2b. Where bridled runs are not required to be covered by these rules, they shall be supported by bridle hooks or rings spaced at intervals of not more than 24 inches.

Communications risers on the following poles were not attached to the poles by bridle hooks or rings:

- Pole 120420064
- The pole located on 1744 17th Street

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 climbing space on the pole located on the northwest corner of 17th Street and 17th Street in Oceano was insufficient. The climbing space was blocked on three quadrants of the pole by numerous communications conductors, and the remaining quadrant contained a communications service drop.

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 [the] communication or supply lines and equipment.

The ground wire on the following underground structures was not attached to its respective ground rod:

- The amplifier at 1005 Acorn Drive
- The vault at 987 Makewe Ave
- The vault at 977 Makewe Ave