

PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE

SAN FRANCISCO, CA 94102-3298

**December 18, 2024**

CA2024-1235

Saad Khalid
Supervisor – Network Construction
Crown Castle Communications
200 Spectrum Suite 1800
Irvine, CA 92618

SUBJECT: Communications Infrastructure Provider (CIP) Audit of Crown Castle’s NorCal Region

Mr. Khalid:

On behalf of the Electric Safety and Reliability Branch (ESRB) of the California Public Utilities Commission (CPUC), Joe Murphy and Brandon Vasquez of ESRB staff conducted a CIP audit of Crown Castle’s NorCal Region from September 23, 2024 through September 27, 2024. During the audit, ESRB staff conducted field inspections of Crown Castle’s facilities and equipment and reviewed pertinent documents and records.

As a result of the audit, ESRB staff identified violations of General Order (GO) 95 and GO 128. A copy of the audit findings itemizing the violations and observations is enclosed.

Please provide a response no later than **January 22, 2025**, via electronic copy of all corrective actions and preventive measures taken by Crown Castle to correct the identified violations and prevent the recurrence of such violations and observations.

Please note that ESRB will be posting the audit report and your response to our audit on the CPUC website. If there is any information in your response that you would like us to consider as confidential, we request that in addition to your confidential response, you provide us with a public version (a redacted version of your confidential response) to be posted on our website.

If you have any questions concerning this audit, please contact Joe Murphy at (415) 308-4159 or muj@cpuc.ca.gov.

Sincerely,

A handwritten signature in blue ink, appearing to read "Rickey Tse".

Rickey Tse, P.E.

Program and Project Supervisor
Electric Safety and Reliability Branch
Safety and Enforcement Division
California Public Utilities Commission

Enclosure: CPUC Audit Findings of Crown Castle NorCal Region

Cc: Lee Palmer, Director, Safety and Enforcement Division (SED), CPUC
Fadi Daye, Program and Project Supervisor, ESRB, SED, CPUC
Stephen Lee, Senior Utilities Engineer (Supervisor). ESRB, SED, CPUC
Yi (Rocky) Yang, Senior Utilities Engineer (Supervisor), ESRB, SED, CPUC
Joe Murphy, Utilities Engineer, ESRB, SED, CPUC
Brandon Vasquez, Utilities Engineer, ESRB, SED, CPUC
Madonna Ebrahimof, Staff Services Analyst, ESRB, SED, CPUC
Kenny Manchester, Supervisor Network Construction/Operations: Northern California,
Crown Castle Communications
Ulysses Aburto, Manager, Network Construction, Crown Castle Communications

**CROWN CASTLE NORCAL REGION
COMMUNICATIONS AUDIT FINDINGS
September 23-27, 2024**

I. Records Review

Electric Safety and Reliability Branch (ESRB) staff reviewed the following standards, procedures, and records for Crown Castle's NorCal Region:

- Facility statistics as of July 2024, including miles of overhead lines, miles of underground lines, number of poles, number of vaults, and number of pedestals.
- Overhead and Underground facility maps as of July 2024.
- Patrol and detailed inspection records containing data for the inspected facility type, facility location, fire threat district location, inspection date, and resulting inspection findings and repairs from August 2019 through July 2024.
- Work orders records for wired and wireless, OH and UG facilities containing data for inspected facility type, facility location, fire threat district location, repair, due date and completed date from August 2019 through July 2024.
- Safety Hazards Notifications sent to third-party utilities from August 2019 through July 2024.
- Safety Hazards Notifications received from third-party utilities from August 2019 through July 2024.
- Pole loading calculations for Tier 2 and Tier 3 High Fire Threat Districts from August 2023 through July 2024.
- Intrusive test records for the CIP facilities in Tier 2 and Tier 3 High Fire Threat Districts from August 2023 through July 2024.
- New construction projects from August 2023 through July 2024.

II. Records Violations

ESRB staff observed the following violations during the record review portion of the audit:

1. General Order (GO) 95, Rule 31.2, Inspection of Lines states in part:

“Lines shall be inspected frequently and thoroughly for the purpose of ensuring that they are in good condition so as to conform with these rules. Lines temporarily out of service shall be inspected and maintained in such condition as not to create a hazard.”

GO 95, Rule 80.1-A(2), Statewide Inspection Requirements states in part:

“Each company shall prepare, follow, and modify as necessary, procedures for conducting patrol or detailed inspections for all of its Communication Lines throughout the State.”

GO 128, Rule 17.2, Inspection states in part:

“Systems shall be inspected by the operator frequently and thoroughly for the purpose of insuring that they are in good condition and in conformance with all applicable requirements of these rules.”

Crown Castle failed to provide procedures for conducting inspections of its communications lines. Therefore, Crown Castle violated GO 95, Rules 31.2, 80.1-A(2), and GO 128 Rule 17.2.

2. GO 95, Rule 80.1-A(4), Record Keeping states in part:

“Each company shall maintain records for at least ten (10) years that provide the following information for each facility subject to this rule: The location of the facility, the date of each inspection of the facility, the results of each inspection, the personnel who performed each inspection, the date and description of each corrective action, and the personnel who performed each correction action...”

Crown Castle failed to provide inspection or work order history for facilities in Sacramento, San Joaquin, Yolo, Placer, and Solano counties.¹ Therefore, Crown Castle violated GO 95, Rule 80.1-A(4). Crown Castle must maintain complete inspection records for all service areas.

¹ Crown Castle, Pre audit data response, 20240917 Q7-8 20240917 NorCal Repair Report

3. GO 95, Rule 80.1-A(1), Inspection Requirements for Joint-Use Poles in High Fire-Threat District states in part:

“In Tiers 2 and 3 of the High Fire-Threat District, the inspection intervals... shall not exceed the time specified in the following Table.”

Inspection	Tier 2	Tier 3
Patrol	2 years	1 year
Detailed	10 years	5 years

Crown Castle has facilities in the following counties which contain High Fire Threat District (HFTD) Tier 2 and Tier 3 areas: Nevada, El Dorado, Napa, Alameda, Contra Costa, San Mateo, and Santa Cruz Counties. Crown Castle provided inspection data for facilities in Alameda, Contra Costa, El Dorado, San Mateo and Santa Cruz Counties.² The year of inspection and number of poles inspected are listed in Table 1 below. Crown Castle’s inspection data does not identify whether a patrol inspection or detailed inspection was conducted, nor did the inspection data identify whether facilities were in an HFTD Tier 2 or Tier 3 area.

Table 1: HFTD Tier 2 and Tier 3 Facility Inspections by Year and County

County	2024	2023	2022	2021	2020	2019
Nevada	-	-	-	-	-	-
El Dorado	-	526	-	-	-	-
Napa	-	-	257	-	-	-
Alameda	-	529	-	-	-	-
Contra Costa	-	-	319	-	-	-
San Mateo	-	-	139	-	-	-
Santa Cruz	-	-	10	-	-	-

-: no inspection report provided for this county/year

Crown Castle provided no evidence of pole inspections in Nevada County HFTD areas. Additionally, Crown Castle provided records of only 10 inspections of joint-use poles in High Fire-Threat Districts (HFTD) within Santa Cruz County.³ Crown Castle has 10 to 15 miles of overhead lines in HFTD Tier 2 and Tier 3 areas within Santa Cruz County.⁴ 10 to 15 miles of line would require far more than 10 poles requiring inspection subject to GO 95, Rule 80.1-A(1). Crown Castle failed to inspect facilities in Tier 2 and Tier 3 at the required intervals. Therefore, Crown Castle violated GO 95, Rule 80.1-A(1). Crown Castle must inspect and provide evidence of inspections for all joint-use poles in High Fire Threat Districts at the required intervals.

² Crown Castle, Post audit data response, NorCalInpsection List20241021045340

³ Crown Castle, Post audit data response, Santa Cruz-Northern California-Tier 3 Q1 2022

⁴ Crown Castle, Pre audit data response, Maps, Aerial San Jose and CPUC HFTD Map

4. GO 95, Rule 80.1.A.(2) Statewide Inspection Requirements states in part:

“Each company shall prepare, follow, and modify as necessary, procedures for conducting patrol or detailed inspections for all of its Communication Lines throughout the State. Consistent with Rule 31.2, the type, frequency and thoroughness of inspections shall be based upon the following factors:

- *Fire threat*
- *Proximity to overhead power line facilities*
- *Terrain*
- *Accessibility*
- *Location, including whether the Communications Lines are located in the High Fire-Threat District*

Each company that discovers a safety hazard on or near a communications facility or electric facility involving another company while performing inspections of its own facilities pursuant to this rule shall notify the other company and/or facility owner of such safety hazard in accordance with Rule 18-A3.

Each company’s procedures shall describe (i) the methodology used to ensure that all Communication Lines are subject to the required inspections, and (ii) the procedures used for specifying what problems should be identified by the inspections. The procedures used for specifying what problems should be identified by the inspections shall include a checklist for patrol inspections.”

GO 95, Rule 80.1.A.(3) Definitions, Patrol Inspections states in part:

“For the purpose of this rule, Patrol Inspection shall be defined as a simple visual inspection, of applicable communications facilities equipment and structures that is designed to identify obvious structural problems and hazards. Patrol inspections may be carried out in the course of other company business.”

Patrol inspections require a checklist that specifies problems that inspectors should identify. Crown Castle does not have a checklist in place for its inspection records. Therefore, Crown Castle violated GO 95, Rules 80.1-A(2) and 80.1-A(3). Crown Castle must create and deploy checklists for inspector use during Patrol Inspections.

5. General Order (GO) 95, Rule 18-B, Maintenance Programs states in part:

“The auditable maintenance program must include, at a minimum, records that show the date of the inspection, type of equipment/facility inspected, findings, and a timeline for corrective actions to be taken following the identification of a potential violation of GO 95 or a Safety Hazard on the company’s facilities.”

Crown Castle’s records do not list a timeline for corrective actions. Therefore, Crown Castle violated GO 95, Rule 18-B. Crown Castle must provide a timeline (due date) for all corrective actions.

6. General Order (GO) 95, Rule 31.1, 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 communication or supply lines and equipment.”

GO 95, Rule 18-A1: Resolution of Potential Violations of General Order 95 and Safety Hazards, states in part:

“Each company (including electric utilities and communications companies) is responsible for taking appropriate corrective action to remedy potential violations of GO 95 and Safety Hazards posed by its facilities.”

ESRB’s review of Crown Castle’s NorCal Region work orders from August 2019 through July 2024 found that 5,499 work orders of 15,016 total work orders (36.6%) were either closed late or were late and pending completion.⁵ Late closed work orders are work orders completed after the due date. Late pending work orders are work orders that had due dates prior to July 31, 2024 but were not complete by that date. ESRB’s analysis is only for those records provided in response to the PreAudit Data Request.

⁵ Crown Castle, Pre audit data response, 20240917 Q7-8 20240917 NorCal Repair Report. The 5,499 late work orders and total of 15,016 work orders is based on Ticket Resolved Date in the pre audit data response. That response lacks work orders for the counties noted in Record Finding Section 2.

- ESRB notes that:
 - No work order records were received for the following counties:
 - Sacramento
 - San Joaquin
 - Yolo
 - Placer
 - Solano
 - Required timelines for corrective action were not provided.⁶
 - ESRB analyzed Crown Castle data to the following standards⁷:
 - Infraction Severity 1: 7 days
 - Infraction Severity 2: 36 months
 - Infraction Severity 3: 60 months

Table 2 breaks down the total late and past due work orders for the NorCal Region by priority level and status.

Table 2: NorCal Region Late Closed and Pending Work Orders

Infraction Severity (Safety Hazard Level)	Late Closed Work Order	Late Pending Work Order*	Total
1	132	271	403
2	13	1,156	1,169
3	0	3,927	3,927
Total	145	5,354	5,499

*As of July 31, 2024

Table 3 lists the most overdue work orders.

Table 3: NorCal Region Overdue Work Orders

Infraction Severity (Safety Hazard Level)	Tag ID, Issue, Location	Created Date/ Status	Days Past Due
1	110044414, Lashing Wire Broken, San Francisco	1/27/2017 Open/Past Due	2,735
2	PG170155VT LOC 1, Fiber Clean Up, Santa Cruz	9/21/2017 Open/Past Due	1,409
3	JPCN114, Pole Not Tagged, Calistoga	12/26/2017 Open/Past Due	583

⁶ See Record Finding 5.

⁷ Crown Castle data uses “Infraction Severity” rather than Safety Hazard Level. Based on the longest permissible times in GO 95, Rule 18. Safety Hazard Level 1 (Infraction Severity 1) has a corrective action period of “immediate”. For analysis, ESRB used 7 days. Safety Hazard Level 2 (Infraction Severity 2) has a maximum corrective action period of 6 to 36 months depending on various safety and ignition factors. For analysis, ESRB used 36 months for the analysis of all Infraction Severity 2 work orders. Actual values will be higher.

7. General Order (GO) 95, Rule 18-B, Maintenance Programs states in part:

“Each company must describe in its auditable maintenance program the required qualifications for the company representatives who perform inspections and/or who schedule corrective actions.”

Crown Castle did not provide formal written auditable procedures that describe the qualifications of inspectors to ensure that all its communication lines are in compliance with GO 95 and GO 128. Therefore, Crown Castle violated GO 95, Rule 18-B. Crown Castle must develop training and maintain training records that can be audited.

III. Field Inspection

During the field audit, ESRB inspected the following facilities noted in Table 4:

Table 4: Locations of NorCal Region Field Audit

Loc#	Struct Type	City	Lat	Long
1	WP	Floriston 1	39.42026	-120.032
2	WP	Floriston 2	39.39302	-120.02054
3	WP	Floriston 2	39.3933	-120.02035
4	WP	Floriston 2	39.39353	-120.02052
5	WP	Strawberry	38.78828	-120.16532
6	WP	Strawberry	38.78809	-120.16465
7	WP	Strawberry	38.78823	-120.16452
8	Padmount	Strawberry	38.78823	-120.16445
9	WP	Strawberry	38.78779	-120.16406
10	WP	Kyburz	38.76544	-120.32261
11	WP	Kyburz	38.76593	-120.32039
12	WP	Kyburz	38.76594	-120.32028
13	UG	Sacramento 1	38.56835	-121.46733
14	WP	Sacramento 1	38.56825	-121.46727
15	UG	Sacramento 1	38.56923	-121.46686
16	WP	Sacramento 1	38.56924	-121.46681
17	UG	Sacramento 1	38.56667	-121.47247
18	WP	Sacramento 1	38.56668	-121.47245
19	WP	Sacramento 1	38.56653	-121.47197
20	UG	Sacramento 2	38.57709	-121.4859
21	WP	Sacramento 2	38.57743	-121.4851
22	WP	Sacramento 2	38.57729	-121.48465
23	WP	Sacramento 2	38.57695	-121.4834
24	UG	Sacramento 2	38.57605	-121.48624
25	UG	Sacramento 2	38.57667	-121.48931
26	UG	Sacramento 2	38.57634	-121.48788
27	UG	Sacramento 2	38.57597	-121.48636
28	WP	Davis 1	38.56452	-121.70434
29	WP	Davis 1	38.56454	-121.70364
30	UG	Davis 1	38.56472	-121.70303
31	WP	Davis 1	38.56441	-121.70523
32	WP	Davis 1	38.56434	-121.70619
33	UG	Davis 2	38.56049	-121.78601
34	UG	Davis 2	38.56102	-121.78541
35	UG	Davis 2	38.561	-121.78598
36	WP	Davis 2	38.56116	-121.79006

Loc#	Struct Type	City	Lat	Long
37	WP	Stockton 1	38.01057	-121.29393
38	WP	Stockton 1	38.01037	-121.29385
39	WP	Stockton 1	38.00949	-121.29351
40	WP	Stockton 1	38.0086	-121.29316
41	WP	Stockton 1	38.00771	-121.2928
42	UG	Stockton 2	38.00218	-121.28973
43	UG	Stockton 2	38.00226	-121.28981
44	UG	Stockton 2	38.00243	-121.29072
45	WP	Stockton 2	38.00242	-121.29075
46	WP	Stockton 2	38.00155	-121.2903
47	WP	Stockton 3	37.98503	-121.32112
48	WP	Stockton 3	37.98452	-121.321
49	WP	Stockton 3	37.98404	-121.32076
50	WP	Stockton 3	37.98367	-121.32076
51	WP	Stockton 3	37.98335	-121.32064
52	UG	Stockton 3	37.98337	-121.32063
53	WP	Tracy 1	37.75657	-121.42604
54	WP	Tracy 1	37.75667	-121.42609
55	WP	Tracy 1	37.75711	-121.42609
56	WP	Tracy 1	37.75736	-121.42608
57	WP	Tracy 1	37.75709	-121.42597
58	WP	Tracy 2	37.7128	-121.45304
59	UG	Tracy 2	37.71274	-121.45304
60	WP	Tracy 2	37.71321	-121.45305
61	UG	Tracy 2	37.71184	-121.4528
62	WP	Tracy 2	37.71058	-121.45225
63	WP	Tracy 2	37.71064	-121.45146
64	WP	Fremont	37.53473	-122.00007
65	WP	Fremont	37.53418	-122.00043
66	WP	Fremont	37.53377	-122.00078
67	UG	Fremont	37.53378	-122.0008
68	WP	Los Gatos	37.22533	-121.93532
69	WP	Los Gatos	37.22538	-121.93601
70	WP	Los Gatos	37.22499	-121.93456
71	WP	Los Gatos	37.2247	-121.93372
72	WP	Scotts Valley	37.04454	-122.02654
73	WP	Scotts Valley	37.04424	-122.02616
74	WP	Scotts Valley	37.04398	-122.02593
75	WP	Scotts Valley	37.04355	-122.02558
76	WP	Scotts Valley	37.04351	-122.02574
77	WP	Davenport 1	37.04088	-122.2243
78	WP	Davenport 1	37.04019	-122.22447
79	WP	Davenport 1	37.03944	-122.22456

Loc#	Struct Type	City	Lat	Long
80	WP	Davenport 2	37.02914	-122.21673
81	WP	Davenport 2	37.02881	-122.21652
82	WP	Davenport 2	37.02853	-122.21618
83	UG	South San Fran	37.65689	-122.45354
84	WP	South San Fran	37.65685	-122.45355
85	WP	South San Fran	37.65598	-122.45302
86	WP	South San Fran	37.65468	-122.45202
87	WP	South San Fran	37.65382	-122.45102
88	WP	San Francisco 1	37.74363	-122.50354
89	WP	San Francisco 1	37.74366	-122.50303
90	WP	San Francisco 1	37.74365	-122.50274
91	WP	San Francisco 1	37.74362	-122.50267
92	WP	San Francisco 2	37.7531	-122.50074
93	WP	San Francisco 2	37.75325	-122.50069

IV. Field Inspection Violations

ESRB identified the following violations during the field inspection:

1. 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.”

ESRB’s findings related to the above rule are listed in Table 5:

Table 5: GO 95, Rule 31.1 Findings

Location	Findings
5	Broken lashing
49	Loose, broken lashing
51	Broken lashing, midspan
75	Unsecured riser (taped to pole)
78	Broken lashing
87	Facilities not transferred to new utility pole
90	Broken lashing
91	Facilities not transferred to new utility pole
93	Loose cable, loose lashing.

2. GO 95, Rule 31.6, Abandoned Lines states:

“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.”

ESRB’s findings related to the above rule are listed in Table 6:

Table 6: GO 95, Rule 31.6 Findings

Location	Findings
47	Abandoned leads to idle facility
53	Abandoned facility
54	Abandoned facility
55	Abandoned facility

3. GO 95, Rule 35, Vegetation Management states in part:

“Communication and electric supply circuits, energized at 750 volts or less, including their service drops, should be kept clear of vegetation....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).”

ESRB’s finding related to the above rule is listed in Table 7:

Table 7: GO 95, Rule 35 Finding

Location	Finding
40	Strain/abrasion on conductor.

4. GO 95, Rule 37, Minimum Clearances of Wires above Railroads, Thoroughfares, Buildings, etc. states in part:

“Clearances between overhead conductors, guys, messengers or trolley span wires and tops of rails, surfaces of thoroughfares or other generally accessible areas across, along or above which any of the former pass; also the clearances between conductors, guys, messengers or trolley span wires and buildings, poles, structures, or other objects, shall not be less than those set forth in Table 1, at a temperature of 60° F. and no wind.

Table 1, Case 11C: Water areas not suitable for sailboating must be at least 15 feet.”

ESRB’s finding related to the above rule is listed in Table 8:

Table 8: GO 95, Rule 37 Finding

Location	Finding
1	Clearance over river, 12 ½ ft.

5. GO 95, Rule 38, Minimum Clearance of Wires from Other Wires states in part:

“The minimum vertical, horizontal or radial clearances of wires from other wires shall not be less than the values given in Table 2 and are based on a temperature of 60° F. and no wind. Conductors may be deadended at the crossarm or have reduced clearances at points of transposition, and shall not be held in violation of Table 2, Cases 8–15, inclusive.

Table 2, Case 16C: The radial separation of conductors on same crossarm, pole or structure—incidental pole wiring between conductors, taps or lead wires of different circuits to communication conductors (including open wire, cables and service drops) must be at least 3 inches.

Table 2, Case 16D: The radial separation of conductors on same crossarm, pole or structure—incidental pole wiring between conductors, taps or lead wires of different circuits between conductors, taps or lead wires of different circuits to 0 – 750 Volts (including service drops) and Trolley Feeders must be at least 11 1/2 inches.”

ESRB’s findings related to the above rule are listed in Table 9:

Table 9: GO 95, Rule 38 Findings

Location	Findings
7	Insufficient clearance to supply service drop
9	Insufficient clearance to communications conductor
45	Insufficient clearance: Enclosure, contacting communications conductor
63	Insufficient clearance to communications conductor on cross arm (temp)
71	Insufficient clearance to communications conductor, midspan
75	Insufficient clearance to communications conductor, midspan
93	Insufficient clearance to communications conductor, midspan

6. GO 95, Rule 84.6-B, Ground Wires states:

“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. Such covering may be omitted providing the ground wire in this 7-foot section has a mechanical strength at least equal to the strength of No. 6 AWG medium–hard–drawn copper.

Portions of ground wires which are on the surface of wood poles and within 6 feet vertically of unprotected supply conductors supported on the same pole, shall be covered with a suitable protective covering (see Rule 22.8).”

ESRB’s findings related to the above rule are listed in Table 10:

Table 10: GO 95, Rule 84.6-B Findings

Location	Findings
10	Exposed ground wire.
77	Exposed ground wire, broken protective cover.
93	Exposed ground wire.

7. GO 95, Rule 84.6-D, Vertical and Lateral Conductors, Vertical Runs states in part:

“Vertical runs of communication wires or cables supported on the surface of wood poles or structures... shall be supported by bridle hooks or rings spaced at intervals of not more than 24 inches.”

ESRB’s findings related to the above rule are listed in Table 11:

Table 11: GO 95, Rule 84.6-D Findings

Location	Findings
7	Vertical run supports spaced greater than 24 inches.
16	Vertical run supports spaced greater than 24 inches.
45	Vertical run supports spaced greater than 24 inches.
53	Vertical run supports spaced greater than 24 inches.

Location	Findings
84	Vertical run supports spaced greater than 24 inches.

8. 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.”

ESRB’s findings related to the above rule are listed in Table 12:

Table 12: GO 95, Rule 86.2 Findings

Location	Findings
6	Slack down guy
9	Slack down guy
12	Slack down guy
57	Slack down guy
68	Missing down guy.
81	Slack down guy
86	Slack down guy

9. GO 95, Rule 86.4-C(4), Guys, Clearances, From Conductors, Passing on Same Poles states:

“Where mechanical loads imposed on poles, towers or structures are greater than can be supported with the safety factors as specified in Rule 44, additional strength shall be provided by the use of guys or other suitable construction.

The radial clearances between guys and conductors supported by or attached to the same poles or crossarms shall be not less than as specified in Table 2, Case 19 except that the clearance between guys and communication messenger and/or cable attached directly to surface of pole may be less than the 3 inches specified in Table 2, Case 19, Column C provided: the guy is not a guy in proximity, or all parts of the guy are not less than 6 feet below 0 - 750 volt supply conductors supported on same pole, and a

wood guard or equivalent is placed on the messenger and/or cable; also, a guy attached to a pole which supports supply conductors at a distance of not less than 6 feet above communication messenger and/or cable shall (1) have an insulator placed in the guy above the communication messenger and/or cable, at a distance of not less than 6 feet horizontally from the pole, or (2) have an insulator placed in the guy not less than 3 inches nor more than 6 inches above the messenger and/or cable, and a wood guard or equivalent placed on the messenger and/or cable.”

ESRB’s findings related to the above rule are listed in Table 13:

Table 13: GO 95, Rule 86.4-C(4) Findings

Location	Finding
18	Down guy spacing to insulator <3 inches
69	Down guy spacing to insulator <3 inches
84	Down guy contacting communications conductor.

10. GO 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.”

ESRB’s findings related to the above rule are listed in Table 14:

Table 14: GO 95, Rule 86.9 Findings

Location	Findings
2	Missing down guy marker. (Fixed in field)
81	Missing down guy marker.

11. GO 95, Rule 92.1-F(2), Conductors, Cables and Messengers, Vertical Clearances Between Conductors, Cables, Messengers and Miscellaneous Equipment states in part:

“All parts of such metal terminals, boxes or similar equipment which are 8 inches or more from center line of pole shall have vertical clearances from conductors not less than the clearance specified in Table 2, Col. C, Cases 8 to 13 inclusive.

“EXCEPTION: The minimum vertical distance between all parts of such metal terminals, boxes or similar equipment which are 8 inches or more from the center line of pole and are supported by cable and/or messenger alone can be reduced to not less than 1 inch by mutual agreement between the affected owners (see Rule 38, Table 2, Case 8, Column C).”

ESRB’s findings related to the above rule are listed in Table 15:

Table 15: GO 95, Rule 92.1-F(2) Findings

Location	Findings
14	Metal amplifier enclosure is contacting communication conductors.
16	Metal amplifier enclosure is contacting communication conductors.

12. GO 95, Rule 92.4-C(1) c, Grounding, Material and Size, Grounding Conductors, Conductors, states:

“The grounding conductor from the ground rod (ground electrode) to the messenger shall be continuous, unless suitable electrical compression connections are used.”

ESRB’s findings related to the above rule are listed in Table 16:

Table 16: GO 95, Rule 92.4-C(1) c Findings

Location	Findings
1	Missing ground wire (3 places).
47	Missing ground wire.

13. GO 95, Rule 94.5-B, Antenna Marking, states:

*“Joint use poles shall be marked with a sign for each antenna installation as follows:
(1) Identification of the antenna operator
(2) A 24-hour contact number of antenna operator for Emergency or Information
(3) Unique identifier of the antenna installation.”*

ESRB’s finding related to the above rule is listed in Table 17:

Table 17: GO 95, Rule 94.5-B Finding

Location	Finding
77	Emergency decal is not visible.

14. 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.”

ESRB’s finding related to the above rule is listed in Table 18:

Table 18: GO 128, Rule 17.1 Finding

Location	Finding
67	Enclosure is broken.

15. 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.”

ESRB’s findings related to the above rule are listed in Table 19:

Table 19: GO 128, Rule 17.8 Finding

Location	Finding
20	Missing ownership mark.
24	Missing ownership mark.
25	Missing ownership mark.
26	Missing ownership mark.
34	Missing ownership mark.
67	Missing ownership mark.

V. Observations

1. GO 95, Rule 18, Reporting and Resolution of Safety Hazards Discovered by Utilities states in part:

“For purposes of this rule, “Safety Hazard” means a condition that poses a significant threat to human life or property...”

GO 95, Rule 18-A, Resolution of Potential Violations of General Order 95 and Safety Hazards states in part:

- “(3) 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 entity of such Safety Hazard(s) no later than ten (10) business days after the discovery.*
- (4) To the extent a company that has a notification requirement under (2) or (3) above cannot determine the facility owner/operator, it shall contact the pole owner(s) within ten (10) business days if the subject of the notification is a Safety Hazard, or otherwise within a reasonable amount of time not to exceed 180 days after discovery. The notified pole owner(s) shall be responsible for promptly (normally not to exceed five business days) notifying the company owning/operating the facility if the subject of the notification is a Safety Hazard, or otherwise within a reasonable amount of time not to exceed 180 days, after being notified of the potential violation of GO 95.”*

During the field inspection, ESRB noted the third-party safety concerns listed in Table 20. While in the field, Crown Castle created and sent third-party notifications to the respective utilities for the items below:

Table 20: Third-Party Observations

Location	Observations
2	ATT: Line on ground
2	ATT: Abandoned pole butt
3	ATT: Line on ground
3	ATT: Abandoned pole butt
4	ATT: Line on ground
4	ATT: Abandoned pole butt
5	PG&E: Burned ID tag

Location	Observations
6	PG&E: missing down guy marker
9	PG&E: Pole steps too low, climbing access
10	ATT: Lean >15 %
12	ATT: Abandoned phone drop
18	ATT: unsecured box
18	ATT: vertical support >24 inch
18	ATT: exposed ground
18	ATT: broken ground molding
18	SMUD: ground wire vertical support >24 inch
19	SMUD: down guy insulator separation <3 inch
21	ATT: Strain on span, causing tree abrasion
22	Comm: Lifted riser
22	Comm: missing down guy
22	SMUD: abandoned service
22	SMUD: loose/exposed ground, adjacent pole
23	SMUD: idle neutral touching hot
37	Comcast: Exposed ground
38	Pole lean 10%, burned
39	Comcast: broken lashing
40	Comcast: ground clearance 13 ft.
45	Comcast: broken lashing
48	ATT: Vertical support >24 inches
49	ATT: Buddy pole needs removal
50	ATT: Vertical support >24 inches
50	Span attached to other utility line (zip tie)
51	ATT: Vertical support >24 inches

Location	Observations
51	ATT: Exposed ground
53	ATT: Abandoned line, loose on pole
58	ATT: Vertical support >24 inches
60	Missing visibility strips
65	Comcast: Clearance to comm
65	PG&E: Exposed ground
66	Comcast: clearance to guy
68	Comm: missing guy insulator, #1 & 3, within proximity of high voltage.
69	Comm: down guy insulator spacing <3 inch from adjacent down guy.
69	ATT: Missing down guy
71	pole lean ~15%
76	Comm: Veg strain
78	ATT: broken lashing
79	ATT: fraying down guy
81	ATT: pole lean
81	ATT: Lifter riser.
82	ATT: pole lean.
85	ATT (?): Low service drop over driveway
86	All Comm: clearance, clean up
87	All Comm: Transfer service to new pole
87	ATT: Abandoned service drop
88	PG&E: Unsecured meter box, corroded housing.
88	Comcast: Exposed ground wire.
89	Comm: service drop clearance
91	ATT: Transfer service to new pole
92	ATT: clearance, clean up