505 VAN NESS AVENUE SAN FRANCISCO, CA 94102-3298

EA2023-1149

December 18, 2023 Mr. Dean Batchelor

PUBLIC UTILITIES COMMISSION

Utilities Director Palo Alto Utilities Department 1007 Elwell Court Palo Alto, CA 94303

SUBJECT: City of Palo Alto Utilities Electric Facilities Audit Report

Mr. Batchelor:

On behalf of the Electric Safety and Reliability Branch (ESRB) of the California Public Utilities Commission (CPUC), Monica Hoskins and Gordon Szeto of ESRB staff conducted an electric facilities audit of the City of Palo Alto Utilities (CPAU) from August 7 to August 11, 2023. During the audit, ESRB staff conducted a field inspection of the CPAU's distribution facilities and equipment and reviewed pertinent documents and records. ESRB staff, however, did not inspect the CPAU's substation facilities. The CPAU failed to provide ESRB access to its substations due to the CPAU's jurisdictional dispute over the Commission's authority to enforce General Order 174 on municipal utilities. ESRB's issuance of this report does not indicate agreement with the CPAU's position on our jurisdictional authority, but rather the intent to effect corrective actions on its observed findings in a timely manner.

As a result of the audit, ESRB staff identified violations of one or more General Orders (GOs). Enclosed is a copy of our audit findings itemizing the violations found. Please respond no later than February 1, 2024, by providing an electronic copy of all corrective actions and preventive measures taken by the CPAU to correct the identified violations and prevent the recurrence of such violations. 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 Monica Hoskins at (415) 652-1847 or monica.hoskins@cpuc.ca.gov.

Sincerely,

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

Enclosure: CPUC Electric Distribution Audit Findings

 Cc: Lee Palmer, Director, Safety and Enforcement Division (SED), CPUC Nika Kjensli, Program Manager, ESRB, SED, CPUC
 Nathan Sarina, Senior Utilities Engineer (Supervisor), ESRB, SED, CPUC
 Monica Hoskins, Utilities Engineer, ESRB, SED, CPUC
 Gordon Szeto, Utilities Engineer, ESRB, SED, CPUC
 Tabatha Boatwright, Utilities Management Analyst, CPAU
 Letty Rodriguez, Utilities Supervisor, CPAU

CITY OF PALO ALTO UTILITIES ELECTRIC DISTRIBUTION AUDIT FINDINGS AUGUST 7 – 11, 2023

I. Records Review

Electric Safety and Reliability Branch (ESRB) staff reviewed the following standards, procedures, and records for City of Palo Alto Utilities (CPAU):

- CPAU Inspections and Maintenance Program
- Overhead and underground inspection and maintenance field checklists
- Statistics on overhead and underground distribution facilities with a list of all circuits in service area
- Service area distribution maps
- Completed overhead work orders, June 2022 to June 2023
- Completed underground work orders, June 2020 to January 2023
- Underground patrols and inspections records, April 2018 to March 2023
- Overhead patrols and inspections records, February 2018 to August 2022
- Overhead and underground inspection cycle for 2023
- New completed construction projects list, July 2022 to June 2023
- Completed pole loading calculations list, August 2022 to July 2023
- List of inspectors and qualifications, January 2018 to July 2023
- Utility Compliance Technician and Utility Compliance Technician Lead job descriptions and requirements
- Intrusive inspections, April 2019 to February 2020 and October 2022

II. Records Violations

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

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

"Each company (including electric utilities and communications companies) shall establish and implement an auditable maintenance program for its facilities and lines for the purpose of ensuring that they are in good condition so as to conform to these rules. 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. Companies that are subject to GO 165 may maintain procedures for conducting inspections and maintenance activities in compliance with this rule and with GO 165.

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.

- (a) The maximum time periods for corrective actions associated with potential violation of GO 95 or a Safety Hazard are based on the following priority levels:
 - *(i)* Level 1 An immediate risk of high potential impact to safety or reliability:
 - Take corrective action immediately, either by fully repairing or by temporarily repairing and reclassifying to a lower priority.
 - *(ii)* Level 2 Any other risk of at least moderate potential impact to safety or reliability:
 - Take corrective action within specified time period (either by fully repair or by temporarily repairing and reclassifying to Level 3 priority). Time period for corrective action to be determined at the time of identification by a qualified company representative, but not to exceed: (1) six months for potential violations that create a fire risk located in Tier 3 of the High Fire-Threat District; (2) 12 months for potential violations that create a fire risk located in Tier 2 of the High Fire-Threat District; (3) 12 months for potential violations that compromise worker safety; and (4) 36 months for all other Level 2 potential violations.

(iii) Level 3 – Any risk of low potential impact to safety or reliability:

• Take corrective action within 60 months subject to the exception specified below."

GO 165, Section III-C, Record Keeping states in part:

"The utility shall maintain records for (1) at least ten (10) years of patrol and detailed inspection activities, and (2) the life of the pole for intrusive inspection activities. Such records shall be made available to parties or pursuant to Commission rules upon 30 days notice. Commission staff shall be permitted to inspect such records consistent with Public Utilities Code Section 314 (a).

For all inspections records shall specify the circuit, area, facility or equipment inspected, the inspector, the date of the inspection, and any problems (or items requiring corrective action) identified during each inspection, as well as the scheduled date of corrective action."

The CPAU priority codes from the Inspections and Maintenance Program are as follows:

• Priority 1 – Immediate Hazard

Conditions that may affect the integrity of the system or present a hazard to workers or the general public. All Priority 1 tags will be responded to immediately, and appropriate action taken until the hazardous condition is remedied.

• Priority 2 – Non-Emergency Repair Condition

Conditions that require maintenance that can be scheduled to maintain the integrity of the system. Priority 2 tags will be prioritized by urgency and will be scheduled to have appropriate repairs made to correct the condition within 24 months, where feasible.

• Priority 3 – Non-Emergency Repair Condition

Conditions that do not present a situation that could jeopardize the safety of the system, workers, and the general public. Priority 3 tags will be issued with the time interval recommended and work will be scheduled to have appropriate repairs made to correct the condition when work is being performed on the utility structure and/or equipment.

- a. CPAU creates and tracks their work orders through an internal online system. The work orders submitted to ESRB included a date created and a date completed for the individual issues, but CPAU does not specify the scheduled date of correction action as required by GO 165, Section III-C. ESRB also previously identified this issue during the CPAU Facilities Audit in 2015 (EA2015-011), where ESRB noted CPAU did not use due dates in their inspection records as required by GO 165.
- b. CPAU completes Priority 3 issues when possible but does not assign a specific due date in their internal system. The *Inspections and Maintenance Program* does not have a timeframe for Priority 3 repairs, and therefore CPAU cannot ensure all issues are completed within the 60-month interval required by GO 95, Rule 18-B.a.iii. CPAU needs to update their *Inspections and Maintenance Program* and their work order tracking system to provide a timeline for completing Priority 3 issues and to ensure all issues are completed within 60 months.

2. 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 165, Section III-B, Standards for Inspection states:

"Each utility subject to this General Order shall conduct inspections of its distribution facilities, as necessary, to ensure reliable, high quality, and safe operation, but in no case may the period between inspections (measured in years) exceed the time specified in Table 1."

| | Pat | rol | Deta | iled | Intru | sive |
|--|-------|----------------|-------|-------|-------|-------|
| | Urban | Rural | Urban | Rural | Urban | Rural |
| Transformers | | | | | | |
| Overhead | 1 | 2 ¹ | 5 | 5 | _ | _ |
| Underground | 1 | 2 | 3 | 3 | _ | _ |
| Padmounted | 1 | 2 | 5 | 5 | _ | _ |
| Switching/Protective Devices | | | | | | |
| Overhead | 1 | 2 ¹ | 5 | 5 | _ | _ |
| Underground | 1 | 2 | 3 | 3 | _ | _ |
| Padmounted | 1 | 2 | 5 | 5 | _ | _ |
| Regulators/Capacitors | | | | | | |
| Overhead | 1 | 2 ¹ | 5 | 5 | _ | _ |
| Underground | 1 | 2 | 3 | 3 | _ | _ |
| Padmounted | 1 | 2 | 5 | 5 | _ | _ |
| | | | | | | |
| Overhead Conductor and Cable | 1 | 2 ¹ | 5 | 5 | | |
| Streetlighting | 1 | 2 | Х | Х | _ | _ |
| Wood Poles under 15 years | 1 | 2 | Х | Х | _ | _ |
| Wood Poles over 15 years which have | 1 | 2 | | | 10 | 10 |
| not been subject to intrusive inspection | 1 | | Х | Х | 10 | 10 |
| Wood poles which have passed | | | | | 20 | 20 |
| intrusive inspection | _ | | _ | | 20 | 20 |

Table 1: Distribution Inspection Cycles (Maximum Intervals in Years)

1) Patrol inspections in rural areas shall be increased to once per year in Tier 2 and Tier 3 of the High Fire-Threat District. (See GO 95, Rule 21.2-D)

Note: For the purpose of implementing the patrol and detailed inspection intervals in Table 1 above, the term "year" is defined as 12 consecutive calendar months starting the first full calendar month after an inspection is performed, plus three full calendar months, not to exceed the end of the calendar year in which the next inspection is due. A required inspection may be completed any time before the expiration of the associated inspection interval using this definition of "year," but not after. The completion of an inspection starts a new inspection interval that must be completed within the prescribed timeframe using this definition of "year." However, inspection intervals may be extended by up to six months in areas where the Governor of California or the President of the United States has declared an emergency or a disaster following a major earthquake or other catastrophe using the procedure set forth in Decision 13-06-011 issued in Rulemaking 08-11-005. The extension shall not exceed six months from the date that an emergency is declared or the date that a disaster is declared, whichever is earlier.

CPAU only organizes their overhead and underground inspections by calendar year and does not use due date months. In their system, all inspections for the year must be completed by the end of the year but may be performed at any point during that calendar year. Without specified monthly due dates, CPAU cannot ensure the inspections occur every 16 months as required by GO 165, Section III-B.

Additionally, ESRB staff identified that CPAU completed a total of 74 underground (UG) inspections late¹ between April 2018 to March 2023. Table 1 lists the UG maps inspected late and the inspection type, in addition to the year due and the date the inspections were completed.

| Map Number | Inspection Type | Year Due | Date Completed |
|------------|-----------------|----------|----------------|
| A5 | UG Detail | 2019 | 1/23/2020 |
| A6 | UG Detail | 2019 | 1/29/2020 |
| A7 | UG Detail | 2019 | 2/6/2020 |
| A8 | UG Detail | 2019 | 2/12/2020 |
| A9 | UG Detail | 2019 | 2/24/2020 |
| A10 | UG Detail | 2019 | 2/25/2020 |
| B4 | UG Detail | 2019 | 2/28/2020 |
| B5 | UG Detail | 2019 | 3/4/2020 |
| B6 | UG Detail | 2019 | 6/4/2020 |
| B7 | UG Detail | 2019 | 6/11/2020 |
| C4 | UG Detail | 2019 | 6/17/2020 |
| B8 | UG Detail | 2019 | 6/18/2020 |
| C3 | UG Detail | 2019 | 6/18/2020 |
| C5 | UG Detail | 2019 | 6/24/2020 |
| D7 | UG Detail | 2019 | 6/30/2020 |
| C7 | UG Detail | 2019 | 7/1/2020 |
| D6 | UG Detail | 2019 | 7/1/2020 |
| C6 | UG Detail | 2019 | 7/2/2020 |
| G8 | UG Detail | 2021 | 1/11/2022 |
| G11 | UG Detail | 2021 | 1/15/2022 |
| D8 | UG Detail | 2021 | 1/19/2022 |
| D9 | UG Detail | 2021 | 1/22/2022 |
| F9 | UG Detail | 2021 | 1/25/2022 |
| F8 | UG Detail | 2021 | 1/28/2022 |
| G7 | UG Detail | 2021 | 1/29/2022 |
| H6 | UG Detail | 2021 | 1/29/2022 |
| F15 | UG Detail | 2021 | 2/3/2022 |
| E17 | UG Detail | 2021 | 2/5/2022 |
| F17 | UG Detail | 2021 | 2/7/2022 |
| E16 | UG Detail | 2021 | 2/8/2022 |

Table 1: CPAU Late Underground Inspections

¹ Refer to the Note in Table 1 of GO 165, Section III-B for the definition of late inspections.

| F14 | UG Detail | 2021 | 2/10/2022 |
|-----|-----------|------|-----------|
| F16 | UG Detail | 2021 | 2/10/2022 |
| G18 | UG Detail | 2021 | 2/11/2022 |
| G19 | UG Detail | 2021 | 2/11/2022 |
| H5 | UG Detail | 2021 | 2/11/2022 |
| H18 | UG Detail | 2021 | 2/12/2022 |
| H19 | UG Detail | 2021 | 2/12/2022 |
| I20 | UG Detail | 2021 | 2/12/2022 |
| K19 | UG Visual | 2021 | 2/12/2022 |
| D17 | UG Detail | 2021 | 2/15/2022 |
| E15 | UG Detail | 2021 | 2/15/2022 |
| D14 | UG Detail | 2021 | 2/28/2022 |
| D15 | UG Detail | 2021 | 2/28/2022 |
| E11 | UG Detail | 2021 | 2/28/2022 |
| E13 | UG Detail | 2021 | 2/28/2022 |
| E14 | UG Detail | 2021 | 3/1/2022 |
| E1 | UG Visual | 2021 | 3/2/2022 |
| E2 | UG Visual | 2021 | 3/2/2022 |
| E3 | UG Visual | 2021 | 3/2/2022 |
| E4 | UG Visual | 2021 | 3/3/2022 |
| E5 | UG Visual | 2021 | 3/4/2022 |
| E6 | UG Visual | 2021 | 3/4/2022 |
| E7 | UG Visual | 2021 | 3/5/2022 |
| D7 | UG Visual | 2021 | 3/8/2022 |
| F18 | UG Visual | 2021 | 3/10/2022 |
| F3 | UG Visual | 2021 | 3/10/2022 |
| F4 | UG Visual | 2021 | 3/11/2022 |
| F5 | UG Visual | 2021 | 3/12/2022 |
| F6 | UG Visual | 2021 | 3/12/2022 |
| G4 | UG Visual | 2021 | 3/12/2022 |
| G6 | UG Visual | 2021 | 3/12/2022 |
| F7 | UG Visual | 2021 | 3/15/2022 |
| G5 | UG Visual | 2021 | 3/18/2022 |
| B5 | UG Detail | 2022 | 1/17/2023 |
| B6 | UG Detail | 2022 | 1/31/2023 |
| B7 | UG Detail | 2022 | 2/4/2023 |
| B8 | UG Detail | 2022 | 2/8/2023 |
| C3 | UG Detail | 2022 | 2/8/2023 |
| C4 | UG Detail | 2022 | 2/9/2023 |
| C5 | UG Detail | 2022 | 2/24/2023 |
| C6 | UG Detail | 2022 | 2/15/2023 |
| C7 | UG Detail | 2022 | 2/16/2023 |
| D6 | UG Detail | 2022 | 2/17/2023 |
| D7 | UG Detail | 2022 | 3/2/2023 |
| | | 2022 | 51212025 |

3. GO 165, Section III-D, Reporting states:

"By July 1st each utility subject to this General Order shall submit an annual report for the previous year under penalty of perjury.

The report shall list four categorical types of inspections: Patrols, Overhead Detailed, Underground Detailed and Wood Pole Intrusive. The report shall denote the total units of work by inspection type for the reporting period and the number of outstanding (not completed) inspections within the same reporting period for each of the four categories."

CPAU does not submit annual GO 165 reports to the Commission as required by GO 165, Section III-D. CPAU must submit the annual reports to the Commission by July 1st of each year.

III. Field Inspection

| Location | Structure Type | Equipment Identifier (Pole Number/Address) |
|----------|--------------------------------------|---|
| 1 | Pole | 2168 |
| 2 | Pole | 2169 |
| 3 | Pole | 2016 |
| 4 | Pole | 2015 |
| 5 | Pole | 1987 |
| 6 | Pole | 491 Ferne Avenue, Palo Alto |
| 7 | Pole | 3583 South Court, Palo Alto |
| 8 | Pole | 3601 South Court, Palo Alto |
| 9 | Pole | 3617 South Court, Palo Alto |
| 10 | Pole | 2244 |
| 11 | Pole | 3641 South Court, Palo Alto |
| 12 | Pole | 2311 |
| 13 | Pole | 2239 |
| 14 | Pole | 3955 |
| 15 | Pole | 3954 |
| 16 | Pole | 3953 |
| 17 | Service Pole | 2659 |
| 18 | Pole | 2658 |
| 19 | Pole | 2660 |
| 20 | Pole | 2552 |
| 21 | Pole | 2551 |
| 22 | Pole | 5085 |
| 23 | Pole | 5065 |
| 24 | Pole | 1174 Stanley Way, Palo Alto |
| 25 | Pole | 5073 |
| 26 | Pole | 5162 |
| 27 | Underground Secondary Service Box | 1120 Newell Road, Palo Alto |
| 28 | Pole | 5163 |
| 29 | Pole | 6902 |
| 30 | Pole | 5164 |
| 31 | Guy Pole | 5166 |
| 32 | Pole | 5165 |
| 33 | Pole | 5183 |
| 34 | Pole | 5185 |
| 35 | Pole | 184 Lois Lane, Palo Alto |
| 36 | Pole | 1034 |
| 37 | Pole | 1033 |
| 38 | Pole | 1032 |

During the field inspection, ESRB staff inspected the following facilities:

| 20 | D-1- | 4601 |
|-----------|-------------------------|-------------------------------------|
| 39 | Pole | 4681 |
| 40 | Pole | 4682 |
| 41 | Pole | 4683 |
| 42 | Pole | 4805 |
| 43 | Pole | 4653 |
| 44 | Pole | 4652 |
| 45 | Pole | 4650 |
| 46 | Pole | 4649 |
| 47 | Pole | 5612 |
| 48 | Service Pole | 5613 |
| 49 | Pole | 5614 |
| 50 | Pole | 5615 |
| 51 | Pole | 5616 |
| 52 | Pole | 5413 |
| 53 | Pole | 5412 |
| 54 | Pole | 5896 |
| 55 | Pole | 5894 |
| = (| Underground | 2200 |
| 56 | Transformer Vault | 2390 |
| 57 | Underground Secondary | 21 Percent Place, Pale Alto |
| 51 | Service Box | 21 Regent Place, Palo Alto |
| 58 | UG Transformer Vault | 2384 |
| 59 | Underground Secondary | 1051 and 1041 Channing Avenue, Palo |
| | Service Box | Alto |
| 60 | Underground Manhole | 1349 |
| 61 | Pad Mount Transformer | 8620 |
| 62 | Underground | 2176 |
| | Transformer Vault | |
| 63 | Underground Pull Box | 3206 |
| 64 | Underground | 40209 |
| | Transformer Manhole | |
| 65 | Pad Mount Transformer | 7443 |
| 66 | Underground Secondary | 430 Cambridge Ave, Palo Alto |
| | Pull Box | |
| 67 | Underground | 1672 |
| | Transformer Manhole | |
| 68 | Underground Service | 2555 Park Boulevard, Palo Alto |
| (0 | Vault | |
| <u>69</u> | Pad Mount Load Break | 3402 |
| 70 | Pad Mount Transformer | 3907 |
| 71 | Pad Mount Load Break | 3404 |
| 72 | Pad Mount Transformer - | 6974 |
| 72 | Streetlight | 9045 |
| 73 | Pad Mount Transformer | 8045 |
| 74 | Underground Switch | 2207 |
| | Vault | |

| 75 | Pad Mount Transformer | 6752 |
|------------|--|-------------------------|
| 15 | Underground Pad Mount | 0752 |
| 76 | Switch | 2272 |
| 77 | Pad Mount Transformer | 6594 |
| 78 | Pad Mount Switch | 2815 |
| 79 | Pad Mount Transformer - Streetlight | 6971 |
| 80 | Underground Manhole | 1379 |
| 81 | Underground Manhole | 2470 |
| 82 | Underground Manhole | 1202 |
| 83 | Pad Mount Switch | 20013 |
| 84 | Pad Mount Transformer | 8186 |
| 85 | Underground Manhole | 40032 |
| 86 | Underground Manhole | 1203 |
| 87 | Pad Mount Switch | 2785 |
| 88 | Pad Mount Switch | 2786 |
| 89 | Pole | 6600 |
| 90 | Pole | 6601 |
| 91 | Pole | 6602 |
| 92 | Pole | 6609 |
| 93 | Guy Pole | 6691 |
| 94 | Pole | 6690 |
| 95 | Pole | 7051 |
| 96 | Pole | 6693 |
| 97 | Pole | Along Page Mill Road at |
| | | 37.3460, -122.1759 |
| <u>98</u> | Pole | 6594 |
| <u>99</u> | Pole | 6593 |
| 100 | Pole | 6591 |
| 101 | Pole | 6592 |
| 102 | Pole | 6542 |
| 103 | Pole | 6538 |
| 104 | Pole | 6537 |
| 105 | Pole | 6536 0377 |
| 106 107 | Pole Pole | 0375 |
| 107 | Service Pole | 0378 |
| 108 | Pole | 0250 |
| 109 | Pole | 0249 |
| 110 | Pole | 7035 |
| 111 | Pole | 4462 |
| 112 | Pole | 4463 |
| 113 | Pole | 4464 |
| 114 | Pole | 4465 |
| 115 | Pole | 4466 |
| 110 | 1.010 | 1100 |

| 117 | Pole | 4468 |
|-----|------|------|
| | | |
| 118 | Pole | 4471 |
| 119 | Pole | 4474 |
| 120 | Pole | 2400 |
| 121 | Pole | 2401 |
| 122 | Pole | 2383 |
| 123 | Pole | 2382 |
| 124 | Pole | 2403 |
| 125 | Pole | 2405 |
| 126 | Pole | 3635 |
| 127 | Pole | 3634 |
| 128 | Pole | 3633 |
| 129 | Pole | 3632 |
| 130 | Pole | 3631 |
| 131 | Pole | 1619 |
| 132 | Pole | 1620 |
| 133 | Pole | 1657 |
| 134 | Pole | 1658 |
| 135 | Pole | 5516 |
| 136 | Pole | 5518 |

IV. Field Inspection Violations

ESRB staff observed 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 2:

| Location | Finding |
|----------|--|
| 1 | Pole 2168 is located along a paved road and has missing visibility strips, which are a required item on CPAU's OH inspection form. |
| 3 | Pole 2016 is located along a paved road and has missing visibility strips, which are a required item on CPAU's OH inspection form. |
| 15 | Pole 3954 is located along a paved road and has missing visibility strips, which are a required item on CPAU's OH inspection form. |
| 17 | Pole 2659 is located along a paved road and has missing visibility strips, which are a required item on CPAU's OH inspection form. |
| 101 | Pole 6592 has an abandoned buddy pole that needs to be removed. |
| 105 | Pole 6592 has an abandoned buddy pole that needs to be removed (Pole 7046). |
| 115 | Pole 4465 is located along a paved road and has missing visibility strips, which are a required item on CPAU's OH inspection form |

Table 2: GO 95, Rule 31.1 Findings

2. GO 95, Rule 34, Foreign Attachments states in part:

"Nothing in these rules shall be construed as permitting the unauthorized attachment, to supply, streetlight 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.

Nothing herein contained shall be construed as requiring utilities to grant permission for such use of their overhead facilities; or permitting any use of

joint poles or facilities for such permanent or temporary construction without the consent of all parties having any ownership whatever in the poles or structures to which attachments may be made; or granting authority for the use of any poles, structures or facilities without the owner's or owners' consent.)."

ESRB's finding related to the above rule is listed in Table 3:

| Location | Finding |
|----------|---|
| 21 | Pole 2551 has an unauthorized third-party attachment. |

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

"Where overhead conductors traverse trees and vegetation, safety and reliability of service demand that certain vegetation management activities be performed in order to establish necessary and reasonable clearances, the minimum clearances set forth in Table 1, Cases 13 and 14, measured between line conductors and vegetation under normal conditions shall be maintained. (Also see Appendix E for tree trimming guidelines.) These requirements apply to all overhead electrical supply and communication facilities that are covered by this General Order, including facilities on lands owned and maintained by California state and local agencies.

Communication and electric supply circuits, energized at 750 volts or less, including their service drops, should be kept clear of vegetation in new construction and when circuits are reconstructed or repaired, whenever practicable. 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)."

ESRB's findings related to the above rule are listed in Table 4:

| Location | Finding |
|----------|---|
| 46 | Excessive vegetation is surrounding the service drop to 420 Tennyson Street from Pole 4649 and causing possible strain and abrasion. |

Table 4: GO 95, Rule 35 Findings

| 48 | Excessive vegetation is surrounding the service drop to 1450 Bryant Street from Service Pole 5613 and causing possible strain and abrasion. |
|-----|--|
| 111 | Excessive vegetation is surrounding the service drop to 742 Josina Avenue from Pole 7035 and causing possible strain and abrasion. |
| 124 | Excessive vegetation is surrounding the service drop to 2914 Sandra Place from Pole 2403 and causing possible strain and abrasion. |
| 133 | Excessive vegetation is surrounding the service on Pole 1657 and causing possible strain and abrasion. |

4. GO 95, Rule 51.6-A, High Voltage Marking states in part:

"Poles which support line conductors of more than 750 volts shall be marked with high voltage signs. This marking shall consist of a single sign showing the words "HIGH VOLTAGE", or pair of signs showing the words "HIGH" and "VOLTAGE", not more than six (6) inches in height with letters not less than 3 inches in height. Such signs shall be of weather and corrosion– resisting material, solid or with letters cut out therefrom and clearly legible.

The top of such sign(s) shall be located between the level of the lowest line conductor, energized in excess of 750 volts, on the pole to no more than 40 inches below that conductor level (see Figure 51–1).

Poles that support risers of more than 750 volts, which are not supporting line conductors of more than 750 volts, shall be marked with a high voltage sign(s). The top of such sign(s) shall be located between the level of the lowest exposed energized portion of the riser to no more than 40" below that portion of the riser."

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

| Location | Finding |
|----------|--|
| 11 | The Pole at 3641 South Court has damaged high voltage signs. |
| 16 | Pole 3953 has a damaged high voltage sign. |
| 18 | Pole 2658 has a damaged high voltage sign. |
| 19 | Pole 2660 has a damaged high voltage sign. |

Table 5: GO 95, Rule 51.6-A Findings

| 21 | Pole 2551 has a damaged high voltage sign. |
|-----|---|
| 24 | The Pole at 1174 Stanley Way has a damaged high voltage sign. |
| 25 | Pole 5073 has a missing high voltage sign. |
| 38 | Pole 1032 has missing high voltage signs. |
| 46 | Pole 4649 has a damaged high voltage sign. |
| 97 | The Pole on Page Mill Road at 37.3460, -122.1759 has a damaged high voltage sign. |
| 118 | Pole 4471 has missing high voltage signs. |
| 120 | Pole 2400 has a damaged high voltage sign. |
| 125 | Pole 2405 has a damaged high voltage sign. |

5. GO 95, Rule 54.6-B, Vertical and Lateral Conductor, Ground Wires states in part:

"That portion of the ground wire attached on the face or back of wood crossarms or on the surface of wood poles and structures shall be covered by a suitable protective covering (see Rule 22.8)."

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

| Location | Finding |
|----------|---|
| 3 | Pole 2016 has an exposed transformer ground wire. |
| 10 | Pole 2244 has an exposed ground wire. |
| 21 | Pole 2551 has an exposed ground wire |
| 110 | Pole 0249 has an exposed ground wire. |

Table 6: GO 95, Rule 54.6-B Findings

| 114 | Pole 4464 has an exposed transformer ground wire. |
|-----|---|
|-----|---|

6. GO 95, Rule 54.8-B(3), Service Drops 0-750 Volts, Clearances above Ground, Buildings, Etc. states in part:

"(3) Above Ground in Areas Accessible to Pedestrians Only: Over areas accessible to pedestrians only service drops shall be maintained at a vertical clearance of not less than 12 feet.

EXCEPTION: This clearance may be reduced for insulated services that conform with Rule 54.8-A, to not less than 8 feet 6 inches."

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

| Location | Finding |
|----------|---|
| 21 | Pole 2551 has a low service drop to 2895 Waverly Street that has less than the required clearance and can be touched from the ground. |

Table 7: GO 95, Rule 54.8-B(3) Finding

7. 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."

ESRB's findings related to the above rule are listed in Table 8:

| Location | Finding |
|----------|---|
| 1 | Pole 2168 has a slack span guy to the pole across San Antonio Road. |
| 2 | Pole 2169 has a slack span guy to the pole across San Antonio Road. |
| 5 | Pole 1987 has a slack span anchor down guy. |
| 97 | The Pole on Page Mill Road at 37.3460, -122.1759 has a slack anchor down guy. |

Table 8: GO 95, Rule 56.2 Finding

| 103 | Pole 6538 has a slack anchor down guy. |
|-----|--|
| 117 | Pole 4468 has a slack span guy. |
| 134 | Pole 2168 has a slack span guy to Pole 1659 and a slack span guy to Pole 1657. |

8. GO 95, Rule 56.7-B, Location of Sectionalizing Insulators, Anchor Guys states in part:

"In order to prevent trees, buildings, messengers, metal-sheathed cables or other similar objects from grounding portions of guys above guy insulators, it is suggested that anchor guys be sectionalized, where practicable, near the highest level permitted by this Rule."

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

| Location | Finding |
|----------|---|
| 2 | Pole 2169 has vegetation above the down guy insulator that is contacting and grounding the anchor guy. |
| 3 | Pole 2016 has insufficient vegetation guards and vegetation above the down guy insulator that is contacting and grounding the anchor guy. |
| 15 | Pole 3954 has insufficient vegetation guards and vegetation above the down guy insulator that is contacting and grounding the anchor guy. |
| 16 | Pole 3953 has vegetation above the down guy insulator that is contacting and grounding the anchor guy. |

Table 9: GO 95, 56.7-B Findings

9. 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 10:

Table 10: GO 128, Rule 17.1 Finding

| Location | Finding |
|----------|---|
| 71 | Pad Mount Load Break 3402 has a corroded fault indicator on one of the C Phase load break elbows. |

10. GO 128, Rule 32.7, Manholes, Handholes and Subsurface Equipment Enclosures, Covers states in part:

"Manholes, handholes, and subsurface equipment enclosures while not being worked in, shall be securely closed by covers of sufficient strength to sustain such loads as may reasonably be imposed upon them and arrangements shall be such that a tool or appliance shall be required for their opening and cover removal. (Also see Rule 17.8, and Appendix B, Figs. 9 and 17.)"

ESRB's finding related to the above rule is listed in Table 11:

Table 11: GO 128, Rule 32.7 Findings

| Location | Finding |
|----------|--|
| 27 | The underground secondary service box at 1120 Newell Road has a damaged lid and is accessible by the public. |

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 observed the following third-party safety concerns listed in Table 12:

| Location | Observations |
|----------|--|
| 1 | The communication lines between Pole 2168 and Pole 2169 have strain and abrasion from excessive vegetation. |
| 2 | Pole 2169 has a slack communications anchor down guy. |
| 3 | Pole 2016 has slack communications anchor down guys and the communications lines have strain and abrasion from excessive vegetation. |
| 4 | Pole 2015 has communications ground moulding gaping and exposing the ground wire. |

Table 12: Third-Party Audit Observations

| · · · · · · · · · · · · · · · · · · · | |
|---------------------------------------|---|
| 5 | Pole 1987 has a slack communications anchor down guy. |
| 7 | The Pole at 3583 South Court has communications conductors that are in contact. |
| 8 | The communications lines between Pole at 3601 South Court and the Pole at 3583 South Court have strain and abrasion from excessive vegetation. |
| 9 | The communications lines between Pole at 3617 South Court and the Pole at 3601 South Court have strain and abrasion from excessive vegetation. |
| 10 | Pole 2244 has an incomplete communications pole transfer that is leading to low hanging communications drops. |
| 15 | Pole 3954 has an exposed communications ground wire and communication lines with strain and abrasion from excessive vegetation. |
| 20 | Pole 2552 has loose communications drops that are unsecured to the pole and excessive communications drops hanging on the ground. |
| 21 | Pole 2551 has a loose communications lashing wire. |
| 23 | Pole 5065 has an incomplete communications pole transfer. |
| 26 | Pole 5162 has a communications drop attached to a tree and loose communications drops that are unsecured to the pole and coming out of the moulding. |
| 28 | Pole 5163 has a slack communications anchor down guy and the communications lines between Pole 5163 and Pole 5162 have strain and abrasion from excessive vegetation. |
| 30 | Pole 5164 has loose communications drops that are unsecured to the pole. |
| 31 | Guy Pole 5166 has vegetation above the insulator on the communications anchor down guy. |
| 33 | The communications lines between Pole 5183 and Pole 5165 have strain and abrasion from excessive vegetation. |
| 36 | Pole 1034 has broken and abandoned communications equipment. |

| Pole 1033 has a broken communications riser moulding and the communications lines between Pole 1033 and Pole 1034 have strain and abrasion from excessive vegetation. |
|---|
| Pole 4681 has loose communications drops that are unsecured to the pole. |
| Pole 4682 has loose communications drops that are unsecured to the pole. |
| Pole 4683 has loose communications drops that are unsecured to the pole. |
| Pole 4653 has an abandoned communications line. |
| Pole 4652 has loose communications equipment hanging off the conductors. |
| Pole 4649 has loose communications drops that are unsecured to the pole and strain and abrasion from excessive vegetation on the drop going to 420 Tennyson Street. |
| Pole 5612 has communications lines hanging low over a pedestrian throughfare. |
| Service Pole 5613 has loose communications equipment hanging off the conductors. |
| The communications lines between Pole 5614 and Pole 5613 have strain and abrasion from excessive vegetation. |
| Pole 5615 has abandoned broken phone equipment hanging off the conductors. |
| Pole 5413 has strain and abrasion from excessive vegetation on the drop going to 320 Kellogg Avenue. |
| Pole 5894 has a loose communications drop unsecured to the pole. |
| Pole 6601 has loose communications drops that are unsecured. |
| Pole 6602 has an incomplete communications pole transfer leading to a buddy pole with loose guy wires. |
| Pole 6690 has a communications anchor down guy with missing insulators. |
| |

| 95 | The communications lines between Pole 7051 and Pole 6693 have strain and abrasion from excessive vegetation. |
|-----|---|
| 96 | Pole 6693 has a communications anchor down guy with missing insulators and a communications riser with a broken C clamp. |
| 98 | Pole 6594 has a loose communications drop that is unsecured. |
| 100 | Pole 6591 has a slack communications anchor down guy, a slack phone anchor down guy, loose communications equipment hanging off the conductors, and the communications lines between Pole 6591 and Pole 6593 have strain and abrasion from excessive vegetation. |
| 101 | Pole 6592 has a broken communications riser moulding. |
| 103 | Pole 6538 has communications lines with strain and abrasion from excessive vegetation. |
| 106 | Pole 0377 has an abandoned communications line. |
| 109 | Pole 0250 has a slack communications anchor down guy and vegetation above the insulator on the phone anchor down guy. |
| 110 | Pole 0249 has a slack communications anchor down guy that is contacting the phone anchor down guy. |
| 119 | Pole 4474 has a loose communications drop that is unsecured to the pole and an abandoned communications line. |
| 135 | Pole 5516 has a loose communications drop that is unsecured to the pole. |