505 VAN NESS AVENUE SAN FRANCISCO, CA 94102-3298

May 13, 2022

PUBLIC UTILITIES COMMISSION

EA2022-1001

Jonathan Connelly, P.E. Director of Asset Management – Wildfire Safety & Asset Management PacifiCorp 825 NE Multnomah St Suite 1700 Portland, OR 97232

SUBJECT: Electric Distribution Audit of PacifiCorp - Crescent City Division

Dear Mr. Connelly:

On behalf of the Electric Safety and Reliability Branch (ESRB) of the California Public Utilities Commission (CPUC), Brandon Vazquez and Monica Hoskins of ESRB staff conducted an electric distribution audit of PacifiCorp's Crescent City Division from March 22, 2022 through March 24, 2022. During the audit, ESRB staff conducted field inspections of PacifiCorp's distribution facilities and equipment and reviewed pertinent documents and records.

As a result of the audit, ESRB staff identified violations of one or more General Orders (GOs). A copy of the audit findings itemizing the violations is enclosed. Please provide a response no later than June 10, 2022, by electronic copy of all corrective actions and preventive measures taken by PacifiCorp to correct the identified violations and prevent the recurrence of such violations. The response should indicate the date each remedial action and preventive measure was completed. For any outstanding items not addressed, please provide the projected completion dates of all corrective actions for the violations outlined in Sections II & IV of the enclosed Audit Report. Please also provide records for the third-party notifications for the field observations listed in Section V of the enclosed Audit Report.

If you have any questions concerning this audit, please contact Brandon Vazquez at (415) 703-1076 or <u>brandon.vazquez@cpuc.ca.gov</u>.

Sincerely,

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

Enclosure: CPUC Electric Distribution Audit Report for PacifiCorp Crescent City Division

Cc: Lee Palmer, Director, Safety and Enforcement Division, CPUC

Nika Kjensli, Program Manager, ESRB, SED, CPUC Nathan Sarina, Senior Utilities Engineer (Supervisor), ESRB, SED, CPUC Rickey Tse, Senior Utilities Engineer (Supervisor), ESRB, SED, CPUC Brandon Vazquez, Utilities Engineer, ESRB, SED, CPUC Monica Hoskins, Utilities Engineer, ESRB, SED, CPUC

PACIFICORP CRESCENT CITY DIVISION ELECTRIC DISTRIBUTION AUDIT FINDINGS March 22-24, 2022

I. Records Review

During the audit, ESRB staff reviewed the following records:

- PacifiCorp's inspection and maintenance procedures.
- Completed work orders with notifications from the past 12 months, canceled work orders with notifications from the past 12 months, and open and late work orders from the past 60 months.
- Patrol and detailed inspection records from the past 60 months.
- Reliability metrics and sustained outages for the past 60 months.
- New Construction projects (both overhead and underground) in the past 12 months.
- Pole loading and safety factor calculations completed in the last 12 months.
- Third Party Safety Hazard notifications sent and received for the past 60 months.
- Inspector list for the past 60 months and inspector qualifications.
- Equipment test records for the past 36 months.

II. Records Violations

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

1. GO 95, Rule 18-B1(a), Maintenance Programs states in part:

"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-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."

ESRB's review of PacifiCorp's work orders from March 1, 2017 to February 4, 2022 found that PacifiCorp had 225 late-pending work orders and 180 late-closed work orders. Late-pending work orders are pending work orders that have not been completed by their assigned due date based on their hazard level, and late-closed work orders are work orders that were completed past their assigned due date based on their hazard level. Table 1 below breaks down the 405 late work orders by hazard level, including the total number of late work orders, as well as late-pending and late-closed work orders, which are included in the total.

Hazard Levels	Total Late Work Orders	Late-Pending Work Orders	Late-Closed Work Orders
1	169	37	132
2	236	188	48
3	-	-	-
Total	405	225	180

Table	1:	Late	Work	Orders
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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 in part:

"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."

- 2.1. ESRB noted that PacifiCorp completed 1,618 overhead patrols past their assigned due dates.
- 2.2. ESRB noted that PacifiCorp completed 31 overhead inspections past their assigned due dates.
- 2.3. ESRB noted that PacifiCorp completed 19 intrusive pole inspections past their assigned due dates.

3. 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 these rules."

GO 165, Section III-B, Standards for Inspection states in part:

"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."

- 3.1. ESRB noted that PacifiCorp completed 278 underground patrols past their assigned due dates.
- 3.2. ESRB noted that PacifiCorp completed 81 underground inspections past their assigned due dates.

III. Field Inspection

Location #	Structure #	Structure Type	Structure Location/Address	City
1	`07117002.0276800	Pole	41.841, -123.931	Gasquet
2	`07117002.0288540	Guy Pole	120 Lado del Rio	Gasquet
3	`07117002.0288500	Pole	120 Lado del Rio	Gasquet
4	`07117002.0211201	Pole	41.8475, -123.96	Gasquet
5	`07117002.0205101	Secondary Pole	41.8453, -123.972	Gasquet
6	`07117002.0203301	Pole	41.8473, -123.977	Gasquet
7	`07117002.0203201	Pole	Gasquet Flat Rd & Forrest River Ln	Gasquet
8	`07117002.0200304	Pole	41.8473, -123.982	Gasquet
9	`07117002.0200340	Pole	1150 Gasquet Flat Rd	Gasquet
10	`07117002.0200308	Service Pole	1190 Gasquet Flat Rd	Gasquet
11	`07117002.0198305	Pole	925 Gasquet Flat Rd	Gasquet
12	`07117002.0198301	Service Pole	930 Gasquet Flat Rd	Gasquet
13	`07117002.0198303	Pole	930 Gasquet Flat Rd	Gasquet
14	`07116001.0100000	Pole	41.7897, -124.059	Douglas Park
15	`07116001.0100102	Pole	210 Monument Dr	Douglas Park
16	`07116001.0093202	Pole	110 Cable Ln	Hiouchi
17	`07116001.0093203	Pole	Behind the Hiouchi Café	Hiouchi
18	`07116001.0093201	Pole	115 Cable Ln	Hiouchi
19	`07116001.0095480	Padmount Transformer	41.7946, -124.069	Hiouchi
20	`07216001.0224006	Secondary Pole	41.7583, -124.167	Berstch- Oceanview
21	`07216001.0224005	Pole	725 Elk Valley Rd	Berstch- Oceanview
22	`07216001.0224002	Pole	725 Elk Valley Rd	Berstch- Oceanview
23	`07216001.0224007	Service Pole	41.7584, -124.167	Berstch- Oceanview
24	`07216001.0277800	Pole	41.7563, -124.161	Berstch- Oceanview
25	`07216001.0277801	Pole	219 Olive St	Berstch- Oceanview
26	`07216001.0277803	Pole	229 Olive St	Berstch- Oceanview

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

27	`07216001.0280705	Pole	41.7547, -124.193	Crescent City
28	`07216001.0281704	Pole	Crescent City Cinemas	Crescent City
29	`07216001.0281803	Pole	Behind Crescent City Cinemas	Crescent City
30	`07216001.0291900	Pole	Across from 5th and Green	Crescent City
31	`07216001.0281901	Pole	Across from 5th and Green	Crescent City
32	`07216001.0210280	Padmount Transformer	41.7617, -124.195	Crescent City
33	`07216001.0210281	Junction Box	41.7616, -124.195	Crescent City
34	`07217001.0144880	Padmount Transformer	41.8703, -124.147	Fort Dick
35	`07217001.0144882	Junction Box	41.8705, -124.147	Fort Dick
36	`07217001.0144881	Padmount Transformer	41.8705, -124.147	Fort Dick
37	`07217001.0145880	Padmount Transformer	41.8702, -124.146	Fort Dick
38	`07217001.0114400	Pole	41.8801, -124.147	Fort Dick
39	`07217001.0115441	Pole	41.88, -124.147	Fort Dick
40	`07216001.0309941	Service Pole	41.7574, -124.215	Crescent City
41	`07216001.0309902	Pole	1112 Seville Ave	Crescent City
42	`07216001.0309901	Pole	250 Del Monte St	Crescent City
43	`07216001.0201208	Pole	41.7623, -124.212	Crescent City
44	`07216001.0201207	Service Pole	41.7622, -124.212	Crescent City
45	`07216001.0201206	Pole	41.7624, -124.212	Crescent City
46	`07217001.0276007	Pole	230 Younkers Ln	Fort Dick
47	`07217001.0275000	Pole	175 Younkers Ln	Fort Dick
48	`07217001.0275002	Pole	175 Younkers Ln	Fort Dick
49	`07113002.0183040	Pole	41.5106, -123.988	Klamath Glen
50	`07113002.0183005	Pole	Across from 20 Redwood Rd	Klamath Glen
51	`07113002.0183001	Pole	45 Redwood Rd	Klamath Glen
52	`07113002.0183000	Pole	23 Redwood Rd	Klamath Glen

53	`07113002.0181106	Pole	41.5123, -123.991	Klamath Glen
54	`07113002.0181103	Pole	41.5121, -123.992	Klamath Glen
55	`07113002.0181102	Service Pole	41.5118, -123.992	Klamath Glen
56	`07113002.0181004	Pole	Cedar St and Terwer Riffle Rd	Klamath Glen
57	`07113002.0181000	Pole	441 Terwer Riffle Rd	Klamath Glen
58	`07113002.0139380	Padmount Transformer	82 Maple Rd	Klamath Glen
59	`07113001.0140702	Pole	41.5212, -124.032	Klamath
60	`07113001.0141701	Pole	1 pole east of Location 59	Klamath
61	`07113001.0141900	Pole	41.524784, -124.029398	Klamath
62	`07113001.0141904	Pole	41.524395, -124.029596	Klamath
63	`07113001.0141902	Pole	500 Klamath Blvd	Klamath
64	`07113001.0141903	Pole	500 Klamath Blvd	Klamath
65	`07113001.0044802	Pole	41.5519, -124.061	Requa
66	`07113001.0044904	Pole	41.552910, -124.061127	Requa
67	`07114001.0343103	Pole	Margaret Keating Elementary	Requa
68	`07114001.0343101	Pole	Margaret Keating Elementary	Requa
69	`07114001.0283308	Pole	41.5742, -124.073	Requa
70	`07114001.0282402	Pole	16029 US-101	Requa

IV. Field Inspection Violations

ESRB staff observed the following violations during the field inspection:

1. 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."

- 1.1. The pole at 120 Lado del Rio in Gasquet (Location 3) has a damaged high voltage sign.
- 1.2. The pole at 1150 Gasquet Flat Rd in Gasquet (Location 9) has a missing voltage sign and damaged voltage sign.
- 1.3. The pole at 210 Monument Dr in Douglas Park (Location 15) has a missing high sign.
- 1.4. The pole in front of Crescent City Cinemas in Crescent City (Location 28) has a missing high sign.
- 1.5. The pole at 250 Del Monte St in Crescent City (Location 42) has a missing high voltage sign.
- 1.6. The pole at 175 Younkers Ln in Fort Dick (Location 47) has a damaged high voltage sign.
- 1.7. The pole at GPS coordinates 41.5123, -123.991 in Klamath Glen (Location 53) has an illegible high voltage sign due to moss.
- 1.8. The pole at GPS coordinates 41.5212, -124.032 in Klamath (Location 59) has a missing high voltage sign.

2. GO 95, Rule 54.6-E1, Risers, Encased from Ground Level to 8 Feet Above the Ground 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."

The riser on the pole at GPS coordinates 41.8473, -123.982 in Gasquet (Location 8) is not covered.

3. GO 95, Rule 54.6-B, Vertical and Lateral Conductors, 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)."

3.1. The pole at 115 Cable Ln in Hiouchi (Location 18) has an exposed ground wire.

3.2. The pole at 16029 US-101 in Requa (Location 70) has an exposed ground wire and loose ground molding.

4. 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"

- 4.1. Vegetation was obstructing access to the padmount transformer located at GPS coordinates 41.7946, -124.069 in Hiouchi (Location 19). PacifiCorp cleared the vegetation during the audit.
- 4.2. The padmount transformer at GPS coordinates 41.8702, -124.146 in Fort Dick (Location 37) has an oil seep at the secondary bushing.

5. 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."

- 5.1. The pole at GPS coordinates 41.7563, -124.161 in Berstch-Oceanview (Location 24) has a broken anchor guy.
- 5.2. The pole at GPS coordinates 41.524395, -124.029596 in Klamath (Location 62) has a slacked anchor guy.

6. GO 128, Rule 17.8, Identification of Manholes, Handholes, Subsurface and Selfcontained 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 padmount transformer at GPS coordinates 41.7617, -124.195 in Crescent City (Location 32) is missing an ownership sign.

7. GO 128, Rule 35.3, Warning Signs states:

"Warning signs indicating high voltage shall be installed on an interior surface, or barrier if present, inside the entrance of vaults, manholes, handholes, pad mounted transformer compartments, and other above ground enclosures containing exposed live parts above 750 volts. Such warning signs shall also be installed on an exterior surface of all such pad mounted transformer compartments and other above ground enclosures. Such signs shall be clearly visible to a person in position to open any such access door, other opening, or barrier."

- 7.1. The padmount transformer at GPS coordinates 41.7617, -124.195 in Crescent City (Location 32) has a faded high voltage sign.
- 7.2. The junction box at GPS coordinates 41.7616, -124.195 in Crescent City (Location 33) has a faded high voltage sign.

8. 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."

The pole at GPS coordinates 41.5106, -123.988 in Klamath Glen (Location 49) has woodpecker holes.

9. GO 95, Rule 37, Minimum Clearances of Wires above Railroads, Thoroughfares, Buildings, Etc., Table 1, Case 9 Column D states in part:

"The basic minimum allowable clearance of supply conductors between 0-750 Volts from the surface of a pole, crossarm, or other overhead line structure upon which it is supported is 3 inches."

The service line is less than 3 inches from the pole at GPS coordinates 41.5121, -123.992 in Klamath Glenn (Location 54).

10. 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."

There is an abandoned service line hanging off a building next to the pole at GPS coordinates 41.524395, -124.029596 in Klamath (Location 62).

V. Observations

ESRB staff observed the following third-party potential safety concerns during the field inspection:

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 18A, 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 GO95.

Note: Each pole owner must be able to determine all other pole owners on poles it owns. Each pole owner must be able to determine all authorized entities that attach equipment on its portion of a pole."

- 1. The communication line equipment box on the pole at GPS coordinates 41.8473, -123.982 in Gasquet (Location 8) is open.
- 2. The communication line at 1190 Gasquet Flat Rd in Gasquet (Location 10) is 9 inches from a PacifiCorp service line.
- 3. A tree branch is causing abrasion on the communication line at 925 Gasquet Flat Rd in Gasquet (Location 11).
- 4. A communication ground wire on the pole at 115 Cable Ln in Hiouchi (Location 18) is exposed.
- 5. There is a buddy pole at GPS coordinates 41.7547, -124.193 in Crescent City (Location 27).
- 6. There is a communication line contacting a PacifiCorp anchor guy and a buddy pole behind Crescent City Cinemas in Crescent City (Location 29).

- There is a communication line with wires exposed near the splice box and a slacked communication anchor guy at the pole at 500 Klamath Blvd in Klamath (Location 64).
- 8. The pole at GPS coordinates 41.5519, -124.061 in Requa (Location 65) has a slacked communication anchor guy.
- 9. There is a communication pole with a split top located adjacent to the pole at GPS coordinates 41.552910, -124.061127 in Requa (Location 66).
- 10. There is an abandoned communication line attached with a rope hanging off of a pole at Margaret Keating Elementary in Requa (Location 68).