505 VAN NESS AVENUE SAN FRANCISCO, CA 94102-3298

December 20, 2021

PUBLIC UTILITIES COMMISSION

TA2021-923

Heide Caswell Pacific Power T&D Asset Performance/Wildfire Mitigation 825 NE Multnomah St Suite 1700 Portland, OR 97232

SUBJECT: Transmission Audit of PacifiCorp's Alturas/Tulelake Districts

Dear Ms. Caswell:

On behalf of the Electric Safety and Reliability Branch (ESRB) of the California Public Utilities Commission (CPUC), Raymond Cho, Samuel Mandell, and Dmitriy Lysak of my staff conducted a transmission audit of PacifiCorp's Alturas/Tulelake Districts from September 28 through September 30, 2021. The audit included a review of PacifiCorp's transmission procedures and maintenance records, in addition to field inspections of PacifiCorp facilities within its Alturas/Tulelake Districts.

As a result of the audit, my staff identified violations of General Order 95. A copy of the audit findings itemizing the violations is enclosed. Please provide a response no later than January 17, 2021, via electronic transmittal of all corrective actions and preventive measures taken by PacifiCorp to correct the identified violations and prevent the recurrence of such violations.

If you have any questions concerning this audit, please contact Raymond Cho at (415) 703-2236 or <u>raymond.cho@cpuc.ca.gov.</u>

Sincerely,

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

Enclosure: CPUC Transmission Audit Findings of PacifiCorp Alturas/Tulelake Districts

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 Raymond Cho, Senior Utilities Engineer, ESRB, SED, CPUC Samuel Mandell, Utilities Engineer, ESRB, SED, CPUC Dmitriy Lysak, Utilities Engineer, ESRB, SED, CPUC

CPUC TRANSMISSION AUDIT FINDINGS PACIFICORP ALTURAS/TULELAKE DISTRICTS September 28-30, 2021

I. Records Review

During the transmission audit, Electric Safety and Reliability Branch (ESRB) staff reviewed the following records for PacifiCorp's Alturas/Tulelake Districts:

- Map and list of all transmission circuits in the districts
- PacifiCorp's Visual Assurance Inspections, Transmission and Distribution Lines, Asset Management – Policy No. 011, Revision 2/18/2021
- PacifiCorp's Correction Management Plan, Correction Time Periods and Compliance Requirements, Asset Management Policy No. 192, Dated 03/16/2020
- PacifiCorp's Detailed Inspections for Transmission & Distribution Lines, Asset Management Policy No. 297, Dated 1/13/2017
- PacifiCorp's Wood Pole Test & Treatment, Transmission and Distribution Lines, Asset Management Policy No. 298, Dated 1/13/2017
- PacifiCorp's Transmission & Distribution Vegetation Management Program, Standard Operating Procedures, Dated 08/19/2019
- A summary list of detailed inspections performed including dates of the last two detailed inspections.
- A list of work pending, reassessed, completed and cancelled in the previous 12 months leading up to June 30, 2021.
- A list of capital projects completed between July 1, 2020, and June 30, 2021.
- A list of intrusive inspections performed in the previous 36 months leading up to June 30, 2021.
- Transmission and distribution vegetation inspections for the previous 12 months leading up to June 30, 2021.
- Five pole loading calculations.
- PacifiCorp's General Order 165 Annual Filings from 2016 through 2021.

II. Records Review - Violations List

ESRB staff did not identify a records violation during the records review portion of the audit.

III. Field Inspection

ESRB staff inspected the following facilities in Table 1:

Table 1. Facility locations reviewed by ESRB Staff during the field audit.

| Location No. | Circuit/Facility ID | Work Type | Structure No. | |
|-----------------|------------------------|--------------------|------------------|--|
| | Line 4 | ESRB | | |
| 1 | | Inspection | 9/20 | |
| | . | ESRB | 0./20 | |
| 2 | Line 4 | Inspection | 8/20 | |
| 2 | т. 4 | ESRB | 7/20 | |
| 3 | Line 4 | Inspection | 7/20 | |
| 4 | Line 4 | ESRB | 6/20 | |
| 4 | Line 4 | Inspection | 0/20 | |
| 5 | Line 4 | ESRB | 5/20 | |
| | Line 4 | Inspection | 5/20 | |
| 6 | Line 4 | ESRB | 1/22 | |
| 0 | | Inspection | 1/22 | |
| 7 | Line 4 | ESRB | 11/21 | |
| / | | Inspection | 11/21 | |
| 8 | Line 4 | ESRB | 10/21 | |
| | | Inspection | 10/21 | |
| 9 | Line 4 | ESRB | 9/21 | |
| | | Inspection | | |
| 10 | Line 41 | ESRB | 4/4 | |
| _ | | Inspection | | |
| 11 | Line 41 | ESRB | 3/4 | |
| | | Inspection | | |
| 12 | Line 41 | ESRB | 2/4 | |
| | | Inspection | | |
| 13 | Line 41 | ESRB | 1/4 | |
| | | Inspection ESRB | | |
| 14 | Line 41 | Inspection | 11/7 | |
| | | ESRB | | |
| 15 | Line 41 | Inspection | 10/7 | |
| | Line 41 | ESRB | | |
| 16 | | Inspection | 9/7 | |
| | | ESRB | | |
| 17 | Line 41 | Inspection | 8/7 | |
| | Line 41 | ESRB | 7/7 | |
| 18 | | Inspection | | |
| 19 | Line 41 | ESRB | ~ | |
| | | Inspection | 6/7 | |
| | | Vegetation | | |
| 20 | 51 5 4 | Management | D#20 | |
| 20 | 5L64 | (VM) | R#29 | |
| | | Inspection | | |

| 21 | Line 5 | New Construction 6955225 | 20/30 |
|----|--------------------------|--------------------------------|--------|
| 22 | Line 41 | Intrusive Inspection | 12/31 |
| 23 | Facility ID 537844373 | Work Order | 12/32 |
| 24 | Facility ID 920897023 | Work Order | 10/33 |
| 25 | Line 41 | Intrusive Inspection | 1/34 |
| 26 | Facility ID 118562795 | | |
| 27 | 5L82 | VM Work Order | R#46.4 |
| 28 | Line 5 | Work Order | 3/4 |
| 29 | Line 5 | Work Order | 5/4 |
| 30 | Facility ID 330347020 | Work Order | 8/48 |
| 31 | Unknown | VM Work Order | 11/77 |
| 32 | PL# 668005 | New Construction 6983370 | 13/82 |
| 33 | PL# 668005 | Pole Load | 1/87 |
| 34 | PL# 668005 | Pole Load | 2/87 |
| 35 | PL# 668005 | Pole Load | 3/87 |
| 36 | PL# 668005 | Pole Load | 4/87 |
| 37 | Facility ID 1852273 | Work Order | 14/92 |
| 38 | Line 36 | VM Work Order | R#58 |
| 39 | Line 36 | Intrusive Inspection | 11/56 |
| 40 | Line 5 | New Construction 6839027 | 16/97 |
| 41 | Line 5 | New Construction 6839027 | 1/98 |

| 42 | Line 5 | New Construction 6839027 | 2/98 |
|----|---------|--------------------------------|--------|
| 43 | Line 36 | VM Work Order | R#16.4 |

IV. Field Inspection – Violations List

ESRB staff observed the following violations during the field inspection:

GO 95, Rule 31.1, Design Construction and Maintenance states in part:

"Electrical supply and communication systems shall be designed, constructed, and maintained for their intended use, regard being given to the conditions under which they are to be operated, to enable the furnishing of safe, proper, and adequate service.

For all particulars not specified in these rules, design, construction, and maintenance should be done in accordance with accepted good practice for the given local conditions known at the time by those responsible for the design, construction, or maintenance of communication or supply lines and equipment."

PacifiCorp's Transmission & Distribution Vegetation Management Program Standard Operating Procedures states:

"6.2.2 Structure Clearances"

Trees and brush should be cleared within a twenty-five-foot radius of transmission "H" or metal structures, a ten-foot radius of single pole construction and a five-foot radius of guy anchors. Clearing activities shall not damage poles, structures, guys or anchors. Grasses, forbs, ferns and other herbaceous species may be left around structures and guys."¹

1. **GO 95, Rule 31.1** - Vegetation was found growing and in contact with the East leg of the tower at Location 28.

GO 95, Rule 51.6.A, High Voltage Marking of Poles 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. A pair of signs

¹ PacifiCorp's Response to Question 4 of ESRB's Pre-audit Data Request, PacifiCorp's Transmission & Distribution Vegetation Management Program Standard Operating Procedures, dated 08/19/2019, p.47.

may be stacked to a height of no more than 12 inches. Such signs shall be of weather and corrosion–resisting material, solid or with letters cut out therefrom and clearly legible."

- 2. **GO 95, Rule 51.6A** The following Location Numbers given in Table 1, exhibited an illegible or missing high voltage sign:
 - a. 19
 - b. 21
 - c. 23
 - d. 30

V. Follow-up Requests and Concerns

ESRB staff have the following additional requests regarding records reviewed:

1. In response to Question 8 of ESRB's Pre-audit Data Request,² PacifiCorp reported finding a condition described as "CLIMBABLE RISER INTO PRIM/NEUTRL/OPEN WIRE SECONDARY" on June 24, 2021. PacifiCorp designated this condition as a Priority A with a Compliance Correction Due Date of July 31, 2021:

| FAC_ID | MEM_ID | FAC_MEM | FPNO | MAP_LOC_NAME | POINT_NAME |
|-----------|--------|------------|-----------|--------------|------------|
| | | 920897023- | 668041/00 | | |
| 920897023 | 26369 | 26369 | 10/033 | 668041/00 | 10/033 |

What is the status of this work order? If complete, provide the completion date. If not complete, explain the reasons for not completing the work identified and PacifiCorp's plans to address the condition.

2. Location 19 exhibited a slack distribution down guy. Provide documentation regarding PacifiCorp's efforts to address the condition.

² PacifiCorp's Response to ESRB's Pre-audit Data Request, dated August 9, 2021.