PACIFIC POWER
A DIVISION OF PACIFICORP

825 NE Multnomah, Suite 2000
Portland, Oregon 97232

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Jolynne Flores
Wildfire Safety Analyst
Jolynne.Flores@energysafety.ca.gov

Nicole Dunlap
Nicole.Dunlap@energysafety.ca.gov

Dakota Smith
Dakota.Smith@energysafety.ca.gov

Steve Kerr
Steve.Kerr@energysafety.ca.gov

Surya Keshav
Surya.Keshav@energysafety.ca.gov

Andie Biggs
Andie.Biggs@energysafety.ca.gov

Ethan Campos
Ethan.Campos@energysafety.ca.gov

Francis Solis
Francis.Solis@energysafety.ca.gov

Re: CA 2025-WMPs
OEIS-P-WMP_2025-PC-07

Please find enclosed PacifiCorp's Responses to OEIS Data Requests 7.1-7.8. Also included are Attachments OEIS 7.3-1, 7.3-2, 7.4-1. 7.4-2, 7.6-1, 7.6-2, 7.6-3, 7.8-1, and 7.8-2.

If you have any questions, please call me at (503) 813-7314.

Sincerely,

___/s/___
Pooja Kishore
Manager, Regulation

OEIS Data Request 7.1

Regarding the number of assets in the HFTD and HFRA:

(a) Provide the number of distribution poles in PacifiCorp's HFTD and HFRA.

i. Provide the number of distribution poles in PacifiCorp's HFTD.

(b) Provide the number of transmission poles and towers in PacifiCorp's HFTD and HFRA.

i. Provide the number of transmission poles and towers in PacifiCorp's HFTD.

(c) Provide the number of wooden transmission poles in PacifiCorp's HFTD and HFRA.

i. Provide the number of wooden transmission poles in PacifiCorp's HFTD.

Response to OEIS Data Request 7.1

(a) There are 28,845 distribution poles in PacifiCorp's Tier 2 and Tier 3 High Fire Threat Districts (HFTD) and High Fire Risk Area (HFRA)

i. There are 18,195 distribution poles in PacifiCorp's Tier 2 and Tier 3 HFTD.

(b) There are 6,525 transmission poles and towers in PacifiCorp's Tier 2 and Tier 2 HFTD and HFRA.

i. There are 4,631 transmission poles and towers in PacifiCorp's Tier 2 and Tier 3 HFTD.

(c) There are 5,982 wooden transmission poles in PacifiCorp's Tier 2 and Tier 3 HFTD and HFRA.

i. There are 4,121 wooden transmission poles in PacifiCorp's Tier 2 and Tier 3 HFTD.

OEIS Data Request 7.2

Regarding PacifiCorp's drone inspection pilot:

(a) Provide PacifiCorp's estimated start and end dates for the following phases of its distribution drone inspection pilot:

i. Planning
ii. Execution
iii. Analysis

(b) Provide PacifiCorp's estimated start and end dates for the following phases of its transmission drone inspection pilot:

i. Planning
ii. Execution
iii. Analysis

Response to OEIS Data Request 7.2

(a) Please refer to the below information which provides estimated dates for the planning, execution and analysis of the distribution drone inspection pilot:

i. Planning: The distribution drone inspection pilot is being planned in 2025 with the inspection plan pending approval in September 2025. The pilot inspections, pending the approval, are set to be completed on a five-year cycle on facility points on lines interconnected with the Tier 2 and Tier 3 High Fire Threat Districts (HFTD) and the High Fire Risk Area (HFRA).

ii. Execution: Pending approval of the inspection plan, the inspections will be performed annually (March through September) beginning in 2026. The five-year cycle would be completed in 2030.

iii. Analysis: Pending approval of the inspection plan, the analysis would be expected to be completed by end of Q2 2031 to provide a recommendation on the distribution drone inspection program's future.

(b) Please refer to the below information which provides estimated dates for planning, execution and analysis of the transmission drone inspection pilot:

i. Planning: The transmission drone inspection pilot is being planned in 2025 with the inspection plan pending approval in September 2025. The pilot inspections, pending the approval, are set to be completed on a five-year cycle on facility points on lines interconnected with the Tier 2 and Tier 3 High Fire Threat Districts (HFTD) and the High Fire Risk Area (HFRA).

ii. Execution: Pending approval of the inspection plan, the inspections will be performed annually (March through September) beginning in 2026. The five-year cycle will be completed in 2030.

iii. Analysis: Pending approval of the inspection plan, the analysis would be expected to be complete by end of Q2 2031 to provide a recommendation on the transmission drone inspection program's future.

OEIS Data Request 7.3

Regarding outage data collected by PacifiCorp:

(a) Does PacifiCorp collect data related to the cause of all outages on PacifiCorp's system (i.e., vegetation contact, equipment failure, contact from object, planned outage, etc.)?

i. If so, list all selectable outage cause options.

(b) For outages caused by equipment failure, does PacifiCorp collect data related to the specific equipment type that caused the outage (i.e. transformer, conductor, fuse, pole, etc.)?

i. If so, list all tracked equipment type options.

(c) For outages caused by vegetation contact, does PacifiCorp collect data related to the specific contact mode (i.e., fall-in, grow-in) and/or vegetation type (i.e., species) that caused the outage?

i. If so, list all tracked vegetation options.

Response to OEIS Data Request 7.3

(a) Yes.

i. Please refer to Attachment OEIS 7.3-1 which provides outage cause categories.

(b) Yes.

i. Please refer to Attachment OEIS 7.3-2 which provides the list of equipment type options.

(c) Data on outages caused by vegetation contact is not collected in the PacifiCorp's outage management system (OMS). Separate from OMS, PacifiCorp vegetation management department collects vegetation-related information for those outages reviewed in the field, including mode of contact, where discernable, and vegetation characteristics, such as species.

i. Vegetation-related data that may be collected during outage investigations conducted by PacifiCorp vegetation management personnel or contractor is listed below:

- Outage cause (e.g. not tree-related, broken limb, bending limb wind snow ice load, broken trunk, side growth, top growth, overhang, uprooted tree, private party fell tree or part on line, undeterminable).
- Species.
- Branch diameter.
- Tree diameter.
- Tree height.
- Trunk to conductor clearance.
- Tree health factors (e.g., animal damage, appears healthy, codominant stems, dead, dieback, decay/rot, etc.).

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OEIS Data Request 7.4

Regarding PacifiCorp's material failure reports and investigations:
On page 214 of its 2026-2028 Base WMP, PacifiCorp discusses material failure reports and investigations.[1]

(a) Provide all forms used by PacifiCorp or PacifiCorp contractors during the material failure report and investigation process.

(b) Provide the estimated percentage of equipment failure outages that have resulted in a completed material failure report since the inception of the material failure report process.

(c) Are material failure reports completed for Priority I and A conditions identified during inspections?

   i. If so, provide the estimated percentage of equipment failure Priority I and A conditions that have resulted in a material failure report since the inception of the material failure report process.

Response to OEIS Data Request 7.4

(a) Please refer to the following attachments used by PacifiCorp or PacifiCorp contractors during the material failure report and investigation process:

- Attachment OEIS 7.4-1: material failure form.
- Attachment OEIS 7.4-2: material failure doForm.

(b) 0.2066 percent.

(c) The material failure form is completed at the time of correction.

   i. PacifiCorp has not estimated the percentage of equipment failure Priority I and A conditions that have resulted in a material failure report.

[1] PacifiCorp, 2026-2028 Base Wildfire Mitigation Plan, Published July 11, 2025, URL:(https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=58907&shareable=true).

OEIS Data Request 7.5

Regarding Third-Party Contractor and Undergrounding Initiative: On page 169 of its 2026-2028 Base WMP, PacifiCorp reports that a third-party contractor was hired to manage the completion of covered conductor installation. In its response to OEIS-P-WMP 2025-PC-04, Question 11, PacifiCorp states that "delays in permitting or receipt of the needed rights of way could delay construction on these [underground work] projects past 2026."

Will the third-party contractor help manage the completion of PacifiCorp's underground projects?

i. If not, explain how PacifiCorp intends to mitigate possible delays with permitting and easements for its underground projects.

Response to OEIS Data Request 7.5

The third-party contractor will help manage the completion of PacifiCorp's underground projects. Please refer to the information provided below on specific projects:

- 5G79: Approximately four circuit miles of underground work scoped. The design and permitting was assigned to a prior contractor. The third-party contractor referenced on page 169 of the 2026-2028 Base Wildfire Mitigation Plan (WMP) will complete construction once permits are obtained.

- 5G93: Approximately 4.8 circuit miles of underground work scoped. The third-party contractor referenced on page 169 of the 2026-2028 Base WMP is responsible for design, permitting, and construction activities on this project.

- 5G165: Approximately 0.4 circuit miles of underground work scoped. The design and permitting was assigned to a prior contractor. The third-party contractor referenced on page 169 of the 2026-2028 Base WMP will complete construction once permits are obtained.

- 8G95: Approximately 0.5 circuit miles of underground work scoped. The design and permitting was assigned to a prior contractor. The third-party contractor referenced on page 169 of the 2026-2028 Base WMP will complete construction once permits are obtained.

i. Not applicable.

OEIS Data Request 7.6

Regarding Idle Transmission Power Lines:

(a) How many circuit miles of idle-deenergized transmission lines does PacifiCorp currently have located within the HFTD and HFRA?

(b) Do any of these idle-deenergized transmission lines run parallel to and in close proximity (within 1,000 feet) with energized transmission lines?

i. If so, provide the number of circuit miles, and describe the spacing characteristics and location of each instance.

(c) Provide a preliminary estimate of idle transmission line miles planned for removal between 2026 and 2028.

(d) Provide PacifiCorp's latest findings or studies on whether idle transmission lines present a potential induction risk that could result in unintended energization.

(e) Describe any procedures, policies, or future planned projects to mitigate the ignition risk of idle transmission lines that PacifiCorp is considering.

Response to OEIS Data Request 7.6

(a) There are currently no circuit miles of idle-deenergized transmission lines in PacifiCorp's Tier 2 and Tier High Fire Threat Districts (HFTD) and High Fire Risk Area (HFRA).

(b) Please refer to the Company's response to subpart (a) above.

i. Not applicable.

(c) PacifiCorp is reviewing all idle transmission lines with a priority to remove unless the transmission line is part of a transmission line rebuild project or serving as an active backup to an energized line. Currently there are no known idle transmission lines in California that are planned for removal.

(d) PacifiCorp has contracted with Electranix to run power simulation models on de-energized transmission lines to advise on induction risk and mitigations of mutually coupled transmission lines. Please refer to Attachment OEIS 7.6-1 which provides a draft technical memorandum. PacifiCorp will perform segmentation on the transmission line discussed in the study to reduce the induction risk.

In addition, please refer to the following attachments:

- Attachment OEIS 7.6-2: Induced Voltage in Parallel Lines Causes and Concerns.
- Attachment OEIS 7.6-3: De-energized Lines Can Still Start Fires. Understanding the Risks and Effects of Grounding.

(e) Asset Management Policy 319: Temporarily Out of Service or Abandoned Overhead Facility Policy is planned to be updated by the end of calendar year 2025 to describe the policy for idle transmission lines.

OEIS Data Request 7.7

Regarding Table 4-1 High-Level Service Territory Components: Provide the following service territory components for PacifiCorp's HFRA.

Characteristic	HFRA
Area Served (sq. mi.)	
Number of Customers Served	
Overhead Transmission Tines (circuit miles)	
Overhead Distribution Lines (circuit miles)	
Underground Distribution Lines (circuit miles)	
Hardened overhead distribution lines (circuit miles)	
Substations (#)	
Distribution transformers (#)	
Reclosers (#)	
Poles (#)	

Response to OEIS Data Request 7.7

Please refer to the table below which provides the service territory components for PacifiCorp's High Fire Risk Area (HFRA). Circuit miles of hardened overhead distribution lines are through the end of second quarter 2025.

Characteristic	HFRA
Area Served (sq. mi.)	294
Number of Customers Served	6,613
Overhead Transmission Lines (circuit miles)	120
Overhead Distribution Lines (circuit miles)	487
Underground Distribution Lines (circuit miles)	46
Hardened overhead distribution lines (circuit miles)	0.29
Substations (#)	12
Distribution transformers (#)	3,551
Reclosers (#)	19
Poles (#)	12,544

OEIS Data Request 7.8

Regarding Fire Incident Tracking Database:

(a) On page 522 of its 2026-2028 Base WMP, in response to PC-23B-20. Lessons Learned from Past Wildfires, PacifiCorp states that, "At the end of 2024, the company implemented its fire incident tracking database."

i. Provide any pilot study reports and internal memoranda that discuss the functionality and operational abilities of the fire incident tracking database.

ii. Provide the current inputs and list of possible incident causes currently tracked within the fire incident tracking database.

iii. On page 62 of PacifiCorp's 2026-2028 Base WMP, PacifiCorp states that "[f]ire incidents have been tracked since 2020, and the data is an input to the risk model." Describe how this differs from the implementation of the fire incident tracking database.

(b) On page 523 of PacifiCorp's 2026-2028 Base WMP, PacifiCorp states that "[f]or root cause analysis, the company has completed engineering investigations that have found certain conditions or equipment that may be more susceptible to energy release that could lead to an ignition event."

i. Provide a list of all such certain conditions or equipment that have been identified through this process.

ii. Describe all lessons learned PacifiCorp has implemented as a result of these findings.

Response to OEIS Data Request 7.8

(a) Please refer to the Company's responses to subparts i. through iii. below:

i. PacifiCorp did not perform a pilot study or create any internal memoranda as part of its standard process for software development work. Please refer to the information provided below which provides the evolution of the tool from initial planning to present:

September 2023 – Discovery and Scoping:

- Initial meeting to discuss moving the SharePoint fire incidents database to Foundry.

- Existing process seemed to have limitations with automation and pulling data from different sources, which resulted in a lot of manual tracking and follow up.

October 2023 – Version 1 of the Fire Incidents Tracking and Reporting application in Foundry:

- Created the first version of the fire incidents database in Foundry to replace the SharePoint database.
- Imported data from the Microsoft Excel spreadsheet into Foundry.
- Added functionality for users to enter fire incidents manually or from an outage

November 2023 - Updates to support fire investigations:

- Added elevated fire risk (EFR) related information for outages associated with a fire incident.
- Added a new field called “Investigation Notes” to enter data pertaining to the fire incident investigation.
- Created notifications workflow to alert investigators whenever a new fire incident is entered in the portal.

November 2024 – Improvements:

- Updated the fire incident and outage timestamps to display dates in the local time zone where the incident occurred.

December 2024 – Improvements:

- Established connectivity from doForms data to capture fire incident data filled out in the field.
- Integrated data from doForms to populate all the fields that were identified
- Created fire incidents from outage data where comments have “Pole Fire” and dedupe on outage ID.
- Pulled historic fire incident data (from 2020 forward) from doForms into the Fire Incident Tracking and Reporting application.

January 2025 – Improvements:

- Added functionality to review and include Class 0 fire incidents.
- Added the ability to export data with all the relevant information for reporting.

- Added functionality to remove/reject incidents that Foundry has found to be (potentially) fire related when an incident should not be categorized as a fire incident based on further review.

July 2025 – Improvements:

- Incorporated geographic information system (GIS) county information and auto populated the county information using the latitude and longitude information of the fire incident received through outage/doForms/Manual filing. Users can preview the county before filing the incident to the database

ii. Please refer to Attachment OEIS 7.8-1 which provides the data fields that PacifiCorp tracks in the fire incident tracking and reporting database. Please refer to Attachment OEIS 7.8-2 which provides a list of the possible incident causes.

iii. The Company has maintained records of fire incidents since 2020. Prior to deployment of the Fire Incident Tracking and Reporting application described above, incidents were stored in a SharePoint repository. When the Fire Incident Tracking and Reporting application was deployed in October 2023, prior year fire incidents were imported from SharePoint and the SharePoint repository was retired.

(b) Please refer to the Company's responses to subparts i. and ii. below:

i. Please refer to the table below which provides list of the conditions from the Company's Standard Operating Procedure (SOP) 069: Clearance Table for Distribution and Transmission Line Inspectors National Electrical Safety Code (NESC) and General Order (GO) 95 Grandfathering Matrix Facility Point Inspection NESC and GO 95 Frequently Asked Questions Condition Code Dropdowns Asset Management (SOP 069) that were added in response to engineering investigations completed:

CONDITION_CODE	DESCRIPTION_DETAILED	PRIORITY	DIFFERENTIATING	ENERGY_RELEASE_RISK
JUMPCONT	JUMPERS/CONDUCTOR CONTACT	A	No differentiator as only an 'A' condition is allowed	YES
HOTCLAMP	HOT CLAMP DIRECTLY CONNECTED TO PRIMARY CONDUCTOR	B	"B" if hot line clamp is directly connected to mainline primary conductor instead of stirrup	YES
HOTCLPAM	HOT CLAMP DIRECTLY CONNECTED TO ARMOR ROD	B	No differentiator as only a 'B' condition is allowed	YES

ii. The conditions provided in the Company's response to subpart (b) i. above would generally be identified during detailed inspections. The Company completes detailed inspections on a five-year cycle across PacifiCorp's entire service territory. Since these conditions were added to SOP 069 at the beginning of 2025, it is expected it will take several years to gather sufficient data for all lessons learned. However, from the engineering investigations the lesson learned from HOTCLAMP and HOTCLPAM conditions found that hot line clamp connectors directly connected to primary conductor or armor rod conductor have a higher probability of failure due to damaging primary conductor strands over time. To correct this, it was identified that hot line clamps should be connected to a stirrup which is connected to the primary conductor or armor rod conductor.

For the JUMPERCONT conditions it was found that equipment jumpers were contacting primary conductors without a physical connection being made. Generally, this led to energy release under certain conditions. To correct this, it was identified that the jumpers should be re-installed so that they do not make contact without a physical connection.