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Re: CA 2025-WMPs

OEIS-P-WMP 2025-PC-03

Please find enclosed PacifiCorp's responses to OEIS data requests 3.1-3.8. Also provided are Attachments OEIS 3.8-1 and 3.8-2.

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

Sincerely,

___/s/__ Pooja Kishore Manager, Regulation

Regarding Validation of Asset Information: On page 438 of PacifiCorp's 2026-2028 Base WMP, validation of asset information between various systems of record is completed "through manual input" and "periodic analysis is performed to ensure that the asset information in the three systems is materially aligned".

- (a) Provide the procedure for updating the enterprise systems manually.
- (b) Provide the procedure for this periodic analysis.
- (c) Describe the process, including retention and re-verification, for handling data found during this analysis that does not match between the three systems.
 - i. Describe any planned updates to this process during the 2026-2028 Base WMP cycle.
- (d) How often is this analysis performed?
- (e) Describe how PacifiCorp confirms the data accuracy between the three systems.
- (f) Provide the metrics PacifiCorp uses to track and monitor data accuracy.

Response to OEIS Data Request 3.1\

- (a) Data from geographic information systems (GIS) is compared with data from SAP and Maximo. This analysis is performed by PacifiCorp subject matter experts (SME). If data is found to be in one system and not the other, a corresponding record will be added to ensure the systems match. For example, if a record of a faulted circuit indicator is found in GIS but not in SAP, a corresponding record will be added to SAP to ensure the systems match.
- (b) The data sets are compared to ensure asset records match between the systems. If data gaps are found, the GIS and SAP / Maximo teams will align on what needs to be changed. Records will be added, changed or removed by the appropriate team. For example, a change to GIS would be performed by a member of the GIS team.
- (c) As described in the Company's responses to subparts (a) and (b) above, data is compared between the systems. If changes are needed, they are made in the appropriate system. Electronic records are retained to memorialize changes made.
 - i. PacifiCorp plans to continue this process until the business transformation efforts

described in section 12.2, page 439 of the Company's 2026-2028 Base Wildfire Mitigation Plan (WMP), are completed and asset information is passed from GIS to Maximo with minimal manual intervention.

- (d) Wires asset data is reviewed at least annually and often more frequently on an ad-hoc basis. PacifiCorp generates inspection work orders on an annual basis to ensure operations can better plan inspection work alongside the other work operations will need to perform. The GIS data is compared to the applicable SAP and Maximo data to ensure any data gaps are corrected before the next year's work orders are generated. Additionally, if gaps between the annual reviews are suspected, ad-hoc analyses are performed to ensure accuracy between the systems. The process for ad-hoc analysis is the same for the annual analysis.
- (e) As described in section 12.2, page 438 of the 2026-2028 WMP, GIS is the system of record for wires assets and SAP is used to schedule against those assets. Asset record matching for wires assets compares the GIS asset data to SAP asset data. Key information is kept in both systems and allows records to be matched. For example, if GIS has a record of a recloser at a location, SAP should also have a corresponding record. Gaps in the data are investigated and corrected in either system.
- (f) Maximo is the system of record for substation assets. Most substation asset data is not stored in GIS, but substation physical location data is. Since the physical location data for substations generally does not change once the substation is built, this data is usually reviewed on an ad-hoc basis.

OEIS Data Request 3.2

Regarding Replacement of Vegetation Management Work Management System: On page 440 of PacifiCorp's 2026-2028 Base WMP, PacifiCorp states "[v]egetation management is also replacing its work management system for managing vegetation. This initiative is in Table 12-1. GIS will continue to be a manual export to SFTP and the annual refresh to the vendor for MAPIT Fast/VM Optix will continue."

- (a) What work management system will PacifiCorp be using in the future for vegetation management purposes?
- (b) What level of integration does the new work management system being used for vegetation management purposes have with other enterprise systems, including asset information, risk information, wildfire risk, etc.?
- (c) There is no reference to what "SFTP" means. Provide detailed information about "SFTP" and its integration with other enterprise management systems.

- (a) PacifiCorp is transitioning to vegetation work management software provided by GeoDigital.
- (b) The new work management system will not have integration with other enterprise systems, and it is anticipated that geographic information systems (GIS) asset information, high fire threat district (HFTD) and high fire risk area (HFRA) boundaries, and other geospatial information will be updated annually. Postimplementation and considering larger business transformation efforts regarding enterprise system updates, PacifiCorp will evaluate opportunities for integration.
- (c) "SFTP" is an acronym for secured file transfer protocol. PacifiCorp uploads GIS information to a file transfer protocol (FTP) site where GeoDigital, the work management software vendor, can access and upload the GIS data to the work management software.

OEIS Data Request 3.3

Regarding Enhanced Overhang Reduction Pilot: On page 289 of PacifiCorp's 2026-2028 Base WMP, PacifiCorp describes their "Enhanced Overhang Reduction Pilot" that culminated in 2025. PacifiCorp states "This pilot project targeted high-risk distribution circuits...."

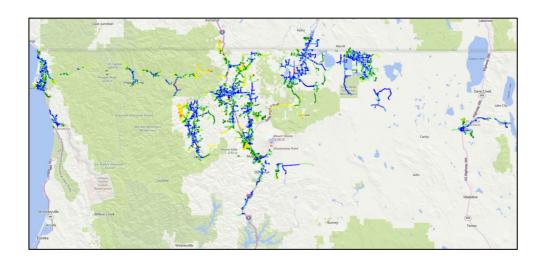
- (a) Provide the criteria PacifiCorp used to identify high-risk distribution circuits for the pilot.
 - i. If the Enhanced Overhand Reduction Pilot was implemented on a subset of PacifiCorp's high-risk distribution circuits, provide the criteria used to select the circuits included in the pilot.
- (b) Provide the criteria PacifiCorp will use to determine whether to continue or discontinue the pilot.

- (a) Segments of distribution circuits were prioritized in high fire threat district (HFTD) Tier 3 and identified through PacifiCorp forester knowledge of the circuits, vegetation conditions, vegetation characteristics, and feasibility of project implementation. The segments of distribution circuits were then reviewed using PacifiCorp's discontinued risk model and canopy height to confirm risk.
 - i. Please refer to the Company's response to subpart (a) above. The pilot project was implemented on a subset of distribution circuits.
- (b) PacifiCorp has conducted visual field reviews of tree health to evaluate the response of trees that received treatment to determine whether impacts of increased pruning can be discerned. PacifiCorp will also review outage data to determine if there is a notable improvement to the extent feasible.

Regarding Zones of Protection: The term "Zones of Protection" (ZOP) is used multiple times in Section 10 in PacifiCorp's 2026-2028 Base WMP. PacifiCorp does not provide a definition of the term in the glossary.

- (a) Provide a definition of the above term as it relates to its usage in Section 10.
- (b) Provide a map of the "Zones of Protection" as they relate to Section 10 across the PacifiCorp service area in California.

- (a) A zone of protection (ZOP) is any area of a circuit between devices that can operate on their own to protect the downstream line.
- (b) Please refer to the map below which provides the ZOPs accessed on July 24, 2025, from Greater, a geospatial analysis application designed to display PacifiCorp facilities over a base map. Note: the different colors on the circuits are different ZOP.



Regarding Weather Station Outages: Section 10.5.5, page 136, of the WMP Guidelines requires electrical corporations to provide an "acceptable percentage of weather station outages..." Page 370 of PacifiCorp's 2026-2028 Base WMP states, "PacifiCorp has not quantified an acceptable percentage of weather station outage".

- (a) Provide an acceptable percentage of weather station outages in which PacifiCorp will still be able to operate without an increase in risk or impact to the PSPS decision making as outlined in the WMP Guidelines.
 - i. If PacifiCorp cannot provide what percentage of weather station outages it defines as acceptable, provide an explanation why it cannot.

Response to OEIS Data Request 3.5

- (a) As stated in Section 10.5.5, page 370 of PacifiCorp's 2026-2028 Base Wildfire Mitigation Plan (WMP) filed July 11, 2025, "PacifiCorp has not quantified an acceptable percentage of weather station outage. Annual calibration begins in spring and is typically complete by the end of July. Every attempt is made to complete the calibration by then, but timing may be impacted by weather conditions that may make roads impassable until late spring-early summer".
 - i. There are many considerations that make using a data driven approach to determine an "acceptable" percentage of weather station outages challenging, such as terrain type, weather station network age, seasonality, and concentration of outages. PacifiCorp is investigating the best methodology for determining what is an acceptable amount of weather station downtime while considering these variables:
 - Terrain type in areas of more complex terrain, weather conditions will likely vary more spatially than in areas of flatter terrain.
 - Weather station network age the weather station network has not been fully built out and does not have a long history to determine a percentage that PacifiCorp considers "acceptable".
 - Seasonality many weather stations are in very remote areas that may be inaccessible for months at a time during the winter and spring making it difficult to provide timely maintenance until access conditions improve.
 - Concentration if all weather stations that are not communicating are within the same general area or if a cell tower goes down, the overall

weather station network may still have what is considered an "acceptable" percentage of weather stations available, however all the weather stations that rely on the cell tower for communication may be concentrated in a localized area.

OEIS Data Request 3.6

Regarding Risk Reduction Percentages: In Table 10-1, page 325, of PacifiCorp's 2026-2028 Base WMP, it shows that the percentage of risk reduction for all activities (SA-01, SA-02, SA-05, SA-06, MA-01) is "TBD".

- (a) Provide an explanation for the lack of Risk Reduction values for all activities listed above.
- (b) Provide a date when PacifiCorp will determine the amount of risk reduction for all activities listed above.

- (a) As described on page 324 in Section 10.1.1 of the 2026-2028 Base Wildfire Mitigation Plan (WMP) filed on July 11, 2025, "Estimated risk reduction in Table 10-1 is TBD because PacifiCorp has not quantified risk reduction. As described in Section 6.2 PacifiCorp is developing a framework to quantify the estimated and observed or measured effectiveness of wildfire risk mitigation activities to incorporate into an analysis of achieved and forecasted risk reduction".
- (b) PacifiCorp's risk modeling efforts are currently focused on implementing an updated risk scoring methodology with risk reduction and benefit cost ratios (BCR), as well as a mitigation selection framework for undergrounding and covered conductor. Upon completion of these and other higher priority objectives, PacifiCorp will prioritize calculating risk reduction for the initiatives listed in Table 10.1 of the July 11, 2026-2028 Base WMP. PacifiCorp expects to begin risk reduction estimation for Installation of communicating Fault Circuit Indicators (cFCI), Installation of Substation Control Advanced Network (SCAN), and installation of advanced metering infrastructure (AMI) meters by the end of 2026. Each risk reduction estimate is contingent on sufficiently available data to support risk reduction quantification.

Regarding Fire Potential Index: On page 371 of PacifiCorp's 2026-2028 Base WMP, it states that the Fire Potential Index (FPI) is a combined value of multiple inputs that, "...yields a range from categories from very low to extreme".

- (a) Provide the complete range (i.e., 0-5, 6-9,10-15, 16-20) of (FPI) breakpoints and their associated categories (i.e., Very Low to Extreme).
- (b) Provide the following information regarding the FPI breakpoints and how each is used in the initiation of PSPS events.
 - i. A detailed description of the weather conditions associated with each category of the FPI breakpoint (i.e., Very Low to Extreme).
 - ii. The initiation criteria for PSPS events for FPI breakpoint (i.e., Very Low to Extreme).
- (c) Provide the following information regarding the FPI breakpoints and how they are used for actions taken in the field.
 - i. A detailed description of actions taken in the field that are associated with each FPI breakpoint (i.e., Very Low to Extreme).

Response to OEIS Data Request 3.7

(a) Please refer to the information below which provides the range of the fire potential index (FPI) breakpoints and their associated categories:

Very Low: <5 Low: 5-10

Moderate: 10-13.5 High: 13.5 – 23 Very High: 23-37.5 Extreme: >37.5

- (b) Please refer to the Company's responses to subparts i. and ii. below:
 - i. PacifiCorp cannot provide specific weather conditions for each level of risk in the FPI, because the risk level is calculated using varying non-weather conditions such as terrain and vegetation complexity. Weather conditions related to associated risk values may vary in different places relative to these different non-weather parameters.

- ii. PacifiCorp does not currently utilize the FPI for initiation of public safety power shutoff (PSPS) events. As stated on page 377, section 10.6.3 of the 2026-2028 Wildfire Mitigation Plan (WMP) filed July 11, 2025, this is a planned improvement when the FPI percentiles are implemented.
- (c) Actions that are taken in the field related to different fire risk levels are described in section 8.7.3 Personnel Work Procedures and Training in Conditions of Elevated Wildfire Risk of the 2026-2028 Base WMP. Currently, FPI is not tied to these actions but is being considered for integration.

Regarding Prioritized Risk Drivers: Table 3-1 in PacifiCorp's 2026-2028 Base WMP (pages 34-38) shows how PacifiCorp is prioritizing various risk drivers throughout its service territory.

- (a) Provide the data used to determine the percent of ignitions in HFTD provided in Table 3-1. This data should include the following via Excel:
 - i. Date of event
 - ii. Type of event (ignition, outage, fault, etc.)
 - iii. HFTD Designation (Tier 2, Tier 3, or non-HFTD)
 - iv. Risk
 - v. Risk Driver
 - vi. Topographical and Climatological Risk Factor(s)
- (b) Provide the range of years used to determine the data provided in Table 3-1.
- (c) On page 34 of its 2026-2028 Base WMP, PacifiCorp states that it "has limited data as there were only 21 ignitions tracked in the HFTD."
 - i. Provide the range of years that covers these ignitions.
 - ii. Provide the data for these ignitions, if not included in part (a), above.
- (d) On page 34 of its 2026-2028 Base WMP, PacifiCorp states that it "does not track all ignition causes using the same categories as presented required in Table 3-1, and those are noted as 'Not tracked' in the table." Describe what categories are used instead, if applicable.
- (e) On page 34 of its 2026-2028 Base WMP, PacifiCorp states that it "will seek to clarify and understand in order to categorize appropriately" for any unknown risks.
 - i. Describe what process PacifiCorp is undergoing to try and identify these risk drivers.
 - ii. When does PacifiCorp intend to complete this analysis?
 - iii. How is PacifiCorp working to minimize "unknowns" in the future?
- (f) On page 34 of its 2026-2028 Base WMP, PacifiCorp states that "additional analysis is also required to examine the topographical issues relating to risk drivers and to understand any trends that are co-incident with certain drivers." When does PacifiCorp intend to complete this analysis?

(g) Explain how PacifiCorp determined the priority numbers in Table 3-1? For instance, "Contact from object" has a priority of 4, despite having 0 percent of ignitions in the HFTD.

Response to OEIS Data Request 3.8

- (a) Please refer to Attachment OEIS 3.8-1 which provides outage data and Attachment OEIS 3.8-2 which provides ignition data. In Attachment OEIS 3.8-1, column A, "Outage_ID" is populated with outage identifications to indicate that the type of event was an outage. Table 3-1 in 2026-2028 Base Wildfire Mitigation Plan (WMP), filed July 11, 2025, was created from two tables that were aggregated then joined on a common key based on risk driver. The outage data and ignition data were rolled up from the source data provided in this response. Topographical and climatological risk factor(s) was created in the aggregated joined dataset and does not exist in any source transactional database.
- (b) Outage data used in this analysis ranges from 2022 through 2024. Please refer to Attachment OEIS 3.8-2.
- (c) Please refer to the Company's responses to subparts i. and ii. below:
 - i. The date range for ignitions is 2020 through 2025. The date column has not been provided as it contained mostly "NULL" values due to incomplete data collection for prior year fire incidents. Historical fire incident data is under review for accuracy and completeness to address these gaps.
 - ii. Please refer to Attachment OEIS 3.8-1 and Attachment OEIS 3.8-2.
- (d) Table 3-1 in the 2026-2028 Base WMP identifies the risk drivers that are not currently tracked by topographical and climatical risk factors. From a risk driver perspective, there are only a few that the Company does not track, primarily those related to vegetation contact incidents. These untracked vegetation contact risk drivers include blow-in, fall in (branch, root, or trunk failure), grown-in, and other vegetation-related contact. Currently, PacifiCorp only tracks vegetation contact within and outside the clearance zone. Additionally, environmental risk drivers listed under Equipment/Facility Failure or Damage (e.g., line elements, structural components, control devices) are included within broader equipment-related risk driver categories.
- (e) Please refer to the Company's responses to subparts i. through iii. below:
 - i. The Company has enhanced its fire incident tracking and reporting by capturing more detailed information at the time of the incident, introducing automation to minimize errors, and applying quality controls to improve data

accuracy. It is also benchmarking best practices with peer utilities to better improve its process.

- ii. PacifiCorp expected to complete the analysis by the end of 2027.
- iii. PacifiCorp is currently benchmarking with peer utilities to identify best practices for fire incident reporting, tracking, and investigation. The goal is to better identify and validate underlying ignition causes and associated risk drivers, thereby reducing the number of fire incidents classified as "Unknown".
- (f) Based on risk modeling priorities and competing tasks, PacifiCorp expects to complete the topographical and climatological related analysis within the current WMP cycle.
- (g) PacifiCorp used a weighted sum approach to generate the priority ranking. The logic was employed to prioritized ignitions in the High Fire Threat Districts (HFTD) as the heighted priority, followed by outages in the HFTD, followed by outages not in the HFTD. To accomplish this, the column containing the ignitions in the HFTD was multiplied by three. Next, the column containing outages in the HFTD was multiplied by two. Finally, the on-HFTD outages were kept steady with a weight of one. The three weighted columns were then added together to come up with the summed column which was sorted in descending order so that the highest value was first in the table. Subsequently, an ascending sequence was applied to the table based on the summed column. The sequence column serves as the priority column.

```
The logic for the weighting is below:

pri['pri_prep_additive_weighted'] = (pri['x% of ignitions in hftd']*3) +

(pri['outage_hftd_pct']*2) + (pri['outage_pct_float'])

# Sort dataframe in descending order

Pri = pri.sort_values(by='pri_prep_additive_weighted',

ascending=False).reset_index(drop=True)

# Create sequence column

pri['priority'] = range(1, len(pri) + 1)
```