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RE: CA 2025-WMPs
OEIS-P-WMP_2025-PC-13_

Please find enclosed PacifiCorp's Responses to OEIS Data Requests 13.1-13.9.

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

Sincerely,

____/s/____
Pooja Kishore
Manager, Regulation

OEIS Data Request 13.1

Regarding Risk Score Calculations:

- (a) On page 88 of its 2026-2028 Base WMP R0, Figure PAC 5-10: Combined Composite Risk Score Calculation, the calculation indicates the final value should be between 0 and 1.¹ On pages 102-103, Table 5-5: Summary of Top-Risk Circuits, Segments, or Spans, the Wildfire Risk Score provided in Table 5-5 is not between 0 and 1.
 - i. Provide an explanation of how Wildfire Risk Score in Table 5-5 is calculated.
 - ii. If the Wildfire Risk Score shown in Table 5-5 is not the Combined Composite Risk Score, provide the Combined Composite Risk Score Calculations for the circuits provided in Table 5-5.
- (b) On page 55, Figure PAC 5-2: Wind Risk and Fuel/Terrain Risk Calculation, weighted input variables are summed to produce the final Wind Risk and Fuel / Terrain Risk.
 - i. Are all weighted input variables scaled to be between 0 and 1?
 - 1. Provide a sample calculation of Wind Risk and Fuel / Terrain Risk for a specific circuit, clearly showing input values and any weighting applied.
 - ii. If all weighted input variables are not scaled to be between 0 and 1, provide a justification for how the weighted sum function effectively captures the various risk input components.

Response to OEIS Data Request 13.1

- (a) Please refer to the Company's responses to subparts i. and ii. below:
 - i. Each segment receives a unitless composite risk score between 0 and 1 based on the combination of failure probability, ignition probability, and consequence.

To identify the "top-risk" portions of the system in California, PacifiCorp first looks at the distribution of segment-level composite risk scores across all California segments. Conceptually, this can be thought of as the area under a curve of "segment composite score versus frequency" where the total statewide wildfire risk is the sum of all segment-level Composite Risk Score values.

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>).

PacifiCorp then:

1. Computes total statewide risk:

- Sums the Composite Risk Scores for all segments in California:

$$R_{total} = \sum comp_score$$

2. Defines the “top 5% of risk”:

- Take 5 percent of total risk:

$$0.05 \times R_{total}$$

3. Collects the segments that make up the “top 5% of risk”:

- Sort all segments in descending order of Composite Risk Score.
- Starting from the highest-risk segment, cumulatively add Composite Risk Score values until the cumulative sum first exceeds:

$$0.05 \times R_{total}$$

- The set of segments included in this cumulative sum are the “top 5% risk” segments statewide.

4. Aggregate to the circuit level:

- For each circuit, PacifiCorp identifies which of its segments are included in this “top 5% risk” set.
- The Wildfire Risk Score reported in Table 5-5 for a given circuit is the sum of the Composite Risk Score values of those high-risk segments on that circuit:

$$WildfireRiskScore_c = \sum_{i \in S_c} comp_score_i$$

Where S_c is the subset of segments on circuit C that are part of the statewide “top 5% risk” group.

- The “Total Miles” column reports the sum of the line miles associated with those same segments in S_C .
 - Because the Wildfire Risk Score is a cumulative sum of many segment-level Composite Risk Score values, it is not bounded between 0 and 1 and may take on values greater than 1. The 0-to-1 bound applies only to the individual segment Composite Risk Score values, not to the aggregated circuit-level totals.
- ii. The Wildfire Risk Scores shown in Table 5-5 of the 2026-2028 Base Wildfire Mitigation Plan (WMP) are derived directly from the Composite Risk Scores. However, for the purpose of Table 5-5, PacifiCorp does not present each circuit’s Composite Risk Score as a single normalized value between 0 and 1. Instead, the Company uses the sum of Composite Risk Score values in its absolute form to directly compare how much each circuit contributes to the statewide “top 5%” of total wildfire risk.

Each segment’s Composite Risk Score remains bounded between 0 and 1. But when identifying the top-risk portions of the system, PacifiCorp sums the Composite Risk Score values of the segments that collectively make up the “top 5%” of statewide risk. The Wildfire Risk Score for each circuit in Table 5-5 is therefore the cumulative Composite Risk Score of the segments on that circuit that fall within the “top 5% risk” group, rather than a normalized Composite Risk Score for the circuit as a whole.

This approach allows the table to communicate an absolute magnitude of contribution to the top-risk portion of the system, rather than a relative or normalized Composite Risk Score value.

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

- i. Yes.
1. For both Wind Risk and Fuel / Terrain Risk, all input variables are first transformed into dimensionless indices between 0 and 1 at the segment level. Each raw input (e.g., buildings destroyed, rate of spread, terrain difficulty index) is normalized using the scaling method described in the WMP so that:

$$0 \leq \text{Input}_k \leq 1 \text{ for all input variables } k.$$

These scaled inputs are then multiplied by their respective weights and summed to produce the Wind Risk and Fuel/Terrain Risk scores, each of which is also scaled bounded between 0 and 1.

Example: 5G45 segment PPD474558:

Wind Score

Input Variable	Weight	Scaled Value
Rate of Spread (95 th percentile)	0.30	1.0
Population Impacted (95 th percentile)	0.25	0.995007
Buildings Destroyed (95 th percentile)	0.25	1.0
Terrain Difficulty Index	0.10	0.25
Disabled Population	0.05	1.0
Poverty Population	0.05	1.0

$$\begin{aligned}
\text{Weighted Sum} &= \sum_{k=1}^6 (\text{Weight}_k \times \text{Scaled_Value}_k) \\
&= 0.30 \times 1.0 + 0.25 \times 0.995 + 0.25 \times 1.0 + 0.10 \times 0.25 + 0.05 \times 1.0 + 0.05 \times 1.0 \\
&= 0.3 + 0.2489 + 0.25 + 0.025 + 0.05 + 0.05
\end{aligned}$$

$$\text{Weighted Sum} = 0.9238$$

The max of this weighted sum anywhere in the service territory occurs on this particular segment. PacifiCorp puts the wind score on a 0-to-1 scale where 0 corresponds to zero and the max (0.9238) corresponds to 1 on a linear scale.

Then:

$$\text{Wind Score} = \frac{\text{Weighted Sum}}{\text{Max Weighted Sum}} = \frac{0.9238}{0.9238} = 1.0$$

Fuel/Terrain Score

Input Variable	Weight	Scaled Value
Fire Behavior Index (95 th percentile)	0.20	1.0
Fire Size Potential (95 th percentile)	0.20	1.0
Flame Length (95 th percentile)	0.20	1.0
Terrain Difficulty Index	0.25	0.25
Fire Station Density	0.10	0.161356
Fuel Majority Model	0.05	0.181243

$$\begin{aligned}\text{Weighted Sum} &= \sum_{k=1}^5 (\text{Weight}_k \times \text{Scaled_Value}_k) \\ &= 0.20 \times 1.0 + 0.20 \times 1.0 + 0.20 \times 1.0 + 0.25 \times 0.25 + 0.10 \times 0.161 + 0.05 \times 0.181 \\ &= 0.2 + 0.2 + 0.2 + 0.0625 + 0.0161 + 0.0091 \\ \text{Weighted Sum} &= 0.6877\end{aligned}$$

The max of this fuel/terrain weighted sum anywhere in the PacifiCorp service territory is 0.809168 on circuit 5Y197 near Yakima, Washington. The Company puts the fuel/terrain score on a 0-to-1 scale where 0 corresponds to zero and the max (0.809168) corresponds to 1 on a linear scale. Then:

$$\text{Fuel/Terrain Score} = \frac{\text{Weighted Sum}}{\text{Max Weighted Sum}} = \frac{0.6877}{0.809168} = 0.8499$$

Composite Score

To get the Composite Risk Score, PacifiCorp sums the wind and fuel/terrain scores together, then rescale those summed values onto a 0-1 scale, again setting the max to 1 on a linear scale. For this example, the sum of the two scores in:

$$1.0 + 0.8499 = 1.8499$$

The maximum value for wind score + fuel/terrain score throughout the service territory is 1.920161 on that same segment of 5Y197 near Yakima, Washington.

Then, the Composite Risk Score is:

$$\text{Composite Score} = \frac{\text{Wind Score} + \text{Fuel/Terrain Score}}{\text{Max(Wind Score} + \text{Fuel/Terrain Score)}} = \frac{1.8499}{1.920161} = 0.9634$$

ii. Not applicable.

OEIS Data Request 13.2

Regarding Overall Utility Risk Normalization: On pages 93-94 of its 2026-2028 Base WMP R0, Table 5-4: Summary of Risk Models, PacifiCorp states, “Composite risk score is a 1 to 5 rating based on normalization of combined outputs.”

- i. Provide a narrative description of this normalization methodology.
- ii. Provide the composite risk scores calculated with this normalization methodology.

Response to OEIS Data Request 13.2

- i. PacifiCorp clarifies that its Composite Risk Score is calculated on a continuous 0–1 scale, not on a 1–5 scale. The reference to a “1 to 5 rating” in Table 5-4 was an error and does not reflect the methodology used by PacifiCorp.

As described on page 58 of the 2026–2028 Base Wildfire Mitigation Plan (WMP) R0: “Overall Utility Risk: PacifiCorp currently uses the Composite Risk Score as the quantified Overall Utility Risk. To quantify Wildfire Risk, the company has deployed FireSight. Upon completion of the PSPS and PEDS risk models, the Overall Utility Risk will combine Wildfire Risk and Outage Risk”.

At this time, PacifiCorp has not yet developed a final Overall Utility Risk score, as the public safety power shutoff (PSPS) and protective equipment and device settings (PEDS) risk models remain in development. Therefore, the Composite Risk Score derived from FireSight data serves as the interim quantitative metric for wildfire-related risk until the outage-related models are completed.

The Composite Risk Score is calculated by combining the FireSight model’s segment-level outputs, each scaled to a 0-1 range. These components are mathematically combined to produce a single continuous risk score between 0 and 1 for each segment. No additional categorical normalization (such as a 1–5 scale) is used.

- ii. As described in the Company’s response to subpart i. above, PacifiCorp has not developed an Overall Utility Risk score yet, PacifiCorp currently relies on the 0-1 Composite Risk Scores derived from the FireSight model for wildfire-related planning and prioritization.

OEIS Data Request 13.3

Regarding PacifiCorp's Wildfire Intelligence Center: On page 444 of its 2026-2028 Base WMP R0, PacifiCorp stated that a 2024 lesson learned is that "Utilizing existing roles/functions for situational awareness for wildfires was a challenge." Its proposed WMP improvement was to establish its Wildfire Intelligence Center (WIC) in 2025.

- (a) On page 391, PacifiCorp stated that "PacifiCorp's Wildfire Intelligence Center was modeled after the best practices and insights of PG&E, Southern California Edison, and SoCal Gas." Describe the scope of PacifiCorp's Wildfire Intelligence Center and the best practices incorporated.
- (b) When it was established or when will it be established?
- (c) Explain how the WIC has helped, or may help, alleviate the challenge of "Utilizing existing roles/functions for situational awareness for wildfires."

Response to OEIS Data Request 13.3

- (a) PacifiCorp's Wildfire Intelligence Center (WIC) is a centralized hub for real-time situational awareness, monitoring wildfire and other emerging hazards across the Company's six-state service territory. Through 2025, the WIC's primary focus was supporting wildfire decision-making by integrating fire-camera networks, weather and fuels data, early-detection software, dispatch and agency feeds, and crowd-sourced intelligence. As of December 2025, the WIC has been in rapid development to expand into a full all-hazard watch office.

The WIC was intentionally modeled on the best practices of Pacific Gas and Electric (PG&E), Southern California Edison (SCE), and SoCalGas, all of which operate mature wildfire and situational-awareness centers. PacifiCorp incorporates similar core elements: a dedicated watch-office structure staffed by specialists with wildfire and geographic information system (GIS) expertise; high-definition camera systems with artificial intelligence (AI) based smoke detection; structured analytical tools such as fire-spread modeling and threat-severity matrices; and strong coordination with dispatch agencies.

- (b) The WIC began internal development in October 2024 and became operational with seven-day, 10-hour coverage May 3, 2025. On October 26, 2025, the WIC transitioned to provide 24/7 coverage.
- (c) The WIC is composed of staff with backgrounds in wildfire management and other emergency response roles. Although there were capabilities within the Company previously for monitoring wildfire activity, these assessments lacked subject matter expertise (SME) and dedicated resourcing. Having assigned staff with these

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qualifications operating 24 hours a day provides the necessary attention to mitigate the spread of wildfire through rapidly provided intelligence and action.

Despite PacifiCorp's diligent efforts, certain information protected from disclosure by the attorney-client privilege or other applicable privileges or law may have been included in its responses to these data requests. PacifiCorp did not intend to waive any applicable privileges or rights by the inadvertent disclosure of protected information, and PacifiCorp reserves its right to request the return or destruction of any privileged or protected materials that may have been inadvertently disclosed. Please inform PacifiCorp immediately if you become aware of any inadvertently disclosed information.

OEIS Data Request 13.4

Regarding PacifiCorp's Wildfire and Emergency Response Team: On pages 444 of its 2026-2028 Base WMP R0, PacifiCorp states that a 2024 lesson learned is that its Emergency Preparedness external communications "relationships need to be bolstered to improve real time ability to coordinate" due to the 90 counties it serves in six states. Its proposed WMP improvement is to establish a Wildfire and Emergency Response Team.

- (a) Based on the experience PacifiCorp gained in 2025, how has the Wildfire and Emergency Response Team impacted its emergency management relationships in real time? Provide three examples.
- (b) If there are no examples, provide a full description of how PacifiCorp envisions the Wildfire and Emergency Response Team will function.

Response to OEIS Data Request 13.4

- (a) PacifiCorp's Wildfire and Emergency Response Team have impacted emergency management relationships in three ways:
 - **Real-Time Coordination:** Acting as liaisons during emergencies to ensure timely, accurate exchange of information with local, state, and federal agencies.
 - **Incident Command Participation:** Embedding personnel within incident command system (ICS) structures to align PacifiCorp's operational actions with broader emergency response objectives.
 - **Preparedness and Relationship Building:** Conducting pre-season planning, and after-action reviews to strengthen trust and improve collaborative response capabilities.
- (b) PacifiCorp's Wildfire and Emergency Response Team will provide resource support to transmission and distribution operations during wildland fires and other incidents that could impact PacifiCorp customers. Response managers will work with PacifiCorp's Wildfire Intelligence Center (WIC) to validate threats, issues and concerns and provide updates to internal stakeholders as appropriate; and will dispatch to impacted areas during public safety power shutoff (PSPS) events to support Company activities during such event.

OEIS Data Request 13.5

Regarding More Weather Stations for Surgical PSPS Events: On pages 444 of its 2026-2028 Base WMP R0, lesson learned for PSPS Decision Making, PacifiCorp mentions that “During PSPS, uniform conditions must be assumed on circuits with only one weather station.” To improve the situation, PacifiCorp plans to install five weather stations in 2026 and four in 2027¹ to “Increase the number of weather stations near the [Wildland Urban Interface] border.”

- (a) Provide the study or analysis that established that the nine weather stations are the appropriate number of weather stations to “Increase the number of weather stations near the WUI border.”
- (b) If no study or analysis was done, explain how the number of weather stations to install at the WUI border(s) was established.

Response to OEIS Data Request 13.5

- (a) There is no study or analysis that specifically establishes that nine is the appropriate number of weather stations to increase the number near the wildland urban interface (WUI) border. The five weather stations planned for 2026 and the four planned for 2027 were part of the original weather station installation plan that was established internally in 2022. While this lesson learned is still a consideration for 2026-2028 installations, it is not the only factor being considered. In many cases in California, PacifiCorp has already installed numerous weather stations along WUI borders and has at least one weather station downstream of protective devices in the broader wildland areas. In addition to prioritizing gaps in data near WUI borders, PacifiCorp is also trying to establish weather station network maturity based on density of weather stations in areas of subject matter expert (SME) reviewed terrain and vegetation analysis.
- (b) Meteorology SMEs reviewed each circuit in the service territory and prioritized areas where there is either no existing weather station between two reclosers in a wildland fire risk area or no weather station between a recloser and a WUI/low risk area but also fills what remaining data gaps exist to reach network maturity.

¹ PacifiCorp 2026-2028 Base WMP R0, Table 10-1: Situational Awareness Targets by Year, page 325.

OEIS Data Request 13.6

Regarding PacifiCorp's Mapping of ESS Outages: On page 444 of its 2026-2028 Base WMP R0, lesson learned for Public Communications and Outreach, PacifiCorp states, "When there are outages on due to ESS ... they want information on why the outage is happening." PacifiCorp's planned WMP improvement for 2025 was "Updated outage map to show if an outage is due to an Emergency De-energization or on a circuit with ESS."

- (a) When did (or will) PacifiCorp enable its outage map to show if an outage is due to an Emergency De-energization or on a circuit with ESS?
- (b) Provide all feedback PacifiCorp received from its public safety partners on the new outage map capabilities.
- (c) Does PacifiCorp intend to make further changes to better communicate with its public safety partners on the nature of system outages? If yes, please describe.

Response to OEIS Data Request 13.6

- (a) PacifiCorp's public facing outage map was updated to show outages related to emergency de-energization and outages related to Enhanced Safety Settings on May 15, 2025. An example is shown in Figure PAC 11-3 of PacifiCorp's 2026-2028 Base Wildfire Mitigation Plan (WMP).

The live outage map is accessible to the public at:

www.pacificpower.net/outages-safety.html.

- (b) PacifiCorp has no documented feedback relative to the improvements made to its outage map, however, public safety partners attending community forums and other meetings have commented that the public facing outage map capabilities will prove beneficial.
- (c) As indicated on page 402 of PacifiCorp's 2026-2028 Base WMP R0, PacifiCorp has implemented a public safety partner portal. The portal is a secure web-based application that provides key information for public safety partners during public safety power shut-off (PSPS) and emergency de-energization events; event specific information is available to registered portal users to support response efforts.

PacifiCorp emergency managers maintain regular contact with public safety partners in the areas they support to strengthen connections, continue meaningful dialogue, and ensure appropriate response and coordination during system events.

OEIS Data Request 13.7

Regarding Public Communications and Outreach to Non-account Holders: On page 445 of its 2026-2028 Base WMP R0, PacifiCorp states that “Non-account holders ... do not receive notifications of PSPS, ESS or Emergency De-energization Outages, which go to the customer of record.” On page 379, Table 11-1: Emergency Preparedness and Community Outreach Targets by Year, PacifiCorp’s target for the mitigation activity is to “create alerts system for non-account holders to register for outage/emergency alerts.” The full scope of the work is to be completed in 2026.

- (a) Describe the process PacifiCorp will use for non-account holders to register for outage/emergency alerts. If the process is not yet designed, describe the plan concept as it currently exists.

Response to OEIS Data Request 13.7

- (a) PacifiCorp is currently reviewing what other investor-owned utilities (IOU) are doing to provide alerts to non-account holders. A cross functional team at PacifiCorp is working on the scope of the project and how it can be achieved with current tools and technologies.

OEIS Data Request 13.8

Regarding Public Communications and Outreach to AFN Customers: On page 445 of its 2026-2028 Base WMP, PacifiCorp stated that “previously there has not been clear links between the AFN plan and WMP initiatives.” PacifiCorp’s proposed WMP improvement is that “AFN initiatives in the 2026-2028 WMP align with the objectives of the 2025 AFN Plan.” Explain.

Response to OEIS Data Request 13.8

PacifiCorp’s access and functional needs (AFN) plan outlines the Company’s key objectives to mitigate impacts of public safety power shutoffs (PSPS) on individuals with AFN. The objectives focus on improvements to AFN programs including customer outreach, education, assistance programs and services. The objectives of the AFN plan have been vetted with the Joint Investor Owner Utilities (IOU) Statewide Council, Joint IOU Collaborative Council, Joint IOU AFN Plan Working Group and PacifiCorp’s California Wildfire Advisory Board. Beginning in 2025, PacifiCorp included an Appendix titled “Key Objectives” to each AFN Plan Quarterly Report that describes specific actions taken to improve the Company’s AFN program. Citing the AFN plan’s key objectives in the WMP ensures the plans are in sync and the WMP represents the full breadth of AFN efforts.

OEIS Data Request 13.9

Regarding Lessons Learned WMP Guidelines Requirements: On page 181 of the WMP Guidelines it states that the lessons learned narrative, “must also include lessons learned from prior catastrophic wildfires ignited by the electrical corporation’s facilities or equipment and findings from Energy Safety compliance audits and reports.”¹

- (a) Describe PacifiCorp’s lessons learned from prior catastrophic wildfires ignited by the electrical corporation’s facilities or equipment. Also include all information required in Table 13-1.
- (b) Describe PacifiCorp’s lessons learned from Energy Safety compliance audits and reports. Also include all information required in Table 13-1.

Response to OEIS Data Request 13.9

- (a) PacifiCorp objects that the request seeks information protected by the attorney-client privilege and attorney work product doctrine. Subject to and without waiving these objections, PacifiCorp responds as follows:

Certain claimants, including in pending litigation, have asserted that the Slater Fire and McKinney Fire were ignited by PacifiCorp facilities, which PacifiCorp disputes. PacifiCorp is not aware of any other catastrophic wildfire ignited by, or allegedly ignited by, PacifiCorp facilities in California. PacifiCorp may update its lessons learned with respect to a fire after all litigation and all claims related to such fire are resolved.

- (b) PacifiCorp provides the following lessons learned from the 2023 Substantial Vegetation Management (SVM) Audit that was received February 21, 2025. The ID number begins with #8 to continue the numbering in Table 13-1 of the 2026-2028 Base Wildfire Mitigation Plan (WMP).

¹ Office of Energy Infrastructure Safety, [Wildfire Mitigation Plan Guidelines](https://efiling.energy.ca.gov/eFiling/Getfile.aspx?fileid=58026), Published February 24, 2025, URL:(<https://efiling.energy.ca.gov/eFiling/Getfile.aspx?fileid=58026> &shareable=true).

Despite PacifiCorp's diligent efforts, certain information protected from disclosure by the attorney-client privilege or other applicable privileges or law may have been included in its responses to these data requests. PacifiCorp did not intend to waive any applicable privileges or rights by the inadvertent disclosure of protected information, and PacifiCorp reserves its right to request the return or destruction of any privileged or protected materials that may have been inadvertently disclosed. Please inform PacifiCorp immediately if you become aware of any inadvertently disclosed information.