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Re: CA 2023-WMPs
OEIS-P-WMP_2023-PC-004

Please find enclosed PacifiCorp's responses to OEIS data requests 4.1-4.7 and Attachments OEIS 4.4, 4.6, and 4.7.

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

Sincerely,

 /s/
Pooja Kishore
Manager, Regulation

OEIS Data Request 4.1

Regarding Risk Spend Efficiency (RSE) - In its WMP, PacifiCorp provides hypothetical examples of how it calculates RSE. Please explain how PacifiCorp calculates RSE values in practice.

- i. Are mitigation values based on percentage rules of thumb or another means?

Response to OEIS Data Request 4.1

PacifiCorp is currently developing the application to implement the general framework described in its 2023 Wildfire Mitigation Plan (WMP). The specific calculations to determine risk reduction effectiveness are in development based on inputs from PacifiCorp subject matter experts, benchmarking with other utilities, and technical planning with Technosylva. PacifiCorp plans to provide additional information on its risk reduction effectiveness calculations in its 2024 WMP following completion of this work.

OEIS Data Request 4.2

Regarding Mitigation Rankings - Please provide a table of ranked mitigations as well as an explanation of any instances where PacifiCorp has made mitigation decisions or choices that did not follow this ranking, including the justification for these decisions if applicable.

Response to OEIS Data Request 4.2

PacifiCorp intends to use its Risk-Spend Efficiency (RSE) calculations to evaluate and rank potential mitigation projects as an input into its project selection and prioritization process. PacifiCorp is currently developing the application to implement the general RSE framework described in its 2023 Wildfire Mitigation Plan (WMP). PacifiCorp plans to provide additional information on its RSE methodology and calculations including application to project selection and prioritization in its 2024 WMP update.

Specific project scope is defined based on engineering, accounting for the unique characteristics of each job location including risk drivers and risk model outputs, environmental factors, and feasibility. Line rebuilds generally include:

- Replacement of all bare primary conductor with covered conductor, replacement with underground conductor, or removal of overhead bare conductor
- Installation of covers or other protective devices where possible to cover portions of the primary conductor system where cover has been removed (e.g., stirrups, jumpers, taps)
- Evaluation of pole strength
- Replacement of identified poles with non-wood alternatives
- Replacement of fuses, arrestors, and other equipment not compliant with the “California Power Line Fire Prevention Field Guide” 2021 Edition with equipment that is compliant with the field guide

OEIS Data Request 4.3

Regarding PSPS Decision-Making

- (a) It appears PacifiCorp is not able to use data or analytics to support PSPS decisions at this time. Is this an accurate assertion?
- i. If not, please elaborate on what drives PacifiCorp's PSPS decision-making.
 - a) What are the criteria?
 - b) Does PacifiCorp use checklists, scorecards, or other metrics?

Response to OEIS Data Request 4.3

The assertion that PacifiCorp is not able to use data or analytics to support Public Safety Power Shutoff (PSPS) decisions is inaccurate. PacifiCorp does use a wide variety of data and analytics to support PSPS decisions from both public and company sources including the Geographic Area Coordination Center (GACC), National Weather Service (NWS), PacifiCorp's Weather Research and Forecast (WRF) model, and wildfire modeling software.

- a) PacifiCorp's PSPS decision-making criteria is as follows:
 1. PacifiCorp Meteorology has determined the wildfire risk to be "Extreme" as defined in 8.3.6.1 of PacifiCorp's 2023 Wildfire Mitigation Plan (WMP) and,
 2. Maximum wind gusts at or above the 99th percentile except 95th percentile for circuits in areas of complex fuel & terrain
- b) PacifiCorp also considers data from tools currently in testing (to be included in the 2024 WMP filing) which includes a circuit-level Probability of Failure model, Fire Potential Index, and a modified Hot-Dry-Windy Index.

OEIS Data Request 4.4

Regarding Emergency Preparedness Performance Metrics - In Table 8-35 of its WMP (page 251), PacifiCorp lists “n/a” for 2020, 2021, and 2022 for its performance metric “Percentage of Wildfire/PSPS events followed by an After-Action Review or feedback process.”

- i. Please confirm whether “n/a” is applicable here (i.e., no wildfire or Public Safety Power Shutoff (PSPS) events were followed by an After-Action Review (AAR) or other feedback process in 2020, 2021, or 2022).
- (1) If this was an error and AARs were performed following wildfire or PSPS events in 2020, 2021, and/or 2022, please provide an updated Table 8-35 with the correct information. Please also provide any AAR documentation or reports, if applicable.

Response to OEIS Data Request 4.4

- i. The table entry is incorrect due to a misinterpretation of the metrics requested. There were After-Action Review (AARs) performed with each of the two PSPS events and the 1 Public Safety Power Shutoff (PSPS) watch in 2020 and 2021. PacifiCorp has not conducted any other PSPS events. Wildfire AARs are performed following each event. Please refer to attachment OEIS 4.4 which provides the following requested documents:
 - (1) AAR CA PSPS Event 09.13.2020 Watch Event 09.17.2020.pdf
 - (2) AAR CA PSPS Watch Event Oct 2020.pdf
 - (3) AAR CA PSPS Event Aug 2021.pdf
 - (4) AAR CA McKinney and Yeti Complex Fires July 2022.pdf
 - (5) AAR CA Mill and Mountain Fires Sept 2022.pdf

The corrected Table 8.35 is provided below:

2023-WMPs/ PacifiCorp
 August 11, 2023
 OEIS-PacifiCorp-2023WMP

Performance Metrics	2020	2021	2022	2023 Projected	2024 Projected	2025 Projected	Method of Verification (e.g., third-party evaluation, QDR)
Percentage of Wildfire/PSPS events followed by an After-Action Review or feedback process	100%	100%	100%	100%	100%	100%	After Action Reports

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 4.5

Regarding Internal Exercises for Emergency Events - In Table 8-41 of its WMP (pages 263-264), PacifiCorp lists internal exercises for different types of emergency events, most of which are discussion-based.

- i. Does PacifiCorp conduct any internal exercises specific to wildfire events?
 - (1) If so, please provide these exercises, providing details for each as required by Table 8-41 (e.g., category, exercise title and type, purpose, etc.).
 - (2) If not, do PacifiCorp's internal exercises for its or "ECC" events pertain to all emergency events, including wildfire, PSPS, etc.?
- ii. Are all exercises listed in PacifiCorp's Table 8-41 hosted/conducted by PacifiCorp?
 - (1) If not, please list any exercises for which PacifiCorp participates in but does host/conduct.

Response to OEIS Data Request 4.5

- i. PacifiCorp did not include standalone wildfire exercises in the 2022 exercise series. PacifiCorp responded to and had active Emergency Coordination Center (ECCs) in several wildfire events across our service territory in 2022.
 - (1) Not applicable.
 - (2) ECC exercises include a variety of hazards impacting our service territory, including wildfires, severe storms and manmade disruptions (i.e. Cyber or physical). Based on feedback received from Office of Energy Infrastructure Safety (OEIS), PacifiCorp plans to incorporate wildfire into the severe weather exercise series in the upcoming exercise plan.
- ii. PacifiCorp conducts and hosts all exercises listed in table 8-41 Internal Drill, Simulation and Tabletop Exercise Program.
 - (1) Not applicable.

OEIS Data Request 4.6

Regarding Protocols for Emergency Communication to Stakeholder Groups - In Table 8-49 of PacifiCorp's WMP (pages 282-284), most of the "Means to Verify Message Receipt" column is filled in as "N/A".

- i. For those that are filled in as "N/A", is it a correct assumption that PacifiCorp does not have a means to verify receipt of these emergency communications?
 - (1) If this is correct, does PacifiCorp have plans to verify message receipt for these communications in the future? If so, please elaborate on these plans.
 - (2) If not a correct assumption, please provide an updated Table 8-49 with the correct information.

Response to OEIS Data Request 4.6

- i. The initial table includes all methods combined into one cell. It was not clear if rows could be further broken out as means to verify varies by type of communication method.
 - (1) Not applicable.
 - (2) Please refer to Attachment OEIS 4.6 which provides the communications methods broken out further by types of verification available.

OEIS Data Request 4.7

Regarding PacifiCorp's Planned Covered Conductor Projects - For all covered conductor projects PacifiCorp currently has planned, provide the following information via spreadsheet:

- i. Circuit or circuit segment ID
- ii. HFTD Tier (Non-HFTD, Tier 2, or Tier 3)
- iii. Associated circuit risk score
- iv. Associated circuit risk ranking
- v. Length of project in miles
- vi. Current project status (engineering, design, construction, etc.)
- vii. Expected year of completion
- viii. Initial planned year of completion, if project was delayed
- ix. Reason for project delay, if applicable (permitting, supply chain, etc.)

Response to OEIS Data Request 4.7

Please refer to Attachment OEIS 4.7.

For subparts iii and iv of Q07.a, PacifiCorp provides circuit risk scores and rankings under two distinct risk models: the Localized Risk Assessment Model (LRAM) and the Wildfire Risk Reduction Model (WRRM) described in section 6.2 of PacifiCorp's Wildfire Mitigation Plan. LRAM is included because this model was used to inform project selection and prioritization for the provided list of covered conductor projects.

The circuit risk rankings are rankings within the total number of distribution circuits within the three-state service territory of Pacific Power. The circuit risk scores are calculated averages of separate outputs from LRAM and WRRM. Due to the variation of risk scores within a particular circuit based on various factors including terrain, fuel type, and vegetation proximity, average circuit risk scores are not necessarily representative of the risk at a specific project location. For example, a circuit segment may be identified for covered conductor installation because that segment has higher risk associated with vegetation in a park compared to the portions of the circuit over pavement upstream and downstream of that segment. This may result in an overall low average circuit risk score although the risk associated with that project location is high.

Circuit risk scores and circuit risk rankings from LRAM and WRRM cannot be directly compared due to differences in source data, modeling methodology and calculations, and the recency of the input data used. PacifiCorp will replace LRAM with WRRM in 2023 for future project selection and prioritization.