

Bench Request 1

Company witness Allen L. Berreth testifies to the need for situational awareness when addressing wildfire risk. More specificity related to the data collection and analysis would be beneficial.

- (a) Do these data tools need to be built specifically for the Company or are there more “out of the box” systems available?
- (b) Has the Company priced or demoed any of the software discussed by the Company?

The Company is seeking approximately \$20 million dollars to enhance infrastructure in the Fire High Consequence Areas (FHCA):

1. How often will the Company evaluate which areas meet the criteria to be considered an FHCA?
2. Would these costs be borne by the customers within the FHCA or spread amongst the entire Washington rate base?

Response to Bench Request 1

(a) Please refer to the Company’s response below:

- **Weather Research and Forecast (WRF) model:** Yes, the PacifiCorp WRF needed to be built specifically for the Company to accomplish wildfire and forecast objectives. The WRF is a high-resolution weather and fuels prediction tool that ingests data about atmospheric and vegetation conditions across the western United States (U.S.) It provides forecast outputs and analytics for fire weather and fuels conditions. The fire weather and fuels model data feed into wildfire risk modeling and assessments that are necessary to produce an outage-potential and wildfire risk forecast. The data and model are tailored to the PacifiCorp service territory and are for infrastructure-specific risk modeling applications. These risk models identify areas where a variety of system operations and management mitigation strategies are needed to support safe system operations.
- **Wildfire Analyst Enterprise:** Yes, the Wildfire Analyst Enterprise software needed to be acquired and tailored specifically for the Company to meet operational risk identification and mitigation objectives. Wildfire Analyst Enterprise is essential to accomplish wildfire analysis and risk objectives. It provides two essential outputs necessary for wildfire risk assessments. First, it receives WRF model outputs and infrastructure asset

data that are used for wildfire risk modeling and assessments. Wildfire risk modeling informs both short-term and long-term wildfire mitigation strategies. The short-term risk outputs are used for analysis and the development of daily wildfire risk forecasts that support decision-making for safe system operating schemes. The long-term risk outputs are used to inform infrastructure-specific mitigation strategies such as system hardening. Additionally, the tool provides a real-time wildfire simulation capability that coupled with infrastructure asset data allows for incident response actions that are intended to ensure safe system operations such as protection strategies that protect the infrastructure in the presence of a rapidly spreading wildfire.

- **Weather Awareness Websites:** Yes, the weather awareness website needed to be created specifically for the Company to accomplish weather forecast and emergency operations objectives. The weather awareness websites are critical elements for operational decision-making. They are designed to incorporate PacifiCorp's WRF data and weather station data into the operational decision-making process. PacifiCorp-owned weather station climatology data coupled with operational WRF forecasts are used to inform outage potential forecasts and serve as decision-support tools during public safety power shutoff (PSPS) operations. These websites also serve as a conduit by which WRF forecast data is served to customer and industry partners which provide a direct benefit to the communities served by PacifiCorp.

(b) Please refer to the Company's responses below:

- **WRF model:** While numerical weather prediction models are publicly available, they were not purpose-built to support infrastructure-specific needs such as outage modeling that requires asset data. No publicly available wildfire risk modeling products exist that relate wildfire risk information with our infrastructure data. As a result, publicly available products are unable to assess infrastructure-specific wildfire risk metrics or modeling of risks associated with infrastructure.
- **Wildfire Analyst Enterprise:** The market currently offers wildfire risk and wildfire simulation products that provide limited value for short-term and long-term mitigation strategies. While the products generally quantify wildfire risk, they are unable to incorporate infrastructure data that is needed to for mitigation and system operations strategies.
- **Weather Awareness Websites:** There are publicly available products that provide PacifiCorp weather station data although none of the publicly available data include WRF data or weather station climatology data. As a result, no publicly available data sources can support operations decision-

UE-230172 / PacifiCorp

January 22, 2024

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making for weather-related system outage potential forecasts or for PSPS decision-making during extreme wildfire risk events.

1. PacifiCorp expects to annually evaluate which areas are in a fire hazard consequence area (FHCA) and update as appropriate.
2. Costs to evaluate FHCA are borne by all Washington customers under the appropriate rate spread in tariffs. If there are transmission costs identified as part of the FHCA evaluation, they are allocated to all states that PacifiCorp serves.

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