CalPA Data Request 13.1

2022 WMP Update submission.
On page 70 of PacifiCorp's 2022 WMP Update, PacifiCorp states that:

Once fully operational, FireCast will ingest PacifiCorp's operational WRF data, then use Technosylva's wildfire spread model to perform millions of wildfire simulations daily across the service territory over a 96-hour forecast horizon. The results of the simulations are used to calculate both territory wide and asset level wildfire risk at three-hour time intervals across the forecast period.

Regarding the quote above from page 70 of PacifiCorp's 2022 WMP:

(a) Please confirm if PacifiCorp proposes to model wildfire spread for 96 hours.

(b) Does PacifiCorp plan to use the aforementioned wildfire simulations "over a 96-hour forecast horizon" to estimate wildfire consequence (and therefore wildfire risk) for particular assets, circuit-segments, or circuits?

(c) If the answer to subpart (b) is yes, does PacifiCorp plan to use the resulting wildfire risk estimates to influence the selection and priority of system hardening projects?

(d) If the answer to subpart (b) is no, state what duration of wildfire simulation PacifiCorp plans to use to estimate wildfire consequence (and therefore wildfire risk) for particular assets, circuit-segments, or circuits.

Response to CalPA Data Request 13.1

(a) PacifiCorp runs a weather research and forecasting (WRF) model which produces a 96-hour forecast. The output from this WRF model is delivered to Technosylva to be used as the weather input for the wildfire spread model (FireCast) within Wildfire Analyst Enterprise. Each individual wildfire simulation duration is eight hours.

(b) Individual wildfire simulations are only eight hours. Wildfire simulations are initiated at three-hour intervals across a 96-hour forecast horizon.

(c) No. PacifiCorp plans to use the Wildfire Risk Reduction Model (WRRM) component of Wildfire Analyst Enterprise to influence the selection and priority of system hardening projects.

(d) PacifiCorp plans the duration of each wildfire simulation to be eight hours.

CalPA Data Request 13.2

2022 WMP Update submission.
On page 70 of PacifiCorp's 2022 WMP Update, PacifiCorp states that:

Once fully operational, FireCast will ingest PacifiCorp's operational WRF data, then use Technosylva's wildfire spread model to perform millions of wildfire simulations daily across the service territory over a 96-hour forecast horizon. The results of the simulations are used to calculate both territory wide and asset level wildfire risk at three-hour time intervals across the forecast period.

Regarding the quote above from page 70 of PacifiCorp's 2022 WMP:

(a) Please explain how PacifiCorp chose a 96-hour forecast horizon.

(b) Please provide all available analysis or data on the accuracy of Technosylva's wildfire simulations over a 96-hour duration.

Response to CalPA Data Request 13.2

(a) PacifiCorp's weather research and forecasting (WRF) domain is very large and computationally expensive. There is a significant amount of time required to run and process WRF at this scale. A 96-hour forecast horizon was determined to be the best compromise between run-time and lead-time based on our current computational capabilities. A shorter forecast horizon would be completed and available sooner, but would also provide less lead time to prepare and plan for potential extreme weather events. A longer forecast horizon would take considerably more time to complete and would already be 12 to 24 hours old by the time it was delivered. The data then still must be ingested into Wildfire Analyst Enterprise (FireCast) to run the millions of eight-hour wildfire simulations across the 96-hour forecast period.

(b) PacifiCorp does not simulate individual wildfires over a 96-hour duration. Each individual wildfire simulation duration is eight-hours. These simulations are performed at specific intervals across the 96-hour forecast period.

CalPA Data Request 13.3

> **2022 WMP Update submission.**
> On page 70 of PacifiCorp's 2022 WMP Update, PacifiCorp states that:
>
> Once fully operational, FireCast will ingest PacifiCorp's operational WRF data, then use Technosylva's wildfire spread model to perform millions of wildfire simulations daily across the service territory over a 96-hour forecast horizon. The results of the simulations are used to calculate both territory wide and asset level wildfire risk at three-hour time intervals across the forecast period.
>
> Regarding the quote above from page 70 of PacifiCorp's 2022 WMP:
>
> (a) Has PacifiCorp consulted with any other utilities on an appropriate simulation duration?
>
> (b) Please list those utilities if so.
>
> (c) Has PacifiCorp consulted with any agencies, universities, research groups, or other entities on an appropriate simulation duration?
>
> (d) Please list those organizations if so.

Response to CalPA Data Request 13.3

(a) Yes, PacifiCorp's approach is consistent with other California investor-owned utilities (IOU). Each individual wildfire simulation duration is eight-hours.

(b) San Diego Gas & Electric (SDG&E).

(c) No, PacifiCorp has not consulted with any other entities on simulation duration.

(d) Not applicable.

CalPA Data Request 13.4

> **2022 WMP Update submission.**
> On page 70 of PacifiCorp's 2022 WMP Update, PacifiCorp states that:
>
> Once fully operational, FireCast will ingest PacifiCorp's operational WRF data, then use Technosylva's wildfire spread model to perform millions of wildfire simulations daily across the service territory over a 96-hour forecast horizon. The results of the simulations are used to calculate both territory wide and asset level wildfire risk at three-hour time intervals across the forecast period.
>
> Regarding the quote above from page 70 of PacifiCorp's 2022 WMP:
>
> (a) Does PacifiCorp plan to change the simulation duration in the future?
>
> (b) Please describe your plans if so.

Response to CalPA Data Request 13.4

(a) PacifiCorp does not plan to change the simulation duration at this time.

(b) Not applicable.