

**PACIFIC GAS AND ELECTRIC COMPANY**  
**Wildfire Mitigations Plans Discovery 2026-2028**  
**Data Response**

<b>PG&amp;E Data Request No.:</b>	GPI_001-Q002Supp01
<b>PG&amp;E File Name:</b>	WMP-Discovery2026-2028_DR_GPI_001-Q002Supp01
<b>Request Date:</b>	May 9, 2025
<b>Requester DR No.:</b>	GPI-PGE-2026-2028WMP-01
<b>Requesting Party:</b>	Green Power Institute
<b>Requester:</b>	Zoe Harrold, Ph.D
<b>Date Sent:</b>	May 14, 2025 Supp01: May 20, 2025

The following questions relate to your 2026-2028 WMP submission.

WFC model questions:

**QUESTION 002**

- a. In OEIS\_001\_Q24, OEIS asked (a.iii) “How many “worst weather days” are included within the set used for WFC?” PG&E responded: “PG&E includes 571 worst weather days from March 2003 to Dec 2020.”
  - i. Of the total 571 worst weather days modeled with 24-h Technosylva fire spread simulations, how many simulations are included in the quantification of each CoRE pixel?
  - ii. If a subset of the 571 worst weather day simulations are applied in the WFC for each CoRE pixel, what is the basis for selecting whether a Technosylva worst weather day 24-h simulation is used as a WFC input to calculate CoRE for a given pixel?
- b. Confirm that the only outputs from 24-h Technosylva fire spread simulations input into the WFC to determine granular CoRE values are Flame Length and Rate of Spread. If other fire spread simulation outputs (e.g., acreage, buildings destroyed, etc.) are included in any aspect of the WFC and final CoRE valuation, please list them and describe the methods used.
- c. It is our understanding that PG&E previously calibrated Technosylva simulation Flame Length and Rate of Spread “Destructive Fire” thresholds based on 8-h simulations (PG&E 2023- 2025 WMP R5, p. 173).
  - i. Did PG&E analyze the relationship between 24-h Technosylva simulation Flame Length and Rate of Spread and its revised “Predicted Destructive Potential” binned fire classifications? If so, provide the calibration results.
- d. PG&E validates its use of 24-h versus 8-h Technosylva simulations based on the correlation between simulated historical fires versus actual acres burned (wildfire-consequence-model-documentation-v4.pdf, p. 13).
  - i. Did PG&E complete a similar assessment for simulated historical fires versus actual buildings destroyed? If so, please provide the results.

- ii. Does PG&E apply the simulated acres burned from 24-h Technosylva simulations in any of its risk quantification models?
- e. FPI outputs are an input to the WFC Model. FPI fuel data is sourced from Technosylva and is reported as being updated annually (PGE 2026-2028 MWP vol. 1, p. 470).
  - i. Please clarify if a 2030 fuels layer was used as an input to generate the backcast FPI R values that are input into the WFC for the “11 fire seasons covering 2012 through 2022 (wildfire-consequence-model-documentation-v4.pdf, p. 30).” If not, please provide the fuel data vintage(s) used in the FPI backcast for the WFC model.

#### **ANSWER 002 SUPPLEMENTAL 01**

- a.
  - i. The v4 WFC model requires all inputs for a pixel to be present to characterize expected consequence at a pixel. The temporal overlap between Technosylva simulations and the FPI model backcast data used as WFC v4 inputs spans 2012 through 2020. Therefore all “worst weather days” spanning 2012-2020, 268 days, were used.
  - ii. Please see the response to subpart (i) above. The temporal overlap between Technosylva simulations and the FPI model backcast data determined the data used.
- b. We confirm that flame length and rate of spread are the only fire simulation characteristics used as inputs to the WFC.
- c.
  - i. Yes, PG&E confirmed the same thresholds were valid for both 8 and 24 hour simulations. Because the flame length and rate of spread values used are the maximum values observed during the simulation interval, in many cases they are unchanged between 8 and 24 hour simulations. Even when the 24 hour simulation increased one or both values, the same thresholds were found necessary to achieve “full recall” of historically destructive fires.
- d.
  - i. The validation on page 13 confirms that the acres burned after 24 hours of simulation better correlate with final acres of historical fires than their 8-hour counterparts, but only after binning the data. For structures destroyed, there is poor correlation. Please note that the acres burned correlation was only clear when the results were binned and averaged. The vast majority of fires do not destroy any structures, so there are fewer fires to aggregate into bins, resulting in inherently noisier relationships. Additionally, the Technosylva wildfire simulation engine does not currently treat buildings as fuels, with structures reported based on fire footprints without accounting for the contribution of structure fire itself. However, fires with the greatest number of structures destroyed feature structure to structure spread not captured by Technosylva’s approach.

- ii. No, Technosylva simulations are only used to support wildfire risk planning models and those models do not apply the simulated acres burned from Technosylva simulations.

**ANSWER 002**

- e. Pre-fire fuels layers were used as input to generate the backcast of the FPI climatology. Specifically, a pre-fire fuels snapshot was created for years 2012-2020. A spring 2021 snapshot was used for 2021, and a spring 2022 snapshot for 2022. Pre-fire fuels layers represent the state of the fuels before being changed by wildfire.