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

PG&E Data Request No.:	OEIS_003-Q004
PG&E File Name:	WMP-Discovery2026-2028_DR_OEIS_003-Q004
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Requester DR No.:	OEIS-P-WMP_2025-PG&E-003
Requesting Party:	Office of Energy Infrastructure Safety
Requester:	Nathan Poon
Date Sent:	April 23, 2025

SUBJECT: REGARDING EFFECTIVENESS ANALYSIS

QUESTION 004

Regarding PG&E's response to TURN's Data Request 2 Question 5, Attachment 1:

a. In its response to the data request, PG&E states that "Company-initiated outages, including PSPS outages, outages of unknown cause, as well as outages on existing underground assets are not applicable to this study."
   i. Why does PG&E not include outages on existing underground assets?
   ii. 561 events are shown as "N/A" that are not under the GRC drivers of "Unknown" or "Utility Work / Operation."
      A. Are these 561 events limited to existing underground assets or PSPS outages?
      B. If not, why are these listed as "N/A" for determining effectiveness?

b. PG&E's response included a spreadsheet with a tab accounting for risk scores and associated wildfire intensity and outcome when calculating for PSPS effectiveness. Provide a detailed description of how PG&E accounts for wildfire intensity and outcome when determining the effectiveness of reducing wildfire risk for mitigations.

Answer 004

a.
   i. The purpose of the study is to analyze the effectiveness of an array of mitigations in comparison to existing bare overhead conductors within the HFTD. Replacement of existing underground assets, which are mostly located in urban settings, are not the focus of system hardening mitigations.
   ii. PG&E notes 581 outage combinations (not 561) with effectiveness values of "N/A" that are not explicitly listed as "Unknown" or "Utility Work / Operation" drivers.

A. These 581 outage combinations are categorized as follows:

(i) 221 were underground outages

(ii) 121 have insufficient information to assess mitigation effectiveness

(iii) 100 were caused by environmental/external forces of either wildfires or ice/snow storms and outage cause could not be properly associated with any specific equipment failure

(iv) 65 were substation outages

(v) 74 were caused by 3rd party/metering equipment

B. PG&E excluded these outage events from consideration in the analysis as they are not directly applicable to system hardening mitigations.

b. In determining the effectiveness of reducing wildfire risk for mitigation, PG&E accounts for wildfire intensity and outcomes by differentiating (a) the type of fire – categorized as destructive, large, or small – and (b) whether the fire would occur during Red Flag Warning (RFW) conditions. This distinction is important because both the environmental conditions and the potential severity of a fire influence the overall risk. The likelihood of a destructive fire is significantly higher under RFW conditions compared to non-RFW conditions, and the fire type further informs the expected impact.

When assessing the effectiveness of wildfire risk mitigations, especially Public Safety Power Shutoffs (PSPS), PG&E factors in this elevated risk by specifying effectiveness in reducing likelihood of ignition by different outcomes (which is combination of fire severity and RFW flag) if applicable. This allows PG&E to also account for the fact that the PSPS is not likely to be activated in non-RFW conditions by assuming zero effectiveness for those non-RFW outcomes. Also, it can account for the fact that not all RFW conditions result in a PSPS activation.

The table in "*WMP-Discovery2026-2028_DR_TURN_002-Q005Atch01.xlsx*", tab "RiskScore_Attribute", shows the assumptions used for the PSPS effectiveness by RFW condition and fire outcome (destructive, large, and small).

When determining overall effectiveness of the program, the outcome-level effectiveness is multiplied with the outcome-level risk scores over all outcomes to derive risk reduction and then the risk reduction is divided by the total risk score to derive the overall effectiveness.