PACIFIC GAS AND ELECTRIC COMPANY
10 Year Electrical Undergrounding Plan (EUP)
Data Response

PG&E Data Request No.:	OEIS_004-Q002
PG&E File Name:	EUP-PhI_DR_OEIS_004-Q002
Request Date:	October 23, 2026
Requester DR No.:	Energy Safety-DR-EUP-26-09
Requesting Party:	Office of Energy Infrastructure Safety
Requester:	Adam Berlinerman
Date Sent:	October 29, 2026
Responsible Person(s):	Justin Sadler, Andrea Brown

SUBJECT: CPUC DATA TEMPLATE, PRESENT VALUE CALCULATION, SCREEN 2 BCR INPUTS, RISK MODELING

QUESTION 002

Project Variable Modifiers (PVMs)

a. Within PG&E's EUP, the trade-off between Ignition Risk and Outage Program Risk in Core Capability 3 is described as "an 80 percent decrease in Ignition Risk and a 46 percent decrease in Ignition Likelihood associated with EPSS and PSPS."[1] However, in response to WMP-Discovery2026-2028_DR_TURN_004-Q002(b), the combined effectiveness of EPSS and PSPS is approximately 95 percent. Please explain this difference in combined effectiveness including any differences in methodologies.
   i. Provide all supporting calculations/assumptions for the combined effectiveness as reported in the EUP in Excel.

b. Explain why there is an 80 percent decrease in Ignition Risk but only a 46 percent decrease in Ignition Likelihood.
   i. Provide all supporting calculations/assumptions for the 80 percent decrease in Ignition Risk and the 46 percent decrease in Ignition Likelihood in Excel.

c. Why are identical percentage reductions (80 percent and 46 percent) applied to circuit segment ignition risk and ignition likelihood regardless of circuit segment specific risk drivers and circuit segment-specific EPSS and PSPS enablement criteria?
   i. Why not apply identical percentage reductions to risk sub-drivers and/or incorporate circuit segment specific EPSS and PSPS enablement criteria?
   ii. Why not apply identical percentage reductions to any other granularity of risk and/or likelihood?

d. Are PVMs applied at the sub-driver level of granularity for Screen 2 purposes?

---

1 Pacific Gas and Electric Company Electrical Undergrounding Plan, at pg. 313.

e. Fill in the table below with the Blended Average Mitigation Effectiveness Values similar to Table PG&E-8.2.1-3: Ignition Mitigation Effectiveness Representative Blended Average Values within the 2026-2028 PG&E WMP. If PG&E elects to report any portion of the table as "N/A" please justify in a footnote.

ANSWER 002

a. The approximately 95 percent combined effectiveness identified in PG&E's response to WMP-Discovery2026-2028_DR_TURN_004-Q002(b) and the 80 percent combined effectiveness reflected in the EUP are based on different geographic populations and associated baseline risk values. The approximately 95 percent value reflects the combined effectiveness of EPSS and PSPS in reducing scaled wildfire safety risk values for HFRA distribution tranches.

   In contrast, the 80 percent combined effectiveness for Ignition Risk and the 46 percent reduction in Ignition Likelihood reflected in the EUP are based on the unscaled wildfire risk values for HFTD and non-HFTD distribution tranches.

	Risk tranches	Scaling method	Consequence Attribute
80%	HFTD/HFRA and Non-HFTD/HFRA Distribution	Risk-neutral	Safety, Reliability, Financial
95%	HFTD/HFRA Distribution	Risk-averse	Safety

   i. Please refer to Cell L3 of the "EPSS_PSPS_effectiveness_calc" sheet in Attachment "*EUP-PhI_DR_OEIS_004-Q002Atch01.xlsx*," which provides the calculation supporting the 80 percent combined effectiveness reflected in the EUP.

b. PSPS and EPSS reduce modeled Ignition Likelihood by approximately 46 percent. However, the associated reduction in Wildfire Risk is approximately 80 percent because Wildfire Risk reflects both ignition likelihood and the potential consequences associated with an ignition. The ignition likelihood reduced through PSPS and EPSS is disproportionately associated with higher-risk fire conditions, when and where potential wildfire consequences are greater. As a result, reducing 46 percent of modeled Ignition Likelihood can produce a substantially greater reduction in modeled Wildfire Risk.

   i. Please refer to Cell E2 of the "EPSS Ignition Weighted Effect" sheet in Attachment "*EUP-PhI_DR_OEIS_004-Q002Atch02.xlsx*," which provides the calculation supporting the 46 percent combined effectiveness reflected in the EUP for Ignition Likelihood. Please refer to the response to Question a.i for the supporting documentation for the 80 percent combined effectiveness reflected in the EUP for Ignition Risk.

c. The 80 percent reduction in Ignition Risk and 46 percent reduction in Ignition Likelihood referenced in the EUP reflect the aggregate effect of EPSS and PSPS incorporated into the system-wide Wildfire Risk baseline. Accordingly, these

percentages characterize the aggregate change in the system-level baseline and do not indicate that each Circuit Segment has identical underlying risk characteristics.

As described in Attachment B, WP006, WBCA Whitepaper, the Enterprise Wildfire Bow Tie produces monetized Wildfire Risk at the system level, while WDRM v4 provides relative Wildfire Risk at the Circuit Segment level. The system-level monetized Wildfire Risk, which reflects the residual Wildfire Risk after accounting for the system-level risk reduction provided by EPSS and PSPS, is apportioned to individual Circuit Segments based on their relative WDRM v4 risk scores. Accordingly, although the effects of EPSS and PSPS are reflected at the system level, differences in the relative Wildfire Risk of individual Circuit Segments are preserved through the WDRM v4 Circuit Segment-level risk allocation.

Please refer to PG&E's EUP Attachment B, WP006, WBCA Whitepaper, for additional information regarding the calculation and allocation of Circuit Segment-level Wildfire Risk.

i. The 80 percent and 46 percent reductions are derived at the system level and therefore are applied at the same level at which the effects of EPSS and PSPS are incorporated into the Wildfire Risk baseline. Applying those system-level reductions separately to individual risk sub-drivers or Circuit Segment-specific enablement criteria would introduce a level of specificity that is not represented in the underlying system-level calculation.

   Circuit Segment-specific differences in wildfire risk are subsequently reflected through the Circuit Segment-level risk modeling and allocation described in Attachment B, WP006, WBCA Whitepaper

ii. Risk sub-drivers represent the most granular level of risk and likelihood used in this methodology. There is no intermediate level of risk between the individual sub-drivers and the aggregated Circuit Segment-level risk. Accordingly, there is no additional level of granularity at which to apply the percentage reductions.

d. Project Variable Modifier (PVM) mitigation effectiveness is aggregated to the Circuit Segment level by applying the applicable sub-driver-level mitigation effectiveness values to the corresponding sub-driver-level Ignition Likelihood. The resulting reduction in Ignition Likelihood is then aggregated across the sub-drivers and divided by the Circuit Segment's total unmitigated Ignition Likelihood to calculate a Circuit Segment-level wildfire mitigation effectiveness value. This Circuit Segment-level mitigation effectiveness value can then be applied to the applicable Circuit Segment-level risk values.

e. As discussed with Energy Safety via email, PG&E will submit a response to subpart e by November 5, 2026.