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

PG&E Data Request No.:	TURN_001-Q008
PG&E File Name:	EUP-PhI_DR_TURN_001-Q008
Request Date:	October 19, 2026
Requester DR No.:	001
Requesting Party:	The Utility Reform Network
Requester:	A Mireille Fall
Date Sent:	October 22, 2026
Responsible Person(s):	Justin Sadler

Subject: EUP-PGE

QUESTION 008

PG&E's EUP Vol. 1, p. 7 states, "PG&E identified approximately 8,800 overhead miles that are eligible for undergrounding under the EUP Guidelines, representing approximately 11,000 underground miles after applying standard engineering conversion factors. From this eligible population, PG&E developed a proposed portfolio of approximately 5,000 underground miles that reflects the scale of undergrounding necessary to deliver substantial system-level wildfire and reliability risk reduction while maintaining a practical and executable program over the ten-year planning horizon."

a. Please provide an explanation and underlying analysis in Excel that demonstrates why the 8,800 miles are eligible. Please include all supporting data, calculations, and assumptions.
    i. This should include in Excel a list of all circuit segments in WDRMv4 with associated mileage and all total risk amounts for each risk separately (wildfire risk, reliability risk, etc.), and a column indicating which are the 8,800 overhead miles.
b. In the spreadsheet provided for part (a), please indicate which were selected for the 4,000 overhead / 5,000 underground miles and explain why they were selected. Please include all relevant data for why they were selected.
c. Please provide the level of risk reduction, for each risk addressed, achieved by the 5,000 miles. Please provide all supporting workpapers, data, analysis, and assumptions in Excel.
    i. Please provide as much granularity as possible, including which circuit segments are included in the 4,000 OH miles.
d. For each risk listed, please provide the current estimate of the total risk in PG&E's service territory on an annual basis. Please include all data, assumptions, and calculations in Excel.
    i. Please provide on a scaled and unscaled basis.

ANSWER 008

Please note that all Wildfire Risk values, whether scaled or unscaled, referenced in this response and Attachment "*EUP-PhI_DR_TURN_001-Q008Atch01.xlsx*" are presented on a mitigated basis and reflect Wildfire Risk after accounting for the risk-reduction effects of existing PSPS and EPSS operational mitigations.

a. Please see the underlying analysis supporting the derivation of the approximately 8,800 overhead (OH) mile workplan in Attachment "*EUP-PhI_DR_TURN_001-Q008Atch01.xlsx*." Please note that the initial workplan was developed primarily using high-level planning assumptions and Screen 2 Benefit-Cost Ratio (BCR) data.

   The following provides a step-by-step description of the process used to develop the estimated workplan. All column references below are to Sheet "Q8.a" of Attachment "*EUP-PhI_DR_TURN_001-Q008Atch01.xlsx*":

   - Identify Circuit Segments that meet an EUP risk threshold. This determination is reflected in the column "Eligible Circuit via an EUP Threshold."
   - Identify whether each Circuit Segment is included in Progress Report 0. This is reflected in the column "Circuit Segment in Progress Report 0.
   - Estimate the mileage available for mitigation on each WDRM v4 Circuit Segment. The resulting mileage is reflected in the columns "Available HFTD/HFRA Union Length OH Primary Miles" and "Available HFTD/HFRA Union Length UG Primary Miles." These values incorporate the "Progress Report 0 Scoped UG Miles" and "Percentage of Circuit Segment Mileage Available" fields.

     PG&E also developed a high-level estimate of the mileage remaining available for mitigation on individual Circuit Segments, as reflected in the column "Percentage of Circuit Segment Mileage Available to be Mitigated." This estimate accounts for previously completed and planned mitigation work to the extent reasonably identifiable from available data. The estimate is subject to uncertainty due to factors including changes in risk model versions and differences in geographic definitions and naming conventions between models and source datasets.
   - Evaluate the Undergrounding Primary BCR relative to the Overhead Hardening BCR. For purposes of this comparison, the Overhead Hardening BCR is subject to the applicable BCR Uncertainty Factor. The resulting workplan inclusion determination is reflected in the column "For inclusion in estimate EUP Workplan," which consolidates the applicable high-level workplan inclusion criteria and returns a "Yes" or "No" for each Circuit Segment.
   - Calculate the estimated eligible OH mileage. Summing the values in "Available HFTD/HFRA Union Length OH Primary Miles" for Circuit Segments where "For inclusion in estimate EUP Workplan" equals "Yes" results in approximately 8,805 OH miles.

- Calculate the corresponding estimated UG mileage. Summing the values in “Available HFTD/HFRA Union Length UG Primary Miles” for Circuit Segments where “For inclusion in estimate EUP Workplan” equals “Yes” results in approximately 11,008 UG miles.

b. As described in PG&E’s EUP, Vol. 1, Chapter 1, Section B.1 (Achieving Substantial Risk Reduction), p. 7, the proposed 5,000 underground-mile portfolio reflects the scale of undergrounding necessary to deliver substantial system-level wildfire and reliability risk reduction while maintaining a practical and executable program over the ten-year planning horizon.

   The following provides a step-by-step description of the process used to develop the estimated 5,000 underground-mile workplan. All column references below are to Sheet “Q8.a” of Attachment “*EUP-PhI_DR_TURN_001-Q008Atch01.xlsx*”:

   - Identify Circuit Segments included in Portfolio 0. Circuit Segments included in Portfolio 0 are identified in the column “Circuit Segment in Progress Report 0,” and the associated scoped underground mileage is reflected in the column “Progress Report 0 Scoped UG Miles.” Circuit Segments included in Portfolio 0 are included in the estimated 5,000 underground-mile workplan. These projects represent approximately 162 underground miles.
   - Identify the remaining underground mileage required to develop the estimated 5,000-mile workplan. After accounting for the approximately 162 underground miles associated with Portfolio 0, approximately 4,838 additional underground miles are required to develop the estimated 5,000 underground-mile workplan.
   - Prioritize the remaining eligible Circuit Segments based on Wildfire Risk Rank. Circuit Segments included within the broader approximately 8,805 OH-mile eligible population described in response to Question 8(a) are sorted based on Wildfire Risk Rank.
   - Calculate cumulative available underground mileage. Following the Wildfire Risk Rank sorting described above, PG&E calculates the cumulative sum of the mileage reflected in the column “Available HFTD/HFRA Union Length UG Primary Miles.”
   - Identify the Circuit Segments included in the estimated 5,000 underground-mile workplan. Circuit Segments are included based on the prioritization described above until the cumulative underground mileage, inclusive of Portfolio 0, reaches approximately 5,000 underground miles.

     Please note that development of the estimated EUP workplan is performed within PG&E’s data repository system, Foundry, using Python scripts. This allows PG&E to implement the workplan logic, including the allocation of Circuit Segment mileage across plan years and, where necessary, the allocation of a portion of the final Circuit Segment required to reach the approximately 5,000 underground-mile workplan. As a result, due to limitations in replicating this allocation logic in Excel, the mileage presented in the attachment may not sum to exactly 5,000 underground miles or the

corresponding approximately 4,000 overhead miles. These differences reflect the allocation of partial Circuit Segment mileage within the Foundry-based workplan logic and do not represent a difference in the estimated EUP workplan mileage. Additionally, the estimated EUP workplan is subject to change as projects progress through the Project Acceptance Framework, including Screen 3 project scoping, and as additional project-specific information becomes available. Accordingly, the specific Circuit Segments, mileage, and associated risk reflected in the estimated workplan may change over time.

c. Please refer to Sheet "Q8.c" of Attachment "*EUP-PhI_DR_TURN_001-Q008Atch01.xlsx*" for a summary of the estimated risk addressed by the 5,000 underground-mile EUP workplan. The values presented are estimates based primarily on high-level Circuit Segment eligibility criteria and Screen 2 Benefit-Cost Ratio (BCR) information. The specific projects included in the estimated workplan, and therefore the associated risk addressed, may change as projects undergo further evaluation and scoping in Screen 3 of the Project Acceptance Framework.

    i. Please see Attachment "*EUP-PhI_DR_TURN_001-Q008Atch01.xlsx*," Sheet "Q8.a." Filtering Column K to "Yes" shows the circuit segments included in the 4,000 overhead miles. Additional columns in that sheet provide segment-level detail.

d. Please refer to Sheet "Q8.d.i" of Attachment "*EUP-PhI_DR_TURN_001-Q008Atch01.xlsx*" for a summary of PG&E's estimated systemwide scaled and unscaled risks, expressed in 2028 dollars ($M). The following risk values are provided:

    i. Unscaled Overall Utility Risk (2028 $M)

    ii. Unscaled Wildfire Risk mitigated by PSPS and EPSS (2028 $M)

    iii. Unscaled PSPS Risk (2028 $M)

    iv. Unscaled EPSS Risk (2028 $M)

    v. Scaled Overall Utility Risk (2028 $M)

    vi. Scaled Wildfire Risk mitigated by PSPS and EPSS (2028 $M)

    vii. Scaled PSPS Risk (2028 $M)