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|----|------|-----|----------|----|-----|--------------|---|------------------|----------|-----------|-----------|---|---|----|---|--|---------|
| 6 | TURN | 002 | TURN_002 | 6N | Yes | TURN_002_06N | <p>Section 6.1.3.2, page 134, states: "Overhead system hardening combined with operations mitigations (EPSS and PPSs) has a high-risk reduction benefit that is roughly comparable to that of undergrounding without these operational mitigations. PG&E continues to prefer undergrounding as high-risk circuits where feasible for several reasons. Undergrounding is permanent risk reduction that does not have the repeatability impacts from PPSs and EPSS. Underground facilities are less likely to be damaged during severe storms by high winds and vegetation falling on lines damaging the facilities or other contact with the lines from third parties. Over time, undergrounding also has lower operations and maintenance expenses."</p> <p>a. Please provide any studies or reports in PG&E's possession that compare the long-term or life cycle costs of undergrounding with the costs of overhead hardening combined with EPSS and PPSs.</p> <p>b. Please provide any studies or reports in PG&E's possession that compare the long-term or life cycle costs of undergrounding with the costs of overhead hardening combined with EPSS, PPSs, and remote grids to reduce the reliability impacts of EPSS and PPSs.</p> <p>c. Please provide any studies or reports in PG&E's possession that compare the operations and maintenance expenses of undergrounding with overhead hardening.</p> <p>d. Please provide any studies or reports in PG&E's possession that compare the operations and maintenance expenses of undergrounding with overhead hardening combined with EPSS and PPSs.</p> <p>e. Please provide any studies or reports in PG&E's possession that compare the reliability (e.g., SAIDI, SAIFI, CAIDI, etc.) of undergrounded vs. overhead hardened facilities.</p> <p>f. Please provide any studies or reports in PG&E's possession that compare the reliability (e.g., SAIDI, SAIFI, CAIDI, etc.) of undergrounded vs. overhead hardened facilities – not including the reliability impacts of EPSS and EPSS.</p> | A Milea Fall-Fry | 4/7/2025 | 4/14/2025 | 4/14/2025 | https://www.pge.com/assets/docs/turnlogs_and_safety/mileage-removal-data-and-safety/mileage-removal-data-and-safety/PG&E_PSS_Pool-Level_Report.pdf | 0 | No | 6 | Wildfire Mitigation Strategy Development | 6.1.3.2 |
| 7 | TURN | 002 | TURN_002 | 7 | No | TURN_002_07 | <p>The microgrid discussed in 8.2.7 are said to not impact reliability because they are not dependent on upstream lines. Do they have upstream lines in areas where they have been installed and can they be deployed in conjunction with other hardening mitigations to minimize reliability concerns?</p> | A Milea Fall-Fry | 4/7/2025 | 4/10/2025 | 4/10/2025 | https://www.pge.com/assets/docs/turnlogs_and_safety/mileage-removal-data-and-safety/mileage-removal-data-and-safety/PG&E_PSS_Pool-Level_Report.pdf | 0 | No | 8 | Grid Design, Operations, and Maintenance | 8.2.7 |
| 8 | TURN | 002 | TURN_002 | 8 | No | TURN_002_08 | <p>Section 7, page 170, states that "During the July 2, 2024 (L) PPS event, we were able to reduce the event duration for some customers by temporarily re-energizing a line that serves a portion of the impacted customers." and "help us meet temporary re-energization during future PPS events where conditions allow." What conditions are necessary to replicate partial or temporary re-energization during PPS events?</p> | A Milea Fall-Fry | 4/7/2025 | 4/10/2025 | 4/10/2025 | https://www.pge.com/assets/docs/turnlogs_and_safety/mileage-removal-data-and-safety/mileage-removal-data-and-safety/PG&E_PSS_Pool-Level_Report.pdf | 0 | No | 7 | Public Safety Power Shutoff | 7 |
| 9 | TURN | 002 | TURN_002 | 9 | No | TURN_002_09 | <p>Phase 8B in the values in the following table (all units are miles):</p> | A Milea Fall-Fry | 4/7/2025 | 4/10/2025 | 4/10/2025 | https://www.pge.com/assets/docs/turnlogs_and_safety/mileage-removal-data-and-safety/mileage-removal-data-and-safety/PG&E_PSS_Pool-Level_Report.pdf | 1 | No | 8 | Grid Design, Operations, and Maintenance | 8.2.2 |
| 10 | TURN | 002 | TURN_002 | 10 | No | TURN_002_010 | <p>Please provide a narrative explanation of the decision tree shown in Figure 8.2.1-2, including any criteria that PG&E intends to use to determine if conditions in the decision tree are met.</p> <p>a. Figure 8.2.1-2 appears to indicate that UG is preferred when CBR is 1 and within 0.5% of the CH or EPSS CBR and UG is 10% or less. Please explain the basis for the figure of 50%.</p> <p>b. If it appears that the decision tree begins with UG as the default option and only moves to alternatives when certain criteria are not met, why doesn't PG&E begin with the more cost-effective "hybrid approach and move to UG when absolutely necessary?"</p> <p>c. Please identify and explain each and every criterion that is considered in determining "Are there Emissions/Significant concerns associated with PPS load?" Please provide a narrative explanation of the types of concerns and how they impact risk.</p> <p>d. Please provide a narrative explanation of the PPS program and the effect on CPZ.</p> <p>e. At any point in the decision tree, are the hybrid project CBRs recalculated based on different permutations/combinations?</p> | A Milea Fall-Fry | 4/7/2025 | 4/10/2025 | 4/10/2025 | https://www.pge.com/assets/docs/turnlogs_and_safety/mileage-removal-data-and-safety/mileage-removal-data-and-safety/PG&E_PSS_Pool-Level_Report.pdf | 0 | No | 8 | Grid Design, Operations, and Maintenance | 8.2.1-2 |
| 11 | OES | 001 | OES_001 | 1 | No | OES_001_01 | <p>Regarding Vegetation Management QA and QC Data</p> <p>On page 410 of its 2026-2028 WMP, PG&E lists "Inspection" as the "Population Size/Sample Unit" for VM-08D, VM-22T, and VM-22T. However, in the "Sample Size" column, PG&E uses a different unit, listing the number of miles (VM-08D, VM-22T, and VM-22T) and square miles (VM-22D). That is all well and good.</p> <p>a. Define what constitutes an "Inspection unit."</p> <p>b. Clearly whether PG&E is actually at work performed and not performed along the length of the sample "inspection, or diverse documented" "inspection" within those parameters.</p> <p>c. If PG&E audits diverse inspections rather than the entire length of a segment, reproduce Table 9-4 "Vegetation Management QA and QC Activity" with an estimated total number of inspections it could potentially audit under the 2026, 2027, and 2028 "Population Size" columns.</p> <p>d. As an estimated number of inspections PG&E plans to audit under the 2026, 2027, and 2028 "Sample Size" columns.</p> <p>e. For VM-22T units, PG&E lists "Inspection Size" column, "Sample Size," and "Inspection" in the "Population/Sample Unit." Check the unit used for VM-22T.</p> <p>Regarding Vegetation Management QA and QC Outside the HFTD</p> <p>On page 410 of its 2026-2028 WMP, PG&E specifies that 100% of QA/QC samples are from locations within the HFTD.</p> <p>a. Does PG&E perform QA/QC in its HFTD?</p> <p>b. If yes, describe its QA/QC program in its HFTD.</p> <p>c. If yes, why does it not extend to QA/QC program to its HFTD?</p> <p>d. Does PG&E perform QA/QC in non-HFTD areas?</p> <p>e. If yes, describe its QA/QC program in non-HFTD areas.</p> <p>f. If yes, why does it not extend to QA/QC program to its non-HFTD areas?</p> | Nathan Poon | 4/8/2025 | 4/11/2025 | 4/11/2025 | https://www.pge.com/assets/docs/turnlogs_and_safety/mileage-removal-data-and-safety/mileage-removal-data-and-safety/PG&E_PSS_Pool-Level_Report.pdf | 0 | No | 9 | Vegetation Management & Inspections | 9.11 |
| 12 | OES | 001 | OES_001 | 2 | No | OES_001_02 | <p>a. Yes, QC and QA will perform assessments in HFTD.</p> <p>b. PG&E QA/QC will be conducted for all HFTD areas.</p> <p>c. Yes, QC and QA will perform assessments in both HFTD and non-HFTD areas.</p> <p>d. PG&E QA/QC will be conducted for all HFTD and non-HFTD areas.</p> <p>e. NA.</p> | Nathan Poon | 4/8/2025 | 4/11/2025 | 4/11/2025 | https://www.pge.com/assets/docs/turnlogs_and_safety/mileage-removal-data-and-safety/mileage-removal-data-and-safety/PG&E_PSS_Pool-Level_Report.pdf | 0 | No | 9 | Vegetation Management & Inspections | 9.11 |

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| 36 | OEIS | 001 | OEIS_001 | 26 | No | OEIS_001_026 | <p>Regarding Community Vulnerability</p> <p>In its 2023-2028 Base WMP (BW), PG&E provides the following key milestones as part of its risk assessment improvement plan in Table 4.7 on page 221: "By the end of 2023, evaluate an approach to incorporate community vulnerability attributes (AFN, Economic disadvantaged zones, Critical Facilities) into the WFC Model."</p> <p>a. What were PG&E's results of this evaluation?</p> <p>b. PG&E discusses inclusion of vulnerable customer populations as part of its PSPS risk components (page 6 of the 2023-2028 Base WMP) and through the critical customer weightings (Table PG&E-5.2.3.3, page 69) of the 2023-2028 Base WMP. Describe how these relate to the evaluation discussed in the key milestone identified in the 2023-2028 Base WMP.</p> <p>c. PG&E states that public agency impact considers vulnerability on page 67 of the 2023-2028 Base WMP. Describe how this relates to the evaluation discussed in the key milestone identified in the 2023-2028 Base WMP.</p> <p>d. Provide a description of how PG&E integrated community vulnerability considerations into its wildfire and PSPS consequence models?</p> <p>e. If PG&E is still undergoing this evaluation, what is PG&E's timeline for integration into future models?</p> | As a result of this evaluation, PG&E incorporated census data of age as a proxy for AFN as one measure of community vulnerability in the sparse component of its WFC consequence model v4. | Nathan Poon | 4/8/2025 | 4/16/2025 | 4/16/2025 | https://www.pge.com/assets/pge/docs/Outage-logs-and-logs/2023-2028-001_026.pdf | 0 | No | 11 | Emergency Preparedness, Collaboration, and Public Awareness | 11.3.2113.3 |
| 37 | OEIS | 001 | OEIS_001 | 27 | No | OEIS_001_027 | <p>Regarding Independent Review</p> <p>a. Provide a copy of the E3 Review of PG&E's Wildfire Risk Model Version 4, as referenced on page 105 of the 2023-2028 Base WMP.</p> <p>b. Provide PG&E's plan and timeline to address the two areas for improvement listed on page 105 from that report.</p> | a. Please see "WMP-Discovery2023-2028_DR_MGPA_002-000740c01.pdf" for the E3 review of PG&E's Wildfire Risk Model Version 4. | Nathan Poon | 4/8/2025 | 4/16/2025 | 4/16/2025 | https://www.pge.com/assets/pge/docs/Outage-logs-and-logs/2023-2028-001_027.pdf | 1 | No | 5 | Risk Methodology & Assessment | 5.6.16.6.2 |
| 38 | OEIS | 001 | OEIS_001 | 28 | No | OEIS_001_028 | <p>Regarding PG&E's Wildfire Transmission Risk Model (WTRM)</p> <p>a. In Table 5-1: Risk Modeling Assumptions and Limitations, page 79 of the 2023-2028 Base WMP, PG&E states that it identified 47 components divided into five asset groups.</p> <p>b. Provide a list of these 47 components and associated asset groupings for each component.</p> <p>c. Figure PG&E-5.3.3: Wildfire Transmission Risk Analysis Framework only shows eight probability models relating to assets. How do these eight models relate to the nine asset groups?</p> <p>d. What asset types, if any, are not captured through this analysis and grouping? How is PG&E working to evaluate the risk associated with these other asset types?</p> | 1. The table below lists the 47 components and associated asset group: "Component" refers to the individual component whose failure could result in an ignition, and "Group" is the component grouping for the TCM. There are 5 component groupings: (1) conductors, (2) transformers, (3) non-vital structures (NVS), (4) vital structures (VS), (5) foundations, (6) switches, (7) above ground hardware (AGH), (8) below ground hardware (BGH), and (9) splices. The north asset group that is missing from Figure 5.3.3 is the switches. A deterministic approach was chosen for the transmission switch asset group rather than probabilistic modeling through the WTRM. The deterministic model allows asset data (age, manufacturer, type, location, etc.) to be used to make recommendations, industry best practices and inspection results to prioritize controls and mitigation. This approach is typically considered for components with small populations or limited deployment, which applies to transmission switches (approximately 2,000 installed in the system). In individual components whose failure could result in an ignition are captured in the analysis and grouping. Risk associated with switches are evaluated as described in the switches AGH table. | Nathan Poon | 4/8/2025 | 4/16/2025 | 4/16/2025 | https://www.pge.com/assets/pge/docs/Outage-logs-and-logs/2023-2028-001_028.pdf | 0 | No | 5 | Risk Methodology & Assessment | 5.25.5 |
| 39 | MGRA | 002 | MGRA_002 | 1 | No | MGRA_002_01 | Weather station metadata valid as of Q4 of 2024. | In response to this request, PG&E is providing the Weather Station Feature Class as delivered in the Q4 2024 OEIS GIS Data Standard Submission. Please see the file "WMP-Discovery2023-2028_DR_MGPA_002-00045001001.xlsx". | Joseph Mitchell | 4/11/2025 | 4/16/2025 | 4/16/2025 | https://www.pge.com/assets/pge/docs/Outage-logs-and-logs/2023-2028-002_001.xlsx | 1 | No | NA | GIS | NA |
| 39 | MGRA | 002 | MGRA_002 | 104 | Yes | MGRA_002_0104 | Weather station metadata valid as of Q4 of 2024. | Please see "WMP-Discovery2023-2028_DR_MGPA_002-00045001001.xlsx" in which PG&E has included requested lat/long information. | Joseph Mitchell | 4/11/2025 | 4/16/2025 | 4/16/2025 | https://www.pge.com/assets/pge/docs/Outage-logs-and-logs/2023-2028-002_001.xlsx | 1 | No | NA | GIS | NA |
| 40 | MGRA | 002 | MGRA_002 | 2 | No | MGRA_002_02 | PSPS event damage event reports obtained from post-event patrols, including causes for all quarters of 2024. | In response to this request, PG&E is providing non-confidential data for the PSPS Event Damage Feature Classes, as delivered in 2024. Please note that PG&E did not have PSPS events during each quarter nor is every table applicable for relevant damages. For example, there were no support structure or other asset damages, so there are no data to report in the PspEventSupportStructureDamageDetail or PspEventOtherAssetDamageDetail to report. Attached, please see the responsive files and associated explanations for when PG&E had relevant data to report each quarter for 2024. | Joseph Mitchell | 4/11/2025 | 4/16/2025 | 4/16/2025 | https://www.pge.com/assets/pge/docs/Outage-logs-and-logs/2023-2028-002_002.xlsx | 2 | No | NA | GIS | NA |
| 40 | MGRA | 002 | MGRA_002 | 204 | Yes | MGRA_002_0204 | PSPS event damage event reports obtained from post-event patrols, including causes for all quarters of 2024. | a. PG&E only provided data in the Feature Class for Q4 2024. b. PG&E only provided data in the Feature Class for Q4 2024. c. PG&E only provided data in the Feature Class for Q4 2024. Please see the attachments listed below in which PG&E has included the requested lat/long information. Please note that a third file responsive to this question was inadvertently omitted from our initial response and is included here: - "WMP-Discovery2023-2028_DR_MGPA_002-00045001001.xlsx" - "WMP-Discovery2023-2028_DR_MGPA_002-00045001001.xlsx" - "WMP-Discovery2023-2028_DR_MGPA_002-00045001001.xlsx" | Joseph Mitchell | 4/11/2025 | 4/16/2025 | 4/16/2025 | https://www.pge.com/assets/pge/docs/Outage-logs-and-logs/2023-2028-002_002.xlsx | 3 | No | NA | GIS | NA |
| 41 | MGRA | 002 | MGRA_002 | 3 | No | MGRA_002_03 | Unlabeled outage data, including cause for all four quarters of 2023 and 2024. a. If possible, should include whether the outage occurred on a covered conductor segment. | In response to this request, PG&E is providing non-confidential data for the Unlabeled Outage Feature Class for all 4 quarters requested from 2023 and 2024, as delivered in the OEIS GIS Data Standard Submissions for each quarter. Please see "WMP-Discovery2023-2028_DR_MGPA_002-00045001001.xlsx". | Joseph Mitchell | 4/11/2025 | 4/16/2025 | 4/16/2025 | https://www.pge.com/assets/pge/docs/Outage-logs-and-logs/2023-2028-002_003.xlsx | 1 | No | NA | GIS | NA |
| 41 | MGRA | 002 | MGRA_002 | 304 | Yes | MGRA_002_0304 | Unlabeled outage data, including cause for all four quarters of 2023 and 2024. a. If possible, should include whether the outage occurred on a covered conductor segment. | Please see "WMP-Discovery2023-2028_DR_MGPA_002-00045001001.xlsx", in which PG&E has included the requested lat/long information. | Joseph Mitchell | 4/11/2025 | 4/16/2025 | 4/16/2025 | https://www.pge.com/assets/pge/docs/Outage-logs-and-logs/2023-2028-002_003.xlsx | 1 | No | NA | GIS | NA |
| 42 | MGRA | 002 | MGRA_002 | 4 | No | MGRA_002_04 | Wire down data for all four quarters of 2023 and 2024. Include cause and any associated outage identifier. a. If possible, should include whether the outage occurred on a covered conductor segment. | In response to this request, PG&E is providing non-confidential data for the Wire Down Feature Class, as delivered in the 8 quarters requested in 2023 and 2024. Please see the file "WMP-Discovery2023-2028_DR_MGPA_002-00045001001.xlsx". | Joseph Mitchell | 4/11/2025 | 4/16/2025 | 4/16/2025 | https://www.pge.com/assets/pge/docs/Outage-logs-and-logs/2023-2028-002_004.xlsx | 1 | No | NA | GIS | NA |
| 42 | MGRA | 002 | MGRA_002 | 404 | Yes | MGRA_002_0404 | Wire down data for all four quarters of 2023 and 2024. Include cause and any associated outage identifier. a. If possible, should include whether the outage occurred on a covered conductor segment. | a. The provided Feature Classes are not structured to include data on covered conductor segmentation, and thus PG&E is presently unable to provide this requested data. When the non-confidential GIS data are created, as requested by MGRA in MGRA-PGE-WMPSPS_DataRequest1, MGRA will be able to identify the classifications and make spatial inferences through the Primary Distribution Line feature class. | Joseph Mitchell | 4/11/2025 | 4/16/2025 | 4/16/2025 | https://www.pge.com/assets/pge/docs/Outage-logs-and-logs/2023-2028-002_004.xlsx | 1 | No | NA | GIS | NA |
| 42 | MGRA | 002 | MGRA_002 | 5 | No | MGRA_002_05 | Ignition data for all four quarters of 2023 and 2024. a. Should include cause and any associated outage identifier. b. If possible, should include whether the ignition occurred on a covered conductor segment. | Please see "WMP-Discovery2023-2028_DR_MGPA_002-00045001001.xlsx", in which PG&E has included the requested lat/long information. | Joseph Mitchell | 4/11/2025 | 4/16/2025 | 4/16/2025 | https://www.pge.com/assets/pge/docs/Outage-logs-and-logs/2023-2028-002_005.xlsx | 1 | No | NA | GIS | NA |
| 43 | MGRA | 002 | MGRA_002 | 504 | Yes | MGRA_002_0504 | Ignition data for all four quarters of 2023 and 2024. a. Should include cause and any associated outage identifier. b. If possible, should include whether the ignition occurred on a covered conductor segment. | In response to this request, PG&E is providing non-confidential data for the Ignition Feature Class, as delivered in the 8 quarters requested in 2023 and 2024. Please see the file "WMP-Discovery2023-2028_DR_MGPA_002-00045001001.xlsx". | Joseph Mitchell | 4/11/2025 | 4/16/2025 | 4/16/2025 | https://www.pge.com/assets/pge/docs/Outage-logs-and-logs/2023-2028-002_005.xlsx | 1 | No | NA | GIS | NA |
| 44 | MGRA | 003 | MGRA_003 | 1 | No | MGRA_003_01 | <p>Please provide an excel spreadsheet table that provides for 2021, 2022, 2023, and 2024:</p> <p>a. Number of miles of fully covered conductor circuit segments in the HFTD-HFRA.</p> <p>b. Number of miles of fully "bare wire" conductor circuit segments in the HFTD-HFRA.</p> <p>c. Number of miles down associated with a covered conductor circuit segment in the HFTD-HFRA.</p> <p>d. Number of miles down associated with a "bare wire" conductor circuit segments in the HFTD-HFRA.</p> <p>e. Number of miles down associated with a "bare wire" conductor circuit segments in the HFTD-HFRA.</p> <p>f. Number of miles down associated with a "bare wire" conductor circuit segments in the HFTD-HFRA.</p> <p>g. For ignitions on partially covered circuit segments in the HFTD-HFRA, or "bare wire" system with uncertain origins, sum these into the "fully covered" or "bare wire" groups based on the most prevalent circuit configuration in the area of ignition.</p> <p>h. Number of outages attributable to infrastructure on fully "bare wire" conductor circuit segments in the HFTD-HFRA.</p> <p>i. Number of outages attributable to infrastructure on fully covered conductor circuit segments in the HFTD-HFRA.</p> <p>j. For outages on partially covered circuit segments in the HFTD-HFRA, or outages with uncertain locations, sum these into the "fully covered" or "bare wire" groups based on the most prevalent circuit configuration in the area of the outage.</p> | a. Please see "WMP-Discovery2023-2028_DR_MGPA_003-00010001001.xlsx". Please note that the data provided reflects asset data as included in our Q4 spatial data deliveries to the Office of Energy Safety for each of 2021-2024. Please note that PG&E has applied HFTD and HFRA filters based on current, not historical, definitions of HFTD and HFRA. | Joseph Mitchell | 4/11/2025 | 4/16/2025 | 4/16/2025 | https://www.pge.com/assets/pge/docs/Outage-logs-and-logs/2023-2028-003_001.xlsx | 1 | No | 8 | Grid Design, Operations, and Maintenance | 8.4.48.2.10 |

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| 44 | MGRA | 003 | MGRA_003 | 10a | Yes | MGRA_003_010a | <p>Please provide an excel spreadsheet table that provides for 2021, 2022, 2023, and 2024</p> <p>a. Number of miles of fully covered conductor circuit segments in the HFTD-HFRA.</p> <p>b. Number of miles of fully "bare wire" conductor circuit segments in the HFTD-HFRA.</p> <p>c. Number of wires down from associated with a covered conductor circuit segment in the HFTD-HFRA.</p> <p>d. Number of wires down associated with a "bare wire" conductor circuit segments in the HFTD-HFRA.</p> <p>e. Number reportable ignitions for fully covered conductor circuit segments in the HFTD-HFRA.</p> <p>f. For ignitions on partially covered circuit segments in the HFTD-HFRA, or ignitions with uncertain origin, sum these into the "Fully covered" or "Bare wire" groups based on the most prevalent circuit configuration in the area of ignition.</p> <p>g. Number of outages attributable to infrastructure on fully "bare wire" conductor circuit segments in the HFTD-HFRA.</p> <p>h. For outages on partially covered circuit segments in the HFTD-HFRA, or outages with uncertain locations, sum these into the "Fully covered" or "Bare wire" groups based on the most prevalent circuit configuration in the area of the outage.</p> | Joseph Mitchell | 4/1/2025 | 4/23/2025 | 4/23/2025 | https://www.pge.com/assets/docs/003/Outage-Data-2021-2024-MGRA_003.xlsx | 1 | No | 8 | Grid Design, Operations, and Maintenance | 8.4.4.2.10 |
| 45 | MGRA | 003 | MGRA_003 | 2 | No | MGRA_003_02 | <p>Some of the risk drivers in Table 5.1 (p. 20-21) show wind as a Climatological risk factor. Please provide a historical assessment of the wind for the following Risk Sub-Drivers. Also provide data supporting this assessment:</p> <p>a. Catenary Risk</p> <p>b. Fuse</p> <p>c. Lightning Arrestor</p> <p>d. Transformer</p> <p>e. Radiation</p> <p>f. Contamination</p> | Joseph Mitchell | 4/1/2025 | 4/16/2025 | 4/16/2025 | https://www.pge.com/assets/docs/003/Outage-Data-2021-2024-MGRA_003.xlsx | 0 | No | 3 | Overview of WMP | 3.4 |
| 46 | MGRA | 003 | MGRA_003 | 3 | No | MGRA_003_03 | <p>On 24, PG&E states that "These exceptional temperatures, in turn, impact the relative humidity of the atmosphere, increasing the occurrence of vapor pressure deficit that is also linked to more severe fires. These conditions also pose a health risk to vegetation, increasing the potential for forest or tree failures impacting our assets and creating potential sources of wildfire ignition."</p> <p>a. What evidence does PG&E have that demonstrates how drought conditions relate to forest and tree failures?</p> <p>b. How PG&E analyzed the relationship between drought variables and vegetation outage rates? If so please provide the results.</p> <p>c. If it has not done so, is it planning to do so and what would be the timeline? If it is not planning to do so what is the justification?</p> | Joseph Mitchell | 4/1/2025 | 4/22/2025 | 4/22/2025 | https://www.pge.com/assets/docs/003/Outage-Data-2021-2024-MGRA_003.xlsx | 0 | No | 9 | Vegetation Management & Inspections | 9.9 |
| 47 | MGRA | 003 | MGRA_003 | 4 | No | MGRA_003_04 | <p>Provide technical description and available documentation for the Suppression Access model used in the WFCM Consequence model, along with data and analysis used to support the Suppression Access model.</p> | Joseph Mitchell | 4/1/2025 | 4/22/2025 | 4/22/2025 | https://www.pge.com/assets/docs/003/Outage-Data-2021-2024-MGRA_003.xlsx | 0 | No | 5 | Risk Methodology & Assessment | 5.4 |
| 48 | MGRA | 003 | MGRA_003 | 5 | No | MGRA_003_05 | <p>Provide technical description and available documentation for the Public Egress model used in the WFCM Consequence model, along with data and analysis used to support the Public Egress model.</p> | Joseph Mitchell | 4/1/2025 | 4/22/2025 | 4/22/2025 | https://www.pge.com/assets/docs/003/Outage-Data-2021-2024-MGRA_003.xlsx | 0 | No | 5 | Risk Methodology & Assessment | 5.4 |
| 49 | MGRA | 003 | MGRA_003 | 6 | No | MGRA_003_06 | <p>Regarding the WDRM v4 ignition probability model:</p> <p>a. Are the covariates calculated for each geographic location in the machine learning models such as Random Forest calculated as one value per geographic location? Or are they calculated per year?</p> <p>b. Please provide tabular data supporting each of the "Feature Importance" figures in the Distribution Event Probability Model v4 documentation.</p> <p>c. If there is a single value for feature/importance at each location, or if there are calculated on a coarse time scale (annually), then please provide GIS data for the following feature/importance for the HFTD-HFRA areas of the PG&E service area:</p> <p>(i) Average wildfire season daily max windspeed</p> <p>(ii) Percent difference from average wildfire season daily max windspeed</p> <p>(iii) Average wildfire season relative humidity</p> <p>(iv) Average wildfire season vapor pressure deficit</p> <p>(v) Percent daily summer day</p> | Joseph Mitchell | 4/1/2025 | 5/5/2025 | 5/5/2025 | https://www.pge.com/assets/docs/003/Outage-Data-2021-2024-MGRA_003.xlsx | 1 | No | 5 | Risk Methodology & Assessment | 5.4 |
| 49 | MGRA | 003 | MGRA_003 | 6(a) | Yes | MGRA_003_06(a) | <p>Regarding the WDRM v4 ignition probability model:</p> <p>a. Are the covariates calculated for each geographic location in the machine learning models such as Random Forest calculated as one value per geographic location? Or are they calculated per year?</p> <p>b. Please provide tabular data supporting each of the "Feature Importance" figures in the Distribution Event Probability Model v4 documentation.</p> <p>c. If there is a single value for feature/importance at each location, or if there are calculated on a coarse time scale (annually), then please provide GIS data for the following feature/importance for the HFTD-HFRA areas of the PG&E service area:</p> <p>(i) Average wildfire season daily max windspeed</p> <p>(ii) Percent difference from average wildfire season daily max windspeed</p> <p>(iii) Average wildfire season relative humidity</p> <p>(iv) Average wildfire season vapor pressure deficit</p> <p>(v) Percent daily summer day</p> | Joseph Mitchell | 4/1/2025 | 5/5/2025 | 5/5/2025 | https://www.pge.com/assets/docs/003/Outage-Data-2021-2024-MGRA_003.xlsx | 3 | No | 5 | Risk Methodology & Assessment | 5.4 |
| 50 | MGRA | 003 | MGRA_003 | 7 | No | MGRA_003_07 | <p>Regarding Figure 6-AE-1.3.2-1 (2024 Year Baseline) representing system-wide wildfire risk, do the values shown in the figure include PG&E's risk scoring function?</p> <p>a. If the answer is "yes," please provide a figure showing the same values without the scoring function to control for any effects.</p> | Joseph Mitchell | 4/1/2025 | 4/22/2025 | 4/22/2025 | https://www.pge.com/assets/docs/003/Outage-Data-2021-2024-MGRA_003.xlsx | 0 | No | 6 | Wildfire Mitigation Strategy Development | 6.1.3.2 |
| 51 | MGRA | 003 | MGRA_003 | 8 | No | MGRA_003_08 | <p>Figure 6-1 (p. 140) shows PG&E's functional risk reduction on a yearly basis from 2013 to 2023. Using available data and methodology, please provide an equivalent risk reduction curve showing the functional change of PG&E's overall service territory wildfire risk between 2017 and 2024.</p> | Joseph Mitchell | 4/1/2025 | 4/22/2025 | 4/22/2025 | https://www.pge.com/assets/docs/003/Outage-Data-2021-2024-MGRA_003.xlsx | 0 | No | 6 | Wildfire Mitigation Strategy Development | 6.1.3.2 |
| 52 | MGRA | 003 | MGRA_003 | 9 | No | MGRA_003_09 | <p>Advanced Technologies</p> <p>PG&E states that "In 2023, there were observed ignitions that occurred during EPSS protection that were lower than the detectable thresholds of DCO. It was identified that a lower SOF pickup could have interrupted the events sooner, potentially preventing the ignition (DCO not present). In 2024, we revised SOF trip floor settings (pickup for in-service reenergizing) planned for increased detection of high-impedance faults to 5 ampere/fault within 5 seconds."</p> <p>a. Assuming that these ignitions are listed in the GIS and tabular data provided by MGRA by PG&E, indicate which of these ignitions were the high impedance faults that could potentially be detected by these trip settings.</p> <p>b. What is the estimated increase in outage rate that would be caused by lowering the SOF trip floor settings to 5 ampere within 5 seconds?</p> | Joseph Mitchell | 4/1/2025 | 4/16/2025 | 4/16/2025 | https://www.pge.com/assets/docs/003/Outage-Data-2021-2024-MGRA_003.xlsx | 0 | No | AO PG&E-25U-08 | Evaluation and Reporting of Safety Impacts Resulting to EPSS | AO PG&E-25U-08 |

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|----|------|-----|----------|----|----|--------------|--|-------------|-----------|-----------|-----------|---|---|----|----------------|---|----------------|
| 59 | OEIS | 002 | OEIS_002 | 5 | No | OEIS_002_05 | <p>Regarding distribution detailed aerial and ground inspections</p> <p>On page 226 of VMAP, PG&E sets a target of 22,000 distribution detailed inspections per year for 2026-2028. The target states the inspections can be either ground or aerial, separate targets are not provided for detailed aerial or detailed ground inspections.</p> <p>Provide the following information related to scheduling detailed aerial and ground inspections:</p> <ol style="list-style-type: none">1. Does PG&E have controls in place to avoid an asset being only subject to one variety of detailed inspection for extended periods of time? (i.e., an asset in an area of extreme consequence and extreme wildfire risk only receiving detailed aerial inspections for 10 years). Provide PG&E's reasoning for its chosen approach.2. Some hazardous conditions may be less likely identified via ground inspections while others may be less likely identified via aerial inspections.3. Provide a list of conditions that PG&E has recognized as being more likely identified via aerial inspections and less likely identified via ground inspections. Provide a brief explanation for each condition.4. A PG&E has not recognized any such conditions, briefly discuss its reasoning. | Nathan Poon | 4/11/2025 | 4/16/2025 | 4/16/2025 | https://www.pge.com/assets/pge/docs/ocv/vegetation-management-projects-and-activities-and-supply-2026-2028-cris-001.pdf | 0 | No | 8 | Grid Design, Operations, and Maintenance | 8.3.8 |
| 60 | OEIS | 002 | OEIS_002 | 6 | No | OEIS_002_06 | <p>Regarding transmission detailed aerial and ground inspections</p> <p>On page 226 of VMAP, PG&E sets a target of 22,000 transmission detailed inspections per year. The target states the inspections can be either ground or aerial, separate targets are not provided for detailed aerial or detailed ground inspections.</p> <p>Provide supporting documentation for transmission detailed inspections, including any job aids, procedural documentation, or inspector checklists. Specify any documents that are unique to aerial or ground inspections.</p> <p>Provide the following information related to scheduling detailed aerial and ground inspections:</p> <ol style="list-style-type: none">1. Does PG&E have controls in place to avoid an asset being only subject to one variety of detailed inspection for extended periods of time? (i.e., an asset only receiving detailed aerial inspections for 10 years). Provide PG&E's reasoning for its chosen approach.2. Some hazardous conditions may be less likely identified via ground inspections while others may be less likely identified via aerial inspections.3. Provide a list of conditions that PG&E has recognized as being more likely identified via aerial inspections and less likely identified via ground inspections. Provide a brief explanation for each condition.4. A PG&E has not recognized any such conditions, briefly discuss its reasoning.5. Provide a list of conditions that PG&E has recognized as being more likely identified via ground inspections and less likely identified via aerial inspections. Provide a brief explanation for each condition.6. A PG&E has not recognized any such conditions, briefly discuss its reasoning. | Nathan Poon | 4/11/2025 | 4/16/2025 | 4/16/2025 | https://www.pge.com/assets/pge/docs/ocv/vegetation-management-projects-and-activities-and-supply-2026-2028-cris-001.pdf | 1 | No | 8 | Grid Design, Operations, and Maintenance | 8.3.1 |
| 61 | OEIS | 002 | OEIS_002 | 7 | No | OEIS_002_07 | <p>Regarding transmission switch function testing</p> <p>PG&E does not provide a target for its transmission switch function testing inspection program in its 2026-2028 Base VMAP. However, the test inspection initiatives with first rates provided, transmission switch function testing demonstrates the highest first rates of level 1 conditions and the fourth highest first rates of level 2 conditions.</p> <p>Briefly discuss PG&E's program for not including a compliance target for transmission switch testing.</p> <p>Provide the following data for transmission switch function testing:</p> <ol style="list-style-type: none">1. The total number of transmission switches in the HFTD/HFTD in 2022, 2023, and 2024.2. The number of transmission switch function tests performed in the HFTD/HFTD in 2022, 2023, and 2024.3. The number of level 1 conditions identified in 2022, 2023, and 2024.4. The number of level 1 conditions with associated wildfire risk identified in 2022, 2023, and 2024.5. The number of level 2 conditions identified in 2022, 2023, and 2024.6. The number of level 2 conditions with associated wildfire risk identified in 2022, 2023, and 2024. | Nathan Poon | 4/11/2025 | 4/16/2025 | 4/16/2025 | https://www.pge.com/assets/pge/docs/ocv/vegetation-management-projects-and-activities-and-supply-2026-2028-cris-001.pdf | 0 | No | 8 | Grid Design, Operations, and Maintenance | 8.3.5 |
| 62 | OEIS | 002 | OEIS_002 | 8 | No | OEIS_002_08 | <p>Regarding inspection inspections and pole clearing targets</p> <p>On VMAP page 366, PG&E provides quantitative targets for vegetation inspection and vegetation management programs. For the column "HFTD Covered in 2023" PG&E provides the percentage of HFTD covered in 2023 target that is performed within the HFTD. The VMAP Guidelines (page 104) defines the column as "the percentage of total overhead circuit miles in HFTD covered by the VMAP program (i.e., 100 circuit miles of poles inspected in Year 1) divided by 300 overhead circuit miles in the HFTD equals 33 percent coverage".</p> <p>Provide the following information:</p> <ol style="list-style-type: none">1. Does PG&E have a different equation than the one defined in the Guidelines, provide "HFTD in 2028" figures for each of PG&E's targets in Table 2.4.2 using calculation defined in the VMAP Guidelines. For targets that do not use overhead circuit miles as a unit, the denominator should be the total number of the unit present in the HFTD.2. Yes, the denominator difference is based on mileage reduction due to underground for the respective year.3. Yes, the denominator difference is based on mileage reduction due to underground for the respective year.4. PG&E's target is to inspect 871,000 distribution/transmission poles and a target to inspect 70,000 of these poles if necessary. Please note, the VMAP Pole Clearing target will be adjusted as determined by inspections in the previous year or may additionally be adjusted by changes to facilities or based on other safety risk mitigation reasons.5. Based on 2025 targets:6. Approximately 60% of the Poles are required to be cleared under PRC 4202.7. Approximately 54% of these Poles are not required to be cleared under PRC 4202. See VMAP Section 9.4.1 for further information regarding PG&E's risk reduction program.8. PG&E has calculated outage probability by tree species at the eco-region level. There is not enough data at the CPZ level to confidently estimate the outage or ignition probability of tree species at a given level in 2025.9. At present, we do not plan to use the information to inform our vegetation management program.10. Yes.11. Yes, TDM utilizes the same LDMR collection as Routine Transmission Patrol (VIM-13) and Transmission Hazard Patrol (VIM-14).12. The circuit mileage used to assess transmission rights-of-way for TDM (VIM-15) are the same as the circuit mileage assessed for Routine Transmission Patrol (VIM-13), which is approximately 17,500 circuit miles systemwide.13. Based on 2025 targets, we do not plan to use the information to inform our vegetation management program.14. PG&E does not collect any other remote sensing data besides ortho-imagery during Transmission Hazard Patrol (VIM-14).15. A "Tree VMAP Discovery" 2026-2028, DR, OEIS_002-Q1346101.pdf.16. The "Insulator Contamination Model" is under development for the WTRM but is not yet completed. It will be documented with the other Transmission Management and Public Safety risk models in the WTRM.17. Models for Reliability and Public Safety risk are separate from the WTRM planning models used for WTRM.18. PG&E does not collect any other remote sensing data besides ortho-imagery during Transmission Hazard Patrol (VIM-14).19. The points were generated by creating risk ratings for all circuit segments with overhead conductors assets within the PG&E territory using approximate risk values. Approximate risk values were calculated using relative condition asset probability data that was converted into spatial values for identified corresponding and aggregated multiplied times the base and adjusted consequence values. Processing the circuit segments in order of their risk rank, each circuit segment's summed risk value, as a percentage of summed risk in the service territory, was sequentially subtracted from 100% to form the data series for the risk values for the byproduct curves. The x-axis data series was formed by creating a running total of miles for each individual circuit segment.20. VMAP Discovery 2026-2028, DR, OEIS_002-Q1346101 Page 2.21. The sentence highlighted from the Wildlife Consequence Model at documentation indicates that incorporating the species and suppression impacts on wildfire consequences resulted in less suppression that showed that the number of miles that needed to be underground to mitigate 60% of the wildfire risk was higher than anticipated. As a result of this analysis, the team concluded that the general findings of the model confirm the results by evaluating against historical fire outcomes. The additional information resulted in the removal of several lightning fires from the consequence training data set as described in Section 3.2.4 on page 12 of the consequence documentation. In the end, the team concluded that the general findings of the risk byproduct curves when adjusting consequences for species and suppression was a correct outcome.22. As stated above in (b), lightning fires were taken out of the historical fire data set used to calculate the wildfire consequence model as they showed results for fires related to non-predicted destructive weather days, which resulted in slightly deeper byproduct curves for both base and adjusted consequences. No changes were made that affected the Egress or Suppression impacts for the adjusted consequence. The relative differences between the base and adjusted consequence curves remained as depicted in Figure 20.23. The calculation process was described in the response for (a). | Nathan Poon | 4/11/2025 | 4/16/2025 | 4/16/2025 | https://www.pge.com/assets/pge/docs/ocv/vegetation-management-projects-and-activities-and-supply-2026-2028-cris-001.pdf | 0 | No | 9 | Vegetation Management & Inspections | 9.4 |
| 63 | OEIS | 002 | OEIS_002 | 9 | No | OEIS_002_09 | <p>Regarding Distribution Routine Patrol quantitative targets (VIM-15)</p> <p>On VMAP page 366, PG&E sets cumulative quarterly targets for Q4 in 2026, 2027, and 2028 of 78,000, 77,000, and 77,000 circuit miles respectively. These are annual decreases of 400 miles from 2026 to 2027, and 300 miles from 2027 to 2028.</p> <p>Do the increasingly decreasing targets reflect risks of distribution line projected to be underground?</p> <p>If so, explain how PG&E calculated each annual decrease in Distribution Routine Patrol target circuit miles.</p> <p>If not, provide the justification for each annual decrease in Distribution Routine Patrol target circuit miles.</p> | Nathan Poon | 4/11/2025 | 4/16/2025 | 4/16/2025 | https://www.pge.com/assets/pge/docs/ocv/vegetation-management-projects-and-activities-and-supply-2026-2028-cris-001.pdf | 0 | No | 9 | Vegetation Management & Inspections | 9.1.2 |
| 64 | OEIS | 002 | OEIS_002 | 10 | No | OEIS_002_010 | <p>Regarding PG&E's Pole Clearing Program target (VIM-13)</p> <p>On page 356 of its 2026-2028 Base VMAP, PG&E sets cumulative quarterly targets for Q4 in 2026, 2027, and 2028 of 78,000 distribution poles.</p> <p>Clarify whether PG&E's target is to clear vegetation around 70,000 distribution poles or inspect 70,000 distribution poles and clear vegetation of those poles only as needed.</p> <p>Of the 70,000 poles targeted for pole clearing specify how many of those poles:</p> <ol style="list-style-type: none">1. Are required to be cleared under Public Resource Code (PRC) 4202.2. Are not required to be cleared under PRC 4202. | Nathan Poon | 4/11/2025 | 4/16/2025 | 4/16/2025 | https://www.pge.com/assets/pge/docs/ocv/vegetation-management-projects-and-activities-and-supply-2026-2028-cris-001.pdf | 0 | No | 9 | Vegetation Management & Inspections | 9.4 |
| 65 | OEIS | 002 | OEIS_002 | 11 | No | OEIS_002_011 | <p>Regarding PG&E's 2026-2028 VMAP "Inspection of high-risk species for 'isolated' tree inspections"</p> <p>On page 357 of its 2026-2028 VMAP, PG&E defines "criteria for assessing which [tree] species warrant increased scrutiny during Focused Tree Inspections and other inspections." PG&E states that it provides "Vegetation Management Inspection (VMI) historical outage data and developed a 'Standardized' [tree] above the tree off to the circuit or CPZ were to see historical outage and ignition causes by species, diameter, and habitat."</p> <p>Is PG&E able to calculate outage and ignition probabilities by tree species at the CPZ level?</p> <p>Is PG&E able to calculate outage and ignition probabilities by tree species at the CPZ level?</p> | Nathan Poon | 4/11/2025 | 4/16/2025 | 4/16/2025 | https://www.pge.com/assets/pge/docs/ocv/vegetation-management-projects-and-activities-and-supply-2026-2028-cris-001.pdf | 0 | No | AO PG&E-238-15 | AO PG&E-238-15 | AO PG&E-238-15 |
| 67 | OEIS | 002 | OEIS_002 | 12 | No | OEIS_002_012 | <p>Regarding PG&E's 2026-2028 VMAP, PG&E states that "TDM [Transmission Integrated Vegetation Management] LDMR data, assesses vegetation conditions by aerial transmission line (TTL)." On page 356, PG&E targets 17,500 miles annually for its Routine Transmission Patrol (VIM-13) and 5,625 circuit miles annually for its Transmission Hazard Patrol (VIM-14).</p> <p>On the Routine Transmission Patrol (VIM-13) and the Transmission Hazard Patrol (VIM-14) also capture the LDMR data used for TDM.</p> <p>List the number of circuit miles PG&E inspects annually using LDMR to assess transmission rights-of-way for TDM.</p> | Nathan Poon | 4/11/2025 | 4/16/2025 | 4/16/2025 | https://www.pge.com/assets/pge/docs/ocv/vegetation-management-projects-and-activities-and-supply-2026-2028-cris-001.pdf | 0 | No | 9 | Vegetation Management & Inspections | 9.7 |
| 68 | OEIS | 002 | OEIS_002 | 13 | No | OEIS_002_013 | <p>Regarding risk model documentation</p> <p>On page 357 of PG&E's Distribution Event Probability Models Version 4 (DEPM v4) Documentation includes "RADA Algorithms and Methodologies" under the list of documents as part of the documentation suite for the Wildlife Distribution Risk Model (WDRM) v4. Provide a copy of this document.</p> <p>Figure 24: RADA Product Plan - WDRM on page 22 of PG&E's Wildlife Distribution Risk Model Version 4 (WDRM v4) Documentation shows that the following components are included in the WDRM plan: Insulator Contamination Update, Public Safety Risk Model (C), Insulator Risk Model (C), Public Safety Consequence V1, Why are these components not included in WDRM plans?</p> <p>Provide documentation that shows actions and discusses these components, similar to the documentation provided in the DEPM v4, WDRM v4, and WDRM v4.</p> | Nathan Poon | 4/11/2025 | 4/21/2025 | 4/21/2025 | https://www.pge.com/assets/pge/docs/ocv/vegetation-management-projects-and-activities-and-supply-2026-2028-cris-001.pdf | 1 | No | Appendix B | Supporting Documentation for Risk Methodology | Appendix B |
| 69 | OEIS | 002 | OEIS_002 | 14 | No | OEIS_002_014 | <p>Regarding suppression and egress impacts</p> <p>On page 357 of PG&E's Wildlife Consequence Model Version 4 (WRCM v4) Documentation, PG&E states that "The wildfire consequence model is used to estimate the potential for wildfire impacts on the system, resulting in additional efforts to validate the results and confirm the model development" when discussing the validation process.</p> <p>Provide the following information:</p> <ol style="list-style-type: none">1. How did PG&E calculate the releases associated with validating 60% of the wildfire risk?2. How did PG&E calculate the releases associated with validating 60% of the wildfire risk?3. How did PG&E calculate the releases associated with validating 60% of the wildfire risk?4. How did PG&E calculate the releases associated with validating 60% of the wildfire risk?5. How did PG&E calculate the releases associated with validating 60% of the wildfire risk?6. 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How did PG&E calculate the releases associated with validating 60% of the wildfire risk?97. How did PG&E calculate the releases associated with validating 60% of the wildfire risk?98. How did PG&E calculate the releases associated with validating 60% of the wildfire risk?99. How did PG&E calculate the releases associated with validating 60% of the wildfire risk?100. How did PG&E calculate the releases associated with validating 60% of the wildfire risk? | Nathan Poon | 4/11/2025 | 4/21/2025 | 4/21/2025 | https://www.pge.com/assets/pge/docs/ocv/vegetation-management-projects-and-activities-and-supply-2026-2028-cris-001.pdf | 0 | No | 5 | Risk Methodology & Assessment | 5.4 |

Page 10

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|-----|------|-----|----------|---|----|-------------|--|-----------------|-----------|-----------|-----------|--|---|----|----|--|---------|
| 126 | MGRA | 004 | MGRA_004 | 1 | No | MGRA_004_01 | <p>PPIS event damage event reports obtained from post-event patrols, including cause and estimated time of damage for all quarters of 2024. Cause was not included in the provided data.</p> <p>A. Also please extend the request to cover all four quarters of 2023 as well.</p> | Joseph Mitchell | 4/21/2025 | 4/23/2025 | 4/23/2025 | https://www.esa.com/insight/esa/docs/OutageLogAndSupportStructureDamageDetailTablesWhichAreProducedInWMP-Discovery2025-2028_DR_MGRA_004-20250901140001.xlsx https://www.esa.com/insight/esa/docs/OutageLogAndSupportStructureDamageDetailTablesWhichAreProducedInWMP-Discovery2025-2028_DR_MGRA_004-20250901140001.xlsx | 1 | No | NA | GIS | NA |
| 127 | MGRA | 004 | MGRA_004 | 2 | No | MGRA_004_02 | <p>Updated outage data, including cause. Cause was not provided in the initial response.</p> | Joseph Mitchell | 4/21/2025 | 4/23/2025 | 4/23/2025 | https://www.esa.com/insight/esa/docs/OutageLogAndSupportStructureDamageDetailTablesWhichAreProducedInWMP-Discovery2025-2028_DR_MGRA_004-20250901140001.xlsx https://www.esa.com/insight/esa/docs/OutageLogAndSupportStructureDamageDetailTablesWhichAreProducedInWMP-Discovery2025-2028_DR_MGRA_004-20250901140001.xlsx | 0 | No | NA | GIS | NA |
| 128 | MGRA | 004 | MGRA_004 | 3 | No | MGRA_004_03 | <p>Wire down data for all four quarters of 2023 and 2024. This was missing cause and event time.</p> | Joseph Mitchell | 4/21/2025 | 4/23/2025 | 4/23/2025 | https://www.esa.com/insight/esa/docs/OutageLogAndSupportStructureDamageDetailTablesWhichAreProducedInWMP-Discovery2025-2028_DR_MGRA_004-20250901140001.xlsx https://www.esa.com/insight/esa/docs/OutageLogAndSupportStructureDamageDetailTablesWhichAreProducedInWMP-Discovery2025-2028_DR_MGRA_004-20250901140001.xlsx | 0 | No | NA | GIS | NA |
| 129 | OEIS | 005 | OEIS_005 | 1 | No | OEIS_005_01 | <p>Regarding distribution detailed inspections and findings</p> <p>A. Provide the following data related to detailed distribution inspections:</p> <p>1. The number of detailed distribution inspections performed in the HFRANFTD 2020, 2021, 2022, 2023 and 2024.</p> <p>2. The number of level 1 work orders that resulted from distribution detailed inspections in the HFRANFTD 2020, 2021, 2022, 2023 and 2024.</p> <p>3. The number of level 2 work orders that resulted from distribution detailed inspections in the HFRANFTD 2020, 2021, 2022, 2023 and 2024.</p> <p>4. The number of level 3 work orders that resulted from distribution detailed inspections in the HFRANFTD 2020, 2021, 2022, 2023 and 2024.</p> | Nathan Poon | 4/22/2025 | 4/25/2025 | 4/25/2025 | https://www.esa.com/insight/esa/docs/OutageLogAndSupportStructureDamageDetailTablesWhichAreProducedInWMP-Discovery2025-2028_DR_MGRA_004-20250901140001.xlsx https://www.esa.com/insight/esa/docs/OutageLogAndSupportStructureDamageDetailTablesWhichAreProducedInWMP-Discovery2025-2028_DR_MGRA_004-20250901140001.xlsx | 0 | No | 8 | Grid Design, Operations, and Maintenance | 8.3.8.1 |
| 130 | OEIS | 005 | OEIS_005 | 2 | No | OEIS_005_02 | <p>Regarding Distribution Hazard Patrol</p> <p>Page 363 of PG&E's 2025-2028 Base WMP states Distribution Hazard Patrol inspections are "conducted in high-risk areas based on a risk-prioritized approach." Figure PG&E-8.2.2.1-1, reproduced below, shows the Component and Severity ratings by mile for HTD and HFRV locations in the scope of the Distribution Hazard Patrol.</p> <p>The sum of miles studied as Routine/High/Medium, Severe/High and Routine/Severe/High is 10,584 miles. The target for Distribution Hazard Patrol listed on Table 9-2 is 10,000 miles.</p> <p>1. If Distribution Hazard Patrol will not cover all miles with Consequence or Wildlife Risk ratings of or above "Medium", explain the discrepancy between Figure PG&E-8.2.2.1-1 and Table 9-2.</p> <p>2. If Distribution Hazard Patrol will not cover all miles with Consequence or Wildlife Risk ratings of or above "Medium":</p> <p>A. Provide the criteria used to select the subset of "Medium" or higher rated miles for patrol.</p> <p>B. Explain how wildlife risk is managed for "Medium" or higher rated miles that are not targeted for Distribution Hazard Patrol inspection.</p> | Nathan Poon | 4/22/2025 | 4/25/2025 | 4/25/2025 | https://www.esa.com/insight/esa/docs/OutageLogAndSupportStructureDamageDetailTablesWhichAreProducedInWMP-Discovery2025-2028_DR_MGRA_004-20250901140001.xlsx https://www.esa.com/insight/esa/docs/OutageLogAndSupportStructureDamageDetailTablesWhichAreProducedInWMP-Discovery2025-2028_DR_MGRA_004-20250901140001.xlsx | 0 | No | 9 | Vegetation Management and Inspections | 9.2.2 |
| 131 | OEIS | 005 | OEIS_005 | 3 | No | OEIS_005_03 | <p>Regarding Distribution Hazard Patrol</p> <p>Page 363 of PG&E's 2025-2028 Base WMP states "In 2025, PG&E will use data gathered from proven remote sensing technologies to analyze fire distribution inspections could be further enhanced to incorporate remote sensing techniques." Further, page 363 states "PG&E may consider utilizing remote sensing in lieu of ground-based inspections on electrical spans that typically have no trees around the line, to provide customers with a more cost-effective solution."</p> <p>1. Does the target for Distribution Hazard Patrol listed on Table 9-2 (10,000 miles) include aerial miles that will be inspected using only remote sensing?</p> <p>2. Explain how wildfire risk is managed for "Medium" or higher rated miles that are not targeted for Distribution Hazard Patrol inspection.</p> | Nathan Poon | 4/22/2025 | 4/25/2025 | 4/25/2025 | https://www.esa.com/insight/esa/docs/OutageLogAndSupportStructureDamageDetailTablesWhichAreProducedInWMP-Discovery2025-2028_DR_MGRA_004-20250901140001.xlsx https://www.esa.com/insight/esa/docs/OutageLogAndSupportStructureDamageDetailTablesWhichAreProducedInWMP-Discovery2025-2028_DR_MGRA_004-20250901140001.xlsx | 0 | No | 9 | Vegetation Management and Inspections | 9.2.1 |
| 132 | OEIS | 005 | OEIS_005 | 4 | No | OEIS_005_04 | <p>Regarding Quality Assurance and Quality Control Unit Equivalents</p> <p>On page 410 of the 2025-2028 Base WMP, PG&E lists "Inspection" as the "Population/Template Unit" for VM-08AT and VM-020AT. In the "Population Size" and "Sample Size" columns, PG&E then indicates the unit is either "mile" or "span." This raises a question whether the "Population/Template Unit" is "Inspection" or another factor.</p> <p>A. Clarify what the sample unit is for quality control and quality assurance audits by describing:</p> <p>1. The population of PG&E's QA/QC work.</p> <p>2. The unit that the randomization software draws from the population to create a sample (i.e., describe if PG&E audits from a population of inspections, miles, spans, or another population).</p> <p>3. Any procedural differences when auditing randomly sampled spans for VM-08AT, VM-020AT, and VM-027T. For example, procedural differences might include selecting an inspection location randomly and then auditing an entire mile in a specific direction or selecting an inspection location randomly and then auditing the span where the inspection is located.</p> <p>4. In the table below, for VM-08AT and VM-020AT, convert all values in "Population Size" and "Sample Size" columns from "miles" to "spans" or "aerial miles" or "inspections" by sampling the 2020, 2021, or 2028 "Inspection Population Size" and 2020, 2021, and 2028 "Inspection Sample Size" columns.</p> | Nathan Poon | 4/22/2025 | 4/25/2025 | 4/25/2025 | https://www.esa.com/insight/esa/docs/OutageLogAndSupportStructureDamageDetailTablesWhichAreProducedInWMP-Discovery2025-2028_DR_MGRA_004-20250901140001.xlsx https://www.esa.com/insight/esa/docs/OutageLogAndSupportStructureDamageDetailTablesWhichAreProducedInWMP-Discovery2025-2028_DR_MGRA_004-20250901140001.xlsx | 0 | No | 9 | Vegetation Management and Inspections | 9.11 |
| 133 | OEIS | 005 | OEIS_005 | 5 | No | OEIS_005_05 | <p>Regarding Quality Control - Pole Clearing (VM-027) Target</p> <p>On page 411 of the 2025-2028 Base WMP, PG&E lists 95,933 poles as the population size for its annual Quality Control of Pole Clearing activity. On page 368 of its 2025-2028 Base WMP, PG&E targets 70,000 poles annually for its Pole Clearing (VM-02) activity.</p> <p>A. Explain why PG&E's audit population for quality control is 20,933 more poles than its targets for its pole clearing activity each year.</p> | Nathan Poon | 4/22/2025 | 4/25/2025 | 4/25/2025 | https://www.esa.com/insight/esa/docs/OutageLogAndSupportStructureDamageDetailTablesWhichAreProducedInWMP-Discovery2025-2028_DR_MGRA_004-20250901140001.xlsx https://www.esa.com/insight/esa/docs/OutageLogAndSupportStructureDamageDetailTablesWhichAreProducedInWMP-Discovery2025-2028_DR_MGRA_004-20250901140001.xlsx | 0 | No | 9 | Vegetation Management and Inspections | 9.4 |
| 134 | OEIS | 005 | OEIS_005 | 6 | No | OEIS_005_06 | <p>Regarding Pole Clearing</p> <p>A. In PG&E's response to data request OEIS-P-WMP-2025-PG&E-002, Question 14, PG&E states that "the team conducted extra validation to confirm the results by evaluating against historical fire outcomes" and that the validation "resulted in the removal of several lightning fires from the consequence training data set."</p> <p>B. Provide the data this validation was completed, including, at minimum the month(s) and year.</p> <p>C. Provide the date the model was updated as a result of the validation, including, at minimum the month(s) and year.</p> <p>D. On p. 25 of the Review of PG&E's Wildlife Risk Model Version 4, E3 includes a recommendation on establishing an expanded model roadmap for model detection.</p> <p>E. Has PG&E established the roadmap for its planned risk model changes?</p> | Nathan Poon | 4/22/2025 | 5/1/2025 | 5/1/2025 | https://www.esa.com/insight/esa/docs/OutageLogAndSupportStructureDamageDetailTablesWhichAreProducedInWMP-Discovery2025-2028_DR_MGRA_004-20250901140001.xlsx https://www.esa.com/insight/esa/docs/OutageLogAndSupportStructureDamageDetailTablesWhichAreProducedInWMP-Discovery2025-2028_DR_MGRA_004-20250901140001.xlsx | 0 | No | 5 | Risk Methodology & Assessment | 5.4 |
| 135 | OEIS | 005 | OEIS_005 | 7 | No | OEIS_005_07 | <p>Regarding Reliability and Public Safety Risk</p> <p>In response to data request OEIS-P-WMP-2025-PG&E-002, Question 13 regarding Reliability and Public Safety risk models, PG&E states that its response to "Public Safety Consequence Update: Public Safety Risk Model v1, Reliability Risk Model v1, Public Safety Consequence v1, and Reliability Consequence v1" "are not currently used for wildfire mitigation planning" and are "described to help inform internal investment decisions internally."</p> | Nathan Poon | 4/22/2025 | 5/8/2025 | 5/8/2025 | https://www.esa.com/insight/esa/docs/OutageLogAndSupportStructureDamageDetailTablesWhichAreProducedInWMP-Discovery2025-2028_DR_MGRA_004-20250901140001.xlsx https://www.esa.com/insight/esa/docs/OutageLogAndSupportStructureDamageDetailTablesWhichAreProducedInWMP-Discovery2025-2028_DR_MGRA_004-20250901140001.xlsx | 0 | No | 5 | Risk Methodology & Assessment | 5.4 |

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|-----|------|-----|----------|---|----|-------------|---|-------------|-----------|-----------|-----------|---|---|----|-------|--|---------|
| 136 | OEIS | 005 | OEIS_005 | 8 | No | OEIS_005_08 | <p>Regarding Climate-Driven Extreme Risk</p> <p>Figure PG&E-5.3.3-1 (a) PG&E 2026-2028 Base WMP) shows scenarios involving climate-driven risk as part of extreme event evaluation. However, in PG&E's response to data request OEIS-P&WMP_2025-PG&E-001, Question 2a, PG&E discloses configuration risk as part of its extreme scenarios.</p> <p>Provide a description of what PG&E is planning or implementing changes related to climate-driven risk as it relates to the forward segment in Figure PG&E-5.3.3-1.</p> <p>Provide a timeline, with dates (at a minimum, quarter and year) for when PG&E is planning on implementing changes related to climate-driven risk and include an example of the changes from the research paper referenced in Figure PG&E-5.3.3-1.</p> <p>4. If no such changes are planned relating to the figure, describe why no such changes are planned.</p> | Nathan Poon | 4/22/2025 | 5/1/2025 | 5/1/2025 | https://www.pge.com/Investor/PG&E/Outage/and-safety/management-approaches-and-solutions/PGE-2026-2028-SPP_O&I.pdf | 0 | No | 5 | Risk Methodology & Assessment | 5.3.2 |
| 137 | OEIS | 005 | OEIS_005 | 9 | No | OEIS_005_09 | <p>Regarding Top-Risk Transmission Circuits</p> <p>Table 5-6 (p. 103 and pg. 770-773, PG&E's 2026-2028 Base WMP) shows only distribution-level circuits.</p> <p>Table 5-6 (p. 103 and pg. 770-773, PG&E's 2026-2028 Base WMP) shows only distribution-level circuits.</p> <p>Provide the total overall utility risk scores for transmission-level circuits.</p> | Nathan Poon | 4/22/2025 | 5/6/2025 | 5/6/2025 | https://www.pge.com/Investor/PG&E/Outage/and-safety/management-approaches-and-solutions/PGE-2026-2028-SPP_O&I.pdf | 0 | No | 5 | Risk Methodology & Assessment | 5.5.2 |
| 138 | SPO | 003 | SPO_003 | 1 | No | SPO_003_01 | <p>On page 186 of PG&E's 2026-2028 WMP, PG&E mentions the Line Elimination Incentive Plan.</p> <p>a. Describe the plan, including when it would be used.</p> <p>b. Page 183 shows the decision tree with the LEIP screening process – describe the screening process and provide the criteria for evaluation of LEIP, including an example of when the LEIP mitigation would be chosen versus when it would not be chosen.</p> <p>c. What is the average cost of LEIP per customer and what is the expected future cost per customer?</p> <p>d. What is the average cost per circuit mile?</p> <p>e. Why is this not included as a WMP metric considering it is in the decision tree?</p> <p>f. How many customers are PG&E targeting for this plan over the course of the 2026-2028 Wildlife Mitigation Plan?</p> <p>g. How many customers did the LEIP (or a similar customer layout program) remove from the PG&E's system in each year from 2017 through 2020, and is expected to remove in 2023?</p> <p>h. List out options available to customers that do not wish to participate in LEIP.</p> <p>i. If there are no options, explain why?</p> <p>j. How does LEIP relate to line removal as defined GH-12?</p> <p>k. What is the cost-benefit ratio of the LEIP program? Provide a worksheet that demonstrates how the ratio was calculated.</p> | Henry Sweat | 4/23/2025 | 4/29/2025 | 4/29/2025 | https://www.pge.com/Investor/PG&E/Outage/and-safety/management-approaches-and-solutions/PGE-2026-2028-SPP_O&I.pdf | 1 | No | 8 | Grid Design, Operations, and Maintenance | 8.2.1 |
| 139 | SPO | 003 | SPO_003 | 2 | No | SPO_003_02 | <p>PG&E's Figure 6-1.3.2-1 states EPSS combined with PSPS removes 81.7% (16,012/19,481.7%) wildfire risk. Secondary: PG&E's response in the first PG&E 2026-2028 WMP, DR_OEIS_001-Q027 implies that PSPS/EPSS is closer to 90% effective at mitigating wildfire risk. Table PG&E-1.3.1-1 also states PSPS reduces 84% of the wildfire risk. Why is there an apparent discrepancy between the response of Part 6 of WMP-Discovery2026-2028_DR_OEIS_001-Q027 and Table PG&E-1.3.1-1 compared to PG&E Figure 6-1.3.2-1?</p> | Henry Sweat | 4/23/2025 | 5/7/2025 | 5/7/2025 | https://www.pge.com/Investor/PG&E/Outage/and-safety/management-approaches-and-solutions/PGE-2026-2028-SPP_O&I.pdf | 0 | No | 6 | Wildfire Mitigation Strategy Development | 6.1.3.2 |
| 140 | SPO | 003 | SPO_003 | 3 | No | SPO_003_03 | <p>In Figure 6-1, what are the projected mileages for each resiliency mitigation for each year through 2037?</p> <p>a. How were the projected mileages, especially those beyond 2026, for the resiliency mitigations established?</p> | Henry Sweat | 4/23/2025 | 5/9/2025 | 5/9/2025 | https://www.pge.com/Investor/PG&E/Outage/and-safety/management-approaches-and-solutions/PGE-2026-2028-SPP_O&I.pdf | 0 | No | 6 | Wildfire Mitigation Strategy Development | 6.2.1 |
| 141 | SPO | 003 | SPO_003 | 4 | No | SPO_003_04 | <p>For Figure 6-1 and the figures in Part 6 of WMP-Discovery2026-2028_DR_OEIS_001-Q023, what are the actual percentages values for each year?</p> <p>a. What are the baseline 2023 values for Wildfire Risk, PSPS Risk and EPSS Risk?</p> <p>b. Provide the three figures in Part 6 of WMP-Discovery2026-2028_DR_OEIS_001-Q023, using absolute values of monetary risk in dollar values.</p> <p>c. What is the assumed risk reduction from operational mitigations for each year for wildfire risk (the first figure in the response to part (c) of WMP-Discovery2026-2028_DR_OEIS_001-Q023)?</p> | Henry Sweat | 4/23/2025 | 5/2/2025 | 5/2/2025 | https://www.pge.com/Investor/PG&E/Outage/and-safety/management-approaches-and-solutions/PGE-2026-2028-SPP_O&I.pdf | 0 | No | 6 | Wildfire Mitigation Strategy Development | 6.2.1 |
| 142 | SPO | 003 | SPO_003 | 5 | No | SPO_003_05 | <p>Compute the as-built conversion factor for projects in 2023 and 2024 between overhead lines to underground lines. Provide an explanation of the computation. Use the computation provided in PG&E's response to WMP-Discovery2026-2028_DR_SPO_003-Q007 for an example.</p> | Henry Sweat | 4/23/2025 | 4/29/2025 | 4/29/2025 | https://www.pge.com/Investor/PG&E/Outage/and-safety/management-approaches-and-solutions/PGE-2026-2028-SPP_O&I.pdf | 1 | No | 8 | Grid Design, Operations, and Maintenance | 8.2.2 |
| 143 | SPO | 003 | SPO_003 | 6 | No | SPO_003_06 | <p>For GH-04, provide a definition of the miles target and compare the definition to the target in the 2026-2028 WMP. For instance, is the target some combination of "The miles of primary overhead line to be replaced by undergrounding," "The miles of underground primary, secondary and service line to be replaced by undergrounding," "The miles of underground primary lines to be installed" or "The miles of underground primary, secondary and service lines to be installed."</p> <p>a. PG&E proposes two forms of undergrounding underground primary, and undergrounded. Provide the number of miles for each undergrounding type planned for 2026, 2027, and 2028.</p> <p>b. Page 181 of the PG&E's 2026-2028 WMP states "While PG&E will choose either overhead hardening or undergrounding as the primary mitigation, PG&E also implements a hybrid mitigation solution that consists of both overhead hardening and undergrounding on portions of the same circuit segment."</p> <p>c. If a hybrid solution is implemented, how will the mileage be recorded in GH-04 and GH-12?</p> <p>d. If undergrounding is the primary mitigation, but some covered conductor is installed on the project because undergrounding is infeasible for a small section of the line – how will the mileage be recorded in GH-04 and GH-12?</p> <p>e. Provide the number of miles where PG&E expects a hybrid solution will be implemented and recorded in GH-04 and GH-12.</p> | Henry Sweat | 4/23/2025 | 4/29/2025 | 4/29/2025 | https://www.pge.com/Investor/PG&E/Outage/and-safety/management-approaches-and-solutions/PGE-2026-2028-SPP_O&I.pdf | 1 | No | GH-04 | GH-04 | GH-04 |
| 144 | SPO | 003 | SPO_003 | 7 | No | SPO_003_07 | <p>Explain how PG&E calculates the risk reduced when there is a combination of undergrounding and covered conductor for a particular circuit segment. Clearly if there is a difference in how the risk reduction is calculated if a primary covered conductor project, primary undergrounding project or a hybrid project is chosen.</p> | Henry Sweat | 4/23/2025 | 4/29/2025 | 4/29/2025 | https://www.pge.com/Investor/PG&E/Outage/and-safety/management-approaches-and-solutions/PGE-2026-2028-SPP_O&I.pdf | 0 | No | 8 | Grid Design, Operations, and Maintenance | 8.2.2 |
| 145 | SPO | 003 | SPO_003 | 8 | No | SPO_003_08 | <p>Provide additional explanation on the discussion in section 8.2.2 under the heading, "Impacts on Likelihood and Consequence of Program Events." The questions below are posed under the assumption that the lines would not be replaced by PSPS/EPSS conditions due to overhead lines upstream or downstream.</p> <p>a. For circuit segments where there are covered conductors being undergrounded among undergrounded lines, explain how PG&E will plan to use PSPS and EPSS for these circuit segments.</p> <p>b. Is there a threshold for the amount of covered conductor (in ft. or miles) in a 5-mile undergrounded circuit segment that has only 100 feet of covered conductor and that the circuit segment is subjected to PSPS conditions, would a PSPS event be triggered?</p> <p>c. Provide underground segments from the 2023-2025 WMP where only the primary conductor was undergrounded, explain how PG&E will use of PSPS and EPSS.</p> | Henry Sweat | 4/23/2025 | 4/29/2025 | 4/29/2025 | https://www.pge.com/Investor/PG&E/Outage/and-safety/management-approaches-and-solutions/PGE-2026-2028-SPP_O&I.pdf | 0 | No | 8 | Grid Design, Operations, and Maintenance | 8.2.2 |
| 146 | SPO | 003 | SPO_003 | 9 | No | SPO_003_09 | <p>The system target for GH-04 is 370 miles for 2026 whereas PG&E previously forecasted a target of 440 miles. Explain how PG&E calculated the risk reduction in the 2026-2028 WMP compared to the 2023-2025 WMP. The justification should be supported by the amount of risk reduced per year by mitigation and by the risk model.</p> <p>a. In the baseline risk model, the risk is calculated based on the risk calculated in WORM v4.</p> <p>b. In the baseline risk model, the risk is calculated based on the risk calculated in WORM v4.</p> <p>c. In the baseline risk model, the risk is calculated based on the risk calculated in WORM v4.</p> <p>d. In the baseline risk model, the risk is calculated based on the risk calculated in WORM v4.</p> <p>e. In the baseline risk model, the risk is calculated based on the risk calculated in WORM v4.</p> <p>f. In the baseline risk model, the risk is calculated based on the risk calculated in WORM v4.</p> <p>g. In the baseline risk model, the risk is calculated based on the risk calculated in WORM v4.</p> <p>h. In the baseline risk model, the risk is calculated based on the risk calculated in WORM v4.</p> <p>i. In the baseline risk model, the risk is calculated based on the risk calculated in WORM v4.</p> <p>j. In the baseline risk model, the risk is calculated based on the risk calculated in WORM v4.</p> <p>k. In the baseline risk model, the risk is calculated based on the risk calculated in WORM v4.</p> <p>l. In the baseline risk model, the risk is calculated based on the risk calculated in WORM v4.</p> <p>m. In the baseline risk model, the risk is calculated based on the risk calculated in WORM v4.</p> <p>n. In the baseline risk model, the risk is calculated based on the risk calculated in WORM v4.</p> <p>o. In the baseline risk model, the risk is calculated based on the risk calculated in WORM v4.</p> <p>p. In the baseline risk model, the risk is calculated based on the risk calculated in WORM v4.</p> <p>q. In the baseline risk model, the risk is calculated based on the risk calculated in WORM v4.</p> <p>r. In the baseline risk model, the risk is calculated based on the risk calculated in WORM v4.</p> <p>s. In the baseline risk model, the risk is calculated based on the risk calculated in WORM v4.</p> <p>t. In the baseline risk model, the risk is calculated based on the risk calculated in WORM v4.</p> <p>u. In the baseline risk model, the risk is calculated based on the risk calculated in WORM v4.</p> <p>v. In the baseline risk model, the risk is calculated based on the risk calculated in WORM v4.</p> <p>w. In the baseline risk model, the risk is calculated based on the risk calculated in WORM v4.</p> <p>x. In the baseline risk model, the risk is calculated based on the risk calculated in WORM v4.</p> <p>y. In the baseline risk model, the risk is calculated based on the risk calculated in WORM v4.</p> <p>z. In the baseline risk model, the risk is calculated based on the risk calculated in WORM v4.</p> | Henry Sweat | 4/23/2025 | 4/29/2025 | 4/29/2025 | https://www.pge.com/Investor/PG&E/Outage/and-safety/management-approaches-and-solutions/PGE-2026-2028-SPP_O&I.pdf | 0 | No | GH-04 | GH-04 | GH-04 |

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|-----|-------|-----|-----------|----|----|--------------|---|-----------------|-----------|-----------|-----------|---|---|----|------------|--|-----------------|
| 147 | SPO | 003 | SPO_003 | 10 | No | SPO_003_010 | <p>In the 2024 QDR spatial data set, the polygons GH-01 and GH-04 are frequently overlaid on each other. Explain what is likely to have caused this. Please provide a brief description of the data and how it is used, as well as how to understand the as-built configuration of the system. Additionally, answer the following:</p> <p>a. SPO notes the feature in the data where status "upheld" and "not up" are designated between underground and covered conductor, but is finding that these numbers do not add up to the reported completed SPO. How many times was the status "upheld" and "not up" used? Why do they not add up to the reported completed SPO? How many times was the status "upheld" and "not up" used? Why do they not add up to the reported completed SPO? How many times was the status "upheld" and "not up" used? Why do they not add up to the reported completed SPO?</p> <p>b. SPO notes the length of the polygons added up to 291 miles for GH-01 (Status-Complete, Completion Date = All), but the reported actual number of miles completed in the QDR is 348. Explain why the length of the polygons is not equal to the 348 miles.</p> <p>c. Some GH-01 data is in points instead of polygons – explain why polygons are not used since there is either a portion of a line removed, cover conducted or underground.</p> | Henry Sweet | 4/29/2025 | 4/29/2025 | 4/29/2025 | https://www.pge.com/energy/operational-safety/gh-01-gh-04-polygons | 0 | No | GH-04 | GH-04 | GH-04 |
| 148 | SPO | 003 | SPO_003 | 11 | No | SPO_003_011 | <p>Provide an update for full 2024 year data to "WMP-Chowherry2023-2028_DR_SPO_003-Q012-Q012.pdf" and the supplemental reports.</p> <p>For the year 2024, PG&E confirms the average number of strike trees per mile of lines removed is 748.41.</p> <p>Please see the calculation below for how the number was determined:</p> <p>For the year 2024, PG&E confirms the average number of strike trees per mile of lines removed is 748.41.</p> <p>Please see the calculation below for how the number was determined:</p> <p>Please see the following data for the requested information for the year 2024:</p> <ul style="list-style-type: none"> Number of total trees worked: 17,084 trees Number of total trees removed: 56,342 trees Number of total trees inspected: 18,689 trees Number of total trees removed: 48,237 trees Number of miles inspected: 1,585 miles Number of strike trees per mile of lines inspected before removal: 785.94 trees/mile Number of strike trees per mile after removal: 748.41 trees/mile Number of trees removed: 1,220,233 trees | Henry Sweet | 4/23/2025 | 4/29/2025 | 4/29/2025 | https://www.pge.com/energy/operational-safety/gh-01-gh-04-polygons | 0 | No | 9 | Vegetation Management and Inspections | 9 |
| 149 | SPO | 003 | SPO_003 | 12 | No | SPO_003_012 | <p>Provide the data in Tables 1 through 3 for each of PG&E's 2023-2025 WMP planned Vegetation Management Programs and PG&E's 2026-2028 WMP Programs. There should be one spreadsheet for each of the Vegetation Management Programs listed in Tables 4 and 5.</p> <p>a. Table 4: List of Vegetation Management Programs 2023-2025</p> <p>b. Table 5: List of Vegetation Management Programs 2026-2028</p> <p>For the 2023-2025 WMPs, SPO expects the individual programs to be reported on to include:</p> <p>Table 4: List of Vegetation Management Programs 2023-2025</p> <p>For the 2026-2028 WMPs, SPO expects the individual programs to be reported on to include:</p> <p>Table 5: List of Vegetation Management Programs 2026-2028</p> | Henry Sweet | 4/23/2025 | 5/7/2025 | 5/7/2025 | https://www.pge.com/energy/operational-safety/gh-01-gh-04-polygons | 1 | No | 9 | Vegetation Management and Inspections | 9 |
| 150 | SPO | 003 | SPO_003 | 13 | No | SPO_003_013 | <p>Complete the Tables 1 through 3 at the systemswide and HTFD scale for all of PG&E's Vegetation Management work (i.e., the total number of trees removed systemswide and separately the total number of trees removed in the HTFD).</p> <p>Please refer to "WMP-Chowherry2023-2028_DR_SPO_003-Q012A0101.stu" for the requested tables for Vegetation Management programs.</p> <p>Please refer to "WMP-Chowherry2023-2028_DR_SPO_003-Q012A0101.stu" for the requested tables for Vegetation Management programs.</p> <p>Please refer to "WMP-Chowherry2023-2028_DR_SPO_003-Q012A0101.stu" for the requested tables for Vegetation Management programs.</p> <p>Please refer to "WMP-Chowherry2023-2028_DR_SPO_003-Q012A0101.stu" for the requested tables for Vegetation Management programs.</p> | Henry Sweet | 4/23/2025 | 5/7/2025 | 5/7/2025 | https://www.pge.com/energy/operational-safety/gh-01-gh-04-polygons | 1 | No | 9 | Vegetation Management and Inspections | 9 |
| 151 | SPO | 003 | SPO_003 | 14 | No | SPO_003_014 | <p>For each vegetation management program in the 2026-2028 WMP, specify if the Quality Assurance and Quality Control assessments include verification of the height and distance to the conductor of each strike vegetation point specified for removal, and each vegetation strike point listed as an inventory tree.</p> <p>PG&E currently estimates approximately 6.6 million trees that have overhead electric system risk potential within HTFD only. This estimate is based on 2019 (distribution) and 2021 (transmission) aerial LIDAR data collection. Due to known limitations of aerial LIDAR associated with power lines, especially in closed canopy environments, this is likely an underestimation. Due to these factors, our confidence level is low.</p> <p>a. PG&E plans to deploy 185 EFD devices over and 15 EPA devices per year during 2026-2028 WMP period. PG&E is still in the deployment strategy development phase for GPS/GNSS devices.</p> <p>b. EFD devices planned for deployment in 2026 will monitor approximately 467 primary overhead miles of HTFD conductor. EPA devices planned for deployment in 2026 will monitor approximately 1,616 primary overhead miles of HTFD conductor. Deployment results in 2027 and 2028 are expected to be comparable to 2026.</p> <p>c. The approximately 467 miles of primary overhead conductor HTFD miles in the circuits planned for deployment of EFD devices in 2026 account for 1.9% of all primary overhead conductor HTFD miles in service territory. The 1,616 miles of primary overhead conductor HTFD miles in the circuits planned for deployment of EPA devices in 2026 account for 4.4% of all primary overhead conductor HTFD miles in service territory. Deployment results in 2027 and 2028 are expected to be comparable to 2026.</p> <p>d. WMP-Chowherry 2023-2028_DR_MGRIA_OIG-Q01 Page 2</p> <p>e. Line asset inspections, sensors provide type-specific, detecting conditions that could create a wildfire or public safety risk. Actual risk reduction is accomplished when identified conditions are addressed by maintenance.</p> <p>f. EFD - 2.52% EOR per year</p> <p>g. EPA - 3.32% EOR per year</p> | Henry Sweet | 4/29/2025 | 4/29/2025 | 4/29/2025 | https://www.pge.com/energy/operational-safety/gh-01-gh-04-polygons | 0 | No | 9 | Vegetation Management and Inspections | 9 |
| 152 | SPO | 003 | SPO_003 | 15 | No | SPO_003_015 | <p>Provide PG&E's latest estimate for the number of strike trees in PG&E's HTFD with an explanation of how this estimate was obtained. Discuss PG&E's confidence in the estimate.</p> <p>PG&E currently estimates approximately 6.6 million trees that have overhead electric system risk potential within HTFD only. This estimate is based on 2019 (distribution) and 2021 (transmission) aerial LIDAR data collection. Due to known limitations of aerial LIDAR associated with power lines, especially in closed canopy environments, this is likely an underestimation. Due to these factors, our confidence level is low.</p> <p>a. PG&E plans to deploy 185 EFD devices over and 15 EPA devices per year during 2026-2028 WMP period. PG&E is still in the deployment strategy development phase for GPS/GNSS devices.</p> <p>b. EFD devices planned for deployment in 2026 will monitor approximately 467 primary overhead miles of HTFD conductor. EPA devices planned for deployment in 2026 will monitor approximately 1,616 primary overhead miles of HTFD conductor. Deployment results in 2027 and 2028 are expected to be comparable to 2026.</p> <p>c. The approximately 467 miles of primary overhead conductor HTFD miles in the circuits planned for deployment of EFD devices in 2026 account for 1.9% of all primary overhead conductor HTFD miles in service territory. The 1,616 miles of primary overhead conductor HTFD miles in the circuits planned for deployment of EPA devices in 2026 account for 4.4% of all primary overhead conductor HTFD miles in service territory. Deployment results in 2027 and 2028 are expected to be comparable to 2026.</p> <p>d. WMP-Chowherry 2023-2028_DR_MGRIA_OIG-Q01 Page 2</p> <p>e. Line asset inspections, sensors provide type-specific, detecting conditions that could create a wildfire or public safety risk. Actual risk reduction is accomplished when identified conditions are addressed by maintenance.</p> <p>f. EFD - 2.52% EOR per year</p> <p>g. EPA - 3.32% EOR per year</p> | Henry Sweet | 4/29/2025 | 4/29/2025 | 4/29/2025 | https://www.pge.com/energy/operational-safety/gh-01-gh-04-polygons | 0 | No | 9 | Vegetation Management and Inspections | 9 |
| 153 | MGRIA | 005 | MGRIA_005 | 1 | No | MGRIA_005_01 | <p>Follow-up to Data Request Responses:</p> <p>WMP-Chowherry 2023-2028_DR_OIG-Q01-Q022</p> <p>MGRIA-5.1 For the three technologies listed a PG&E's response to the OGIS data request (EFD, EPA, GPS/GNSS), please provide a per year estimate of the deployment of these devices for 2026, 2027, and 2028 in the HTFD/HTFD.</p> <p>a. The number of devices to be deployed.</p> <p>b. The miles of overhead conductor to be monitored by these technologies in the HTFD in miles.</p> <p>c. The fractional coverage of the overhead conductor system.</p> <p>d. The estimated conservative risk reduction due to the deployment of that technology.</p> | Joseph Mitchell | 4/29/2025 | 5/13/2025 | 5/13/2025 | https://www.pge.com/energy/operational-safety/gh-01-gh-04-polygons | 0 | No | 10 | Stratistical Awareness and Forecasting | 10.4/10.31 |
| 154 | MGRIA | 005 | MGRIA_005 | 2 | No | MGRIA_005_02 | <p>Response:</p> <p>MGRIA-5.2 During a meeting of the Risk Mitigation Working Group, I recall one of the PG&E team stating that they had looked at the Caffeine data database to determine whether weather forecast conditions affected the probability of successful initial attack.</p> <p>a. Did PG&E ever perform an analysis similar to that described?</p> <p>b. If the answer is yes, please provide the results.</p> <p>c. Is the PG&E FPI model available through a public interface? i.e. if a latitude, longitude, and time is provided can a corresponding FPI value be returned?</p> <p>d. If the answer to (b) is no, what is the representative values of PG&E's FPI history, could it potentially be reported, and how much time (days) and effort (person-hours) would it require?</p> <p>e. As PG&E's FPI algorithm has changed over time, has PG&E segregated historical periods with different FPI approaches? Or is it now in history with the most current FPI version?</p> | Joseph Mitchell | 4/29/2025 | 4/30/2025 | 4/30/2025 | https://www.pge.com/energy/operational-safety/gh-01-gh-04-polygons | 1 | No | Appendix D | Appendix D: Areas of Continued Improvement | ACI PG&E-238.03 |
| 155 | MGRIA | 005 | MGRIA_005 | 3 | No | MGRIA_005_03 | <p>Covered Conductor</p> <p>MGRIA-5.3 In Table PG&E-8.2.1.4, COVERED CONDUCTOR AND UNDERGROUNDING IMPACTS ON THE LIKELIHOOD OF IGNITION, PG&E's analysis of wire-to-wire contact lists the effectiveness of Covered Conductor as medium if reducing the risk source, whereas other parties rank it as a high effectiveness.</p> <p>Please justify why wire-to-wire contact is only ranked to a medium outage prevention.</p> <p>b. Please provide examples in which wire to wire contact between covered conductors resulted in an outage and under what conditions.</p> | Joseph Mitchell | 4/29/2025 | 4/30/2025 | 4/30/2025 | https://www.pge.com/energy/operational-safety/gh-01-gh-04-polygons | 0 | No | 8 | Grid Design, Operations, and Maintenance | 8.2.1 |
| 156 | MGRIA | 005 | MGRIA_005 | 4 | No | MGRIA_005_04 | <p>Advanced Technology</p> <p>MGRIA-5.4 Please direct us to or provide the technical details of GridScope or EFD.</p> <p>Please provide the information in action and function and purpose between GridScope and EFD.</p> | Joseph Mitchell | 4/29/2025 | 4/30/2025 | 4/30/2025 | https://www.pge.com/energy/operational-safety/gh-01-gh-04-polygons | 0 | No | 10 | Stratistical Awareness and Forecasting | 10.3.1 |

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| 173 | SFO | 004 | SFO_004 | 9 | No | SFO_004_Q9 | <p>Which bowtie workshop was used to generate Figure PG&E-1.1.2 in the 2026-2028 Base WMP?</p> <p>a. Has this bowtie workshop been updated since it was submitted with the 2024 RAMP Application? If so, explain how.</p> <p>b. If this bowtie workshop was submitted with PG&E's 2024 RAMP Application and has been updated since the 2024 RAMP Application, provide SFO with a copy of the updated workshop.</p> <p>c. Provide the exact settings that were used on the bowtie workshop to generate Figure PG&E-1.1.2 in the 2026-2028 Base WMP.</p> <p>d. How did this bowtie workshop inform mitigation selection in this WMP? Provide a step-by-step example demonstrating how this bowtie workshop informed and resulted in the mitigation selections on the circuit segment named CORNERC 11018115.</p> <p>e. Figure 1.4 of the 2024 RAMP Application exhibited an exposure of 222,209 miles. Figure PG&E-1.1.2 of the 2026-2028 Base WMP exhibits an exposure of 472,475 miles. Explain why the number of miles increased from the 2024 RAMP to the 2026-2028 Base WMP.</p> <p>f. Does PG&E intend to update this bowtie workshop, between now and when it submits its 2027 GRC? If so, explain how and why this bowtie workshop will be updated between now and when PG&E submits its 2027 GRC.</p> | <p>The workshop, Exhibit PG&E-41 EO-WLDFR-2a, Bow Tie (System) item, was provided in the RAMP application. An updated version was used to generate Figure PG&E-1.1.2 for the 2026-2028 Base WMP.</p> <p>a. Yes, this bowtie workshop has been updated since it was submitted with the 2024 RAMP application. The updates include the following:</p> <ul style="list-style-type: none">WMP-Discovery 2026-2028_DR_SFO_004-Q000 Page 2Historical source data used to predict frequency and consequence of ignitions have been updated to include incidents from 2023 and 2024.The WDRM used for distribution trenches has been updated from version 3 to version 4.The EPSS and PPSPS effectiveness as well as the EPSS multiplier have been updated. <p>b. Please see attachment "WMP-Discovery2026-2028_DR_SFO_004-Q000A01.docx" for the requested document.</p> <p>c. Please refer to the sheet "Bowties" in the attachment "WMP-Discovery2026-2028_DR_SFO_004-Q000A01.docx". The settings are detailed in the following:</p> <ul style="list-style-type: none">a. The bowtie provides an overall picture of risk drivers and consequences. The primary level is the most granular view. The enterprise risk model aggregates WDRM output segments into 42 trenches (10 HFRAs Primary, 10 non-HFRAs Primary, 10 HFRAs Secondary, 10 HFRAs Services, 1 non-HFRAs Secondary, and 1 non-HFRAs Services) of similar risk profiles. Most of the program workshops are developed at the circuit segment or circuit level and then mapped to the trench level. The bowtie does not inform mitigation selection at the circuit segment level in the WMP.b. There was a cell reference error that caused the near doubling of exposure miles in the WMP graphic. The attachment provided corrects the error. The exposure miles should be 225,746 miles.c. Yes, the bowtie will be updated to include these updates:d. The safety incident value changes from \$15.22 million to \$16.2 million using the value of a statistical life from the Bureau of Labor Statistics, adjusted to California dollars.e. The value of service increases from \$3.17 to \$3.33 based on PG&E 2024 historical customer counts and consumption values. <p>d. The bowtie provides an overall picture of risk drivers and consequences. The primary level is the most granular view. The enterprise risk model aggregates WDRM output segments into 42 trenches (10 HFRAs Primary, 10 non-HFRAs Primary, 10 HFRAs Secondary, 10 HFRAs Services, 1 non-HFRAs Secondary, and 1 non-HFRAs Services) of similar risk profiles. Most of the program workshops are developed at the circuit segment or circuit level and then mapped to the trench level. The bowtie does not inform mitigation selection at the circuit segment level in the WMP.</p> <p>e. There was a cell reference error that caused the near doubling of exposure miles in the WMP graphic. The attachment provided corrects the error. The exposure miles should be 225,746 miles.</p> <p>f. Yes, the bowtie will be updated to include these updates:</p> <ul style="list-style-type: none">The safety incident value changes from \$15.22 million to \$16.2 million using the value of a statistical life from the Bureau of Labor Statistics, adjusted to California dollars.The value of service increases from \$3.17 to \$3.33 based on PG&E 2024 historical customer counts and consumption values. | Edie Schmitt | 4/30/2025 | 5/6/2025 | 5/6/2025 | https://www.pge.com/assets/docs/Workbooks-and-Attachments/Workbooks-and-Attachments/2026-2028-Base-WMP/PG&E-1.1.2-2026-2028-Base-WMP-004_09.pdf | 1 | No | 5 | Risk Methodology & Assessment | 5.1.1 |
| 174 | SFO | 004 | SFO_004 | 10 | No | SFO_004_Q10 | <p>Which bowtie workshop was used to generate Figure PG&E-1.1.3 in the 2026-2028 Base WMP?</p> <p>a. Has this bowtie workshop been updated since it was submitted with the 2024 RAMP Application? If so, explain how.</p> <p>b. If this bowtie workshop was submitted with PG&E's 2024 RAMP Application and has been updated since the 2024 RAMP Application, provide SFO with a copy of the updated workshop.</p> <p>c. Provide the exact settings that were used on the bowtie workshop to generate Figure PG&E-1.1.3 in the 2026-2028 Base WMP.</p> <p>d. How did this bowtie workshop inform mitigation selection in this WMP? Provide a step-by-step example demonstrating how this bowtie workshop informed and resulted in the mitigation selections on CORNERC 11018115.</p> <p>e. Figure 1.4 of the 2024 RAMP Application exhibited an exposure of 1,208,023 customers. Figure PG&E-1.1.3 of the 2026-2028 Base WMP exhibits an exposure of 611,046 customers. Explain why the number of customers decreased from the 2024 RAMP to the 2026-2028 Base WMP.</p> <p>f. Does PG&E intend to update this bowtie workshop, between now and when it submits its 2027 GRC? If so, explain how and why this bowtie workshop must be updated between now and when it submits its 2027 GRC.</p> | <p>The workshop, Exhibit PG&E-41 EO-WLDFR-2a, Bow Tie (System) item, was provided in the RAMP application. An updated version was used to generate Figure PG&E-1.1.3 for the 2026-2028 Base WMP.</p> <p>a. Yes, this bowtie workshop has been updated since it was submitted with the 2024 RAMP application. The updates include the following:</p> <ul style="list-style-type: none">WMP-Discovery 2026-2028_DR_SFO_004-Q011 Page 2The 2026-2028 Base WMP version of the bowtie includes updated outage data to include 2023 and 2024 whenever applicable.The WDRM used for developing trenches has been updated from version 3 to version 4.EPSS likelihood analysis is updated based on Fire Potential Index (FPI) version 5.The EPSS multiplier has been updated from 8 to 5.8.Please see attachment "WMP-Discovery2026-2028_DR_SFO_004-Q000A01.docx" for the requested document. <p>b. Please refer to the sheet "Bowties" in the attachment "WMP-Discovery2026-2028_DR_SFO_004-Q000A01.docx". The settings are detailed in the following:</p> <ul style="list-style-type: none">a. The bowtie provides an overall picture of risk drivers and consequences. The primary level is the most granular view. The enterprise risk model aggregates WDRM output segments into 42 trenches (10 HFRAs Primary, 10 non-HFRAs Primary, 10 HFRAs Secondary, 10 HFRAs Services, 1 non-HFRAs Secondary, and 1 non-HFRAs Services) of similar risk profiles. Most of the program workshops are developed at the circuit segment or circuit level and then mapped to the trench level. It does not inform mitigation selection at the circuit segment level in the WMP.b. The number of service increases from \$3.17 to \$3.33 based on PG&E 2024 historical customer counts and consumption values.c. Updated program based on information from PG&E.d. The bowtie provides an overall picture of risk drivers and consequences. The primary level is the most granular view. The enterprise risk model aggregates WDRM output segments into 42 trenches (10 HFRAs Primary, 10 non-HFRAs Primary, 10 HFRAs Secondary, 10 HFRAs Services, 1 non-HFRAs Secondary, and 1 non-HFRAs Services) of similar risk profiles. Most of the program workshops are developed at the circuit segment or circuit level and then mapped to the trench level. It does not inform mitigation selection at the circuit segment level in the WMP.e. The reason for the decrease in exposure is due to removing the Potentially Impacted Customers (PIC) dataset and using PPSPS 5.0 Guidance for the likelihood events and including the years 2023 and 2024. PPSPS events are smaller in size and are frequent as our PPSPS guidance evolves.f. Yes, the bowtie will be updated to include these updates:Conversions to the PPSPS likelihood analysis.The safety incident value changes from \$15.22 million to \$16.2 million using the value of a statistical life from the Bureau of Labor Statistics, adjusted to California dollars.The value of service increases from \$3.17 to \$3.33 based on PG&E 2024 historical customer counts and consumption values. | Edie Schmitt | 4/30/2025 | 5/6/2025 | 5/6/2025 | https://www.pge.com/assets/docs/Workbooks-and-Attachments/Workbooks-and-Attachments/2026-2028-Base-WMP/PG&E-1.1.3-2026-2028-Base-WMP-004_10.pdf | 1 | No | 5 | Risk Methodology & Assessment | 5.1.1 |
| 175 | SFO | 004 | SFO_004 | 11 | No | SFO_004_Q11 | <p>Which bowtie workshop was used to generate Figure PG&E-1.1.4 in the 2026-2028 Base WMP?</p> <p>a. Has this bowtie workshop been updated since it was submitted with the 2024 RAMP Application? If so, explain how.</p> <p>b. If this bowtie workshop was submitted with PG&E's 2024 RAMP Application and has been updated since the 2024 RAMP Application, provide SFO with a copy of the updated workshop.</p> <p>c. Provide the exact settings that were used on the bowtie workshop to generate Figure PG&E-1.1.4 in the 2026-2028 Base WMP.</p> <p>d. How did this bowtie workshop inform mitigation selection in this WMP? Provide a step-by-step example demonstrating how this bowtie workshop informed and resulted in the mitigation selections on CORNERC 11018115.</p> <p>e. Figure 1.4 of the 2024 RAMP Application exhibited an exposure of 43,433 miles. Figure PG&E-1.1.4 of the 2026-2028 Base WMP exhibits an exposure of 43,508 miles. Explain why the number of miles increased from the 2024 RAMP to the 2026-2028 Base WMP.</p> <p>f. Does PG&E intend to update this bowtie workshop, between now and when it submits its 2027 GRC? If so, explain how and why this bowtie workshop must be updated between now and when it submits its 2027 GRC.</p> | <p>The workshop, Exhibit PG&E-41 EO-WLDFR-2a, Bow Tie (System) item, was provided in the RAMP application. An updated version was used to generate Figure PG&E-1.1.4 for the 2026-2028 Base WMP.</p> <p>a. Yes, this bowtie workshop has been updated since it was submitted with the 2024 RAMP application. The updates include the following:</p> <ul style="list-style-type: none">WMP-Discovery 2026-2028_DR_SFO_004-Q011 Page 2The 2026-2028 Base WMP version of the bowtie includes updated outage data to include 2023 and 2024 whenever applicable.The WDRM used for developing trenches has been updated from version 3 to version 4.EPSS likelihood analysis is updated based on Fire Potential Index (FPI) version 5.The EPSS multiplier has been updated from 8 to 5.8.Please see attachment "WMP-Discovery2026-2028_DR_SFO_004-Q000A01.docx" for the requested document. <p>b. Please refer to the sheet "Bowties" in the attachment "WMP-Discovery2026-2028_DR_SFO_004-Q000A01.docx". The settings are detailed in the following:</p> <ul style="list-style-type: none">a. The bowtie provides an overall picture of risk drivers and consequences. The primary level is the most granular view. The enterprise risk model aggregates WDRM output segments into 42 trenches (10 HFRAs Primary, 10 non-HFRAs Primary, 10 HFRAs Secondary, 10 HFRAs Services, 1 non-HFRAs Secondary, and 1 non-HFRAs Services) of similar risk profiles. Most of the program workshops are developed at the circuit segment or circuit level and then mapped to the trench level. It does not inform mitigation selection at the circuit segment level in the WMP.b. The number of service increases from \$3.17 to \$3.33 based on PG&E 2024 historical customer counts and consumption values.c. Updated program based on information from PG&E.d. The bowtie provides an overall picture of risk drivers and consequences. The primary level is the most granular view. The enterprise risk model aggregates WDRM output segments into 42 trenches (10 HFRAs Primary, 10 non-HFRAs Primary, 10 HFRAs Secondary, 10 HFRAs Services, 1 non-HFRAs Secondary, and 1 non-HFRAs Services) of similar risk profiles. Most of the program workshops are developed at the circuit segment or circuit level and then mapped to the trench level. It does not inform mitigation selection at the circuit segment level in the WMP.e. The reason for the decrease in exposure is due to removing the Potentially Impacted Customers (PIC) dataset and using PPSPS 5.0 Guidance for the likelihood events and including the years 2023 and 2024. PPSPS events are smaller in size and are frequent as our PPSPS guidance evolves.f. Yes, the bowtie will be updated to include these updates:Conversions to the PPSPS likelihood analysis.The safety incident value changes from \$15.22 million to \$16.2 million using the value of a statistical life from the Bureau of Labor Statistics, adjusted to California dollars.The value of service increases from \$3.17 to \$3.33 based on PG&E 2024 historical customer counts and consumption values. | Edie Schmitt | 4/30/2025 | 5/6/2025 | 5/6/2025 | https://www.pge.com/assets/docs/Workbooks-and-Attachments/Workbooks-and-Attachments/2026-2028-Base-WMP/PG&E-1.1.4-2026-2028-Base-WMP-004_11.pdf | 1 | No | 5 | Risk Methodology & Assessment | 5.1.1 |
| 176 | SFO | 004 | SFO_004 | 12 | No | SFO_004_Q12 | <p>Question 1a highlights a marginal change in exposure for EPSS risk between the 2024 RAMP and 2026-2028 Base WMP filings. Question 1a and 1b highlight a significant change in exposure for wildfire and PPSPS risk between the 2024 RAMP and 2026-2028 Base WMP filings. Explain why exposure to EPSS risk exhibits a marginal change, despite significant changes in the exposure to wildfire and PPSPS risk.</p> <p>The significant decrease in exposure to PPSPS risk highlighted in Question 1a resulted in a significant decrease in risk value between the 2024 RAMP and 2026-2028 Base WMP filings. The significant increase in exposure to wildfire risk highlighted in Question 1b did not result in a significant increase in risk value between the 2024 RAMP and 2026-2028 Base WMP filings. 2. Explain why the change in exposure to PPSPS risk resulted in a corresponding change in risk value, but the change in exposure to wildfire risk did not result in a corresponding change in risk value.</p> | <p>EPSS risk is quantified as the difference between the Failure of Distribution Channel Assets risk with and without EPSS. EPSS exposure is the reweight of conformed primary assets that the EPSS dataset. EPSS exposure means the critical event where EPSS enabled when the development criteria are met. Marginal change in EPSS exposure resulted in a marginal change in EPSS risk. EPSS risk is not directly connected to wildfire and PPSPS.</p> <p>a. PPSPS risk did change in customer count to drive a significant decrease in risk value. The wildfire exposure is in error and should have read 235,746 miles.</p> <p>In reviewing Table 3-1 submitted in the WMP, it was determined that a non-final version of the table was included. The correct version of Table 3-1 is provided below. Please note, due to rounding of numbers, the total percentage of ignitions in HFTDHFRA equals 100.1%.</p> <p>a. The forecast for each year is driven by the workshop and target commitments for wildfire mitigation work. As the workshop increases, so does the forecast.</p> <p>b. Please refer to the explanations provided in PG&E's Annual Report on Compliance (ARC), which is included here as attachments "WMP-Discovery2026-2028_DR_SFO_004-Q01A001.docx" and "WMP-Discovery2026-2028_DR_SFO_004-Q01A002.pdf".</p> <p>c. Please refer to attachment "WMP-Discovery2026-2028_DR_SFO_004-Q01A001.docx" for the updated Asset amounts for 2023 and 2024 and updated plan for 2025.</p> <p>d. The revenue expenditures can be found in the ARC report for each year.</p> <p>e. Yes, wildfire (pre-EPSS/PPSPS) is calculated as a product of LURE and CORE. The pre-PPSPS LURE is calculated as the number of events per year and the CORE is \$20.7M, resulting in approximately \$19.78M in the risk value.</p> <p>f. In this measure, the "PPSPS Consequence" and "EPSS Consequence" are interchangeable with "PPSPS Risk" and "EPSS Risk".</p> <p>g. The EPSS LURE is calculated as the number of events per year and the CORE is \$20.7M, resulting in approximately \$19.78M in the risk value.</p> <p>h. LURE is 1,388 events per year and the CORE is \$594M, resulting in approximately \$1,933M in the risk value. EPSS Consequence is 2.467 events per year and the CORE is \$642M, resulting in approximately \$1,593M in the risk value.</p> <p>i. Please see attachment "WMP-Discovery2026-2028_DR_SFO_004-Q01A001.docx" for the requested information.</p> <p>j. The table submitted below to the 2024 RAMP was the "RAMP" draft that shows the TV Baseline for 2027 while MGRA Discovery and WMP chart shows Baseline for 2026 and 2027. The table below shows the impact to the risk value between the 2024 RAMP and the 2026-2028 Base WMP. The table below shows the impact to the risk value between the 2024 RAMP and the 2026-2028 Base WMP. The table below shows the impact to the risk value between the 2024 RAMP and the 2026-2028 Base WMP.</p> <p>k. No. Customers living within the HFTDHFRA were included in the Potentially Impacted Customers dataset, not in the historical likelihood dataset. HFTDHFRA customers included in the historical likelihood dataset would have to have met the PPSPS 5.0 Guidance threshold.</p> <p>l. Yes. Customers who might have been in a cell segment in HFRAs would be included. WMP-Discovery 2026-2028_DR_SFO_004-Q011 Page 2</p> | Edie Schmitt | 4/30/2025 | 5/6/2025 | 5/6/2025 | https://www.pge.com/assets/docs/Workbooks-and-Attachments/Workbooks-and-Attachments/2026-2028-Base-WMP/PG&E-1.1.4-2026-2028-Base-WMP-004_12.pdf | 0 | No | Appendix D | Appendix D: Areas of Continued Improvement | AO PG&E-2501-06 |
| 177 | SFO | 004 | SFO_004 | 13 | No | SFO_004_Q13 | <p>Explain why the % of ignitions in HFTDHFRA column in Table 3-1 in the PG&E 2026-2028 Base WMP did not total to 100%.</p> | <p>Table 3-1 in the Request of the PG&E 2023-2025 Base WMP shows a ramp up in expenditures from 2020-2022 and from 2023-2025. Table 3-3 in the PG&E 2026-2028 Base WMP shows a similar ramp up in expenditures.</p> <p>a. Explain what causes the low forecasts in the first year of each WMP.</p> <p>b. Explain what causes the significant variance in 2022-2022 Table 4-1 from the 6th Revision of the PG&E 2023-2025 Base WMP.</p> <p>c. Please refer to Table 4-1 from the Request of the PG&E 2023-2025 Base WMP that includes the include and variance for 2023 and 2024.</p> <p>d. Provide an explanation for any variances in the table content in response to Question 1a.</p> <p>e. The 135 exposures each of the elements in the waterfall figure PG&E-1.3.2-1 in the 2026-2028 Base WMP. PG&E states that wildfire (pre-EPSS/PPSPS) is the "inherent wildfire risk based on the data from 2017 to 2024, absent of the PPSPS and EPSS operational mitigation".</p> <p>f. While the wildfire (pre-EPSS/PPSPS) calculated as a product of LURE and CORE?</p> <p>g. Explain why PPSPS Consequence and EPSS Consequence were included in the figure, rather than PPSPS Risk and EPSS Risk.</p> <p>h. Explain why PG&E did not use the product of LURE and CORE for PPSPS and EPSS when generating this figure.</p> | Edie Schmitt | 4/30/2025 | 5/6/2025 | 5/6/2025 | https://www.pge.com/assets/docs/Workbooks-and-Attachments/Workbooks-and-Attachments/2026-2028-Base-WMP/PG&E-1.1.4-2026-2028-Base-WMP-004_13.pdf | 0 | No | 3 | Overview of WMP | 3.4 |
| 178 | SFO | 004 | SFO_004 | 14 | No | SFO_004_Q14 | <p>Table 4-1 in the Request of the PG&E 2023-2025 Base WMP shows a ramp up in expenditures from 2020-2022 and from 2023-2025. Table 3-3 in the PG&E 2026-2028 Base WMP shows a similar ramp up in expenditures.</p> <p>a. Explain what causes the low forecasts in the first year of each WMP.</p> <p>b. Explain what causes the significant variance in 2022-2022 Table 4-1 from the 6th Revision of the PG&E 2023-2025 Base WMP.</p> <p>c. Please refer to Table 4-1 from the Request of the PG&E 2023-2025 Base WMP that includes the include and variance for 2023 and 2024.</p> <p>d. Provide an explanation for any variances in the table content in response to Question 1a.</p> <p>e. The 135 exposures each of the elements in the waterfall figure PG&E-1.3.2-1 in the 2026-2028 Base WMP. PG&E states that wildfire (pre-EPSS/PPSPS) is the "inherent wildfire risk based on the data from 2017 to 2024, absent of the PPSPS and EPSS operational mitigation".</p> <p>f. While the wildfire (pre-EPSS/PPSPS) calculated as a product of LURE and CORE?</p> <p>g. Explain why PPSPS Consequence and EPSS Consequence were included in the figure, rather than PPSPS Risk and EPSS Risk.</p> <p>h. Explain why PG&E did not use the product of LURE and CORE for PPSPS and EPSS when generating this figure.</p> | Edie Schmitt | 4/30/2025 | 5/13/2025 | 5/13/2025 | https://www.pge.com/assets/docs/Workbooks-and-Attachments/Workbooks-and-Attachments/2026-2028-Base-WMP/PG&E-1.1.4-2026-2028-Base-WMP-004_14.pdf | 2 | No | 3 | Overview of WMP | 3.6 | |
| 179 | SFO | 004 | SFO_004 | 15 | No | SFO_004_Q15 | <p>Table 4-1 in the Request of the PG&E 2023-2025 Base WMP shows a ramp up in expenditures from 2020-2022 and from 2023-2025. Table 3-3 in the PG&E 2026-2028 Base WMP shows a similar ramp up in expenditures.</p> <p>a. Explain what causes the low forecasts in the first year of each WMP.</p> <p>b. Explain what causes the significant variance in 2022-2022 Table 4-1 from the 6th Revision of the PG&E 2023-2025 Base WMP.</p> <p>c. Please refer to Table 4-1 from the Request of the PG&E 2023-2025 Base WMP that includes the include and variance for 2023 and 2024.</p> <p>d. Provide an explanation for any variances in the table content in response to Question 1a.</p> <p>e. The 135 exposures each of the elements in the waterfall figure PG&E-1.3.2-1 in the 2026-2028 Base WMP. PG&E states that wildfire (pre-EPSS/PPSPS) is the "inherent wildfire risk based on the data from 2017 to 2024, absent of the PPSPS and EPSS operational mitigation".</p> <p>f. While the wildfire (pre-EPSS/PPSPS) calculated as a product of LURE and CORE?</p> <p>g. Explain why PPSPS Consequence and EPSS Consequence were included in the figure, rather than PPSPS Risk and EPSS Risk.</p> <p>h. Explain why PG&E did not use the product of LURE and CORE for PPSPS and EPSS when generating this figure.</p> | Edie Schmitt | 4/30/2025 | 5/13/2025 | 5/13/2025 | https://www.pge.com/assets/docs/Workbooks-and-Attachments/Workbooks-and-Attachments/2026-2028-Base-WMP/PG&E-1.1.4-2026-2028-Base-WMP-004_15.pdf | 0 | No | 6 | Wildfire Mitigation Strategy Development | 6.1.3 | |
| 180 | SFO | 004 | SFO_004 | 16 | No | SFO_004_Q16 | <p>Provide a copy of Figure 1-2 in PG&E's Chapter 1 of the PG&E 2024 RAMP without the scaling function (read as fiscal risk attribute).</p> <p>a. Explain any variances in the values displayed in the Figure 1-2 without the scaling function when compared with PG&E's response to WMP-Discovery2026-2028_DR_MORA_003-002.</p> | <p>The table submitted below to the 2024 RAMP was the "RAMP" draft that shows the TV Baseline for 2027 while MGRA Discovery and WMP chart shows Baseline for 2026 and 2027. The table below shows the impact to the risk value between the 2024 RAMP and the 2026-2028 Base WMP. The table below shows the impact to the risk value between the 2024 RAMP and the 2026-2028 Base WMP. The table below shows the impact to the risk value between the 2024 RAMP and the 2026-2028 Base WMP.</p> <p>k. No. Customers living within the HFTDHFRA were included in the Potentially Impacted Customers dataset, not in the historical likelihood dataset. HFTDHFRA customers included in the historical likelihood dataset would have to have met the PPSPS 5.0 Guidance threshold.</p> <p>l. Yes. Customers who might have been in a cell segment in HFRAs would be included. WMP-Discovery 2026-2028_DR_SFO_004-Q011 Page 2</p> | Edie Schmitt | 4/30/2025 | 5/13/2025 | 5/13/2025 | https://www.pge.com/assets/docs/Workbooks-and-Attachments/Workbooks-and-Attachments/2026-2028-Base-WMP/PG&E-1.1.4-2026-2028-Base-WMP-004_16.pdf | 1 | No | 6 | Wildfire Mitigation Strategy Development | 6.1.3.2 |
| 181 | SFO | 004 | SFO_004 | 17 | No | SFO_004_Q17 | <p>In Question 1c of PG&E's data request response to WMP-Discovery2026-2028_DR_TURN_002-0001, PG&E said that "The inclusion of PICs results in an increased risk associated with customers in locations where PPSPS thresholds are not met, not in our historical likelihood, but has exposure to PPSPS risk based on HFTDHFRA location and system configuration".</p> <p>a. What does HFTDHFRA location mean in this sentence?</p> <p>b. Does PG&E mean that every customer lives within the HFTDHFRA was included in the historical likelihood?</p> <p>c. Does PG&E include customers who might be considered of circuit segment that is exposed to PPSPS risk?</p> <p>d. Define "system configuration".</p> <p>e. Include a list of the components that were considered within the "system configuration" and explain their relationship to PPSPS thresholds.</p> <p>f. List each procedural step used to determine whether customers were exposed to PPSPS risk based on HFTDHFRA location and system configuration. Provide an explanation for each step.</p> | <p>In system configuration in this sentence refers to customers who might be physically located in HFRAs but are included because they are determined to be a circuit segment in HFRAs that would have been included.</p> <p>a. Please see PG&E's response to subpart (b) regarding the definition of "system configuration" in the current "System configuration" and "PPSPS Consequence" or "EPSS Consequence" are interchangeable with "PPSPS Risk" and "EPSS Risk".</p> <p>b. PPSPS thresholds may have an impact on what customers may be de-energized (in context of the historical likelihood not PIC) due to system configuration.</p> <p>c. The process for PICs is the same process for historical PPSPS likelihood analyses, however, there is a PPSPS threshold and the "weather program" is the latest approved HFRAs version. Customers that are within HFRAs are included, as well as any downstream customers that would be affected by a de-energization. Any commonly used mitigation like microgrids and backfeeds, if applicable, would be assumed to operate, so those customers would be mitigated in the PIC dataset.</p> | Edie Schmitt | 4/30/2025 | 5/13/2025 | 5/13/2025 | https://www.pge.com/assets/docs/Workbooks-and-Attachments/Workbooks-and-Attachments/2026-2028-Base-WMP/PG&E-1.1.4-2026-2028-Base-WMP-004_17.pdf | 0 | No | 5 | Risk Methodology & Assessment | 5.2.1 |

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|-----|-----|-----|---------|-------|-----|----------------|---|--|---|----|----|-------------------------------|-------------------------------|---------|-------------------------------|-----|
| 182 | SPO | 004 | SPO_004 | 18 | No | SPO_004_018 | <p>PG&E's Response to TURN/PO&E-3 Question 1 stated that with regard to the risk score in the affected datasets (e.g., WMP-Discovery2025-2028_DR_TURN_003-000A040CONF.xlsx), PG&E retained the primary project and primary risk (and) with the "maximum risk reduction." Provide an example for a subproject where both the "mean risk score" and "estimated wildfire risk reduction" is calculated.</p> | <p>Please see attachment "WMP-Discovery2025-2028_DR_SPO_004-000A040CONF.xlsx" for an example of wildfire risk reduction and mean risk for multiple subprojects on the same circuit segment.</p> <p>The general is in column (Column D) of the provided attachment "WMP-Discovery2025-2028_DR_TURN_003-000A040CONF.xlsx" for one sample circuit segment.</p> <p>PG&E originally included estimated wildfire risk reduction for each subproject because this is a critical element of wildfire risk that is not achieved by mitigation measures. The mean risk is the total risk score divided by the number of primary overhead miles on a circuit segment and is an indicator of the risk density of a subproject. It does not represent the total risk score associated with the length of the subproject.</p> <p>TSD orders with an applicable risk reduction of v2 and v3 represented circuit protection zones (CPZs) which were originally identified for scoring when the applicable risk model was v2 or v3 at the time. These TSD orders fall into three categories:</p> <ol style="list-style-type: none">On Hold Projects. Projects on these CPZs were paused following the 2023-2028 GRC decision. They will remain in a pre-scoping status and be re-evaluated and rescored under WORM v4. There are 2 CPZs in this category representing approximately 37 miles.Camper Projects. These CPZs represent projects that will carry over from the current GRC period and will remain in v2 or v3 projects. The pre-scoping status was an error. There are six CPZs in this category representing approximately 5.6 miles.Inductively Installed. These CPZs were initially identified as potential undergrounding projects due to mitigations being previously planned on a portion of the CPZ prior to 2027. The high-level workplan was developed based on the assumption that remaining mileage on these CPZs should be mitigated. For TSD orders in category 1, these projects were inadvertently included and were not as part of PG&E's 2027 workplan. There are four CPZs in this category representing less than 7 miles of risk and 0.0005% risk reduction based on the current scoring process described by the System Hardening Project Scoping Decision. These Projects PG&E 5.2.2.1, PG&E 5.2.2.2, and PG&E 5.2.2.3. These projects would not have met the WORM V4 criteria for inclusion in the work plan, and would not have proceeded beyond their inactivated inclusion in the high-level workplan. <p>For categorization of each of the CPZs with TSD orders in v2 and v3, please reference the table below:</p> <ol style="list-style-type: none">At the time of PG&E's WMP submission, the 2027 and 2028 work plan had not yet been fully accepted. For purposes of estimating risk reduction associated with PG&E's Critical WMP initiative mileage target, PG&E identified a list of circuit segments that would be considered for scoring and thus when producing subsequent WMP/Discovery2025-2028_DR_SPO_001-Q002000A040CONF.xlsx all the same with an end date in 2027 or 2028 were listed with a "pre-scoping" status. The workplan is dynamic, and as work evolves as work is scoped in accordance with the System Hardening Project Scoping Decision, these would be in the WMP/Discovery2025-2028_DR_SPO_004-Q002000A040CONF.xlsx. <p>Please see attachment "WMP-Discovery2025-2028_DR_SPO_004-Q002000A040CONF.xlsx" worksheet "Summary (FINAL - WMP - Discovery)".</p> <ol style="list-style-type: none">Yes, PG&E intended to reference PG&E A0400 7150 E-A in response to SPO-004-WMP/Discovery2025-2028_DR_SPO_004-Q002000A040CONF.xlsx.See attached "WMP-Discovery2025-2028_DR_SPO_004-Q002000A040CONF.xlsx" - Project Details, 2025 - 2028 LG, 2025 - 2028 CH, and 2025 - 2028 LR Tab.See attached "WMP-Discovery2025-2028_DR_SPO_004-Q002000A040CONF.xlsx" - Project Details and the 2028 Workplan Tab.WMP-Discovery2025-2028_DR_SPO_004-Q002000A040CONF.xlsx, each calculation includes the requested formula.Not applicable in the attached "WMP-Discovery2025-2028_DR_SPO_004-Q002000A040CONF.xlsx" have been corrected.Not only in the attached "WMP-Discovery2025-2028_DR_SPO_004-Q002000A040CONF.xlsx" have been fully mitigated, but where discrepancies exist between circuit segment length data (as specified in the applicable version of the WORM) and field as-built data. For example, unallocated overhead removal occurs when the mitigation footage recorded in our as-built database is less than the total length of the original overhead line being mitigated. As an example, this can occur when a more direct route with fewer bends than the original route is installed. Although the risk associated with the original overhead line is still addressed, it may not be reflected under the three mitigation categories (CH, LG, or Removal). To ensure every yard of the original overhead line is accounted for in the risk reduction calculation, this "unallocated" difference must be included for a comprehensive assessment. | 1 | No | 5 | Risk Methodology & Assessment | 5.4 | | | |
| 183 | SPO | 004 | SPO_004 | 19 | No | SPO_004_019 | <p>PG&E's Response to TURN/PO&E-3 Question 1 included the dataset titled WMP-Discovery2025-2028_DR_TURN_003-000A040CONF.xlsx. PG&E's Response to SPO-004-WMP/Discovery2025-2028_DR_TURN_003-000A040CONF.xlsx. Why do these datasets include TSD Orders where the Applicable Risk Model is Version 2 and Version 3?</p> <p>a. Why do these TSD Orders exhibit a pre-scoping status?</p> <p>b. Why do these TSD Orders only report Forecast LG Miles in 2027?</p> <p>c. Will WORM v4 and v3 be used to scope projects that are Forecasted for 2028? If so, explain why.</p> | <p>PG&E's Response to SPO-004-WMP/Discovery2025-2028_DR_TURN_003-000A040CONF.xlsx. PG&E's Response to SPO-004-WMP/Discovery2025-2028_DR_TURN_003-000A040CONF.xlsx. Why do these datasets include TSD Orders where the Applicable Risk Model is Version 2 and Version 3?</p> <p>a. Why do these TSD Orders exhibit a pre-scoping status?</p> <p>b. Why do these TSD Orders only report Forecast LG Miles in 2027?</p> <p>c. Will WORM v4 and v3 be used to scope projects that are Forecasted for 2028? If so, explain why.</p> | <p>PG&E's Response to SPO-004-WMP/Discovery2025-2028_DR_TURN_003-000A040CONF.xlsx. PG&E's Response to SPO-004-WMP/Discovery2025-2028_DR_TURN_003-000A040CONF.xlsx. Why do these datasets include TSD Orders where the Applicable Risk Model is Version 2 and Version 3?</p> <p>a. Why do these TSD Orders exhibit a pre-scoping status?</p> <p>b. Why do these TSD Orders only report Forecast LG Miles in 2027?</p> <p>c. Will WORM v4 and v3 be used to scope projects that are Forecasted for 2028? If so, explain why.</p> | 0 | No | 5 | Risk Methodology & Assessment | 5.4 | | |
| 184 | SPO | 004 | SPO_004 | 20 | No | SPO_004_020 | <p>PG&E's Response to SPO-004-WMP/Discovery2025-2028_DR_TURN_003-000A040CONF.xlsx. PG&E's Response to SPO-004-WMP/Discovery2025-2028_DR_TURN_003-000A040CONF.xlsx. Why do these datasets include TSD Orders where the Applicable Risk Model is Version 2 and Version 3?</p> <p>a. Why do these TSD Orders exhibit a pre-scoping status?</p> <p>b. Why do these TSD Orders only report Forecast LG Miles in 2027?</p> <p>c. Will WORM v4 and v3 be used to scope projects that are Forecasted for 2028? If so, explain why.</p> | <p>PG&E's Response to SPO-004-WMP/Discovery2025-2028_DR_TURN_003-000A040CONF.xlsx. PG&E's Response to SPO-004-WMP/Discovery2025-2028_DR_TURN_003-000A040CONF.xlsx. Why do these datasets include TSD Orders where the Applicable Risk Model is Version 2 and Version 3?</p> <p>a. Why do these TSD Orders exhibit a pre-scoping status?</p> <p>b. Why do these TSD Orders only report Forecast LG Miles in 2027?</p> <p>c. Will WORM v4 and v3 be used to scope projects that are Forecasted for 2028? If so, explain why.</p> | <p>PG&E's Response to SPO-004-WMP/Discovery2025-2028_DR_TURN_003-000A040CONF.xlsx. PG&E's Response to SPO-004-WMP/Discovery2025-2028_DR_TURN_003-000A040CONF.xlsx. Why do these datasets include TSD Orders where the Applicable Risk Model is Version 2 and Version 3?</p> <p>a. Why do these TSD Orders exhibit a pre-scoping status?</p> <p>b. Why do these TSD Orders only report Forecast LG Miles in 2027?</p> <p>c. Will WORM v4 and v3 be used to scope projects that are Forecasted for 2028? If so, explain why.</p> | 1 | No | GH04 | GH04 | GH04 | Risk Methodology & Assessment | 5.4 |
| 185 | SPO | 004 | SPO_004 | 21 | No | SPO_004_021 | <p>Figure PG&E-5.2.2.1 in the 2025-2028 Base WMP presents "Outage Probability Vegetation" as a Model. Section 5.2.2.1 Distribution Event Probability Model Version 4 (DPRM v4) Documentation is dedicated to describing "Vegetation Models". Pg. 60 presents "asset-based event model" and "contact from object" models but does not present "regression" models. Does the "contact from object" description apply to "regression models"? If not:</p> <p>a. Why are regression models not discussed in any of the 2025-2028 Base WMP?</p> <p>b. How are regression models integrated into the calculation of probability of ignition given category?</p> <p>c. Compared with the Asset Equipment or Contact from Object models, are there any differences in how vegetation models are integrated into the calculation of probability of ignition? If so, list them and explain why there are differences.</p> <p>Provide a description of each of the alphanumeric customer categories listed in Table PG&E 5.2.2.2.</p> <p>2 in the 2025-2028 Base WMP:</p> <p>a. Include in the description an explanation of how PG&E established each category?</p> <p>b. What justification did PG&E use to establish the relative customer weightings? PG&E explains that COI "has higher consequence, but why is "Customer" weighted 20s more than "Significant"?</p> | <p>Figure PG&E-5.2.2.1 in the 2025-2028 Base WMP presents "Outage Probability Vegetation" as a Model. Section 5.2.2.1 Distribution Event Probability Model Version 4 (DPRM v4) Documentation is dedicated to describing "Vegetation Models". Pg. 60 presents "asset-based event model" and "contact from object" models but does not present "regression" models. Does the "contact from object" description apply to "regression models"? If not:</p> <p>a. Why are regression models not discussed in any of the 2025-2028 Base WMP?</p> <p>b. How are regression models integrated into the calculation of probability of ignition given category?</p> <p>c. Compared with the Asset Equipment or Contact from Object models, are there any differences in how vegetation models are integrated into the calculation of probability of ignition? If so, list them and explain why there are differences.</p> <p>Provide a description of each of the alphanumeric customer categories listed in Table PG&E 5.2.2.2.</p> <p>2 in the 2025-2028 Base WMP:</p> <p>a. Include in the description an explanation of how PG&E established each category?</p> <p>b. What justification did PG&E use to establish the relative customer weightings? PG&E explains that COI "has higher consequence, but why is "Customer" weighted 20s more than "Significant"?</p> | <p>Figure PG&E-5.2.2.1 in the 2025-2028 Base WMP presents "Outage Probability Vegetation" as a Model. Section 5.2.2.1 Distribution Event Probability Model Version 4 (DPRM v4) Documentation is dedicated to describing "Vegetation Models". Pg. 60 presents "asset-based event model" and "contact from object" models but does not present "regression" models. Does the "contact from object" description apply to "regression models"? If not:</p> <p>a. Why are regression models not discussed in any of the 2025-2028 Base WMP?</p> <p>b. How are regression models integrated into the calculation of probability of ignition given category?</p> <p>c. Compared with the Asset Equipment or Contact from Object models, are there any differences in how vegetation models are integrated into the calculation of probability of ignition? If so, list them and explain why there are differences.</p> <p>Provide a description of each of the alphanumeric customer categories listed in Table PG&E 5.2.2.2.</p> <p>2 in the 2025-2028 Base WMP:</p> <p>a. Include in the description an explanation of how PG&E established each category?</p> <p>b. What justification did PG&E use to establish the relative customer weightings? PG&E explains that COI "has higher consequence, but why is "Customer" weighted 20s more than "Significant"?</p> | 0 | No | 5 | Risk Methodology & Assessment | 5.2.1 | | |
| 186 | SPO | 004 | SPO_004 | 22(a) | Yes | SPO_004_022(a) | <p>Provide a description of each of the alphanumeric customer categories listed in Table PG&E 5.2.2.2.</p> <p>2 in the 2025-2028 Base WMP:</p> <p>a. Include in the description an explanation of how PG&E established each category?</p> <p>b. What justification did PG&E use to establish the relative customer weightings? PG&E explains that COI "has higher consequence, but why is "Customer" weighted 20s more than "Significant"?</p> | <p>Provide a description of each of the alphanumeric customer categories listed in Table PG&E 5.2.2.2.</p> <p>2 in the 2025-2028 Base WMP:</p> <p>a. Include in the description an explanation of how PG&E established each category?</p> <p>b. What justification did PG&E use to establish the relative customer weightings? PG&E explains that COI "has higher consequence, but why is "Customer" weighted 20s more than "Significant"?</p> | <p>Provide a description of each of the alphanumeric customer categories listed in Table PG&E 5.2.2.2.</p> <p>2 in the 2025-2028 Base WMP:</p> <p>a. Include in the description an explanation of how PG&E established each category?</p> <p>b. What justification did PG&E use to establish the relative customer weightings? PG&E explains that COI "has higher consequence, but why is "Customer" weighted 20s more than "Significant"?</p> | 0 | No | 5 | Risk Methodology & Assessment | 5.2.2.2 | | |
| 186 | SPO | 004 | SPO_004 | 22 | No | SPO_004_022 | <p>Provide a description of each of the alphanumeric customer categories listed in Table PG&E 5.2.2.2.</p> <p>2 in the 2025-2028 Base WMP:</p> <p>a. Include in the description an explanation of how PG&E established each category?</p> <p>b. What justification did PG&E use to establish the relative customer weightings? PG&E explains that COI "has higher consequence, but why is "Customer" weighted 20s more than "Significant"?</p> | <p>Provide a description of each of the alphanumeric customer categories listed in Table PG&E 5.2.2.2.</p> <p>2 in the 2025-2028 Base WMP:</p> <p>a. Include in the description an explanation of how PG&E established each category?</p> <p>b. What justification did PG&E use to establish the relative customer weightings? PG&E explains that COI "has higher consequence, but why is "Customer" weighted 20s more than "Significant"?</p> | <p>Provide a description of each of the alphanumeric customer categories listed in Table PG&E 5.2.2.2.</p> <p>2 in the 2025-2028 Base WMP:</p> <p>a. Include in the description an explanation of how PG&E established each category?</p> <p>b. What justification did PG&E use to establish the relative customer weightings? PG&E explains that COI "has higher consequence, but why is "Customer" weighted 20s more than "Significant"?</p> | 0 | No | 5 | Risk Methodology & Assessment | 5.2.2.2 | | |
| 187 | SPO | 004 | SPO_004 | 23 | No | SPO_004_023 | <p>Related to Figure PG&E 5.2.2.3-1 in the 2025-2028 Base WMP, on pg. 72, PG&E states "... the two circuit segments share a common (joint) FE, and a third support structure (pole) asset also located in joint FE. To keep the total sum of risk on the network constant, these shared risk results must be partially distributed to each of the circuit segments. The aggregation methodology, in this case, would assign half of the FE joint risk and half of the support structure risk to each of the circuit segments."</p> <p>a. Explain "TADA Algorithms and Methodologies" please explain.</p> <p>Why, in this example, was the risk distributed to each of the circuit segments equally?</p> <p>b. If not explained in "TADA Algorithms and Methodologies" please explain.</p> <p>a. Are there instances where the risk is not distributed equally?</p> <p>a) If so, explain what those instances would be and how PG&E determines the proportion of risk that should be attributed to each circuit segment.</p> <p>b) If not, explain why.</p> <p>c. Are there instances of a pole sharing more than two circuit segments?</p> <p>d. If so, explain why a pole can share more than two circuit segments. Provide examples by citing circuit segment names.</p> <p>e. If not, explain why not.</p> | <p>Related to Figure PG&E 5.2.2.3-1 in the 2025-2028 Base WMP, on pg. 72, PG&E states "... the two circuit segments share a common (joint) FE, and a third support structure (pole) asset also located in joint FE. To keep the total sum of risk on the network constant, these shared risk results must be partially distributed to each of the circuit segments. The aggregation methodology, in this case, would assign half of the FE joint risk and half of the support structure risk to each of the circuit segments."</p> <p>a. Explain "TADA Algorithms and Methodologies" please explain.</p> <p>Why, in this example, was the risk distributed to each of the circuit segments equally?</p> <p>b. If not explained in "TADA Algorithms and Methodologies" please explain.</p> <p>a. Are there instances where the risk is not distributed equally?</p> <p>a) If so, explain what those instances would be and how PG&E determines the proportion of risk that should be attributed to each circuit segment.</p> <p>b) If not, explain why.</p> <p>c. Are there instances of a pole sharing more than two circuit segments?</p> <p>d. If so, explain why a pole can share more than two circuit segments. Provide examples by citing circuit segment names.</p> <p>e. If not, explain why not.</p> | <p>Related to Figure PG&E 5.2.2.3-1 in the 2025-2028 Base WMP, on pg. 72, PG&E states "... the two circuit segments share a common (joint) FE, and a third support structure (pole) asset also located in joint FE. To keep the total sum of risk on the network constant, these shared risk results must be partially distributed to each of the circuit segments. The aggregation methodology, in this case, would assign half of the FE joint risk and half of the support structure risk to each of the circuit segments."</p> <p>a. Explain "TADA Algorithms and Methodologies" please explain.</p> <p>Why, in this example, was the risk distributed to each of the circuit segments equally?</p> <p>b. If not explained in "TADA Algorithms and Methodologies" please explain.</p> <p>a. Are there instances where the risk is not distributed equally?</p> <p>a) If so, explain what those instances would be and how PG&E determines the proportion of risk that should be attributed to each circuit segment.</p> <p>b) If not, explain why.</p> <p>c. Are there instances of a pole sharing more than two circuit segments?</p> <p>d. If so, explain why a pole can share more than two circuit segments. Provide examples by citing circuit segment names.</p> <p>e. If not, explain why not.</p> | 1 | No | 5 | Risk Methodology & Assessment | 5.2.2.2 | | |
| 187 | SPO | 004 | SPO_004 | 23(a) | Yes | SPO_004_023(a) | <p>When discussing PSPS Risk on page 74-75 in the 2025-2028 Base WMP, PG&E states that "PSPS likelihood and PSPS consequence are calculated by the probability and consequence of each individual customer service, part, (C) (SPO). Describe each step in the procedure that PG&E takes to estimate the PSPS likelihood and consequence of each individual customer service, part, (C) (SPO)."</p> <p>a. Explain how PG&E predicts where PSPS events will occur for customers that PG&E has not had a PSPS event?</p> <p>b. Explain how PG&E uses each of the Model Inputs listed in Figure PG&E-5.1.3 to estimate PSPS likelihood for each individual customer service, part, (C) (SPO).</p> <p>c. PG&E 48 notes that the "combination of weather, switching, and restoration is represented as total DM". Are the values associated with weather, switching and restoration measured in DM and just added together? Additionally, explain the following:</p> <p>a. How does PG&E estimate the severity of an expected weather period in which a customer is expected to be de-energized?</p> <p>b. How did PG&E come up with the estimate that patrol and restoration typically take 11 hours?</p> <p>c. Why did PG&E not use Estimated Time of Restoration?</p> <p>In its description of COI&E on page 61 in the 2025-2028 Base WMP, PG&E states "One perspective is that the Burn Probability is a deterministic assessment of local conditions at the time of an ignition event where there is a probability of ignition. There is no mention of Burn Probability in the Consequence Model Version 4 (CPM v4) Documentation. Provide a step-by-step description of PG&E's deterministic assessment of Burn Probability."</p> <p>a. If PG&E's deterministic assessment of Burn Probability is conducted with SME judgement, list the criteria SMEs are required to consider in their assessment.</p> <p>b. If PG&E's deterministic assessment of Burn Probability is conducted with SME judgement, explain how many SMEs participated in an estimation of Burn Probability based on the local conditions for each circuit segment.</p> | <p>When discussing PSPS Risk on page 74-75 in the 2025-2028 Base WMP, PG&E states that "PSPS likelihood and PSPS consequence are calculated by the probability and consequence of each individual customer service, part, (C) (SPO). Describe each step in the procedure that PG&E takes to estimate the PSPS likelihood and consequence of each individual customer service, part, (C) (SPO)."</p> <p>a. Explain how PG&E predicts where PSPS events will occur for customers that PG&E has not had a PSPS event?</p> <p>b. Explain how PG&E uses each of the Model Inputs listed in Figure PG&E-5.1.3 to estimate PSPS likelihood for each individual customer service, part, (C) (SPO).</p> <p>c. PG&E 48 notes that the "combination of weather, switching, and restoration is represented as total DM". Are the values associated with weather, switching and restoration measured in DM and just added together? Additionally, explain the following:</p> <p>a. How does PG&E estimate the severity of an expected weather period in which a customer is expected to be de-energized?</p> <p>b. How did PG&E come up with the estimate that patrol and restoration typically take 11 hours?</p> <p>c. Why did PG&E not use Estimated Time of Restoration?</p> <p>In its description of COI&E on page 61 in the 2025-2028 Base WMP, PG&E states "One perspective is that the Burn Probability is a deterministic assessment of local conditions at the time of an ignition event where there is a probability of ignition. There is no mention of Burn Probability in the Consequence Model Version 4 (CPM v4) Documentation. Provide a step-by-step description of PG&E's deterministic assessment of Burn Probability."</p> <p>a. If PG&E's deterministic assessment of Burn Probability is conducted with SME judgement, list the criteria SMEs are required to consider in their assessment.</p> <p>b. If PG&E's deterministic assessment of Burn Probability is conducted with SME judgement, explain how many SMEs participated in an estimation of Burn Probability based on the local conditions for each circuit segment.</p> | <p>When discussing PSPS Risk on page 74-75 in the 2025-2028 Base WMP, PG&E states that "PSPS likelihood and PSPS consequence are calculated by the probability and consequence of each individual customer service, part, (C) (SPO). Describe each step in the procedure that PG&E takes to estimate the PSPS likelihood and consequence of each individual customer service, part, (C) (SPO)."</p> <p>a. Explain how PG&E predicts where PSPS events will occur for customers that PG&E has not had a PSPS event?</p> <p>b. Explain how PG&E uses each of the Model Inputs listed in Figure PG&E-5.1.3 to estimate PSPS likelihood for each individual customer service, part, (C) (SPO).</p> <p>c. PG&E 48 notes that the "combination of weather, switching, and restoration is represented as total DM". Are the values associated with weather, switching and restoration measured in DM and just added together? Additionally, explain the following:</p> <p>a. How does PG&E estimate the severity of an expected weather period in which a customer is expected to be de-energized?</p> <p>b. How did PG&E come up with the estimate that patrol and restoration typically take 11 hours?</p> <p>c. Why did PG&E not use Estimated Time of Restoration?</p> <p>In its description of COI&E on page 61 in the 2025-2028 Base WMP, PG&E states "One perspective is that the Burn Probability is a deterministic assessment of local conditions at the time of an ignition event where there is a probability of ignition. There is no mention of Burn Probability in the Consequence Model Version 4 (CPM v4) Documentation. Provide a step-by-step description of PG&E's deterministic assessment of Burn Probability."</p> <p>a. If PG&E's deterministic assessment of Burn Probability is conducted with SME judgement, list the criteria SMEs are required to consider in their assessment.</p> <p>b. If PG&E's deterministic assessment of Burn Probability is conducted with SME judgement, explain how many SMEs participated in an estimation of Burn Probability based on the local conditions for each circuit segment.</p> | 0 | No | 5 | Public Safety Power Shutoff | 7 | | |
| 189 | SPO | 004 | SPO_004 | 25 | No | SPO_004_025 | <p>In its description of COI&E on page 61 in the 2025-2028 Base WMP, PG&E states "One perspective is that the Burn Probability is a deterministic assessment of local conditions at the time of an ignition event where there is a probability of ignition. There is no mention of Burn Probability in the Consequence Model Version 4 (CPM v4) Documentation. Provide a step-by-step description of PG&E's deterministic assessment of Burn Probability."</p> <p>a. If PG&E's deterministic assessment of Burn Probability is conducted with SME judgement, list the criteria SMEs are required to consider in their assessment.</p> <p>b. If PG&E's deterministic assessment of Burn Probability is conducted with SME judgement, explain how many SMEs participated in an estimation of Burn Probability based on the local conditions for each circuit segment.</p> | <p>In its description of COI&E on page 61 in the 2025-2028 Base WMP, PG&E states "One perspective is that the Burn Probability is a deterministic assessment of local conditions at the time of an ignition event where there is a probability of ignition. There is no mention of Burn Probability in the Consequence Model Version 4 (CPM v4) Documentation. Provide a step-by-step description of PG&E's deterministic assessment of Burn Probability."</p> <p>a. If PG&E's deterministic assessment of Burn Probability is conducted with SME judgement, list the criteria SMEs are required to consider in their assessment.</p> <p>b. If PG&E's deterministic assessment of Burn Probability is conducted with SME judgement, explain how many SMEs participated in an estimation of Burn Probability based on the local conditions for each circuit segment.</p> | <p>In its description of COI&E on page 61 in the 2025-2028 Base WMP, PG&E states "One perspective is that the Burn Probability is a deterministic assessment of local conditions at the time of an ignition event where there is a probability of ignition. There is no mention of Burn Probability in the Consequence Model Version 4 (CPM v4) Documentation. Provide a step-by-step description of PG&E's deterministic assessment of Burn Probability."</p> <p>a. If PG&E's deterministic assessment of Burn Probability is conducted with SME judgement, list the criteria SMEs are required to consider in their assessment.</p> <p>b. If PG&E's deterministic assessment of Burn Probability is conducted with SME judgement, explain how many SMEs participated in an estimation of Burn Probability based on the local conditions for each circuit segment.</p> | 0 | No | 5 | Risk Methodology & Assessment | 5.4 | | |

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|-----|-----|-----|---------|-------|-----|----------------|---|---|--------------|-----------|-----------|-----------|---|----|----|-------------------------------|--|-------|
| 190 | SPO | 004 | SPO_004 | 26 | No | SPO_004_026 | <p>What steps has PG&E taken to archive any data or models related to WORM v3?</p> <p>a. Have any aspects of WORM v3 not been archived? If so, explain why they were not archived.</p> <p>b. If any aspects of WORM v3 were not archived, would this prevent a party from using for data analysis using WORM v3 in the future?</p> <p>c. How long will PG&E maintain its archive of the data or models related to WORM v3?</p> <p>d. What data is PG&E maintaining of its previous asset data? What data would be missing if PG&E wanted to backload the risk in pre-2023 years using WORM v4? How is PG&E working to ensure that future models have the data necessary to backload the risk to current system configurations?</p> | <p>a. WORM v3 has been archived. The WORM version archive includes all source data, model code, and output data.</p> <p>b. All aspects of WORM v3 have been archived and will be available for future analysis requests.</p> <p>c. Currently, WORM v3 has been archived indefinitely. However, an additional WORM version is provided for future WMPs. PG&E may adopt an end-of-life retention policy in the future to discontinue other related mitigation program work supported by a version has been completed or canceled.</p> <p>d. Pursuant to agreement with SPO, PG&E will respond to this subject by May 13, 2026.</p> <p>e. What data is PG&E maintaining of its previous asset data?</p> <p>Asset history is not currently tracked in PG&E's GIS database. Historical asset data can be accessed through annually archived GIS database backups. Note that historical backups don't include future data quality improvements.</p> <p>As detailed for WORM v3 for subjects (a) and (b), WORM v4 source data, model code, and output data has been archived indefinitely. In addition, GIS configuration data going forward from January 1, 2023 only, has been snapshotted and archived monthly.</p> <p>What data would be missing if PG&E wanted to backload the risk in pre-2023 years using WORM v4?</p> <p>PG&E is assuming backload the risk means taking a version of the WORM aligned against a specific configuration of the system (i.e. Jan. 1, 2023) to WORM v4 and re-aggregating the risk to a configuration of the system representing a prior date.</p> <p>WMP-Denover 2026-2028 CBRL SPO_004-026 Page 2</p> <p>Primarily, the assignment of asset model risk to circuit segments would be missing prior to Jan. 1, 2023. Additionally, there would be other missing data when backloading to a previous circuit segment configuration. The distribution system is continuously changing; circuit segment reconfiguration, addition, and deletion. GIS location data errors are corrected, equipment assets are replaced, etc. All these incremental changes will result in a mismatch with grid configuration data from the January 1, 2023 snapshot used to generate WORM v4. The further a backload date is from the original snapshot, the more severe the mismatches will become. For each mismatch, the likelihood that the WORM v4 would be unable to produce a risk value for a given asset or location increases. In turn, the aggregated risk value for any given circuit segment would likely be underreported, as any missing asset-level risk values would be assumed to be zero.</p> <p>How is PG&E working to ensure that future models have the data necessary to backload the risk to current system configurations?</p> <p>PG&E is archiving monthly snapshots of data related to WORM v4 to enable re-creating historical configurations of the system. However, many of the issues mentioned previously around the risk data becoming date error will still be true, even when a historical configuration can be created. Additionally, it's challenging to</p> <p>PG&E objects that the request is overbroad because there are many potential feasibility constraints depending on the specific circumstances of a given case. Due to the extensive range of feasibility constraints that may be considered in the design of undergrounding, costed construction, and for removal projects, it is impractical, if not impossible, to enumerate all potential factors. Therefore, although the list provided below attempts to thoroughly set forth common feasibility constraints that significantly impact the program, it may not be an exhaustive list.</p> <p>Below are primary examples of feasibility constraints considered within the scoping process:</p> <ul style="list-style-type: none">• High-voltage dependencies and permitting requirements from federal, state and local agencies• Soil stability, such as grade/soil, rock, waterway crossings, hills, cultural and environmental• Terrain impacts, such as the need for retaining walls, grading/erosion, and vegetation removal• Aesthetic and other constraints that are known to exist in the project scope.• Construction and restoration restrictions such as bird nests, helicopter safety, limited equipment• Assessment and customer engagement limitations to building the scope• Constructability of alternatives whether it be due to overhead limitations or underground <p>a. Feasibility constraints are operationalized within the decision tree starting with a lead engineer who conducts a desktop feasibility review and determines a preliminary proposed scope that we compare to available alternatives. This preliminary proposed scope is sent out to a greater scoping team who completes a combination of field and desktop reviews targeted at the locations proposed for work. The various reviews are evaluated in a desktop scoping meeting where the proposed scope may be modified to ensure constructability and to address dependencies that may impact timing and cost.</p> <p>b. Feasibility constraints influence the construction route of projects. For example, if there is steep terrain or significantly hard rock, the route will be adjusted based on the location of the constraints. Cost-related feasibility factors are incorporated into cost assessments as non-adjustable cost nodes, which are then included in the ALJ ruling.</p> <p>The date the CBRL has not adopted any Risk Tolerance standard. Accordingly, we do not rely on any determination by PG&E or the CBRL regarding a Risk Tolerance standard as justification for our proposed mitigation strategies. However, in proposing our mitigation strategies we employ our professional experience, expertise, and prudent operational judgment to assess the level of safety event risk posed by wildfires. We do not assert that these risk levels are "reasonable." As the ALJ ruling correctly points out, and PG&E agrees, establishing Risk Tolerance standards for California is the Commission's responsibility. We believe, however, that understanding the potential for catastrophic WMP-Denover 2026-2028 CBRL SPO_004-026 Page 2 risk consequences is an important factor to be considered along with cost-benefit analysis.</p> <p>A. There is no mitigation that needs to be reconsidered in light of this order. A specific risk tolerance threshold was not used as a justification for selecting those mitigation strategies.</p> <p>A specific risk tolerance threshold was not used in the decision trees.</p> <p>c. Risk tolerance thresholds have not been integrated into PG&E's mitigation selection process for the 2026-2028 WMP.</p> | Edie Schwett | 4/30/2025 | 5/6/2025 | 5/6/2025 | https://www.pge.com/energy/ops/docs/understand-safety/understand-safety-operations-and-maintenance/CBRL-2026-SPO_004.pdf | 0 | No | 5 | Risk Methodology & Assessment | 5.4 |
| 190 | SPO | 004 | SPO_004 | 26(x) | Yes | SPO_004_026(x) | <p>What steps has PG&E taken to archive any data or models related to WORM v3?</p> <p>a. Have any aspects of WORM v3 not been archived? If so, explain why they were not archived.</p> <p>b. If any aspects of WORM v3 were not archived, would this prevent a party from using for data analysis using WORM v3 in the future?</p> <p>c. How long will PG&E maintain its archive of the data or models related to WORM v3?</p> <p>d. What data is PG&E maintaining of its previous asset data? What data would be missing if PG&E wanted to backload the risk in pre-2023 years using WORM v4? How is PG&E working to ensure that future models have the data necessary to backload the risk to current system configurations?</p> | <p>a. WORM v3 has been archived. The WORM version archive includes all source data, model code, and output data.</p> <p>b. All aspects of WORM v3 have been archived and will be available for future analysis requests.</p> <p>c. Currently, WORM v3 has been archived indefinitely. However, an additional WORM version is provided for future WMPs. PG&E may adopt an end-of-life retention policy in the future to discontinue other related mitigation program work supported by a version has been completed or canceled.</p> <p>d. Pursuant to agreement with SPO, PG&E will respond to this subject by May 13, 2026.</p> <p>e. What data is PG&E maintaining of its previous asset data?</p> <p>Asset history is not currently tracked in PG&E's GIS database. Historical asset data can be accessed through annually archived GIS database backups. Note that historical backups don't include future data quality improvements.</p> <p>As detailed for WORM v3 for subjects (a) and (b), WORM v4 source data, model code, and output data has been archived indefinitely. In addition, GIS configuration data going forward from January 1, 2023 only, has been snapshotted and archived monthly.</p> <p>What data would be missing if PG&E wanted to backload the risk in pre-2023 years using WORM v4?</p> <p>PG&E is assuming backload the risk means taking a version of the WORM aligned against a specific configuration of the system (i.e. Jan. 1, 2023) to WORM v4 and re-aggregating the risk to a configuration of the system representing a prior date.</p> <p>WMP-Denover 2026-2028 CBRL SPO_004-026 Page 2</p> <p>Primarily, the assignment of asset model risk to circuit segments would be missing prior to Jan. 1, 2023. Additionally, there would be other missing data when backloading to a previous circuit segment configuration. The distribution system is continuously changing; circuit segment reconfiguration, addition, and deletion. GIS location data errors are corrected, equipment assets are replaced, etc. All these incremental changes will result in a mismatch with grid configuration data from the January 1, 2023 snapshot used to generate WORM v4. The further a backload date is from the original snapshot, the more severe the mismatches will become. For each mismatch, the likelihood that the WORM v4 would be unable to produce a risk value for a given asset or location increases. In turn, the aggregated risk value for any given circuit segment would likely be underreported, as any missing asset-level risk values would be assumed to be zero.</p> <p>How is PG&E working to ensure that future models have the data necessary to backload the risk to current system configurations?</p> <p>PG&E is archiving monthly snapshots of data related to WORM v4 to enable re-creating historical configurations of the system. However, many of the issues mentioned previously around the risk data becoming date error will still be true, even when a historical configuration can be created. Additionally, it's challenging to</p> <p>PG&E objects that the request is overbroad because there are many potential feasibility constraints depending on the specific circumstances of a given case. Due to the extensive range of feasibility constraints that may be considered in the design of undergrounding, costed construction, and for removal projects, it is impractical, if not impossible, to enumerate all potential factors. Therefore, although the list provided below attempts to thoroughly set forth common feasibility constraints that significantly impact the program, it may not be an exhaustive list.</p> <p>Below are primary examples of feasibility constraints considered within the scoping process:</p> <ul style="list-style-type: none">• High-voltage dependencies and permitting requirements from federal, state and local agencies• Soil stability, such as grade/soil, rock, waterway crossings, hills, cultural and environmental• Terrain impacts, such as the need for retaining walls, grading/erosion, and vegetation removal• Aesthetic and other constraints that are known to exist in the project scope.• Construction and restoration restrictions such as bird nests, helicopter safety, limited equipment• Assessment and customer engagement limitations to building the scope• Constructability of alternatives whether it be due to overhead limitations or underground <p>a. Feasibility constraints are operationalized within the decision tree starting with a lead engineer who conducts a desktop feasibility review and determines a preliminary proposed scope that we compare to available alternatives. This preliminary proposed scope is sent out to a greater scoping team who completes a combination of field and desktop reviews targeted at the locations proposed for work. The various reviews are evaluated in a desktop scoping meeting where the proposed scope may be modified to ensure constructability and to address dependencies that may impact timing and cost.</p> <p>b. Feasibility constraints influence the construction route of projects. For example, if there is steep terrain or significantly hard rock, the route will be adjusted based on the location of the constraints. Cost-related feasibility factors are incorporated into cost assessments as non-adjustable cost nodes, which are then included in the ALJ ruling.</p> <p>The date the CBRL has not adopted any Risk Tolerance standard. Accordingly, we do not rely on any determination by PG&E or the CBRL regarding a Risk Tolerance standard as justification for our proposed mitigation strategies. However, in proposing our mitigation strategies we employ our professional experience, expertise, and prudent operational judgment to assess the level of safety event risk posed by wildfires. We do not assert that these risk levels are "reasonable." As the ALJ ruling correctly points out, and PG&E agrees, establishing Risk Tolerance standards for California is the Commission's responsibility. We believe, however, that understanding the potential for catastrophic WMP-Denover 2026-2028 CBRL SPO_004-026 Page 2 risk consequences is an important factor to be considered along with cost-benefit analysis.</p> <p>A. There is no mitigation that needs to be reconsidered in light of this order. A specific risk tolerance threshold was not used as a justification for selecting those mitigation strategies.</p> <p>A specific risk tolerance threshold was not used in the decision trees.</p> <p>c. Risk tolerance thresholds have not been integrated into PG&E's mitigation selection process for the 2026-2028 WMP.</p> | Edie Schwett | 4/30/2025 | 5/13/2025 | 5/13/2025 | https://www.pge.com/energy/ops/docs/understand-safety/understand-safety-operations-and-maintenance/CBRL-2026-SPO_004.pdf | 0 | No | 5 | Risk Methodology & Assessment | 5.4 |
| 191 | SPO | 004 | SPO_004 | 27 | No | SPO_004_027 | <p>List all of the feasibility constraints that are relevant to the decision trees found in Figures PG&E-8.2.1-1, PG&E-8.2.1-2, and PG&E-8.2.1-3 in the 2026-2028 Base WMP.</p> <p>a. How are these feasibility constraints operationalized within these decision trees?</p> <p>b. How are these feasibility constraints addressed in PG&E's Cost Benefit Analysis?</p> | <p>PG&E objects that the request is overbroad because there are many potential feasibility constraints depending on the specific circumstances of a given case. Due to the extensive range of feasibility constraints that may be considered in the design of undergrounding, costed construction, and for removal projects, it is impractical, if not impossible, to enumerate all potential factors. Therefore, although the list provided below attempts to thoroughly set forth common feasibility constraints that significantly impact the program, it may not be an exhaustive list.</p> <p>Below are primary examples of feasibility constraints considered within the scoping process:</p> <ul style="list-style-type: none">• High-voltage dependencies and permitting requirements from federal, state and local agencies• Soil stability, such as grade/soil, rock, waterway crossings, hills, cultural and environmental• Terrain impacts, such as the need for retaining walls, grading/erosion, and vegetation removal• Aesthetic and other constraints that are known to exist in the project scope.• Construction and restoration restrictions such as bird nests, helicopter safety, limited equipment• Assessment and customer engagement limitations to building the scope• Constructability of alternatives whether it be due to overhead limitations or underground <p>a. Feasibility constraints are operationalized within the decision tree starting with a lead engineer who conducts a desktop feasibility review and determines a preliminary proposed scope that we compare to available alternatives. This preliminary proposed scope is sent out to a greater scoping team who completes a combination of field and desktop reviews targeted at the locations proposed for work. The various reviews are evaluated in a desktop scoping meeting where the proposed scope may be modified to ensure constructability and to address dependencies that may impact timing and cost.</p> <p>b. Feasibility constraints influence the construction route of projects. For example, if there is steep terrain or significantly hard rock, the route will be adjusted based on the location of the constraints. Cost-related feasibility factors are incorporated into cost assessments as non-adjustable cost nodes, which are then included in the ALJ ruling.</p> <p>The date the CBRL has not adopted any Risk Tolerance standard. Accordingly, we do not rely on any determination by PG&E or the CBRL regarding a Risk Tolerance standard as justification for our proposed mitigation strategies. However, in proposing our mitigation strategies we employ our professional experience, expertise, and prudent operational judgment to assess the level of safety event risk posed by wildfires. We do not assert that these risk levels are "reasonable." As the ALJ ruling correctly points out, and PG&E agrees, establishing Risk Tolerance standards for California is the Commission's responsibility. We believe, however, that understanding the potential for catastrophic WMP-Denover 2026-2028 CBRL SPO_004-026 Page 2 risk consequences is an important factor to be considered along with cost-benefit analysis.</p> <p>A. There is no mitigation that needs to be reconsidered in light of this order. A specific risk tolerance threshold was not used as a justification for selecting those mitigation strategies.</p> <p>A specific risk tolerance threshold was not used in the decision trees.</p> <p>c. Risk tolerance thresholds have not been integrated into PG&E's mitigation selection process for the 2026-2028 WMP.</p> | Edie Schwett | 4/30/2025 | 5/6/2025 | 5/6/2025 | https://www.pge.com/energy/ops/docs/understand-safety/understand-safety-operations-and-maintenance/CBRL-2026-SPO_004.pdf | 0 | No | 8 | Grid Design, Operations, and Maintenance | 8.2.1 |
| 192 | SPO | 004 | SPO_004 | 28 | No | SPO_004_028 | <p>On page 124 in the 2026-2028 Base WMP, PG&E states that it has adopted a consistent treatment of risk tolerance in its risk assessment and mitigation strategies. In an Administrative Law Judge Ruling (dated April 22 2025) in the PG&E 2024 RAMP Proceedings (A 24-05-008), PG&E was ordered to not refer to "risk tolerance" to justify risk mitigation activities in the 2027 GRC Rate Case.</p> <p>a. Explain which mitigations, discussed in the 2026-2028 WMP, will need to be reconsidered in light of this order.</p> <p>b. Explain how and why risk tolerance was used as a justification for selecting those mitigation strategies.</p> <p>c. Explain what role risk tolerance played in the decision trees found in Figures PG&E-8.2.1-1, PG&E-8.2.1-2, and PG&E-8.2.1-3 in the 2026-2028 Base WMP.</p> <p>d. Explain how these decision trees will change in light of the ALJ Ruling.</p> <p>e. Explain any other decision-making procedure, process, tool or other approach where a treatment of risk tolerance was integrated into PG&E's mitigation selection process.</p> <p>f. Explain how these approaches will change in light of the ALJ Ruling.</p> | <p>The date the CBRL has not adopted any Risk Tolerance standard. Accordingly, we do not rely on any determination by PG&E or the CBRL regarding a Risk Tolerance standard as justification for our proposed mitigation strategies. However, in proposing our mitigation strategies we employ our professional experience, expertise, and prudent operational judgment to assess the level of safety event risk posed by wildfires. We do not assert that these risk levels are "reasonable." As the ALJ ruling correctly points out, and PG&E agrees, establishing Risk Tolerance standards for California is the Commission's responsibility. We believe, however, that understanding the potential for catastrophic WMP-Denover 2026-2028 CBRL SPO_004-026 Page 2 risk consequences is an important factor to be considered along with cost-benefit analysis.</p> <p>A. There is no mitigation that needs to be reconsidered in light of this order. A specific risk tolerance threshold was not used as a justification for selecting those mitigation strategies.</p> <p>A specific risk tolerance threshold was not used in the decision trees.</p> <p>c. Risk tolerance thresholds have not been integrated into PG&E's mitigation selection process for the 2026-2028 WMP.</p> | Edie Schwett | 4/30/2025 | 5/6/2025 | 5/6/2025 | https://www.pge.com/energy/ops/docs/understand-safety/understand-safety-operations-and-maintenance/CBRL-2026-SPO_004.pdf | 0 | No | 6 | Risk Methodology & Assessment | 6 |
| 193 | SPO | 004 | SPO_004 | 29 | No | SPO_004_029 | <p>Provide a detailed explanation of how PG&E addresses tail risk in its risk models presented in the 2026-2028 Base WMP.</p> <p>a. Is the EORM impacted by PG&E's approach to addressing wildfire tail risk? If so, how? If not, why not?</p> <p>b. Is the WORM impacted by PG&E's approach to addressing wildfire tail risk? If so, how? If not, why not?</p> <p>c. Is the WTRM impacted by PG&E's approach to addressing wildfire tail risk? If so, how? If not, why not?</p> | <p>The date the CBRL has not adopted any Risk Tolerance standard. Accordingly, we do not rely on any determination by PG&E or the CBRL regarding a Risk Tolerance standard as justification for our proposed mitigation strategies. However, in proposing our mitigation strategies we employ our professional experience, expertise, and prudent operational judgment to assess the level of safety event risk posed by wildfires. We do not assert that these risk levels are "reasonable." As the ALJ ruling correctly points out, and PG&E agrees, establishing Risk Tolerance standards for California is the Commission's responsibility. We believe, however, that understanding the potential for catastrophic WMP-Denover 2026-2028 CBRL SPO_004-026 Page 2 risk consequences is an important factor to be considered along with cost-benefit analysis.</p> <p>A. There is no mitigation that needs to be reconsidered in light of this order. A specific risk tolerance threshold was not used as a justification for selecting those mitigation strategies.</p> <p>A specific risk tolerance threshold was not used in the decision trees.</p> <p>c. Risk tolerance thresholds have not been integrated into PG&E's mitigation selection process for the 2026-2028 WMP.</p> | Edie Schwett | 4/30/2025 | 5/30/2025 | | | No | 5 | Risk Methodology & Assessment | 5.4 | |
| 194 | SPO | 004 | SPO_004 | 30 | No | SPO_004_030 | <p>Provide a detailed explanation of how PG&E applies the risk scaling function in its risk models presented in the 2026-2028 Base WMP.</p> <p>a. Is the risk scaling function applied to the EORM? If so, how? If not, why not?</p> <p>b. Is the risk scaling function applied to the WORM? If so, how? If not, why not?</p> <p>c. Is the risk scaling function applied to the WTRM? If so, how? If not, why not?</p> | <p>The date the CBRL has not adopted any Risk Tolerance standard. Accordingly, we do not rely on any determination by PG&E or the CBRL regarding a Risk Tolerance standard as justification for our proposed mitigation strategies. However, in proposing our mitigation strategies we employ our professional experience, expertise, and prudent operational judgment to assess the level of safety event risk posed by wildfires. We do not assert that these risk levels are "reasonable." As the ALJ ruling correctly points out, and PG&E agrees, establishing Risk Tolerance standards for California is the Commission's responsibility. We believe, however, that understanding the potential for catastrophic WMP-Denover 2026-2028 CBRL SPO_004-026 Page 2 risk consequences is an important factor to be considered along with cost-benefit analysis.</p> <p>A. There is no mitigation that needs to be reconsidered in light of this order. A specific risk tolerance threshold was not used as a justification for selecting those mitigation strategies.</p> <p>A specific risk tolerance threshold was not used in the decision trees.</p> <p>c. Risk tolerance thresholds have not been integrated into PG&E's mitigation selection process for the 2026-2028 WMP.</p> | Edie Schwett | 4/30/2025 | 5/30/2025 | | | No | 5 | Risk Methodology & Assessment | 5.4 | |
| 195 | SPO | 004 | SPO_004 | 31 | No | SPO_004_031 | <p>On page 124 in the 2026-2028 Base WMP, PG&E states "PG&E's Investment Planning group leverages the CBRLs and the ROP to prioritize the proposed investments to achieve risk reduction at a reasonable cost as part of its GRC decision."</p> <p>a. How does PG&E leverage CBRLs to prioritize investments in risk reduction? Explain.</p> <p>b. List within non-CBRL aspects of the ROP PG&E leverages to prioritize investments in risk reduction.</p> <p>c. Explain how PG&E leverages those non-CBRL aspects of the ROP to prioritize investments in risk reduction.</p> <p>d. Define "reasonable cost." Explain how PG&E incorporates "reasonable cost" as a constraint in its risk models.</p> | <p>A. PG&E notes that while the wildfire mitigations in its WMP are consistent with those that will be proposed in the GRC, there is a distinction between GRC forecasting activities and the work planning as described in the WMP. In the GRC, CBRLs are one component that PG&E utilizes for the purpose of developing its overall funding request across all mitigation programs (gas transmission safety plus replacement programs, dam safety remediation, wildfire undergrounding, etc.). Hence program-level CBRLs are determined across all PG&E's Functional Areas and utilized as described in Exhibit (PG&E-2), Chapter 1 and Exhibit (PG&E-4), Chapter 3 of its 2027 GRC Testimony, which will be filed on May 15, 2025 in the WMP. The portfolio of projects are selected, partly based on projected CBRLs, but also based on other factors as described on page 125.</p> <p>b. Row 26 of the ROP states that mitigation programs can be selected based on other factors besides their CBRLs. These factors are:</p> <p>PG&E's obligation to consider Safety as the Top Priority</p> <p>WMP-Denover 2026-2028 CBRL SPO_004-026 Page 2</p> <p>The exercise of PG&E's Prudent Operator Judgment</p> <p>Mitigation Limitations and Uncertainty</p> <ul style="list-style-type: none">• Compliance Requirements• Exhibit (PG&E-2), Chapter 1 of PG&E's 2027 GRC Testimony provides an in-depth discussion on each of these factors. <p>PG&E considers CBRLs, and the factors mentioned above on a case-by-case basis for each of its mitigations and documents the rationale for selecting them in the GRC Testimony.</p> <p>c. PG&E does not apply a strict definition of "reasonable cost" but considers the circumstances around each of its mitigation programs in its determination of reasonableness. Some programs have reasonable cost based on the risk reduction benefits they provide, i.e., their CBRLs. Others are reasonable because they are the most economical way to address known vulnerabilities and threats or most compliance requirements in an efficient manner.</p> | Edie Schwett | 4/30/2025 | 5/13/2025 | 5/13/2025 | https://www.pge.com/energy/ops/docs/understand-safety/understand-safety-operations-and-maintenance/CBRL-2026-SPO_004.pdf | 0 | No | 3 | Overview of WMP | 3.6 |

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| 196 | SPO | 004 | SPO_004 | 32 | No | SPO_004_032 | <p>On page 125 in the 2026-2028 Base WMP, PG&E explains that SME Judgment is integrated into the process of mitigation selection through "cross-functional working groups." Provide a detailed narrative description of how these cross-functional working groups operate.</p> <p>a. List each type of document or other kinds of information that is created at these cross functional working groups.</p> <p>i. How are these documents or other kinds of information related?</p> <p>ii. Provide an example of each type of document or other kinds of information that is generated by the cross-functional working group when selecting mitigations on circuit segment CORNING 110185152.</p> <p>iii. Do the working groups evaluate every asset within a circuit segment to determine which mitigation should be implemented?</p> <p>iv. If so, explain how this is done.</p> <p>v. If not, explain why not.</p> <p>c. List the inputs the SME's review to support the cross-functional working group's decision about which mitigation should be selected at a given circuit segment.</p> <p>d. Explain how the SME's use each of those inputs to support the cross-functional working group's decision about which mitigation should be selected at a given circuit segment.</p> | <p>ix. During the cross-functional Scoping working group, PG&E creates the Design Basis Memorandum document for each job, which includes information on job location and authorities having jurisdiction, functional and estimating team notes, design considerations, and the following appendices:</p> <p>i. APPENDIX A – DEDICATED RMZ & SUPPORTING DOCUMENTS</p> <p>ii. APPENDIX B – SEGMENTATION RMZ</p> <p>iii. APPENDIX C – SUBORDER TABLE</p> <p>iv. APPENDIX D – WORKSHEET DESCRIPTION</p> <p>v. APPENDIX E – KEY SWITCHES</p> <p>vi. APPENDIX F – HYDROBENEFIT COST ANALYSIS (WBSA) TOOL OUTPUTS</p> <p>vii. APPENDIX G – EC TAD LIST</p> <p>viii. APPENDIX H – LAND RIGHTS RMZ & SUPPORTING DOCUMENTS</p> <p>ix. APPENDIX I – VEGETATION MANAGEMENT & SUPPORTING DOCUMENTS</p> <p>x. APPENDIX J – ENVIRONMENTAL RMZ & SUPPORTING DOCUMENTS</p> <p>xi. APPENDIX K – PUBLIC SAFETY RMZ & SUPPORTING DOCUMENTS</p> <p>xii. APPENDIX L – ISLE FACILITY</p> <p>xiii. The documents are reviewed in PG&E's Electronic Document Reading System (EDRS).</p> <p>xiv. CORNING 110185-152 is still at the early stages of scoping, and we have not developed the full job package.</p> <p>xv. No, we do not evaluate every asset within a circuit segment to determine which mitigation should be evaluated.</p> <p>xvi. N/A</p> <p>xvii. The Scoping working groups evaluate the circuit segment for overall feasibility, vegetation risk exposure, constructability, cost estimate, ingress/egress concerns, land and environmental impacts, permitting requirements, and risk reduction benefits to help develop the final mitigation.</p> <p>xviii. The cross-functional Scoping working group may provide the following insights and recommendations, which would help drive our decision for the mitigation selection. Although the list provided below attempts to thoroughly set forth common insights and recommendations provided during the working group, it may not be an exhaustive list, and additional factors could be discussed depending on the nature of the project.</p> | Eddie Schwitt | 4/30/2025 | 5/21/2025 | 5/21/2025 | https://www.pge.com/assets/pge/docs/outage-planning-and-safety/outage-preparedness.pdf , https://pge.2026.spo.004.pdf | 0 | No | 6 | Wildfire Mitigation Strategy Development | 6.1.3 |
| 197 | SPO | 004 | SPO_004 | 33 | No | SPO_004_033 | <p>On page 125 in the 2026-2028 Base WMP, PG&E explains that the cross-functional working groups leverage both qualitative risk assessments and qualitative operational insights. Provide a list of the qualitative operational insights.</p> <p>a. Describe how each of these qualitative operational insights can contribute to the mitigation selection.</p> <p>b. Provide an example. Explain how and why each of these qualitative operational insights either did or did not inform the selection of mitigations on circuit segment CORNING 110185152.</p> <p>c. Describe how each of these qualitative operational insights are integrated into the decision trees found in Figures PG&E 8.2.1-1, PG&E 8.2.1-2, and PG&E 8.2.1-3 in the 2026-2028 Base WMP.</p> <p>d. Which of the steps in the decision-tree reviews these qualitative operational insights? How is that performed?</p> | <p>The following is a list of the key qualitative operational insights used by the cross-functional working groups. Although the list provided below attempts to thoroughly set forth common qualitative insights that contribute to mitigation selection, it may not be an exhaustive list.</p> <ul style="list-style-type: none">• High fire smoke potential, including an assessment of the current quantitative data on the vegetation management team.• Ingress/egress concerns and major historical fire data identified by the Public Safety Specialist (PSS).• Construction management feasibility, which accounts for local geology, including presence of hard rock, steep terrain, water crossings.• Environmental considerations, including sensitive habitats.• Cultural or historical considerations, such as significant construction in a neighborhood by PG&E or another utility, land rights and/or permitting challenges.• Customer/community impacts, such as significant construction in a neighborhood by PG&E or another utility, land rights and/or permitting challenges. <p>i. The CORNING 110185152 project is still in the early stages of scoping and PG&E can provide the following qualitative operational insights on the analysis of this project.</p> <p>ii. Qualitative insights on any given project are discussed during the Hybrid Analysis and Desktop Scoping Meeting (Figures 8.2.1-2 and 8.2.1-3).</p> <p>iii. During the Desktop Scoping Meeting, the cross-functional team reviews the qualitative insights to answer the question: "Are there any significant dependencies or constructability limitations in the #100 of IMPACT (Figures 8.2.1-3)." #100 of IMPACT is evaluated at the circuit segment level. All aspects of the decision tree are considered for the circuit segment. PG&E defines local factors (factors that are unique to that project location) to be the same as the qualitative factors described in response to the WMP 2026-2028 SPO_004_033 (with the exception the PSPS factors, which is a quantitative measurement and included below). The primary local factors considered when selecting a mitigation are listed below. Although the list provided below attempts to thoroughly set forth common local factors that PG&E considers when selecting a mitigation, it may not be an exhaustive list.</p> <ul style="list-style-type: none">• High fire smoke potential, including an assessment of the current quantitative data provided by the vegetation management team.• Ingress/egress concerns and major historical fire data identified by the Public Safety Specialist (PSS).• Construction management feasibility assessment, which accounts for local geology, including presence of hard rock, steep terrain, and water crossings.• Environmental considerations, such as sensitive habitats.• Cultural or historical considerations, such as vital lands.• Cultural or historical considerations, including sensitive habitats.• Customer/community impacts, such as significant construction in a neighborhood by PG&E or another utility, land rights and/or permitting challenges. <p>iv. The Safety Power Shutoff (SPS) PSPS polygon data, assessed by reviewing the PSPS polygon data. The polygon data shows the area identified for each PSPS event in the lookback period that identifies which of the overhead assets will have required mitigation.</p> <p>v. PG&E's list of local factors was developed by participants in the cross-functional Scoping working group who leverage their historical knowledge and local requirements. These participants offer feedback informed by their engagement with key stakeholders, such as agencies, cities, counties, tribes, and local communities, to ensure alignment with relevant local regulations and address local needs. This collective input helped shape the list, ensuring PG&E effectively addresses local considerations when selecting mitigations.</p> <p>vi. No additional factors were considered but removed from the list.</p> <p>vii. These local factors can inform PG&E's mitigation selection at the key stages leading up to and during the scoping process.</p> <p>viii. When PG&E completes its Initial Cost Benefit Analysis (Figures 8.2.1-2), and a Circuit Protection Zone (CPZ) does not meet the Cost Benefit Ratio (CBR) and Net Benefit requirements for an area, PG&E identifies a local solution. At least one of the local solutions, PG&E:</p> <ul style="list-style-type: none">a. PG&E is providing a response to this question for system hardening and undergrounding. PG&E selects system hardening and undergrounding based on the risk model's ranking of the highest risk circuit segments. Other WMP programs reference the risk model but focus on addressing the location where the specific risk is present.b. Circuit segments are selected for scoping from 1-N based on ignition risk rank. Certain circuit segments may be excluded if, for example, they are already hardened, are privately owned, and very short, or are already in a workshop. PG&E generally prioritizes execution of projects in the same order that scoping is completed. Once a project has completed scoping and other pre-construction activities (e.g., design, estimating and permitting) are complete, PG&E will begin construction as soon as practicable. <p>ix. While our approach is to begin hardening as soon as practicable after scoping is complete, there are timing factors identified through the engineering and permitting process that impact when projects can be implemented, such as:</p> <ul style="list-style-type: none">• Construction management feasibility, which accounts for local geology, including presence of hard rock, steep terrain, water crossings.• Environmental considerations, including sensitive habitats.• Cultural or historical considerations including tribal lands, and• Customer/community impacts, such as significant construction in a neighborhood by PG&E or another utility, land rights and/or permitting challenges. <p>x. When it seems like a project may be delayed, PG&E also works to improve timing (complete mitigations more quickly) by separating projects into multiple phases and/or sub-phases and fitting the timing constraints to smaller sections of work.</p> <p>xi. No, LRIE and CRIE values are not considered independently when planning for the sequencing and timing of projects or sub-projects. While both likelihood and consequence are important components of risk, their product (i.e., risk) is the primary focus when prioritizing mitigations. More specifically, PG&E uses the density of risk, such as risk per mile, to rank circuit segments 1-N. PG&E then prioritizes projects for execution in ascending risk rank order based on the model used at the time of selection, while considering the operational limitations noted in response to part a above.</p> <p>xii. None of references in this response are specific to distribution-related terms in PG&E's 2026-2028 Base WMP, RI, April 4, 2025.</p> <p>xiii. Resilience Mitigation</p> <p>Resilience Mitigation describes one of the four categories of mitigations that support PG&E's foundational framework of risk-informed decision-making designed to minimize ignition risk and outage impacts. PG&E's system resilience activities are critical to permanently reducing wildfire risk, minimizing negative aspects of PSPS and EPRS, and strengthening the grid against extreme weather events (p. 6).</p> <p>xiv. System Resilience describes mitigations designed to reduce ignition risk by changing how PG&E's grid is constructed and operated (2023-2025 Base WMP, RI, p. 255).</p> <p>xv. Resilience Mitigation describes a broader category of mitigations than just system hardening. While Resilience Mitigation includes system hardening activities (distribution undergrounding, distribution covered conductor, distribution line removal), it also includes non-system hardening mitigations, such as distribution pole replacement and reinforcement and RTD/PDRM open bay isolation - distribution (2026-2028 Base WMP, RI, Figure PG&E 6.1.3.3-1).</p> <p>xvi. Covered conductors (CC) installation and line removal, including remote grids (GRs) and</p> <p>xvii. 2) Distribution undergrounding (GUH).</p> <p>xviii. Grid Hardening</p> <p>WMP Section 8.2 is called "Grid Hardening." PG&E uses the term "grid hardening" in our Section 8.2 narrative to align to the title of WMP Section 8.2 as specified by Energy Safety in the 2026-2028 WMP (Guidance). In PG&E's Section 8.2 narrative, we state that grid hardening projects include undergrounding (p. 343). The term is also specified by Energy Safety in Area 9a Continuous Improvement (ACI) PG&E-251-05.</p> <p>xix. Continuation of Grid Hardening Joint Studies, so PG&E uses the term in its response to that ACI.</p> <p>xx. While grid hardening and system hardening are basically synonymous, the key distinction among the three terms PG&E uses in the WMP is that Resilience Mitigation refers to a broader category of mitigations than just grid hardening or system hardening.</p> | Eddie Schwitt | 4/30/2025 | 5/21/2025 | 5/21/2025 | https://www.pge.com/assets/pge/docs/outage-planning-and-safety/outage-preparedness.pdf , https://pge.2026.spo.004.pdf | 0 | No | 6 | Wildfire Mitigation Strategy Development | 6.1.3 |
| 198 | SPO | 004 | SPO_004 | 34 | No | SPO_004_034 | <p>On page 125 in the 2026-2028 Base WMP, PG&E explains that when selecting a mitigation it considers relevant local factors on a job-by-job basis.</p> <p>a. Provide a list of local factors that PG&E considers when selecting a mitigation.</p> <p>b. Describe how the list of local factors was established by PG&E.</p> <p>c. Were any other factors considered in this process but removed from the final list? If so, explain why.</p> <p>d. Describe how each of these local factors can inform mitigation selection.</p> <p>e. Describe how each of these local factors are integrated into the decision trees found in Figures PG&E 8.2.1-1, PG&E 8.2.1-2, and PG&E 8.2.1-3 in the 2026-2028 Base WMP.</p> <p>f. Which of the steps in the decision-tree reviews these local factors? How is that performed?</p> | <p>On page 125 in the 2026-2028 Base WMP, PG&E explains that when selecting a mitigation it considers relevant local factors on a job-by-job basis.</p> <p>a. Provide a list of local factors that PG&E considers when selecting a mitigation.</p> <p>b. Describe how the list of local factors was established by PG&E.</p> <p>c. Were any other factors considered in this process but removed from the final list? If so, explain why.</p> <p>d. Describe how each of these local factors can inform mitigation selection.</p> <p>e. Describe how each of these local factors are integrated into the decision trees found in Figures PG&E 8.2.1-1, PG&E 8.2.1-2, and PG&E 8.2.1-3 in the 2026-2028 Base WMP.</p> <p>f. Which of the steps in the decision-tree reviews these local factors? How is that performed?</p> | Eddie Schwitt | 4/30/2025 | 5/21/2025 | 5/21/2025 | https://www.pge.com/assets/pge/docs/outage-planning-and-safety/outage-preparedness.pdf , https://pge.2026.spo.004.pdf | 0 | No | 6 | Wildfire Mitigation Strategy Development | 6.1.3 |
| 199 | SPO | 004 | SPO_004 | 35 | No | SPO_004_035 | <p>On page 132 in the 2026-2028 Base WMP, PG&E states that it looks at its "highest risk circuit segments" to determine where to target the work included in the WMP.</p> <p>a. Within these "highest risk circuit segments," what aspects does PG&E consider in order to determine the timing of implementing mitigations on these "highest risk circuit segments"?</p> <p>b. Does PG&E consider the LRIE and CRIE values of these circuit segments when determining the timing of implementing mitigations on these "highest risk circuit segments"? If so, how? If not, why not?</p> | <p>On page 132 in the 2026-2028 Base WMP, PG&E states that it looks at its "highest risk circuit segments" to determine where to target the work included in the WMP.</p> <p>a. Within these "highest risk circuit segments," what aspects does PG&E consider in order to determine the timing of implementing mitigations on these "highest risk circuit segments"?</p> <p>b. Does PG&E consider the LRIE and CRIE values of these circuit segments when determining the timing of implementing mitigations on these "highest risk circuit segments"? If so, how? If not, why not?</p> | Eddie Schwitt | 4/30/2025 | 5/21/2025 | 5/21/2025 | https://www.pge.com/assets/pge/docs/outage-planning-and-safety/outage-preparedness.pdf , https://pge.2026.spo.004.pdf | 0 | No | 5 | Risk Methodology & Assessment | 5.5.2 |
| 200 | SPO | 004 | SPO_004 | 36 | No | SPO_004_036 | <p>Throughout the 2026-2028 Base WMP, PG&E uses the terms system hardening, grid hardening, and resiliency mitigation activities to describe the same category of mitigations, namely undergrounding, covered conductor, and distribution line removal. Explain why PG&E uses three different terms for the category of mitigations.</p> <p>a. Are there differences between these terms? If so, explain.</p> | <p>Throughout the 2026-2028 Base WMP, PG&E uses the terms system hardening, grid hardening, and resiliency mitigation activities to describe the same category of mitigations, namely undergrounding, covered conductor, and distribution line removal. Explain why PG&E uses three different terms for the category of mitigations.</p> <p>a. Are there differences between these terms? If so, explain.</p> | Eddie Schwitt | 4/30/2025 | 5/8/2025 | 5/8/2025 | https://www.pge.com/assets/pge/docs/outage-planning-and-safety/outage-preparedness.pdf , https://pge.2026.spo.004.pdf | 0 | No | 8 | Grid Design, Operations, and Maintenance | 8 |

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|-----|------|-----|----------|-------|-----|----------------|--|--------------------|-----------|-----------|-----------|---|---|----|---|--|-------|
| 201 | SPO | 004 | SPO_004 | 37 | No | SPO_004_037 | <p>On page 135 in the 2008-2008 Base WMP, PG&E states "Over time, undergrounding also lowers operations and maintenance expenses." Provide documentation that corroborates this statement.</p> <p>a. What is the time scale of the analysis that led to this statement? Why was that time scale?</p> <p>b. How would the results of the analysis be different if an alternative time scale was used?</p> <p>c. Consider the possible results of the analysis if the following time scales were used:</p> <p>1. Annual</p> <p>2. Decadal</p> <p>3. Multi-decadal (this must include the decommissioning and replacement costs)</p> | Eddie Schwitt | 4/30/2005 | 5/9/2005 | 5/9/2005 | https://www.pge.com/assets/docs/outageplans-and-safety/undergrounding-cost-benefit-analysis-2008-2008-wmp.pdf | 1 | No | 8 | Grid Design, Operations, and Maintenance | 8.2.2 |
| 202 | SPO | 004 | SPO_004 | 38 | No | SPO_004_038 | <p>On page 136 in the 2008-2008 Base WMP, PG&E states "For many of the mitigation programs, wildfire risk is the primary driver of prioritization." List the mitigation programs where wildfire risk is not the primary driver of prioritization.</p> <p>a. For each mitigation program in this list, explain what is the primary driver of prioritization and why.</p> | Eddie Schwitt | 4/30/2005 | 5/13/2005 | 5/13/2005 | https://www.pge.com/assets/docs/outageplans-and-safety/undergrounding-cost-benefit-analysis-2008-2008-wmp.pdf | 0 | No | 5 | Risk Methodology & Assessment | 5 |
| 203 | SPO | 004 | SPO_004 | 39(a) | Yes | SPO_004_039(a) | <p>For Table 6-3 in the 2008-2008 Base WMP, PG&E provided an "Activity-Effectiveness-Wildfire Risk" value for each activity listed. However, for six of these activities PG&E did not provide Cost-Benefit Ratios.</p> <p>a. Provide the Cost-Benefit Ratios for each of these activities as is required by D.24-02-12.027.</p> <p>b. If these calculations of CBR vary from what was submitted in PG&E's 2024 RAMP Application, explain how much they vary and why.</p> <p>c. Complete Table 6-3 for all activities listed in this WMP. Add the Initiative Activity Tracking ID as a column in the completed Table. Present the completed version of Table 6-3 in an Excel spreadsheet.</p> | Eddie Schwitt | 4/30/2005 | 5/21/2005 | 5/21/2005 | https://www.pge.com/assets/docs/outageplans-and-safety/undergrounding-cost-benefit-analysis-2008-2008-wmp.pdf | 0 | No | 6 | Wildfire Mitigation Strategy Development | 6 |
| 203 | SPO | 004 | SPO_004 | 39 | No | SPO_004_039 | <p>For Table 6-3 in the 2008-2008 Base WMP, PG&E provided an "Activity-Effectiveness-Wildfire Risk" value for each activity listed. However, for six of these activities PG&E did not provide Cost-Benefit Ratios.</p> <p>a. Provide the Cost-Benefit Ratios for each of these activities as is required by D.24-02-12.027.</p> <p>b. If these calculations of CBR vary from what was submitted in PG&E's 2024 RAMP Application, explain how much they vary and why.</p> <p>c. Complete Table 6-3 for all activities listed in this WMP. Add the Initiative Activity Tracking ID as a column in the completed Table. Present this completed version of Table 6-3 in an Excel spreadsheet.</p> | Eddie Schwitt | 4/30/2005 | 5/13/2005 | 5/13/2005 | https://www.pge.com/assets/docs/outageplans-and-safety/undergrounding-cost-benefit-analysis-2008-2008-wmp.pdf | 0 | No | 6 | Wildfire Mitigation Strategy Development | 6 |
| 204 | SPO | 004 | SPO_004 | 40 | No | SPO_004_040 | <p>On page 152 in the 2008-2008 Base WMP, PG&E provides an explanation for how it calculated Activity Effectiveness - Overall Utility Risk. The total value for Wildfire Risk (Dx, Tx, Sd) is \$10.424 Million. Explain why this value is different from the \$10.578 Million expressed in Figure 6.1.3.2.1.</p> <p>a. Explain why the PSPS and EPSS values are as presented in Figure 6.1.3.2.1. These values are referred to as "Consequence".</p> <p>b. Explain why the value of Wildfire Risk (Dx, Tx, Sd) is different, but the values for PSPS and EPSS Risk on page 152 remain exactly the same as the values for PSPS and EPSS Consequence in Figure 6.1.3.2.1.</p> | Eddie Schwitt | 4/30/2005 | 5/13/2005 | 5/13/2005 | https://www.pge.com/assets/docs/outageplans-and-safety/undergrounding-cost-benefit-analysis-2008-2008-wmp.pdf | 0 | No | 6 | Wildfire Mitigation Strategy Development | 6.1.3 |
| 205 | SPO | 004 | SPO_004 | 41 | No | SPO_004_041 | <p>On page 153 in the 2008-2008 Base WMP, PG&E describes the Activity Effectiveness - Wildfire Risk calculation and notes that a study was conducted with subject matter experts (SME) who were asked to "fill out a questionnaire about the effectiveness of these activities against roughly 2,000 failure modes".</p> <p>a. How many SMEs participated in this study?</p> <p>b. Provide a list of the expertise for each SME that participated in this study.</p> <p>c. How does the questionnaire compare with the mitigation effectiveness study submitted to PG&E as "WMP-Discovery2008-2008_OU_SPO_004-Q2010A0101"?</p> <p>d. Provide a narrative explanation of the questionnaire and how SMEs were expected to fill it out.</p> <p>e. Describe what is meant by categorical level of effectiveness.</p> <p>f. If a scale was used for SMEs to respond to the questionnaire, provide a detailed explanation of that scale and how it was established.</p> <p>g. If a scale was used, was a variance and standard deviation calculated for the SME responses to each failure mode? If so, provide a table that displays the mean, variance and standard deviation for the SMEs scaled responses to each of the failure modes.</p> <p>h. Provide a copy of the questionnaire about the effectiveness of these activities against the failure modes.</p> <p>i. Provide a copy of the results of the study PG&E notes on page 153 in the 2008-2008 Base WMP.</p> | Eddie Schwitt | 4/30/2005 | 5/6/2005 | 5/6/2005 | https://www.pge.com/assets/docs/outageplans-and-safety/undergrounding-cost-benefit-analysis-2008-2008-wmp.pdf | 0 | No | 6 | Wildfire Mitigation Strategy Development | 6.1.3 |
| 206 | SPO | 004 | SPO_004 | 42 | No | SPO_004_042 | <p>Related to the explanation of the Cost-Benefit Ratios described on pages 154-155 in the 2008-2008 Base WMP, provide an explanation of how PG&E addressed "discounting of inflation".</p> <p>a. Did PG&E use a discount rate scenario specified in D.24-02-0647?</p> <p>b. Did PG&E agree that risk per mile of each CPZ is a more accurate way to capture the risk of each CPZ relative to each other? Please explain why or why not.</p> | Eddie Schwitt | 4/30/2005 | 5/13/2005 | 5/13/2005 | https://www.pge.com/assets/docs/outageplans-and-safety/undergrounding-cost-benefit-analysis-2008-2008-wmp.pdf | 0 | No | 3 | Overview of WMP | 3.6 |
| 207 | TURN | 004 | TURN_004 | 1 | No | TURN_004_01 | <p>Regarding Table 6-5 on page 103 and PG&E's risk prioritization, why doesn't PG&E prioritize circuit by risk per mile rather than absolute risk?</p> <p>a. Does PG&E agree that risk per mile of each CPZ is a more accurate way to capture the risk of each CPZ relative to each other? Please explain why or why not.</p> | A Minerva Fall-Fly | 5/19/2005 | 5/9/2005 | 5/9/2005 | https://www.pge.com/assets/docs/outageplans-and-safety/undergrounding-cost-benefit-analysis-2008-2008-wmp.pdf | 0 | No | 5 | Risk Methodology & Assessment | 5 |

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|-----|------|-----|----------|---|----|-------------|--|---|--------------------|----------|-----------|-----------|---|---|----|---|--|---------|
| 208 | TURN | 004 | TURN_004 | 2 | No | TURN_004_02 | <p>Regarding Table 6.1.3-1 on page 128:</p> <p>a. Why does line removal with remote grid result in 98% effectiveness? Are all overhead lines removed in each of these instances or are lines underground? Please provide an explanation using an example project to illustrate the mitigation effectiveness.</p> <p>b. Please provide all supporting calculations/assumptions in Excel.</p> | <p>REGARDING TABLE 6.1.3-1 ON PAGE 128:</p> <p>a. Remote grid systems typically serve customers through low voltage overhead lines. While all high voltage overhead lines are removed, the analysis for this mitigation assumed that the remaining secondary and service lines still pose an ignition risk, resulting in approximately 98% reduction of the overall wildfire risk. The absolute removal of lines, including both primary and secondary voltage, would result in the elimination of all ignition risk, or 100% effectiveness, since no source for ignition would be present.</p> <p>b. Based on Table 6.1.3-1 on page 128 and "WMP-Discovery2020-2028_DR_TURN_004-Q003A001.docx", the PPSB effectiveness is estimated to be 98%. Based on "WMP-Discovery2020-2028_DR_TURN_004-Q003A001.docx", the EPSS effectiveness is estimated to be 68%.</p> <p>c. PPSB and EPSS mitigation programs are assumed to operate independently. Effectiveness represents the probability that a program successfully mitigates a risk. The ineffectiveness is the chance that the program does not mitigate the risk. When programs operate independently, the chance that both programs do not mitigate the risk is the product of their individual ineffectivenesses. The combined effectiveness of two independent mitigation programs is then the chance that at least one of the programs mitigates the risk, which is the same as the complement of both programs being ineffective.</p> <p>d. Therefore, the combined effectiveness is approximately 98%.</p> <p>e. The supporting calculations are provided in the "WMP-Discovery2020-2028_DR_TURN_004-Q003A001.docx" and "Tab: Combined Effectiveness.docx".</p> | A Mineola Fall-Fry | 5/1/2025 | 5/6/2025 | 5/6/2025 | https://www.pge.com/assets/pge/docs/outage-and-safety/wildfire-mitigation-and-safety/2024-2028-TURN_004.xls | 1 | No | 6 | Wildfire Mitigation Strategy Development | 6.1.3 |
| 209 | TURN | 004 | TURN_004 | 3 | No | TURN_004_03 | <p>Regarding Figure 6.1.3-2.1 on page 136:</p> <p>a. Please provide this figure in Excel with all supporting data, calculations, and assumptions.</p> <p>b. Please recalculate the figure when implementing planned mitigations for PPSB and EPSS consequences in 2028.</p> <p>c. Please provide in Excel with all supporting data, calculations, and assumptions.</p> | <p>a. "Please see the attachment "WMP-Discovery2020-2028_DR_TURN_004-Q003A001.docx" for the requested information. The response to subpart (a) is located in "Q003_A" worksheet and the response to subpart (b) is located in the "Q003_B" worksheet of the attachment.</p> <p>b. "Please see above."</p> | A Mineola Fall-Fry | 5/1/2025 | 5/6/2025 | 5/6/2025 | https://www.pge.com/assets/pge/docs/outage-and-safety/wildfire-mitigation-and-safety/2024-2028-TURN_004.xls | 1 | No | 6 | Wildfire Mitigation Strategy Development | 6.1.3 |
| 210 | TURN | 004 | TURN_004 | 4 | No | TURN_004_04 | <p>Section 6.2.1.2, page 150 states "The total number of miles within the PTZ and WPA is 4,250 circuit miles."</p> <p>a. Shouldn't the total number of circuit miles be closer to 25,000?</p> <p>b. Please explain the 4,250 figure and what it represents.</p> | <p>To clarify, the quoted language on page 150 of the WMP is part of Energy Safety's prompt for this section and was provided by Energy Safety in the WMP Guidelines. It was included as an example to help understand the information provided in the section and is not language that PG&E provided. PG&E's response to Energy Safety's prompt begins after the solid divider line at the bottom of page 150.</p> <p>a. For purposes of the System Hardening program, tree strike risk refers to the likelihood of trees falling into the overhead span, regardless of wind speed and direction, and creating a proposed overhead hardware span. An area with a tree strike score of 0 or higher is identified as "Area of Impact Identified to be underground preferred." In both cases an area with a tree strike score of 0-5 is identified as "Area of Impact Identified, On or Above Preferred." The high surrounding tree strike is shown in Figures PG&E-6.2.1.2 and in Figures SPN-PG&E-23-05-06A of PG&E's 2028 Base WMP.</p> <p>b. If a high tree strike potential is identified, our preferred approach is to underground at that location, provided that it meets the Cost-Benefit Ratio (CBR) and Net Benefit criteria as described in Section 6.2, Figure PG&E-6.2.1.2, of the WMP. However, if undergrounding is not feasible or does not satisfy the CBR and Net Benefit requirements, we will collaborate with PG&E's vegetation management team to determine whether overhead conductor (OC) and secondary equipment is an acceptable alternative.</p> <p>c. Ignored and ignored routes are evaluated by a PG&E Public Safety Specialist, whose guidance ensures our underground design supports safe and efficient movement for citizens and first responders during an emergency.</p> <p>d. As noted in "WMP-Discovery2020-2028_DR_TURN002_Q010.pdf", the PPSB considers many factors when evaluating ignition and ignores concerns, and it is not possible to identify each and every criterion and how that criterion particularly impacts risk in every situation. The specific facts and circumstances of each situation must be considered on a case by case basis. The specific facts and circumstances of a case, when taken together, form our understanding of the real time risk associated with a particular area. Some of the factors considered include, but are not limited to:</p> <ul style="list-style-type: none"> Population density Time of day (there are differences between evacuating communities at night when most people are at home compared to during the day when fewer people are at home) Amount of time the public would need to evacuate or shelter in place Notification and information made available to the public <p>e. Ignored and ignored routes are evaluated by a PG&E Public Safety Specialist, whose guidance ensures our underground design supports safe and efficient movement for citizens and first responders during an emergency.</p> <p>f. As noted in "WMP-Discovery2020-2028_DR_TURN002_Q010.pdf", the PPSB considers many factors when evaluating ignition and ignores concerns, and it is not possible to identify each and every criterion and how that criterion particularly impacts risk in every situation. The specific facts and circumstances of each situation must be considered on a case by case basis. The specific facts and circumstances of a case, when taken together, form our understanding of the real time risk associated with a particular area. Some of the factors considered include, but are not limited to:</p> <ul style="list-style-type: none"> Population density Time of day (there are differences between evacuating communities at night when most people are at home compared to during the day when fewer people are at home) Amount of time the public would need to evacuate or shelter in place Notification and information made available to the public Road infrastructure (e.g., road size, number of lanes, type of surface, destination) Fuel types along an evacuation corridor (e.g., grass vs. brush vs. timber) Current weather conditions (e.g., wet fire days including high temperatures, high winds, low relative humidity) Topography/terrain (its elevation makes place evacuations is danger due to steep slopes, drainages, and channels along a corridor which are often associated with extreme fire behavior) Human factors (e.g., elderly, special needs, evacuating large and small paths, knowledge or experience of citizens living in high fire hazard areas) Location of overhead electrical assets (e.g., poles proximity to the road's shoulder and conductor crossing over those open/exposed thoroughfares should they become impacted by fire and fall onto the evacuation corridor) Proximity to assets (i.e., neither, line, tank, oil, equipment, shanty, street, etc.) <p>All effectiveness ratings in Table 6.2-1.2 are calculated based on SME reviews. These ratings are used in combination with available outage data (in a proxy for ignition) to estimate mitigation effectiveness.</p> <p>The SME-based approach allows PG&E to calculate a realistic effectiveness estimate based on limited mitigation-specific outage data. Relying entirely on a data-based approach to calculate effectiveness for these mitigations would not yield meaningful results. For example, as detailed in "WMP-2024_DR_TURN_005-Q004.pdf" and "WMP-Discovery2020-2028_DR_TURN_005-Q005.pdf", observed ignition data is quite limited for new system hardening mitigations. Only three reportable ignitions have been observed on covered conductor since its broad application began around 2015. Much of PG&E's covered conductor installation has also been in wildfire retardant areas (in burned natural areas with limited vegetation growth) or potentially installed in areas of low tree strike risk in alignment with PG&E's decision tree. Furthermore, limited degradation of these assets has occurred due to that recent installation, leaving observed effectiveness estimates. For all of these reasons, it is necessary to rely on SME input to inform these estimates.</p> <p>Another potential issue with purely data-driven calculation methods, is the overlap between mitigations deployed simultaneously. For example, EPSS and covered conductor can be complementary mitigations, but using only observed data, it is difficult to measure their effectiveness contributions, or even identify a statistically valid data sample where these mitigations were concurrently operational. The SME-based analysis allows PG&E's experts to apply their knowledge and experience to assess these scenarios despite the limited deployment of these mitigations.</p> <p>WMP-Discovery 2020-2028_DR_TURN_004-Q007 Page 2</p> <p>Finally, the actual application of the effectiveness values referenced in Table 6.2-1.2 is much more detailed than depicted in this sample table. Specifically, down-head effectiveness values are applied to the unique risk drivers of WCPM, which themselves are derived from data-driven observations and events in PG&E's system of record. This allows PG&E to calculate specific mitigation effectiveness values for each individual circuit segment and ultimately yields a holistic, SME-informed, data-driven result.</p> | A Mineola Fall-Fry | 5/1/2025 | 5/9/2025 | 5/9/2025 | https://www.pge.com/assets/pge/docs/outage-and-safety/wildfire-mitigation-and-safety/2024-2028-TURN_004.xls | 0 | No | 6 | Wildfire Mitigation Strategy Development | 6.2.1.2 |
| 211 | TURN | 004 | TURN_004 | 5 | No | TURN_004_05 | <p>Section 6.2.1, page 151 states "PG&E will analyze the proposed CC route to determine if there are areas with tree strike risk or locations that could be subject to increased tree strike."</p> <p>a. Please define "tree strike risk."</p> <p>b. If "tree strike risk" is found to be present, does this mean the CC is ruled out? Please explain.</p> <p>c. Please define ignore/ignore issues as used here.</p> | <p>a. Ignored and ignored routes are evaluated by a PG&E Public Safety Specialist, whose guidance ensures our underground design supports safe and efficient movement for citizens and first responders during an emergency.</p> <p>b. As noted in "WMP-Discovery2020-2028_DR_TURN002_Q010.pdf", the PPSB considers many factors when evaluating ignition and ignores concerns, and it is not possible to identify each and every criterion and how that criterion particularly impacts risk in every situation. The specific facts and circumstances of each situation must be considered on a case by case basis. The specific facts and circumstances of a case, when taken together, form our understanding of the real time risk associated with a particular area. Some of the factors considered include, but are not limited to:</p> <ul style="list-style-type: none"> Population density Time of day (there are differences between evacuating communities at night when most people are at home compared to during the day when fewer people are at home) Amount of time the public would need to evacuate or shelter in place Notification and information made available to the public <p>c. Ignored and ignored routes are evaluated by a PG&E Public Safety Specialist, whose guidance ensures our underground design supports safe and efficient movement for citizens and first responders during an emergency.</p> <p>d. As noted in "WMP-Discovery2020-2028_DR_TURN002_Q010.pdf", the PPSB considers many factors when evaluating ignition and ignores concerns, and it is not possible to identify each and every criterion and how that criterion particularly impacts risk in every situation. The specific facts and circumstances of each situation must be considered on a case by case basis. The specific facts and circumstances of a case, when taken together, form our understanding of the real time risk associated with a particular area. Some of the factors considered include, but are not limited to:</p> <ul style="list-style-type: none"> Population density Time of day (there are differences between evacuating communities at night when most people are at home compared to during the day when fewer people are at home) Amount of time the public would need to evacuate or shelter in place Notification and information made available to the public Road infrastructure (e.g., road size, number of lanes, type of surface, destination) Fuel types along an evacuation corridor (e.g., grass vs. brush vs. timber) Current weather conditions (e.g., wet fire days including high temperatures, high winds, low relative humidity) Topography/terrain (its elevation makes place evacuations is danger due to steep slopes, drainages, and channels along a corridor which are often associated with extreme fire behavior) Human factors (e.g., elderly, special needs, evacuating large and small paths, knowledge or experience of citizens living in high fire hazard areas) Location of overhead electrical assets (e.g., poles proximity to the road's shoulder and conductor crossing over those open/exposed thoroughfares should they become impacted by fire and fall onto the evacuation corridor) Proximity to assets (i.e., neither, line, tank, oil, equipment, shanty, street, etc.) <p>All effectiveness ratings in Table 6.2-1.2 are calculated based on SME reviews. These ratings are used in combination with available outage data (in a proxy for ignition) to estimate mitigation effectiveness.</p> <p>The SME-based approach allows PG&E to calculate a realistic effectiveness estimate based on limited mitigation-specific outage data. Relying entirely on a data-based approach to calculate effectiveness for these mitigations would not yield meaningful results. For example, as detailed in "WMP-2024_DR_TURN_005-Q004.pdf" and "WMP-Discovery2020-2028_DR_TURN_005-Q005.pdf", observed ignition data is quite limited for new system hardening mitigations. Only three reportable ignitions have been observed on covered conductor since its broad application began around 2015. Much of PG&E's covered conductor installation has also been in wildfire retardant areas (in burned natural areas with limited vegetation growth) or potentially installed in areas of low tree strike risk in alignment with PG&E's decision tree. Furthermore, limited degradation of these assets has occurred due to that recent installation, leaving observed effectiveness estimates. For all of these reasons, it is necessary to rely on SME input to inform these estimates.</p> <p>Another potential issue with purely data-driven calculation methods, is the overlap between mitigations deployed simultaneously. For example, EPSS and covered conductor can be complementary mitigations, but using only observed data, it is difficult to measure their effectiveness contributions, or even identify a statistically valid data sample where these mitigations were concurrently operational. The SME-based analysis allows PG&E's experts to apply their knowledge and experience to assess these scenarios despite the limited deployment of these mitigations.</p> <p>WMP-Discovery 2020-2028_DR_TURN_004-Q007 Page 2</p> <p>Finally, the actual application of the effectiveness values referenced in Table 6.2-1.2 is much more detailed than depicted in this sample table. Specifically, down-head effectiveness values are applied to the unique risk drivers of WCPM, which themselves are derived from data-driven observations and events in PG&E's system of record. This allows PG&E to calculate specific mitigation effectiveness values for each individual circuit segment and ultimately yields a holistic, SME-informed, data-driven result.</p> | A Mineola Fall-Fry | 5/1/2025 | 5/6/2025 | 5/6/2025 | https://www.pge.com/assets/pge/docs/outage-and-safety/wildfire-mitigation-and-safety/2024-2028-TURN_004.xls | 0 | No | 8 | Grid Design, Operations, and Maintenance | 8.2.1 |
| 212 | TURN | 004 | TURN_004 | 6 | No | TURN_004_06 | <p>Regarding PG&E's System Hardening Project Process Decision Tree and Process Figures 8.2.1-1, 8.2.1-2, and 8.2.1-3 on pages 153-164:</p> <p>a. Does PG&E utilize project-specific exit codes for CC and US as opposed to generic averages? Please explain.</p> | <p>a. Please see the attachment "WMP-Discovery2020-2028_DR_TURN_004-Q003A001.docx" for the requested information. The response to subpart (a) is located in "Q003_A" worksheet and the response to subpart (b) is located in the "Q003_B" worksheet of the attachment.</p> <p>b. "Please see above."</p> | A Mineola Fall-Fry | 5/1/2025 | 5/6/2025 | 5/6/2025 | https://www.pge.com/assets/pge/docs/outage-and-safety/wildfire-mitigation-and-safety/2024-2028-TURN_004.xls | 0 | No | 8 | Grid Design, Operations, and Maintenance | 8.2.1 |
| 213 | TURN | 004 | TURN_004 | 7 | No | TURN_004_07 | <p>Regarding Table 8.2.1-2 on page 180, please explain whether mitigation effectiveness is calculated based on SME judgement. In each case where SME judgement is used, please explain why PG&E does not utilize alternative methods to calculate mitigation effectiveness.</p> | <p>All effectiveness ratings in Table 6.2-1.2 are calculated based on SME reviews. These ratings are used in combination with available outage data (in a proxy for ignition) to estimate mitigation effectiveness.</p> <p>The SME-based approach allows PG&E to calculate a realistic effectiveness estimate based on limited mitigation-specific outage data. Relying entirely on a data-based approach to calculate effectiveness for these mitigations would not yield meaningful results. For example, as detailed in "WMP-2024_DR_TURN_005-Q004.pdf" and "WMP-Discovery2020-2028_DR_TURN_005-Q005.pdf", observed ignition data is quite limited for new system hardening mitigations. Only three reportable ignitions have been observed on covered conductor since its broad application began around 2015. Much of PG&E's covered conductor installation has also been in wildfire retardant areas (in burned natural areas with limited vegetation growth) or potentially installed in areas of low tree strike risk in alignment with PG&E's decision tree. Furthermore, limited degradation of these assets has occurred due to that recent installation, leaving observed effectiveness estimates. For all of these reasons, it is necessary to rely on SME input to inform these estimates.</p> <p>Another potential issue with purely data-driven calculation methods, is the overlap between mitigations deployed simultaneously. For example, EPSS and covered conductor can be complementary mitigations, but using only observed data, it is difficult to measure their effectiveness contributions, or even identify a statistically valid data sample where these mitigations were concurrently operational. The SME-based analysis allows PG&E's experts to apply their knowledge and experience to assess these scenarios despite the limited deployment of these mitigations.</p> <p>WMP-Discovery 2020-2028_DR_TURN_004-Q007 Page 2</p> <p>Finally, the actual application of the effectiveness values referenced in Table 8.2-1.2 is much more detailed than depicted in this sample table. Specifically, down-head effectiveness values are applied to the unique risk drivers of WCPM, which themselves are derived from data-driven observations and events in PG&E's system of record. This allows PG&E to calculate specific mitigation effectiveness values for each individual circuit segment and ultimately yields a holistic, SME-informed, data-driven result.</p> | A Mineola Fall-Fry | 5/1/2025 | 5/6/2025 | 5/6/2025 | https://www.pge.com/assets/pge/docs/outage-and-safety/wildfire-mitigation-and-safety/2024-2028-TURN_004.xls | 0 | No | 8 | Grid Design, Operations, and Maintenance | 8.2.1 |
| 214 | TURN | 004 | TURN_004 | 8 | No | TURN_004_08 | <p>Regarding Table 8.2.1-5 on page 195:</p> <p>a. Please provide this table in Excel with supporting calculations.</p> <p>b. Please add the following information to the Excel table and include all data, calculations, and assumptions:</p> <p>i. Annual and cumulative number of overhead miles in each year from 2023 (recovered) to 2028 (forecast) for each activity separately (covered conductor and undergrounding).</p> <p>ii. Annual and cumulative risk reduction from 2023 to 2028 (including forecast years) for each activity separately (covered conductor and undergrounding).</p> <p>iii. Annual and cumulative risk reduction from all other primary wildfire mitigations from 2023-2028 (including forecast years).</p> <p>iv. Annual and cumulative costs to implement EPSS and PPSB in each year (separately) from 2023-2028 (including forecast years), if not otherwise indicated.</p> | <p>a. Please see "WMP-Discovery2020-2028_DR_TURN_004-Q008A001.docx" at the tab titled "Table 8.2.1-5" for a version of Table 8.2.1-5 in Excel format. Please see "WMP-Discovery2020-2028_DR_TURN_004-Q008A001.docx" at the tab titled "Supporting Data" for the risk reduction data upon which Table 8.2.1-5 is based. Please note that, for clarity, PG&E has removed circuit segments with no listed risk reduction from the "Supporting Data" tab. The risk reduction values provided in Table 8.2.1-5 are some of the reported risk reduction values provided. Please note that the calculations underlying each reported risk reduction value were WMP-Discovery 2020-2028_DR_TURN_004-Q008 Page 2 conducted in the Forestry Platform, and PG&E is not able to re-create them in Excel in a reasonably timely manner.</p> | A Mineola Fall-Fry | 5/1/2025 | 5/12/2025 | 5/12/2025 | https://www.pge.com/assets/pge/docs/outage-and-safety/wildfire-mitigation-and-safety/2024-2028-TURN_004.xls | 1 | No | 8 | Grid Design, Operations, and Maintenance | 8.2.1 |

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|-----|------|-----|----------|-------|-----|----------------|--|-------------------|----------|-----------|-----------|---|---|----|---|--|---------|
| 214 | TURN | 004 | TURN_004 | R(42) | Yes | TURN_004_O(42) | <p>Regarding Table 8.2.1-5 on page 195:</p> <ul style="list-style-type: none"> a. Please provide this table in Excel with supporting calculations. b. Please add the following information to the Excel table and include all data, calculations, and assumptions: <ul style="list-style-type: none"> Annual and cumulative number of overhead miles in each year from 2023 (recorded) to 2028 (forecast) for each activity separately (covered conductor and underground). Annual and cumulative costs in each year from 2023 to 2028 (including forecast years) for each activity separately (covered conductor and underground). Annual and cumulative risk reduction from all other primary wildfire mitigations from 2023-2028 (including forecast years). Annual and cumulative costs from all other primary wildfire mitigations from 2023-2028 (including forecast years). Annual and cumulative costs to implement EPSS and PPSs in each year (separately from 2023-2028) (including forecast years). If not previously included. | A Milele Fall-Fly | 5/1/2025 | 5/19/2025 | 5/19/2025 | https://www.pge.com/asset/pge/docs/outage-plans-and-communications-reports-and-incident-reports/2025-05-01-turn_004-Q010A0101.xlsx | 1 | No | 8 | Grid Design, Operations, and Maintenance | 8.2.1 |
| 214 | TURN | 004 | TURN_004 | R(4) | Yes | TURN_004_O(4) | <p>Regarding Table 8.2.1-5 on page 195:</p> <ul style="list-style-type: none"> a. Please provide this table in Excel with supporting calculations. b. Please add the following information to the Excel table and include all data, calculations, and assumptions: <ul style="list-style-type: none"> Annual and cumulative number of overhead miles in each year from 2023 (recorded) to 2028 (forecast) for each activity separately (covered conductor and underground). Annual and cumulative costs in each year from 2023 to 2028 (including forecast years) for each activity separately (covered conductor and underground). Annual and cumulative risk reduction from all other primary wildfire mitigations from 2023-2028 (including forecast years). Annual and cumulative costs from all other primary wildfire mitigations from 2023-2028 (including forecast years). Annual and cumulative costs to implement EPSS and PPSs in each year (separately from 2023-2028) (including forecast years). If not previously included. | A Milele Fall-Fly | 5/1/2025 | 5/13/2025 | 5/13/2025 | https://www.pge.com/asset/pge/docs/outage-plans-and-communications-reports-and-incident-reports/2025-05-01-turn_004-Q010A0101.xlsx | 1 | No | 8 | Grid Design, Operations, and Maintenance | 8.2.1 |
| 215 | TURN | 004 | TURN_004 | 9 | No | TURN_004_O9 | <p>Regarding Table 8.2-1 on page 321, please provide these figures on an annual basis, from December 31, 2015, through 2023 at a minimum, please provide the 151 Figures.</p> | A Milele Fall-Fly | 5/1/2025 | 5/6/2025 | 5/6/2025 | https://www.pge.com/asset/pge/docs/outage-plans-and-communications-reports-and-incident-reports/2025-05-01-turn_004-Q010A0101.xlsx | 0 | No | 8 | Grid Design, Operations, and Maintenance | 8.5 |
| 216 | TURN | 004 | TURN_004 | 10 | No | TURN_004_O10 | <p>Please provide a list of mitigations PG&E has examined for how to reduce the "consequence" (outages and outage time) of PPSs and EPSSs. Please include the following:</p> <ul style="list-style-type: none"> Mitigation effectiveness of each mitigation, including all workarounds and an explanation. Unit cost or other relevant metrics. All supporting data and worksheets. | A Milele Fall-Fly | 5/1/2025 | 5/13/2025 | 5/13/2025 | https://www.pge.com/asset/pge/docs/outage-plans-and-communications-reports-and-incident-reports/2025-05-01-turn_004-Q010A0101.xlsx | 2 | No | 7 | Public Safety Power Shutoff | 7 |
| 217 | OEIS | 008 | OEIS_008 | 1 | No | OEIS_008_O1 | <p>Regarding Tree Risk Potential</p> <p>On page 146 of PG&E's 2028 Base WMP, in Figure PG&E-8.2.1-2, PG&E shows that it considers a tree strike potential of five or greater as "High." On page 432 of PG&E's 2025 Base WMP, in Figure PG&E-8.2.1-2, PG&E shows a tree strike potential of three or greater as "High." Explain why PG&E has changed the threshold for determining the significance of the tree strike potential. Provide an analysis of the magnitude of impact changing the threshold has had. This should include:</p> <ul style="list-style-type: none"> The number of projects that meet this threshold at five compared to three. The number of circuit segments that meet the threshold at five compared to three. <p>There has been no impact because there has been no change to the threshold.</p> | Nathan Poon | 5/2/2025 | 5/7/2025 | 5/7/2025 | https://www.pge.com/asset/pge/docs/outage-plans-and-communications-reports-and-incident-reports/2025-05-01-ois_008-Q010A0101.xlsx | 0 | No | 8 | Grid Design, Operations, and Maintenance | 8.2.1 |
| 218 | OEIS | 008 | OEIS_008 | 2 | No | OEIS_008_O2 | <p>Regarding PG&E's Response to OEIS-F-WMP_2025-PG&E-004 Question 04</p> <p>In part (c) of PG&E's response to data request OEIS-F-WMP_2025-PG&E-004 question 04, PG&E identifies that circuit protection zones as being "primarily owned lines."</p> <p>PG&E states within this data request response that two of the lines were identified as not being primarily owned through the validation process. Given the change, describe how PG&E intend to adjust its current benchmarking plan in order to reduce risk along these lines.</p> <p>a. If the lines are owned by someone other than PG&E, why is PG&E including the lines as part of their highest risk circuit segments?</p> <p>b. Provide a description of PG&E's procedures for working with the owners to decrease risk along their lines. In part (d) of PG&E's responses to data request OEIS-F-WMP_2025-PG&E-004 question 04, PG&E identifies many of the circuit segments to not be included based on not being a "part of selection criteria" as work is "based on density of risk per mile" and "not total risk on the circuit segment."</p> <p>Provide an updated version of Table 4 based on risk density opposed to total risk score. This must also include the total mileage for each circuit segment, and mileage.</p> | Nathan Poon | 5/2/2025 | 5/7/2025 | 5/7/2025 | https://www.pge.com/asset/pge/docs/outage-plans-and-communications-reports-and-incident-reports/2025-05-01-ois_008-Q010A0101.xlsx | 2 | No | 6 | Wildfire Mitigation Strategy Development | 6.2.1.3 |
| 218 | OEIS | 008 | OEIS_008 | 2(N) | Yes | OEIS_008_O2(N) | <p>Regarding PG&E's Response to OEIS-F-WMP_2025-PG&E-004 Question 04</p> <p>In part (c) of PG&E's response to data request OEIS-F-WMP_2025-PG&E-004 question 04, PG&E identifies that circuit protection zones as being "primarily owned lines."</p> <p>PG&E states within this data request response that two of the lines were identified as not being primarily owned through the validation process. Given the change, describe how PG&E intend to adjust its current benchmarking plan in order to reduce risk along these lines.</p> <p>a. If the lines are owned by someone other than PG&E, why is PG&E including the lines as part of their highest risk circuit segments?</p> <p>b. Provide a description of PG&E's procedures for working with the owners to decrease risk along their lines. In part (d) of PG&E's responses to data request OEIS-F-WMP_2025-PG&E-004 question 04, PG&E identifies many of the circuit segments to not be included based on not being a "part of selection criteria" as work is "based on density of risk per mile" and "not total risk on the circuit segment."</p> <p>Provide an updated version of Table 4 based on risk density opposed to total risk score. This must also include the total mileage for each circuit segment, and mileage.</p> | Nathan Poon | 5/2/2025 | 5/16/2025 | 5/16/2025 | https://www.pge.com/asset/pge/docs/outage-plans-and-communications-reports-and-incident-reports/2025-05-01-ois_008-Q010A0101.xlsx | 1 | No | 6 | Wildfire Mitigation Strategy Development | 6.2.1.3 |
| 219 | MGRA | 006 | MGRA_006 | 1 | No | MGRA_006_O1 | <p>Provide all information available on the following risk events, including related cause information, lessons learned, the type of conductor or equipment involved in particular whether the segment had been converted to covered conductor.</p> <p>On 8/3/2024, at 6:14 am, an ignition was reported related to PG&E infrastructure at latitude 39.1025715 longitude -121.300272.</p> <p>On 11/20/2024, at 11:42 AM, a good PPSs consequence resulted a damage event at latitude 37.105822 and longitude -121.300272.</p> | Joseph Mitchell | 5/5/2025 | 5/8/2025 | 5/8/2025 | https://www.pge.com/asset/pge/docs/outage-plans-and-communications-reports-and-incident-reports/2025-05-01-mgra_006-Q010A0101.xlsx | 2 | No | 5 | Risk Methodology & Assessment | 5.2.2.2 |
| 220 | MGRA | 006 | MGRA_006 | 2 | No | MGRA_006_O2 | <p>With reference to PG&E's Wildfire Consequence model of documentation, Sections 4.1, 4.2, and 4.3 please provide substantive answers to OEIS-001-Q025-c and 4.4.</p> | Joseph Mitchell | 5/5/2025 | 5/12/2025 | 5/12/2025 | https://www.pge.com/asset/pge/docs/outage-plans-and-communications-reports-and-incident-reports/2025-05-01-mgra_006-Q010A0101.xlsx | 0 | No | 5 | Risk Methodology & Assessment | 5.4 |

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|-----|------|-----|----------|------|-----|---------------|--|--------------------|----------|-----------|-----------|---|---|----|---|--|---------|
| 221 | MGRA | 006 | MGRA_006 | 3 | No | MGRA_06_03 | <p>WFC at Section 4.1.3 states that "The TDI is composed of items 1 to 3 that assess local topography and other factors to determine speed and ease of access from public roads and fire the feasibility for service territory expansion based on location".</p> <p>a. List all "other factors" that are included other than local topography.</p> <p>b. What are the topographic and other variables combined and weighted to compose the TDI?</p> <p>c. What metrics were used to validate that the TDI accurately (within 10%) speed and ease of access from public roads and fire the feasibility for service territory expansion based on location?</p> <p>d. Please provide this validation.</p> | Joseph Mitchell | 5/5/2025 | 5/12/2025 | 5/12/2025 | https://www.pge.com/energy/geo/docs/outputs_and_safety/coverage_areas/tdi/coverage_areas/tdi_06_03.pdf | 0 | No | 5 | Risk Methodology & Assessment | 5.4 |
| 222 | MGRA | 006 | MGRA_006 | 4 | No | MGRA_06_04 | <p>With regard to WFC v4 Table 9:</p> <p>a. Table 9 presents an abbreviated summary of the model regression results. Please provide the full model regression results.</p> <p>b. If value is shown to be 1 or less than 0.00001 in Table 9, what is the meaning of this P value? Does this imply a perfect fit?</p> <p>c. In the regression, how many variables were used to fit how many data points?</p> <p>d. Please also provide the validation that was done to quantify the explanatory value of TDI and other variables.</p> | Joseph Mitchell | 5/5/2025 | 5/12/2025 | 5/12/2025 | https://www.pge.com/energy/geo/docs/outputs_and_safety/coverage_areas/tdi/coverage_areas/tdi_06_04.pdf | 0 | No | 5 | Risk Methodology & Assessment | 5.4 |
| 223 | MGRA | 006 | MGRA_006 | 5 | No | MGRA_06_05 | <p>In Section 4.1.2.1 PG&E's model assets that</p> <p>The literature on structure loss in wildfire is extensive and lists a number of variables that influence structure loss. These include housing materials, age of neighborhood, density of neighborhood and separation of houses, proximity of vegetation to the structure, wetland area and vents, and others.</p> <p>a. How does PG&E's structure loss model incorporate other variables that are implicit to the structure, maintained landscapes, and neighborhoods?</p> <p>b. Please provide the numerical values that went into Figures 9 and 10.</p> <p>c. Figure 10 implies that for TDI+1 that the probability of structure is very small (counts for loss < 0.3 > loss < 0.3), and that for TDI+2 probability of structure loss is very large (counts for loss > 0.7 > loss < 0.7). Does this imply that PG&E's model assumes that home survival fraction is primarily dependent on the availability of firefighting resources? If so, what justification (analysis or otherwise) does it provide for this assertion?</p> | Joseph Mitchell | 5/5/2025 | 5/12/2025 | 5/12/2025 | https://www.pge.com/energy/geo/docs/outputs_and_safety/coverage_areas/tdi/coverage_areas/tdi_06_05.pdf | 0 | No | 5 | Risk Methodology & Assessment | 5.4 |
| 224 | MGRA | 006 | MGRA_006 | 5(a) | Yes | MGRA_06_05(a) | <p>In Section 4.1.2.1 PG&E's model assets that</p> <p>The literature on structure loss in wildfire is extensive and lists a number of variables that influence structure loss. These include housing materials, age of neighborhood, density of neighborhood and separation of houses, proximity of vegetation to the structure, wetland area and vents, and others.</p> <p>a. How does PG&E's structure loss model incorporate other variables that are implicit to the structure, maintained landscapes, and neighborhoods?</p> <p>b. Please provide the numerical values that went into Figures 9 and 10.</p> <p>c. Figure 10 implies that for TDI+1 that the probability of structure is very small (counts for loss < 0.3 > loss < 0.3), and that for TDI+2 probability of structure loss is very large (counts for loss > 0.7 > loss < 0.7). Does this imply that PG&E's model assumes that home survival fraction is primarily dependent on the availability of firefighting resources? If so, what justification (analysis or otherwise) does it provide for this assertion?</p> | Joseph Mitchell | 5/5/2025 | 5/12/2025 | 5/14/2025 | https://www.pge.com/energy/geo/docs/outputs_and_safety/coverage_areas/tdi/coverage_areas/tdi_06_05(a).pdf | 0 | No | 5 | Risk Methodology & Assessment | 5.4 |
| 225 | MGRA | 006 | MGRA_006 | 6 | No | MGRA_06_06 | <p>The analysis provided estimated TDI values for the Dixie fire. Please provide a TDI for every fire line as well including:</p> <p>a. Eaton (2025)</p> <p>b. Padilla (2025)</p> <p>c. Leblond (2025)</p> | Joseph Mitchell | 5/5/2025 | 5/12/2025 | 5/12/2025 | https://www.pge.com/energy/geo/docs/outputs_and_safety/coverage_areas/tdi/coverage_areas/tdi_06_06.pdf | 0 | No | 5 | Risk Methodology & Assessment | 5.4 |
| 226 | MGRA | 006 | MGRA_006 | 7 | No | MGRA_06_07 | <p>Was PG&E's regression model developed internally or by a third party vendor, and if the latter which vendor?</p> | Joseph Mitchell | 5/5/2025 | 5/12/2025 | 5/12/2025 | https://www.pge.com/energy/geo/docs/outputs_and_safety/coverage_areas/tdi/coverage_areas/tdi_06_07.pdf | 0 | No | 5 | Risk Methodology & Assessment | 5.4 |
| 227 | MGRA | 006 | MGRA_006 | 8 | No | MGRA_06_08 | <p>With regard to Table 12</p> <p>a. Please provide the full model regression results.</p> <p>b. If P value is shown to be 1 or less than 0.00001 in Table 12, what is the meaning of this P value? Does this imply a perfect fit?</p> <p>c. In the regression, how many variables were used to fit how many data points?</p> <p>d. Please also provide the validation that was done to quantify the explanatory value of TDI and other variables.</p> | Joseph Mitchell | 5/5/2025 | 5/12/2025 | 5/12/2025 | https://www.pge.com/energy/geo/docs/outputs_and_safety/coverage_areas/tdi/coverage_areas/tdi_06_08.pdf | 0 | No | 5 | Risk Methodology & Assessment | 5.4 |
| 228 | MGRA | 006 | MGRA_006 | 9 | No | MGRA_06_09 | <p>In Section 4.2.3, PG&E advances the hypothesis that AFN fraction is a predictor of structure loss. The Camp fire is an example with high fatalities.</p> <p>a. Figure 12 shows an age distribution for the Camp fire fatalities. Please provide an age distribution graph for the 50,000 people who evacuated from the Camp fire.</p> | Joseph Mitchell | 5/5/2025 | 5/12/2025 | 5/12/2025 | https://www.pge.com/energy/geo/docs/outputs_and_safety/coverage_areas/tdi/coverage_areas/tdi_06_09.pdf | 0 | No | 5 | Risk Methodology & Assessment | 5.4 |
| 229 | TURN | 005 | TURN_005 | 1 | No | TURN_05_01 | <p>Please see attachment "WMP-Discovery2025-2028_DR_TURN_005-001A0101.stu", workbook "Data Analysis", Column "Chi-Square".</p> <p>a. How many data points were used?</p> <p>PG&E has interpreted this request as referring to the original overhead miles that were removed in the subproject and has provided those miles in response.</p> <p>The primary overhead miles removed and undergirding overhead actual overhead miles removed on undergirding subprojects where data is available. If data is not yet available, we used the adopted overhead to undergirding conversion factor of 1 mile of overhead to 1.25 miles of undergirding.</p> | A. Mirek, Phil Fry | 5/8/2025 | 5/13/2025 | 5/13/2025 | https://www.pge.com/energy/geo/docs/outputs_and_safety/coverage_areas/tdi/coverage_areas/tdi_05_01.pdf | 1 | No | 6 | Wildfire Mitigation Strategy Development | 6.1.3.1 |

[illegible]