Pacific Gas and Electric Company®

INDEPENDENT EVALUATOR

Annual Report on Compliance for Wildfire Mitigation Plan Compliance Year 2024

JUNE 30, 2025

BUREAU VERITAS

C2 GROUP®

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This report has been compiled through the process of observation and review of documents provided by the electric service provider named herein. The Office of Energy Infrastructure Safety ("Energy Safety") instituted the requirement for an independent evaluation of electric utility providers Wildfire Mitigation Plans ("WMP"). Bureau Veritas is not the designer, implementer, or owner of the WMP and is not responsible for its content, implementation, and/or any liabilities, obligations, or responsibilities arising therein.

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1. EXECUTIVE SUMMARY

The devastating wildfires of the past and present have taught us valuable lessons about safeguarding California's lands, particularly in areas where electrical infrastructure coexists with wildland environments. In response to these challenges, the California Public Utilities Commission (CPUC) initiated Rulemaking 18-10-007 to provide guidance on Wildfire Mitigation Plans (WMPs) for Investor-Owned Utilities (IOUs), now referred to as Electrical Corporations (ECs). These WMPs are designed to cover a three-year period, with the first cycle of independent evaluations beginning in 2020.

The 2024 WMP is part of the second three-year planning cycle. During the first evaluation of this cycle, which ended in 2023, Pacific Gas and Electric Company (PG&E) reported a decrease in wildfire ignition risk. PG&E's 2023-2025 WMP builds on the previous cycle by incorporating more community engagement efforts, the utilization of review and analysis for building upon existing mitigation measures, and the application of innovative technologies. These improvements, along with existing mitigation measures, are founded on the understanding that effective natural resource management is crucial for maintaining facilities. Many of these existing programs include comprehensive monitoring and data collection, such as wildfire cameras, in-depth Quality Assessment and Quality Control (QA/QC) programs, asset inspections, and situational awareness tools. Overall, the previous year saw a reduction in reportable ignitions within the High Fire Threat Districts (HFTD) and High Fire Risk Areas (HFRA) in PG&E's service area.

This Independent Evaluator (IE) Annual Report of Compliance (ARC) assesses PG&E's second cycle plan, which began in 2023 and extends to 2025. The IE ARC reviews the WMP initiatives as outlined for 2024 and evaluates PG&E's performance in meeting their committed objective targets. These targets include specific quantifiable or qualitative performance goals, verification of QA/QC program implementation, processes, and results, as well as the distribution of funding to initiatives described within the WMP.

Pursuant to Public Utilities Code Section 8386.3(c)(2)(B)(i), (ii), (iii), and (iv), Bureau Veritas North America, Inc. (BVNA) has been selected as the IE to review and assess PG&E's 2024 WMP in its entirety. This IE ARC will present BVNA's findings and results for review. BVNA was included in the Office of Energy Infrastructure and Safety (Energy Safety) Independent Evaluator List for 2024 WMPs, dated January 27, 2025, in accordance with Public Utilities Code section 8386.3(c)(2)(A).

In compliance with Energy Safety's requirements, Pacific Gas and Electric Company has contracted BVNA to provide the IE assessment. This assessment includes the IE

responsibilities outlined in Public Utilities Code section 8386.3(c)(5)(C), which involve performing the following tasks:

- Task 1: Consult with Energy Safety on compliance assurance auditing that will be performed
- Task 2: Perform compliance assurance auditing, including field inspections
- Task 3: Draft and provide Energy Safety a report on audit findings, including deficiencies of underfunded WMP activities
- Task 4: Draft and provide Energy Safety a report on deficiencies of electrical corporations
- Task 5: Track and report deficiencies of audit findings

Docket Title: 2023 to 2025 Electrical Corporation Wildfire Mitigation Plans; Docket #: 2023-2025-WMPs produced on February 13, 2025, for Pacific Gas and Electric Company. 2024 WMP R8 update and the requirements of the Public Utilities Code (PU Code); Bureau Veritas North America, Inc. (BVNA), in partnership with C2 Group, have reviewed PG&E's 2024 WMP.

Introduction

PG&E was incorporated in California in 1905, becoming one of the largest natural gas and electricity providers in the United States. As a subsidiary of PG&E Corporation, this EC employs over 25,000 people and maintains a corporate office in Oakland, California.

PG&E's service area spans approximately 71,732 square miles in northern and central California, extending from Eureka in the north to Bakersfield in the south, and from the Pacific Ocean in the west to the Sierra Nevada in the east. The EC serves more than 5.7 million customers across their entire service area.

PG&E's extensive infrastructure includes approximately 108,060 circuit miles of both overhead and underground electric distribution lines and 18,293 circuit miles of interconnected overhead and underground transmission lines. The company also manages 992 substations and 1,433 weather stations.

Over half of PG&E's service territory (~52%), comprising 5,506 miles of electric transmission and 24,911 miles of distribution assets, lies within the High Fire Threat District (HFTD) and High Fire Risk Area (HFRA). In recent years, PG&E has developed an integrated strategy to manage and reduce ignition risks in wildland areas where their infrastructure is present.

PG&E's commitment to wildfire safety intensified in 2019 when the CPUC initiated the WMP project which aimed to create a roadmap for systematically reducing the risk of utility

infrastructure-caused wildfires. To lead this effort, the Wildfire Safety Division defined long-term objectives that supported and led to the formation of Energy Safety. PG&E acknowledged this strategic roadmap for reducing utility-related wildfire risk in 2020 with its first implementation of the WMP and continues to build upon this commitment.

Throughout the 2023-2025 three-year cycle of the WMP, PG&E's primary objective is to construct, maintain, and operate its electric line and equipment in a way that minimizes the risk of catastrophic wildfire. This goal is pursued through ongoing initiatives that aim to assess the EC's wildfire risk, develop comprehensive strategies to reduce ignitions, and ensure the reliability of electric systems. Using risk-informed decision making, PG&E aims to minimize ignition risk and outage impacts.

Independent Evaluator Review of Compliance

BVNA, in partnership with the C2 group, have been selected as the IE for PG&E's 2023-2025 WMP. The IE ARC will focus on evaluating PG&E's progress in implementing the WMP during 2024, assessing the completion of proposed initiatives, analyzing the distribution of allocated funds, and verifying the effectiveness of QAQC programs. This independent evaluation aims to ensure PG&E's compliance with its wildfire mitigations commitments and targets.

The evaluation process began with an Energy Safety kick-off meeting, which served as an introduction between PG&E representatives, BVNA/C2 staff, and assigned Energy Safety personnel. This introductory meeting established key elements, including communication and documentation protocols, as well as the identification of individuals responsible for receiving requests from the IE. Following this meeting, the IE initiated a review of PG&E's 2024 WMP and related publicly available documents, as listed in Section 7. This review aimed to identify PG&E's stated goals within the 2024 WMP.

To evaluate activities described in the WMP that were not available in public records, BVNA's team of evaluators submitted data requests and conducted interviews with Subject Matter Experts (SMEs). These steps helped verify activities stated within the 2023-2025 WMP (see Section 7 for a list of Data Requests/SME Interviews). In addition to document analysis, data requests, and SME interviews, the IE conducted field assessments within HFTD Tier 2 and Tier 3 areas. These assessments allowed the IE to collect photographic evidence and evaluate compliance with 2024 activities and initiatives identified during the initial review. Detailed analysis and key findings for each respective category are presented in the following sections of this report.

The IE has classified each initiative as "Validated," "Not Validated", or "Not Applicable." "Validated" indicates that the EC has clearly demonstrated meeting the stated WMP target

for the review year. “Not Validated” means the EC either failed to provide sufficient documentation to support their claim or did not meet the WMP target, the individual reviews will elaborate and make the distinction. “Not Applicable” signifies that the EC has determined the initiative is not relevant to the current review period.

BVNA's understanding of collected utility strategies demonstrated throughout the state are summarized below:

1. **Inspection and maintenance of distribution, transmission, and substation** includes a comprehensive approach conducting system patrols and ground inspections using advanced technological tools, managing predictive and electrical preventative maintenance, performing vegetation inspections and management, implementing vulnerability detection methods such as Light Detection and Ranging (LiDAR) inspection, and utilizing geospatial and topography identification along with geographic information system (GIS) mapping data. A key aspect of these programs is the identification and collection of data elements through each initiative. Understanding how this data is used and shared is essential for improving utility practices and enhancing overall wildfire mitigation efforts.

2. **System hardening** includes pole replacement, non-expulsion equipment, advanced fuses, tree attachment removal, less flammable transformer oil, covered wire and wire wrap, and undergrounding where it is supported by a cost benefit analysis.

3. **De-energization** actions are triggered and prioritized based on various fire weather conditions such as forecasted, imminent, and validated extreme fire weather conditions. Plans for re-energization when weather conditions subside to safe levels are implemented. Both manual and automatic capabilities to implement the de-energization and re-energization process exist.

4. **Advanced Technologies** include Distribution Fault Anticipation (DFA) technology, tree growth regulators, pulse control fault interrupters, oblique and hyperspectral imagery, advanced transformer fluids, advanced LiDAR systems, and advanced Supervisory Control and Data Acquisition (SCADA) systems. These technologies help reduce risk of electrical ignition, mitigate power outages, and prevent equipment damage.

5. **Vegetation management**, including routine preventative vegetation maintenance; corrective vegetative management and off-cycle tree work; emergency vegetation clearance, prioritized for portions of the service territory in Tier 2 and 3 HFTD; quality control processes; and resource protection plan, including animal and avian mitigation programs. Enhanced Vegetation Management (EVM) with enhanced

inspections, aims to keep all aspects of trees away from power lines and to prescribe minimum clearances that exceed state standards. EVM implements frequent inspection beyond the routine patrols to address dead, diseased or dying trees from power lines where they can do no harm.

6. **Situational Awareness** involves gathering real-time information from various sources to create a comprehensive understanding of current conditions. This included data from devices and sensors on electrical systems, weather monitoring equipment, and other tools that assess wildfire conductivity conditions. Utilization of programs such as online feeds and websites like the NFRDS help the EC employ risk-informed, data-supported decision-making processes. The goal of these situational awareness efforts is to achieve a shared understanding of actual conditions amongst all stakeholders, thereby improving collaborative planning and decision-making.

7. **Emergency Preparedness, Outreach, and Response** efforts engage a wide range of key stakeholders, including critical facilities, customers, local government, and essential agencies such as CAL FIRE. Strong communication channels are employed with local law enforcement agencies, first responders, hospitals, local emergency planning committees, other utility providers, and the California Independent System Operator. Coordination agreements such as mutual Aid or Assistance, as well as a community outreach plan is in place to inform and engage the various stakeholders.

8. **Operational practices** include communication protocols, and the execution of specific plans designed to minimize fire danger. A key element of this approach is the strategic deactivation of automatic reclosers during high-risk periods. De-energization decisions are based on a multifaceted risk assessment that consider various factors, including the type of facility, tree and vegetation density, the presence of available dry fuel, and other location specific vulnerabilities to wildfire risk.

Key Findings

As PG&E completes its second year in the current cycle, and fifth year overall, in executing the WMP, it's evident that the EC has embraced the challenges of complying with statewide wildfire mitigation regulations set forth by Energy Safety and participation in the IE process.

The PG&E 2024 WMP builds on lessons learned from previous years, utilizing statistical data and detailed analysis of mitigation measures. It aims to improve efforts to reduce wildfire ignition risk by enhancing existing programs and implementing new technologies. PG&E has met or exceeded several target goals for initiatives, demonstrating the effectiveness of its mitigation strategies.

SA-02 – 8.3.3.1 - Line Sensor Installations – Non-Focus & Non-Field Verifiable
SA-10 – 8.3.3.1 - Distribution Fault Anticipation (DFA) Installations – Focus & Non-Field Verifiable
PG&E exceeded several targets pertaining to Situational Awareness. Line sensor installations provide detection and assistance in locating faults. DFA installations help provide detection and assistance in locating faults, abnormal events, and the categorization of these events. Both technologies reduce ignition risk and mitigate PSPS events.

Field Verified Initiative Key Findings:

GH-01 System Hardening – Distribution
PG&E completed system hardening improvements on 348.3 circuit miles, exceeding the original target of 280 miles. These upgrades involve strengthening overhead power lines to reduce potential wildfire ignitions.

GH-10 Non-Exempt Expulsion Fuse Removal
PG&E successfully removed 3,112 older-style expulsion fuses, surpassing their original goal of 3,000 fuses. The removal process replaces older fuses with newer technologies.

Funding Verification Key Findings:

VM-03 Focused Tree Inspection Program
PG&E spent $61.3 million on the Focused Tree Inspection Program, below the planned budget of $209 million. This program targets specific areas to inspect trees near power lines for potential risks.

VM-16 Distribution Routine Patrol
PG&E spent $890.5 million on routine patrols of its distribution lines, exceeding the planned budget of $744.6 million. These patrols involve regularly inspecting power lines to identify potential equipment and vegetation issues.

PG&E's service programs continue to evolve as their understanding of wildfire threats and mitigation opportunities deepens. The EC has consistently improved and developed programs to reduce fire risks within their territory and minimize the impact of Public Safety Power Shutoff (PSPS) events on customers. The 2024 WMP demonstrates a comprehensive approach to enhancing all five categories of their WMP initiatives, from grid design and system hardening to community outreach.

Initiatives Completed Within 5% of the WMP Targets: 47 Total Number of Initiatives (100%)

Table 1: List of Initiatives that Missed Target or Could Not Be Validated

Initiative Number, WMP Section Number, and Name	Missed Target or Could Not Be Validated
N/A	N/A

Table 2: Initiatives with Absolute % Differences > 10%
(Spend in Thousand $)
30 Total Number of Initiatives (37%)

Initiative Number, WMP Section Number, and Name	Total Budget ($)	Total Expenditure ($)	Total Variance Between Budget and Expenditure (%)
AI-02, 8.1.3.1.1, Detailed Inspection Transmission – Ground	$13,959	$11,494	18%
AI-05, 8.1.3.1.3, Detailed Inspection Transmission – Climbing	$3,758	$2,825	25%
AI-08, 8.1.3.3.1, Supplemental Inspections - Substation Distribution	$2,649	$2,378	10%
AI-09, 8.1.3.3.1, Supplemental Inspections - Substation Transmission	$2,647	$2,362	11%
AI-10, 8.1.3.3.1, Supplemental Inspections - Hydroelectric Substations and Powerhouses	$1,017	$2,246	121%
GH-01, 8.1.2.1, System Hardening - Distribution	$97,014	$134,201	38%
GH-06, 8.1.2.5.1, System Hardening - Transmission Shunt Splices	$4,900	$4,042	18%
GH-07, 8.1.2.8.1, Distribution Protective Devices	$6,907	$3,398	51%
GH-08, 8.1.2.10.4, Surge Arrestor – Removals	$5,800	$7,643	32%
GH-09, 8.1.2.10.3, Distribution Line Motor Switch Operator (MSO) - Replacements	$5,835	$2,994	49%
GH-10, 8.1.2.10.5, Non-Exempt Expulsion Fuse - Removal	$19,800	$16,867	15%
GM-01, 8.1.6.1, Asset Inspections - Quality Assurance	$2,751	$8,052	193%
GM-06, 8.1.2.10.1, EPSS - Down Conductor Detection (DCD)	$9,800	$11,570	18%
SA-02, 8.3.3.1, Line Sensor - Installations	$4,445	$3,818	14%

Initiative Number, WMP Section Number, and Name	Total Budget ($)	Total Expenditure ($)	Total Variance Between Budget and Expenditure (%)
SA-05 - Evaluate FPI and IPW Modeling enhancements in 2023 - 2025(a)	$5,303	$4,900	7.6%
SA-10, 8.3.3.3, Distribution Fault Anticipation (DFA) Installations	$3,000	$2,390	20%
SA-11, 8.3.3.3, Early Fault Detection (EFD) Installations	$7,000	$2,802	60%
VM-01, 8.2.2.1.1, LiDAR Data Collection - Transmission	$6,634	$5,151	22%
VM-02, 8.2.3.1, Pole Clearing Program	$28,803	$68,512	138%
VM-03, 8.2.2.2.5, Focused Tree Inspection Program	$209,050	$61,359	71%
VM-04, 8.2.2.2.4, Tree Removal Inventory	$77,911	$26,656	66%
VM-06, 8.2.2.3.1, Defensible Space Inspections - Transmission Substation	$1,282	$1,049	18%
VM-07, 8.2.2.3.1, Defensible Space Inspections - Hydroelectric Substations and Powerhouses	$1,917	$1,558	19%
VM-08, 8.2.5, Vegetation Management – Quality Verification	$14,710	$13,104	11%
VM-14, 8.2.2.1.2, Transmission Second Patrol	$1,192	$3,695	210%
VM-15, 8.2.2.1.3, Integrated Vegetation Management - Transmission	$14,577	$9,164	37%
VM-16, 8.2.2.2.1, Distribution Routine Patrol	$744,607	$890,507	20%
VM-17, 8.2.2.2.2, Distribution Second Patrol	$80,124	$132,743	66%
VM-18, 8.2.2.2.3, VM for Operational Mitigations (VMOM)	$20,904	$8,419	60%
VM-21, 8.2.2.2.5, FTI Record Keeping Enhancement	$0	$1,311	100%

Table 3: 10 Largest Initiatives by Planned Expenditure

No.	Initiative Number, WMP Section Number, and Name	Failed to Fund? (Funded below 100%)
1	AI-04, 8.1.3.1.2, Detailed Inspection Transmission – Aerial	No
2	AI-07, 8.1.3.2.1, Detailed Ground Inspections - Distribution	Yes
3	GH-01, 8.1.2.1, System Hardening - Distribution	No
4	GH-04, 8.1.2.2, 10K Undergrounding	No
5	GM-09, 8.1.6.1, Asset Inspection – Quality Control	No
6	VM-03, 8.2.2.2.5, Focused Tree Inspection Program	Yes

No.	Initiative Number, WMP Section Number, and Name	Failed to Fund? (Funded below 100%)
7	VM-04, 8.2.2.2.4, Tree Removal Inventory	Yes
8	VM-16, 8.2.2.2.1, Distribution Routine Patrol	No
9	VM-17, 8.2.2.2.2, Distribution Second Patrol	No
10	VM-22, 8.2.5.2, Vegetation Management - Quality Control	Yes

Recommendations

No real recommendations for PG&E, they provided thorough data when requested, fixed any discrepancies with frontload data without being prompted, proactively identified data recording issues, and were open and transparent during the process.

2. FOCUS INITIATIVES AND DISCUSSION

For the 2024 WMP Review Year, Energy Safety instructed the IE to select up to fifteen initiatives for a "focused" more robust analysis. These "Focus Initiatives" were chosen by BVNA based on several key factors.

First, the IE considered the number and nature of "Notice of Violations" (NOVs) received by the EC in 2024, prioritizing initiatives related to these violations to verify compliance efforts. Funding allocation was another crucial consideration, with initiatives receiving the highest planned or actual expenditure being selected. Additionally, initiatives showing significant variance (~20%) between planned and actual spending were generally chosen, especially if target goals were not met. The WMP Risk Impact Percentage was also evaluated to assess each initiative's potential for fire risk reduction. Historically, grid hardening and vegetation management initiatives have proven most effective in mitigating fire risks and typically comprise the majority of Focus Initiatives. The specific fifteen initiatives selected by BVNA for focused analysis are listed in Table 4 below, followed by a brief rationale for each selection. This approach to initiative selection ensures a thorough evaluation of the EC's most critical and impactful wildfire mitigation efforts.

Table 4: List of Focus Initiatives

No.	Initiative Number, WMP Section Number, and Name
1	AI-07 - 8.1.3.2.1 - Detailed Ground Inspections - Distribution
2	GH-01 - 8.1.2.1 - System Hardening - Distribution
3	GH-04 - 8.1.2.2 - 10K Undergrounding

4	GH-10 - 8.1.2.10.5 - Non-Exempt Expulsion Fuse - Removal
5	GM-01 - 8.1.6.1 - Asset Inspections - Quality Assurance
6	GM-03 - 8.1.7.2 - Eliminate HFTD-HFRA Distribution Backlog
7	GM-06 - 8.1.2.10.1 - EPSS - Down Conductor Detection (DCD)
8	GM-09 - 8.1.6.1 - Asset Inspection – Quality Control
9	SA-10 - 8.3.3.3 - Distribution Fault Anticipation (DFA) Installations
10	VM-02 - 8.2.3.1 - Pole Clearing Program
11	VM-03 - 8.2.2.2.5 - Focused Tree Inspection Program
12	VM-04 - 8.2.2.2.4 - Tree Removal Inventory
13	VM-15 - 8.2.2.1.3 - Integrated Vegetation Management - Transmission
14	VM-16 - 8.2.2.2.1 - Distribution Routine Patrol
15	VM-17 - 8.2.2.2.2 - Distribution Second Patrol

3. SITE AND SAMPLE SELECTION AND DISCUSSION

Table 5: List of Field Verified Initiatives

Initiative Number, WMP Section Number, and Name	Rationale if Not Field Verified	Rationale for Additional Field Verified Initiative
GH-01 - 8.1.2.1 - System Hardening – Distribution	N/A	N/A
GH-04 - 8.1.2.2 - 10K Undergrounding	N/A	N/A
GH-10 - 8.1.2.10.5 - Non-Exempt Expulsion Fuse – Removal	N/A	N/A
GM-06 - 8.1.2.10.1 - EPSS - Down Conductor Detection (DCD)	N/A	N/A
GH-06 - 8.1.2.5.1 - System Hardening - Transmission Shunt Splices	N/A	N/A

Sample Location Methodology

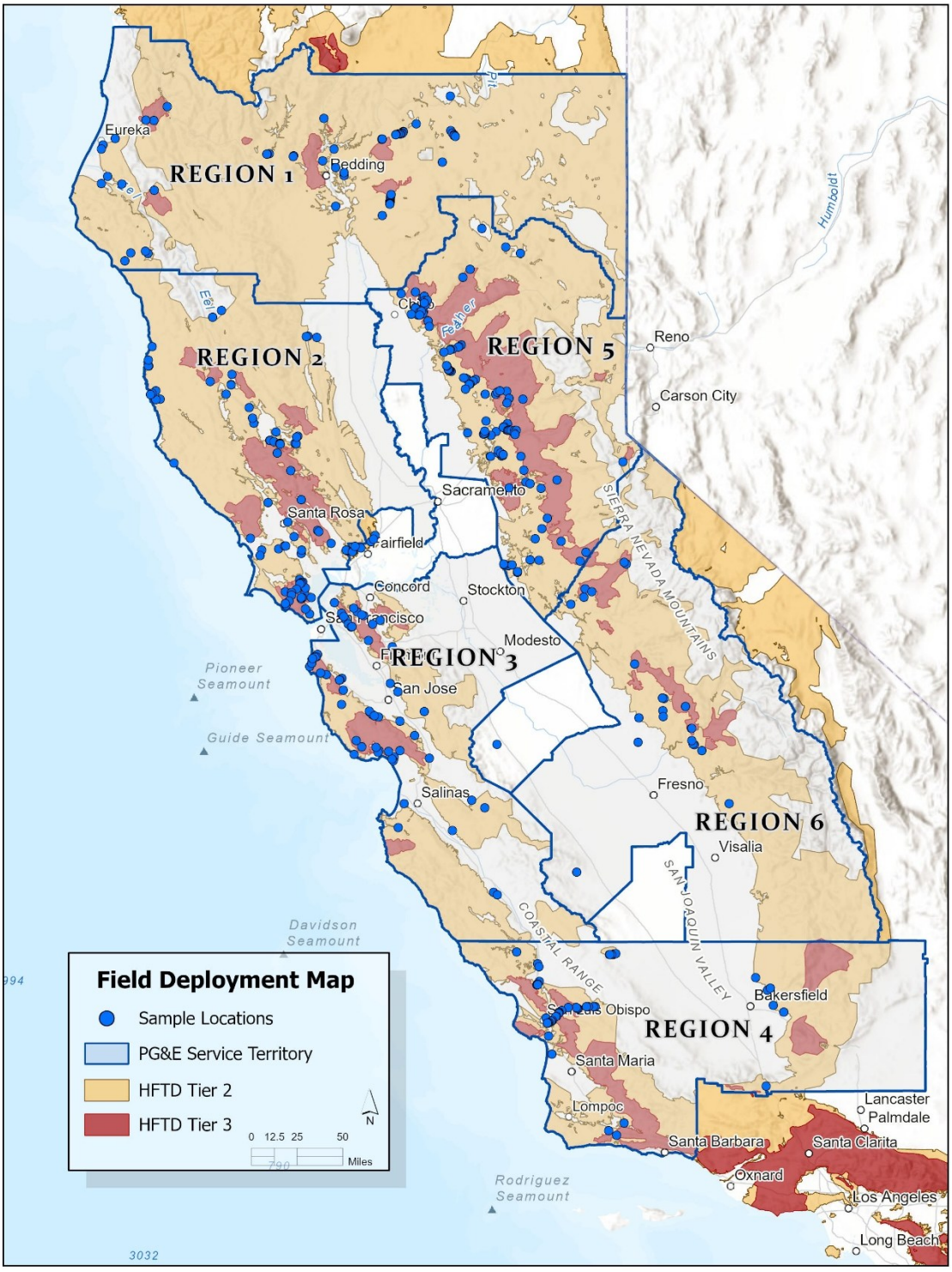
BVNA utilized random sampling for PG&E based upon a simplified version of Cochran's Sample Size Formula. Utilization of this formula helps determine the appropriate sample size required to achieve a desired level of precision and confidence in the results – this ensures that the sample is representative of the larger population. By specifying a confidence level for the EC's individual initiatives based upon historical trends and data, mainly the previous year's validation rates, the conclusions drawn from the sample data have a higher degree of statistical confidence. This confidence rate ranged from 85% to 95%, and if the previous year's validation rate fell outside of this range, the low or high end was utilized. For example, if the prior year sample validation rate was 96%, then 95% was used, if the previous year

sample validation rate was 84%, then 85% was used. If no information on the prior year's sample validation rate exists, then 90% was used, unless other factors influenced that determination.

Whether or not an initiative was classified as Focus or non-Focus also affected the number of samples required for a given initiative. For Focus Initiatives, the margin of error (MOE) was set at 5%, and for non-Focus Initiatives, the MOE was set at 10%. Although there is only a 5% difference between these two MOEs, the difference in sample size produced when utilizing these two MOE values is quite significant. As the margin of error increases, the required sample size decreases because a larger margin of error allows for more variability in the sample, requiring fewer samples to achieve the desired level of precision. As the margin of error decreases, the opposite happens because a smaller margin of error allows for less variability in the sample, requiring more samples to achieve the desired level of precision. Therefore, Focus Initiatives require more sampling than non-Focus Initiatives.

Once the total number of samples was calculated for each initiative, the IE determined how many samples should come from non-HFTD, HFTD Tier 2, and HFTD Tier 3 areas. Due to HFTD Tier 3 areas posing the most significant threat to wildfire ignition risk, it was determined that 75% of the sampling would occur in these areas, while 25% of sampling would occur in HFTD Tier 2 areas. If a certain initiative did not reside within a HFTD Tier 3 area, then the sampling number would be drawn from a HFTD Tier 2 area; if an initiative did not reside within either a HFTD Tier 3 or 2 area, then all samples were drawn from the non-HFTD area. An additional 25% of samples were identified to be used in the case that any of the primary samples were unusable or inaccessible.

Figure 1: Overview of Field Areas Sampled



4. REVIEW OF INITIATIVES ACROSS WMP CATEGORIES: COMPLIANCE AND FUNDING

Table 6: WMP Initiative Category Initiative Summary

WMP Initiative Category	No. of Focus and Field Verifiable Initiatives	No. of Focus and Non-Field Verifiable Initiatives	No. of Non-Focus and Field Verifiable Initiatives	No. of Non-Focus and Non-Field Verifiable Initiatives
Grid Design, Operations, and Maintenance	4	4	1	10
Vegetation Management and Inspections	0	6	0	12
Situation Awareness and Forecasting	0	1	0	2
Emergency Preparedness	0	0	0	5
Community Outreach and Engagement	0	0	0	2

Funding Evaluation Methodology

The IE employed a comprehensive approach to evaluate funding compliance for each initiative in the WMP. The funding methodology approach included the following:

Budget Baseline Establishment: The IE established a baseline for planned expenditures by thoroughly reviewing budget information documented in PG&E's approved 2024 WMP filing. These planned budget figures were cross-verified against PG&E's officially reported data, specifically examining the Q4 2024 QDR Table 11.

Actual Expenditure Verification: Actual financial expenditures reported by PG&E in their March 2025 ARC Table 5 Finance for Expense and Capital were compared against established WMP budget baselines.

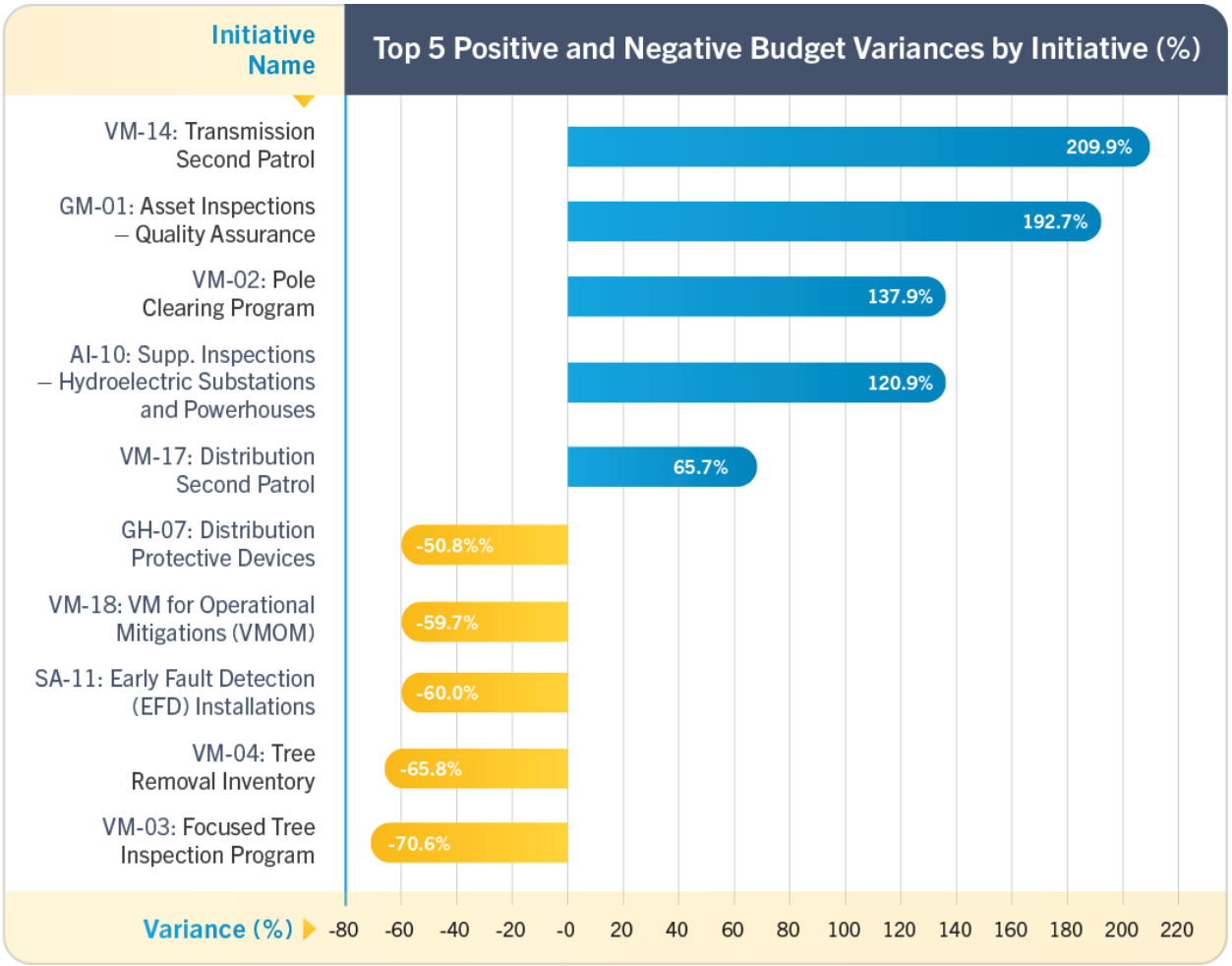
Variance Analysis: The IE calculated the absolute percent differences for each initiative by applying the formula as required by Energy Safety guidelines. These calculations were conducted for every initiative, generating detailed variance data for further review and analysis.

Threshold Application: A predefined threshold of 10% absolute percent difference was applied to systematically identify initiatives that required deeper review.

Supporting Documentation Review: For initiatives exceeding the established 10% variance threshold, the IE requested additional supporting documentation and detailed explanations from PG&E. If PG&E's rationale provided in the ARC was insufficient or incomplete, the IE explicitly asked for further documentation as necessary to achieve clarity and validate the reasoning behind the variances.

Detailed Analysis and Reporting: The IE documented any funding discrepancies identified during the evaluation, provided accurate corrected values, and analyzed the underlying causes for each variance, as detailed in Section 4 of this report and the top five (5) positive and negative variances as summarized in Figure 2.

Figure 2: Top 5 Positive and Negative Variances by Initiative (%)



4.1 GRID DESIGN, OPERATIONS, AND MAINTENANCE

4.1.1 Initiative Summary Table

Table 7: Initiative Summary Table (Spend in Thousand $)

Initiative Number, WMP Section Number, and Name	WMP – Initiative Target	EC-Claimed Progress	EC-Claimed Initiative Status	Sample Size[1]	Sample Validation Rate (%)[2, 3]	Verification Method	IE Finding on Initiative (Initiative Validation Rate)[4, 5]	WMP – Planned Spend ($)	EC-Claimed Actual Spend ($ and % from budget)	Satisfied Risk Reduction Goal?[6]
AI-02, 8.1.3.1.1 Detailed Inspection Transmission - Ground	20,000 Ground Inspections	21,684 Ground Inspections	Complete	18 Ground Inspections	100%	Detailed Inspection List.xlsx 18 Inspection Reports (DR006)	Initiative Validated (108%)	$13,959	$11,494.11 (-17.7%)	No Goal Provided
AI-04 , 8.1.3.1.2 Detailed Inspection Transmission - Aerial	20,000 Aerial Inspections	22,757 Aerial Inspections	Complete	18 Aerial Inspections	100%	Detailed Aerial Inspection List.xlsx 73 Inspection Reports (DR007)	Initiative Validated (113%)	$32,446	$32,529.11 (+0.3%)	No Goal Provided
AI-05, 8.1.3.1.3 Detailed Inspection Transmission – Climbing	1,200 Climbing Inspections	1,216 Climbing Inspections	Complete	18 Climbing Inspections	100%	Detailed Climbing Inspection List.xlsx 18 Inspection Reports (DR008)	Initiative Validated (101%)	$3,758	$2,825.24 (-24.8%)	No Goal Provided
AI-06, 8.1.3.1.4 Transmission Infrared Inspections	4,000 Infrared Inspections	4,339 Infrared Inspections	Complete	18 Infrared Inspections	100%	Infrared Inspection List.xlsx 2 Inspection Reports (DR009)	Initiative Validated (108%)	$2,798	$2,678.27 (-4.3%)	No Goal Provided
AI-07, 8.1.3.2.1, Detailed Ground Inspections - Distribution	220,016 Ground & Aerial Inspections	223,122 Ground & Aerial Inspections	Complete	73 Ground & Aerial Inspections	100%	Detailed Ground Inspection List (x3) Inspection Reports (DR010)	Initiative Validated (101%)	$53,312	$51,098.65 (-4.2%)	Yes (53%)
AI-08, 8.1.3.3.1 Supplemental Inspections – Substation Distribution	76 Substation Inspections	76 Substation Inspections	Complete	15 Substation Inspections	100%	Substation Distribution Inspection List.xlsx 19 Inspection Reports (DR011)	Initiative Validated (100%)	$2,649	$2,378.16 (-10.2%)	No Goal Provided
AI-09, 8.1.3.3.1 Supplemental Inspections – Substation Transmission	36 Substation Inspections	36 Substation Inspections	Complete	12 Substation Inspections	100%	Substation Transmission Inspection List Inspection Reports (DR012)	Initiative Validated (100%)	$2,647	$2,361.97 (-10.8%)	No Goal Provided
AI-10, 8.1.3.3.1 Supplemental Inspections – Hydroelectric Substations & Powerhouses	46 Substation Inspections	46 Substation Inspections	Complete	13 Substation Inspections	100%	Hydroelectric Substation Inspection List.xlsx 17 Inspection Reports (DR013)	Initiative Validated (100%)	$1,017	$2,245.69 (+120.9%)	No Goal Provided

[1] N/A in the Sample Size column means that no target was provided by the EC, or the target was qualitative and did not have a sampling component.
[2] Sample Validation is determined by taking the number of sampling data validated and dividing by the sampling request.
[3] N/A in the Sample Validation column means that no sampling was reviewed; therefore, no validation rate was applied.
[4] As detailed in Energy Safety's issued IE ARC Outline for WMP Compliance Year 2024 document, if the total initiative validation is greater or equal to 95%, the initiative is considered validated by the IE.
[5] The Initiative Validation Rate is determined by taking the Sample Validation Rate and multiplying by the EC-claimed amount, this estimate is then divided by the WMP Target amount to determine the validation rate.
[6] N/A in the Risk Reduction Goal column means that no goal was provided by the EC.

Initiative Number, WMP Section Number, and Name	WMP – Initiative Target	EC-Claimed Progress	EC-Claimed Initiative Status	Sample Size[1]	Sample Validation Rate (%)[2, 3]	Verification Method	IE Finding on Initiative (Initiative Validation Rate)[4, 5]	WMP – Planned Spend ($)	EC-Claimed Actual Spend ($ and % from budget)	Satisfied Risk Reduction Goal?[6]
GH-01, 8.1.2.1, System Hardening – Distribution	Complete 280 Circuit Miles of Distribution System Hardening	348.3 Circuit Miles	Complete	75 Circuit Miles	100%	Field Inspection System Hardening – Distribution Documentation (DR018) As-Builts (DR018.b)	Initiative Validated (124%)	$97,014	$134,200.90 (+38.3%)	Yes (1.6%)
GH-02, 8.1.2.1, Evaluate Covered Conductor Effectiveness	Update covered conductor effectiveness calculation using 2023 outage data	Covered conductor recorder effectiveness calculation updated using 2023 outage data.	Complete	1	100%	Covered Conductor Effectiveness Whitepaper (Front Load Data Request) Covered Conductor Effectiveness Data (Front Load Data Request)	Initiative Validated (100%)	$0	$0.00 (+0.0%)	No Goal Provided
GH-04, 8.1.2.2, 10K Undergrounding	Complete 250 Circuit Miles of Undergrounding	257.8 Circuit Miles	Complete	72 Circuit Miles	100%	Field Inspection Undergrounding Documentation (DR020) As-Builts (DR020b, DR020c)	Initiative Validated (103%)	$960,418	$999,783.17 (+4.1%)	Yes (1.5%)
GH-06, 8.1.2.5.1, System Hardening - Transmission Shunt Splices	Install Shunt Splices on 22 Transmission Lines	23 Splices	Complete	13 Splices	100%	Field Inspection Shunt Splice Documentation (Front Load Data Request)	Initiative Validated (105%)	$4,900	$4,042.32 (-17.5%)	No Goal Provided
GH-09, 8.1.2.10.3 Distribution Line Motor Complete Switch (MSO) – Replacements	26 MSOs Replaced	26 MSOs Replaced	Complete	11 MSOs Replaced	100%	Distribution Line MSO List.xlsx 10 As-Built/SCADA (DR022/.b)	Initiative Validated (100%)	$5,835	$2,993.99 (-48.7%)	Yes (0.0040 %)
GH-10, 8.1.2.10.5, Non-Exempt Expulsion Fuse – Removal	Remove Non-Exempt Expulsion Fuses/Cutouts From 3,000 Fuse Locations	3,112 Expulsion Fuses	Complete	89 Expulsion Fuses	100%	Field Inspection Non-Exempt Expulsion Fuse Documentation (Front Load Data Request)	Initiative Validated (104%)	$19,800	$16,866.85 (-14.8%)	Yes (>1%)
GM-01, 8.1.6.1, Asset Inspections - Quality Assurance	Transmission –500 audit locations; 94% pass rate Distribution –1,500 audit locations; 90% pass rate	Transmission – 2,970 audit locations; 99.97% pass rate Distribution – 7,098 audit locations; 99.69% pass rate	Complete	Transmission – 80 Distribution –88	Transmission – 100% Distribution – 100%	Asset Inspection QA Distribution Documentation (Front Load Data Request) Asset Inspection QA Transmission Documentation (Front Load Data Request) Distribution Quality Assurance Audits (DR024) Transmission Quality Assurance Audits (DR024) Distribution Audit Checklist and Cause Codes (DR024) Transmission Audit Checklist and Cause Codes(DR024)	Transmission – Initiative Validated (594%) Distribution – Initiative Validated (473%)	$2,751	$8,052.35 (+192.7%)	No Goal Provided
GM-03, 8.1.7.2 HFTD/HFRA Open Tag Reduction – Distribution Backlog	89,000 Reduced Tags	96,141 Reduced Tags	Complete	73 Reduced Tags	100%	Open Tag Backlog List Aerial Inspections (DR025) Notification Source (DR025)	Initiative Validated (150%)	$0	$0.00 (+0.0%)	Yes (2.55%)
GM-06, 8.1.2.10.1, EPSS - Down Conductor Detection (DCD)	Make capable for Down Conductor Detection (DCD) 400 protective device controllers or relays	705 DCD	Complete	83 DCD	100%	Field Inspection EPSS – Down Conductor Detection (DCD) Documentation (Front Load Data Request)	Initiative Validated (176%)	$9,800	$11,569.52 (+18.1%)	Yes (>1%)

Initiative Number, WMP Section Number, and Name	WMP – Initiative Target	EC-Claimed Progress	EC-Claimed Initiative Status	Sample Size[1]	Sample Validation Rate (%)[2, 3]	Verification Method	IE Finding on Initiative (Initiative Validation Rate)[4, 5]	WMP – Planned Spend ($)	EC-Claimed Actual Spend ($ and % from budget)	Satisfied Risk Reduction Goal?[6]
GM-07, 8.1.8.1.1 Update on EPSS Reliability Study	Provide annually an updated EPSS Reliability Impact Study	Submitted February 15, 2024	Complete	N/A	N/A	DR027 Response EPSS Reliability Study	Initiative Validated (100%)	$0	$0.00 (+0.0%)	No Goal Provided
GM-09, 8.1.6.1, Asset Inspection – Quality Control	Transmission –16,300 audit locations; 92% pass rate Distribution –170,000 audit locations; 88% pass rate	Transmission– 23,012 audit locations; 99.95% pass rate Distribution –: 175,376 audit locations; 99.83% pass rate	Complete	Transmission – 92 audit locations Distribution –92 audit locations	Transmission – (100%) Distribution– (100%)	Asset Inspection QC Distribution Documentation (Front Load Data Request) Asset Inspection QC Transmission Documentation (Front Load Data Request) QC Distribution WMP Commitment Submission (Front Load Data Request) QC Transmission WMP Commitment Submission (Front Load Data Request) Distribution Quality Control Audits (DR028) Transmission Quality Control Audits (DR028)	Transmission – Initiative Validated (141%) Distribution – Initiative Validated (103%)	$29,738	$31,434.01 (+5.7%)	No Goal Provided

3.1.1 Written Detail for Initiatives

3.1.2 Initiative Review – Findings & Method

AI-02 – 8.1.3.1.1 - Detailed Inspection Transmission – Gound – Non-Focus & Non-Field Verifiable

AI-02 outlines PG&E's transmission overhead asset inspection program. These inspections are completed in accordance with the Electric Transmission Preventive Maintenance (ETPM) and informed by the Failure Modes and Effects Analysis (FMEA). Inspections of structures in the HFTD and HFRA are conducted at least once every three years and can be added to the annual inspection scope based upon certain criteria. In 2024, PG&E had a target of 20,000 inspections and completed 21,684 per the 2024 EC ARC. PG&E provided an explanation in QDR4T1 that they updated the target to 21,390 to align with updated asset registry numbers, but given the WMP Guidelines, they could not include the update as part of the 2024 Change Order.

PG&E provided an excel spreadsheet that contained a list including all of the claimed 21,684 inspections for 2024. This list included the equipment type, the HFTD, location, and the month completed; it also included an internal link to a PDF copy of the inspection report. In response to DR006, PG&E provided a copy of the PDF inspection reports for 14 HFTD Tier 3 and 4 HFTD Tier 2 inspections. These inspection forms included general asset details, notes pertaining to access, areas to note vegetation issues, minor work performed, and areas to note conditions of the asset itself. Photos could be included in the reports and most answers were left in comment form.

Upon review of these inspection reports, the data outlined within addresses the existing conditions of the assets and any maintenance issues recommended, completed, and/or in progress. All areas were adequately completed, and all inspection reports contained several photos. Any issues identified were clearly noted and given a proper priority tag.

Table 8: Detailed Inspection Transmission – Gound Summary

2024 Target	2024 ARC	2024 Q4 QDR	Frontload Data Response	Summary
20,000 Transmission Structure Inspections	21,684 Transmission Structure Inspections	21,713 Transmission Structure Inspections	21,684 Transmission Structure Inspections	Initiative Validated

AI-04, 8.1.3.1.2 - Detailed Inspection Transmission – Aerial – Non-Focus & Non-Field Verifiable

In support of the 2024 WMP initiative AI-04, PG&E committed to completing detailed aerial inspections on approximately 20,000 transmission structures listed in its asset registry as of January 1, 2024. In response to data requests, PG&E provided a dataset listing 22,757 Detailed Ground and Aerial Inspections for transmission structures, exceeding the stated 2024 target. The dataset included monthly summaries by HFTD zone, order numbers, asset locations, HFTD tier classifications, and HFRA status, all grouped across 11 service territory divisions. Although some order numbers appeared on multiple lines—indicating multiple components or inspection events per structure—the equipment identifiers were unique, supporting the conclusion that the inspection count reflects individual transmission structure elements.

To confirm the reports had been documented and to evaluate the thoroughness of these inspections, PG&E also submitted 73 requested inspection reports prioritized by HFTD corresponding to the dataset randomly selected in various regions. These 2024-dated aerial inspection PDFs followed a consistent format, documenting inspector ID, structure locations, work orders, ratings across 11 inspection categories, and a 1–5 condition scale was used for issue severity. The structured format, presence of risk evaluation components, and alignment with WMP data tracking requirements provide credible support that PG&E met or exceeded the 2024 initiative target. The data is consistent with WMP expectations for measurable progress, risk-informed planning, and quarterly reportability as outlined in the WMP. Based upon this analysis and the documentation provided, the IE has validated this initiative.

Table 9: Detailed Inspection Transmission Aerial Summary

2024 Target	2024 ARC	2024 Q4 QDR	DR007 Response	Summary
20,000 Transmission Structure Inspections	22,757 Transmission Structure Inspections	22,865 Transmission Structure Inspections	22,757 Transmission Structure Inspections	Initiative Validated

AI-05, 8.1.3.1.3 - Detailed Inspection Transmission – Climbing – Non-Focus & Non-Field Verifiable

The provided data supports the 2024 WMP initiative target under Initiative ID AI-05. PG&E provided a comprehensive dataset listing 1,216 detailed transmission climbing inspections, slightly exceeding the 2024 target of approximately 1,200 structures as specified in the

Wildfire Mitigation Plan. The dataset identified inspection locations by division and HFTD tier, offering transparency in both geographic coverage and risk prioritization. The inclusion of HFTD 2 and 3 locations confirms alignment with the WMP's risk-based approach, as inspections in higher fire-threat areas are emphasized. The count of completed inspections is explicitly listed and directly supports the quantitative tracking required by the WMP, offering clear traceability from target to execution.

To further evaluate the quality and accuracy of these inspections, a targeted follow-up data request was issued seeking full inspection reports for 18 randomly selected equipment locations from the larger dataset, including both HFTD 2 and HFTD 3 areas. PG&E provided the full reports as requested, which included report numbers, structure IDs, geographic data, inspection dates, and multiple pages of high-resolution photographs per structure. These reports documented all conforming findings, and no damage or corrective action was indicated for any of the sampled structures. The level of detail within these reports indicates that inspections were carried out in a manner consistent with the expectations described in the WMP. The inspections show a level of information that is auditable, traceable, and supported by verifiable field documentation.

The structure-specific dataset aligns with the asset registry-based tracking referenced in the WMP guidance, and the visual documentation meets the plan's verification standard. The data and inspection reports confirm that PG&E has exceeded its 2024 target for detailed climbing inspections with a high level of confidence. Based upon this analysis and the documentation provided, the IE has validated this initiative.

Table 10: Detailed Inspection Transmission - Climbing Summary

2024 Target	2024 ARC	2024 Q4 QDR	Frontload Data Response	Summary
1,200 Transmission Structure Inspections	1,216 Transmission Structure Inspections	1,216 Transmission Structure Inspections	1,216 Transmission Structure Inspections	Initiative Validated

AI-06, 8.1.3.1.4 -Transmission Infrared Inspections – Non-Focus & Non-Field Verifiable

AI-06 outlines PG&E's program to perform infrared (IR) inspections on transmission overhead assets. These inspections are conducted annually in HFTD Tier 3 and once every three years in HFTD Tier 2. The goal of these inspections is to proactively identify and mitigate asset conditions that could result in wildfire ignitions. PG&E had a target goal of inspecting 4,000 circuit miles and exceeded this goal by inspecting 4,339.38 circuit miles in HFTD Tier 2, HFTD Tier 3, and HFRA.

PG&E provided frontload data that contained a list of all inspections completed in 2024 and included information such as region, circuit number, HFTD/HFRA, order number, flight date, and information pertaining to the infrared results. In DR009, the IE requested sample data for 18 circuit miles and received inspection reports for two segments of circuit miles inspected. The reports are detailed and include asset information, inspection, sensor, and thermography information, loading details, environmental conditions, and inspection results. Inspection report Jefferson detected no anomalies, while inspection report Parkway-Moraga was inspected a second time due to loading being substantially higher than usual. On the subsequent inspection, anomaly was noticed and properly reported. Detailed pictures are included in these reports and in the instance of the anomaly, detailed inspection notes were included.

Based upon this analysis and the documentation provided, the IE has validated this initiative.

Table 11: Transmission Infrared Inspections Summary

2024 Target	2024 ARC	2024 Q4 QDR	Frontload Data Response	Summary
4,000 Circuit Miles Inspected	4,339.38 Circuit Miles Inspected	4,339.38 Circuit Miles Inspected	4,339.38 Circuit Miles Inspected	Initiative Validated

AI-07, 8.1.3.2.1 - Detailed Ground and Aerial Inspections – Distribution – Focus & Non-Field Verifiable

AI-07 outlines PG&E's detailed ground and aerial inspection program. This program aims to proactively identify areas where corrective work needs to happen to alleviate imminent equipment failures that could create fire or safety risk. This initiative has a 53% eyes-on risk reduction goal.

Documentation for a sample of 73 distribution pole inspections from PG&E's pool of 213,457 aerial inspection locations were chosen to assess the utilities performance in meeting the WMP initiative targets for 2024. This sample included 18 poles located in HFTD Tier 2 areas and 55 poles in Tier 3 areas. In response, PG&E provided individual PDF inspection reports extracted from its BF1 EDAIR B1 data and the 2024 EDAIR attainment report. Each report was two pages long and included a work order number, date, location, circuit name, and checklist questions covering structural integrity and visible equipment damage. Comments were present throughout, offering consistent inspector input. However, the reports lacked photographic documentation, which limits the ability to verify the findings independently or assess the severity of any noted issues.

Based on the sample reviewed, the documentation confirms that PG&E conducted inspections for the requested locations and followed a uniform inspection protocol. The utility's response adequately addressed the data request and demonstrated that the inspections occurred as scheduled and were appropriately documented in line with the WMP. The submitted documents support that inspections are actively taking place in both Tier 2 and Tier 3 areas, aligned with the updated wildfire distribution risk model.

Findings indicate that the 2024 target for AI-07 has been met for the reviewed sample. The shift from Tier-based scheduling to a consequence-driven approach appears to have improved the precision of inspections, increasing the wildfire risk reduction per inspection. The lack of photographic evidence, however, is a notable gap in documentation and could hinder future verification efforts or post-incident analyses. PG&E's comment fields showed varied and location-specific observations, which suggest meaningful engagement by inspectors in assessing site conditions. No notable issues were identified in the recordkeeping for the samples provided, and inspection logs were complete and properly labeled.

Review methods involved comparing the utility's response documents to the original data request and determining whether the inspection evidence was sufficient. All requested reports were received and were specific to the identified equipment numbers. The content matched the expected format and included appropriate metadata. The completion of this target demonstrates that PG&E has met the risk reduction goal outlined for this initiative. It is recommended that PG&E consider including photo documentation in future aerial inspection reports to support verification and enhance transparency. Based upon this analysis and the documentation provided, the IE has validated this initiative.

Table 12: Detailed Ground and Aerial Inspection - Distribution Summary

2024 Target	2024 ARC	2024 Q4 QDR	Frontload Data Response	Summary
220,016 Distribution Ground & Aerial Pole Inspections	223,122 Distribution Ground & Aerial Pole Inspections	223,146 Distribution Ground & Aerial Pole Inspections	223,122 Distribution Ground & Aerial Pole Inspections	Initiative Validated

AI-08, 8.1.3.3.1 - Supplemental Inspections – Substation Distribution – Non-Focus & Non-Field Verifiable

AI-08 outlines PG&E's Substation Inspection program, specifically for distribution substations. This program is a comprehensive inspection of all assets inside the substations that are located within HFTD and HFRA areas. The inspections identify equipment issues

and damage that may impact operations and/or pose an ignition risk. These inspections are planned on a 3-year baseline cycle for all stations and a portion of substations are pulled into the in-year inspection plan based on a risk matrix. The inspection criteria and the development of the inspections plan are documented in Utility Procedure TD-3328P-01.

In 2024, PG&E had a target of 76 substation distribution inspections and claimed to have completed all 76. Referenced in the 2024 EC ARC, the Q2 target of 68 inspections was delayed due to receiving a change order decision on May 31, 2024, preventing the safe completion of the inspections by the end of Q2. By the end of Q3, all 76 ground, infrared, and aerial inspections were completed for the substations.

PG&E provided documentation that identified the 76 substations inspected during 2024. This documentation included the name of the substation, area, headquarters, and HFTD. In DR011, the IE requested inspection reports for 15 of the distribution substations. PG&E provided five documents for each of the 15 requested substations: aerial drone report, ground report, and three documents pertaining to the infrared inspection. For the aerial and ground forms, the inspectors were requested to inspect each structure using the form and to record any issues found for each component using the priority codes included in the form. These documents had the inspectors look at several aspects of the substation, provide comments, and include photos.

The infrared inspection had three associated documents. One of the documents was a generalized form that contained little information outside of summarizing what the inspection found, most notably if any anomalies were found. The second document contained all the infrared photos and details captured by FLIR, this included measurements, location, and any notes. The last document was the inspection form which asked for inspector information, the device used to perform the inspection, and to record any anomalies in detail that were found during the inspection.

All required information was completed on the provided inspection forms and no abnormalities were noticed when reviewing these documents. Based upon this analysis and the documentation received, the IE has validated this initiative.

Table 13: Supplemental Inspections - Substation Distribution Summary

2024 Target	2024 ARC	2024 Q4 QDR	Frontload Data Response	Summary
76 Distribution Substation Inspections	76 Distribution Substation Inspections	76 Distribution Substation Inspections	76 Distribution Substation Inspections	Initiative Validated

AI-09, 8.1.3.3.1 - Supplemental Inspections – Substation Transmission – Non-Focus & Non-Field Verifiable

AI-09 outlines PG&E's Substation Inspection program, specifically for transmission substations. This program is a comprehensive inspection of all assets inside the substations that are located within HFTD and HFRA areas. The inspections identify equipment issues and damage that may impact operations and/or pose an ignition risk. These inspections are planned on a 3-year baseline cycle for all stations and a portion of substations are pulled into the in-year inspection plan based on a risk matrix. The inspection criteria and the development of the inspections plan are documented in Utility Procedure TD-3328P-01.

In 2024, PG&E had a target of 36 substation transmission inspections and claimed to have completed all 36. Referenced in the 2024 EC ARC, the Q2 target of 33 inspections was delayed due to receiving a change order decision on May 31, 2024, preventing the safe completion of the inspections by the end of Q2. By the end of Q3, all 36 ground, infrared, and aerial inspections were completed.

PG&E provided documentation that identified the 36 substations inspected during 2024. This documentation included the name of the substation, area, headquarters, and HFTD. In DR012, the IE requested inspection reports for 12 of the distribution substations. PG&E provided five documents for each of the 12 requested substations: aerial drone report, ground report, and three documents pertaining to the infrared inspection. For the aerial and ground forms, the inspectors were requested to inspect each structure using the form and to record any issues found for each component using the priority codes included in the form. These documents had the inspectors look at several aspects of the substation, provide comments, and include photos.

The infrared inspection had three associated documents. One of the documents was a generalized form that contained little information outside of summarizing what the inspection found, most notably if any anomalies were found. The second document contained all the infrared photos and details captured by FLIR, this included measurements, location, and any notes. The last document was the inspection form which asked for inspector information, the device used to perform the inspection, and to record any anomalies in detail that were found during the inspection.

All required information was completed on the provided inspection forms and no abnormalities were noticed when reviewing these documents. Based upon this analysis and the documentation received, the IE has validated this initiative.

Table 14: Supplemental Inspections - Substation Transmission Summary

2024 Target	2024 ARC	2024 Q4 QDR	Frontload Data Response	Summary
36 Substation Transmission Inspections	36 Substation Transmission Inspections	36 Substation Transmission Inspections	36 Substation Transmission Inspections	Initiative Validated

AI-10, 8.1.3.3.1 - Supplemental Inspections – Hydroelectric Substations and Powerhouses – Non-Focus & Non-Field Verifiable

AI-10 outlines PG&E's Substation Inspection program, specifically for hydroelectric substations. This program is a comprehensive inspection of all assets inside the substations that are located within HFTD and HFRA areas. The inspections identify equipment issues and damage that may impact operations and/or pose an ignition risk. These inspections are planned on a 3-year baseline cycle for all stations and a portion of substations are pulled into the in-year inspection plan based on a risk matrix. The inspection criteria and the development of the inspections plan are documented in Utility Procedure TD-3328P-01.

In 2024, PG&E had a target of 46 substation distribution inspections and claimed to have completed all 46. Referenced in the 2024 EC ARC, the Q2 target of 45 inspections was delayed due to receiving a change order decision on May 31, 2024, preventing the safe completion of the inspections by the end of Q2. By the end of Q3, all 46 ground, infrared, and aerial inspections were completed.

PG&E provided documentation that identified the 46 substations inspected during 2024. This documentation included the name of the substation, area, headquarters, and HFTD. In DR012, the IE requested inspection reports for 13 of the distribution substations. PG&E provided five documents for each of the 13 requested substations: aerial drone report, ground report, and three documents pertaining to the infrared inspection. For the aerial and ground forms, the inspectors were requested to inspect each structure using the form and to record any issues found for each component using the priority codes included in the form. These documents had the inspectors look at several aspects of the substation, provide comments, and include photos.

The infrared inspection had three associated documents. One of the documents was a generalized form that contained little information outside of summarizing what the inspection found, most notably if any anomalies were found. The second document contained all the infrared photos and details captured by FLIR, this included measurements, location, and any notes. The last document was the inspection form which asked for

inspector information, the device used to perform the inspection, and to record any anomalies in detail that were found during the inspection.

All required information was completed on the provided inspection forms and no abnormalities were noticed when reviewing these documents. Based upon this analysis and the documentation received, the IE has validated this initiative.

Table 15: Supplemental Inspections - Hydroelectric Substations and Powerhouses Summary

2024 Target	2024 ARC	2024 Q4 QDR	Frontload Data Response	Summary
46 Hydroelectric Substation Inspections	46 Hydroelectric Substation Inspections	46 Hydroelectric Substation Inspections	46 Hydroelectric Substation Inspections	Initiative Validated

GH-01 – 8.1.2.1 – System Hardening – Distribution – Focus & Field Verifiable

Distribution system hardening reduces wildfire ignition risks by enhancing the reliability and resilience of overhead distribution assets. PG&E prioritizes hardening initiatives first by identifying line removal opportunities, followed by undergrounding to maximize risk reduction, including mitigating tree fall-in risks. Other hardening alternatives, such as remote-grid solutions and relocating overhead facilities, are also considered. When overhead system hardening is selected, PG&E employs a detailed evaluation process described in Section 8.1.2.1 of its 2023–2025 WMP.

PG&E's 2023–2025 WMP established a 2024 target of completing 280 circuit miles of distribution system hardening with an associated risk reduction goal of 1.6%. According to PG&E's 2024 Q4 QDR, the utility completed 348.3 circuit miles, exceeding its annual target. PG&E provided detailed documentation confirming the completion of all 348.3 circuit miles. Additionally, PG&E's 2024 ARC reported a corresponding Risk Impact of 1.96%, surpassing its original risk reduction goal.

The IE reviewed a random sample of 75 circuit miles of system hardening from PG&E's provided documentation and associated as-built construction records from DR018b. Field verification utilized vehicle-mounted 360° cameras with GPS data logging to map work orders and compare them against historical Google Streetview imagery (2019–2024) and as-built drawings. During the field reviews, the IE verified:

- Completion of system hardening projects.
- Equipment installation aligned accurately with documented coordinates.

- Workmanship adhered to industry construction standards.

For illustrative examples of these observations, refer to Figure 3: Example System Hardening Distribution Pole Field Images.

Figure 3: Example System Hardening Distribution Pole Field Images

35227654 - CWSP - VACAVILLE 11046542 PH 1.5

35290513 - CWSP-HIGHLANDS 1102 LR623120 PH1.4

Figure 4: Example System Hardening Distribution Pole Field Images

2015 Google Street View

GIS Map View 35277926-CWSP-AUBERRY 1101 CB PH. 1.3

360 Imagery Capture – 5/31/2025

Field assessments specifically reviewed workmanship quality and accuracy against the initiative description in PG&E's 2023–2025 WMP. No issues or discrepancies were identified during the field validation process.

Based on the comprehensive field review and documentation analysis, the IE validates this initiative.

Table 16: System Hardening – Distribution Summary

2024 Target	2024 ARC	2024 Q4 QDR	DR018 Response	Summary
280 Circuit Miles	348.3 Circuit Miles	348.3 Circuit Miles	348.3 Circuit Miles	Initiative Validated

GH-02 – 8.1.2.1 – Evaluate Covered Conductor Effectiveness – Non-Focus & Non-Field Verifiable

Evaluating covered conductor effectiveness allows PG&E to incorporate accurate outage performance data into future system hardening planning efforts. PG&E's 2023–2025 WMP established a 2024 target to update its covered conductor effectiveness calculation using 2023 outage data but did not set a risk reduction goal for this initiative.

According to PG&E's 2024 Q4 QDR, the utility updated the covered conductor effectiveness calculation using 2023 outage data, meeting its annual target. PG&E provided supporting documentation, including a whitepaper and effectiveness calculation data based on 2023 outage records.

The IE reviewed both the whitepaper and the supporting covered conductor effectiveness data. No issues or discrepancies were identified during the review. Based on the documentation provided, the IE validates this initiative.

Table 17: Evaluate Covered Conductor Effectiveness Summary

2024 Target	2024 ARC	2024 Q4 QDR	Front Load Data Request Response	Summary
Update the covered conductor effectiveness calculation using 2023 outage data	Covered Conductor effectiveness calculation updated using 2023 outage data	Covered Conductor effectiveness calculation updated using 2023 outage data	Covered Conductor effectiveness calculation updated using 2023 outage data	Initiative Validated

GH-04 – 8.1.2.2 – 10K Undergrounding – Focus & Field Verifiable

The 10K Undergrounding Initiative, launched in July 2021 and separately tracked from Initiative 8.1.2.1, prioritizes high-risk areas for undergrounding electrical assets to reduce wildfire ignition risks associated with overhead distribution lines, such as tree fall-in hazards. PG&E's 2023–2025 WMP established a 2024 target of completing 250 miles of undergrounding with an associated risk reduction goal of 1.5%.

According to PG&E's 2024 Q4 QDR, the utility completed 257.8 miles of undergrounding, exceeding its annual target. PG&E provided detailed documentation confirming the completion of 257.8 circuit miles of undergrounding. PG&E's 2024 ARC reported a corresponding Risk Impact of 1.72%, exceeding the original risk reduction goal.

The IE randomly selected and reviewed 72 circuit miles of completed undergrounding from PG&E's provided documentation and associated as-built construction records from DR020b. Field verification employed vehicle-mounted 360° cameras with GPS data logging to map work orders, compare installations with historical Google Streetview imagery (2019–2024), and validate against the as-built construction drawings. During field assessments, the IE verified:

- Completion of undergrounding projects.
- Installed equipment aligned accurately with documented coordinates.
- Installation workmanship adhered to industry construction standards.

For illustrative examples, refer to Figure 5: Example Underground Assets Field Images.

Figure 5: Example Underground Assets Field Images

Work Order Number: 35338406

Figure 6: Example Underground Assets Field Images

Work Order 35332213
Left: October 2023 Google Street View **Right:** May 2025 360 Camera

Field assessments specifically evaluated workmanship quality and accuracy against PG&E's initiative description in the 2023–2025 WMP. The IE identified no issues or discrepancies during the field validation process.

Based on the comprehensive field review and documentation analysis, the IE validates this initiative.

Table 18: 10K Undergrounding Summary

2024 Target	2024 ARC	2024 Q4 QDR	DR020 Response	Summary
250 Circuit Miles	257.8 Circuit Miles	257.8 Circuit Miles	257.8 Circuit Miles	Initiative Validated

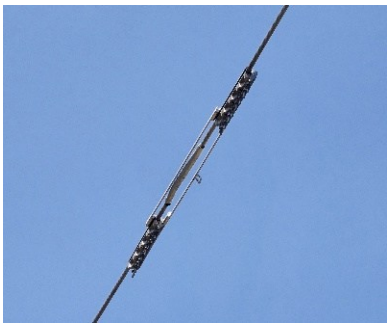
GH-06 – 8.1.2.5.1 – System Hardening - Transmission Shunt Splices – Non-Focus & Field Verifiable

Transmission shunt splices reduce wildfire ignition risks by reinforcing existing splices identified as having a higher risk of failure, thereby removing them as single points of failure. PG&E's 2023–2025 WMP set a 2024 target to install shunt splices on 22 transmission lines, with the associated risk reduction goal identified as TBD.

According to PG&E's 2024 Q4 QDR, the utility completed shunt splice installations on 23 transmission lines, exceeding its annual target. PG&E provided documentation confirming these installations. Additionally, PG&E's 2024 ARC reported a corresponding Risk Impact of 0.02% for this initiative.

The IE field assessment team validated completed work against the California Power Line Fire Prevention Guide, 2021 Edition (Page 79, Figure A-6), as well as manufacturer installation standards, including PLP Installation Procedure SP2734 (Formed Wire Jumper Shunts) and ClampStar Inline Rigid Splice Installation Guide. For illustrative examples, refer to Figure 7: Example System Hardening – Transmission Shunt Splices Field Images.

Figure 7: Example System Hardening – Transmission Shunt Splices Field Images

		
Work Order Number 74057091	Work Order Number 74049810	Work Order Number 74056965

The IE randomly selected 13 shunt splice work orders from PG&E's provided documentation and verified each location through on-site visits, capturing geo-referenced photographs. Drone imagery was utilized in instances where splices were otherwise inaccessible. During field assessments, the IE verified:

- Installation of shunt splices.
- Splice locations aligned accurately with reported coordinates.
- Installation workmanship adhered to industry construction standards and was free of defects.

Field assessments specifically reviewed workmanship quality and accuracy against PG&E's initiative description in the 2023–2025 WMP. The IE identified no issues or discrepancies during the field validation process.

Based on the comprehensive field review and documentation analysis, the IE validates this initiative.

Table 19: System Hardening - Transmission Shunt Splices Summary

2024 Target	2024 ARC	2024 Q4 QDR	Front Load Data Request Response	Summary
22 Transmission Lines	23 Transmission Lines	23 Transmission Lines	23 Transmission Lines	Initiative Validated

GH-09, 8.1.2.10.3 - Distribution Line Motor Switch (MSO) Replacements – Non-Focus & Non-Field Verifiable

GH-09 outlines PG&E's commitment to install line sensors such as reclosers, subsurface equipment, and other vacuum switch equipment to replace the existing motor switch operator (MSO) program due to the observation that these existing devices posed a wildfire ignition risk. In 2024, PG&E had a target to remove and replace 26 existing MSOs, and per QDR4T1, they met this goal with the completion of 26 replacements.

PG&E provided a list of the MSO replacements during 2024, and this documentation showed that 26 replacements or removals occurred during the year. This list included the project name, location (GPS coordinates included), the scheduled and actual completion date, and a description of the work. Of the 26 replacements/removals, 23 were commissioned/installed, and the remaining three had the MSO device removed, but a new line sensor may not have been installed, mainly due to underground efforts in that area.

In response to DR022, PG&E provided SCADA Release Reports or As-Built drawings to verify work completed for 9 locations in HFTD Tier 3 and 2 locations in HFTD Tier 2. The as-built drawings included information documenting how the installation took place, and the SCADA release verified that a test on the device was conducted and operational. Based upon this analysis and the documentation received, the IE has validated this initiative.

Table 20: Distribution Line Motor Switch (MSO) Replacements Summary

2024 Target	2024 ARC	2024 Q4 QDR	Frontload Data Response	Summary
26 MSO Removals/ Replacements	26 MSO Removals/Replacements	26 MSO Removals/ Replacements	26 MSO Removals/ Replacements	Initiative Validated

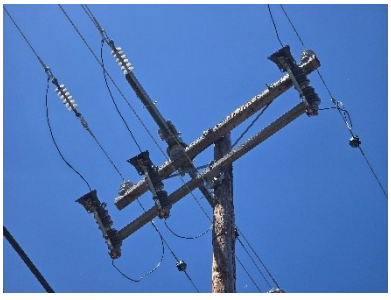
GH-10 – 8.1.2.10.5 – Non-Exempt Expulsion Fuse – Removal – Focus & Field Verifiable

Replacing non-exempt expulsion fuses with exempt, non-expulsion devices reduces wildfire ignition risks by reducing equipment capable of creating arcs or sparks within HFTD areas. PG&E's 2023–2025 WMP established a 2024 target of removing non-exempt expulsion fuses from 3,000 fuse locations on distribution poles, with a risk reduction goal of <1%.

According to PG&E's 2024 Q4 QDR, the utility reported the removal of non-exempt expulsion fuses at 3,106 locations, exceeding its annual target. PG&E later updated this total to 3,112 locations in its 2024 ARC. Additionally, PG&E's 2024 ARC reported a corresponding Risk Impact of 0.35% for this initiative.

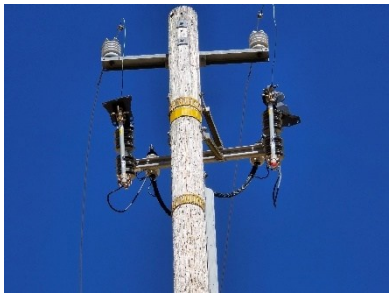
The IE randomly selected 89 locations from the documentation provided for detailed field verification. Field assessments utilized the California Power Line Fire Prevention Guide, 2021 Edition (Exempt installations: Pages 81–87, Figures B-1 to B-21; Non-Exempt: Pages 54–62, Figures NE-1 to NE-18) as the validation standard. For illustrative examples, refer to Figure 8: Example of Expulsion Fuse Replacement Field Images.

Figure 8: Example of Expulsion Fuse Replacement Field Images



SAP Pole ID 10189478

SAP Pole ID 103828495



SAP Pole ID 100474020

During the site visits, the IE captured geo-referenced photographs and verified:

- Non-exempt expulsion fuses were removed and replaced.
- Structure locations aligned accurately with reported coordinates.
- Installation workmanship adhered to industry construction standards.

Field assessments specifically reviewed workmanship quality and accuracy against PG&E's initiative description in the 2023–2025 WMP. No workmanship issues were identified; however, two data discrepancies were observed during field verification that included the following:

- One (1) Location specified as 30 ELF in GH-10 but had 25 ELF installed.
- One (1) Location specified as 10E in GH-10 but has 20E installed.

Based on the comprehensive field review and supporting documentation, the IE validates this initiative

Table 21: Non-Exempt Expulsion Fuse – Removal Summary

2024 Target	2024 ARC	2024 Q4 QDR	Front Load Data Request Response	Summary
3,000 Fuses	3,112 Fuses	3,106 Fuses	3,112 Fuses	Initiative Validated

GM-01 – 8.1.6.1 – Asset Inspections - Quality Assurance – Focus & Non-Field Verifiable

Quality assurance (QA) audits validate asset inspection results to ensure compliance, accuracy, and adherence to established inspection standards. PG&E's 2023–2025 WMP established specific 2024 QA targets for two distinct asset inspection programs.

Quality Assurance Audits – Transmission Inspections

PG&E set a 2024 target of conducting 500 quality assurance audits for transmission inspections, with an expected quality pass rate of 94%. No specific risk reduction goal was established. According to PG&E's 2024 Q4 QDR, the utility completed QA audits at 2,970 transmission inspection locations with an overall pass rate of 99.7%, exceeding both the targeted audits and pass rate.

PG&E provided detailed documentation in the Asset Inspection QA Transmission Documentation workbook, which listed each audit location along with asset identifiers, inspection and audit dates, findings, critical findings, and associated documentation links.

The IE reviewed a representative sample of 80 transmission QA audits, cross-referencing these with the Transmission Audit Checklist workbook provided in DR024.

The sampled transmission QA audit reports included:

- **Basic Asset Data and Inspector Information:**
  SAP ID, HFTD Tier, Region, Latitude/Longitude, Inspection and QA Completion Dates, and personnel involved.
- **Assessment Summary and "Shout Out":**
  Highlighted exceptional performance and detailed audit findings.
- **SME Review:**
  Verification of audit completeness and accuracy by subject matter experts.

For field-type audits, detailed inspection checklists covered seven asset-specific categories: Access and Confirmations, Vegetation, Anchors & Guys, Steel Structure Foundation, Steel Structures, Conductors, and Insulators, accompanied by comprehensive photos.

The Transmission Audit Checklist workbook categorized audit findings into four groups: Documentation, Compelling Issues, Condition Codes, and Photos, and clearly identified critical findings requiring immediate attention.

The IE identified no issues or discrepancies during the review of sampled transmission QA audit documentation.

Quality Assurance Audits – Distribution Inspections

PG&E established a 2024 target of conducting 1,500 quality assurance audits for distribution inspections, with an expected quality pass rate of 90%. No specific risk reduction goal was set. According to PG&E's 2024 Q4 QDR, the utility completed QA audits at 7,098 distribution inspection locations with an overall pass rate of 99.69%, exceeding both the targeted audits and pass rate.

PG&E provided detailed documentation in the Asset Inspection QA Distribution Documentation workbook, listing each audit location with asset identifiers, inspection and QA completion dates, findings, critical findings, and associated documentation links. The IE reviewed a representative sample of 88 distribution QA audits, cross-referencing these with the Distribution Audit Checklist and Cause Codes workbook provided in DR024.

The sampled distribution QA audit reports included:

- **Basic Asset Data and Inspector Information:**
  SAP ID, HFTD Tier, Division, Latitude/Longitude, Inspection and QA Completion Dates, and personnel involved.

- **Discrepancy Identification:**
  Documentation of audit discrepancies, supported by photographic evidence.
- **SME Review:**
  Verification of audit completeness and accuracy by subject matter experts.

Field-type distribution audits also included an additional photo section for asset verification.

The Distribution Audit Checklist workbook documented discrepancies and cause codes separately for aerial and ground inspections, providing clear descriptions, display questions, and references to relevant documentation.

The IE identified no issues or discrepancies during the review of sampled distribution QA audit documentation. Based on the comprehensive review of documentation provided for both transmission and distribution asset inspection QA audits, the IE validates this initiative.

Table 22: Asset Inspections - Quality Assurance Summary

2024 Target	2024 ARC	2024 Q4 QDR	Front Load Data Request Response	Summary
Transmission Inspections – 500 Audit Locations; 94% Pass Rate	Transmission Inspections – 2,970 Audit Locations; 99.7% Pass Rate	Transmission Inspections – 2,970 Audit Locations; 99.7% Pass Rate	Transmission Inspections – 2,970 Audit Locations; 99.7% Pass Rate	Initiative Validated
Distribution Inspections – 1,500 Audit Locations; 90% Pass Rate	Distribution Inspections – 7,098 Audit Locations; 99.69% Pass Rate	Distribution Inspections – 7,098 Audit Locations; 99.69% Pass Rate	Distribution Inspections – 7,098 Audit Locations; 99.69% Pass Rate	Initiative Validated

GM-03, 8.1.7.2 - HFTD/HFRA Open Tag Reduction – Distribution Backlog – Focus & Non-Field Verifiable

In support of the WMP initiative to reduce wildfire risk by addressing the backlog of distribution equipment condition notifications in HFTDs, PG&E provided a dataset containing 69,456 EC tags, which include identifiers for HFTD tier status and ignition risk designation. Detailed inspection reports for 73 specific locations listed in that dataset were selected to verify that PG&E's closure of EC notifications aligned with the stated targets for 2024. PG&E responded with a spreadsheet that clearly matched each of the 73 notification numbers to the source of inspection—65 of which were created through aerial inspections, and the remaining 8 through crew reports or call-ins. This documentation was consistent with the company's stated process for creating and resolving EC notifications in wildfire-prone areas.

The aerial inspection reports submitted were dated from 2024 and included site-specific information such as work order numbers, circuit IDs, and yes/no condition fields for critical infrastructure elements like structures, crossarms, conductors, and equipment. These fields were supplemented by inspector notes with individualized observations at each site, which supported qualitative findings. While photo documentation was not included in the submitted materials, the clarity and specificity of the written inspection notes generally supported PG&E's reported progress. Based on this documentation and PG&E's assertion that the aerial inspections generated the majority of these EC tags, the IE finds that the company is substantially adhering to its risk-based maintenance approach.

PG&E's stated goal for 2024 was to close at least 25,000 additional EC notifications on top of closing an equivalent (25,000) number of EC notifications created in HFTD/HFRA areas. Based on the forecasted amount of new EC notifications, PG&E expected a total execution plan of 89,000 EC notifications for 2024. Of these 89,000, 46,000 were expected to be closed from the distribution backlog which is defined as EC notifications known as of January 5, 2023, and found prior to January 1, 2023, in HFTD/HFRA areas. The remaining closures would be from backlog or newly identified EC notifications.

The data provided demonstrates that PG&E has continued to actively identify, assess, and process EC notifications in HFTD areas. The company appears to be using aerial surveillance to identify equipment conditions, generate actionable notifications, and guide maintenance prioritization. This operational behavior aligns with the WMP's 2024 initiative objectives to reduce cumulative wildfire risk by 68%, or 102.7 risk units from the 2023 baseline.

The 96,141 EC tags provided exceeded the target outlined for number of tags closed. In 2024, 69,456 HFTD/HFRA tags were created and the goal to close 25,000 more HFTD/HFRA tags in 2024 would put the actual target goal at 94,456. By closing 96,141 tags in HFTD/HFRA, PG&E has exceeded the 2024 target. PG&E also exceeded in closing backlog tags. 53,526 of the tags closed were from the backlog, therefore the utility exceeded the target of 46,000 backlog tags closed. The data shows that PG&E prioritized and processed the higher-risk tags effectively, which aligns with the WMP's risk reduction objectives. Therefore, based upon this analysis and the documentation received, the IE has validated this initiative.

Table 23: HFTD/HFRA Open Tag Reduction - Distribution Backlog Summary

2024 Target	2024 ARC	2024 Q4 QDR	Frontload Data Response	Summary
89,000 Closed Tags	96,141 Closed Tags	96,141 Closed Tags	96,141 Closed Tags	Initiative Validated

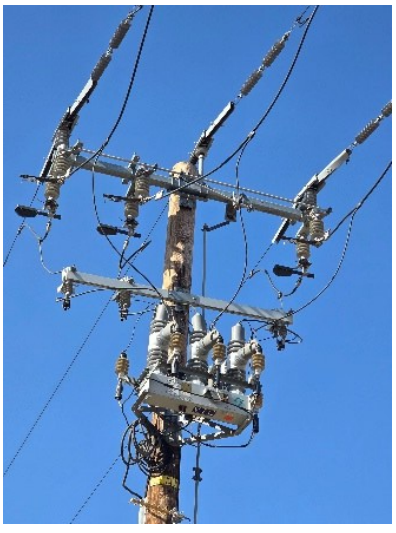
GM-06 – 8.1.2.10.1 – EPSS - Down Conductor Detection (DCD) – Focus & Field Verifiable

Down Conductor Detection (DCD) devices enhance wildfire safety by improving the ability to detect and rapidly de-energize circuit segments before high-impedance faults can occur, significantly reducing ignition potential within HFTD and HFRA. PG&E's 2023–2025 WMP set a 2024 target to equip 400 protective device controllers or relays with down conductor detection capability, establishing a risk reduction goal of <1%.

According to PG&E's 2024 Q4 QDR, PG&E added down conductor detection capability to 705 protective device controllers or relays, exceeding the annual target. The 2024 ARC reported an associated Risk Impact of 0.35% for this initiative. PG&E provided detailed supporting documentation, including installation lists of the 705 devices, in response to the Front Load Data Request.

The IE randomly selected and reviewed 83 DCD installations completed in 2024, utilizing the California Power Line Fire Prevention Guide, 2021 Edition (Exempt equipment installations: Pages 90–97, Figures B-26 through B-47), as well as G.O. 95 (December 2024 – Document 550438485), specifically Rule 94, Rule 32.4, and Rule 54, as standards for verification. For illustrative examples, refer to Figure 9: Example Down Conductor Detection Field Images.

Figure 9: Example Down Conductor Detection Field Images



Circuit Operating Number 253911104-4113

Circuit Operating Number 152481104-28570

Circuit Operating Number 08231109-XR044

During field assessments, the IE verified:

- Installation and commissioning of Down Conductor Detection devices.
- Accurate alignment of device locations with reported coordinates.
- Installation workmanship consistent with industry construction standards.

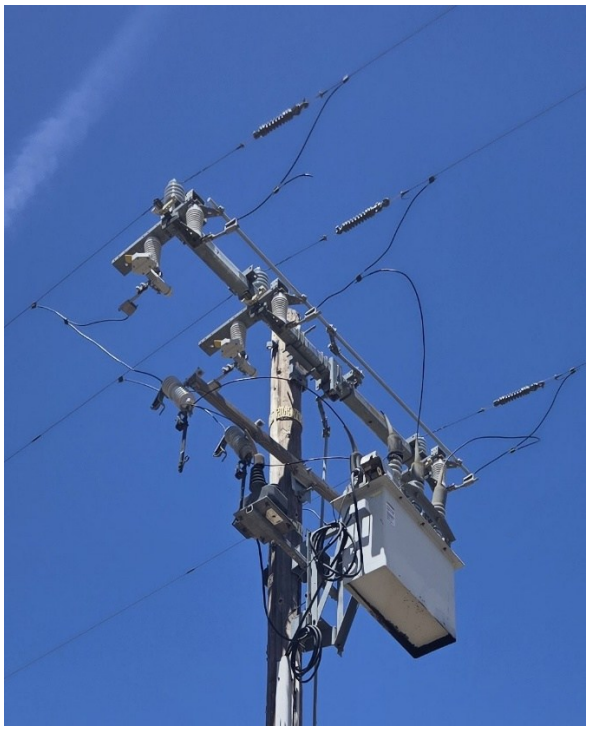
The IE identified no workmanship issues across the sampled installations. However, during field review, the IE noted the following observations:

- One (1) structure had a non-functional DCD unit, likely taken out of service due to damage occurring in 2025 (see Figure 10: Example Non-Functional DCD Images).
- Two (2) installations were found with missing caps on one or more lightning arresters, which appeared to have detached after initial installation (see Figure 11: Example Lightning Arrester Caps Missing).
- During the evaluation of device 182611108-R08, the IE found open cutouts, an open switch, and a disconnected jumper on the 'A' phase of the DCD. Historical imagery via Google Earth indicated the device was previously functional and intact before January 2025.

These findings were documented clearly but did not materially affect the overall compliance with the initiative goals. Based on the comprehensive field assessments and documentation review, the IE validates this initiative.

Figure 10: Example Non-Functional DCD Images

182611108-R08,
January 2025 Google Street View.
All three jumpers were intact.



182611108-R08, May 2025
IE Field Data Capture. A-Phase
cut and cutouts open.

Figure 11: Example Lightning Arrester Caps Missing

152271102-465074 – Missing Two Lightning Arrester Caps

182611104-913884 – Missing 1 Lightning Arrester Cap

Table 24: EPSS - Down Conductor Detection (DCD) Summary

2024 Target	2024 ARC	2024 Q4 QDR	Front Load Data Request Response	Summary
400 Protective Device Controllers or Relays	705 Protective Device Controllers or Relays	705 Protective Device Controllers or Relays	705 Protective Device Controllers or Relays	Initiative Validated

GM-07, 8.1.8.1.1 - Update on EPSS Reliability Study – Non-Focus & Non-Field Verifiable

GM-07 outlines PG&E's commitment to provide an updated Enhanced Powerline Safety (EPSS) Reliability Impact Study. This study evaluates the operational performance and reliability effects of enabling EPSS on distribution and transmission line protective devices. EPSS is a protective technology that allows line protection devices to address faults of varying magnitude and rapidly de-energize the line. Circuits with EPSS are configured to clear high-current bolted fault conditions at 100 milliseconds or less. EPSS settings allow circuit breakers and reclosers to clear faults beyond fuses. EPSS settings help protect customers and communities from potential ignitions that could result in wildfires.

In response to DR027, PG&E provided a link to the "PG&E 25U 06 EPSS Reliability Analysis" study which is publicly available on PG&E's Community Wildfire Safety Program website. This study includes reliability performance metrics such as outage counts, duration, and impacts on vulnerable customer populations for each unique CPZ and includes which circuit it is located on. Based upon this analysis and the documentation received, the IE has validated this initiative.

Table 25: Update on EPSS Reliability Study Summary

2024 Target	2024 ARC	2024 Q4 QDR	DR027 Response	Summary
Provide annually an updated EPSS reliability impact study per ACI 22-32	Submitted Feb. 15, 2024	This commitment was completed in Q1.	Updated EPSS Reliability Impact Study was Submitted Feb. 15, 2024	Initiative Validated

GM-09 – 8.1.6.1 – Asset Inspection – Quality Control – Focus & Non-Field Verifiable

Quality control (QC) audits validate asset inspection outcomes, ensuring accuracy, consistency, and adherence to PG&E's established inspection standards. PG&E's 2023–2025 WMP set 2024 targets for QC audits across two asset inspection programs.

Quality Control Audits – Transmission Inspections (HFTD)

PG&E's 2024 target was 16,300 quality control audits for transmission inspections within HFTD areas, with a pass rate of 92%. No specific risk reduction goal was identified. Per PG&E's 2024 Q4 QDR, the utility completed 23,012 transmission inspection QC audits, exceeding its annual target, with an achieved pass rate of 99.95%, as summarized in.

PG&E provided detailed supporting documentation, including the Asset Inspection QC Transmission Documentation workbook, containing information such as:

- **Asset Information:** SAP ID, HFTD Tier, Region, Latitude, Longitude
- **Inspection Information:** Inspection Type, Inspection Date, Link to Inspection PDF
- **QC Audit Information:** QC Completion Date, Total Findings, Total Critical Findings, Link to QC PDF

The IE reviewed a sample of 92 transmission QC audits, cross-referenced against the Transmission QC WMP Commitment Submission (DR028), which included:

- **Basic Asset Data/Inspector Origin/PG&E Execution Team:** Information aligned with the workbook, including QC Specialist, Compliance Inspector, PG&E Compliance Supervisor.
- **Discrepancy Section (if applicable):** Identification of audit discrepancies, detailed categorization, critical findings, photographic documentation, and reference material.
- **Assessment Summary ("Shout Out"):** Highlights exceptional audit performance or detailed findings.

The Transmission QC WMP Commitment Submission provided additional clarity, detailing the sample size determination, audit pass rate calculations, audit scope, reporting dashboard links, and confirmation of internal documentation uploads.

The IE identified no issues or discrepancies in reviewing the sampled transmission QC audit documentation.

Quality Control Audits – Distribution Inspections (HFTD)

PG&E's 2024 target was 170,000 quality control audits for distribution inspections within HFTD areas, with a pass rate of 88%; no specific risk reduction goal was identified. According to PG&E's 2024 Q4 QDR, the utility completed 175,376 distribution inspection QC audits, exceeding its annual target, with an achieved pass rate of 99.83%.

PG&E provided detailed supporting documentation, including the Asset Inspection QC Distribution Documentation workbook, containing information such as:

- **Asset Information:** SAP ID, HFTD Tier, Division, Latitude, Longitude
- **Inspection Information:** Inspection Type, Inspection Date, Link to Inspection PDF
- **QC Audit Information:** QC Completion Date, Total Findings, Total Critical Findings, Link to QC PDF

The IE reviewed a sample of 92 distribution QC audits, cross-referenced against the Distribution QC WMP Commitment Submission (DR028), which included:

- **Asset Details:** Information aligned with the workbook, including QC Specialist, QC Sample Type, Compliance Inspector, PG&E Compliance Supervisor.
- **Discrepancy Section:** Detailed identification of discrepancies found during audits, including categories, descriptions, display questions, photographic documentation, and EC notification status.
- **SME Review:** Documentation confirming subject matter expert review of audit findings and accuracy.

The Distribution QC WMP Commitment Submission provided additional clarity, detailing the sample size determination, audit pass rate calculations, audit scope, reporting dashboard links, and confirmation of internal documentation uploads.

The IE identified no issues or discrepancies in reviewing the sampled distribution QC audit documentation. Based on the comprehensive review of transmission and distribution inspection QC audit documentation, the IE validates this initiative.

Table 26: Asset Inspection – Quality Control Summary

2024 Target	2024 ARC	2024 Q4 QDR	Front Load Data Request Response	Summary
Transmission Inspections – 16,300 Audit Locations; 92% Pass Rate	Transmission Inspections – 23,012 Audit Locations; 99.95% Pass Rate	Transmission Inspections – 23,012 Audit Locations; 99.95% Pass Rate	Transmission Inspections – 23,012 Audit Locations; 99.95% Pass Rate	Initiative Validated
Distribution Inspections – 170,000 Audit Locations; 90% Pass Rate	Distribution Inspections – 175,376 Audit Locations; 99.83% Pass Rate	Distribution Inspections – 175,376 Audit Locations; 99.83% Pass Rate	Distribution Inspections – 175,376 Audit Locations; 99.83% Pass Rate	Initiative Validated

4.1.1.1 Funding Verification – Findings

AI-01 - Retainment of Inspectors and Internal Workforce Development

Although this initiative is not identified with targets in PG&E's Q4 QDR Table 1, it was shown to be included in the financial tables from Q4 QDR Table 11. Since the initiative is not part of Q4 QDR Table 1, this initiative is not part of the IE's Focus or Not-Focus Initiative review within this report. However, since this initiative was identified in Q4 QDR Table 11 and the absolute percent difference between budgeted and actual for this item is less than 10%, the WMP Planned Spend ($) and EC-Claimed Actual Spend ($ and % from budget) are as follows:

- WMP Planned Spend ($): $0
- EC-Claimed Actual Spend ($ and % from budget): $0.00 (+0.0%)

AI-02 - Detailed Inspection Transmission – Ground

Strategic Overview and Risk Mitigation
This initiative involved detailed ground inspections of transmission structures. PG&E initially targeted inspections of approximately 20,000 structures, later revised to 21,390 based on updated asset data, aiming to achieve a 24% "Eyes on Risk" impact.

Financial Performance Analysis

- Planned Budget: $13,959,070
- Actual Expenditure: $11,494,110
- Variance: -$2,464,960 (-17.7% underspend)

- PG&E Justification: The underspend resulted primarily from reduced contractor overtime, achieved by maintaining a standard 5-day workweek, along with efficiencies gained by prioritizing inspections by circuit lines and better utilizing internal inspectors.

Operational Impact and Risk Reduction
PG&E exceeded the revised target, completing detailed ground inspections on 21,684 transmission structures, thus achieving the stated "Eyes on Risk" impact of 24%.

Assessment and Conclusion
PG&E effectively completed this initiative, achieving and surpassing operational targets while realizing financial efficiencies. The underspend resulted from strategic operational improvements without negatively affecting the intended wildfire risk reduction outcomes.

AI-03 - Develop Distribution Aerial Inspections program

Although this initiative is not identified with targets in PG&E's Q4 QDR Table 1, it was shown to be included in the financial tables from Q4 QDR Table 11. Since the initiative is not part of Q4 QDR Table 1, this initiative is not part of the IE's Focus or Not-Focus Initiative review within this report. However, since this initiative was identified in Q4 QDR Table 11 and the absolute percent difference between budgeted and actual for this item is less than 10%, the WMP Planned Spend ($) and EC-Claimed Actual Spend ($ and % from budget) are as follows:

- WMP Planned Spend ($): $0
- EC-Claimed Actual Spend ($ and % from budget): $0.00 (+0.0%)

AI-04 - Detailed Inspection Transmission – Aerial

Since the absolute percent difference between budgeted and actual for this item is less than 10%, please refer to Table 7.

AI-05 - Detailed Inspection Transmission – Climbing

Strategic Overview and Risk Mitigation
This initiative involved detailed climbing inspections of transmission structures. PG&E committed to inspecting 1,200 structures, later revised to 1,216, targeting a 0.35% "Eyes on Risk" impact.

Financial Performance Analysis
- Planned Budget: $3,757,940
- Actual Expenditure: $2,825,240
- Variance: -$932,700 (-24.8% underspend)

- PG&E Justification: Cost savings were attributed to efficiencies from simultaneously inspecting multiple circuit corridors, reducing resource requirements.

Operational Impact and Risk Reduction
PG&E met its revised target by completing detailed climbing inspections on 1,216 transmission structures, successfully achieving the planned "Eyes on Risk" impact of 0.35%.

Assessment and Conclusion
PG&E successfully delivered this initiative, achieving planned operational targets and wildfire risk reduction goals. The financial savings reflect strategic efficiencies without compromising the intended outcomes.

AI-06 - Perform transmission infrared inspections

Since the absolute percent difference between budgeted and actual for this item is less than 10%, please refer to Table 7.

AI-07 - Detailed Ground Inspections – Distribution

Since the absolute percent difference between budgeted and actual for this item is less than 10%, please refer to Table 7.

AI-08 - Supplemental Inspections - Substation Distribution

Strategic Overview and Risk Mitigation
This initiative included supplemental inspections for 76 distribution substations, aiming for a 27% "Eyes on Risk" impact to support wildfire risk reduction efforts.

Financial Performance Analysis
- Planned Budget: $2,649,380
- Actual Expenditure: $2,378,160
- Variance: -$271,220 (-10.2% underspend)

PG&E Justification: Reduced spending resulted from improved efficiency in ground, infrared, and aerial inspections due to process enhancements.

Operational Impact and Risk Reduction
PG&E completed supplemental inspections on all 76 targeted substations, meeting the initiative's "Eyes on Risk" impact of 27%.

Assessment and Conclusion
PG&E effectively implemented this initiative, achieving planned inspection targets and associated wildfire risk reductions. The financial efficiencies were derived from successful operational process improvements without negatively impacting outcomes.

AI-09 - Supplemental Inspections - Substation Transmission

Strategic Overview and Risk Mitigation
This initiative conducted supplemental inspections on 36 transmission substations, targeting a 27% "Eyes on Risk" impact to enhance wildfire risk mitigation.

Financial Performance Analysis
- Planned Budget: $2,647,190
- Actual Expenditure: $2,361,970
- Variance: -$285,220 (-10.8% underspend)
- PG&E Justification: The underspend was attributed to improved efficiency in ground, infrared, and aerial inspections, similar to those achieved in Initiative AI-08, due to process improvements.

Operational Impact and Risk Reduction
PG&E successfully completed supplemental inspections for all 36 targeted transmission substations, fulfilling the intended 27% "Eyes on Risk" impact.

Assessment and Conclusion
PG&E efficiently delivered on this initiative, achieving operational goals and associated wildfire risk reduction. The financial variance aligns with process enhancements and improved operational efficiency without compromising objectives.

AI-10 - Supplemental Inspections - Hydroelectric Substations and Powerhouses

Strategic Overview and Risk Mitigation
PG&E committed to performing supplemental inspections on 46 hydroelectric substations and powerhouses in 2024. The stated risk reduction from this initiative was 34% ("Eyes on Risk"). The initiative achieved the expected risk impact, successfully completing the inspections of all 46 targeted facilities.

Financial Performance Analysis
- Planned Spend (Expense): $1,016,670
- Actual Spend (Expense): $2,245,690
- Variance: +$1,229,020 (+120.9% overspend)
- PG&E Justification: The overspend was primarily due to two factors: 1. Correction of prior year accounting: Drone inspection costs incurred in 2023 were mistakenly charged to Substation orders and were corrected by charging them to Power

Generation in 2024, and 2. Use of contract resources: The internal workforce was unavailable for ground inspections, necessitating reliance on more expensive contracted resources.

Operational Impact and Risk Reduction
All 46 planned inspections were completed, achieving the intended risk reduction. The inspections were successfully completed, ensuring that the initiative's operational goals were fully met.

Assessment and Conclusion
PG&E completed the inspections and achieved the expected risk reduction goal despite financial deviations. The accounting corrections and higher costs due to contracted resources contributed to the overspend. These variances highlight initial estimation and resource allocation challenges, but did not affect the completion or operational effectiveness of the initiative.

AI-11 - Filling Asset Inventory Data Gaps

Although this initiative is not identified with targets in PG&E's Q4 QDR Table 1, it was shown to be included in the financial tables from Q4 QDR Table 11. Since the initiative is not part of Q4 QDR Table 1, this initiative is not part of the IE's Focus or Not-Focus Initiative review within this report. However, since this initiative was identified in Q4 QDR Table 11 and the absolute percent difference between budgeted and actual for this item is less than 10%, the WMP Planned Spend ($) and EC-Claimed Actual Spend ($ and % from budget) are as follows:

- WMP Planned Spend ($): $0
- EC-Claimed Actual Spend ($ and % from budget): $0.00 (+0.0%)

GH-01 - System Hardening – Distribution

Strategic Overview and Risk Mitigation
This initiative involves overhead system hardening, undergrounding of distribution lines, and removal of existing overhead lines within High Fire Threat Districts (HFTD), High Fire Risk Areas (HFRA), and associated buffer zones. PG&E's 2024 target was to complete 280 circuit miles of system hardening to reduce wildfire ignition risks and improve infrastructure resilience within areas identified as vulnerable.

Financial Performance Analysis
- Planned Budget: $97,014,000
- Actual Expenditure: $134,200,900
- Variance: $37,186,900 (38.3% over budget)
- PG&E Justification: PG&E attributed the budget variance to the completion of 108 miles of overhead system hardening, compared to the originally planned 70 miles.

Costs associated with undergrounding were reported separately under Initiative GH-04 for clarity and accurate financial tracking.

Operational Impact and Risk Reduction
PG&E completed a total of 348.3 circuit miles of distribution system hardening, exceeding the original goal of 280 miles by approximately 24.4%. As reported in PG&E's 2025 IE ARC Report, this additional work resulted in a documented wildfire risk reduction of 1.96%, above the planned 1.6% risk reduction goal.

Assessment and Conclusion
PG&E exceeded its planned operational targets, achieving improved wildfire mitigation outcomes aligned with the increased investment. The budget variance is directly linked to the additional miles of system hardening and the corresponding improvement in wildfire risk reduction. Overall, PG&E's implementation of this initiative supported progress toward its wildfire mitigation objectives.

GH-02 - Evaluate Covered Conductor Effectiveness

Since the absolute percent difference between budgeted and actual for this item is less than 10%, please refer to Table 7.

GH-03 - Evaluate and Implement Covered Conductor Effectiveness Impact on Inspections and Maintenance Standards

Although this initiative is not identified with targets in PG&E's Q4 QDR Table 1, it was shown to be included in the financial tables from Q4 QDR Table 11. Since the initiative is not part of Q4 QDR Table 1, this initiative is not part of the IE's Focus or Not-Focus Initiative review within this report. However, since this initiative was identified in Q4 QDR Table 11 and the absolute percent difference between budgeted and actual for this item is less than 10%, the WMP Planned Spend ($) and EC-Claimed Actual Spend ($ and % from budget) are as follows:

- WMP Planned Spend ($): $0
- EC-Claimed Actual Spend ($ and % from budget): $0.00 (+0.0%)

GH-04 - 10K Undergrounding

Since the absolute percent difference between budgeted and actual for this item is less than 10%, please refer to Table 7.

GH-05 - System Hardening – Transmission

Although this initiative is not identified with targets in PG&E's Q4 QDR Table 1, it was shown to be included in the financial tables from Q4 QDR Table 11. Since the initiative is not part

of Q4 QDR Table 1, this initiative is not part of the IE's Focus or Not-Focus Initiative review within this report. However, since this initiative was identified in Q4 QDR Table 11 and the absolute percent difference between budgeted and actual for this item is less than 10%, the WMP Planned Spend ($) and EC-Claimed Actual Spend ($ and % from budget) are as follows:

- WMP Planned Spend ($): $0
- EC-Claimed Actual Spend ($ and % from budget): $0.00 (+0.0%)

GH-06 - System Hardening - Transmission Shunt Splices

Strategic Overview and Risk Mitigation
This initiative involves installing shunt splices on existing transmission lines. Shunt splices help eliminate single points of failure, reducing ignition risks associated with splice-related equipment issues. PG&E's 2024 objective targeted the installation of shunt splices on 22 existing transmission lines to enhance transmission reliability in wildfire-prone areas.

Financial Performance Analysis
- Planned Budget: $4,900,000
- Actual Expenditure: $4,042,320
- Variance: -$857,680 (17.5% under budget)
- PG&E Justification: PG&E reported achieving cost savings primarily through efficient coordination with tagging crews and the optimal use of existing clearances during scheduled operational activities.

Operational Impact and Risk Reduction
PG&E completed the installation of shunt splices on 23 existing transmission lines, exceeding the original target by approximately 4.5%. According to the PG&E 2025 IE ARC Report, the documented risk reduction achieved was 0.02% for PG&E.

Assessment and Conclusion
PG&E surpassed its operational target, delivering risk reduction outcomes consistent with the initiative's objectives. The financial variance aligns with operational efficiencies realized during project execution. Overall, PG&E's performance advanced its wildfire mitigation goals.

GH-07 - Distribution Protective Devices

Strategic Overview and Risk Mitigation
This initiative involved installing and upgrading distribution protective devices on existing distribution lines. These devices are intended to improve system protection and reduce wildfire ignition risks. In 2024, the initiative exclusively focused on completing protective device installations that had been deferred from the prior year (2023). No additional protective device installations were targeted or planned for 2024.

Financial Performance Analysis

- Planned Budget: $6,907,370
- Actual Expenditure: $3,398,420
- Variance: -$3,508,950 (50.8% under budget)

PG&E Justification:

PG&E explained that the underspending resulted directly from the limited scope of completing carry-over installations from 2023, as the initiative had already achieved full compliance in that year. Consequently, no further installations were scheduled for 2024.

Operational Impact and Risk Reduction

PG&E completed all protective device installations that were deferred from 2023. As no additional 2024 targets had been set, there was no incremental risk reduction goal for this year. Nonetheless, completing these deferred installations maintained the previously established benefits of system protection and risk mitigation.

Assessment and Conclusion

PG&E completed the deferred installations planned for 2024, effectively managing the reduced project scope and the corresponding budget. The financial variance aligns directly with the scaled-down activities. Overall, PG&E's implementation of this initiative supported the continuity of its wildfire mitigation objectives.

GH-08 - Surge Arrestor – Removals

Strategic Overview and Risk Mitigation

This initiative involved the removal of surge arrestors. PG&E had no specific Wildfire Mitigation Plan (WMP) target for surge arrestor removals in 2024; therefore, no direct risk reduction commitment was documented.

Financial Performance Analysis

- Planned Budget: $5,799,790
- Actual Expenditure: $7,643,310
- Variance: +$1,843,520 (+31.8% overspend)

PG&E Justification: Increased costs were primarily due to higher unit costs in Nevada and Central Valley areas, which involved more extensive travel and higher contractor rates. Additional expenditures were attributed to enhanced quality assurance processes.

Operational Impact and Risk Reduction

Without a specified 2024 target, quantifying immediate risk reduction impact is challenging. However, the enhanced quality assurance processes implemented may contribute positively to long-term system reliability and wildfire risk management.

Assessment and Conclusion
PG&E's financial variance resulted from regional cost conditions and the implementation of improved quality assurance measures. Although direct 2024 risk reduction was not quantified, the initiative supports broader long-term wildfire mitigation objectives.

GH-09 - Distribution Line Motor Switch Operator (MSO) – Replacements

Strategic Overview and Risk Mitigation
This initiative targeted the replacement or removal of 26 distribution line motor switches (MSO) to mitigate ignition risks from switch failures.

Financial Performance Analysis
- Planned Budget: $5,835,040
- Actual Expenditure: $2,993,990
- Variance: -$2,841,050 (-48.7% underspend)

PG&E Justification: Lower costs resulted from scope refinement, including deferral of legacy MSO work not part of the WMP commitment and shifting some projects from replacement to simpler removal-only, avoiding costs related to installing SCADA-enabled devices.

Operational Impact and Risk Reduction
PG&E achieved its target, replacing or removing 26 MSOs as planned, meeting the documented wildfire risk reduction goal (0.00004risk reduction goal).

Assessment and Conclusion
PG&E completed the initiative successfully, meeting operational targets and achieving the associated wildfire risk reduction. The financial savings resulted from refined project scope adjustments without negatively impacting WMP objectives.

GH-10 - Non-Exempt Expulsion Fuse – Removal

Strategic Overview and Risk Mitigation
This initiative aimed to remove non-exempt expulsion fuses or cutouts from 3,000 fuse locations to reduce ignition risks.

Financial Performance Analysis
- Planned Budget: $19,800,020
- Actual Expenditure: $16,866,850
- Variance: -$2,933,170 (-14.8% underspend)
- PG&E Justification: Cost savings resulted from increased use of internal labor, reducing reliance on more expensive contractor labor.

Operational Impact and Risk Reduction
PG&E exceeded its target, removing fuses from 3,112 locations and achieving the documented wildfire risk reduction goal of 0.0035.

Assessment and Conclusion
PG&E successfully exceeded its operational goals, delivering the intended wildfire risk reduction while managing expenditures effectively. The shift toward internal labor utilization positively contributed to the financial performance without compromising initiative outcomes.

GH-11 - System Hardening – Transmission Conductor Segment Replacement

Although this initiative is not identified with targets in PG&E's Q4 QDR Table 1, it was shown to be included in the financial tables from Q4 QDR Table 11. Since the initiative is not part of Q4 QDR Table 1, this initiative is not part of the IE's Focus or Not-Focus Initiative review within this report. However, since this initiative was identified in Q4 QDR Table 11 and the absolute percent difference between budgeted and actual for this item is less than 10%, the WMP Planned Spend ($) and EC-Claimed Actual Spend ($ and % from budget) are as follows:

- WMP Planned Spend ($): $0
- EC-Claimed Actual Spend ($ and % from budget): $0.00 (+0.0%)

GM-01 - Asset Inspections - Quality Assurance

Strategic Overview and Risk Mitigation
This initiative involved quality assurance audits of transmission and distribution asset inspections, with targets of 500 transmission audit locations (94% pass rate) and 1,500 distribution audit locations (90% pass rate).

Financial Performance Analysis
- Planned Budget: $2,751,000
- Actual Expenditure: $8,052,350
- Variance: +$5,301,350 (+192.7% overspend)
- PG&E Justification: The substantial overspend was corrected by prior-year under-accounting for the Quality Assurance Sampling and Inspection (QASI) program, including comprehensive costs of sampling, dispatch, data collection, and reporting that were previously omitted.

Operational Impact and Risk Reduction
PG&E exceeded audit location targets and achieved established pass rate goals. Although direct numerical risk reduction is not assigned, robust quality assurance directly supports effective long-term wildfire risk mitigation.

Assessment and Conclusion
PG&E completed the initiative effectively, meeting operational quality assurance targets. The substantial financial variance reflects corrected accounting rather than performance concerns. The initiative positively supports long-term wildfire risk mitigation objectives by ensuring inspection accuracy and reliability.

GM-02 - HFTD/HFRA Open Tag Reduction – Transmission

Although this initiative is not identified with targets in PG&E's Q4 QDR Table 1, it was shown to be included in the financial tables from Q4 QDR Table 11. Since the initiative is not part of Q4 QDR Table 1, this initiative is not part of the IE's Focus or Not-Focus Initiative review within this report. However, since this initiative was identified in Q4 QDR Table 11 and the absolute percent difference between budgeted and actual for this item is less than 10%, the WMP Planned Spend ($) and EC-Claimed Actual Spend ($ and % from budget) are as follows:

- WMP Planned Spend ($): $0
- EC-Claimed Actual Spend ($ and % from budget): $0.00 (+0.0%)

GM-03 - Eliminate HFTD-HFRA Distribution Backlog

Since the absolute percent difference between budgeted and actual for this item is less than 10%, please refer to Table 7.

GM-06 - EPSS - Down Conductor Detection (DCD)

Strategic Overview and Risk Mitigation
This initiative upgraded protective device controllers or relays to include Down Conductor Detection (DCD) capabilities, targeting enhancements at 400 locations to mitigate wildfire ignition risks.

Financial Performance Analysis
- Planned Budget: $9,800,040
- Actual Expenditure: $11,569,520
- Variance: +$1,769,480 (+18.1% overspend)
- PG&E Justification: Additional costs were associated with incremental Remote Access work, enabling improved cellular and radio communications for field operations, thereby enhancing the operational effectiveness of the DCD program.

Operational Impact and Risk Reduction
PG&E exceeded its operational target, making 705 protective devices DCD-capable, and achieved the planned wildfire risk reduction goal of 0.0035.

Assessment and Conclusion

PG&E effectively implemented this initiative, surpassing operational goals and enhancing program effectiveness through incremental investment. The financial variance directly contributed to improved operational capabilities, supporting the initiative's wildfire mitigation objectives.

GM-07 - Updates on EPSS Reliability Study

Since the absolute percent difference between budgeted and actual for this item is less than 10%, please refer to Table 7.

GM-08 - Eliminate HFTD/HFRA distribution backlog

Although this initiative is not identified with targets in PG&E's Q4 QDR Table 1, it was shown to be included in the financial tables from Q4 QDR Table 11. Since the initiative is not part of Q4 QDR Table 1, this initiative is not part of the IE's Focus or Not-Focus Initiative review within this report. However, since this initiative was identified in Q4 QDR Table 11 and the absolute percent difference between budgeted and actual for this item is less than 10%, the WMP Planned Spend ($) and EC-Claimed Actual Spend ($ and % from budget) are as follows:

- WMP Planned Spend ($): $0
- EC-Claimed Actual Spend ($ and % from budget): $0.00 (+0.0%)

GM-09 - Asset Inspection – Quality Control

Since the absolute percent difference between budgeted and actual for this item is less than 10%, please refer to Table 7.

4.1.2 Synthesis of Findings

4.1.2.1 Initiative Review

PG&E's 2024 performance across the reviewed asset inspection and grid hardening initiatives demonstrates a strong commitment to wildfire risk reduction, with all targets met or exceeded. The utility consistently achieved its goals, with only minor quarterly delays in substation inspections due to change order decisions, which were all subsequently completed and met the target goal by quarter 3. The overall level of wildfire risk reduction appears significant, particularly through the EPSS program and the focus on high-risk areas, as well as PG&Es over completion of aerial and ground inspections on their distribution system. The shift to a consequence-driven approach in distribution inspections and the prioritization of HFTD and HFRA areas indicate a strong emphasis on risk-based decision-making. PG&E demonstrated excellent recordkeeping practices, with detailed inspection reports, comprehensive datasets, and clear tracking of completed work. The utility's implementation of the EPSS program and its ongoing reliability study demonstrate a

commitment to continual improvement. The risk-based approach to inspections and maintenance, particularly in high-threat areas, suggests a forward-thinking strategy for enhancing wildfire mitigation efforts. PG&E's 2024 performance in these initiatives indicates a comprehensive and largely effective approach to wildfire risk reduction, with a strong focus on risk-based prioritization.

4.1.2.2 Funding Verification

Budget and Expenditure Summary: The Grid Design, Operations, and Maintenance category had a total planned budget of $1,255,550 with actual expenditures of $1,327,596, representing a 5.7% variance above budget. The category's overall expenditure remained within 10% of the planned budget allocation.

Initiatives with Significant Variances: Of the 29 total initiatives in this category, 13 (45%) had absolute percent differences exceeding 10%. The most common reasons for variances included:

- Prior-year accounting corrections resulted in substantial overruns for quality assurance programs, with asset inspection QA experiencing 193% budget variance due to previously omitted costs for sampling, dispatch, data collection, and reporting being properly allocated in 2024
- System hardening initiatives showed mixed patterns, with distribution hardening exceeding budget by 38% to complete 108 miles versus 70 planned, while protective device replacements achieved 49% cost savings through scope refinements that focused on WMP-specific commitments
- Operational efficiency improvements across multiple inspection programs yielded 10-25% cost savings through process enhancements, simultaneous corridor inspections, and strategic use of internal labor instead of contractors

Key Trends and Funding Compliance: The distribution system hardening initiative exceeded both operational targets (124%) and budget (38% variance), achieving a 1.96% wildfire risk reduction versus the 1.6% goal. Several initiatives achieved operational targets while utilizing less funding than planned, including non-exempt expulsion fuse removal which exceeded its target by removing fuses from 3,112 locations versus 3,000 planned with 15% cost savings. The category's funding patterns reflect PG&E's focus on proactive identification and remediation of equipment conditions that pose ignition risks, with asset inspections and grid hardening measures forming critical components of the comprehensive wildfire risk reduction strategy.

4.2 VEGETATION MANAGEMENT AND INSPECTIONS

4.2.1 Initiative Summary Table

Table 27: Initiative Summary Table (Spend in Thousand $)

Initiative Number, WMP Section Number, and Name	WMP – Initiative Target	EC-Claimed Progress	EC-Claimed Initiative Status	Sample Size[7]	Sample Validation Rate (%)[8, 9]	Verification Method	IE Finding on Initiative (Initiative Validation Rate)[10], [11]	WMP – Planned Spend ($)	EC-Claimed Actual Spend ($ and % from budget)	Satisfied Risk Reduction Goal?[12]
VM-01 – 8.2.2.1.1 – LiDAR Data Collection – Transmission	Lidar Inspection of 17,500 Circuit Miles	17,953 Circuit Miles	Complete	25 Circuit Miles	100%	Lidar Documentation (Front Load Data Request, DR035) Lidar Contractor Work Complete Attestation (DR035)	Initiative Validated (103%)	$6,634	$5,150.98 (-22.4%)	No Goal Provided
VM-02 – 8.2.3.1 – Pole Clearing Program	Pole Clearing of 63,000 Distribution Poles	77,152 Poles	Complete	92 Poles	100%	Pole Clearing Documentation (Front Load Data Request)	Initiative Validated (122%)	$28,803	$68,512.36 (+137.9%)	Yes (>1%)
VM-03 – 8.2.2.2.5 – Focused Tree Inspection Program	Inspect 1,500 Circuit Miles	1,557.09 Circuit Miles	Complete	88 Circuit Miles	100%	Focused Tree Inspection Documentation (Front Load Data Request)	Initiative Validated (104%)	$209,050	$61,359.17 (-70.6%)	Yes (>1%)
VM-04 – 8.2.2.2.4 – Tree Removal Inventory	Remove 20,000 Trees	32,091 Trees	Complete	92 Trees	100%	Tree Removal Inventory Documentation (Front Load Data Request)	Initiative Validated (160%)	$77,911	$26,655.53 (-65.8%)	Yes (>1%)
VM-05 – 8.2.2.3.1 – Defensible Space Inspections - Distribution Substation	Inspect 131 Distribution Substations	131 Substations	Complete	20 Substations	100%	Defensible Space Inspection – Distribution Documentation (Front Load Data Request) Distribution Substation Defensible Space Inspection Reports (DR039)	Initiative Validated (100%)	$2,500	$2,389.95 (-4.4%)	Yes (53%)
VM-06 – 8.2.2.3.1 – Defensible Space Inspections - Transmission Substation	Inspect 55 Transmission Substations	54 Substations	Complete	18 Substations	100%	Defensible Space Inspection – Transmission Documentation (Front Load Data Request) Transmission Substation Defensible Space Inspection Reports (DR040) Substation Transfer Documentation (DR040)	Initiative Validated (98%)	$1,282	$1,048.95 (-18.2%)	Yes (22%)
VM-07 – 8.2.2.3.1 – Defensible Space Inspections - Hydroelectric Substations and Powerhouses	Inspect 61 Hydroelectric Substations and Powerhouses	59 Substations	Complete	18 Substations	100%	Defensible Space Inspection – Hydroelectric Substations and Powerhouses Documentation (Front Load Data Request) Hydroelectric Substations and Powerhouses Defensible Space Inspection Reports (DR041) Substation Transfer Documentation (DR041)	Initiative Validated (97%)	$1,917	$1,558.47 (-18.7%)	No

[7] N/A in the Sample Size column means that no target was provided by the EC, or the target was qualitative and did not have a sampling component.
[8] Sample Validation is determined by taking the number of sampling data validated and dividing by the sampling request.
[9] N/A in the Sample Validation column means that no sampling was reviewed; therefore, no validation rate was applied.
[10] As detailed in Energy Safety's issued IE ARC Outline for WMP Compliance Year 2024 document, if the total initiative validation is greater or equal to 95%, the initiative is considered validated by the IE.
[11] The Initiative Validation Rate is determined by taking the Sample Validation Rate and multiplying by the EC-claimed amount, this estimate is then divided by the WMP Target amount to determine the validation rate.
[12] N/A in the Risk Reduction Goal column means that no goal was provided by the EC.

Initiative Number, WMP Section Number, and Name	WMP – Initiative Target	EC-Claimed Progress	EC-Claimed Initiative Status	Sample Size[7]	Sample Validation Rate (%)[8, 9]	Verification Method	IE Finding on Initiative (Initiative Validation Rate)[10, 11]	WMP – Planned Spend ($)	EC-Claimed Actual Spend ($ and % from budget)	Satisfied Risk Reduction Goal?[12]
VM-08 – 8.2.5 – Vegetation Management – Quality Verification	Distribution Routine VM - HFTD: 2,675 Audit Locations; 95% Pass Rate Transmission Routine VM - HFTD: 1,284 Audit Locations; 95% Pass Rate Vegetation Control Pole Clearing - HFTD: 1,926 Audit Locations; 95% Pass Rate	Distribution 4,477 Audit Locations; 99.95 % Pass Rate Transmission 2,728 Audit Locations; 99.95% Pass Rate Pole Clearing 3,466 Audit Locations; 99.86% Pass Rate	Complete	Distribution - 23 Transmission - 23 Pole Clearing - 23	Distribution – 100% Transmission – 100% Pole Clearing – 100%	VM Distribution QV Documentation (Front Load Data Request, DR042) VM Transmission QV Documentation (Front Load Data Request, DR042) Pole Clearing QV Documentation (Front Load Data Request, DR042) Distribution QV Survey (DR042) Transmission QV Survey (DR042) Pole Clearing QV Survey (DR042)	Distribution - Initiative Validated (167%) Transmission - Initiative Validated (212%) Pole Clearing - Initiative Validated (180%)	$14,710	$13,104.15 (-10.9%)	No goal provided
VM-13 – 8.2.2.1.1 – Routine Ground – Transmission	Routine Ground Transmission Inspection of 17,740 Circuit Miles	17,953 Circuit Miles	Complete	27.8 Circuit Miles	100%	Routine Ground – Transmission Documentation (Front Load Data,DR043 Request)	Initiative Validated (101%)	$25,667	$26,433.90 (+3.0%)	Yes (100%)
VM-14 – 8.2.2.1.2 – Transmission Second Patrol	Transmission Second Patrol of 5,625 Circuit Miles	5,697.6 Circuit Miles	Complete	29.2 Circuit Miles	100%	Transmission Second Patrol Documentation (Front Load Data Request, DR044)	Initiative Validated (101%)	$1,192	$3,695.21 (+209.9%)	Yes (100%)
VM-15 – 8.2.2.1.3 – Integrated Vegetation Management – Transmission	Complete Integrated Vegetation Management and Fee Inspections of 6,504 acres	7,907 Acres	Complete	134 Acres	100%	Integrated Vegetation Management – Transmission Documentation (Front Load Data Request, DR045) Vendor Attestation (DR045)	Initiative Validated (122%)	$14,577	$9,164.39 (-37.1%)	No goal provided
VM-16 – 8.2.2.2.1 – Distribution Routine Patrol	Complete Distribution Routine Annual Patrol Inspection of 78,650 Circuit Miles	78,310.87 Circuit Miles	Complete	95.98 Circuit Miles	100%	Distribution Routine Patrol Documentation (Front Load Data Request, DR046)	Initiative Validated (100%)	$744,607	$890,507.00 (+19.6%)	Yes (>1%)
VM-17 – 8.2.2.2.2 – Distribution Second Patrol	Complete Distribution Second Patrol Inspection of 25,685 Circuit Miles	25,519 Circuit Miles	Complete	97.85 Circuit Miles	100%	Distribution Second Patrol Documentation (Front Load Data Request, DR047)	Initiative Validated (99%)	$80,124	$132,743.39 (+65.7%)	Yes (>1%)
VM-18, 8.2.2.2.3 VM for Operational Mitigations (VMOM)	6,500 Trees Mitigations	6,935 Trees Mitigations	Complete	18 Trees	100%	MD/OneVM List	Initiative Validated (106%)	$20,904	$8,418.88 (-59.7%)	No goal provided
VM-19, 8.2.4 One VM Application Record Keeping Enhancement	Enhance the One VM application for Routine, and Second Patrol to include capability to capture factors for prescribing trees for removal.	Completed January 30, 2024	Complete	N/A	N/A	DR048 Utility Response (DR048) Photo Evidence (DR048) OneVM Enhancement to Align (DR048)	Initiative Validated (100%)	$27,000	$29,511.72 (+9.3%)	No goal provided

Initiative Number, WMP Section Number, and Name	WMP – Initiative Target	EC-Claimed Progress	EC-Claimed Initiative Status	Sample Size[7]	Sample Validation Rate (%)[8, 9]	Verification Method	IE Finding on Initiative (Initiative Validation Rate)[10, 11]	WMP – Planned Spend ($)	EC-Claimed Actual Spend ($ and % from budget)	Satisfied Risk Reduction Goal?[12]
VM-20, 8.2.4 Record Keeping Enhancement (VMOM, TRI)	Enhance the application for the Vegetation Management for Operational Mitigations (VMOM) - VMPI2 and Tree Removal Inventory (TRI)	Completed in Q3	Complete	N/A	N/A	DR050 Utility Response (DR050) TRI Reason (DR050) One VM Enhancement to Align (DR050)	Initiative Validated (100%)	$0	$0.00 (+0.0%)	No goal provided
VM-21, 8.2.2.2.5 FTI Record Keeping Enhancement	Enhance record keeping practices for the Focused Tree Inspection program (FTI) by creating records of all potential strike trees inspected using a digitized Tree Risk Assessment form.	Completed in Q1	Complete	N/A	N/A	Potential Strike Tree Lists (x3) Digital TRAQ Form	Initiative Validated (100%)	$0	$1,310.94 (+100.0%)	No goal provided
VM-22 – 8.2.5.2 – Vegetation Management - Quality Control	Distribution Routine VM - HFTD: 80,000 Audit Locations; 88% Pass Rate Transmission Routine VM - HFTD: 13,500 Audit Locations; 92% Pass Rate Vegetation Control Pole Clearing - HFTD: 10,500 Audit Locations; 80% Pass Rate	Distribution - 80,931 Audit Locations; 97.38 % Pass Rate Transmission - 15,897 Audit Locations; 99.08% Pass Rate Pole Clearing - 21,740 Audit Locations; 88.30% Pass Rate	Complete	Distribution - 23 Transmission - 23 Pole Clearing - 23	Distribution – 100% Transmission – 100% Pole Clearing – 100%	VM Distribution QC Documentation (Front Load Data Request, DR052) VM Transmission QC Documentation (Front Load Data Request, DR052) Pole Clearing QC Documentation (Front Load Data Request,DR052) VM QC Distribution Survey (DR052) VM QC Missed Veg Survey (DR052) VM QC Transmission Survey (DR052) VM QC Pole Clearing Survey (DR052)	Distribution – Initiative Validated (101%) Transmission – Initiative Validated (118%) Pole Clearing – Initiative Validated (207%)	$41,025	$40,138.50 (-2.2%)	No goal provided

4.2.2 Written Detail for Initiatives

4.2.2.1 Initiative Review – Findings & Method

VM-01 – 8.2.2.1.1 – LiDAR Data Collection – Transmission – Non-Focus & Non-Field Verifiable

LiDAR data collection for the transmission system supports accurate vegetation management by identifying vegetation encroachments and facilitating timely mitigation. PG&E's 2023–2025 WMP set a 2024 target to collect LiDAR data for 17,500 circuit miles of the transmission system; no specific risk reduction goal was identified.

According to PG&E's 2024 Q4 QDR, the utility collected LiDAR data for 17,989 circuit miles, exceeding its annual target. PG&E later adjusted this reported total to 17,953 circuit miles in its 2024 ARC. Detailed documentation provided by PG&E in the LiDAR Documentation workbook identified the finalized data collection total as 17,952.3 circuit miles.

The IE reviewed a sample of detections identified from LiDAR data covering 25 circuit miles, cross-referencing information from the LiDAR Documentation workbook and the LiDAR Contractor Work Complete Attestation provided in response to DR035. The IE identified no issues or discrepancies during this review.

Based on the review of the provided documentation and sample verification, the IE validates this initiative.

Table 28: LiDAR Data Collection – Transmission Summary

2024 Target	2024 ARC	2024 Q4 QDR	Front Load Data Request Response	Summary
17,500 Circuit Miles	17,953 Circuit Miles	17,989 Circuit Miles	17,952.3 Circuit Miles	Initiative Validated

VM-02 – 8.2.3.1 – Pole Clearing Program – Focus & Non-Field Verifiable

The Pole Clearing Program mitigates wildfire risks by inspecting, clearing, and maintaining vegetation around distribution poles to reduce potential ignition sources. PG&E's 2023–2025 WMP set a 2024 target of inspecting and clearing 63,000 distribution poles, with an associated risk impact goal of <1%.

According to PG&E's 2024 Q4 QDR, the utility completed pole clearing activities for 79,988 distribution poles, exceeding its annual target. PG&E later adjusted this reported total to

77,152 distribution poles in the 2024 ARC. PG&E's ARC also reported a corresponding Risk Impact of 0.06% for this initiative.

PG&E provided detailed documentation in the Pole Clearing Documentation workbook, which included completion records for 77,152 distribution poles. In response to DR036, PG&E confirmed that this workbook represents the system of record documentation for this initiative.

The IE reviewed a sample of pole clearing completion records for 92 distribution poles from the workbook. Each record was verified for accuracy, data consistency, and date validity against reported totals. The documentation included detailed information such as:

- **Asset Information:** SAP ID, Region, Division, HFTD Tier, Latitude, Longitude
- **Pole Clearing Data:** Pole ID, Project Number, Project Name, Project Date, Initial Inspection Date, Clear Status, Clear Date, Constraint Information

The IE identified no issues or discrepancies during this review. Based on the comprehensive review of the documentation and sample verification, the IE validates this initiative.

Table 29: Pole Clearing Program Summary

2024 Target	2024 ARC	2024 Q4 QDR	Front Load Data Request Response	Summary
63,000 Distribution Poles	77,152 Distribution Poles	79,988 Distribution Poles	77,152 Distribution Poles	Initiative Validated

VM-03 – 8.2.2.2.5 – Focused Tree Inspection Program- Focus & Non-Field Verifiable

Focused tree inspections mitigate wildfire risks by proactively identifying vegetation-related hazards along electric circuits. PG&E's 2023–2025 WMP set a 2024 target of completing 1,500 circuit miles of focused tree inspections, with a risk impact goal of <1%.

According to PG&E's 2024 Q4 QDR, the utility completed 1,568.18 circuit miles of focused tree inspections, exceeding its annual target. PG&E later adjusted this total to 1,557.09 circuit miles in the 2024 ARC. The ARC also reported a corresponding Risk Impact of 0.19% Eyes on Risk for this initiative.

PG&E provided detailed documentation in the Focused Tree Inspection Documentation workbook, confirming completion of 1,557.09 circuit miles of focused inspections. In response to DR037, PG&E confirmed this workbook represented the official system-of-record documentation for the initiative.

The IE reviewed a sample of focused tree inspection records covering 88 circuit miles from the provided documentation. Each record was verified for circuit consistency, mileage accuracy, and inspection date validity against reported totals. The reviewed records included detailed information such as:

- **Span Information:** Span ID, Latitude, Longitude, Mileage, HFTD Tier
- **Project Data:** Region, Division, Project Number, Project Name, Project Program, Project Type, Project Year
- **Inspection Data:** Inspection Date, Inspector, Status, Vegetation Work Required

The IE identified no issues or discrepancies during this review. Based on the review of documentation and sample verification, the IE validates this initiative.

Table 30: Focused Tree Inspection Program Summary

2024 Target	2024 ARC	2024 Q4 QDR	Front Load Data Request Response	Summary
1,500 Circuit Miles	1,557.09 Circuit Miles	1,568.18 Circuit Miles	1,557.09 Circuit Miles	Initiative Validated

VM-04 – 8.2.2.2.4 – Tree Removal Inventory – Focus & Non-Field Verifiable

Tree removals identified from the legacy Enhanced Vegetation Management (EVM) program reduce wildfire ignition risks by proactively addressing hazardous vegetation. PG&E's 2023–2025 WMP established a 2024 target to mitigate 20,000 trees from the legacy EVM inventory, with a risk impact goal of <1%.

According to PG&E's 2024 Q4 QDR, the utility completed the removal of 32,480 trees, exceeding the annual target. PG&E later updated this total to 32,091 trees removed in the 2024 ARC. The ARC also reported a corresponding Risk Impact of 1.95% for this initiative.

PG&E provided detailed Tree Removal Inventory Documentation, confirming the removal of 32,091 trees. In response to DR038, PG&E confirmed that this documentation was derived from the legacy database.

The IE reviewed a sample of records for 92 tree removals from the provided documentation. Each record was checked for data consistency, count accuracy, and completion date validity against reported totals. The reviewed records included:

- General Information: Region, Division, Circuit Name, Latitude, Longitude

- Tree Removal Inventory Data: ID, Prescription, Tree Work Category, Company, Tree Category, Completion Date

The IE identified no issues or discrepancies during this review. Based on the review of documentation and sample verification, the IE validates this initiative.

Table 31: Tree Removal Inventory Summary

2024 Target	2024 ARC	2024 Q4 QDR	Front Load Data Request Response	Summary
20,000 Trees Removed	32,091 Trees Removed	32,480 Trees Removed	32,091 Trees Removed	Initiative Validated

VM-05 – 8.2.2.3.1 – Defensible Space Inspections - Distribution Substation – Non-Focus & Non-Field Verifiable

Defensible space inspections at distribution substations mitigate wildfire risks by ensuring vegetation management practices effectively reduce ignition potential. PG&E's 2023–2025 WMP established a 2024 target to complete defensible space inspections at 131 distribution substations, with a risk impact goal of 53% (Eyes-on-Risk).

According to PG&E's 2024 Q4 QDR, the utility completed defensible space inspections at all 131 targeted distribution substations, meeting the annual target. The 2024 ARC reported an associated Risk Impact of 54% (Eyes-on-Risk) for this initiative.

PG&E provided detailed documentation listing the completion of defensible space inspections for each of the 131 substations. The IE reviewed a sample of 20 defensible space inspection reports provided in response to Data Request DR039.

The IE identified no issues or discrepancies during this review. Based on the review of documentation and sample verification, the IE validates this initiative.

Table 32: Defensible Space Inspections – Distribution Substation Summary

2024 Target	2024 ARC	2024 Q4 QDR	Front Load Data Request Response	Summary
131 Distribution Substations	131 Distribution Substations	131 Distribution Substations	131 Distribution Substations	Initiative Validated

VM-06 – 8.2.2.3.1 – Defensible Space Inspections - Transmission Substation – Non-Focus & Non-Field Verifiable

Defensible space inspections at transmission substations reduce wildfire risk by ensuring proper vegetation management practices around critical infrastructure. PG&E's 2023–2025 WMP established a 2024 target to complete defensible space inspections at 55 transmission substations, with a risk impact goal of 22% (Eyes-on-Risk).

According to PG&E's 2024 Q4 QDR, the utility completed defensible space inspections at 54 transmission substations, one (1) substation below the initial target. PG&E documented that the remaining substation was transferred to Power Generation, as confirmed by records provided in response to Data Request DR040. Despite the adjustment, PG&E completed inspections for 100% of applicable transmission substations. Additionally, the IE verified through documentation associated with initiative VM-07 that the transferred substation received its defensible space inspection.

PG&E's 2024 ARC reported an associated Risk Impact of 22% (Eyes-on-Risk), meeting the annual risk impact goal.

The IE reviewed a sample of 18 transmission substation defensible space inspection reports provided in response to DR040. The IE identified no issues or discrepancies during this review.

Based on the review of documentation and sample verification, the IE validates this initiative.

Table 33: Defensible Space Inspections – Transmission Substation Summary

2024 Target	2024 ARC	2024 Q4 QDR	Front Load Data Request Response	Summary
55 Transmission Substations	54 Transmission Substations	54 Transmission Substations	54 Transmission Substations	Initiative Validated

VM-07 – 8.2.2.3.1 – Defensible Space Inspections - Hydroelectric Substations and Powerhouses – Non-Focus & Non-Field Verifiable

Defensible space inspections at hydroelectric substations and powerhouses reduce wildfire risks by managing vegetation around critical power generation facilities. PG&E's 2023–2025 WMP set a 2024 target to complete defensible space inspections at 61 hydroelectric substations and powerhouses, with a risk impact goal of 25% (Eyes-on-Risk).

According to PG&E's 2024 Q4 QDR, the utility completed defensible space inspections at 59 hydroelectric substations and powerhouses, slightly below the original target. PG&E reported in its 2024 QDR and ARC that two powerhouses were divested, reducing the total count of required inspections. Documentation provided by PG&E in response to DR041 confirmed the divestiture of these two facilities. Although fewer inspections were completed compared to the initial target, PG&E achieved 100% completion for all owned hydroelectric substations and powerhouses.

PG&E's 2024 ARC reported an associated Risk Impact of 24% (Eyes-on-Risk), slightly below the original goal due to the divestitures.

The IE reviewed a sample of defensible space inspection reports for 18 hydroelectric substations and powerhouses. The IE identified no issues or discrepancies during this review.

Based on the review of documentation and sample verification, the IE validates this initiative.

Table 34: Defensible Space Inspections – Hydroelectric Substations and Powerhouses Summary

2024 Target	2024 ARC	2024 Q4 QDR	Front Load Data Request Response	Summary
61 Hydroelectric Substations and Powerhouses	59 Hydroelectric Substations and Powerhouses	59 Hydroelectric Substations and Powerhouses	59 Hydroelectric Substations and Powerhouses	Initiative Validated

VM-08 – 8.2.5 – Vegetation Management – Quality Verification – Non-Focus & Non-Field Verifiable

Vegetation Management Quality Verification (QV) audits confirm the accuracy and effectiveness of vegetation management work, ensuring compliance with PG&E's standards. PG&E's 2023–2025 WMP set specific 2024 targets for quality verification audits across three vegetation management programs.

Distribution Routine VM – HFTD

PG&E established a 2024 target of completing quality verification audits at 2,675 locations for distribution routine VM with a pass rate of 95%; no specific risk reduction goal was identified. According to PG&E's 2024 Q4 QDR, the utility completed quality verification audits at 4,477 locations, exceeding its annual target, with a pass rate of 99.95%.

PG&E provided detailed VM Distribution QV documentation confirming completed audits. The IE reviewed a sample of 23 distribution routine VM quality verification audits, cross-referenced with the Distribution QV surveys provided in response to Data Request DR042. No issues or discrepancies were identified during this review.

Transmission Routine VM – HFTD

PG&E's 2024 target was to complete quality verification audits at 1,284 locations for transmission routine VM with a pass rate of 95%; no specific risk reduction goal was identified. According to PG&E's 2024 Q4 QDR, the utility completed quality verification audits at 2,728 locations, exceeding its annual target, with a pass rate of 99.95%.

PG&E provided detailed VM Transmission QV documentation confirming completed audits. The IE reviewed a sample of 23 transmission routine VM quality verification audits, cross-referenced with the Transmission QV surveys provided in response to Data Request DR042. No issues or discrepancies were identified during this review.

Vegetation Control Pole Clearing – HFTD

PG&E set a 2024 target of completing quality verification audits at 1,926 locations for vegetation control pole clearing with a pass rate of 95%; no specific risk reduction goal was identified. According to PG&E's 2024 Q4 QDR, the utility completed quality verification audits at 3,466 locations, exceeding its annual target, with a pass rate of 99.86%.

PG&E provided detailed VM Pole Clearing documentation confirming completed audits. The IE reviewed a sample of 23 vegetation control pole clearing quality verification audits, cross-referenced with the Pole Clearing QV surveys provided in response to Data Request DR042. No issues or discrepancies were identified during this review.

Based on the review of documentation and sample verification across all three VM QV programs, the IE validates this initiative.

Table 35: Vegetation Management – Quality Verification Summary

2024 Target	2024 ARC	2024 Q4 QDR	Front Load Data Request Response	Summary
Distribution Routine VM - HFTD: 2,675 Audit Locations; 95% Pass Rate	Distribution Routine VM - HFTD: 4,477 Audit Locations; 99.95 % Pass Rate	Distribution Routine VM - HFTD: 4,477 Audit Locations; 99.95 % Pass Rate	Distribution Routine VM - HFTD: 4,477 Audit Locations; 99.95 % Pass Rate	Initiative Validated

2024 Target	2024 ARC	2024 Q4 QDR	Front Load Data Request Response	Summary
Transmission Routine VM - HFTD: 1,284 Audit Locations; 95% Pass Rate	Transmission Routine VM - HFTD: 2,728 Audit Locations; 99.95% Pass Rate	Transmission Routine VM - HFTD: 2,728 Audit Locations; 99.95% Pass Rate	Transmission Routine VM - HFTD: 2,728 Audit Locations; 99.95% Pass Rate	Initiative Validated
Vegetation Control Pole Clearing - HFTD: 1,926 Audit Locations; 95% Pass Rate	Vegetation Control Pole Clearing - HFTD: 3,466 Audit Locations; 99.86% Pass Rate	Vegetation Control Pole Clearing - HFTD: 3,466 Audit Locations; 99.86% Pass Rate	Vegetation Control Pole Clearing - HFTD: 3,466 Audit Locations; 99.86% Pass Rate	Initiative Validated

VM-13 – 8.2.2.1.1 – Routine Ground – Transmission – Non-Focus & Non-Field Verifiable

Routine ground inspections of transmission lines ensure proactive identification and mitigation of vegetation-related risks. PG&E's 2023–2025 WMP established a 2024 target of completing routine transmission ground inspections for 17,740 circuit miles, with a risk impact goal of 100% (Eyes-on-Risk) across the PG&E system.

According to PG&E's 2024 Q4 QDR, the utility completed routine transmission ground inspections covering 17,953 circuit miles, exceeding its annual target. PG&E's 2024 ARC confirmed a corresponding Risk Impact of 100% (Eyes-on-Risk) across the system.

PG&E provided detailed documentation confirming the completion of 17,953 circuit miles of routine transmission ground inspections. The IE reviewed a sample covering 27.8 circuit miles, cross-checking these records against additional detailed inspection data from PG&E's vegetation management database provided in response to Data Request DR043.

The IE identified no issues or discrepancies during this review. Based on the review of documentation and sample verification, the IE validates this initiative.

Table 36: Routine Ground – Transmission Summary

2024 Target	2024 ARC	2024 Q4 QDR	Front Load Data Request Response	Summary
17,740 Circuit Miles	17,953 Circuit Miles	17,953 Circuit Miles	17,953 Circuit Miles	Initiative Validated

VM-14 – 8.2.2.1.2 – Transmission Second Patrol – Non-Focus & Non-Field Verifiable

Transmission second patrol inspections provide an additional layer of vegetation monitoring, enabling timely identification and mitigation of risks within HFTD/HFRA. PG&E's 2023–2025 WMP established a 2024 target to complete second patrol inspections for 5,625 transmission circuit miles, with a risk impact goal of 100% (Eyes-on-Risk) in HFTD/HFRA.

According to PG&E's 2024 Q4 QDR, the utility completed second patrol inspections covering 5,848 circuit miles, exceeding the annual target. PG&E later adjusted this reported total to 5,697.6 circuit miles in the 2024 ARC. The ARC reported a corresponding Risk Impact of 100% (Eyes-on-Risk) in HFTD/HFRA.

PG&E provided detailed Transmission Second Patrol documentation confirming inspections completed across the reported mileage. The IE reviewed a sample of second patrol inspections covering 29.2 circuit miles, cross-checking these records with additional detailed inspection data from PG&E's vegetation management database provided in response to Data Request DR044.

The IE identified no issues or discrepancies during this review. Based on the review of documentation and sample verification, the IE validates this initiative.

Table 37: Transmission Second Patrol Summary

2024 Target	2024 ARC	2024 Q4 QDR	Front Load Data Request Response	Summary
5,625 Circuit Miles	5,697.6 Circuit Miles	5,848 Circuit Miles	5,697.6 Circuit Miles	Initiative Validated

VM-15 – 8.2.2.1.3 – Integrated Vegetation Management – Transmission – Focus & Non-Field Verifiable

Integrated Vegetation Management (IVM) for transmission rights-of-way (ROW) mitigates wildfire risk by systematically managing vegetation growth. PG&E's 2023–2025 WMP established a 2024 target to complete integrated vegetation management inspections across 6,504 acres of transmission ROW, with a risk reduction goal identified as TBD.

According to PG&E's 2024 Q4 QDR, the utility completed integrated vegetation management inspections across 7,907 acres, exceeding the annual target. The 2024 ARC reported a corresponding Risk Impact of 0.01% (Eyes-on-Risk) for this initiative.

PG&E provided detailed Integrated Vegetation Management documentation confirming inspections completed across the reported acreage. Documentation included vendor attestations that provided confirmation of project completion, including project names, acreage, ROW miles, inspection start and completion dates, and specific line and span details.

The IE reviewed a sample covering 134 acres of integrated vegetation management inspections, cross-referencing the vendor attestations with the Integrated Vegetation Management documentation workbook. The reviewed records included:

- **General Information:** Project Year, Project Name, Project ID, Project Type, Acreage
- **Line Information:** Line Name, Span Name, Latitude, Longitude, HFTD Tier
- **Inspection Information:** Inspection Start Date, Inspection Completion Date

The IE identified no issues or discrepancies during this review. Based on the review of documentation and sample verification, the IE validates this initiative.

Table 38: Integrated Vegetation Management - Transmission Summary

2024 Target	2024 ARC	2024 Q4 QDR	Front Load Data Request Response	Summary
6,504 Acres	7,907 Acres	7,907 Acres	7,907 Acres	Initiative Validated

VM-16 – 8.2.2.2.1 – Distribution Routine Patrol – Focus & Non-Field Verifiable

Distribution routine patrol inspections support wildfire risk mitigation by proactively identifying vegetation conditions along distribution lines. PG&E's 2023–2025 WMP established a 2024 target to complete distribution routine patrol inspections for 78,650 circuit miles systemwide, with a risk impact goal of <1%.

According to PG&E's 2024 Q4 QDR, the utility completed distribution routine patrol inspections covering 78,307.8 circuit miles, slightly below the annual target. PG&E later updated this total to 78,310.87 circuit miles in the 2024 ARC. The ARC reported a corresponding Risk Impact of 0.60% for this initiative.

PG&E provided detailed Distribution Routine Patrol documentation confirming the completion of inspections across the reported mileage. The IE reviewed a sample covering 95.98 circuit miles, cross-checking inspection records with related tree prescription data resulting from these inspections, provided in response to Data Request DR046.

The distribution routine patrol inspection records included:

- **General Information:** Region, Division, Project Number, Project Name, Program, Project Type, Project Year, Work Order
- **Line Information:** Span ID, Latitude, Longitude, HFTD Tier
- **Inspection Information:** Inspection Date, Inspector ID, Inspection Status, Inspection Results

The associated tree prescription data included:

- **General:** Region, Division, Project Number, Project Name, Project Status
- **Tree Information:** Species, Latitude, Longitude, Address, Height, Diameter, Condition (Dead/Dying)
- **Prescription Information:** Status, Priority, Trim Type

The IE reviewed common data fields between the inspection records and tree prescription data, confirming alignment and consistency. The IE identified no issues or discrepancies during this review. Based on the review of documentation and sample verification, the IE validates this initiative.

Table 39: Distribution Routine Patrol Summary

2024 Target	2024 ARC	2024 Q4 QDR	Front Load Data Request Response	Summary
78,650 Circuit Miles	78,310.87 Circuit Miles	78,307.87 Circuit Miles	78,310.9 Circuit Miles	Initiative Validated

VM-17 – 8.2.2.2.2 – Distribution Second Patrol – Focus & Non-Field Verifiable

Distribution second patrol inspections enhance wildfire mitigation by providing an additional layer of vegetation assessment along distribution circuits. PG&E's 2023–2025 WMP established a 2024 target to complete distribution second patrol inspections for 25,685 circuit miles, with a risk impact goal of <1%.

According to PG&E's 2024 Q4 QDR, the utility completed distribution second patrol inspections covering 27,259.79 circuit miles, exceeding the annual target. PG&E subsequently adjusted this reported total to 25,519.04 circuit miles in the 2024 ARC. The ARC reported a corresponding Risk Impact of 0.55% for this initiative.

PG&E provided detailed Distribution Second Patrol documentation confirming completion of inspections across the final reported mileage. The IE reviewed a sample covering 97.85

circuit miles, cross-checking inspection records with related tree prescription data resulting from these inspections, provided in response to Data Request DR047.

The distribution second patrol inspection records included:

- **General Information:** Region, Division, Project Number, Project Name, Program, Project Type, Project Year, Work Order
- **Line Information:** Span ID, Latitude, Longitude, HFTD Tier
- **Inspection Information:** Inspection Date, Inspector ID, Inspection Status, Inspection Results

The associated tree prescription data included:

- **General:** Region, Division, Project Number, Project Name, Project Year, Project Status
- **Tree Information:** Species, Latitude, Longitude, Address, Height, Diameter, Condition (Dead/Dying)
- **Prescription Information:** Status, Priority, Trim Type

The IE reviewed common data fields between the inspection records and tree prescription data, confirming alignment and consistency.

The IE identified no issues or discrepancies during this review. Based on the review of documentation and sample verification, the IE validates this initiative.

Table 40: Distribution Second Patrol Summary

2024 Target	2024 ARC	2024 Q4 QDR	Front Load Data Request Response	Summary
25,685 Circuit Miles	25,519 Circuit Miles	27,259.79 Circuit Miles	25,519.04 Circuit Miles	Initiative Validated

VM-18, 8.2.2.2.3 - VM for Operational Mitigations (VMOM) – Non-Focus & Non-Field Verifiable

VM-18 outlines PG&E's vegetation management program for operational mitigations. This program aims to reduce outages and potential ignitions by mitigating potential contact based on historic vegetation outages on EPSS-enabled circuits. The scope of work will be developed by using EPSS and historical outage data. PG&E has a target to mitigate 6,500 trees and this number will include the previous year's carry-over work.

The work was captured across field teams using OneVM data systems and included both corrective and hazard-based tree work completed between February and October 2024. The IE reviewed documentation provided by PG&E labeled 'VM-18_VM ROE_VM18_VMOM_Q4 QDR 2024_CONF.xlsx', which lists monthly totals for VMOM tree removals recorded in OneVM. Tree mitigations occurred between February and October, with monthly volumes ranging from 192 to 1,136 removals. Total recorded removals reached 6,935 trees, confirming that PG&E exceeded its stated initiative goal.

The IE reviewed 14 samples from HFTD Tier 3 and 4 samples from HFTD Tier 2 for this initiative. No anomalies were noted, and all required information was adequately completed for each of the items. Eight of the trees were identified as “trim” and eight of the trees were identified as “removal” and all entries contained a work date and who the work was completed by.

These removals reflect high-priority VM tasks outside routine inspection cycles and support operational mitigation under PG&E’s WMP. Based upon this analysis and the documentation received, the IE has validated this initiative.

Table 41: VM for Operational Mitigations (VMOM) Summary

2024 Target	2024 ARC	2024 Q4 QDR	Frontload Data Response	Summary
6,500 Tree Mitigations	6,935 Tree Mitigations	6,937 Tree Mitigations	6,935 Tree Mitigations	Initiative Validated

VM-19, 8.2.4 - One VM Application Record Keeping Enhancement – Non-Focus & Non-Field Verifiable

VM-19 is a digital enhancement initiative focused on improving PG&E’s internal One VM application to include structured fields that capture specific reasons for tree removal during Routine and Second Patrol inspections. This initiative addresses the need for improved documentation, traceability, and decision-making transparency within vegetation management operations. The enhancement supports fire risk reduction by requiring users to log predefined triggers for tree removal such as 'Grow in Risk', 'Fall in Risk', or 'Other', each with tailored subcategories and optional or mandatory comment fields based on context.

The IE submitted DR049 requesting evidence that One VM had been updated to include logic and field capture tools for tree removal reasons. PG&E responded with two supporting documents: a screenshot of the One VM interface showing the new 'Reason for Removal' prompt, and a PDF overview detailing the full logic and subcategories implemented in

alignment with VM-19. The response confirms that users must select from predefined options based on risk type—such as 'Grow In', 'Fall In', or 'Other'—and in some cases, provide further context or select observable field conditions. These enhancements ensure consistent data entry and improve back-end analysis of vegetation management decisions.

The enhancements described by PG&E are clearly operational within the One VM system and align with the initiative intent described in PG&E's WMP. The provided DR response, screenshots, and procedural documentation meet the threshold for validation. This improvement enables traceability and reinforces decision-making criteria during VM patrols, ultimately supporting risk-informed vegetation management. Based upon this analysis and the documentation received, the IE has validated this initiative.

Table 42: One VM Application Record Keeping Enhancement Summary

2024 Target	2024 ARC	2024 Q4 QDR	DR049 Response	Summary
Enhance the One VM application for Routine, and Second Patrol to include capability to capture factors for prescribing trees for removal.	VM Completed the enhancement of the One-VM application for Routine, and Second Patrol to include capability to capture factors for prescribing trees for removal on Jan. 30, 2024.	This commitment was completed in Q1.	Enhancement of Application to Include Factors for Tree Removal	Initiative Validated

VM-20, 8.2.4 - Record Keeping Enhancement (VMOM, TRI) – Non-Focus & Non-Field Verifiable

Initiative VM-20 supports PG&E's objective to improve transparency and traceability in its vegetation management operations by implementing standardized reason codes for tree removals across both the Vegetation Management for Operational Mitigations (VMOM) and Tree Removal Inventory (TRI) programs.

The IE submitted DR050 requesting documentation validating that both VMOM and TRI systems had implemented functionality to capture structured tree removal reasons in the field. PG&E provided screenshots from the TRI Field Maps interface showing the dropdown menu for removal codes, which include standardized options. For VMOM, PG&E referenced the same enhancement procedures submitted under VM-19 that apply to the OneVM system. These documents confirm that structured logic is now in place for field users to classify vegetation removals consistently across programs.

The initiative improves operational transparency in vegetation mitigation work and enables consistent classification of risk drivers behind removal decisions. Evidence provided through screenshots and documentation confirms that PG&E met its goal of integrating this logic into both VMOM and TRI workflows. Based upon this analysis and the documentation received, the IE has validated this initiative.

Table 43: Record Keeping Enhancement (VMOM, TRI) Summary

2024 Target	2024 ARC	2024 Q4 QDR	DR050 Response	Summary
Enhance the application for the Vegetation Management for Operational Mitigations (VMOM) - VMPI2 and Tree Removal Inventory (TRI)	VM enhanced the application for the Vegetation Management for Operational Mitigations (VMOM), One VM, and Tree Removal Inventory (TRI) Field Maps program to include capability to capture factors for prescribing trees for removal. In 2024, the VMOM system of record migrated to One-VM. As a result, the record-keeping enhancements were made to One VM	This commitment was completed in Q3.	Enhanced Application to Include Factors for Tree Removal	Initiative Validated

VM-21, 8.2.2.2.5 - FTI Record Keeping Enhancement – Non-Focus & Non-Field Verifiable

VM-21 outlines PG&E's FTI Record Keeping Enhancement objective. This initiative sets a goal to create record of all potential strike trees utilizing a digitized Tree Risk Assessment form.

The IE submitted DR051 requesting evidence of PG&E's implementation of a digitized Tree Risk Assessment form under the Focused Tree Inspection (FTI) program. PG&E responded on May 20, 2025, confirming that the International Society of Arboriculture's Basic Tree Risk Assessment form was digitized and integrated into the OneVM platform as of March 2024. The form and recordkeeping process were validated through attachment DRU15731_Q01_Atch04_VM-21 Digital TRAQ Form.pdf, which includes structured inputs on tree risk, site conditions, health factors, and prescription recommendations.

PG&E's documentation supports a successful rollout and operational use of the digital TRAQ form, which enhances the precision, traceability, and quality assurance of field observations during FTI activities. The transition to digital recordkeeping aligns with the WMP's goal of reducing fire risk through more accountable field inspections practices. Based upon this analysis and the documentation received, the IE has validated this initiative.

Table 44: FTI Record Keeping Enhancement Summary

2024 Target	2024 ARC	2024 Q4 QDR	DR051 Response	Summary
Enhance record keeping practices for the Focused Tree Inspection program (FTI) by creating records of all potential strike trees inspected using a digitized Tree Risk Assessment form.	This commitment was completed in 2024. The Tree Risk Assessment Form was digitized and provides the reason for tree removal. A Job Aid demonstrating record keeping of digitized Tree Risk Assessment Form was published.	This commitment was completed in Q1.	Digitized Tree Risk Assessment Form & Record of Potential Strike Trees	Initiative Validated

VM-22 – 8.2.5.2 – Vegetation Management - Quality Control – Non-Focus & Non-Field Verifiable

Vegetation Management (VM) Quality Control (QC) audits verify that vegetation management activities are performed consistently and comply with PG&E standards. PG&E's 2023–2025 WMP set specific 2024 targets for quality control audits across three vegetation management programs.

Distribution Routine VM – HFTD
PG&E's 2024 target was to complete quality control audits for distribution routine VM at 80,000 locations, with an 88% pass rate; no specific risk reduction goal was identified. According to PG&E's 2024 Q4 QDR, the utility completed quality control audits at 80,931 locations, exceeding its target, with a pass rate of 97.38%.

PG&E provided detailed VM Distribution QC documentation, along with VM QC Distribution Survey and VM QC Missed Veg Survey records, provided in response to Data Request DR052. The IE reviewed a sample of 23 distribution routine VM quality control audits and identified no issues during the review.

Transmission Routine VM – HFTD
PG&E's 2024 target was to complete quality control audits for transmission routine VM at 13,500 locations, with a 92% pass rate; no specific risk reduction goal was identified. According to PG&E's 2024 Q4 QDR, the utility completed quality control audits at 15,897 locations, exceeding its target, with a pass rate of 99.08%.

PG&E provided detailed VM Transmission QC documentation and VM QC Transmission Survey records in response to Data Request DR052. The IE reviewed a sample of 23 transmission routine VM quality control audits and identified no issues during the review.

Vegetation Control Pole Clearing – HFTD
PG&E's 2024 target was to complete quality control audits for vegetation control pole clearing at 10,500 locations, with an 80% pass rate; no specific risk reduction goal was identified. According to PG&E's 2024 Q4 QDR, the utility completed quality control audits at 21,740 locations, exceeding its target, with a pass rate of 88.30%.

PG&E provided detailed Pole Clearing QC documentation and VM QC Pole Clearing Survey records in response to Data Request DR052. The IE reviewed a sample of 23 vegetation control pole clearing quality control audits and identified no issues during the review.

Based on the review of documentation and sample verification across all three VM QC programs, the IE validates this initiative.

Table 45: Vegetation Management – Quality Control Summary

2024 Target	2024 ARC	2024 Q4 QDR	Front Load Data Request Response	Summary
Distribution Routine VM - HFTD: 80,000 Audit Locations; 88% Pass Rate	Distribution Routine VM - HFTD: 80,931 Audit Locations; 97.38% Pass Rate	Distribution Routine VM - HFTD: 80,931 Audit Locations; 97.38% Pass Rate	Distribution Routine VM - HFTD: 80,931 Audit Locations; 97.38% Pass Rate	Initiative Validated
Transmission Routine VM - HFTD: 13,500 Audit Locations; 92% Pass Rate	Transmission Routine VM - HFTD: 15,897 Audit Locations; 99.08% Pass Rate	Transmission Routine VM - HFTD: 15,897 Audit Locations; 99.08% Pass Rate	Transmission Routine VM - HFTD: 15,897 Audit Locations; 99.08% Pass Rate	Initiative Validated
Vegetation Control Pole Clearing - HFTD: 10,500 Audit Locations; 80% Pass Rate	Vegetation Control Pole Clearing - HFTD: 21,740 Audit Locations; 88.30% Pass Rate	Vegetation Control Pole Clearing - HFTD: 21,740 Audit Locations; 88.30% Pass Rate	Vegetation Control Pole Clearing - HFTD: 21,740 Audit Locations; 88.30% Pass Rate	Initiative Validated

4.2.2.2 Funding Verification – Findings

VM-01, 8.2.2.1.1, LiDAR Data Collection – Transmission

Strategic Overview and Risk Mitigation

This initiative involved LiDAR data collection for 17,500 transmission circuit miles to identify vegetation encroachments and support wildfire mitigation efforts.

Financial Performance Analysis

- Planned Budget: $6,633,940
- Actual Expenditure: $5,150,980
- Variance: -$1,482,960 (-22.35% underspend)
- PG&E Justification: Cost reductions resulted from using internal PG&E helicopter resources instead of contracted helicopter services for LiDAR data collection.

Operational Impact and Risk Reduction

PG&E exceeded its target by collecting LiDAR data for 17,953 circuit miles. The underspend did not negatively impact the effectiveness of data collection efforts.

Assessment and Conclusion

PG&E successfully implemented this initiative, surpassing data collection targets while effectively managing resources to achieve financial efficiencies.

VM-02, 8.2.3.1, Pole Clearing Program

Strategic Overview and Risk Mitigation

This initiative inspects and clears vegetation around poles to create fire breaks. The adjusted target for 2024 was to clear around 63,000 poles, with a stated wildfire risk reduction goal of 0.0006.

Financial Performance Analysis

- Planned Budget: $28,803,000
- Actual Expenditure: $68,512,360
- Variance: +$39,709,360 (+137.87% overspend)
- PG&E Justification: The overspend resulted from PG&E expanding the program to address newly identified risks. They decided to increase pole-clearing work in areas where the fire risk was higher. This included extra work in regions experiencing more fires and areas requiring increased safety measures.

Operational Impact and Risk Reduction

PG&E substantially exceeded the target, clearing vegetation around 77,152 poles, which is well above the revised goal of 63,000. The additional expenditure directly supported this increased effort.

Assessment and Conclusion

PG&E successfully executed this initiative, surpassing operational targets. The overspend was driven by a strategic decision to address emergent risks, resulting in an increased number of cleared poles and enhancing wildfire risk mitigation efforts.

VM-03, 8.2.2.2.5, Focused Tree Inspection Program

Strategic Overview and Risk Mitigation
This initiative involved detailed inspections of potentially hazardous trees near power lines within designated "Areas of Concern," with a target of 1,500 circuit miles and an "Eyes on Risk" impact of 0.19%.

Financial Performance Analysis

- Planned Budget: $209,050,000
- Actual Expenditure: $61,359,170
- Variance: -$147,690,830 (-70.65% underspend)
- PG&E Justification: PG&E strategically reallocated resources from this initiative toward higher-risk vegetation management areas identified through risk assessments, resulting in a reduced scope for this specific initiative.

Operational Impact and Risk Reduction
Despite the substantial budget reduction, PG&E slightly exceeded its operational target by completing 1,557.09 circuit miles of tree inspections.

Assessment and Conclusion
PG&E successfully met the targeted inspections, achieving the planned risk reduction. The underspend reflects a strategic shift in focus rather than operational deficiencies, though it highlights changes in budgeting or strategy during the year.

VM-04, 8.2.2.2.4, Tree Removal Inventory

Strategic Overview and Risk Mitigation
This initiative aimed to mitigate high-risk trees identified through the Enhanced Vegetation Management (EVM) program, targeting the removal of 20,000 trees with a stated wildfire risk reduction goal of 0.0195.

Financial Performance Analysis

- Planned Budget: $77,911,000
- Actual Expenditure: $26,655,530
- Variance: -$51,255,470 (-65.79% underspend)
- PG&E Justification: Funds were strategically reallocated from this program to address higher-priority vegetation management risks identified during the year.

Operational Impact and Risk Reduction
PG&E significantly exceeded its target, mitigating 32,091 trees, surpassing the planned goal by a considerable margin despite the substantial underspend.

Assessment and Conclusion
PG&E efficiently achieved and exceeded the operational target, reflecting strategic reallocation and effective cost management while meeting the risk reduction objectives.

VM-05, 8.2.2.3.1, Defensible Space Inspections - Distribution Substation

Since the absolute percent difference between budgeted and actual for this item is less than 10%, please refer to Table 27.

VM-06, 8.2.2.3.1, Defensible Space Inspections - Transmission Substation

Strategic Overview and Risk Mitigation
This initiative focused on inspecting and creating defensible space around transmission substations. The target for 2024 was inspections at 55 substations, with an "Eyes on Risk" impact of 22%.

Financial Performance Analysis

- Planned Budget: $1,282,500
- Actual Expenditure: $1,048,950
- Variance: -$233,550 (-18.21% underspend)
- PG&E Justification: The underspend was due to challenges in obtaining approvals from agencies and neighboring property owners, which prevented planned additional defensible space improvements.

Operational Impact and Risk Reduction
PG&E successfully completed inspections at all 54 substations (one substation was removed from the program due to an asset transfer), meeting the inspection goal but not the additional planned improvements.

Assessment and Conclusion
PG&E met the core inspection target and associated risk reduction goals. The underspend is attributed to external approval challenges rather than internal performance or operational inefficiencies.

VM-07, 8.2.2.3.1, Defensible Space Inspections - Hydroelectric Substations and Powerhouses

Strategic Overview and Risk Mitigation
This initiative involved inspecting and creating defensible spaces around hydroelectric substations and powerhouses to reduce wildfire risk. The original target of 61 facilities was adjusted to 59 following the divestiture of two facilities. Despite the adjustment, the initiative still aimed to achieve a 24% "Eyes on Risk" impact.

Financial Performance Analysis

- Planned Budget: $1,916,670
- Actual Expenditure: $1,558,470
- Variance: -$358,200 (-18.69% underspend)
- PG&E Justification: The underspend resulted from lower-than-anticipated vegetation growth, reducing the need for mitigation work, and the divestiture of two facilities, which lowered the overall scope of the initiative.

Operational Impact and Risk Reduction

PG&E completed inspections and mitigation at all 59 facilities, which is the revised target following the divestiture. The reduced scope due to the divestiture did not impact PG&E's ability to meet its adjusted target. Although the overall risk reduction achieved was slightly lower than initially planned, the initiative still met its core objectives.

Assessment and Conclusion

PG&E successfully met the revised target of 59 facilities, completing all inspections and mitigation work as planned. The adjustment in scope due to the divestiture of two facilities did not negatively impact the initiative's overall risk reduction. The underspend is attributed to the reduced workload from the divestiture and lower vegetation growth, which ultimately led to fewer resources being needed.

VM-08, 8.2.5, Vegetation Management – Quality Verification

Strategic Overview and Risk Mitigation

This initiative performs quality assurance (QA) audits on various vegetation management programs to ensure that all activities meet safety and effectiveness standards. This is a quality control initiative and does not directly reduce ignition risk, but supports wildfire mitigation efforts by verifying compliance with established standards.

Financial Performance Analysis

- Planned Spend: $14,710,000
- Actual Expenditure: $13,104,150
- Variance: -$1,605,850 (-10.92% underspend)
- PG&E Justification: The underspend was primarily due to cost-sharing with Electric Operations, which helped reduce overall program costs.

Operational Impact and Risk Reduction

PG&E exceeded all audit location targets for Distribution, Transmission, and Pole Clearing, and also exceeded the required pass rates, confirming the effectiveness of the vegetation management processes.

Assessment and Conclusion
PG&E successfully met all quality assurance targets, achieving these goals while effectively managing costs through strategic cost-sharing. The underspend did not negatively affect the work and reflects operational efficiencies.

VM-09, 8.2.6, Constraint Resolution Procedural Guideline

Although this initiative is not identified with targets in PG&E's Q4 QDR Table 1, it was shown to be included in the financial tables from Q4 QDR Table 11. Since the initiative is not part of Q4 QDR Table 1, this initiative is not part of the IE's Focus or Not-Focus Initiative review within this report. However, since this initiative was identified in Q4 QDR Table 11 and the absolute percent difference between budgeted and actual for this item is less than 10%, the WMP Planned Spend ($) and EC-Claimed Actual Spend ($ and % from budget) are as follows:

- WMP Planned Spend ($): $0
- EC-Claimed Actual Spend ($ and % from budget): $0.00 (+0.0%)

VM-11, 8.2.2.2.5, Enhance and refine Focus Tree Inspection – Areas of Concern (AOC)

Although this initiative is not identified with targets in PG&E's Q4 QDR Table 1, it was shown to be included in the financial tables from Q4 QDR Table 11. Since the initiative is not part of Q4 QDR Table 1, this initiative is not part of the IE's Focus or Not-Focus Initiative review within this report. However, since this initiative was identified in Q4 QDR Table 11 and the absolute percent difference between budgeted and actual for this item is less than 10%, the WMP Planned Spend ($) and EC-Claimed Actual Spend ($ and % from budget) are as follows:

- WMP Planned Spend ($): $0
- EC-Claimed Actual Spend ($ and % from budget): $0.00 (+0.0%)

VM-12, 8.2.4, Evaluate emerging technologies

Although this initiative is not identified with targets in PG&E's Q4 QDR Table 1, it was shown to be included in the financial tables from Q4 QDR Table 11. Since the initiative is not part of Q4 QDR Table 1, this initiative is not part of the IE's Focus or Not-Focus Initiative review within this report. However, since this initiative was identified in Q4 QDR Table 11 and the absolute percent difference between budgeted and actual for this item is less than 10%, the WMP Planned Spend ($) and EC-Claimed Actual Spend ($ and % from budget) are as follows:

- WMP Planned Spend ($): $0
- EC-Claimed Actual Spend ($ and % from budget): $0.00 (+0.0%)

VM-13, 8.2.2.1.1, Routine Ground – Transmission

Since the absolute percent difference between budgeted and actual for this item is less than 10%, please refer to Table 27.

VM-14, 8.2.2.1.2, Transmission Second Patrol

Strategic Overview and Risk Mitigation
This initiative involves a second patrol of transmission lines, targeting 5,625 circuit miles in 2024. This is an "Eyes on Risk" initiative with a stated risk impact of 100% for High Fire Threat Districts (HFTD) and High Fire Risk Areas (HFRA).

Financial Performance Analysis

- Planned Spend: $1,192,270
- Actual Expenditure: $3,695,210
- Variance: +$2,502,940 (+209.93% overspend)
- PG&E Justification: The overspend was due to unplanned costs associated with inspections and data collection using LiDAR, a specific technology used to enhance the patrol process.

Operational Impact and Risk Reduction
PG&E exceeded its target, completing 5,697.6 circuit miles.

Assessment and Conclusion
PG&E met and exceeded the initiative's targets. The overspend was primarily due to the use of LiDAR technology, which helped complete the work. The risk reduction goal was successfully achieved.

VM-15, 8.2.2.1.3, Integrated Vegetation Management – Transmission

Strategic Overview and Risk Mitigation
This initiative involves the inspection and mitigation of vegetation in transmission rights-of-way. The 2024 target was 6,504 acres, with an "Eyes on Risk" impact of 0.01%.

Financial Performance Analysis

- Planned Spend: $14,576,810
- Actual Expenditure: $9,164,390
- Variance: -$5,412,420 (-37.13% underspend)
- PG&E Justification: PG&E met the inspection target by completing the planned number of inspections in the required areas. However, they performed less tree removal work than initially planned, which was part of the broader vegetation management program. The reason for this is that some of the tree work was not necessary, either due to lower vegetation growth or because the most critical areas

had already been addressed. As a result, PG&E was able to complete the inspections successfully while spending less on the tree removal portion, resulting in an underspend.

Operational Impact and Risk Reduction
PG&E exceeded the acreage inspection target, completing 7,907 acres.

Assessment and Conclusion
PG&E met and exceeded its acreage inspection target. While the underspend reflects a reduction in the more resource-intensive mitigation work (such as tree removal), the risk reduction goal was still achieved. The financial variance is due to strategic shifts in the program, ensuring that overall objectives were met despite adjustments in the scope of work.

VM-16, 8.2.2.2.1, Distribution Routine Patrol

Strategic Overview and Risk Mitigation
This initiative involves the annual patrol inspection of the entire distribution system, targeting 78,650 overhead circuit miles in 2024, with a wildfire risk reduction goal of 0.006.

Financial Performance Analysis
- Planned Spend: $744,607,000
- Actual Expenditure: $890,507,000
- Variance: +$145,900,000 (+19.59% overspend)
- PG&E Justification: The overspend resulted from an increase in completed units due to a reallocation of work based on a risk-informed assessment, prioritizing higher-risk areas.

Operational Impact and Risk Reduction
The overspend occurred because more work was completed than originally planned. PG&E reallocated resources based on a detailed risk assessment, which led them to prioritize areas with higher wildfire risks. This shift in focus required additional work and resources, contributing to the increased expenditure.

Assessment and Conclusion
PG&E met the core inspection goals, with the reallocation of funds to higher-risk work ensuring that the risk reduction objectives were achieved. Despite a slight discrepancy in the target, the initiative met its intended outcomes.

VM-17, 8.2.2.2.2, Distribution Second Patrol

Strategic Overview and Risk Mitigation
This initiative involves a second patrol of distribution lines in HFTD and HFRA locations, targeting 25,685 circuit miles in 2024, with a stated risk impact of 0.0055.

Financial Performance Analysis

- Planned Spend: $80,124,000
- Actual Expenditure: $132,743,390
- Variance: +$52,619,390 (+65.67% overspend)
- PG&E Justification: The overspend was due to an increase in units completed, resulting from a reallocation of funds to higher-risk areas, which focused on addressing more critical vegetation management work.

Operational Impact and Risk Reduction

PG&E completed 25,519.04 circuit miles, slightly under the revised target of 25,484.8 miles, which was exceeded.

Assessment and Conclusion

PG&E successfully met its risk reduction goals. The overspend reflects a strategic reallocation of resources to higher-risk work areas, ensuring the program's effectiveness despite the variance in funding.

VM-18, 8.2.2.2.3, VM for Operational Mitigations (VMOM)

Strategic Overview and Risk Mitigation

This initiative focuses on mitigating trees on EPSS-capable circuits (Electrical Power Safety Systems). The target for 2024 was to mitigate 6,500 trees to reduce wildfire risk. The stated risk reduction achieved in 2024 was 0.0001.

Financial Performance Analysis

- Planned Spend: $20,904,000
- Actual Expenditure: $8,418,880
- Variance: -$12,485,120 (-59.73% underspend)
- PG&E Justification: The underspend was primarily due to a shift in focus, reallocating funds from VMOM to other vegetation work in higher-risk areas. This resulted in fewer units being completed under this initiative than originally planned.

Operational Impact and Risk Reduction

Despite the reduced scope and funding reallocation, PG&E exceeded its target, mitigating 6,935 trees against the original goal of 6,500.

Assessment and Conclusion

PG&E successfully met and surpassed the target for tree mitigation. The underspend reflects a deliberate shift in focus to higher-risk areas, resulting in fewer trees mitigated under this specific initiative. The reallocation of funds did not negatively impact the overall goal, and the risk reduction commitment was achieved, indicating effective resource management

VM-19, 8.2.4, One VM Application Record Keeping Enhancement (Routine, Second Patrol)

Since the absolute percent difference between budgeted and actual for this item is less than 10%, please refer to Table 27.

VM-20, 8.2.4, Record Keeping Enhancement (VMOM, TRI)

Since the absolute percent difference between budgeted and actual for this item is less than 10%, please refer to Table 27.

VM-21, 8.2.2.2.5, FTI Record Keeping Enhancement

Strategic Overview and Risk Mitigation
This initiative focuses on improving record-keeping systems related to vegetation management activities. It does not include a specific quantitative performance target or an explicitly stated risk reduction percentage.

- Financial Performance Analysis
- Planned Spend: $0
- Actual Spend: $1,310,940
- Variance: +$1,310,940 (Overspend)
- PG&E Justification: PG&E indicated that specific costs associated with VM-21 were not separately tracked at the initiative level. Instead, these expenses are aggregated within a larger financial reporting group. PG&E has confirmed that despite this variance, the overall operational objective for VM-21 was successfully met in 2024.

Operational Impact and Risk Reduction
PG&E reports successful achievement of the operational objectives for this initiative during 2024. However, due to the nature of this initiative as a record-keeping enhancement, explicit risk reduction impacts are not directly quantified or reported.

Assessment and Conclusion
Given that detailed, initiative-specific financial tracking is not provided, a precise analysis of the overspend's direct impact on operational effectiveness or risk mitigation cannot be determined. Nonetheless, PG&E has verified successful completion of the operational objectives associated with this initiative for the reporting period.

VM-22, 8.2.5.2, Vegetation Management - Quality Control

Since the absolute percent difference between budgeted and actual for this item is less than 10%, please refer to Table 27.

4.2.3 Synthesis of Findings

4.2.3.1 Initiative Review

PG&E's vegetation management initiatives demonstrate a comprehensive approach to wildfire risk reduction through enhanced operational practices and improved record-keeping. The utility successfully met or exceeded its targets across all four initiatives, with VM-18 surpassing its goal of mitigating 6,500 trees by addressing 6,935 high-priority removals. The overall wildfire risk reduction achieved appears significant, as evidenced by the targeted removal of high-risk trees and the implementation of structured data collection methods. This determination is based on the volume of mitigations completed and the enhanced ability to track and analyze vegetation-related risks systematically.

A notable strength across these initiatives is the substantial improvement in recordkeeping and data management. PG&E has implemented digital enhancements to its OneVM application, standardized reason codes for tree removals in VMOM and TRI programs, and digitized the Tree Risk Assessment form for the FTI program. These improvements address previous data accuracy and management issues by enforcing structured data entry, improving traceability, and enabling deeper analysis methods of vegetation management decisions.

The transition to digital recordkeeping, particularly the implementation of the ISA's Basic Tree Risk Assessment form in OneVM, stands out as a significant advancement. This change not only enhances the precision and accountability of field inspections but also provides a foundation for data-driven decision-making in future vegetation management strategies. PG&E's focus on capturing specific reasons for tree removal during various types of inspections demonstrates a commitment to understanding and addressing the root causes of vegetation-related risks.

Looking forward, PG&E's initiatives suggest an intent to leverage improved data collection and analysis capabilities to refine their vegetation management strategies. The structured data now being collected across various programs will likely enable more targeted and effective risk mitigation efforts in future seasons, potentially leading to more efficient resource allocation and enhanced wildfire risk reduction.

4.2.3.2 Funding Verification

Budget and Expenditure Summary: The Vegetation Management and Inspection category had a total planned budget of $1,297,903 with actual expenditures of $1,321,703, representing a 1.8% variance above budget. The category's overall expenditure remained within 10% of the planned budget allocation.

Initiatives with Significant Variances: Of the 21 total initiatives in this category, 13 (62%) had absolute percent differences exceeding 10%. The most common reasons for variances included:

- Strategic resource reallocation from planned programs to higher-risk areas resulted in 60-71% budget reductions for focused tree inspections and tree removal inventory programs, while maintaining operational effectiveness through targeted deployment
- Pole clearing program expansion required 138% budget increase to address newly identified risks, enabling vegetation clearing around 77,152 poles versus the 63,000 originally targeted
- Technology integration for enhanced inspections drove 210% budget variance in transmission second patrol due to unplanned LiDAR data collection costs, improving inspection accuracy and vegetation encroachment detection

Key Trends and Funding Compliance: The pole clearing program exceeded targets by 22% with corresponding budget increases supporting enhanced risk mitigation. Several initiatives showing variances below budget maintained operational effectiveness—the tree removal inventory achieved 160% of its goal (32,091 trees versus 20,000 targeted) despite 66% lower expenditure through focused deployment in highest-risk areas. The category's funding patterns demonstrate risk-based prioritization in vegetation management, with resources shifting to address the most critical wildfire threats while maintaining overall program effectiveness across distribution and transmission systems.

4.3 SITUATIONAL AWARENESS AND FORECASTING

4.3.1 Initiative Summary Table

Table 46: Initiative Summary Table (Spend in Thousand $)

Initiative Number, WMP Section Number, and Name	WMP – Initiative Target	EC-Claimed Progress	EC-Claimed Initiative Status	Sample Size	Sample Validation Rate (%)[13]	Verification Method	IE Finding on Initiative (Initiative Validation Rate)[14], [15]	WMP – Planned Spend ($)	EC-Claimed Actual Spend ($ and % from budget)	Satisfied Risk Reduction Goal?[16]
SA-02, 8.3.3.1, Line Sensor Installations	40 Line Sensors	45 Line Sensors	Complete	13 Line Sensors	100%	Line Sensor Installations.xlsx 13 Inspection Reports (DR032)	Initiative Validated (100%)	$4,445	$3,817.64 (-14.1%)	N/A
SA-10 - 8.3.3.3 - Distribution Fault Anticipation (DFA) Installations	15 DFAs	17 DFAs	Complete	14 DFAs	100%	DFA HFTD Circuit Designation Report DFA First Comms (DR033) DFA Portal Screenshots (DR033)	Initiative Validated (113%)	$3,000	$2,390.29 (-20.3%)	No – moved 6 circuits from 2025 work plan to meet 2024 goal. These circuits were of lower wildfire risk.
SA-11 - 8.3.3.3 - Early Fault Detection (EFD) Installations	2 EFDs	2 EFDs	Complete	2 EFDs	100%	EFD Installations Job Package Camp Evers (DR034) Job Package Miwuk (DR034)	Initiative Validated (100%)	$7,000	$2,802.43 (-60.0%)	Yes (0.00482%)

[13] Sample Validation is determined by taking the number of sampling data validated and dividing by the sampling request.
[14] As detailed in Energy Safety's issued IE ARC Outline for WMP Compliance Year 2024 document, if the total initiative validation is greater or equal to 95%, the initiative is considered validated by the IE.
[15] The Initiative Validation Rate is determined by taking the Sample Validation Rate and multiplying by the EC-claimed amount, this estimate is then divided by the WMP Target amount to determine the validation rate.
[16] N/A in the Risk Reduction Goal column means that no goal was provided by the EC.

4.3.2 Written Detail for Initiatives

4.3.2.1 Initiative Review – Findings & Method

SA-02 – 8.3.3.1 - Line Sensor Installations – Non-Focus & Non-Field Verifiable

SA-02 outlines PG&E's commitment to install line sensor devices on various circuits. These sensors provide detection and assistance in location faults and can be integrated into analytics platforms; PG&E utilizes "Foundry." This data can be analyzed and then the EC can calculate an approximate area of possible fault or disturbance based on the circuit model impedance within the power flow tool. The installation of these sensors will be predominantly in Tier 2 and Tier 3 HFTD. PG&E had a goal of 40-line sensor installations in 2024 and claimed to have installed 45 based upon data from QDR4T1.

PG&E provided a list of line sensor installations completed during 2024 and this data reflected the 45 claimed by the EC. This documentation provided data such as location, how many sensors were installed on a given circuit, the mileage in HFTD, and the planned and actual completion date of the work. In response to DR032, PG&E provided proof of completion for 10 installations in HFTD Tier 3 and 3 installations in HFTD Tier 2. The documentation provided showed a completion of work date, the actual hours spent on the installation, comments left by the work crew, a detailed map showing exact location of installations and how many, a copy of the line sensor installation sheet, and a construction completion standards checklist with date included for final sign-off. Based upon this analysis and the documentation received, the IE has validated this initiative.

Table 47: Line Sensor Installations Summary

2024 Target	2024 ARC	2024 Q4 QDR	Frontload Data Response	Summary
40 Line Sensors Installed	45 Line Sensors Installed	45 Line Sensors Installed	45 Line Sensors Installed	Initiative Validated

SA-10, 8.3.3.1 - Distribution Fault Anticipation (DFA) Installations – Focus & Non-Field Verifiable

PG&E targeted installation of 15 Distribution Fault Anticipation (DFA) sensors on circuits by the end of 2024, with each sensor placed at the initiating substation of a targeted circuit. This target represents an expansion from the prior year's goal of five installations and was assigned a "5.1% Eyes-on Risk" designation in the WMP for its operational risk reduction. The WMP's narrative emphasizes the importance of verifying measurements, system

integration, and location specificity in tracking fault detection technologies like DFA sensors.

In response to data requests regarding compliance with this initiative, PG&E provided documentation directly supporting the 2024 goal. The utility submitted 14 installation records, including a DFA Foundry Report that listed 17 circuits in High Fire Threat Districts (HFTDs), and work orders for the 14 initially requested circuits. The response included visual verification in the form of screenshots from the DFA system's interface, demonstrating that each sensor was operational and integrated with system monitoring tools. Each circuit listed in the DFA portal was traceable to one of the 2024 target installations, roughly aligning with both the quantitative and HFTD location targets of the WMP.

Based on the submitted documentation, PG&E appears to have met the stated 2024 WMP target for DFA sensor installation under initiative SA-10. The supporting materials adequately demonstrate compliance with the requirements to verify location, function, and data integration. This fulfillment directly supports the WMP initiative's goals of improving fault detection capabilities and system transparency in high-risk areas. Although the 2024 target goal was met, PG&E fell short of the risk reduction goal by 0.1%. Installation of four circuits experienced delays due to engineering and technology issues, and PG&E had to pull work on six circuits from the 2025 Work Plan to meet the 2024 target. The circuits pulled in for 2024 were of lower wildfire risk which results in a reduction of the risk impact by 0.1%. Of the four circuits that were delayed, one was completed in Q1 of 2025, two will be completed in 2025, and one in 2026. –Based upon this analysis and the documentation received, the IE has validated this initiative.

Table 48: Distribution Fault Anticipation (DFA) Installations Summary

2024 Target	2024 ARC	2024 Q4 QDR	Frontload Data Response	Summary
15 DFA Sensors Installed	17 DFA Sensors Installed	17 DFA Sensors Installed	17 DFA Sensors Installed	Initiative Validated

SA-11, 8.3.3.1 - Early Fault Detection (EFD) Installations – Non-Focus & Non-Field Verifiable

The response to data requests under the SA-11 supports that the utility not only met but exceeded the stated target goals for 2024. The initiative's goal was to install EFD sensors on two circuits, representing less than 1% coverage of "Eyes-on-Risk" circuits, with documentation expected to include SAP reports showing completion dates, circuit names, and installation locations. In response, PG&E provided a dataset listing 88 sensor installations across the Miwuk and Camp Evers circuits, both located in high fire threat areas

and serving seven cities. The documentation package included ER notification forms with detailed sensor location data and completion timestamps, log entries tracking the status of installation tasks, and a construction standards checklist signed by a crew lead. Each report was dated 2024 and circuit-specific. These materials fulfill the requirement for verifiable completion and provide confidence in implementation accuracy.

The reporting indicates that EFD sensors were installed on four circuits, in accordance with the 2.8% of Eyes-on-Risk circuits, which exceeds the original 2024 target. This expansion directly supports the broader goals outlined in WMP Section 8.3.3.1 to improve wildfire risk detection through system monitoring enhancements. The initiative demonstrates measurable progress in grid situational awareness, aligning with the framework defined in WMP Section 8.1.3.2, which emphasizes auditable compliance and risk-focused outcomes. The evidence provided shows successful execution, appropriate documentation, and exceeding minimum expectations, which all indicate that the goals of SA-11 in 2024 were met. Based upon this analysis and the documentation received, the IE has validated this initiative.

Table 49: Early Fault Detection (EFD) Installations Summary

2024 Target	2024 ARC	2024 Q4 QDR	DR034 Response	Summary
EFD Installed on 2 Circuits	EFD Installed on 2 Circuits	EFD Installed on 2 Circuits	EFD Installed on 2 Circuits	Initiative Validated

4.3.2.2 Funding Verification – Findings

SA-01 - Artificial Intelligence (AI) in Wildfire Cameras

Although this initiative is not identified with targets in PG&E's Q4 QDR Table 1, it was shown to be included in the financial tables from Q4 QDR Table 11. Since the initiative is not part of Q4 QDR Table 1, this initiative is not part of the IE's Focus or Not-Focus Initiative review within this report. However, since this initiative was identified in Q4 QDR Table 11 and the absolute percent difference between budgeted and actual for this item is less than 10%, the WMP Planned Spend ($) and EC-Claimed Actual Spend ($ and % from budget) are as follows:

- WMP Planned Spend ($): $0
- EC-Claimed Actual Spend ($ and % from budget): $0.00 (+0.0%)

SA-02 - Line Sensor – Installations

Strategic Overview and Risk Mitigation

This initiative involved installing line sensors on circuits feeding into High Fire Threat Districts (HFTD) and High Fire Risk Areas (HFRA), targeting installations on 40 circuits in 2024 to achieve a wildfire risk reduction goal of 0.05077.

Financial Performance Analysis

- Planned Budget: $4,445,200
- Actual Expenditure: $3,817,640
- Variance: -$627,560 (-14.12% underspend)
- PG&E Justification: The underspend primarily resulted from reducing the program scope by removing non-WMP circuits, correcting initial over-planning at the start of the year.

Operational Impact and Risk Reduction

PG&E exceeded the original target by installing sensors on 45 circuits. The underspend did not negatively impact achieving the intended wildfire risk reduction.

Assessment and Conclusion

PG&E effectively implemented this initiative, exceeding operational targets and associated risk reduction goals while achieving cost savings through scope refinement and strategic planning.

SA-03 - EFD and DFA Reporting

Although this initiative is not identified with targets in PG&E's Q4 QDR Table 1, it was shown to be included in the financial tables from Q4 QDR Table 11. Since the initiative is not part of Q4 QDR Table 1, this initiative is not part of the IE's Focus or Not-Focus Initiative review within this report. However, since this initiative was identified in Q4 QDR Table 11 and the absolute percent difference between budgeted and actual for this item is less than 10%, the WMP Planned Spend ($) and EC-Claimed Actual Spend ($ and % from budget) are as follows:

- WMP Planned Spend ($): $0
- EC-Claimed Actual Spend ($ and % from budget): $0.00 (+0.0%)

SA-04 - FPI and IPW Modeling – Revision Evaluation

Although this initiative is not identified with targets in PG&E's Q4 QDR Table 1, it was shown to be included in the financial tables from Q4 QDR Table 11. Since the initiative is not part of Q4 QDR Table 1, this initiative is not part of the IE's Focus or Not-Focus Initiative review within this report. However, since this initiative was identified in Q4 QDR Table 11 and the absolute percent difference between budgeted and actual for this item is less than 10%, the WMP Planned Spend ($) and EC-Claimed Actual Spend ($ and % from budget) are as follows:

- WMP Planned Spend ($): $0

- EC-Claimed Actual Spend ($ and % from budget): $0.00 (+0.0%)

SA-05 - Evaluate FPI and IPW Modeling enhancements in 2023 - 2025(a)

CAPITAL:

Strategic Overview and Risk Mitigation
This initiative evaluates enhancements to the Fire Potential Index (FPI) and Ignition Potential on Weather (IPW) models. Although no specific risk reduction percentage is attributed, improvements aim to bolster wildfire risk forecasting capabilities.

Financial Performance Analysis
- Planned Spend: $1,852,200
- Actual Spend: $2,609,190
- Variance: +$756,990 (+40.87% overspend)
- PG&E Justification: The overspend was driven mainly by increased internal IT labor costs associated with supporting AWS migration and the development of a new Public Safety Power Shutoff (PSPS) dashboard integrated into PG&E's weathermap tool, which was initially unplanned.

Operational Impact and Risk Reduction
The initiative is evaluative; therefore, progress isn't measured in traditional operational units. Despite overspending, the initiative remains on track, and the additional development has been completed as planned.

Assessment and Conclusion
PG&E's overspending is attributed to specific IT enhancements that augmented the initiative's execution. The financial variance reflects unplanned improvements intended to enhance PG&E's forecasting capabilities and strategic responsiveness.

EXPENSE

Strategic Overview and Risk Mitigation
This expense-related initiative supports ongoing evaluation and enhancement of FPI and IPW models. No explicit risk reduction metric is attributed; the primary aim is continued improvement in wildfire risk forecasting accuracy and reliability.

Financial Performance Analysis
- Planned Spend: $3,450,370
- Actual Spend: $2,290,420
- Variance: -$1,159,950 (-33.62% underspend)

- PG&E Justification: PG&E cites operational efficiencies in computing, timing, and model resolution and testing as reasons for reduced expenditures without compromising objectives or timelines.

Operational Impact and Risk Reduction
Despite significant financial savings, the initiative is reported to be on track. The identified efficiencies allowed PG&E to achieve intended outcomes without adverse effects on progress.

Assessment and Conclusion
PG&E leveraged technical and process efficiencies to maintain the initiative's progress at reduced expenditure. The underspend reflects resource management decisions that did not negatively impact the initiative's objectives.

SA-06 - Evaluate FPI and IPW Modeling enhancements in 2026 – 2032

Although this initiative is not identified with targets in PG&E's Q4 QDR Table 1, it was shown to be included in the financial tables from Q4 QDR Table 11. Since the initiative is not part of Q4 QDR Table 1, this initiative is not part of the IE's Focus or Not-Focus Initiative review within this report. However, since this initiative was identified in Q4 QDR Table 11 and the absolute percent difference between budgeted and actual for this item is less than 10%, the WMP Planned Spend ($) and EC-Claimed Actual Spend ($ and % from budget) are as follows:

- WMP Planned Spend ($): $0
- EC-Claimed Actual Spend ($ and % from budget): $0.00 (+0.0%)

SA-07 - Monitor and evaluate the Cameras AI system's performance

Although this initiative is not identified with targets in PG&E's Q4 QDR Table 1, it was shown to be included in the financial tables from Q4 QDR Table 11. Since the initiative is not part of Q4 QDR Table 1, this initiative is not part of the IE's Focus or Not-Focus Initiative review within this report. However, since this initiative was identified in Q4 QDR Table 11 and the absolute percent difference between budgeted and actual for this item is less than 10%, the WMP Planned Spend ($) and EC-Claimed Actual Spend ($ and % from budget) are as follows:

- WMP Planned Spend ($): $0
- EC-Claimed Actual Spend ($ and % from budget): $0.00 (+0.0%)

SA-08 - Evaluate the Cameras AI system functionalities and technologies

Although this initiative is not identified with targets in PG&E's Q4 QDR Table 1, it was shown to be included in the financial tables from Q4 QDR Table 11. Since the initiative is not part of Q4 QDR Table 1, this initiative is not part of the IE's Focus or Not-Focus Initiative review

within this report. However, since this initiative was identified in Q4 QDR Table 11 and the absolute percent difference between budgeted and actual for this item is less than 10%, the WMP Planned Spend ($) and EC-Claimed Actual Spend ($ and % from budget) are as follows:

- WMP Planned Spend ($): $0
- EC-Claimed Actual Spend ($ and % from budget): $0.00 (+0.0%)

SA-09 - EFD and DFA Reporting

Although this initiative is not identified with targets in PG&E's Q4 QDR Table 1, it was shown to be included in the financial tables from Q4 QDR Table 11. Since the initiative is not part of Q4 QDR Table 1, this initiative is not part of the IE's Focus or Not-Focus Initiative review within this report. However, since this initiative was identified in Q4 QDR Table 11 and the absolute percent difference between budgeted and actual for this item is less than 10%, the WMP Planned Spend ($) and EC-Claimed Actual Spend ($ and % from budget) are as follows:

- WMP Planned Spend ($): $0
- EC-Claimed Actual Spend ($ and % from budget): $0.00 (+0.0%)

SA-10 - Distribution Fault Anticipation (DFA) Installations

Strategic Overview and Risk Mitigation
This initiative involved installing DFA sensors to detect potential faults before they occur, targeting 15 circuits in 2024 with a wildfire risk reduction goal of 0.04985.

Financial Performance Analysis
- Planned Budget: $3,000,000
- Actual Expenditure: $2,390,290
- Variance: -$609,710 (-20.32% underspend)
- PG&E Justification: The underspend was primarily due to deferred engineering work, as seven planned readiness projects for 2025 did not begin in 2024.

Operational Impact and Risk Reduction
PG&E completed installations on 17 circuits; however, due to delays with certain initially planned circuits, alternative circuits with lower wildfire risk were substituted. As a result, although more installations were completed than originally planned, the overall wildfire risk reduction achieved was lower than initially targeted.

Assessment and Conclusion
PG&E partially completed this initiative, exceeding installation targets but achieving lower wildfire risk reduction than planned due to circuit substitutions.

SA-11 - Early Fault Detection (EFD) Installations

Strategic Overview and Risk Mitigation
This initiative aimed to install EFD sensors on two circuits to detect incipient faults, targeting a wildfire risk reduction goal of 0.00482.

Financial Performance Analysis

- Planned Budget: $7,000,000
- Actual Expenditure: $2,802,430
- Variance: -$4,197,570 (-59.97% underspend)
- PG&E Justification: The underspend was attributed to work deferrals resulting from resource and scheduling issues, as well as lower-than-expected unit costs.

Operational Impact and Risk Reduction
Despite significant underspending and work deferrals, PG&E completed EFD installations on both targeted circuits, achieving the planned reduction in wildfire risk.

Assessment and Conclusion
PG&E achieved operational targets and intended risk reduction. The underspend reflects deferred readiness work and cost efficiencies.

SA-12 - Evaluate the use and effectiveness of real-time monitoring tools

Although this initiative is not identified with targets in PG&E's Q4 QDR Table 1, it was shown to be included in the financial tables from Q4 QDR Table 11. Since the initiative is not part of Q4 QDR Table 1, this initiative is not part of the IE's Focus or Not-Focus Initiative review within this report. However, since this initiative was identified in Q4 QDR Table 11 and the absolute percent difference between budgeted and actual for this item is less than 10%, the WMP Planned Spend ($) and EC-Claimed Actual Spend ($ and % from budget) are as follows:

- WMP Planned Spend ($): $0
- EC-Claimed Actual Spend ($ and % from budget): $0.00 (+0.0%)

4.3.3 Synthesis of Findings

4.3.3.1 Initiative Review

PG&E consistently met or exceeded its targets across all three situational awareness initiatives, demonstrating a strong commitment to enhancing grid monitoring capabilities for wildfire risk reduction. The overall wildfire risk reduction achieved appears substantial, particularly given the strategic placement of sensors in HFTDs and the expansion of Distribution Fault Anticipation (DFA) and Early Fault Detection (EFD) sensor installations. The utility's recordkeeping and data accuracy practices are excellent, with detailed documentation provided for each initiative, including installation records, location data,

completion dates, and system integration evidence. A notable highlight is the significant overachievement in EFD sensor installations, indicating a strong commitment to enhancing grid situational awareness. Future performance improvements are implied through the expansion of initiatives, such as the increase in DFA sensor installations from the previous year and the overachievement in EFD sensor deployments. This suggests a scaling up of technology and potential for accelerated implementation in future years. Overall, PG&E's performance across these initiatives showcases a well-managed approach to implementing critical safety measures, with a proactive stance towards enhancing maintenance and fault detection strategies to mitigate wildfire risks.

4.3.3.2 Funding Verification

Budget and Expenditure Summary: The Situational Awareness and Forecasting category had a total planned budget of $19,748 with actual expenditures of $13,910, representing a 29.6% variance below budget. The category's overall expenditure exceeded the 10% variance threshold.

Initiatives with Significant Variances: Of the 12 total initiatives in this category, 4 (33%) had absolute percent differences exceeding 10%. The most common reasons for variances included:

- Early fault detection installations achieved 60% cost savings through work deferrals and lower-than-expected unit costs, while still meeting the target of installing sensors on two circuits for enhanced fault detection capabilities
- Distribution fault anticipation programs experienced 20% budget reduction due to deferred engineering work for seven readiness projects postponed to 2025, though operational targets were exceeded with 17 sensors installed versus 15 planned
- Technology infrastructure improvements for fire potential modeling required 41% increased capital investment for AWS migration and PSPS dashboard development, offset by 34% operational cost savings through computing efficiencies

Key Trends and Funding Compliance: Despite variances below budget, field-verifiable initiatives met or exceeded operational targets. The distribution fault anticipation initiative completed 113% of target while line sensor installations exceeded targets by installing sensors on 45 circuits versus 40 planned. The category's funding patterns indicate cost efficiencies and scope refinements rather than performance impacts, with all initiatives achieving their intended wildfire risk reduction goals despite reduced expenditures.

4.4 EMERGENCY PREPAREDNESS

4.4.1 Initiative Summary Table

Table 50: Initiative Summary Table (Spend in Thousand $)

Initiative Number, WMP Section Number, and Name	WMP – Initiative Target	EC-Claimed Progress	EC-Claimed Initiative Status	Sample Size[17]	Sample Validation Rate (%)[18, 19]	Verification Method	IE Finding on Initiative (Initiative Validation Rate)[20], [21]	WMP – Planned Spend ($)	EC-Claimed Actual Spend ($ and % from budget)	Satisfied Risk Reduction Goal?[22]
EP-01 - 8.4.2.3.1 - Complete PSPS and Wildfire Tabletop and Functional Exercises	Complete PSPS and Wildfire Tabletop and Functional Exercise Annually	The 2024 Wildfire and PSPS Tabletop and Functional exercises are complete	Complete	3	100%	Wildfire Tabletop Exercise After-Action Report (DR016) PSPS Tabletop Exercise After-Action Report (DR016) PSPS and Wildfire Full Scale Exercise (DR016)	Initiative Validated (100%)	$0	$0.00 (+0.0%)	No goal provided
EP-06, 8.4.3.1 Review & Revise CERP and the Two Wildfire-Related Annexes	3 Revised Documents	3 Revised Documents	Complete	N/A	N/A	PSPS Annex CERP Wildfire Annex Company Emergency Response Plan Standard	Initiative Validated (100%)	$0	$0.00 (+0.0%)	No goal provided
PS-06, 8.5.3, Provide Portable Batteries to PG&E Customers	4,000 Batteries Provided	4,376 Batteries Provided	Complete	18 Batteries Provided	100%	Batteries Delivered Summaries Agreement to Accept Equipment Forms (DR029)	Initiative Validated (109%)	$13,064	$13,197.42 (+1.0%)	No goal provided
PS-07, 9.1.5 Reduce PSPS Impacts	9,980 PSPS Impact Events	10,529 PSPS Impact Events	Complete	18 PSPS Impact Events	100%	Customer Impact Summary GH-04 Customer Impact GH-09 Customer Impact	Initiative Validated (105%)	$0	$0.00 (+0.0%)	No goal provided
PS-11, 9.1.2 Pilot Using Drones for PSPS Restoration	Pilot using drones for PSPS restoration and/or damage assessment to improve PSPS outage restoration time.	PG&E Completed the assessment and findings were presented in PG&E's WRGSC on Nov 14, 2024	Complete	N/A	N/A	PG&E Written Response UAS PSPS Patrols Report (DR031)	Initiative Validated (100%)	$0	$0.00 (+0.0%)	No goal provided

[17] N/A in the Sample Size column means that no target was provided by the EC, or the target was qualitative and did not have a sampling component.
[18] Sample Validation is determined by taking the number of sampling data validated and dividing by the sampling request.
[19] N/A in the Sample Validation column means that no sampling was reviewed; therefore, no validation rate was applied.
[20] As detailed in Energy Safety's issued IE ARC Outline for WMP Compliance Year 2024 document, if the total initiative validation is greater or equal to 95%, the initiative is considered validated by the IE.
[21] The Initiative Validation Rate is determined by taking the Sample Validation Rate and multiplying by the EC-claimed amount, this estimate is then divided by the WMP Target amount to determine the validation rate.
[22] N/A in the Risk Reduction Goal column means that no goal was provided by the EC.

4.4.2 Written Detail for Initiatives

4.4.2.1 Initiative Review – Findings & Method

EP-01 - 8.4.2.3.1 - Complete PSPS and Wildfire Tabletop and Functional Exercises – Non-Focus & Non-Field Verifiable

PSPS and wildfire tabletop and functional exercises enhance PG&E's readiness for potential wildfire events and Public Safety Power Shutoffs (PSPS) through structured simulations and scenario-based training. PG&E's 2023–2025 WMP established a 2024 target to complete these exercises, with no specific risk reduction goal identified.

According to PG&E's 2024 Q4 QDR, the utility completed all planned wildfire and PSPS tabletop and functional exercises for 2024, meeting its annual target.

In response to Data Request DR016, PG&E provided detailed after-action reports, including:

- Wildfire Tabletop Exercise After-Action Report
- PSPS Tabletop Exercise After-Action Report
- PSPS and Wildfire Full Scale Exercise After-Action Report

The IE reviewed each of these after-action reports, confirming their completion and thoroughness. No issues or discrepancies were identified during the review.

Based on the review of documentation, the IE validates this initiative.

Table 51: Complete PSPS and Wildfire Tabletop and Functional Exercises Summary

2024 Target	2024 ARC	2024 Q4 QDR	DR016 Response	Summary
Complete PSPS and Wildfire Tabletop Functional Exercises	The 2024 Wildfire and PSPS Tabletop and Functional exercises are complete	The 2024 Wildfire and PSPS Tabletop and Functional exercises are complete	The 2024 Wildfire and PSPS Tabletop and Functional exercises are complete	Initiative Validated

EP-06, 8.4.3.1 - Review & Revise CERP and the Two Wildfire-Related Annexes – Non-Focus & Non-Field Verifiable

EP-06 outlines PG&E's target per table 8-35 of the WMP to annually review and revise, if needed, the Company Emergency Response Plan (CERP) and the two wildfire-related annexes (the Wildfire Annex and the PSPS Annex).

PG&E provided frontload data for this initiative which included four (4) documents: the Company Emergency Response Plan Standard, Company Emergency Response Plan (CERP), Public Safety Power Shutoff (PSPS) Annex, and Wildfire Annex.

The Company Emergency Response Plan Standard outlines the requirements, training process, revision cycle, risk identification and prioritization, and responsibilities for the development revision and approval of the CERP and both annexes. This document includes a publication date of 09/20/2024 and is currently on revision eight (8). Table 1 of section 9 confirms the revision cycle and highlights that review and publication are coordinated to correspond with downtimes for each hazard when possible.

The CERP provided contains a published date of 11/29/2024 and is currently on version 10. Pages ix-xii provide a clear change history for the entirety of 2024. This table included the section that had changes, the person responsible, a description of the changes made, and the date of the changes. A total of 60 changes were made to the CERP in 2024 and these changes span all sections of the document, including tables and appendices. The documentation reflects that a revision occurred during 2024.

Both the PSPS and Wildfire Annex are formatted similarly to the CERP document with a change record, however, no date is provided for these changes. The PSPS Annex has a published date of 07/31/24 and is currently on version 9. The Wildfire Annex has a published date of 03/29/24 and is currently on version 5. The documentation reflects that a revision occurred during 2024. Based upon this analysis and the documentation received, the IE has validated this initiative.

Table 52: Review & Revise CERP and the Two Wildfire-Related Annexes Summary

2024 Target	2024 ARC	2024 Q4 QDR	Frontload Data Response	Summary
3 Documents Reviewed/Revised	3 Documents Reviewed/Revised	3 Documents Reviewed/Revised	3 Documents Reviewed/Revised	Initiative Validated

PS-06, 8.5.3 - Provide Portable Batteries to PG&E Customers – Non-Focus & Non-Field Verifiable

PS-06 focuses on reducing hardships for Access and Functional Needs (AFN) customers during Public Safety Power Shutoff (PSPS) events by delivering critical life-sustaining resources such as portable batteries. For 2024, the WMP set a target of delivering 4,000 new or replacement portable batteries to PG&E customers, particularly those in high fire threat areas, and with medical or accessibility vulnerabilities. According to PG&E's data submission, 3,744 batteries were delivered directly to customer locations listed in the

initiative's Report Summary. Additionally, PG&E accounted for 603 more batteries distributed through the Disability Disaster Access and Resources Program (CFiLC), bringing the cumulative total to 4,347 batteries delivered in 2024 which surpasses the stated PS-06 target.

PG&E provided a report summary and supporting documentation, including individual customer delivery waivers signed by recipients and contractors, confirming 2024 deliveries. These waivers included customer names, contact information, dates, and signatures, demonstrating authenticity and completion. The utility also clarified that the 2,817 entries in the summary represented distinct service points and that selection criteria included AFN classifications and delivery prioritization for customers in High Fire Threat Districts (HFTDs). This supports alignment with PS-06 targeting objectives and WMP goals. Based on the submitted evidence and confirmed deliveries, the IE has validated this initiative.

Table 53: Provide Portable Batteries to PG&E Customers Summary

2024 Target	2024 ARC	2024 Q4 QDR	Frontload Data Response	Summary
4,000 Batteries Provided	4,357 Batteries Provided	4,376 Batteries Provided	4,376 Batteries Provided	Initiative Validated

PS-07, 9.1.5 - Reduce PSPS Impacts – Non-Focus & Non-Field Verifiable

PS-07 outlines how PG&E aims to reduce PSPS impacts by roughly 38,000 customer events for the 2023-2025 WMP cycle. The EC aims to do this by completing planned wildfire mitigation projects such as MSO switch replacements which aligns with initiative GH-09 and undergrounding which aligns with initiative GH-04. PG&E set a target of 9,980 customer events mitigated for 2024 by completing the actions outlined in GH-04 and GH-09.

PG&E provided frontload documentation related to this initiative that included three (3) documents: the PS-07 PSPS Customer Impact Summary, GH-04 System hardening Customer Impact spreadsheet, and GH-09 MSO Switch Replacement Customer Impact spreadsheet.

The PSPS Customer Impact Red Summary contains calculations that demonstrate how PG&E is achieving the claimed number of 10,491 customer events mitigated. By completing undergrounding efforts outlined in GH-04, PG&E claims that the customer count mitigated is 39.92 events per mile. Across all four (4) quarters of 2024, PG&E states that 257.84 miles of undergrounding took place which is verified by both Table 1 of QDR4 and the GH-04 System Hardening Customer Impacts spreadsheet provided. Similarly, PG&E states that 7.59 customer events will be mitigated per MSO device replaced. Across all four (4) quarters,

PG&E states that 26 devices were replaced which is verified by both Table 1 of QDR4 and the GH-09 MSO Switch Replacement spreadsheet provided. Both of these efforts combined led PG&E to state that 10,491 customer events were mitigated for 2024 by the completion of GH-04 and GH-09.

Based upon this analysis and the documentation provided, the IE has validated this initiative.

Table 54: Reduce PSPS Impacts Summary

2024 Target	2024 ARC	2024 Q4 QDR	Frontload Data Response	Summary
9,980 Customer Events Mitigated	10,491 Customer Events Mitigated	10,529 Customer Events Mitigated	10,491 Customer Events Mitigated	Initiative Validated

PS-11 – 9.1.2 - Pilot Using Drones for PSPS Restoration – Non-Focus & Non-Field Verifiable

PS-11 is a three-year pilot program launched by PG&E to assess the feasibility and effectiveness of using Unmanned Aerial Systems (UAS) to support Public Safety Power Shutoff (PSPS) restoration activities. The initiative seeks to determine whether drone-based patrols and damage assessments can enhance restoration times and situational awareness during PSPS events.

In response to DR031, PG&E provided a formal status update by the supervisor of UAS Operations and a UAS PSPS Patrols Power Point Analysis. While initial deployments highlighted benefits in certain constrained environments, such as hard-to-reach or weather-restricted areas, PG&E identified several operational limitations including airspace coordination requirements, launch zone accessibility, and performance constraints during adverse weather. Though helicopters remain the primary asset for aerial patrols, the utility is continuing to explore enhancements to drone capabilities, including preplanned routes and mobile command support, to augment future PSPS response capacity.

The documentation reviewed by the IE demonstrates a clear operational framework and outlines both successes and challenges encountered during the pilot program. Based upon this analysis and the documentation provided, the IE has validated this initiative.

Table 55: Pilot Using Drones for PSPS Restoration Summary

2024 Target	2024 ARC	2024 Q4 QDR	Frontload Data Response	Summary
Documentation presented to the Wildfire Risk Governance Steering Committee to show results of the pilot program effectiveness	PG&E has completed the objective and the findings were presented in PG&E's WRGSC on November 14, 2024.	PG&E has completed the objective and the findings were presented in PG&E's WRGSC on November 14, 2024.	Documentation was provided to the Wildfire Risk Governance Steering Committee	Initiative Validated

4.4.2.2 Funding Verification – Findings

EP-01 - Complete PSPS and Wildfire Tabletop and Functional Exercises

Although this initiative is not identified with targets in PG&E's Q4 QDR Table 1, it was shown to be included in the financial tables from Q4 QDR Table 11. Since the initiative is not part of Q4 QDR Table 1, this initiative is not part of the IE's Focus or Not-Focus Initiative review within this report. However, since this initiative was identified in Q4 QDR Table 11 and the absolute percent difference between budgeted and actual for this item is less than 10%, the WMP Planned Spend ($) and EC-Claimed Actual Spend ($ and % from budget) are as follows:

- WMP Planned Spend ($): $0
- EC-Claimed Actual Spend ($ and % from budget): $0.00 (+0.0%)

EP-02 - Maintain all hazards planning and preparedness program in 2023-2025

Although this initiative is not identified with targets in PG&E's Q4 QDR Table 1, it was shown to be included in the financial tables from Q4 QDR Table 11. Since the initiative is not part of Q4 QDR Table 1, this initiative is not part of the IE's Focus or Not-Focus Initiative review within this report. However, since this initiative was identified in Q4 QDR Table 11 and the absolute percent difference between budgeted and actual for this item is less than 10%, the WMP Planned Spend ($) and EC-Claimed Actual Spend ($ and % from budget) are as follows:

- WMP Planned Spend ($): $0
- EC-Claimed Actual Spend ($ and % from budget): $0.00 (+0.0%)

EP-04 - Expand all hazards planning to include additional threats and scenarios in 2023-2025

Although this initiative is not identified with targets in PG&E's Q4 QDR Table 1, it was shown to be included in the financial tables from Q4 QDR Table 11. Since the initiative is not part of Q4 QDR Table 1, this initiative is not part of the IE's Focus or Not-Focus Initiative review within this report. However, since this initiative was identified in Q4 QDR Table 11 and the absolute percent difference between budgeted and actual for this item is less than 10%, the WMP Planned Spend ($) and EC-Claimed Actual Spend ($ and % from budget) are as follows:

- WMP Planned Spend ($): $0
- EC-Claimed Actual Spend ($ and % from budget): $0.00 (+0.0%)

EP-06 - Review, and revise the CERP and 2 Wildfire Related Annexes on a yearly basis

Since the absolute percent difference between budgeted and actual for this item is less than 10%, please refer to Table 50.

EP-07 - Common Operating Picture Technology

Although this initiative is not identified with targets in PG&E's Q4 QDR Table 1, it was shown to be included in the financial tables from Q4 QDR Table 11. Since the initiative is not part of Q4 QDR Table 1, this initiative is not part of the IE's Focus or Not-Focus Initiative review within this report. However, since this initiative was identified in Q4 QDR Table 11 and the absolute percent difference between budgeted and actual for this item is less than 10%, the WMP Planned Spend ($) and EC-Claimed Actual Spend ($ and % from budget) are as follows:

- WMP Planned Spend ($): $0
- EC-Claimed Actual Spend ($ and % from budget): $0.00 (+0.0%)

EP-08 - Threats and Hazards Identification and Risk Assessment (THIRA) updates executive briefings.

Although this initiative is not identified with targets in PG&E's Q4 QDR Table 1, it was shown to be included in the financial tables from Q4 QDR Table 11. Since the initiative is not part of Q4 QDR Table 1, this initiative is not part of the IE's Focus or Not-Focus Initiative review Although this initiative is not identified with targets in PG&E's Q4 QDR Table 1, it was shown to be included in the financial tables from Q4 QDR Table 11. Since the initiative is not part of Q4 QDR Table 1, this initiative is not part of the IE's Focus or Not-Focus Initiative review within this report. However, since this initiative was identified in Q4 QDR Table 11 and the absolute percent difference between budgeted and actual for this item is less than 10%, the WMP Planned Spend ($) and EC-Claimed Actual Spend ($ and % from budget) are as follows:

- WMP Planned Spend ($): $0
- EC-Claimed Actual Spend ($ and % from budget): $0.00 (+0.0%)

EP-09 - County Execute Briefings

Although this initiative is not identified with targets in PG&E's Q4 QDR Table 1, it was shown to be included in the financial tables from Q4 QDR Table 11. Since the initiative is not part of Q4 QDR Table 1, this initiative is not part of the IE's Focus or Not-Focus Initiative review within this report. However, since this initiative was identified in Q4 QDR Table 11 and the absolute percent difference between budgeted and actual for this item is less than 10%, the WMP Planned Spend ($) and EC-Claimed Actual Spend ($ and % from budget) are as follows:

- WMP Planned Spend ($): $0
- EC-Claimed Actual Spend ($ and % from budget): $0.00 (+0.0%)

PS-01 - Evaluate enhancements for the PSPS Transmission guidance to enhance focus of PSPS events.

Although this initiative is not identified with targets in PG&E's Q4 QDR Table 1, it was shown to be included in the financial tables from Q4 QDR Table 11. Since the initiative is not part of Q4 QDR Table 1, this initiative is not part of the IE's Focus or Not-Focus Initiative review within this report. However, since this initiative was identified in Q4 QDR Table 11 and the absolute percent difference between budgeted and actual for this item is less than 10%, the WMP Planned Spend ($) and EC-Claimed Actual Spend ($ and % from budget) are as follows:

- WMP Planned Spend ($): $0
- EC-Claimed Actual Spend ($ and % from budget): $0.00 (+0.0%)

PS-02 - Evaluate incorporation of approved IPW enhancements into the PSPS Distribution guidance to enhance focus of PSPS events.

Although this initiative is not identified with targets in PG&E's Q4 QDR Table 1, it was shown to be included in the financial tables from Q4 QDR Table 11. Since the initiative is not part of Q4 QDR Table 1, this initiative is not part of the IE's Focus or Not-Focus Initiative review within this report. However, since this initiative was identified in Q4 QDR Table 11 and the absolute percent difference between budgeted and actual for this item is less than 10%, the WMP Planned Spend ($) and EC-Claimed Actual Spend ($ and % from budget) are as follows:

- WMP Planned Spend ($): $0
- EC-Claimed Actual Spend ($ and % from budget): $0.00 (+0.0%)

PS-05 - Evaluate the transition of the Portable Battery Program to permanent battery solutions for PG&E customers at risk of PSPS or EPSS, focusing on but not limited to AFN, MBL, and self-identified vulnerable populations.

Although this initiative is not identified with targets in PG&E's Q4 QDR Table 1, it was shown to be included in the financial tables from Q4 QDR Table 11. Since the initiative is not part of Q4 QDR Table 1, this initiative is not part of the IE's Focus or Not-Focus Initiative review within this report. However, since this initiative was identified in Q4 QDR Table 11 and the absolute percent difference between budgeted and actual for this item is less than 10%, the WMP Planned Spend ($) and EC-Claimed Actual Spend ($ and % from budget) are as follows:

- WMP Planned Spend ($): $0
- EC-Claimed Actual Spend ($ and % from budget): $0.00 (+0.0%)

PS-06 - Provide portable batteries to PG&E customers

Although this initiative is not identified with targets in PG&E's Q4 QDR Table 1, it was shown to be included in the financial tables from Q4 QDR Table 11. Since the initiative is not part of Q4 QDR Table 1, this initiative is not part of the IE's Focus or Not-Focus Initiative review within this report. However, since this initiative was identified in Q4 QDR Table 11 and the absolute percent difference between budgeted and actual for this item is less than 10%, the WMP Planned Spend ($) and EC-Claimed Actual Spend ($ and % from budget) are as follows:

- WMP Planned Spend ($): $0
- EC-Claimed Actual Spend ($ and % from budget): $0.00 (+0.0%)

PS-07 - PSPS Customer Impact Reduction

Although this initiative is not identified with targets in PG&E's Q4 QDR Table 1, it was shown to be included in the financial tables from Q4 QDR Table 11. Since the initiative is not part of Q4 QDR Table 1, this initiative is not part of the IE's Focus or Not-Focus Initiative review within this report. However, since this initiative was identified in Q4 QDR Table 11 and the absolute percent difference between budgeted and actual for this item is less than 10%, the WMP Planned Spend ($) and EC-Claimed Actual Spend ($ and % from budget) are as follows:

- WMP Planned Spend ($): $0
- EC-Claimed Actual Spend ($ and % from budget): $0.00 (+0.0%)

PS-08 - Evaluate emerging technologies for transmission and distribution that may further reduce scale, scope, or frequency of PSPS.

Although this initiative is not identified with targets in PG&E's Q4 QDR Table 1, it was shown to be included in the financial tables from Q4 QDR Table 11. Since the initiative is not part of Q4 QDR Table 1, this initiative is not part of the IE's Focus or Not-Focus Initiative review within this report. However, since this initiative was identified in Q4 QDR Table 11 and the absolute percent difference between budgeted and actual for this item is less than 10%, the WMP Planned Spend ($) and EC-Claimed Actual Spend ($ and % from budget) are as follows:

- WMP Planned Spend ($): $0
- EC-Claimed Actual Spend ($ and % from budget): $0.00 (+0.0%)

PS-09 - Reduce PSPS size, duration, or frequency over the next ten years as part of our 10,000-mile undergrounding program.

Although this initiative is not identified with targets in PG&E's Q4 QDR Table 1, it was shown to be included in the financial tables from Q4 QDR Table 11. Since the initiative is not part of Q4 QDR Table 1, this initiative is not part of the IE's Focus or Not-Focus Initiative review within this report. However, since this initiative was identified in Q4 QDR Table 11 and the absolute percent difference between budgeted and actual for this item is less than 10%, the WMP Planned Spend ($) and EC-Claimed Actual Spend ($ and % from budget) are as follows:

- WMP Planned Spend ($): $0
- EC-Claimed Actual Spend ($ and % from budget): $0.00 (+0.0%)

PS-10 - Continue sharing PSPS lessons learned

Although this initiative is not identified with targets in PG&E's Q4 QDR Table 1, it was shown to be included in the financial tables from Q4 QDR Table 11. Since the initiative is not part of Q4 QDR Table 1, this initiative is not part of the IE's Focus or Not-Focus Initiative review within this report. However, since this initiative was identified in Q4 QDR Table 11 and the absolute percent difference between budgeted and actual for this item is less than 10%, the WMP Planned Spend ($) and EC-Claimed Actual Spend ($ and % from budget) are as follows:

- WMP Planned Spend ($): $0
- EC-Claimed Actual Spend ($ and % from budget): $0.00 (+0.0%)

PS-11 - Pilot using drones for PSPS restoration

Although this initiative is not identified with targets in PG&E's Q4 QDR Table 1, it was shown to be included in the financial tables from Q4 QDR Table 11. Since the initiative is not part of Q4 QDR Table 1, this initiative is not part of the IE's Focus or Not-Focus Initiative review within this report. However, since this initiative was identified in Q4 QDR Table 11 and the absolute percent difference between budgeted and actual for this item is less than 10%, the WMP Planned Spend ($) and EC-Claimed Actual Spend ($ and % from budget) are as follows:

- WMP Planned Spend ($): $0
- EC-Claimed Actual Spend ($ and % from budget): $0.00 (+0.0%)

4.4.3 Synthesis of Findings

4.4.3.1 Initiative Review

PG&E demonstrated a strong commitment to the emergency preparedness category by achieving or exceeding the targets outlined in the 2024 WMP. Through these accomplishments, PG&E continues to enhance their emergency preparedness programs, find ways to mitigate PSPS impacts, and explore innovative technological advancements to provide quicker recovery time when emergencies occur.

PG&E made strides in mitigating PSPS event disruption on their customers through both the portable battery program and the reduction of PSPS impacts. With a total of 4,347 battery units delivered, PG&E surpassed their target goal and was able to provide back-up power resources to vulnerable customers in case a PSPS event does occur. Similarly, through other initiative actions such as the MSO replacement effort and the undergrounding of overhead electrical lines, PG&E contributed substantially to long-term wildfire risk mitigation and therefore, the mitigation of PSPS and emergency events.

The recordkeeping displayed by PG&E was excellent with all initiatives have substantial documentation provided to demonstrate completion and effectiveness. Change history, version controls, tracking of deliveries, and impact calculations all underscore PG&E's commitment to being ready when an emergency happens.

The drone pilot program highlights PG&E's willingness to explore innovative technologies, even when faced with operational challenges. Although both benefits and limitations were reported in the drone pilot program, PG&E remains committed to exploring new ways to enhance the operational ability of drones for emergency response.

The emergency preparedness initiatives demonstrate PG&E's thorough strategy to address wildfire risks, and more importantly, provide support and response capabilities for all customers, especially vulnerable ones.

4.4.3.2 Funding Verification

Budget and Expenditure Summary: The Emergency Preparedness category had a total planned budget of $13,064 with actual expenditures of $13,197, representing a 1.0% variance above budget. The category's overall expenditure remained within 10% of the planned budget allocation.

Initiatives with Significant Variances: Of the 16 total initiatives in this category, 0 (0%) had absolute percent differences exceeding 10%. All initiatives maintained precise budget alignment, with the largest variance being only 1.0% for the portable battery program that delivered critical backup power resources to vulnerable customers.

Key Trends and Funding Compliance: The category demonstrated exceptional budget control while exceeding operational targets across all tracked initiatives. The portable battery program delivered 109% of target (4,376 batteries versus 4,000 planned) supporting Access and Functional Needs customers during PSPS events. The PSPS impact reduction initiative achieved 105% of target (10,529 customer events mitigated versus 9,980 planned) through effective integration with grid hardening initiatives. The funding stability enabled consistent execution across all emergency preparedness objectives including tabletop exercises, plan revisions, and drone pilot programs for PSPS restoration.

4.5 COMMUNITY OUTREACH AND ENGAGEMENT

4.5.1 Initiative Summary Table

Table 56: Initiative Summary Table (Spend in Thousand $)

Initiative Number, WMP Section Number, and Name	WMP – Initiative Target	EC-Claimed Progress	EC-Claimed Initiative Status	Sample Size	Sample Validation Rate (%)[23]	Verification Method	IE Finding on Initiative (Initiative Validation Rate)[24], [25]	WMP – Planned Spend ($)	EC-Claimed Actual Spend ($ and % from budget)	Satisfied Risk Reduction Goal?[26]
CO-01, 8.5.2, Community Engagement Meetings	22 Meetings	25 Meetings	Complete	10 Meetings	100%	10 Post-Event Reports (DR014)	Initiative Validated (113%)	$0	$0.00 (+0.0%)	N/A
CO-02, 8.5.2, Community Engagement Surveys	2 Surveys	2 Surveys	Complete	2 Surveys	100%	Pre-Season Survey Analysis Report Post-Season Survey Analysis Report	Initiative Validated (100%)	$0	$0.00 (+0.0%)	N/A

[23] Sample Validation is determined by taking the number of sampling data validated and dividing by the sampling request.
[24] As detailed in Energy Safety's issued IE ARC Outline for WMP Compliance Year 2024 document, if the total initiative validation is greater or equal to 95%, the initiative is considered validated by the IE.
[25] The Initiative Validation Rate is determined by taking the Sample Validation Rate and multiplying by the EC-claimed amount, this estimate is then divided by the WMP Target amount to determine the validation rate.
[26] N/A in the Risk Reduction Goal column means that no goal was provided by the EC.

4.5.2 Written Detail for Initiatives

4.5.2.1 Initiative Review – Findings & Method

CO-01, 8.5.2 - Community Engagement – Meetings – Non-Focus & Non-Field Verifiable

CO-01 outlines PG&E's commitment to holding community engagement meetings which aim to educate agencies, customers, and property owners on the utility's wildfire mitigation practices, such as EPSS, community resilience, and system hardening. In 2024, PG&E had a goal of holding 22 community meetings within the five regions of service. These meetings could be a mix of webinars, open houses, town halls, and/or answer center. PG&E claimed to have completed 25 events during 2024 which included Regional Townhalls, Safety Webinars, and In-Person Open Houses.

In DR014, the IE requested documentation for 10 events that verify they took place, this documentation could include meeting minutes, agendas, presentations, or reports. PG&E provided 10 post-event reports for each of the events identified by the IE. Each of these reports contained the date the event was held, number of attendees, and PG&E representatives. The report included a high-level summary of the event, description of outreach, overview of the feedback received, and a link to the presentation and recording of the event. At the end of the report, PG&E recorded questions that were asked during the event. Based upon this analysis and the documentation received, the IE has validated this initiative.

Table 57: Community Engagement – Meetings Summary

2024 Target	2024 ARC	2024 Q4 QDR	DR014 Response	Summary
22 Meetings	25 Meetings	This Initiative was Completed in Q3	25 Meetings	Initiative Validated

CO-02, 8.5.2 - Community Engagement – Surveys – Non-Focus & Non-Field Verifiable

CO-02 outlines PG&E's commitment to conduct two PSPS education and outreach surveys. The utility conducts a pre-wildfire season survey and a post-wildfire season survey of the public to evaluate the effectiveness of the education and outreach efforts prior to, during, and immediately after peak PSPS and wildfire seasons. The survey includes questions related to the EPSS Program and typically results in over 2,200 completed surveys.

PG&E provided both the pre-season and post-season 2024 Wildfire Safety-PSPS Outreach Survey with publish dates of November 14, 2024, and March 11, 2025, respectively. These

reports provide an in-depth analysis of the effectiveness of PG&E's outreach efforts. The report starts with the methodology and key findings, then the report goes into detailed findings. Detailed findings include analysis on items such as preferred language, customer ability to recall messaging, and where customers receive most of their communication. The report provides findings on customer satisfaction with PG&E's wildfire safety efforts and includes details on PSPS event messaging. Each page of the report includes the relevant question at the bottom so the viewer can gain needed context for understanding how the data was derived. This documentation shows that PG&E is taking the required steps to ensure that their customers are receiving and understanding information related to wildfire and PSPS events. Based upon this analysis and the documentation received, the IE has validated this initiative.

Table 58: Community Engagement – Surveys Summary

2024 Target	2024 ARC	2024 Q4 QDR	Frontload Data Response	Summary
2 Surveys	2 Surveys	2 Surveys	2 Survey Results Analysis	Initiative Validated

4.5.2.2 Funding Verification – Findings

CO-01 - Community Engagement – Meetings

Since the absolute percent difference between budgeted and actual for this item is less than 10%, please refer to Table 56.

CO-02 - Community Engagement – Surveys

Since the absolute percent difference between budgeted and actual for this item is less than 10%, please refer to Table 56.

CO-04 - Community Engagement – Outreach to HFRA Infrastructure Customers

Although this initiative is not identified with targets in PG&E's Q4 QDR Table 1, it was shown to be included in the financial tables from Q4 QDR Table 11. Since the initiative is not part of Q4 QDR Table 1, this initiative is not part of the IE's Focus or Not-Focus Initiative review within this report. However, since this initiative was identified in Q4 QDR Table 11 and the absolute percent difference between budgeted and actual for this item is less than 10%, the WMP Planned Spend ($) and EC-Claimed Actual Spend ($ and % from budget) are as follows:

- WMP Planned Spend ($): $0

- EC-Claimed Actual Spend ($ and % from budget): $0.00 (+0.0%)

CO-05 - Community Engagement – Outage Preparedness Campaign

Although this initiative is not identified with targets in PG&E's Q4 QDR Table 1, it was shown to be included in the financial tables from Q4 QDR Table 11. Since the initiative is not part of Q4 QDR Table 1, this initiative is not part of the IE's Focus or Not-Focus Initiative review within this report. However, since this initiative was identified in Q4 QDR Table 11 and the absolute percent difference between budgeted and actual for this item is less than 10%, the WMP Planned Spend ($) and EC-Claimed Actual Spend ($ and % from budget) are as follows:

- WMP Planned Spend ($): $0
- EC-Claimed Actual Spend ($ and % from budget): $0.00 (+0.0%)

4.5.3 Synthesis of Findings

4.5.3.1 Initiative Review

PG&E's community engagement initiatives demonstrate a comprehensive approach to wildfire risk reduction through public education and feedback collection. The utility not only met but exceeded its targets for community meetings and conducted both pre- and post-wildfire season surveys as targeted. This overachievement suggests a strong commitment to community engagement and wildfire risk reduction. The level of risk reduction is assessed as significant, evidenced by the extensive outreach efforts and the detailed analysis of survey results, which indicate improved public awareness and preparedness.

PG&E's recordkeeping and data management is extensive, with thorough documentation provided for both initiatives. For CO-01, post-event reports included essential details such as attendance, summaries, and Q&A sessions. CO-02's survey reports demonstrated in-depth analysis of outreach effectiveness.

While specific plans for future performance improvement aren't explicitly mentioned, the comprehensive nature of the survey analysis suggests that PG&E is well-positioned to refining its outreach strategies based on the feedback received.

4.5.3.2 Funding Verification

Budget and Expenditure Summary: The Community Outreach and Engagement category had a total planned budget of $0 with actual expenditures of $0, reflecting activities funded through operational budgets rather than specific WMP allocations.

Initiatives with Significant Variances: Of the 4 total initiatives in this category, 0 (0%) had absolute percent differences exceeding 10%. All initiatives operated through integration

with standard operational functions, enabling community engagement activities without requiring dedicated WMP funding allocations.

Key Trends and Funding Compliance: Despite zero dedicated WMP funding, tracked initiatives exceeded targets through operational budget support. Community engagement meetings achieved 113% of target (25 meetings versus 22 planned), including regional townhalls, safety webinars, and in-person open houses. Pre-season and post-season surveys were completed as required, with over 2,200 responses evaluating PSPS and wildfire safety outreach effectiveness. The category's approach demonstrates integration of community engagement activities within standard operational functions while maintaining accountability for WMP commitments and wildfire risk communication objectives.

5. EVALUATION OF QA/QC PROGRAMS

Quality Assurance and Quality Control (QA/QC) are essential in ensuring the thoroughness and reliability of an EC's operations. This section presents a comprehensive assessment of PG&E's QA/QC program, utilizing a structured approach based on five key dimensions:

- Roles and Responsibilities
- Quality Culture
- Quality Management System (QMS)
- Quality Inspections and Audits
- QA/QC Technology Adoption

By examining these critical areas, the IE aims to provide a holistic view of the EC's quality practices, highlighting areas of strength, identifying industry-leading best practices, and pinpointing opportunities for enhancement. Each category was evaluated on a 0-4 scale, reflecting the EC's maturity in implementing QA/QC processes: 0 – Not Implemented; 1 – Initiated; 2 – Applied; 3 – Routine; 4 – Mastered. This scale indicates the progression from no implementation to complete mastery of QA/QC practices. The evaluation framework allows a thorough analysis of how quality is integrated into the EC's structure, culture, systems, and processes.

Roles and Responsibilities

PG&E received a score of '3 – Routine' for Roles and Responsibilities, demonstrating clearly defined and thoroughly implemented roles across various aspects of the QA/QC process. In response to DR001, PG&E provided a comprehensive roles and responsibilities outline, identifying personnel and outlining responsibilities from the oversight of the QA/QC WMP framework to department-specific inspections and audits in Electrical Operations (EO) and Vegetation Management (VM). PG&E has documented procedures in place, such as the RISK-6501 document family, which details communication duties in EO, while the VM Quality Management (VMQM) team conducts weekly Quality Learning Forums with the VM Operations (VMO) Team. QA/QC responsibilities and roles are formally documented through procedures and training materials, ensuring clarity and consistency. PG&E's roles include a Risk Modeling Lead that aligns QA/QC outcomes to wildfire risk prioritization and initiative targeting, demonstrating a risk-based decision-making process. At the field level, supervisors provide direct insight into the application of QA/QC inspections and audits, while Contract Oversight Managers ensure third-party compliance with PG&E's standards and corrective actions. This comprehensive and structured approach to defining and implementing QA/QC roles and responsibilities across its operations demonstrates PG&E's commitment to maintaining quality assurance and control measures.

Quality Culture

PG&E received a score of '3- Routine' in Quality Culture demonstrating a strong commitment to QA/QC importance across the utility. Implemented processes and protocols clearly show that quality culture plays a major role in PG&E's operations, with quality results broadly shared within appropriate departments. When targets are off-track, formal plans are developed, which may include updated training or coaching for teams and contractors involved in WMP implementation. PG&E also utilizes Learning Forums and Operating Reviews to reinforce quality values. Leadership takes an active role in ensuring proper implementation of QA/QC functions by owning "catchback plans" which ensures specific actions are taken to meet quality targets which were previously missed. To reinforce quality expectations, leadership often employs field benchmarks to gauge performance and utilizes various communication methods, including virtual and in-person meetings, forums, and training sessions to outline QA/QC expectations. PG&E demonstrates that necessary training for employees and contractors is occurring and that key personnel are thoroughly involved in QA/QC activities through multiple processes and learning opportunities. This approach demonstrates PG&E's commitment to maintaining and improving its quality culture across the utility.

Quality Management System (QMS)

PG&E received a score of '3 – Routine' for its Quality Management System. The utility employs two primary database systems: Foundry for EOQM and Survey123 for VMQM. Both systems are integrated with the ArcGIS suite, SQL and PowerBI.

At the core of PG&E's data strategy is SQL, which enables efficient management and querying of databases to support data-drive decision-making. PowerBI compliments this by leveraging SQL to generate interactive, extractable reports and dashboards, facilitating clear data presentation and informed business decisions.

Foundry, a sophisticated data analytics platform supporting SQL, has been continuously expanded as PG&E's enterprise data platform. The utility has made significant progress in integrating and standardizing various purpose-built data sources into Foundry. Key systems such as GIS and SAP have been successfully incorporated, with PG&E employing a risk-based prioritization approach to plan and execute this integration work. This strategic consolidation of data resources enhances PG&E's ability to manage and analyze information across its operations effectively.

Quality Inspections and Audits

PG&E received a score of '4 – Mastered' for Quality Inspections and Audits, demonstrating excellence in its audit processes across both EOQM and VMQM.

For EOQM, PG&E conducts comprehensive internal audits, including both post-work and real-time evaluations. The EOQM system of record is used to generate detailed reports on total audits and findings, which may be documented as SAP notifications, Corrective Action Plan (CAP) actions, or in Quality Management (QM) systems. PG&E has established minimum annual sample sizes for both transmission and distribution assets. The utility not only sets targets for audit completion but also implements progressive pass rate goals. By 2025, PG&E aims to achieve a 95% pass rate, with interim targets of 88% and 92%, depending on asset type, for 2024.

In VMQM, PG&E performs various types of inspections and audits, including:

- VM Quality Control (VMQC)
- VM Quality Assurance – Performance (VMQA-P)
- VM Quality Assurance-Asset (VMQA-A)

These audits cover Electrical Distribution, Transmission, and Vegetation Control Pole Clearing. The VM team utilizes the Survey123 application for audit completion, with data stored on a SQL server. Mirroring the EOQM approach, VM audits have both quantity and quality targets. PG&E aims for a 95% pass rate on QA audits performed at QC locations. For QC audits, PG&E has set a pass percentage of 88% and 92% depending on the asset.

Quality processes and protocols for both EOQM and VMQM are reviewed and updated on a yearly basis or every time that the EO or VM Operations Standards and Procedures are updated. This approach to quality inspections and audits across PG&E's operations outlines PG&E's commitment to maintaining high standards of reliability in its QA/QC operations.

QA/QC Technology Adoption

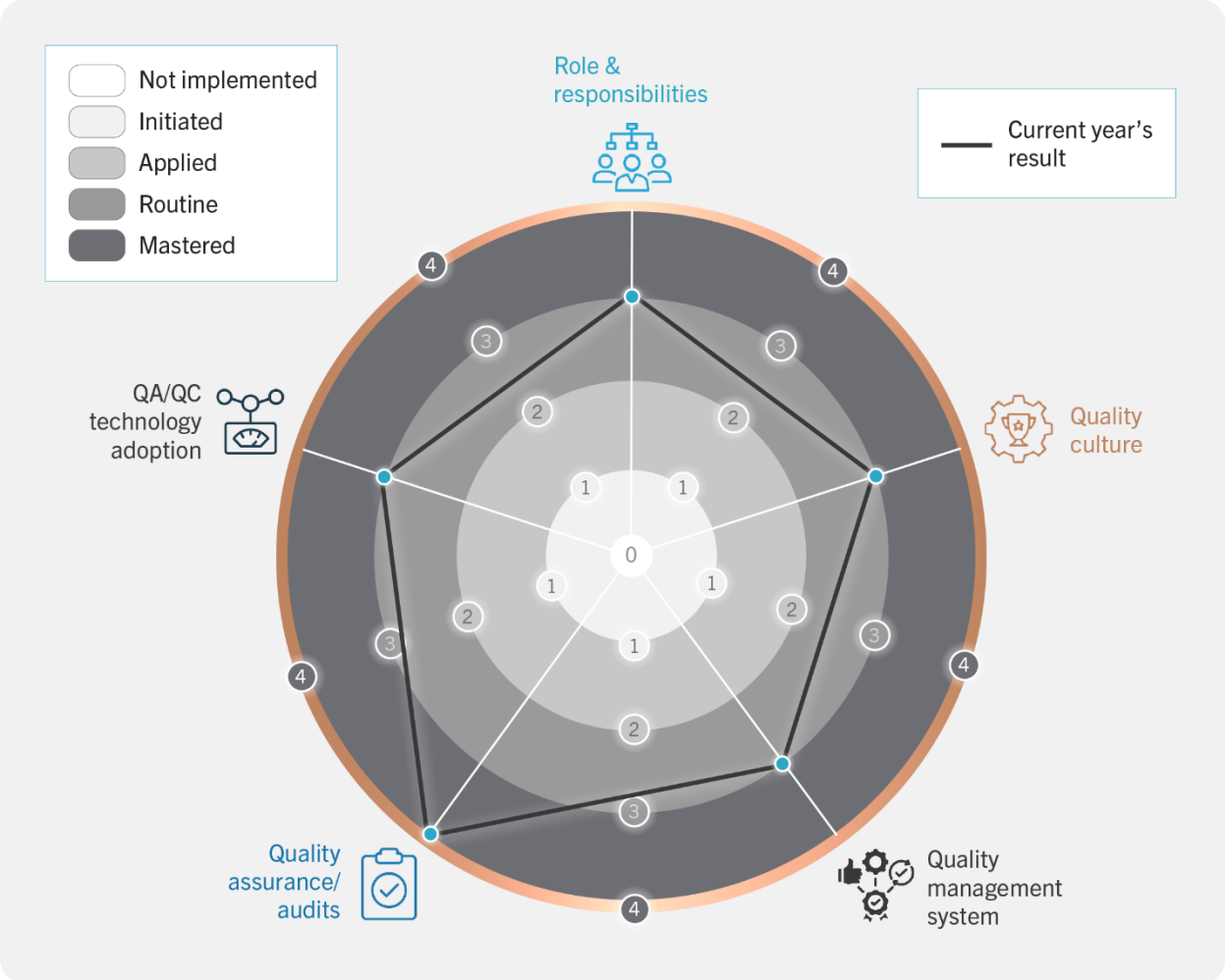
PG&E received a score of '3 – Routine' for QA/QC Technology Adoption, demonstrating a solid commitment to leveraging technology in its QA/QC processes. The utility employs a Technology Integration Lead to support QA/QC implementation through digital tools, remote sensors, and system automation, and documentation across various WMP initiatives demonstrates this.

PG&E utilizes several technology solutions across its QA/QC program, including ArcGIS Field Maps, Survey123, SQL Servers, Foundry, OneVM, and PowerBI Dashboards. PG&E consistently seeks to integrate new technologies into its existing QA/QC programs. The VMQM team has been collaborating closely with the VM Tech Team to enhance visibility into

two key applications: Lemur Map and OneVM. The Lemur Map application allows field workers to collect and input data while accessing the most recent GIS information, while OneVM serves as an integrated VM platform. These improvements have significantly enhanced PG&E's real-time access to all inspected and completed tree work, including access to photos of cleared poles by Vegetation Control.

In a notable advancement for 2024, the EUQM team implemented aerial and drone inspections, identified as a key new technology for the QA/QC program. This implantation, and the others outlined, demonstrates PG&E's ongoing commitment to adopting innovative technologies to further enhance its quality management processes.

Figure 12: QA/QC Maturity Sunburst Chart



6. CONCLUSION

Throughout the 2025 Independent Evaluator process, PG&E demonstrated a strong commitment to the WMP program. They participated with professionalism and cooperation, working diligently to provide the IE with the necessary data for a successful evaluation process. PG&E continues to build upon and implement the objectives and goals outlined in the 2024 WMP.

Historically, grid hardening efforts and vegetation management have proven to be highly effective in mitigating wildfire risk, and PG&E has exceeded in several areas related to these categories. The utility demonstrated its commitment to grid hardening by closing more HFTD/HFRA distribution tags than originally targeted in 2024. PG&E met, and even exceeded in some areas, their schedule inspections for distribution and transmission assets and structures which ensures any potential failure or issues are identified and properly dealt with. PG&E provided several enhancements to its vegetation management database, which allows for standardization of inputs for potential tree removal. They also exceeded their original target of hazard tree mitigation, dealing with trees that pose the greatest ignition risk due to fall-in/contact with lines and equipment.

The ability to detect faults or other power anomalies is critical for not only mitigating ignition risk but for reducing PSPS events as well. PG&E made significant strides in installing several types of sensors to aid in their ability to handle these types of issues and to be ready to respond when an event arises.

Community outreach and trust in the utility are an integral part of the WMP as customers are the ones directly affected by ignition and PSPS events. PG&E not only provided several community outreach events through every quarter of 2024, but more importantly review and analyzed their outreach efforts through both a pre- and post- season survey report. This report helps PG&E identify the areas where they are succeeding, and more importantly, falling short in outreach efforts which can help them focus resources in areas most important for improving community outreach.

Throughout the entire WMP process, PG&E provided proactive communication with the IE. Data was uploaded before engagement from the IE and PG&E made corrections as needed when discrepancies were identified within that data. The recordkeeping exemplified by PG&E was excellent and the data provided was well organized, thorough, and always met what the IE was asking for through data requests. Through these efforts, PG&E has demonstrated a transparent and proactive approach to the data collection portion of the IE ARC process.

PG&E has demonstrated a strong commitment to the WMP and has made significant progress in achieving the objectives and goals outlined for 2024. Through their actions and the evidence provided, PG&E has shown that they are dedicated to mitigating wildfire risk through their implementation of initiatives across all five categories of the WMP. The utility's ability to exceed many of the established targets underscores their diligence and strategic approach to wildfire risk reduction. PG&E's continued efforts to build upon and implement the WMP objectives will be crucial in ensuring the safety and resilience of the communities they serve.

7. ATTACHMENTS

The attachments listed below can be found on a separate Microsoft Excel file titled “PG&E 2025 IE ARC Appendix.”

7.1 CATALOG OF INITIATIVES

7.2 DATA REQUESTS

7.3 SME INTERVIEWS

7.4 LIST OF “FAIL-TO-FUND” INITIATIVES

7.5 PICTURES OF NON-CONFORMANCE (N/A)