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Forest Kaser, Director

September 17, 2026

Dear Stakeholders,

Enclosed is the Office of Energy Infrastructure Safety's (Energy Safety's) Annual Performance Report regarding Pacific Gas and Electric Company's execution of its 2024 Wildfire Mitigation Plan.

This Annual Performance Report is hereby published as of the date of this letter. Pacific Gas and Electric Company may, if it wishes to do so, file a public response to this Annual Performance Report within 14 calendar days of the date of publication. Comments must be submitted to Energy Safety's E-Filing system in the 2024 Annual Performance Report docket.¹

Sincerely,

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Program Manager | Performance Assessment Division
Electrical Infrastructure Directorate
Office of Energy Infrastructure Safety

¹ Submit responses to the [2024-APR](https://efiling.energysafety.ca.gov/EFiling/DocketInformation.aspx?docketnumber=2024-APR) docket via the Office of Energy Infrastructure Safety's E-Filing system here: <https://efiling.energysafety.ca.gov/EFiling/DocketInformation.aspx?docketnumber=2024-APR>



OFFICE OF ENERGY INFRASTRUCTURE SAFETY
2024 ANNUAL PERFORMANCE
REPORT
PACIFIC GAS AND ELECTRIC COMPANY

September 2026

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Executive Summary

Energy Safety's primary objective is to ensure that electrical corporations reduce wildfire risk and adhere to their approved Wildfire Mitigation Plans (WMPs), which are annually filed pursuant to Public Utilities Code section 8385 *et seq.* Energy Safety's annual performance evaluation of Pacific Gas and Electric Company (PG&E) is a comprehensive look at the implementation of its 2024 WMP and its catastrophic wildfire risk reduction initiatives.

PG&E completed 54 of 56 (96%) of its 2024 WMP initiatives. The missed targets were for initiative 8.1.2.5.1 System Hardening Transmission Shunt Splices and initiative 8.2.3.2 Wood and Slash Management. By missing these 2024 WMP targets, PG&E failed to reduce risk on its system in the manner committed to its customers and the people of California through its WMP.

Energy Safety made the following observations and conclusions in this report, which include some areas for performance improvement:

- With respect to data accuracy, PG&E demonstrated several shortcomings during the 2024 performance year. For example, PG&E reported differing actual progress for 24 WMP initiatives (almost half the annual initiative total) in its quarterly data reports, in both tabular and spatial formats, and as compared to its twice-revised 2024 Annual Report on Compliance. With respect to vegetation management, PG&E had poor records for tree inspections completed, and no documentation for its wood and slash management.
- Energy Safety and the independent evaluator noted several locations where 2024 WMP work was reported as complete by PG&E, but was found to be incomplete upon field inspection. This issue was a recurring one for transmission shunt splices and expulsion fuse replacements.
- In general, these types of data reporting problems have persisted for many years, have been identified in prior Energy Safety reports, and are areas in which PG&E's performance must improve.
- Energy Safety's audit of PG&E's 2024 WMP initiative implementation related to its quality assurance and quality control (QA/QC) programs for asset inspections noted that PG&E demonstrated QA/QC program frameworks consistent with its 2024 WMP commitments. However, PG&E's continued refinement of audit methodologies and reporting controls will further enhance visibility into the risks present on its system and identify areas where asset inspection practices might be improved.

While PG&E met nearly all of its WMP commitments during the 2024 performance year, the two missed targets, recurring data quality issues, and the areas for improvement recommended for its QA/QC programs for asset inspections demonstrate that PG&E must continue to improve its performance over time. Energy Safety will scrutinize PG&E's future

WMP performance and continue to report on any failures by PG&E to achieve its own objectives to reduce the risk of catastrophic wildfire in California.

1. Introduction

The Office of Energy Infrastructure Safety's (Energy Safety's) primary objective is to ensure that electrical corporations reduce wildfire risk and adhere to their approved Wildfire Mitigation Plans (WMPs).¹ This Annual Performance Report (APR) presents Energy Safety's statutorily mandated assessment of Pacific Gas and Electric Company's (PG&E's) performance relative to its 2024 targets for initiatives and objectives in its 2023-2025 Base Wildfire Mitigation Plan (2023-2025 Base WMP) and approved Change Order Requests. While the 2023-2025 Base WMP considers activities over a three- and 10-year horizon, this report only addresses targets established for initiatives and objectives to be completed in 2024. Therefore, this report uses the term "2024 WMP" to refer to portions of the 2023-2025 Base WMP and approved Change Order Requests addressed by this report.

In the sections that follow, Energy Safety describes the statutory and regulatory basis for this report, the 2024 WMP, the information supplied by PG&E, the independent evaluation conducted by a third-party independent evaluator that examined PG&E's implementation of its 2024 WMP, and an assessment of how PG&E implemented its 2024 WMP. Finally, Energy Safety provides its conclusions and recommendations for further actions by PG&E.

2. Performance Assessment Process

The statutory objective of electrical corporation's wildfire mitigation planning efforts is to ensure that electrical corporations are constructing, maintaining, and operating their infrastructure in a manner that will minimize the risk of catastrophic wildfire.²

Government Code section 15475(b)(2) directs Energy Safety to develop performance metrics to achieve maximum feasible risk reduction to be used to develop the wildfire mitigation plan and evaluate an electrical corporation's performance relative to the implementation of that plan.

In this report, Energy Safety considers the totality of all performance assessments completed with respect to PG&E's 2024 WMP. This includes all inspection, audit, investigation, and data analysis work performed by Energy Safety, as well as separate electrical corporation and independent third-party evaluations of implementation.

The following is an overview of the performance areas assessed by Energy Safety:

¹ Government Code Section 15475.1(a).

² Pub. Util. Code section 8386(a).

1. Energy Safety assessed *2024 WMP attainment performance* by determining whether the electrical corporation met the 2024 WMP targets for initiatives and objectives; looking specifically at whether the electrical corporation funded and performed the work stated for each initiative, and by performing field inspections of WMP work claimed to be completed by PG&E;
2. Energy Safety assessed *ignition risk performance* by tracking ignition rates, wire down rates, and unplanned outage rates – all indicators of ignition risk;
3. Energy Safety assessed *Public Safety Power Shutoff (PSPS) performance* by tracking the frequency, scope, duration, and impact of PSPS events;
4. Energy Safety assessed *outcome metric performance* by tracking the number of acres burned, number of buildings damaged or destroyed, number of fatalities or injuries, and total value of assets lost due to wildfires ignited by PG&E's equipment; and
5. Energy Safety assessed *data accuracy and completeness performance* by crosschecking data from various utility reporting mechanisms, assessing the accuracy of data submitted by PG&E during field auditing of PG&E's WMP work, reviewing multiple reports, reviewing a formal quality assurance and quality control evaluation, and identifying issues encountered during the performance assessment process.

3. PG&E 2024 Wildfire Mitigation Plan

PG&E originally submitted a Base WMP on March 27, 2023, covering a three-year term from 2023 through the end of 2025,³ ⁴ as well as a Change Order Request on January 8, 2024.⁵

Energy Safety approved PG&E's 2023-2025 Base WMP on December 29, 2023,⁶ and only partially approved PG&E's Change Order Request on May 31, 2024.⁷ For the purpose of this report, Energy Safety refers to the Base 2023-2025 WMP, any approved Change Order Requests, as well as the 2024 targets and initiatives, collectively as 2024 WMP.

PG&E's 2024 WMP highlighted past and ongoing efforts to address wildfire risk and reduce the impacts of PSPS events.⁸ The 2024 WMP described 56 initiatives, which are divided up into five categories with some highlights identified here:

³ According to the 2023-2025 WMP Technical Guidelines.

⁴ 2023-2025 Base WMP.

⁵ 2024 PG&E Utilities Change Order.

⁶ 2023-2025 Base WMP Decision.

⁷ 2024 Change Order Decision. Energy Safety approved most of the requested changes, but rejected several requested changes to 2024 WMP targets, including on substation inspections, vegetation management, and a customer battery program.

⁸ 2024 WMP, pages 71-80.; 2024 Change Order Decision, pages 3-10.

1. **Grid Design, Operations, and Maintenance:** The goal of the initiatives in this WMP category is to reduce system wide risk through proactively identifying and mitigating overhead asset conditions which could fail and lead to an ignition.⁹ Relevant initiatives in this category are System Hardening-Distribution (GH-01) and EPSS-Down Conductor Detection (GM-06).
2. **Vegetation Management and Inspections:** The goal of the initiatives in this WMP category is to reduce system wide risk through a comprehensive vegetation management program that includes developing and implementing robust inspection protocols, updating standards, procedures, training, quality assurance and quality control (QA/QC), and vegetation and fuels management.¹⁰ Relevant initiatives in this category are Tree Removal Inventory (VM-04) and Integrated Vegetation Management-Transmission (VM-15).
3. **Situational Awareness and Forecasting:** The goal of the initiatives in this category is to develop and maintain asset and weather monitoring systems, technologies, and procedures to evaluate and reduce risks within PG&E's service territory.¹¹ Relevant initiatives in this category are Line Sensor-installation (SA-02) and Distribution Fault Anticipation (DFA) Installations (SA-10).
4. **Emergency Preparedness:** PG&E's Emergency Preparedness and Response (EP&R) organization is responsible for emergency preparedness, prevention, response, mitigation, and recovery in responding to wildfire and PSPS emergency incidents. EP&R's strategy focuses on initiatives that ensure PG&E remains prepared to respond to events in ways that benefit customers and communities.¹² Relevant initiatives in this category are Complete PSPS and Wildfire Tabletop and Functional Exercises (EP-01) and Annually Review and Revise the Company Emergency Response Plan (CERP) and the Wildfire Annex and the PSPS Annex (EP-06).
5. **Community Outreach:** The goal of the initiatives in this category is engaging with customers and communities on key wildfire safety programs to share information about fire safety and preparedness; to hear and respond to customers questions; and to provide a channel for resolving concerns.¹³ Relevant initiatives in this category are Community Engagement Meetings (CO-01) and Community Engagement Surveys (CO-02).

The 2024 WMP also contained three- and ten-year objectives.

Selected three-year objectives include:¹⁴

⁹ 2024 WMP, pages 369, 467, 496.

¹⁰ 2024 WMP, page 594.

¹¹ 2024 WMP, page 872.

¹² 2024 WMP, pages 774-776.

¹³ 2024 WMP, pages 872-873.

¹⁴ 2024 WMP, pages 875, 372, 913.

- Annually hold 22 community engagement meetings with the five regions of service that will include but are not limited to a mix of webinars, open houses, town halls, and/or answer centers (CO-01).
- Developing a retention plan to maintain a skilled inspection workforce that builds in existing experience and mentor new employees for asset inspection (AI-01).
- Continuing to share PSPS lessons learned and best practices within California investor owned utilities (IOUs) through monthly meetings focused on PSPS (PS-10).

Selected ten-year objectives include:¹⁵

- Evaluating emerging technologies for transmission and distribution that may further reduce the scale, scope, or frequency of PSPS events (PS-08).
- Performing outreach to critical infrastructure customers in the HFRA via e-mail and/or phone through Business Energy Solutions to discuss the Community Wildfire Safety Program (CWSP), including potential PSPS and EPSS impacts, and update critical account contact information (CO-04).
- Evaluating the transition of the portable battery program to permanent battery solutions for PG&E customers at risk of PSPS and EPSS, focusing on, but not limited to, Access and Functional Needs (AFN), Medical Baseline (MBL), and self-identified vulnerable populations (PS-05).

The following objective is specifically evaluated in this report as it had a target or goal for 2024:

- Annually hold a total of 22 community engagement meetings within the five regions of the service that will include, but are not limited to, a mix of webinars, open houses, town halls, and/or answer centers (CO-01).

Descriptions of the activities and objectives of the programs and initiatives contained in PG&E's 2024 WMP and the approved Change Order Request are listed in the table in Appendix A.

4. PG&E Annual Report on Compliance

Public Utilities Code section 8386.3(b)(1) directs electrical corporations to file a self-evaluation report addressing the electrical corporation's implementation of its approved plan during the prior calendar year. This document is known as the Electrical Corporation Annual Report on Compliance (EC ARC).

¹⁵ 2024 WMP, pages 914, 296, 914.

Energy Safety's Compliance Guidelines outlined the requirements for an EC ARC prepared to address the 2024 calendar year and filed by the electrical corporation in early 2025. The EC ARC was required to detail the electrical corporation's self-assessment of its performance with the 2024 WMP during 2024.¹⁶

PG&E submitted its EC ARC to Energy Safety on April 1, 2024. This initial submission was followed by two more revisions. The timeline of these submissions is described below.

- PG&E submitted its initial EC ARC on April 1, 2024, along with a cover letter, an attachment reporting on financials, and an attachment reporting on initiative targets.¹⁷
- PG&E submitted a revised EC ARC (EC ARC R1) on April 30, 2025, along with a revised cover letter and initiative reporting attachment. The cover letter noted changes to the reporting on two initiatives, VM-14 and PS-06.¹⁸
- PG&E submitted a second revised EC ARC (EC ARC R2) on July 8, 2026, along with a revised cover letter and a revised financial reporting attachment. The cover letter noted that PG&E had discovered "potential discrepancies between previously filed WMP financials and current SAP totals for the 2023-2025 period."¹⁹ Due to the timing of the latest EC ARC revision, and the proximity to the drafting and publication of this APR, the data from the second revision was not used in this report.

The EC ARC is considered by Energy Safety as well as by the independent evaluator in its assessment of PG&E's WMP performance or evaluation of WMP implementation, respectively. For a summary of the EC ARC information on initiative completion and actual spending, see the table in Appendix A.

5. Independent Evaluator ARC for PG&E

Energy Safety, in consultation with the Office of the State Fire Marshal, annually publishes a list of entities qualified to serve as independent evaluators of WMP compliance.²⁰ Each electrical corporation is then required to hire an independent evaluator (IE) from the list of approved evaluators to perform an annual independent WMP compliance evaluation.²¹

¹⁶ 2024 Compliance Guidelines.

¹⁷ EC ARC.

¹⁸ EC ARC R1, Cover Letter, page 1.

¹⁹ EC ARC R2, Cover Letter, page 1.

²⁰ Pub. Util. Code Section 8386.3(b)(2)(A).

²¹ Pub. Util. Code Section 8386.3(b)(2)(B)(i).

The IE reviews and evaluates the electrical corporation's compliance with its approved WMP. As part of its evaluation, the IE must investigate instances of large deviation in actual expenditure greater than 10% as compared to the proposed expenditure amount in the associated WMP.

The 2024 Independent Evaluator Annual Report on Compliance (IE ARC) for PG&E was prepared by Bureau Veritas North America, Inc. The IE ARC included a review of the wildfire mitigation initiatives and activities implemented in 2024, and an accounting of whether PG&E met its performance targets, deviated from its budget, and followed its QA/QC processes.

The IE utilized a variety of techniques to analyze PG&E's progress toward meeting its 2024 WMP commitments, such as inspecting a sample of PG&E's field-verifiable 2024 WMP initiatives, performing desk reviews of non-field verifiable initiatives, interviewing selected utility staff, and reviewing the 2024 WMP and 2024 EC ARC.²² The IE evaluated a total of 47 initiatives with targets.²³ ²⁴ The IE ARC included sample verification statistics, an opinion on initiative completions, and actual expenditures for each initiative.²⁵

The IE ARC did not identify any initiatives as incomplete. The IE concluded that PG&E exceeded commitments in several areas related to grid hardening and vegetation management, for example by closing more distribution work orders than originally planned. According to the IE ARC, PG&E met or exceeded scheduled inspections for distribution and transmission assets and structures, and that PG&E completed several improvements for its vegetation management database.²⁶

As a result of the evaluation conducted, the IE provided observations in certain areas:

- AI-07 Detailed Ground and Aerial Inspections-Distribution: The IE recommended that PG&E consider including photo documentation in aerial inspection reports to support verification and improve transparency.²⁷
- SA-10 Distribution Fault Anticipation (DFA) Installations: The IE noted that some of the 2024 work was delayed due to engineering and technical issues, and therefore PG&E utilized some workplans due to be completed in 2025 to meet the target for this initiative in 2024. Because the substituted work was not in the same HFTD area planned for 2024, the IE determined that the intended risk reduction was not met.²⁸

²² IE ARC, page 7.

²³ IE ARC, pages 19-21, 64-66, 95, 105, 117.

²⁴ The primary difference between the IE's count of initiatives and Energy Safety's count of initiatives is the amount of qualitative vegetation work assessed in Energy Safety's VMA Report.

²⁵ IE ARC PG&E 2024 IE ARC Appendix Table 2.

²⁶ IE ARC, pages 126-127.

²⁷ IE ARC pages 25-26.

²⁸ IE ARC, page 97.

Finally, the IE reviewed PG&E's QA/QC processes, assigning scores from 0 to 4 for five QA/QC Maturity Model metrics (Figure 1). For a full description of the QA/QC Maturity Model, see the IE ARC Outline and the IE ARC.^{29, 30}

In the IE ARC, the IE concluded that PG&E had a well-developed and documented QA/QC process for WMP initiative completion. Of the five metrics the IE used to evaluate PG&E's QA/QC program, four received a score of three which is defined as "routine," and the fifth received a score of four which is defined as "mastered." The metrics that were scored as "routine" were Roles and Responsibilities, Quality Culture, Quality Management System, and QA/QC Technology Adoption. The metric that was scored as "mastered" was Quality Inspections and Audits. The IE's assessment included the following:

- In the Role and Responsibilities category, the IE reviewed PG&E's documented QA/QC roles and responsibilities across its operations, such as the RISK-6501 document family used by Electrical Operations and the Quality Learning Forums used by Vegetation Management Operations.
- In the Quality Culture category, the IE considered PG&E's processes for addressing targets that are off track and its use of Learning Forums and Operating Reviews.
- In the Quality Management System category, the IE reviewed PG&E's QA/QC information management system, specifically Foundry for Electrical Operations Quality Management (EOQM) and Survey 123 for Vegetation Management Quality Management (VMQM), as well as their integration with ArcGIS, and other software programs.
- In the Quality Inspections and Audits category, the IE considered PG&E's inspection and audit completion and pass rate targets in assigning this metric a score of four.³¹
- In the QA/QC Technology Adoption category, the IE reviewed PG&E's use of digital tools, including aerial and drone inspections as part of the 2024 QA/QC program.³²

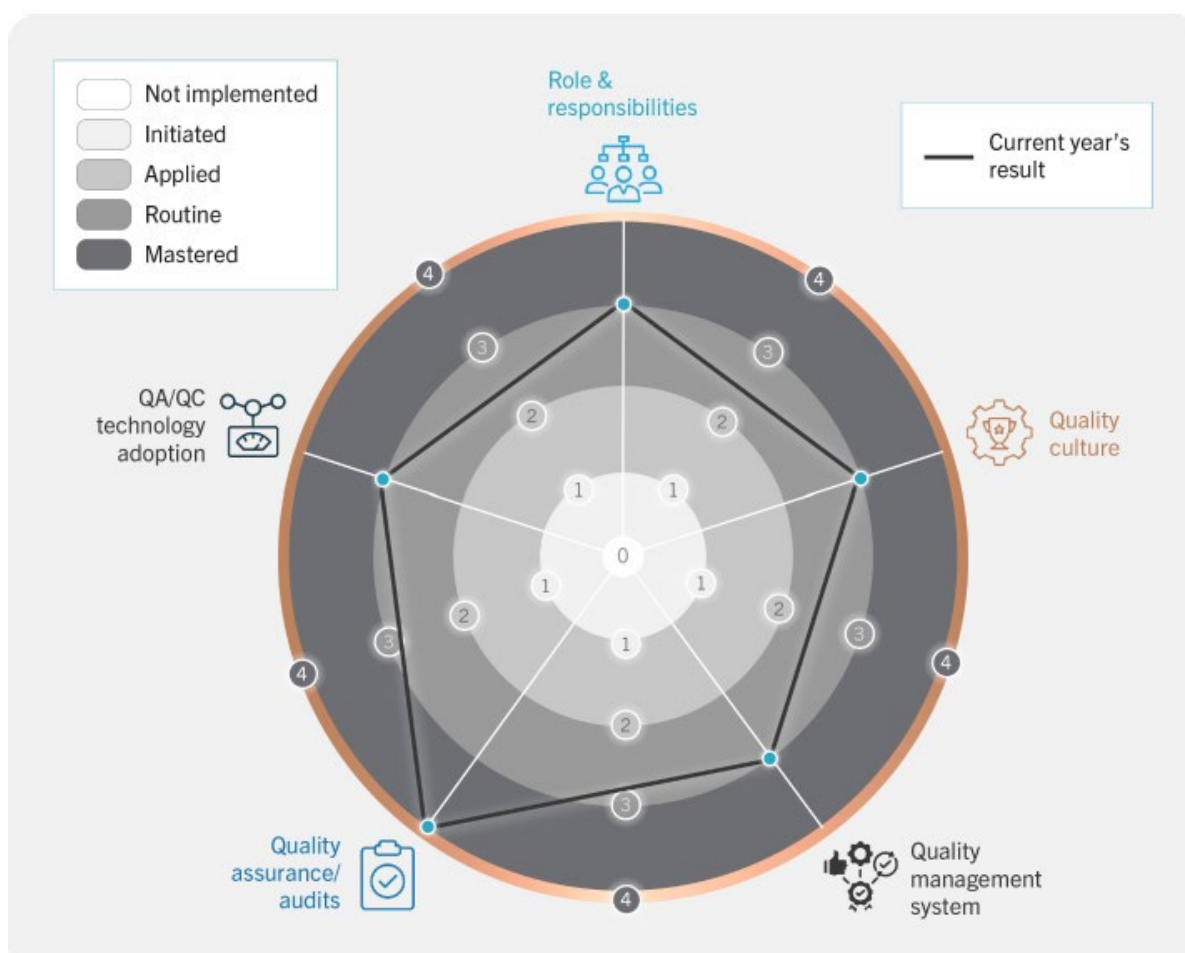
²⁹ IE ARC Outline, page 14.

³⁰ IE ARC, page 122.

³¹ Energy Safety's independent assessment of PG&E 2024 WMP initiatives related to QA/QC of asset inspections determined that PG&E met its 2024 WMP commitments, but made several observations that indicated potential areas for future improvement, including how PG&E determines that QA/QC audits are completed and how pass rates are calculated.

³² IE ARC, pages 122-125.

Figure 1. Radar Plot of QA/QC Maturity Model for PG&E Reproduced from IE ARC³³



6. WMP Initiative Attainment Performance

Energy Safety's assessment of PG&E's performance in 2024 indicates that PG&E attained 54 (96%) of its 56 targets for its 2024 WMP initiative activities. This is consistent with level of PG&E's initiative attainment for 2023.³⁴ The subsections below further describe Energy Safety's assessment of PG&E's execution of its 2024 WMP.

Section 6.1 provides an overview of the 2024 WMP initiatives assessed for attainment by Energy Safety. Section 6.2 describes the vegetation management assessments performed by Energy Safety. Section 6.3 provides an overview of Energy Safety's field inspection of both

³³ IE ARC, page 125.

³⁴ 2023 ARC, pages 45-87.

grid hardening and vegetation management activities related to PG&E's 2024 WMP work, including inaccuracies in PG&E's data regarding completed WMP work. Section 6.4 summarizes the initiatives with missed targets, if any, and provides three perspectives on the impact of PG&E's failure to meet some of its 2024 WMP targets: percentage of completion, budget impacts, and risk reduction impacts. Finally, Section 6.5 provides an overview of the 2024 WMP proposed expenditures and compares them to the actual expenditures. Section 6.6 Altogether, Section 6 characterizes PG&E's performance with respect to its 2024 WMP initiative attainment. Additional performance assessments appear in Sections 7 through 10.

6.1 PG&E 2024 WMP Initiative Activities Assessed by Energy Safety

Energy Safety assessed WMP attainment performance on 56 wildfire mitigation initiatives from the 2024 WMP.³⁵ The initiatives are grouped into six main categories:

1. Grid Design, Operation, and Maintenance with 19 initiatives assessed and an associated proposed expenditure of \$1.26 billion.
2. Vegetation Management and Inspection with 27 initiatives assessed and a proposed expenditure of \$1.3 billion. Of the 27 initiatives, 13 initiatives were assessed in the Vegetation Management Audit (VMA) Report and the remaining 14 were assessed in this APR.
3. Situational Awareness and Forecasting with three initiatives assessed and a proposed expenditure of \$17.8 million.
4. Emergency Preparedness with two initiatives assessed and a proposed expenditure of zero dollars.
5. Community Outreach and Engagement with two initiatives assessed and a proposed expenditure of zero dollars.
6. Public Safety Power Shutoff with three initiatives assessed and a proposed expenditure of \$13 million.

A complete list of initiatives along with expenditure information appears in the table in Appendix A.

The initiative performance assessment process included comparing the actual initiative completion as reported by PG&E in its quarterly data report (QDR) to Energy Safety and in its EC ARC, and as reported by the IE in the IE ARC.³⁶ The information from each of these sources is summarized along with the final assessment of performance for each initiative in the table

³⁵ 2024 Base WMP.

³⁶ 2024 Q4 QDR, Table 11, EC ARC, pages 25-29, and IE ARC, Appendix 7.1, Table 2.

in Appendix A. In some cases, Energy Safety issued data requests to answer specific questions. If data request information is used in the assessment, a citation for the particular instance is provided. Statistics and findings from Energy Safety field audits of 2024 WMP work are also considered. Finally, the Energy Safety VMA Report also contributed to Energy Safety's APR assessment.³⁷

6.2 Energy Safety Vegetation Management Audit Report

Each performance year Energy Safety completes an audit of the vegetation management work performed by an EC as described in its approved WMP (the Vegetation Management Audit (VMA)).³⁸ In the VMA, Energy Safety assesses completeness of each qualitative commitment and quantitative target associated with each initiative from the electrical corporation's approved WMP. The VMA issues findings on the initiative level, as defined in Appendix A of the 2023-2025 Wildfire Mitigation Plan Technical Guidelines.³⁹

The VMA is sent to the electrical corporation, who then has the opportunity to provide Energy Safety with a corrective action plan (CAP) to address any deficiency identified in the VMA. Energy Safety analyzes the CAP and issues a VMA Report that documents any outstanding deficiencies and describes the electrical corporation's overall program performance for that year.

For performance year 2024, Energy Safety issued its VMA to PG&E on October 14, 2025,⁴⁰ received the CAP on November 14, 2025,⁴¹ and issued the 2024 VMA Report on April 7, 2026.⁴²

This APR reproduces the VMA Report conclusions but rather than referencing each vegetation management initiative number it references the Utility Initiative Tracking ID to allow for consistency throughout the APR. Table 10 in Appendix B provides a crosswalk between the vegetation management initiative numbers included in the VMA Report to the Utility Initiative Tracking IDs included in this APR.

Energy Safety's VMA Report concluded that PG&E provided sufficient documentation to demonstrate that all work identified in 12 of the 13 vegetation management initiatives (92%) included in its 2024 WMP was implemented successfully in 2024 or that PG&E provided a CAP that addressed deficiencies for those 12 initiatives. PG&E has an outstanding deficiency in

³⁷ VMA Report.

³⁸ Pub. Util. Code section 8386.3(b)(5)(A).

³⁹ WMP Technical Guidelines, pages A-24-A-26.

⁴⁰ 2024 VMA Report, Appendix 1.

⁴¹ 2024 VMA Report, Appendix 2.

⁴² 2024 VMA Report.

one of the 13 vegetation management initiatives: 8.2.3.2 Wood and Slash Management. Energy Safety's analysis of this deficient initiative can be found in Section 10.2 of this APR.

The specific findings from Energy Safety's VMA Report are summarized in Appendix B.

6.3 Energy Safety Field Inspection Assessment

Energy Safety performs field audits of the WMP work reported as complete by the electrical corporations. Energy Safety's field audits provide empirical verification of the WMP work conducted by the EC. These field audits also act as an audit of the EC's data quality and provide insight as to the extent that the EC can rely upon the information it collects and generates in understanding the effectiveness of its wildfire mitigation activities.

When performing a field audit, Energy Safety conducts two types of inspections: 1) inspections of grid hardening, vegetation management, and other work related to WMP initiatives, and 2) inspections of general wildfire safety (GWS) conditions at an inspection site. Inspections of general wildfire safety conditions are not strictly related to WMP initiatives.⁴³

Observation

As detailed below, Energy Safety's field inspections determined that there was some inconsistency in the data provided by PG&E with respect to the completeness of some 2024 WMP initiatives, which is part of broader data management issues that PG&E should address going forward. For one grid hardening initiative, Energy Safety's field inspections determined that PG&E reported completed WMP work that was not completed.

6.3.1 Inspection and Notice Counts

For field audits of 2024 WMP work, inspections that found instances of non-performance on WMP initiative work resulted in a notice of violation or a notice of non-performance.⁴⁴ An overview of the location counts of inspections and notices by initiative appears in Table 1.

⁴³ If Energy Safety observes a general wildfire safety concern during an inspection activity, that is recorded as a "Wildfire Safety Concern." Or as it was known prior to 2024, a "defect."

⁴⁴ If Energy Safety observes non-performance of a WMP initiative during an inspection activity that an electrical corporation claimed to have occurred at a site, then that is recorded as a "deficiency" and may be the subject of a "Notice of Non-Performance" or a "Notice of Data Inaccuracy" sent to the electrical corporation. Prior to SB 254, Energy Safety issued Notices of Violation, which could be issued due to completeness or data accuracy issues.

Table 1. Energy Safety Inspection Counts and Notices by Initiative

Initiative	Number of Inspections	Notices of Violation	Notices of Non-Performance	Total
Transmission Shunt Splices 8.1.2.5.1 GH-06	32	4 (1 Data Accuracy, ⁴⁵ 3 Completeness ⁴⁶)	1 (Completeness ⁴⁷)	5
EPSS-Down Conductor Detection (DCD) 8.1.2. 10.1 GM-06	259	0	1 (Completeness)	1
Non-Exempt Expulsion Fuse-Removal 8.1.2.10.5 GH-10	144	17 (6 Data Accuracy, 11 Completeness)	1 (Completeness)	18
System Hardening-Covered conductor installation - Distribution 8.1.2.1 GH-01	188	1 (Completeness)	0	1
Distribution Second Patrol 8.2.2.2.2 VM-17	0	1 (Completeness)	0	1

⁴⁵ The NOV number is CAD_PGE_CYA_20250325_1149, and in its response PG&E agreed with the findings of the NOV.

⁴⁶ These NOV numbers are CAD_PGE_CYA_20250325_1204 (with which PG&E disagreed with the findings), CAD_PGE_CYA_20250325_1247 (with which PG&E disagreed with the findings), and CAD_PGE_CYA_20250325_1318 (with which PG&E agreed with the findings).

⁴⁷ The NON number is CAD_PGE_CYA_20250827_1038, and in its response PG&E agreed with the findings of the NON.

Initiative	Number of Inspections	Notices of Violation	Notices of Non-Performance	Total
Wood and Slash Management 8.2.3.2	0	2 (Completeness)	0	2

6.3.2 Data Accuracy and Completeness Issues Observed by Field Audits

As described above, Energy Safety issued 28 notices to PG&E upon inspection of its 2024 WMP work. Of those 28 total notices, eight were related to data accuracy issues and 20 were related to completeness issues observed in the course of field audits.

Data accuracy issues can vary, but generally they are instances in which either: 1) an electrical corporation reported WMP work completed when work did not occur, or 2) work was completed at a location but the nature of the work was different than the EC reported.

Completeness issues are instances where the WMP work claimed to have been completed at a location was done in an incomplete manner, and therefore should not have been counted by the electrical corporation as “complete” WMP work.

The existence of data accuracy or completeness issues in the spatial QDR submissions of an electrical corporation calls into question the reliability of the electrical corporation’s claimed completion of WMP work. For example, if an electrical corporation claims to have completed 100 units of a type of WMP work, but Energy Safety inspectors discover data accuracy and completeness issues with specific instances of the work reported, then the claim that 100 units were completed is unreliable.

In the case of PG&E’s 2024 WMP work, Energy Safety’s field audits observed data accuracy and/or completeness issues with the work claimed as completed under the following WMP initiatives: EPSS-Down Conductor Detection – 8.1.2.10.1, Non-Exempt Expulsion Fuse-Removal – 8.1.2.10.5, System Hardening-Transmission Shunt Splices – 8.1.2.5.1, Covered Conductor Installation – 8.1.2.1, Distribution Second Patrol – 8.2.2.2.2, and Wood and Slash Management – 8.2.3.2 (Table 2).

The table below (Table 2) also includes the numbers of points or miles inspected by Energy Safety for the 2024 WMP work reported by PG&E as completed for each of the relevant WMP initiatives, and the number of points or miles with data accuracy or completeness issues. A percentage of the 2024 WMP work reported by PG&E as complete with those issues is also described.

Table 2. Energy Safety Inspection Counts and Data Accuracy and Completeness Issues, with Percentage of Inspections Where Issues were Observed

Initiatives with Data Accuracy and Completeness Issues	Number of Points or Miles Inspected	Total Points or Miles with Issues	Percentage of Points or Miles with Issues
EPSS-Down Conductor Detection (DCD) 8.1.2.10.1 GM-06	259	1	0.3%
Traditional Overhead Hardening-Transmission Conductors 8.1.2.5.1 GH-05 and GH-06	32	5	15%
Non-Exempt Expulsion Fuse-Removal 8.1.2 10.5 GH-10	144	18	12.5%
Covered conductor Installation – Distribution 8.1.2.1 GH-01	188	1	0.5%
Distribution Second Patrol 8.2.2.2.2 VM-17	0	1	0
Wood and Slash Management 8.2.3.2	0	2	0 ⁴⁸

The electrical corporation must demonstrate that it met its WMP targets. Because Energy Safety's field audit of PG&E's 2024 WMP work observed issues with the data reported by PG&E on initiative 2024 WMP work, the actual amount of 2024 WMP work reported as completed by PG&E with respect to the above initiatives is somewhat unreliable as shown in Table 3. This unreliability did not ultimately affect Energy Safety's determination that PG&E met their 2024 WMP targets with respect to most of these initiatives. However, in the case of Transmission Shunt Splices, Energy Safety's field inspections did lead to a finding of non-attainment as discussed in more detail below.

When using the percentage of points or miles with issues as a measure of this unreliability, Energy Safety PG&E estimates the impact on the 2024 targets for relevant WMP initiatives (Table 3).

⁴⁸ Energy Safety does not inspect this activity directly because slash management, as an initiative, is applied to all VM programs.

Table 3. Energy Safety Estimates of Data Accuracy and Completeness Issue Impacts on Reported WMP Compliance^{49, 50}

Initiatives with Data Accuracy and Completeness Issues	PG&E 2024 WMP Target	Actual Points or Miles Completed as Reported by PG&E	Percentage of Points or Miles with Issues	Reliable Actual Points or Miles
EPSS-Down Conductor Detection (DCD) 8.1.2.10.1 GM-06	400 Devices	705 Devices	0.3%	702 Devices
Non-Exempt Expulsion Fuse-Removal 8.1.2.10.5 GH-10	3,000 Fuses	3,112 Fuses	12.5%	2,723 Fuses
Covered conductor Installation – Distribution 8.1.2.1 GH-01	60 Circuit Miles ⁵¹	59.59 Circuit Miles	0.5%	59.7 Circuit Miles
Distribution Second Patrol 8.2.2.2.2 VM-17	25,685 circuit miles	0	0	0
Wood and Slash Management 8.2.3.2	N/A	0	0	0

Observation

Based on Energy Safety’s field observations, PG&E did not meet its target for the 2024 WMP initiative related to Transmission Shunt Splices (GH-06). PG&E reported installation of 23 shunt splices against a 2024 WMP target of 22.⁵² However, Energy Safety’s field inspections of

⁴⁹ 2024 Q4 QDR Spatial Data.

⁵⁰ This table does not include Transmission Overhead Hardening (GH-05 and GH-06) as the available data could not accurately itemize the work between the two initiatives.”

⁵¹ 2024 WMP, page 402, shows the overall system hardening (GH-01) mileage forecast for all activities including covered conductor, undergrounding, and line removal for a sum total of 280 circuit miles.

⁵² EC ARC R1, Table 3 (“[i]n 2024 PG&E installed shunt splice(s) on 23 transmission lines traversing HFRA or HFTD areas against a target of 22. The assessment was completed by reviewing the as built job packages for each installation”). EC ARC R1 does not describe any revision to the actual numbers for transmission shunt splice installation due to the findings of Energy Safety’s field inspections.

PG&E's 2024 shunt splice work determined that there were four shunt splice locations where work was not sufficiently completed, and one shunt splice location where PG&E reported inaccurate data. As noted previously, PG&E agreed with these findings in three of those instances and disagreed with two of them. Regardless, PG&E and Energy Safety agree that three of the field observations of incomplete or inaccurately reported work are valid. This reduces PG&E's actual completion by three to 20, which is lower than the 2024 WMP target of 22 completed transmission shunt splices.

6.4 PG&E WMP Objective and Initiative Activity Attainment in 2024

An EC's WMP is assessed on the basis of whether it is feasible, cost efficient, demonstrates continued improvement and forward-looking progress, and reduces wildfire risk.⁵³ An EC's ability to complete its initiative activities demonstrates its competence in and commitment to executing on that plan. Therefore, the findings regarding initiative attainment are at the heart of any WMP evaluation, in that they measure the EC's performance in implementing the wildfire risk reduction activities that the EC itself committed to do for the benefit of its customers and the California public.

Energy Safety assessed 56 wildfire mitigation initiatives for 2024 WMP attainment performance and found that PG&E missed two initiative activity targets (3.5%). The two initiative activities where PG&E missed its targets are System Hardening - Transmission Shunt Splices 8.1.2.5.1 and Wood and Slash Management 8.2.3.2. A complete list of the initiative activities with missed targets is shown in Table 4.

Section 6.4.1 elaborates on the financial impact of initiatives with missed targets on proposed expenditures, and Section 6.4.2 on the impacts of initiatives with missed targets on risk reduction, to measure the gap between PG&E's WMP and its implementation.

The findings regarding initiative attainment are at the heart of any WMP evaluation, in that they measure the EC's performance in implementing the wildfire risk reduction activities that the EC itself committed to do for the benefit of its customers and the broader public of California.

Observation

While PG&E met targets for nearly all of its 2024 WMP initiatives, as detailed below some missed targets were related to WMP initiative activities that would have otherwise reduced risk on PG&E's system in the manner PG&E committed to its customers and the broader public of California.

⁵³ 2023-2025 Process and Evaluation Guidelines, page 9.

Table 4. PG&E WMP Initiatives with Missed Targets⁵⁴

Not Attained PG&E 2024 WMP Initiative	2024 WMP Initiative Activity Target	Actual Performance
System Hardening - Transmission Shunt Splices 8.1.2.5.1 GH-06	Install shunt splices on 22 transmission lines	Installed 20
Wood and Slash Management 8.2.3.2	Manage debris less than 4 inches in diameter generated from vegetation management activities	PG&E did not provide documentation to support that debris generated by its vegetation management activities was managed as described in its 2023-2025 WMP.

6.4.1 Impact of Initiatives with Missed Targets on Proposed Expenditures

Energy Safety uses the magnitude of funding proposed for a given WMP initiative as one way of gauging the impact of a missed initiative relative to the larger suite of WMP work. This analysis proceeds from the assumption that the greater the proposed expenditure for a WMP initiative, the greater importance that initiative has to the EC's overall plan for wildfire risk reduction. Note that this financial analysis does not attempt to quantify the risk reduction impact of a WMP initiative.

Energy Safety quantified the financial importance of 2024 WMP initiatives for which PG&E missed targets. For this assessment, Energy Safety created two different perspectives of the financial importance:

1. Relative magnitude of proposed expenditures for initiatives with missed targets to the overall 2024 WMP; and
2. Percentage of the proposed expenditures for the initiatives with missed targets that was spent.

⁵⁴ 2024 VMA Report, pages 3-4; 2024 WMP, page 378.

The total amount budgeted for the two initiative activities with missed targets was \$4.9 million, or 0.2% of the approximate \$2.58 billion allocated in the 2024 WMP budget. Of the \$4.9 million budgeted for the initiatives with missed targets, \$4 million was spent (82%).

Observation

PG&E spent less than proposed for expenditures on its missed grid hardening initiative by a substantial amount (18%).

For an overview of the entire 2024 WMP proposed expenditures as compared to the actual expenditures, see Section 6.5.

6.4.2 Impact of Initiatives with Missed Targets on Risk Reduction

For the 2024 WMP, Energy Safety's WMP Technical Guidelines (as published on December 7, 2022) required an electrical corporation to estimate the relative risk impact of its mitigation activities by subtracting the remaining risk after the mitigation activity is completed from the risk that existed before the mitigation activity occurred.⁵⁵ The electrical corporation was then to divide the risk difference by the risk before the mitigation activity, and finally, multiply by 100.⁵⁶

PG&E's missed initiative target for wood and slash management was a qualitative objective to manage debris less than four inches in diameter generated from vegetation management activities. This initiative was not assigned tracking ID or quantified risk reduction target by PG&E. Therefore, Energy Safety did not conduct a risk reduction analysis for this initiative.

PG&E's missed initiative target for transmission shunt splice installation did not have a quantified risk reduction assigned to it in the 2024 WMP, despite the requirements of the WMP Technical Guidelines. For this reason, Energy Safety was unable to calculate an amount of quantified risk reduction that was not achieved by PG&E due to the failure to meet its targets for transmission shunt splice installation.

However, the 2024 WMP did provide the following narrative description of the transmission shunt splice installation initiative:

"A conductor splice is a point of failure within a conductor span, due to factors such as corrosion, moisture intrusion, vibration, and workmanship variability. Certain types of splices, such as a twist splice, can have higher risk of failure compared to other splice types. A program has been initiated to install a shunt splice on top of the existing splice. This installation eliminates the splice as a single point of failure, as a failure of the original splice would not result in down conductor. Lines prioritized for this program are based on higher

⁵⁵ WMP Technical Guidelines, page 41.

⁵⁶ WMP Technical Guidelines, page 41.

risk splice and wildfire consequence.”⁵⁷ The 2024 WMP goes on to state with respect to this initiative that “[r]eplacement or reinforcement of conductor in the HFTD reduces wildfire risk by decreasing the likelihood of asset failure.”⁵⁸

Observation

While neither the 2024 WMP nor the EC ARC quantified the expected risk reduction from PG&E’s missed initiative target related to transmission shunt splice installation, the narrative description of the initiative in the 2024 WMP makes clear that there was some expected risk reduction that would result from the transmission shunt splice work. By not meeting the target for that initiative, PG&E did not achieve as much risk reduction as planned. Therefore, this report concludes that one of PG&E’s missed 2024 WMP targets led to less risk reduction than PG&E committed to its customers and the broader public in its 2024 WMP.

6.5 PG&E 2024 WMP Expenditure Assessment

Energy Safety conducted an expenditure assessment to estimate PG&E’s spending alignment with its 2024 WMP. Unlike the assessment of the impact of initiatives with missed targets on proposed expenditures, this assessment considers all 2024 WMP initiatives, and focuses on the gap between proposed and actual spending, as stated in the WMP. In addition, Energy Safety’s assessment identifies spending deviations exceeding 10%, assessing how they impact PG&E’s planned spending variance.

This analysis is intended to provide an assessment of the EC’s project management capabilities as they relate to financial management, which in turn provides insight into the EC’s ability to responsibly utilize ratepayer funds dedicated to its WMP work.⁵⁹

PG&E’s reported figures for proposed and actual 2024 WMP expenditures varied across different reporting mechanisms. Energy Safety based its analysis of PG&E’s expenditures on its EC ARC R1, as this was the most recent information provided by PG&E that was available during this report’s production. The EC ARC (R1) reported \$2.67 billion (103%) spent of the \$2.58 billion proposed for 2024 WMP activities. The IE ARC reported a similar figure of \$2.66 billion (103%) spent of the \$2.56 billion proposed.⁶⁰ Energy Safety’s assessment of this information concluded that \$2.66 billion (103%) was spent of the \$2.58 billion proposed.⁶¹

⁵⁷ 2024 WMP, page 437.

⁵⁸ *Id.*

⁵⁹ See Pub. Util. Code section 8386.3(c)(1) regarding the prohibition on diversion of wildfire mitigation funds.

⁶⁰ The proposed expenditure in the IE ARC differs from the EC ARC due to data request communications with PG&E, posing expenditure updates.

⁶¹ Energy Safety accepted the actual expenditure from the IE ARC against the proposed expenditure from the EC ARC (R1).

Observation

Energy Safety analyzed PG&E's expenditures on individual 2024 WMP wildfire mitigation initiatives and found that 16% (nine out of 56) of the initiatives had actual expenditures that deviated more than 10% from those proposed. Energy Safety also found that PG&E exceeded its proposed expenditures for 2024 WMP activities by 8%. See the table in Appendix A for a complete list of initiatives and their proposed and actual expenditures.

6.6 PG&E's Initiatives Related to QA/QC of Asset Inspections

On July 23, 2026, Energy Safety published an audit of PG&E's implementation of its 2024 WMP initiatives related to its QA/QC programs for asset inspections.⁶² Overall, the audit found that PG&E demonstrated QA and QC program frameworks consistent with its WMP commitments and successfully executed its 2024 QA/QC initiatives.⁶³ However, the audit made several observations and recommendations regarding these programs, including:

- While there were high reported pass rates by PG&E, in some cases a substantial volume of inspection findings (e.g., maintenance issues that would have required correction within six months in some high-risk areas of PG&E's territory) were excluded from the pass rate calculations, calling into question whether the pass rate truly reflected the number of inspections sampled that should have passed QA/QC.
- In tallying up audits to count toward achieving its objective number of audits, PG&E included audits where the full scope could not be performed.
- There were inconsistencies between PG&E's reported metrics and supporting datasets.
- Distribution audit failure criteria were not clearly documented by PG&E, which limits transparency and may obscure inconsistencies in how audit outcomes are determined.⁶⁴

The audit noted that while PG&E demonstrated QA and QC program frameworks consistent with its 2024 WMP commitments, continued refinement of audit methodologies and reporting controls would further enhance visibility into the risks present on PG&E's system, and indicate areas where asset inspection practices might be improved.⁶⁵

⁶² Specifically 2024 WMP Sections 8.1.6.1 (QA for asset inspections) and 8.1.6.2 (QC for asset inspections).

⁶³ Audit of PG&E QA/QC Programs, page 4.

⁶⁴ Audit of PG&E QA/QC Programs, page 5.

⁶⁵ *Id.*

6.7 Initiative Performance Observations and Conclusions

Section 6 of this report demonstrates that PG&E missed two of its 2024 WMP initiative activity targets, and that this failure resulted in PG&E removing less risk from its system in 2024 compared to what it committed to its customers and the people of California in its 2024 WMP.

Energy Safety makes several observations regarding the impact of PG&E's 2024 initiative performance:

- Energy Safety's field inspections determined that there was some inconsistency in the data provided by PG&E with respect to the completeness of some 2024 WMP initiatives, which are part of broader data management issues that PG&E should address going forward.
- Based on Energy Safety's field observations, PG&E did not meet its target for the 2024 WMP initiative related to Transmission Shunt Splices (GH-06). PG&E's actual number of completed shunt splices as determined through Energy Safety field inspections was 20, which is lower than the 2024 WMP target of 22 completed shunt splices (91%). Missing the target for this initiative led to less risk reduction than PG&E committed to its customers and the broader public in its 2024 WMP
- PG&E spent less than proposed for expenditures on its missed grid hardening initiative by a substantial amount (18%).
- Energy Safety analyzed PG&E's expenditures on individual 2024 WMP wildfire mitigation initiatives and found that 16% (nine out of 56) of the initiatives had actual expenditures that deviated more than 10% from those proposed.
- Energy Safety's audit of PG&E's implementation of its 2024 WMP initiatives related to its QA/QC programs for asset inspections noted that while PG&E demonstrated QA and QC program frameworks consistent with its 2024 WMP commitments, continued refinement of audit methodologies and reporting controls would further enhance visibility into the risks present on PG&E's system, and indicate areas where asset inspection practices might be improved.

Energy Safety remains committed to an open and collaborative approach to reducing wildfire risk in California. In order to achieve this goal, it is important that PG&E effectively implement its own plan for wildfire risk reduction.

7. Ignition Risk Performance

Energy Safety requires electrical corporations to report data, such as ignitions, that help Energy Safety assess whether an electrical corporation is reducing its wildfire risk over time while also reducing its reliance on PSPS events. In order to consistently analyze these data

between years and between ECs, Energy Safety utilizes a set of quantitative ignition risk performance metrics, as follows:⁶⁶

- **Direct Metric - Ignition Rates:** This report defines ignitions as incidents in which electrical corporation infrastructure contributed to an ignition.⁶⁷ PG&E reports its total number of ignitions to Energy Safety on a quarterly basis.
- **Proxy Metric - Wire Down Event Rate:** This report defines wire down events as incidents in which overhead electrical lines fall to the ground, land on objects, or become disconnected from their moors. PG&E reports its total number of wire down events to Energy Safety on a quarterly basis.
- **Proxy Metric – Outage Event Rate:** This report defines outages as all unplanned outages experienced in PG&E’s territory. PSPS outages are not included. PG&E reports its total amount of outages to Energy Safety on a quarterly basis.

For this report, Energy Safety estimates PG&E’s ignition risk performance metrics for the calendar years 2017 through 2024.

For direct and proxy performance metrics, Energy Safety converts the metric counts into rates by dividing them by PG&E’s Overhead Circuit Miles (OCM). These rates for ignition risk events add nuance to the assessment and allow for comparisons across the ECs.

To see the raw counts of all ignition risk events and OCM values for each year used, see Appendix C.

7.1 Ignition Rates

Ignition rates are the most direct measure of wildfire risk performance. There are limitations to only using ignition rates, however, due to the relatively small size of the dataset relative to other indications of risk, such as wires down and unplanned outages. As a result, this analysis of PG&E’s ignitions over time should be read in concert with the other metrics to give a full picture of an EC’s performance over time.

⁶⁶ Data for all figures in this section utilize a combination of PG&E’s response to DR-282 and PGG&E data from the QDRs. Priority is given to the data request if both are available. Otherwise, 2015-2021 data are sourced from Q3 2022 QDR, 2022-2023 data are sourced from the Q4 2023 QDR, and 2024 data are sourced from the relevant quarter’s QDR (e.g., Q1 2024 data sourced from the Q1 2024 submission, Q2 2024 data sourced from the Q2 2024 submission, etc....).

⁶⁷ The term “ignition,” utilized by Energy Safety, is an ignition that meets all the following criteria: 1) a self-propagating fire of material other than electrical and/or communication facilities, 2) the resulting fire traveled greater than one linear meter from the ignition point, and 3) the EC has knowledge that the fire occurred.

Ignition Rates per Overhead Circuit Mile

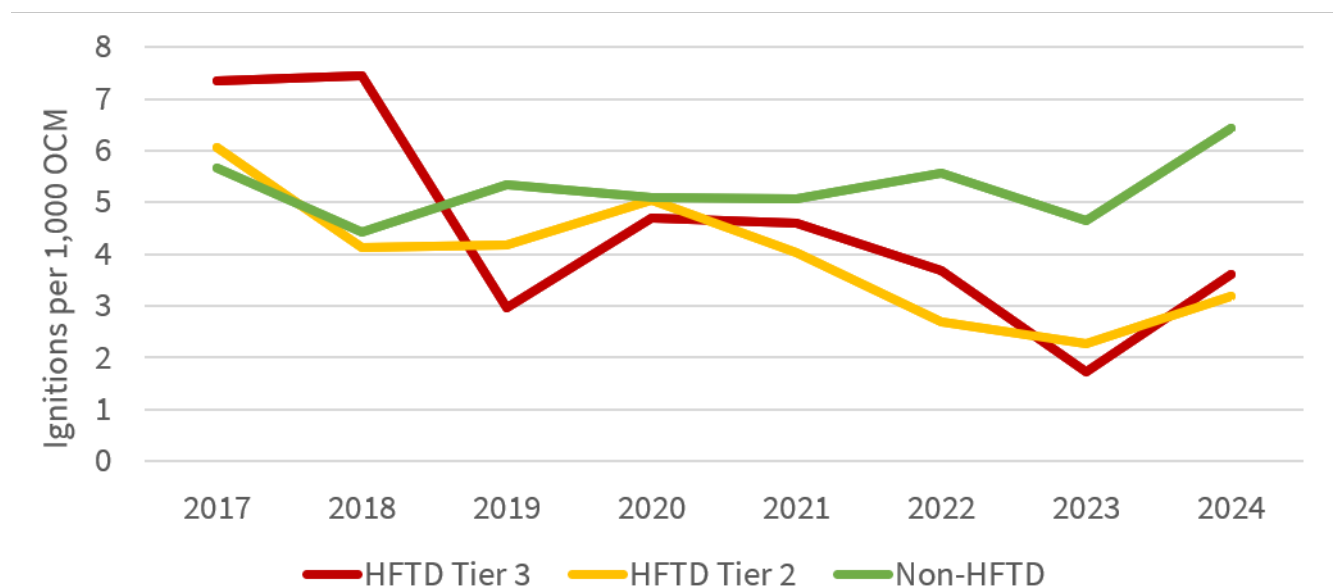
To account for concurrent overhead grid expansion within PG&E's territory and allow for comparisons with other utilities, ignitions normalized by OCM are provided as a rate of ignitions per 1,000 miles and delineated by HFTD Tier 3, HFTD Tier 2, and Non-HFTD Areas.

For this analysis, ignitions have generally decreased across HFTD Tier 3 and HFTD Tier 2 over the 2017–2024 study period, while non-HFTD rates have generally maintained the same rate over time. HFTD Tier 3 recorded the highest ignition rate in 2018 at approximately 7.5 ignitions per 1,000 OCM before declining sharply. HFTD Tier 2 followed a broadly similar pattern, declining from approximately six ignitions per 1,000 OCM in 2017 to approximately three by 2024. By contrast, non-HFTD ignition rates remained comparatively stable throughout the period, ranging between approximately four and six ignitions per 1,000 OCM, and exceeded both HFTD tiers in the majority of years from 2020 onward (Figure 2).

PG&E noted a record-setting heatwave in 2024 as a likely contributor to the increase in ignitions between 2023 and 2024, as this was the same explanation CALFIRE provided as a contributor to increased ignitions statewide.⁶⁸

For a plot of ignition event raw counts, see Appendix C.

Figure 2. PG&E Ignitions per OCM (2017-2024) by HFTD Tier

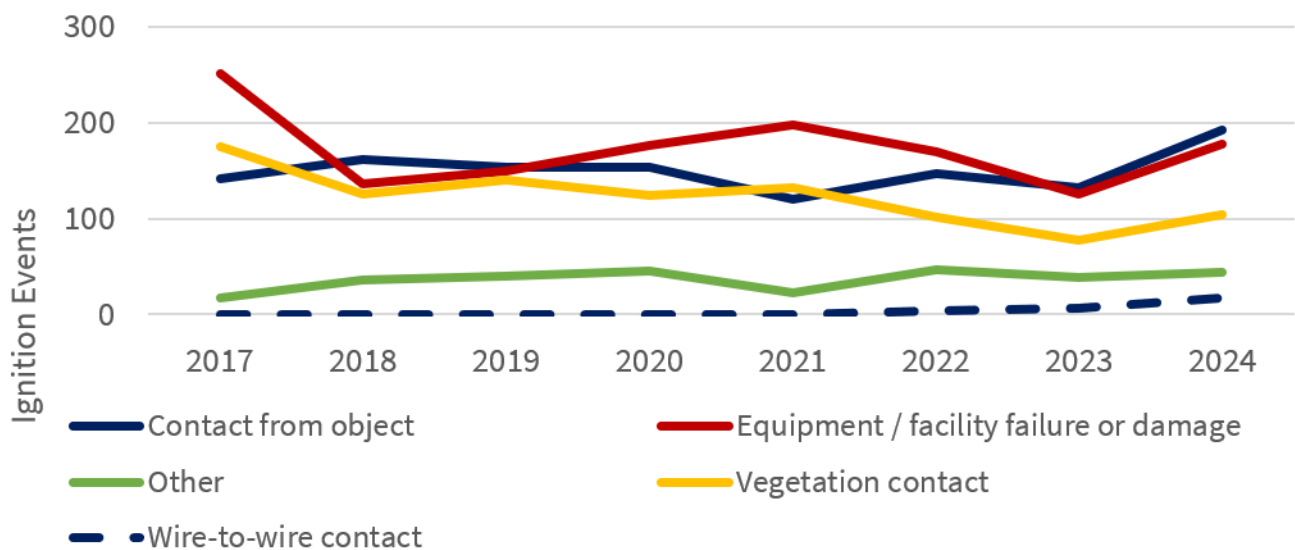


⁶⁸ 2024 EC ARC, page 3.

Raw Ignitions by Risk Driver

PG&E ignition counts are shown delineated by risk drivers to indicate which causes are the most common (Figure 3). Equipment or facility failure or damage and contact from object were the two dominant ignition risk drivers for PG&E across the 2017–2024 period. Equipment or facility failure or damage recorded the highest single-year count, peaking at approximately 251 events in 2017 before declining and recovering to approximately 177 events in 2024. Contact from object ranked second, remaining relatively stable between approximately 120 and 161 events across most of the period before rising to approximately 195 events in 2024 — its highest recorded value. Vegetation contact ranked third, declining from approximately 175 events in 2017 to approximately 105 events in 2024. The “other” category remained consistently low, ranging between approximately 17 and 46 events annually. Wire-to-wire contact, while the lowest-volume category, recorded approximately 17 events and exhibiting a gradual upward trend from near zero in earlier years.

Figure 3. PG&E Ignition Events Delineated by Risk Driver

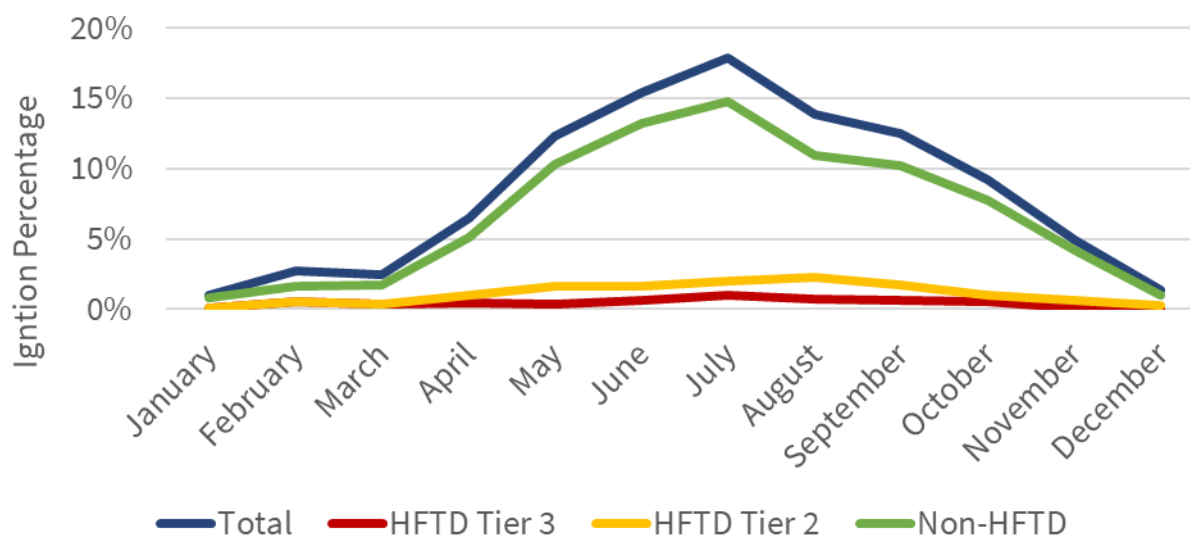


Ignition Events Organized by Month and HFTD Tier for the 2022-2024 Period

Energy Safety estimated where, by HFTD tier, and when, by month of the year, ignition events recently occurred. The last three years (2022-2024) of events are averaged to account for noise in the sparse event data. In order to show the relative contribution of each HFTD tier, Energy Safety divided the 3-year average number of events for each month within each HFTD tier by the 3-year average number of all events for the year.

According to the assessment conducted, PG&E's ignition activity exhibited a pronounced seasonal concentration, with the substantial majority of events occurring during the months of May through October. Total ignitions peaked in July at approximately 18% of annual events before declining steadily through the fall season. Non-HFTD areas made up the majority of ignitions, peaking at approximately 15% in June through August and driving the observed seasonal pattern. HFTD Tier 2 remained markedly low throughout the year, never exceeding approximately 3% in any single month, while HFTD Tier 3 remained effectively flat at or near 0% of total ignitions across all months (Figure 4).

Figure 4. PG&E 3-Year Average (2022-2024) of Monthly Ignition Events by HFTD Tier



7.2 Wire Down Event Rates

Wire down events are wildfire risks where a wire is touching the ground, touching an object, or has become disconnected from its mooring. This type of event poses a risk of ignition or a danger to people if that wire is also energized with electricity, and therefore is tracked by Energy Safety in its Annual Performance Reports as a proxy metric for ignition risk.

Wire Down Events per Overhead Circuit Mile

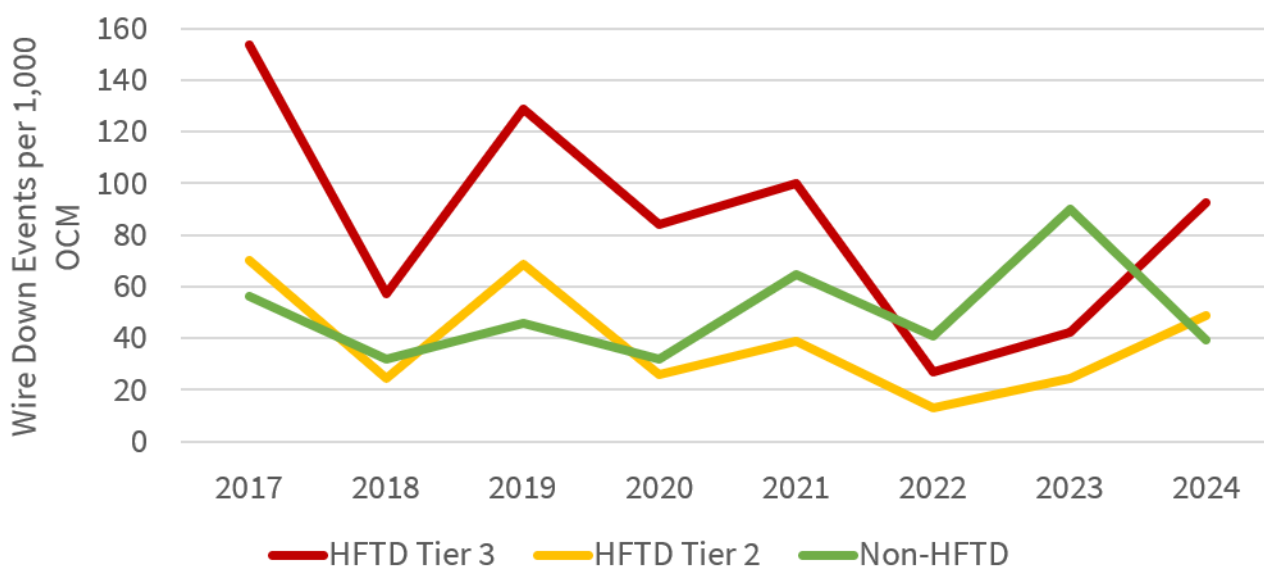
To account for concurrent overhead grid expansion within PG&E's territory and allow for comparisons with other utilities, wire down events normalized by OCM are provided as a rate

of wire down events per 1,000 miles and delineated by HFTD Tier 3, HFTD Tier 2, and non-HFTD Areas.

HFTD Tier 3 recorded the highest normalized wire down rate across the 2017–2024 study period, peaking in 2017 at approximately 154 events per 1,000 OCM before declining sharply and exhibiting considerable year-over-year variability, with secondary peaks in 2019 and 2021 at approximately 129 and 100 events per 1,000 OCM, respectively, before rising again to approximately 92 events per 1,000 OCM in 2024. HFTD Tier 2 ranged between approximately 13 and 70 events per 1,000 OCM. Non-HFTD areas remained comparatively stable, ranging between approximately 31 and 90 events per 1,000 OCM (Figure 5).

For wire down event counts, see Appendix C.

Figure 5. PG&E Wire Down Events per OCM (2017-2024) by HFTD Tier



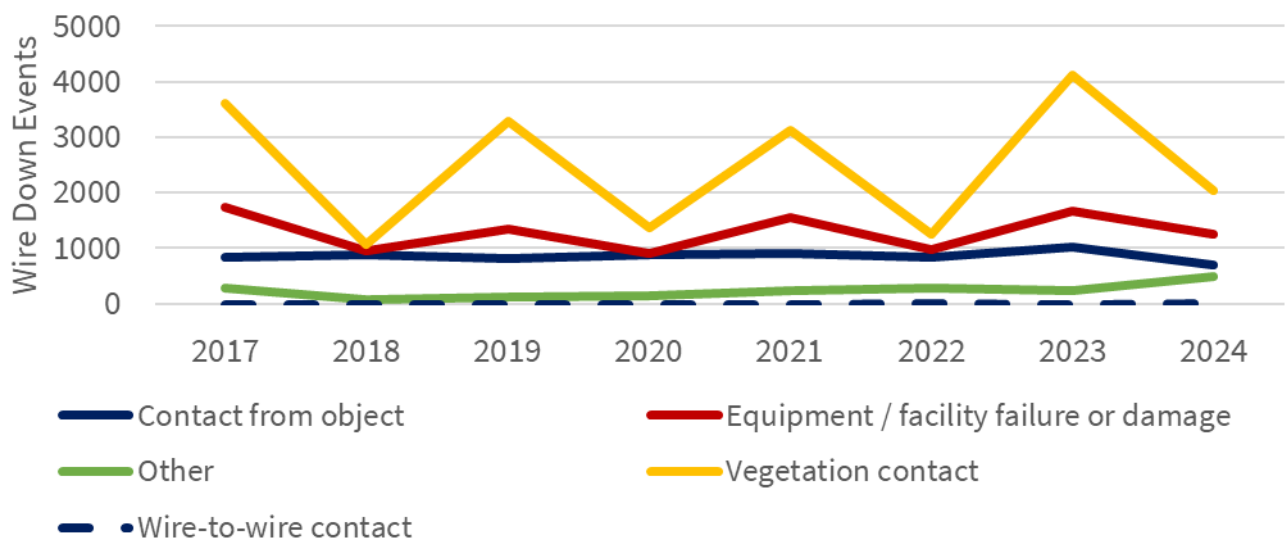
Raw Wire Down Events by Risk Driver

PG&E wire down event counts are shown delineated by risk drivers to indicate which causes are the most common (Figure 6).

Vegetation contact and equipment/facility failure or damage were the two dominant drivers of wire down events across the 2017–2024 study period, consistently recording the highest annual counts by a substantial margin. Vegetation contact was the leading driver throughout, peaking at approximately 4,100 events in 2023 with secondary highs of approximately 3,600 in 2017 and 3,300 in 2019, reflecting the persistent and cyclical influence of vegetation-related hazards on wire down risk across PG&E’s service territory.

Equipment/facility failure or damage represented the second most prevalent driver, remaining relatively stable between approximately 900 and 1,750 events annually, with its highest recorded value in 2017 at approximately 1,750 events. Contact from object and wire-to-wire contact remained comparatively low and stable throughout, while the “other” category remained negligible across all years.

Figure 6. PG&E Wire Down Events Delineated by Risk Driver

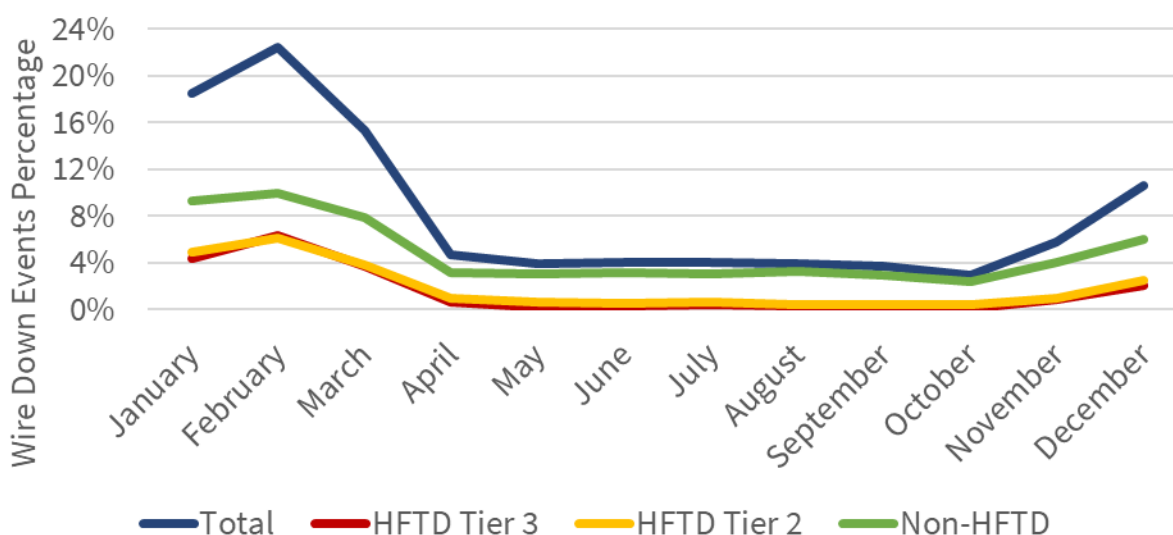


Wire Down Rates Organized by Month and HFTD Tier for the 2022-2024 Period

Energy Safety estimated where, by HFTD tier, and when, by month of the year, wire down events recently occurred. The last three years (2022-2024) of events are averaged to account for noise in the sparse event data. In order to show the relative contribution of each HFTD tier, Energy Safety divided the 3-year average number of events for each month within each HFTD tier by the 3-year average number of all events for the year.

According to the assessment conducted, PG&E's wire down events exhibited a distinctly inverse seasonal pattern relative to ignitions, with the substantial majority of events concentrated during the winter months of January through March. Total wire down events peaked in February at approximately 22%, with an elevated concentration in January at approximately 19% and a secondary recovery in December at approximately 11%, before declining steeply through April and remaining consistently low across the summer and fall months. Non-HFTD areas closely mirrored this winter-dominant pattern, peaking at approximately 9–10% in January through March and confirming that non-HFTD infrastructure is the primary driver of the observed seasonal distribution. HFTD Tier 2 & Tier 3 followed a similar but more muted pattern, peaking at approximately 6% in February before declining to near-zero levels through the remainder of the year (Figure 7).

Figure 7. PG&E 3-Year Average (2022-2024) of Monthly Wire Down Events by HFTD Tier



7.3 Outage Event Rates

Power outages (outages) are unplanned power outage events (i.e., do not include PSPS events) tabulated by circuits and not by number of customers impacted. Outage events are tracked as outcomes that both may cause ignitions and impact a customer's quality of life.

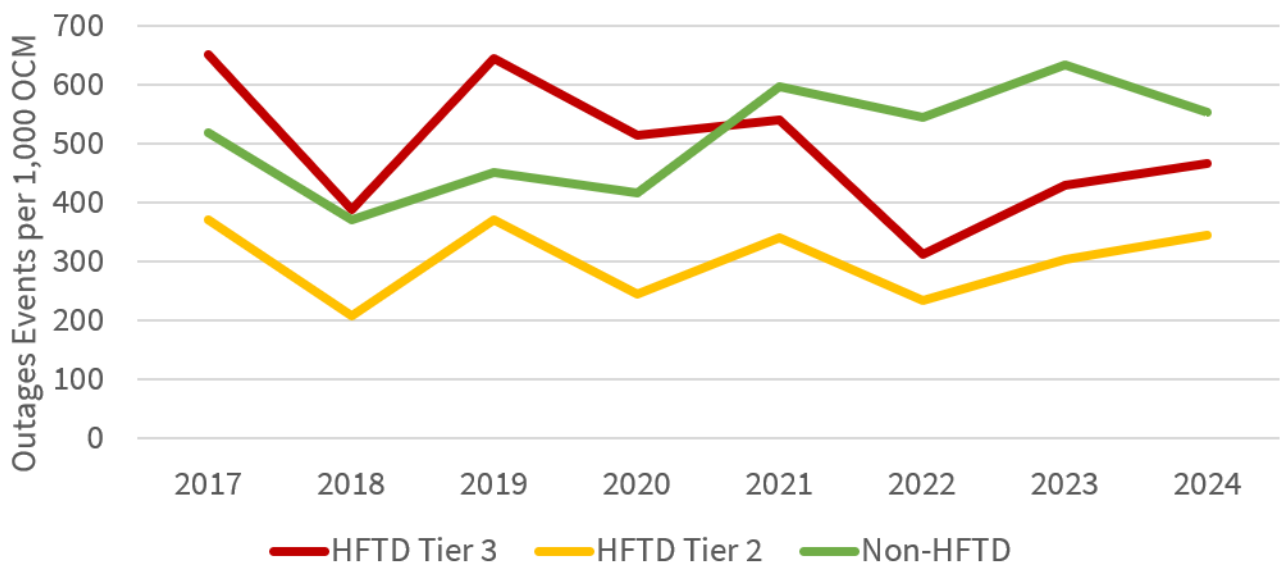
Outage Events per Overhead Circuit Mile

To account for concurrent overhead grid expansion within PG&E’s territory and allow for comparisons with other utilities, outages normalized by OCM are provided as a rate of outages per 1,000 miles and delineated by HFTD Tier 3, HFTD Tier 2, and non-HFTD Areas.

HFTD Tier 3 recorded the highest normalized outage rate in 2017 at approximately 650 events per 1,000 OCM, with a near-equivalent secondary peak of approximately 642 events in 2019, before declining to approximately 465 events by 2024. Non-HFTD areas trended in the opposite direction, rising steadily from approximately 518 events per 1,000 OCM in 2017 to approximately 632 events by 2023. HFTD Tier 2 remained the lowest of all tiers throughout, ranging between approximately 207 and 370 events per 1,000 OCM (Figure 8).

For outage event counts, see Appendix C.

Figure 8. PG&E Outages per OCM (2017-2024) by HFTD Tier



Raw Outage Events by Risk Driver

PG&E outages are shown delineated by risk drivers to indicate which causes are the most common.

The “other” category and equipment or facility failure or damage were the two dominant drivers of outage events across the 2017–2024 study period, collectively accounting for 62% of annual outage volume. Equipment or facility failure or damage represented the most prevalent driver, fluctuating between approximately 10,000 and 17,000 events annually and reaching its peak of approximately 17,000 in 2024. The “other” category was the second leading driver throughout, rising sharply from approximately 14,200 events in 2017 to

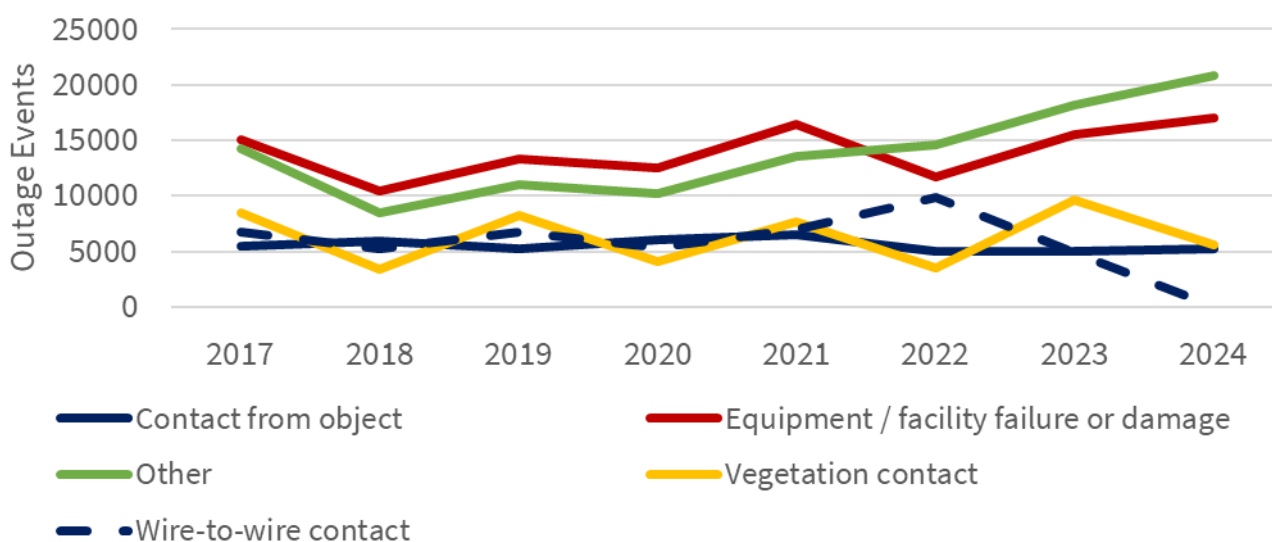
approximately 20,800 events in 2024 — its highest recorded value and the single largest annual count across all risk drivers in the study period.

Vegetation contact ranked third, peaking at approximately 9,500 events in 2023 before declining sharply in 2024, while object contact remained comparatively low and stable throughout. While wire-to-wire contact appears to drop precipitously from 2022 to near zero in 2024, this may be an artifact of the quarterly data received from PG&E. Starting in Q2 2023 and for each quarter thereafter, zero wire-to-wire outage events were reported to Energy Safety, which is inconsistent with the large number of wire-to-wire outage events observed in all previous quarters. In response to Energy Safety Data Request OEIS-C-WMP-2026-PG&E-131, PG&E attributed the drop to a Q2 2023 change in methodology, stating that it no longer counts wire-to-wire contact as a distinct driver but as a secondary effect reported under each outage's primary cause. PG&E declined to provide a crosswalk or corrected data.

Observation

The sustained growth and upward trajectory of the “other” category represents a material data quality and risk transparency concern, as approximately 96% of “other” category outage events were further classified under “other” or “unknown” subcategories — limiting the ability to fully characterize and assess outage risk across PG&E’s service territory in future reporting cycles (Figure 9).

Figure 9. PG&E Outage Events Delineated by Risk Driver



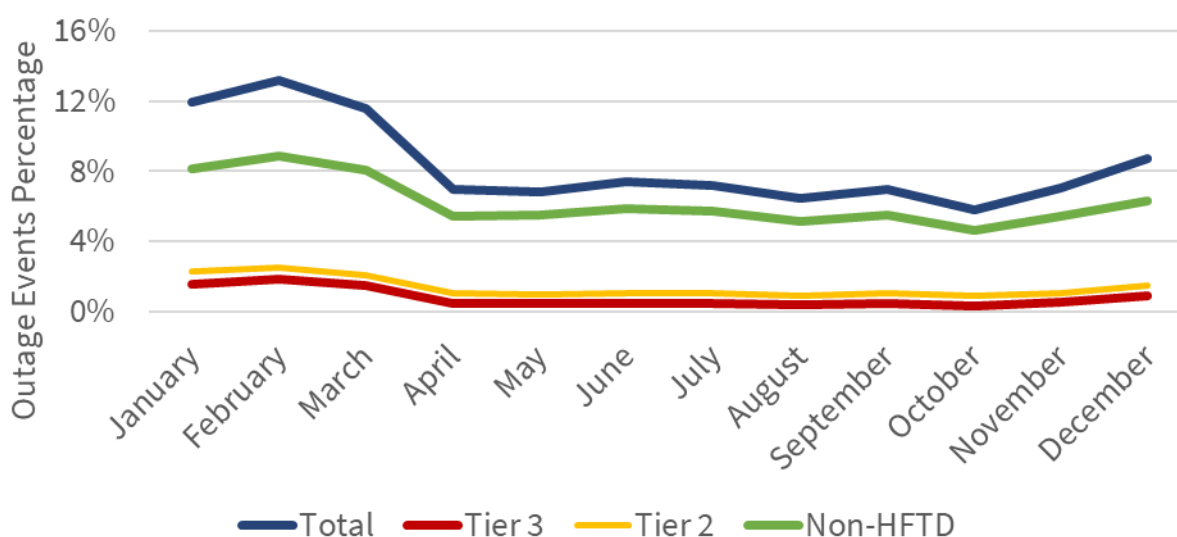
Outage Events Organized by Month and HFTD Tier for the 2022-2024 Period

Energy Safety estimated where, by HFTD tier, and when, by month of the year, outage events recently occurred. The last three years (2022-2024) of events are averaged to account for noise in the sparse event data. In order to show the relative contribution of each HFTD tier,

Energy Safety divided the 3-year average number of events for each month within each HFTD tier by the 3-year average number of all outage events for the year.

According to the assessment conducted, PG&E's outage events exhibit a winter-dominant seasonal pattern consistent with the wire down findings, with the highest concentration of events occurring during January through March. Total outage events peak in February at approximately 13%, with elevated levels in both January and March at approximately 12%, before declining through April and stabilizing at approximately 6–7% across the summer and early fall months — a pattern notably distinct from ignitions, which peak sharply in summer. Non-HFTD areas make up a majority of the events, peaking at approximately 9% in February before declining gradually and maintaining a floor of approximately 5–6% through the fire season months (Figure 10).

Figure 10. PG&E 3-Year Average (2022-2024) of Monthly Outage Events by HFTD Tier



8. Public Safety Power Shutoff Event Performance

PSPS events are planned outages that may be used as a wildfire mitigation tool during extreme fire conditions, particularly hot, dry, and windy days. While useful as a wildfire mitigation measure, PSPS events carry their own risks and adverse impacts on customers — particularly vulnerable customers who rely on electricity. As such, electrical corporations take mitigating actions to reduce the frequency, scope, duration, and impacts of PSPS events.

Energy Safety collects data from the ECs on their PSPS events and tracks their PSPS performance on a year-over-year basis. The purpose of this analysis is to monitor and

publicize the impacts of an EC's PSPS performance. This analysis does not make any judgment about the reasonableness of the decision to employ PSPS.

The following four PSPS event parameters are presented by year and comprise the main components of the PSPS event performance assessment:

- *Scope* is measured as the total number of utility circuits impacted because of PSPS events;
- *Duration - Customer* is measured by the total number of customer-hours because of PSPS events;
- *Duration - Critical Infrastructure* is measured as the total number of critical infrastructure-hours affected by PSPS events;⁶⁹ and
- *Impact* is measured as the total number of customers affected by PSPS events.

Energy Safety converted the event parameters into rates by dividing them by PG&E's PSPS frequency, measured as the count of all PSPS events. These rates for PSPS event parameters measure the performance of EC PSPS event management and account for year-to-year variances in weather. They reflect the performance of the PSPS events once they have occurred.

To estimate when PSPS events typically occur throughout the year, the PSPS events by month for the years 2022 – 2024 have been averaged. The data source for PSPS event parameters information is the QDRs.⁷⁰

To see the raw counts of all PSPS event parameters and PSPS frequency for each year used, see Appendix C.

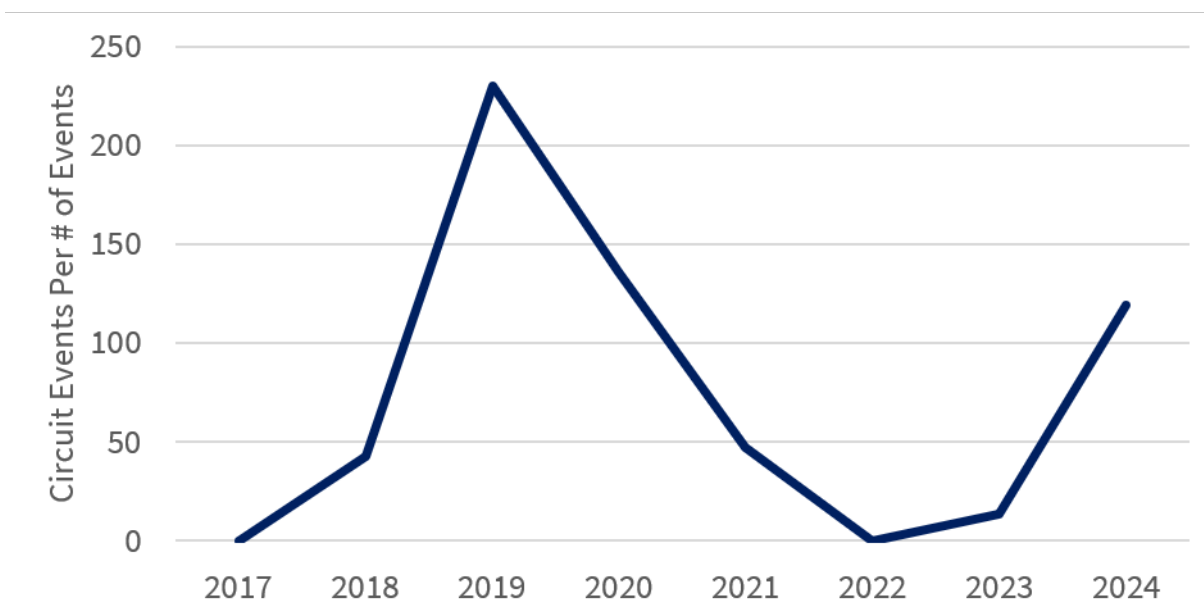
⁶⁹ The term "critical infrastructure hours" means the total number of hours that critical infrastructure was impacted by PSPS events. Energy Safety's 2024 Compliance Guidelines (which were effective during the 2024 performance period) defines critical infrastructure as structures that are: chemical, communication, educational, emergency services, energy, government facilities, healthcare and public health, public safety answering points, transportation, water and wastewater systems, and other.

⁷⁰ 2022 Q3 QDR, Table 11; 2023 Q4 QDR, Table 10; 2024 Q4 QDR, Table 10.

Scope of PSPS Events

Based on information provided by PG&E, the rate of circuits impacted by PSPS events was most pronounced in 2019, reaching approximately 230 circuit events per PSPS event — the highest value recorded across the entire 2017–2024 period — before declining sharply to near-zero levels by 2022 and rising again to approximately 120 circuit events per PSPS event in 2024 (Figure 11). This is despite PG&E recording a higher frequency of PSPS events in 2024 than any other year in the 2017–2024 period (See Figure 24 in Appendix C).

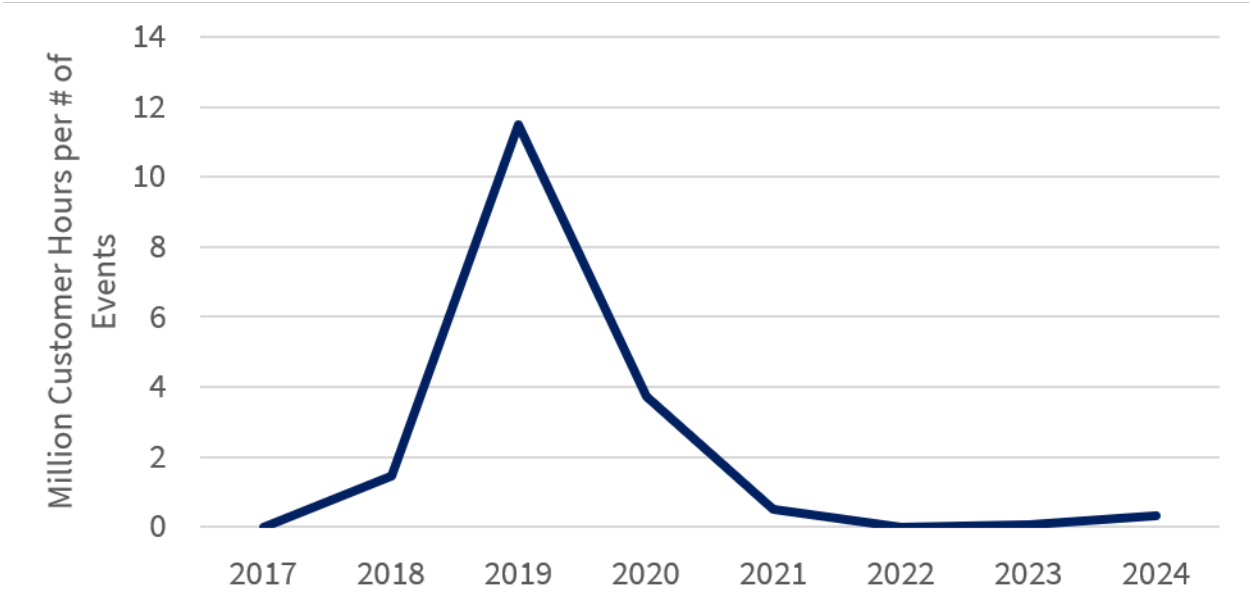
Figure 11. PG&E PSPS Event Scope per Event (2017-2024)



Duration-Customers of PSPS Events

Based on information provided by PG&E, the rate of customer-hours impacted per event was most pronounced in 2019, reaching approximately 11.5 million customer hours per PSPS event — the highest value recorded across the entire 2017–2024 study period — before declining sharply to near-zero levels by 2022 and stabilizing at approximately 0.31 million customer hours per PSPS event in 2024 (Figure 12).

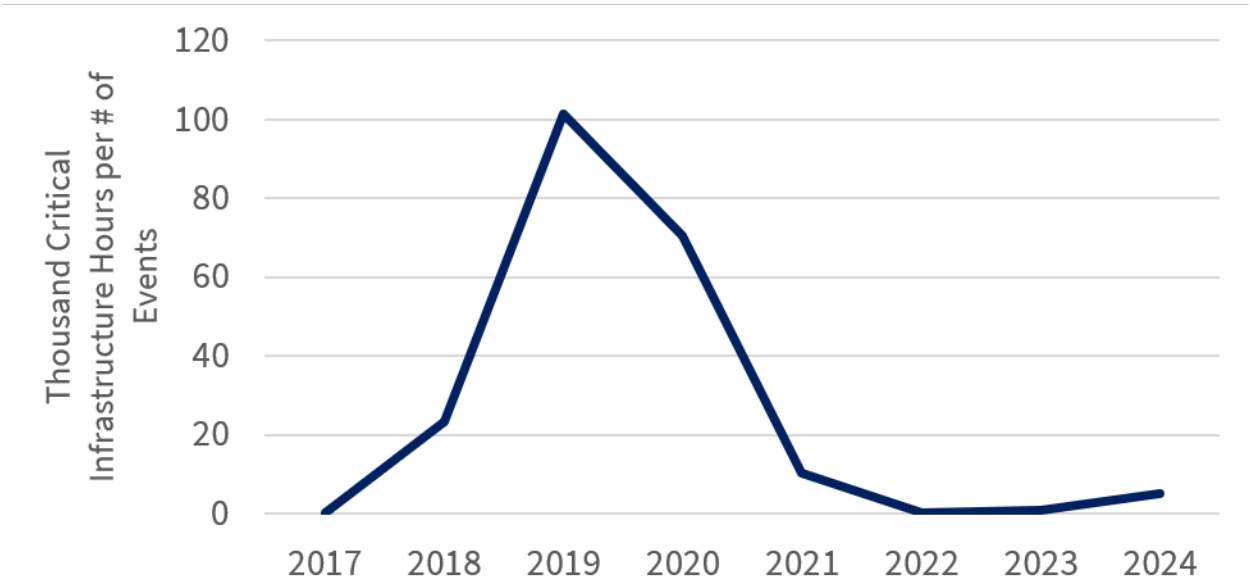
Figure 12. PG&E PSPS Event Duration-Customer per Event (2017-2024)



Duration-Critical Infrastructure of PSPS Events

Based on information provided by PG&E, the duration of PSPS events on critical infrastructure-hours per event was most pronounced in 2019, reaching approximately 101,000 critical infrastructure-hours per PSPS event — the highest value recorded across the entire 2017–2024 study period — before declining to approximately 70,000 in 2020 and sharply to near-zero levels by 2022, before recovering modestly to approximately 4,900 critical infrastructure-hours per PSPS event in 2024 (Figure 13).

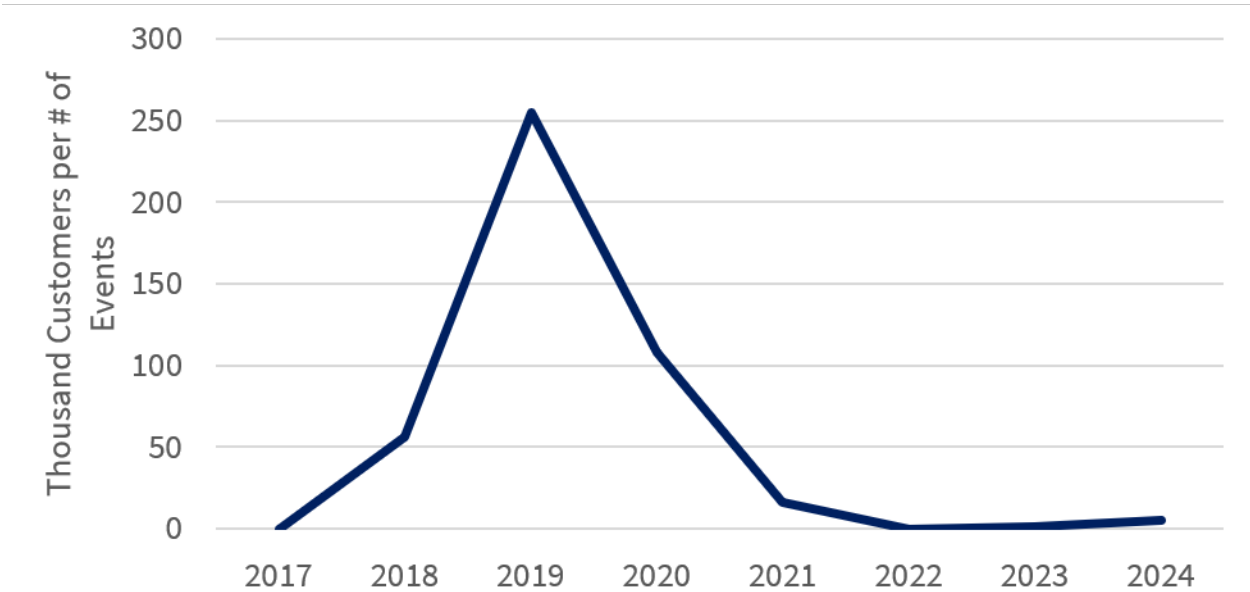
Figure 13. PG&E PPS Event Duration - Critical Infrastructure per Event (2017-2024)



Customers Impacted by PSPS Events

Based on information provided by PG&E, the rate of PSPS event impacts on the number of customers per event was most pronounced in 2019, reaching approximately 255,000 customers per PSPS event — the highest value recorded across the entire 2017–2024 study period — before declining sharply to approximately 16,000 customers per PSPS event in 2021 and near-zero levels by 2022, before recovering modestly to approximately 5,000 customers per PSPS event in 2024 (Figure 14).

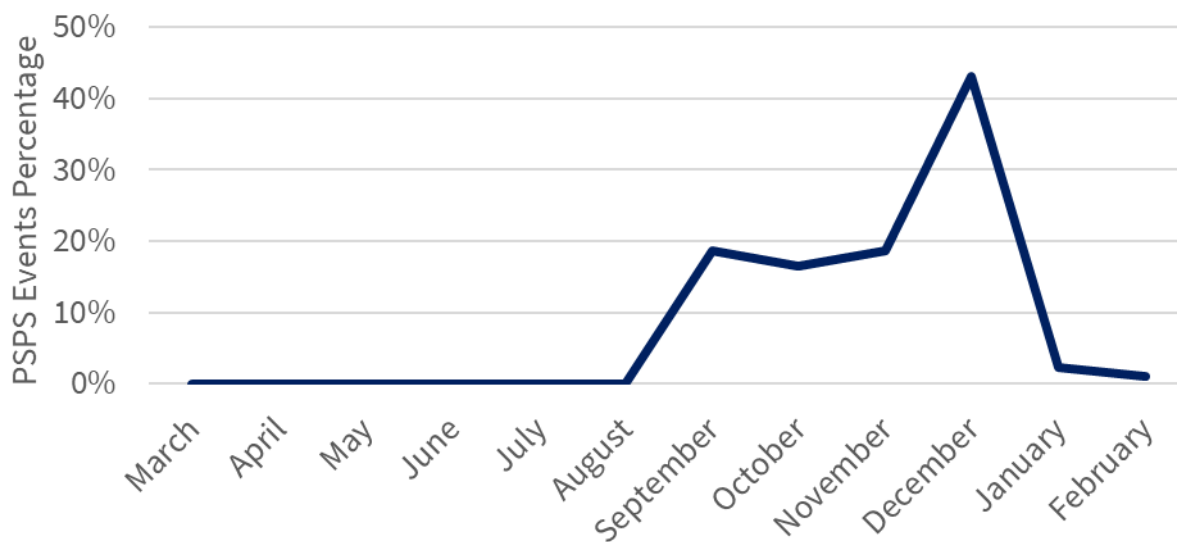
Figure 14. PG&E PSPS Event Impacts on Number of Customers Per Event (2017-2024)



PSPS Events Organized by Month for the 2022-2024 Period

Energy Safety conducted a separate assessment to identify when PSPS events have occurred during the last 3 years. To do so, Energy Safety estimated PG&E's monthly 3-year average count of PSPS event percentages for the 2022-2024 period (Figure 15). According to the assessment conducted, PSPS events exhibit a strongly seasonal pattern, with activations concentrated almost exclusively within the months of August through December. PSPS activity emerges in August before rising sharply through September at approximately 19% and October at approximately 17%, sustaining elevated levels through November at approximately 19%, and peaking in December at approximately 43% of annual PSPS events — the highest recorded share across all months in the study period. PSPS activity drops sharply to near-zero levels in January and February and remains completely absent from March through July.

Figure 15. PG&E 3-Year Average (2022-2024) Monthly PSPS Event Percentages



9. Outcome Metric Performance

Energy Safety collects data from the ECs regarding the consequences, or outcomes, of the ignitions caused by their equipment each year. Tracking this data over time allows for year-to-year assessment of the risk presented to the public by ignitions caused by the EC.

This section presents outcome performance metrics on EC-related wildfires including:

1. *Acres burned* – The total number of acres burned due to electrical corporation caused fires;
2. *Structures damaged/destroyed* - The total number of structures damaged or destroyed due to electrical corporation caused fires;
3. *Injuries/fatalities* - The total number of injuries and fatalities due to electrical corporation caused fires; and
4. *Value of assets destroyed* - The total value of assets destroyed due to electrical corporation caused fires.

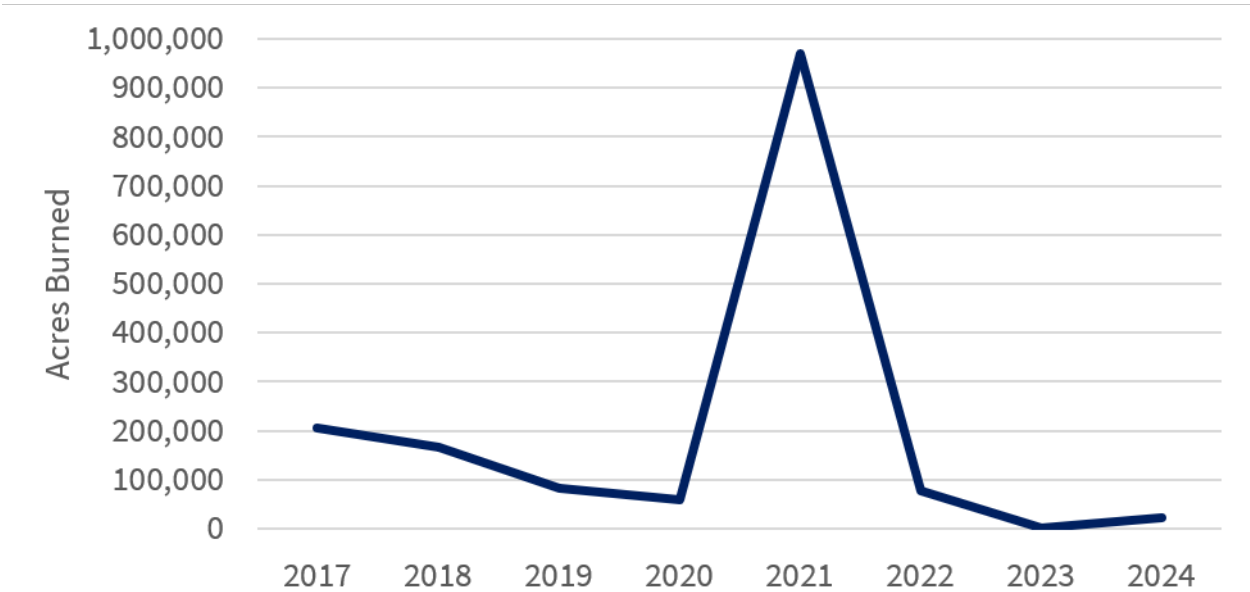
The data source for outcomes performance metrics information is the QDRs.⁷¹

⁷¹ 2023 Q3 QDR, Table 2; 2024 Q4 QDR, Table 2.

Acres Burned

Acres burned associated with PG&E ignition events remained relatively low and stable from 2017 to 2020, ranging between approximately 59,000 and 206,000 acres, before rising sharply to a peak of approximately 968,942 acres in 2021 — the highest recorded value across the entire 2017–2024 period. Acres burned then declined steeply to approximately 77,000 acres in 2022 and further to near-zero levels in 2023, before rising to approximately 21,627 acres in 2024 (Figure 16).

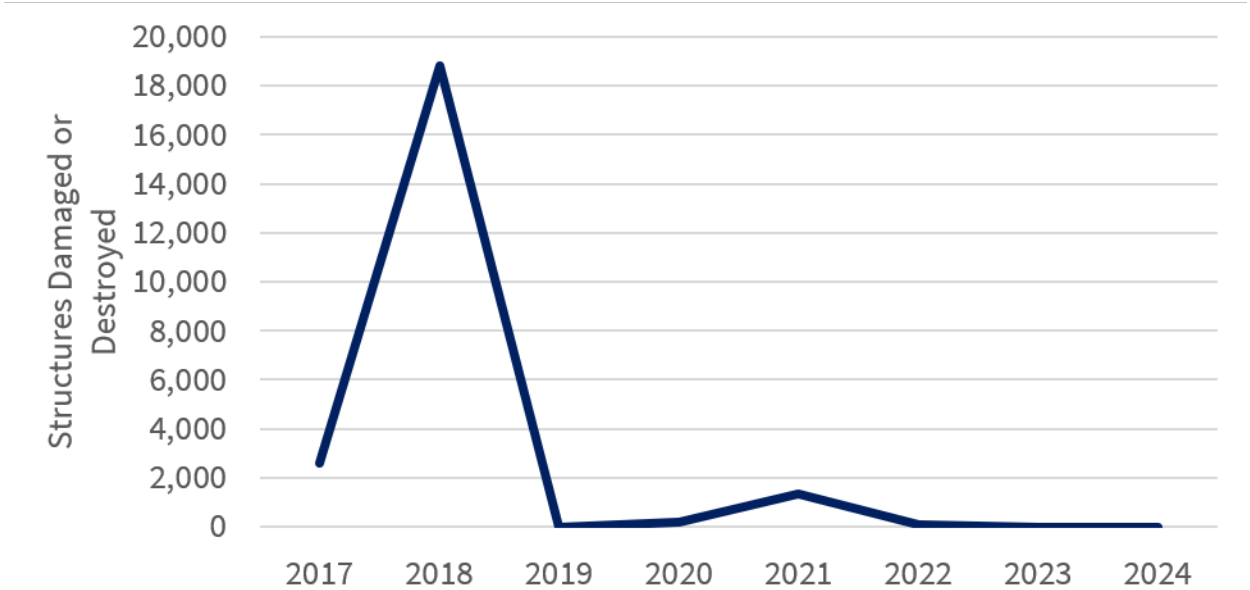
Figure 16. PG&E Total Acres Burned (2017-2024)



Structures Damaged or Destroyed

Structures damaged or destroyed associated with PG&E ignition events rose sharply from approximately 2,500 in 2017 to a peak of approximately 18,800 in 2018 — the highest recorded value across the 2017–2024 period by a substantial margin — before declining steeply to near-zero levels in 2019, rising to approximately 1,300 in 2021 before effectively reaching zero by 2023 and 2024 (Figure 17).

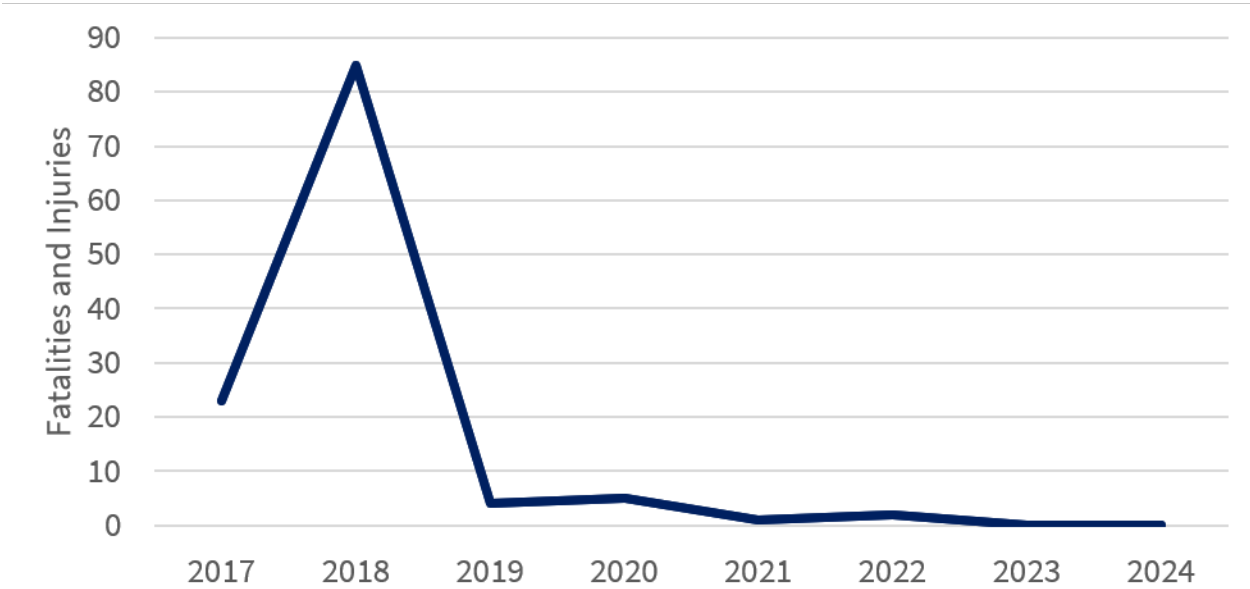
Figure 17. PG&E Structures Damaged or Destroyed (2017-2024)



Injuries and Fatalities

Fatalities and injuries associated with PG&E ignition events rose sharply from approximately 23 in 2017 to a peak of approximately 85 in 2018 — the highest recorded value across the 2017–2024 period by a substantial margin — before declining steeply to approximately four in 2019, and then reaching zero in both 2023 and 2024 (Figure 18).

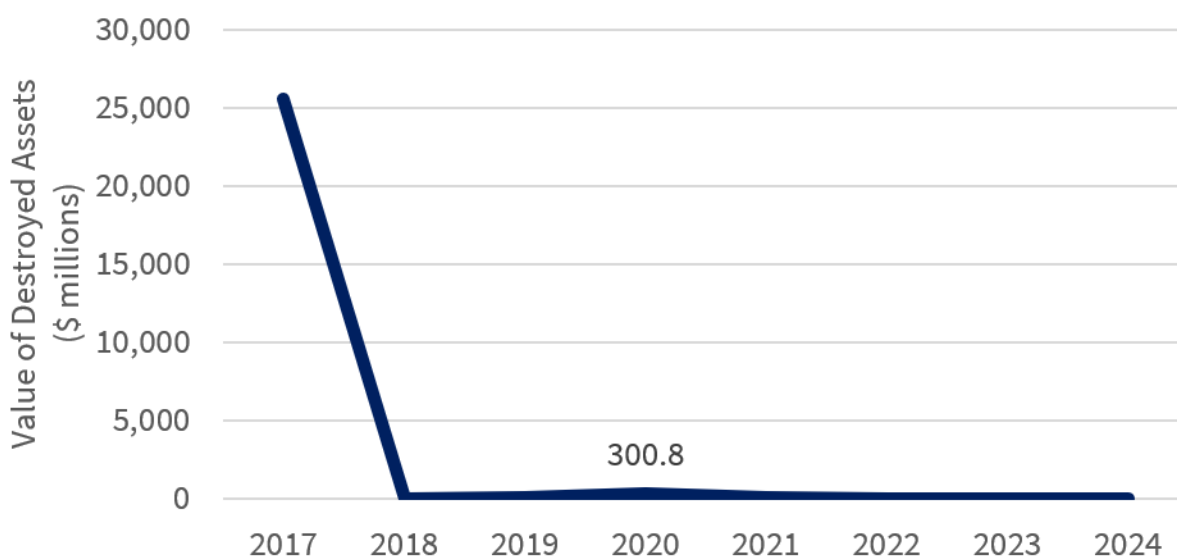
Figure 18. PG&E Fatalities and Injuries (2017-2024)



Value of Destroyed Assets

The value of destroyed assets associated with PG&E ignition events peaked in 2017 at approximately \$25 billion—the highest recorded value across the 2017–2024 period by a substantial margin. This 2017 figure includes destroyed assets related to the 2018 Camp Fire. Following this peak, the value declined to approximately \$300 million in 2020, and has remained consistently lower through 2024 (Figure 19).

Figure 19. PG&E Value of Destroyed Assets (2017-2024)



10. Reporting Accuracy and Completeness Performance

This section considers PG&E's performance related to its documentation of its 2024 WMP implementation. To accomplish this, Energy Safety assessed a wide range of relevant information sources and assessments, including field verifications, for signs of systemic weaknesses that may have hindered PG&E's ability to understand the true status of its 2024 WMP implementation, and therefore to manage and accurately report on it.

Reporting accuracy and completeness is an important indicator of an electrical corporation's overall performance. If an electrical corporation cannot accurately track WMP work and report on progress toward its WMP targets, this calls into question 1) the situational awareness of the electrical corporation and therefore its ability to achieve its WMP risk reduction goals through planned wildfire safety mitigation activities, and 2) the validity of reporting WMP progress. This section of the report summarizes Energy Safety's assessment of

five sources of reporting accuracy and completeness issues to provide an overall performance assessment. Energy Safety reviewed the following:

1. The consistency of data reporting between the QDR and the EC ARC is assessed for issues beyond routine data value updates,
2. VM Audit Reports are reviewed for issues identified,
3. Findings from the IE ARC QA/QC program maturity model evaluations are summarized along with other IE ARC data issues observed,
4. Consistency between QDR tabular and QDR spatial reporting is reviewed, and
5. Data accuracy issues identified by the inspections team are reviewed.

Data reporting accuracy is an ongoing issue for PG&E that has been identified in previous annual performance reporting. The 2020 Annual Report on Compliance produced by Energy Safety explained that PG&E's inaccurately reported data for 16 out of 36 initiatives. There were numerous examples of issues in 2020 with data governance, including poor and inaccurate recordkeeping for PG&E's pole inspection program. The 2021 Annual Report on Compliance produced by Energy Safety identified similar issues, observing that PG&E made numerous changes to the initiative targets in its quarterly initiative update (QIU) information that did not appear to be consistent with the actual 2021 WMP targets. In the 2022 Annual Report on Compliance, Energy Safety observed numerous data issues, including that data for many initiatives was not included in PG&E's EC ARC, PG&E's quantitative commitment activities contained conflicting units between information sources (in the case of nine 2021 WMP initiatives), and that Energy Safety's SVM Audit Report reported inadequacies in PG&E's vegetation management database documenting 2022 work. Finally, in the 2023 Annual Report on Compliance, Energy Safety observed numerous issues with PG&E's financial reporting, in addition to record keeping and documentation issues reported in the SVM Audit and Audit and Report, resulting in two noncompliant vegetation management initiatives.

10.1 QDR as compared to EC ARC

Energy Safety's analysis found several differences for the same initiative between the EC ARC and Q4 QDR. Targets and actuals were frequently reported with different numbers. For example, the detailed inspection transmission-ground initiative (AI-02) had a QDR target of 20,000 transmission structures, and an actual of 21,713 structures. For this same initiative, PG&E's EC ARC reported a different target of 21,390, based on the total listed in its asset registry as of January 2024, and an actual of 21,684 structures. This example and all others are noted in Appendix A of this report.

10.2 VMA Report Identified Issues

Energy Safety's 2024 VMA Report identified deficiencies in PG&E's tracking of debris generated by its vegetation management activities that is less than four inches in diameter,

referred to as debris, in both 2023 and 2024.⁷² In both years, PG&E did not provide documentation to support that debris generated by its vegetation management activities was managed as described in its 2023-2025 WMP. Because the improper management of debris can increase ground fuels, thereby increasing ignition and wildfire spread potential, it is important for PG&E to keep records of these activities for verification that associated risk is being mitigated. As part of its 2024 CAP response, PG&E stated that in response to Energy Safety's feedback during past VMAs, its Quality Control team plans to incorporate debris management verification into their quality observations by the end of 2025.⁷³ This action demonstrates that PG&E has begun to mature its record keeping in response to feedback provided in previous audit cycles. However, because PG&E's corrective actions will only verify a sample of completed work, PG&E will still be unable to verify that all debris is being managed. Therefore, Energy Safety concluded that PG&E's recordkeeping of these activities still has room for improvement, and that PG&E's corrective actions were inadequate in addressing the deficiency.

Energy Safety also identified inconsistencies in PG&E's recordkeeping for its Distribution Routine and Second Patrol inspection programs in 2024. In its 2024 WMP, PG&E committed to tracking progress toward its inspection targets using circuit miles.⁷⁴ However, during the 2024 VMA, PG&E stated that it tracked progress for these targets in 2024 using "span miles."⁷⁵ In its 2024 CAP response, PG&E provided additional information explaining why span miles was a more effective unit of measure for establishment and tracking of these targets.⁷⁶ Based on the information provided in PG&E's 2024 CAP, Energy Safety agrees with PG&E's use of span miles in establishment and tracking for these targets and concluded that it is a more accurate unit of measure to track target progress. PG&E has updated the unit of measure for its Distribution Routine and Second Patrol⁷⁷ inspection targets in its 2026-2028 Base WMP to span miles.⁷⁸

Energy Safety also identified inconsistencies in PG&E's recordkeeping of Level 2 inspections completed by its Focused Tree Inventory (FTI) Program.⁷⁹ In its 2024 WMP, PG&E committed to performing a Level 2 inspection (360 degree walkaround of a tree to identify hazardous conditions) for each tree that could come in contact with PG&E's electrical infrastructure as

⁷² 2024 VMA Report, pages 19-20; 2023 SVM Audit Report, pages 15-17.

⁷³ 2024 VMA Report, page 19.

⁷⁴ 2024 WMP, page 344.

⁷⁵ 2024 VMA Report, page 7.

⁷⁶ 2024 VMA Report, page 8.

⁷⁷ Second Patrol was renamed to Hazard Patrol in 2026.

⁷⁸ 2026-2028 Base WMP, page 362.

⁷⁹ 2024 VMA Report, page 10.

part of the FTI Program scope of work.⁸⁰ PG&E also committed to completing and retaining a Tree Risk Assessment (TRA) form for every tree assessed through the FTI Program.⁸¹

However, PG&E did not maintain documentation verifying that inspectors performed Level 2 inspections for approximately 27% of tree records in the 2024 FTI program.⁸² In addition, PG&E updated its procedures in 2024 to require inspectors to complete and retain TRA forms only for trees prescribed mitigation work as opposed to all inspected trees.⁸³

In its 2024 CAP response, PG&E described several process improvements to address these recordkeeping discrepancies. PG&E created new data fields in its vegetation management enterprise system to document completion of Level 2 inspections. PG&E also improved TRA form recordkeeping by developing a digital version of the form that inspectors can save directly in the enterprise system, replacing the prior practice of uploading photographs of paper forms. While PG&E's updated procedures will only retain records of TRA forms for trees that are prescribed work, Energy Safety concluded that the improvements described in its CAP will increase the overall accuracy of PG&E's data collection related to Level 2 inspections.

Overall, the VMA Report found that PG&E completed the majority of the vegetation management work in its 2024 WMP. PG&E implemented multiple vegetation inspection programs in 2024 that covered its entire Transmission and Distribution systems and duplicated inspections in higher risk areas of its service territory. While all vegetation inspection targets were met, the VMA report found that a proportion of vegetation management work that was prescribed during those inspection activities was delayed by work constraints including: agency permitting requirements, access issues and customer refusals, and that some work identified in 2024 was still pending at the time of PG&E's CAP submission in November 2025. Energy Safety understands that work may be affected by constraints that delay work completion. However, Energy Safety expects PG&E to continue maturing its constraint resolution procedures and utilize the corrective actions described in its CAP to ensure that constraints are documented and resolved as rapidly as possible.

10.3 IE ARC Evaluation

Of the five metrics the IE used to evaluate PG&E's QA/QC programs, four were rated as Routine and one was rated as Mastered. The IE specially highlighted PG&E's adoption of aerial and drone inspections in its QA/QC program as "notable advancement for 2024" that demonstrates PG&E's continued adoption of technology.

The IE noted data discrepancies with two initiatives, Non-Exempt Expulsion Fuse Removal (GH-10), and EPSS-Down Conductor Detection (GM-06). For GM-06 the IE found three issues

⁸⁰ 2024 WMP, page 341.

⁸¹ 2024 WMP, page 603.

⁸² 2024 VMA Report, page 11.

⁸³ 2024 VMA Report, page 26.

during their field review but noted that “these findings were documented clearly but did not materially affect the overall compliance with the initiative goals.” During the field review for GH-10 the IE noted that at two locations the description of equipment installed did not match the equipment found in the field.

10.4 Comparison of Spatial and Tabular QDR Data

Pursuant to Energy Safety’s Data Guidelines, electrical corporations must submit quarterly data reports in both spatial and non-spatial (i.e., tabular) formats. Each of these quarterly reports must contain accurate information about the progress in meeting WMP targets throughout a compliance period.⁸⁴

Energy Safety assessed the data submitted by PG&E regarding the WMP work it completed in 2024, in both the spatial and tabular QDR submissions. Energy Safety found the following inconsistencies between spatial and tabular QDR submissions for 24 initiatives, which may call into question PG&E’s data reporting practices and initiative attainment (Table 5).⁸⁵ Additionally, Energy Safety identified deviations in PG&E’s reporting of ignition and wire down events (Table 6).

Table 5. Energy Safety Summary of Initiatives with Inconsistent QDR Reporting

Initiatives with Inconsistent QDR Reporting	2024 WMP Target ⁸⁶	Actual Recorded in Tabular QDR	Actual Recorded in Spatial QDR	Deviation (%) ⁸⁷
Detailed Inspection Transmission – Ground (8.1.3.1.1) AI-02	20,000 structures	21,713 structures	21,710 Points	0.01%

⁸⁴ Data Guidelines, page 1, pages 47-105, and pages 151-156.

⁸⁵ For more information regarding the unmet initiatives, see Appendix A.

⁸⁶ 2024 WMP.

⁸⁷ When units of measure were comparable, such as with points and poles or points and trees, Energy Safety proceeded to note the percent deviation between tabular and spatial data. When units of measure were not comparable such as with miles and points, Energy Safety did not attempt to present a percent deviation.

Initiatives with Inconsistent QDR Reporting	2024 WMP Target ⁸⁶	Actual Recorded in Tabular QDR	Actual Recorded in Spatial QDR	Deviation (%) ⁸⁷
Detailed Inspection Transmission – Aerial (8.1.3.1.2) AI-04	20,000 structures	22,865 structures	23,011 Points	0.63%
Detailed Inspection Transmission – Climbing (8.1.3.1.3) AI- 05	1,200 structures	1,216 structures	1,241 Points	2%
Detailed Ground Inspections – Distribution (8.1.3.2.1) AI-07	220,016 poles	223,146 poles	217,958 Points	2.3%
Downed Conductor Detection Devices (8.1.2.10) GM-06	400 Protective Device Controllers or Relays that are DCD capable	705 Protective Device Controllers or Relays that are DCD capable	940 Points	33%
Provide portable batteries to PG&E customers (8.5.3) PS-06	4,000 Batteries	4,376 Batteries	4,376 Points	0%
Tree Removal Inventory (8.2.2.2.4) VM-04	20,000 Trees removed	32,480 Trees removed	8,496 Points	73%

Initiatives with Inconsistent QDR Reporting	2024 WMP Target ⁸⁶	Actual Recorded in Tabular QDR	Actual Recorded in Spatial QDR	Deviation (%) ⁸⁷
System Hardening - Transmission Shunt Splices (8.1.2.5.1) GH-06	22 Transmission Lines	23 Transmission Lines	230 Points	N/A Units of measure differ between the Spatial QDR and the Tabular QDR.
Line Sensor – Installations (8.3.3.1) SA-02	40 Circuits	45 Circuits	76 Points	N/A Units of measure differ between the Spatial QDR and the Tabular QDR.
Eliminate HFTD-HFRA Distribution Backlog (8.1.7.2) GM-08	64,000 Distribution EC Tags	96,141 Distribution EC Tags	102,032 Points	N/A Units of measure differ between the Spatial QDR and the Tabular QDR.
Distribution Line Motor Switch Operator (MSO) – Replacements (8.1.2.10.3) GH-09	26 MSO replacements	26 MSO replacements	39 Points	50%

Initiatives with Inconsistent QDR Reporting	2024 WMP Target ⁸⁶	Actual Recorded in Tabular QDR	Actual Recorded in Spatial QDR	Deviation (%) ⁸⁷
Non-Exempt Expulsion Fuse – Removal (8.1.2.10.5) GH-10	3,000 Fuses	3,106 Fuses	3,496 Points	12.5%
Pole Clearing Program (8.2.3.1) VM-02	63,000 Distribution poles	79,988 Distribution poles	79,595 Points	0.5%
Substation defensible space (8.2.2.3) VM-07	61 Hydroelectric Substations and Powerhouses	59 Hydroelectric Substations and Powerhouses	1,354 Points	2,194%
VM for Operational Mitigations (VMOM) (8.2.2.2.3) VM-11	6,500 Trees	6,937 Trees	6,932 Points	0.7%
Covered conductor installation (8.1.2.1)	59.9 Circuit miles	348.3 Circuit miles	292.03 Miles	16%
Perform transmission IR inspections (8.1.3.1.4) AI-06	4,000 Miles	4,339.4 Miles	3,520.42 Miles	19%

Initiatives with Inconsistent QDR Reporting	2024 WMP Target ⁸⁶	Actual Recorded in Tabular QDR	Actual Recorded in Spatial QDR	Deviation (%) ⁸⁷
Routine Patrol - Distribution (8.2.2.2.1) VM-16	78,650 Circuit Miles	78,307.8 Circuit Miles	83,471 Miles	6.6%
Second Patrol - Distribution (8.2.2.2.2) VM-17	25,865 Circuit Miles	27,259.8 Circuit Miles	27,227.03 Miles	1%
Undergrounding of electric lines and/or equipment (8.1.2.2)	250 Circuit Miles	257.8 Circuit Miles	356.42 Miles	38%
LiDAR Data Collection – Transmission (8.2.2.1.1) VM-01	17,500 Circuit Miles	17,989 Circuit Miles	46,507.87 Miles	61%
Transmission Second Patrol (8.2.2.1.2) VM-14	5,625 Circuit Miles	5,848 Circuit Miles	9,379.83 Miles	60%
Focused Tree Inspection Program (8.2.2.2.5) VM-03	1,500 Circuit Miles	1,568.2 Circuit Miles	60.71 Miles	96%

Initiatives with Inconsistent QDR Reporting	2024 WMP Target ⁸⁶	Actual Recorded in Tabular QDR	Actual Recorded in Spatial QDR	Deviation (%) ⁸⁷
Integrated Vegetation Management – Transmission (8.2.2.1.3) VM-15	6,504 Acres	7,907 Acres	5,940.37 Acres	25%

Table 6. Energy Safety Summary of Ignition Risk Metrics with Inconsistent QDR Reporting

Risk Metrics with Inconsistent QDR Reporting	Actual Recorded in Tabular QDR	Actual Recorded in Spatial QDR	Deviation (%)
2024 Total Ignitions	534	1,068	50%
2024 Total Wire Down Events	4,627	8,950	52%
2024 Total Unplanned Outage Events	48,655	48,654	0%

10.5 Field Inspection Issues Identified

Up to 15% of Energy Safety’s field inspections of PG&E’s 2024 WMP work related to the transmission shunt splices initiative (GH-06) and the non-exempt expulsion fuse removal initiative (GH-10) identified data accuracy and completeness issues.

For transmission shunt splices, PG&E’s WMP states that “a conductor splice is a point of failure within a conductor span” and that the initiative was to “install a shunt splice on top of the existing splice” that “eliminates the splice as a single point of failure.” ⁸⁸ However, at multiple locations PG&E reported as having work been completed, Energy Safety inspectors observed an existing transmission splice without a corresponding shunt splice. Ultimately, these findings led Energy Safety to conclude that PG&E did not meet its 2024 WMP target for this initiative, even though PG&E claimed in its EC ARC that it had done so. This illustrates an

⁸⁸ 2024 WMP, page 1,067.

important failure of PG&E to accurately report progress against its initiative targets in its EC ARC.

For non-exempt expulsion fuses, PG&E's WMP states that this initiative "reduces the consequences of potential ignitions by replacement and/or removal of non-exempt fuses."⁸⁹ However, Energy Safety inspectors observed non-exempt expulsion fuses that had not been replaced with CalFire-exempt fuses, and a location where no fuses were observed, when inspecting locations where PG&E reported the work as complete.

These conditions indicate that at inspected locations the assets or configurations intended to provide the stated risk-reduction functions were not present as reported, and in several of these cases it resulted in NOVs and NONs.

10.6 Data Accuracy and Completeness Conclusions

As described above, Energy Safety found that PG&E's documentation and reporting on its 2024 WMP implementation was inconsistent in several areas. These problems have persisted for many years and have been identified in prior reports. Energy Safety's assessment of all the initiatives by data source can be found in Appendix A.

Taken together, this analysis shows that PG&E must continue to improve the accuracy of its WMP implementation documentation practices. Energy Safety will monitor PG&E's reporting and expects improvements regarding the accuracy of PG&E's documentation and tracking processes going forward.

11. Conclusion

Energy Safety makes the following observations and recommendations regarding PG&E's execution of its WMP initiative activities and the performance of its infrastructure relative to its wildfire risk in 2024.

WMP Initiative Attainment and Performance

For initiative attainment, PG&E completed 54 of 56 (96%) of its 2024 WMP initiatives. While PG&E met targets for a large majority of its 2024 WMP initiatives, one of those targets that was missed was related to a WMP initiative activity that would have otherwise reduced risk on PG&E's system in the manner PG&E committed to its customers and the broader public of California. This finding is based on Energy Safety's field inspections, which determined that there was some inconsistency in the data provided by PG&E that are part of broader data management issues that PG&E should address going forward.

⁸⁹ 2024 WMP, page 459.

Ignition Risk Performance

In 2024, PG&E referenced weather conditions as its explanation for an increased number of ignitions in 2024 compared to 2023, and experienced an increased number of wire down events and unplanned outages in HFTD Tiers 2 and 3 in 2024 as compared to 2023.

Public Safety Power Shutoff Performance

While PG&E demonstrated some stability in recent years with respect to customer hours and critical infrastructure hours interrupted, PG&E's 2024 PSPS activations were materially broader in circuit scope than any year since 2019.

Data Reporting Accuracy and Completeness Performance

PG&E's reporting accuracy and completeness requires improvement, as has been recommended in previous annual reports on PG&E's performance. Energy Safety identified important errors in the accuracy of work completion and accounting for some 2024 WMP initiatives, and there were numerous inconsistencies in the spatial and non-spatial reporting on WMP-related work. Similar observations of PG&E's poor data quality were communicated in prior Energy Safety Annual Reports on Compliance, and in the VMA Report for the 2024 WMP.

Additionally, with respect to the reported drivers of unplanned outage events the upward trajectory of the "other" category represents a material data quality and risk transparency concern. Further, approximately 96% of "other" category outage events were further classified under "other" or "unknown" subcategories — limiting the ability to fully characterize and assess outage risk across PG&E's service territory.

Given the ongoing issues with PG&E's data reporting accuracy and completeness, this APR reiterates Energy Safety's previous expectation that PG&E improve its data collection and reporting practices. Future performance reporting will continue to focus on this issue to ensure that PG&E improves.

Conclusion

Energy Safety will continue to monitor PG&E's implementation of its ongoing wildfire mitigation activities so that PG&E improves its ability to eliminate utility-caused catastrophic wildfires in California. In order to effectively do so, PG&E must improve the quality of the data that it submits to Energy Safety regarding WMP performance.

12. References

Table 7. References for Citations

Citation	Reference
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2023 ARC	Office of Energy Infrastructure Safety, <u>“Annual Report on Compliance for Pacific Gas & Electric Company's 2023 Wildfire Mitigation Plan,”</u> Published July 25, 2025, URL:(https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=59033&docket=2023-ARC&shareable=true).
2023 Q4 QDR	Pacific Gas & Electric Company, <u>“PG&E 2023 Q4 Tables1-15 R0,”</u> Published February 6, 2024, URL:(https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=56293&shareable=true).
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Citation	Reference
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IE ARC	Bureau Veritas, " <u>Pacific Gas and Electric 2024 Independent Evaluator Annual Report on Compliance (IE ARC)</u> ," Published July 23, 2025, URL:(https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=58988&docket=2025-IE&shareable=true).
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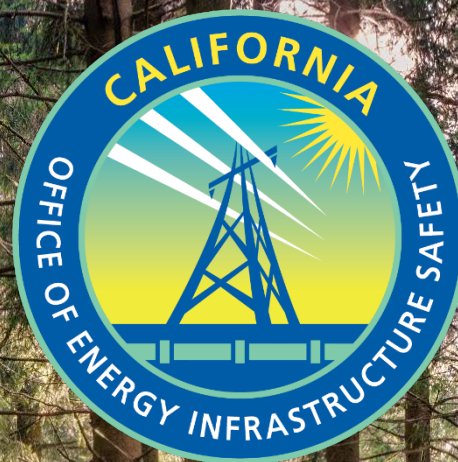
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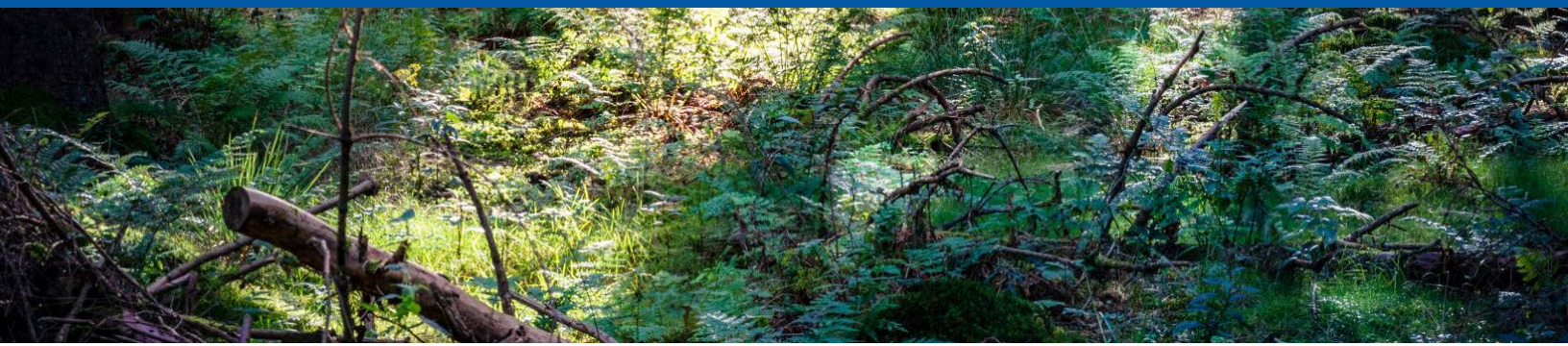
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APPENDICES



13. Appendices

Appendix A: PG&E Information on WMP Initiative Activity Attainment

Table 9 summarizes each of PG&E's 56 initiative activity targets from its 2024 WMP, PG&E's self-reporting on performance contained in its QDR, PG&E's self-reporting on performance contained in its submission in response to Energy Safety PG&E's EC ARC, the IE ARC, and the VMA Report.⁹⁰

⁹⁰ EC ARC, IE ARC, and VMA Report.

Table 8. WMP Initiative Activity Attainment Information ⁹¹

2024 WMP Initiative	2024 WMP Activity Target	QDR	EC ARC	IE ARC	Attainment Status	Proposed Expenditure (\$ thousand)	Actual Expenditure (\$ thousand)
System Hardening-Distribution 8.1.2.1 GH-01	280 circuit miles of system hardening work which includes overhead system hardening, removal of overhead lines in HFTD, HFRA or buffer zones, including work done for Community Rebuild efforts.	Met Target: 280 CM Actual: 348.3 CM	Met Target: 280 CM Actual: 348.29 CM	Met Target: 280 CM Actual: 347.2 CM	Met	\$97,014	\$134,201

⁹¹ This table includes all initiative activities that had targets for the 2024 calendar year but does not include initiative activities for which PG&E had proposed or actual expenditures and no targets for the 2024 calendar year.

2024 WMP Initiative	2024 WMP Activity Target	QDR	EC ARC	IE ARC	Attainment Status	Proposed Expenditure (\$ thousand)	Actual Expenditure (\$ thousand)
Evaluate Covered Conductor Effectiveness 8.1.2.1 GH-02	Update the covered conductor recorded effectiveness calculation using 2023 outage data on the lines that have Covered Conductors for consideration in future system hardening workplans.	Met Target: Update the Covered Conductor recorded effectiveness calculation using 2023 & 2024 outage data. Actual: Met the 2024 milestone in Q1	Met Target: Evaluate Covered Conductor Effectiveness Actual: Whitepaper completed on 3/22/2024 showing the updated Covered Conductor effectiveness calculation using 2023 outage data	Met Target: Update the covered conductor effectiveness calculation using 2023 outage data Actual: Covered conductor effectiveness calculation updated using 2023 outage data	Met	\$0	\$0 ⁹²

⁹² PG&E did not provide funding information for this initiative.

2024 WMP Initiative	2024 WMP Activity Target	QDR	EC ARC	IE ARC	Attainment Status	Proposed Expenditure (\$ thousand)	Actual Expenditure (\$ thousand)
10K Undergrounding 8.1.2.2 GH-04	Complete 250 circuit miles of undergrounding work for all projects.	Met Target: 250 CM Actual: 257.8 CM	Met Target: 250 CM Actual: 257.84 CM	Met Target: 250 CM Actual: 257.5 CM	Met	\$960,418	\$999,783
System Hardening-Transmission Shunt Splices 8.1.2.5.1 GH-06	Install shunt splices on 22 transmission lines	Met Target: 22 Transmission Lines Actual: 23 Transmission Lines	Met Target: 22 Transmission Lines Actual: 23 Transmission Lines	Met Target: 22 Transmission Lines Actual: 23.1 Transmission Lines	Met ⁹³	\$4,900	\$4,042

⁹³Although PG&E and the IE reported 23 actual lines hardened for this initiative, Section 6 of this report describe several Energy Safety field inspection findings for this initiative and concludes that the actual number of transmission shunt splices installed by PG&E under its 2024 WMP is 20.

2024 WMP Initiative	2024 WMP Activity Target	QDR	EC ARC	IE ARC	Attainment Status	Proposed Expenditure (\$ thousand)	Actual Expenditure (\$ thousand)
Distribution Line Motor Switch Operator (MSO)-Replacements 8.1.2 10.3 GH-09	Replace /remove remaining 27 MSOs from the 47 identified as of Jan. 26, 2023	Met Target: 26 MSO Actual: 26 MSO	Met Target: 26 MSO Actual: 26 MSO	Met Target: 26 MSO Actual: 26 MSO	Met	\$5,835	\$2,994
Non-Exempt Expulsion Fuse-Removal 8.1.2 10.5 GH-10	Remove non-exempt expulsion fuses from 3,000 locations identified on distribution poles	Met Target: 3,000 expulsion fuses Actual: 3,106 expulsion fuses	Met Target: 3,000 expulsion fuses Actual: 3,112 expulsion fuses	Met Target: 3,000 expulsion fuses Actual: 3,112 expulsion fuses	Met	\$19,800	\$16,867

2024 WMP Initiative	2024 WMP Activity Target	QDR	EC ARC	IE ARC	Attainment Status	Proposed Expenditure (\$ thousand)	Actual Expenditure (\$ thousand)
Detailed Inspection Transmission-Ground 8.1.3.1.1 AI-02	Complete detailed ground inspections on approx. 20,000 transmission structures.	Met Target: 20,000 structures Actual: 21,713 structures	Met Target: 21,390 structures ⁹⁴ Actual: 21,684 structures	Met Target: 20,000 structures Actual: 21,600 structures	Met	\$13,959	\$11,494
Detailed Inspection Transmission-Aerial 8.1.2.1.2 AI-04	Complete detailed aerial inspections on approx. 20,000 transmission structures.	Met Target: 20,000 structures Actual: 22,865 structures	Met Target: 22,757 structures ⁹⁵ Actual: 22,757 structures	Met Target: 20,000 structures Actual: 22,600 structures	Met	\$32,446	\$32,529

⁹⁴ EC ARC, page 28 and Table 3, PG&E updated the target number based on its January 2024 asset registry.

⁹⁵ EC ARC, page 28 and Table 3, PG&E updated the target number based on its January 2024 asset registry.

2024 WMP Initiative	2024 WMP Activity Target	QDR	EC ARC	IE ARC	Attainment Status	Proposed Expenditure (\$ thousand)	Actual Expenditure (\$ thousand)
Detailed Inspection Transmission-Climbing 8.1.3.1.3 AI-05	Complete detailed climbing inspections on approx. 1,200 transmission structures.	Met Target: 1,200 structures Actual: 1,216 structures	Met Target: 1,216 structures ⁹⁶ Actual: 1,216 structures	Met Target: 1,200 structures Actual: 1,212 structures	Met	\$3,758	\$2,825
Perform transmission infrared (IR) inspections 8.1.2.1.4 AI-06	IR patrols will be performed on 4,000 circuit miles of energized transmission lines.	Met Target: 4,000 CM Actual: 4,339.4 CM	Met Target: 4,314.9 CM Actual: 4,339.38 CM	Met Target: 4,000 CM Actual: 4,320 CM	Met	\$2,798	\$2,678

⁹⁶ EC ARC Table 3, PG&E updated the target number based on its January 2024 asset registry.

2024 WMP Initiative	2024 WMP Activity Target	QDR	EC ARC	IE ARC	Attainment Status	Proposed Expenditure (\$ thousand)	Actual Expenditure (\$ thousand)
Detailed Ground Inspections-Distribution 8.1.3.2.1 AI-07	Complete detailed inspections on approx. 220,016 distribution poles.	Met Target: 220,016 inspections ⁹⁷ Actual: 223,146 inspections	Met Target: 220,042 inspections Actual: 223,122 inspections ⁹⁸	Met Target: 220,016 inspections Actual: 222,216.16 inspections	Met	\$53,312	\$51,099
Supplemental Inspections-Substation Distribution 8.1.3.3.1 AI-08	Complete supplemental inspections on 76 distribution substations.	Met Target: 76 substations Actual: 76 substations	Met Target: 76 substations Actual: 76 substations	Met Target: 76 substations Actual: 76 substations	Met	\$2,649	\$2,378

⁹⁷ 2024 QDR, Table 1, PG&E initial WMP target was 223,501 distribution poles inspected. In its 2024 Change Order PG&E requested lowering the target to 220,016 distribution poles inspected, Energy Safety approved the request. After updating the asset registry PG&E changed the target to 220,042 distribution poles inspected. While the QDR has a target of 220,016 inspections, PG&E used a target of 220,042 inspections to measure completed work.

⁹⁸ PG&E's reported actual of 223,122 includes 217,949 completed inspections and 5,173 inspections not completed due to external factors, such as landowner refusal, weather conditions, or assets removed or destroyed. Completed inspections alone were below the target of 220,042.

2024 WMP Initiative	2024 WMP Activity Target	QDR	EC ARC	IE ARC	Attainment Status	Proposed Expenditure (\$ thousand)	Actual Expenditure (\$ thousand)
Supplemental Inspections-Substation Transmission 8.1.3.3.1 AI-09	Complete supplemental inspections on 36 transmission substations.	Met Target: 36 substations Actual: 36 substations	Met Target: 36 substations Actual: 36 substations	Met Target: 36 substations Actual: 36 substations	Met	\$2,647	\$2,362
Supplemental Inspections-Hydroelectric Substations and Powerhouses 8.1.3.3.1 AI-10	Complete supplemental inspections on 46 Hydroelectric Generation Substations & Powerhouses.	Met Target: 46 substations Actual: 46 substations	Met Target: 46 substations Actual: 46 substations	Met Target: 46 substations Actual: 46 substations	Met	\$1,017	\$2,245

2024 WMP Initiative	2024 WMP Activity Target	QDR	EC ARC	IE ARC	Attainment Status	Proposed Expenditure (\$ thousand)	Actual Expenditure (\$ thousand)
Asset Inspections- Quality Assurance 8.1.6.1 GM-01	1) Transmission Ground Inspections - HFTD/HFRA (Field): 500 audit locations; 94% pass rate 2) Distribution Ground Inspections - HFTD/HFRA (Field): 1,500 audit locations; 90% pass rate	Met Target: Transmission-500 audit locations & 94% pass rate; Distribution-1,500 audit locations & 90% pass rate Actual: Transmission-2,970 audit locations & 99.97% Pass Rate; Distribution-7,098 audit locations & 99.69% Pass Rate	Met Target: Transmission-500 audit locations & 94% pass rate; Distribution-1,500 audit locations & 90% pass rate Actual: Transmission-2,970 audit locations & 99.97% Pass Rate; Distribution-7,098 audit locations & 99.69% Pass Rate	Met Target: Transmission-500 audit locations & 94% pass rate; Distribution-1,500 audit locations & 90% pass rate Actual: Transmission-2,970 audit locations & 99.97% Pass Rate; Distribution-7,095 audit locations & 99.69% Pass Rate	Met	\$2,751	\$8,052

2024 WMP Initiative	2024 WMP Activity Target	QDR	EC ARC	IE ARC	Attainment Status	Proposed Expenditure (\$ thousand)	Actual Expenditure (\$ thousand)
HFTD/HFRA open Tag Reduction-Distribution Backlog 8.1.7.2 GM-03	1) Close at least 25,000 Distribution EC notifications more than created in HFRA/HFTD locations in 2024 2) Of those above, close 46,000 distribution backlog EC notifications. 3) 102.7 (68%) risk units	Met Target: 89,000 HFTD/HFRA Distribution tags Actual: 96,141 HFTD/HFRA Distribution tags	Met Target: 1) 94,456 HFTD/HFRA tags closed 2) 68% risk reduction 3) 46,000 distribution backlog closures Actual: 1) 96,141 HFTD/HFRA tags closed 2) 73% risk reduction 3) 53,526 distribution backlog closures	Met Target: 64,000 Distribution tags Actual: 96,000 Distribution tags	Met	\$0 ⁹⁹	\$0

2024 WMP Initiative	2024 WMP Activity Target	QDR	EC ARC	IE ARC	Attainment Status	Proposed Expenditure (\$ thousand)	Actual Expenditure (\$ thousand)
EPSS-Down Conductor Detection (DCD) 8.1.2. 10.1 GM-06	400 protective device controllers or relays	Met Target: 400 Protective Devices Actual: 705 Protected Devices	Met Target: 400 Protective Devices Actual: 705 Protective Devices	Met Target: 400 Protective Devices Actual: 704 Protective Devices	Met	\$9,800	\$11,570

⁹⁹ PG&E did not provide funding information for this initiative.

2024 WMP Initiative	2024 WMP Activity Target	QDR	EC ARC	IE ARC	Attainment Status	Proposed Expenditure (\$ thousand)	Actual Expenditure (\$ thousand)
EPSS Settings GM-07	Provide annually an updated Enhanced Powerline Safety Settings (EPSS) reliability impact study per ACI 22-32	Met Target: Provided annually an updated EPSS reliability impact study Actual: Provided on Feb. 15, 2024	Met Target: Provided annually an updated Enhanced Powerline Safety Settings (EPSS) reliability impact study. Actual: Updated EPSS Reliability Impact Study provided on February 15, 2024.	Met Target: Provide annually an updated EPSS reliability impact study per ACI 22-32 Actual: Updated EPSS Reliability Impact Study was submitted on Feb. 15, 2024	Met	\$0	\$0 ¹⁰⁰

¹⁰⁰ PG&E did not provide funding information for this initiative.

2024 WMP Initiative	2024 WMP Activity Target	QDR	EC ARC	IE ARC	Attainment Status	Proposed Expenditure (\$ thousand)	Actual Expenditure (\$ thousand)
Asset inspection-Quality Control 8.1.6.2 GM-09	1) System Inspection Transmission-HFTD Location: 16,300; 92% pass rate 2) System Inspection Distribution-HFTD: 170,00; 88% pass rate	Met Target: Transmission 16,300 audit locations & 92% pass rate; Distribution 170,000 audit locations & 88% pass rate Actual: Transmission 23,012 audit locations & 99.95% pass rate; Distribution 175,376 audit locations & 99.83% pass rate.	Met Target: Transmission-16,300 audit locations & 92% pass rate; Distribution-170,000 audit locations & 88% pass rate Actual: Transmission-23,012 audit locations & 99.95% pass rate; Distribution-175,376 audit locations & 99.83% pass rate	Met Target: Transmission-16,300 audit locations & 92% pass rate; Distribution-170,000 audit locations & 90% pass rate Actual: Transmission-22,012 audit locations & 99.95% pass rate; Distribution-175,100 audit locations & 99.83% pass rate	Met	\$29,738	\$31,434

2024 WMP Initiative	2024 WMP Activity Target	QDR	EC ARC	IE ARC	Attainment Status	Proposed Expenditure (\$ thousand)	Actual Expenditure (\$ thousand)
LiDAR Data Collection-Transmission 8.2.2.1.1 VM-01	Collect LiDAR data of the Transmission System (17,500 Circuit miles).	Met Target: 17,500 CM Actual: 17,989 CM	Met Target: 17,953 CM Actual: 17,953 CM	Met Target: 17,500 CM Actual: 17,953 CM	Met	\$6,634	\$5,151

2024 WMP Initiative	2024 WMP Activity Target	QDR	EC ARC	IE ARC	Attainment Status	Proposed Expenditure (\$ thousand)	Actual Expenditure (\$ thousand)
Pole Clearing Program 8.2.3.1 VM-02	2024 pole count to be adjusted by the ending pole population in the previous year (2023) poles per Vegetation Control Standard TD-7112S will be inspected, cleared, and maintained where clearing is necessary,	Met Target: 63,000 poles cleared Actual: 79,988 poles cleared	Met Target: 63,000 poles cleared Actual: 77,152 poles cleared	Met Target: 63,000 poles cleared Actual: 76,860 poles cleared	Met	\$28,803	\$68,512

2024 WMP Initiative	2024 WMP Activity Target	QDR	EC ARC	IE ARC	Attainment Status	Proposed Expenditure (\$ thousand)	Actual Expenditure (\$ thousand)
Focused Tree Inspections (FTI) 8.2.2.2.5 VM-03	Within Areas of Concern (AOC) complete 1,500 circuit miles of FTI inspections.	Met Target: 1,500 CM Actual: 1,568.2 CM	Met Target: 1,500 CM Actual: 1,557.09 CM	Met Target: 1,500 CM Actual: 1,560 CM	Met	\$209,050	\$61,359
Tree Removal Inventory (TRI) 8.2.2.2.4 VM-04	Mitigate 20,000 trees identified from the EVM Program.	Met Target: 20,000 trees Actual: 32,480 trees	Met Target: 20,000 trees Actual: 32,901 trees	Met Target: 20,000 trees Actual: 32,000 trees	Met	\$77,911	\$26,656
Defensible Space Inspections-Distribution Substation 8.2.2.3.1 VM-05	Complete defensible space inspections at 131 distribution substations.	Met Target: 131 substations Actual: 131 substations	Met Target: 131 substations Actual: 131 substations	Met Target: 131 substations Actual: 131 substations	Met	\$2,500	\$2,390

2024 WMP Initiative	2024 WMP Activity Target	QDR	EC ARC	IE ARC	Attainment Status	Proposed Expenditure (\$ thousand)	Actual Expenditure (\$ thousand)
Defensible Space Inspections-Transmission Substation 8.2.2.3.1 VM-06	Complete defensible space inspections at 55 transmission substations.	Met Target: 55 substations Actual: 54 substations	Met Target: 55 substations Actual: 54 substations	Met Target: 55 substations Actual: 54 substations	Met ¹⁰¹	\$1,282	\$1,049
Defensible Space Inspections-Hydroelectric Substations and Powerhouses 8.2.2.3.1 VM-07	Complete defensible space inspections and 61 Hydroelectric generation substations & Powerhouses	Met Target: 61 substations Actual: 59 substations	Met Target: 61 substations Actual: 59 substations	Met Target: 59 substations Actual: 59 substations	Met ¹⁰²	\$1,917	\$1,558

¹⁰¹ EC ARC, Table 3. PG&E transferred ownership of one substation. Energy Safety's ESD verified that all work was completed at the facilities PG&E retained ownership of.

¹⁰² EC ARC, Table 3. PG&E transferred ownership of two substations. Energy Safety's ESD verified that all work was completed at the facilities PG&E retained ownership of.

2024 WMP Initiative	2024 WMP Activity Target	QDR	EC ARC	IE ARC	Attainment Status	Proposed Expenditure (\$ thousand)	Actual Expenditure (\$ thousand)
Vegetation Management-Quality Assurance 8.2.5 VM-08	1) Distribution Routine VM-HFTD: 2,675 audit locations; 95% pass rate 2) Transmission VM-HFTD: 1,284 audit locations; 95% pass rate 3) Vegetation Control Pole Clearing-HFTD: 1,926 audit locations; 95% pass rate	Met 1) Target described as 95% pass rate; actual described as 99.95% pass rate with 4,447 inspections 2) Target described as 95% pass rate; actual described as 99.88% pass rate with 2,728 inspections 3) Target described as 95% pass rate; actual described as 99.86% pass rate with 3,466 poles audited	Met 1) Target 95% pass rate with 2,675 audit locations; actual 99.95% pass rate with 4,477 audit locations 2) Target 95% pass rate with 1,284 audit locations; actual 99.95% pass rate with 2,728 audit locations 3) Target 95% pass rate with 1,926 audit locations; actual 99.86% pass rate with 3,466 audit locations	Met 1) Target 99.95% pass rate with 4,477 audit locations; actual 99.95% pass rate with 7,476.59 audit locations 2) Target 99.95% pass rate with 2,728 audit locations; actual 99.95% pass rate with 5,783.36 audit locations 3) Target 99.86% pass rate with 3,466 audit locations; actual 99.86% pass rate with 6,238.8 audit locations	Met	\$14,710	\$13,104

2024 WMP Initiative	2024 WMP Activity Target	QDR	EC ARC	IE ARC	Attainment Status	Proposed Expenditure (\$ thousand)	Actual Expenditure (\$ thousand)
Routine Ground-Transmission 8.2.2.1.1 VM-13	Complete routine transmission ground inspections of 17,740 circuit miles.	Met Target: 17,740 CM Actual: 17,954 CM	Met Target: 17,740 CM Actual: 17,953 CM	Met Target: 17,740 CM Actual: 17,917.40 CM	Met	\$25,667	\$26,434
Second Patrol-Transmission 8.2.2.1.2 VM-14	Complete transmission second patrol inspections of 5,625 circuit miles	Met Target: 5,625 CM Actual: 5,848 CM	Met Target: 5,625 CM Actual: 5,699.1CM	Met Target: 5,625 CM Actual: 5,681.25 CM	Met ¹⁰³	\$1,192	\$3,695

¹⁰³ 2024 VMA, pages A-14 and A-15, ESD noted that they PG&E's target contained 76 miles of parallel lines that were doubled counted and the reported completed work contained 16 miles that were constrained due to refusals from property owners.

2024 WMP Initiative	2024 WMP Activity Target	QDR	EC ARC	IE ARC	Attainment Status	Proposed Expenditure (\$ thousand)	Actual Expenditure (\$ thousand)
Integrated Vegetation Management-Transmission 8.2.2.1.3 VM-15	Complete integrated vegetation management & fee inspections of 6,504 acres of right of way	Met Target: 6,504 Ac Actual: 7,907 Ac	Met Target: 6,504 Ac Actual: 7,907 Ac	Met Target: 6,504 Ac Actual: 7,907 Ac	Met	\$14,577	\$9,164
Routine Patrol-Distribution 8.2.2.2.1 VM-16	Complete distribution routine annual patrol inspections of 78,650 overhead circuit miles	Not met Target: 78,650 CM Actual: 78,307.8 CM	Not met Target: 78,650 CM Actual: 78,310.87 CM	Met Target: 78,650 CM Actual: 78,650 CM	Met	\$744,607	\$890,507
Second Patrol-Distribution 8.2.2.2.2 VM-17	Complete distribution second patrol inspection of 25,685 circuit miles in HFTD	Not Met Target: 25,685 CM Actual: 27,259.9 CM	Met Target: 25,484.8 CM Actual: 25,519.04 CM	Not Met Target: 25,685 CM Actual: 25,538.20 CM	Met	\$80,124	\$132,743

2024 WMP Initiative	2024 WMP Activity Target	QDR	EC ARC	IE ARC	Attainment Status	Proposed Expenditure (\$ thousand)	Actual Expenditure (\$ thousand)
VM for Operational Mitigations (VMOM) 8.2.2.2.3 VM-18	Mitigate 6,500 tress for VM for operational Mitigation program on EPSS capable circuits	Met Target: 6,500 Trees Actual: 6,937 Trees	Met Target: 6,500 trees Actual: 6,935 trees	Met Target: 6,500 trees Actual: 6,890 trees	Met	\$20,904	\$132,743

2024 WMP Initiative	2024 WMP Activity Target	QDR	EC ARC	IE ARC	Attainment Status	Proposed Expenditure (\$ thousand)	Actual Expenditure (\$ thousand)
One VM Application Record Keeping Enhancement (Routine, Second Patrol) 8.2.4 VM-19	Enhance the One VM application for routine and second patrol to include the capability to capture factors for prescribing trees for removal	Target: Enhance the One VM application for routine and second patrol to include the capability to capture factors for prescribing trees for removal Actual: Monitor and Track & Publish Bulletin TD-7102P-01-B036 and 5MM email, both were completed in January	Target: N/A Actual: N/A	Met Target: Enhance the One VM application for routine and second patrol to include the capability to capture factors for prescribing trees for removal Actual: Enhancement to One VM applications completed in Jan. 30, 2024	Met	\$27,000	\$29,512

2024 WMP Initiative	2024 WMP Activity Target	QDR	EC ARC	IE ARC	Attainment Status	Proposed Expenditure (\$ thousand)	Actual Expenditure (\$ thousand)
Record Keeping Enhancement (VMOM, TRI) 8.2.4 VM-20	N/A (Enhance the application for the Vegetation Management for Operational Mitigations (VMOM) - VMPI2 - and Tree Removal Inventory (TRI) - Field Maps - program to include capability to capture factors for prescribing trees for removal)	Target: Enhance application for VMOM - VMP12 & TRI Actual: Completed in Q3	Target: Record keeping enhancement for VMOM & TRI Actual: Enhancements were completed on 7/30/2024.	Target: Enhance application for VMOM - VMP12 & TRI Actual: Enhanced application to include factors for tree removal & Completed in Q3	Met	\$0	\$0 ¹⁰⁴

¹⁰⁴ PG&E did not provide funding information for this initiative.

2024 WMP Initiative	2024 WMP Activity Target	QDR	EC ARC	IE ARC	Attainment Status	Proposed Expenditure (\$ thousand)	Actual Expenditure (\$ thousand)
FTI Record Keeping Enhancement 8.2.2.2.5 VM-21	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.	Met Target: Enhance record keeping for FTI Actual: Completed in Q1	Met Target: FTI Record keeping enhancement Actual: Tree Risk Assessment Form was digitization completed on 3/26/2024.	Met Target: Enhance record keeping for FTI of all potential strike trees inspected using a digitized Tree Risk Assessment form Actual: Digitized Tree Risk form & record of potential strike trees completed in Q1	Met	\$0 ¹⁰⁵	\$1,311

¹⁰⁵ PG&E did not provide funding information for this initiative.

2024 WMP Initiative	2024 WMP Activity Target	QDR	EC ARC	IE ARC	Attainment Status	Proposed Expenditure (\$ thousand)	Actual Expenditure (\$ thousand)
Vegetation Management-Quality Control 8.2.5.2 VM-22	1) Distribution Routine VM-HFTD: 80,000 audit locations; 88% pass rate 2) Transmission VM-HFTD: 13,500 audit locations; 92% pass rate 3) Vegetation Control Pole: 11,500 audit locations; 88% pass rate	Met 1) Target 88% pass rate; actual 97.38% pass rate with 80,391 spans audited 2) Target 88% pass rate; actual 99.08% pass rate with 15,897 spans audited 3) Target 88% pass rate; actual 98.03% pass rate with 2,488 poles audited	Met 1) Target 88% pass rate with 80,000 audit locations; actual 97.38% pass rate with 80,931 spans audited 2) Target 92% pass rate with 13,500 audit locations; actual 99.08% pass rate with 15,897 spans audited 3) Target 88% pass rate with 11,500 audit locations; actual 88.30% pass rate with 21,740 audit locations	Met 1) Target 88% pass rate with - 80,000 audit locations; 97.38% pass rate with 88,931 spans audited 2) Target 92% pass rate with 113,500 audit locations; 99.08% pass rate with 15,897 spans audited 3) Target 80% pass rate with 10,500 audit locations; actual 88.30% pass rate with 21,740 audit locations	Met	\$41,025	\$40,139

2024 WMP Initiative	2024 WMP Activity Target	QDR	EC ARC	IE ARC	Attainment Status	Proposed Expenditure (\$ thousand)	Actual Expenditure (\$ thousand)
Workforce Planning 8.2.7 (No tracking ID)	Programs to ensure that the electrical corporation has qualified vegetation management personnel and to ensure that both employees and contractors tasked with vegetation management responsibilities are adequately trained to perform relevant work.	N/A Target: N/A Actual: N/A	N/A Target: N/A Actual: N/A	N/A Target: N/A Actual: N/A	Met ¹⁰⁶	\$0	\$0 ¹⁰⁷

¹⁰⁶ 2024 VMA, pages A-10 and A-61 to A-66.

¹⁰⁷ PG&E did not provide funding information for this initiative.

2024 WMP Initiative	2024 WMP Activity Target	QDR	EC ARC	IE ARC	Attainment Status	Proposed Expenditure (\$ thousand)	Actual Expenditure (\$ thousand)
Wood and Slash Management 8.2.3.2 (No tracking ID)	Manage debris less than 4" in diameter generated from vegetation management activities	N/A Target: N/A Actual: N/A	N/A Target: N/A Actual: N/A	N/A Target: N/A Actual: N/A	Not met ¹⁰⁸	\$0	\$0 ¹⁰⁹
Clearance 8.2.3.3 (No tracking ID)	Maintain minimum and enhanced clearances established by Enhanced Vegetation Management program	N/A Target: N/A Actual: N/A	N/A Target: N/A Actual: N/A	N/A Target: N/A Actual: N/A	Met ¹¹⁰	\$0	\$0 ¹¹¹

¹⁰⁸ 2024 VMA, pages 6, 19-20, A-6, A-8, and A-28-29.

¹⁰⁹ PG&E did not provide funding information for this initiative.

¹¹⁰ 2024 VMA, pages 6, A-6, A-8 to A-9, A-30 to A-31.

¹¹¹ PG&E did not provide funding information for this initiative.

2024 WMP Initiative	2024 WMP Activity Target	QDR	EC ARC	IE ARC	Attainment Status	Proposed Expenditure (\$ thousand)	Actual Expenditure (\$ thousand)
Fall-in Mitigation 8.2.3.4 (No tracking ID)	Implement VM Operational Mitigations, Tree Removal Inventory and Focused Tree Inspections programs	See initiatives 8.2.2.2.3 and 8.2.2.2.4	See initiatives 8.2.2.2.3 and 8.2.2.2.4	See initiatives 8.2.2.2.3 and 8.2.2.2.4	Met	\$0	\$0 ¹¹²
Substation Defensible Space 8.2.3.5 (No tracking ID)	Complete defensible space work as needed.	See initiatives 8.2.2.3.1 (VM-05 and VM-06) and 8.2.5	See initiatives 8.2.2.3.1 (VM-05 and VM-06) and 8.2.5	See initiatives 8.2.2.3.1 (VM-05 and VM-06) and 8.2.5	Met	\$0	\$0 ¹¹³

¹¹² PG&E did not provide funding information for this initiative.

¹¹³ PG&E did not provide funding information for this initiative.

2024 WMP Initiative	2024 WMP Activity Target	QDR	EC ARC	IE ARC	Attainment Status	Proposed Expenditure (\$ thousand)	Actual Expenditure (\$ thousand)
High-Risk Species 8.2.3.6 (No tracking ID)	Identify and mitigate High-Risk Species	N/A Target: N/A Actual: N/A	N/A Target: N/A Actual: N/A	N/A Target: N/A Actual: N/A	Met ¹¹⁴	\$0	\$0 ¹¹⁵
Fire-Resilient Right-of-Way 8.2.3.7 (No tracking ID)	Increase fire resiliency in right of ways	N/A Target: N/A Actual: N/A	N/A Target: N/A Actual: N/A	N/A Target: N/A Actual: N/A	Met ¹¹⁶	\$0	\$0 ¹¹⁷

¹¹⁴ 2024 VMA, pages 6, A-6, A-9, and A-35 to A-36.

¹¹⁵ PG&E did not provide funding information for this initiative.

¹¹⁶ 2024 VMA, pages 6, A-6, A-9, and A-36 to A-38.

¹¹⁷ PG&E did not provide funding information for this initiative.

2024 WMP Initiative	2024 WMP Activity Target	QDR	EC ARC	IE ARC	Attainment Status	Proposed Expenditure (\$ thousand)	Actual Expenditure (\$ thousand)
Emergency Response Vegetation Management 8.2.3.8 (No tracking ID)	Respond to priority work during red flag warnings	N/A Target: N/A Actual: N/A	N/A Target: N/A Actual: N/A	N/A Target: N/A Actual: N/A	Met ¹¹⁸	\$0	\$0 ¹¹⁹

¹¹⁸ 2024 VMA, pages 6, 21-24, A-6, A-9, and A-38 to A-40.

¹¹⁹ PG&E did not provide funding information for this initiative.

2024 WMP Initiative	2024 WMP Activity Target	QDR	EC ARC	IE ARC	Attainment Status	Proposed Expenditure (\$ thousand)	Actual Expenditure (\$ thousand)
VM Enterprise System 8.2.4 (No tracking ID)	Enhance the One VM application for Routine and Second Patrol and the VMOM and TRI programs to include capability to capture factors for prescribing trees for removal.	See initiative 8.2.4 (VM-19 and VM-20) and 8.2.2.2.5	See initiatives 8.2.4 (VM-19 and VM-20) and 8.2.2.2.5	See initiatives 8.2.4 (VM_19 and VM-20) and 8.2.2.2.5	Met	\$0	\$0 ¹²⁰

¹²⁰ PG&E did not provide funding information for this initiative.

2024 WMP Initiative	2024 WMP Activity Target	QDR	EC ARC	IE ARC	Attainment Status	Proposed Expenditure (\$ thousand)	Actual Expenditure (\$ thousand)
Line Sensor-Installations 8.3.3.1 SA-02	Install sensor devices on 40 circuits.	Met Target: 40 circuits Actual: 45 circuits	Met Target: 40 circuits Actual: 45 circuits	Met Target: 40 circuits Actual: 40 circuits	Met	\$4,445	\$3,818
Distribution Fault Anticipation (DFA) Installations 8.3.3.1 S SA-10	Install 15 Distribution Fault Anticipation (DFA) sensors on circuits.	Met Target: 15 DFA sensors Actual: 17 DFA sensors	Met Target: 15 DFA sensors Actual: 17 DFA sensors	Met Target: 15 DFA sensors Actual: 17 DFA sensors	Met	\$3,000	\$2,390

2024 WMP Initiative	2024 WMP Activity Target	QDR	EC ARC	IE ARC	Attainment Status	Proposed Expenditure (\$ thousand)	Actual Expenditure (\$ thousand)
Early Fault Detection (EFD)- Installations 8.3.3.1 SA-11	Install Early Fault Detection (EFD) sensors on 2 circuits.	Met Target: Two EFD circuits Actual: Two EFD circuits	Met Target: Two EFD circuits Actual: Two EFD circuits	Met Target: Two EFD circuits Actual: Two EFD circuits	Met	\$7,000	\$2,802

2024 WMP Initiative	2024 WMP Activity Target	QDR	EC ARC	IE ARC	Attainment Status	Proposed Expenditure (\$ thousand)	Actual Expenditure (\$ thousand)
Complete PSPS and Wildfire Tabletop and Functional Exercises 8.4.2.3.1 EP-01	Complete PSPS & Wildfire Tabletop & Functional Exercises annually in compliance with the Homeland Security Exercise Evaluation Program (HSEEP) Deadline November 30, 2024.	Met Target: WMP target Actual: Tabletop exercise completed March 19, 2024; Functional exercise held April 15-19, 2024; Wildfire Tabletop held August 22, 2024; & After-actions report completed in October 22, 2024.	Met Target: WMP target Actual: PSPS Tabletop exercise and Functional exercise were completed in March and April 2024, respectively. Wildfire Tabletop exercise and Functional exercise were completed in August and April 2024, respectively.	Met Target: WMP target Actual: The 2024 Wildfire & PSPS Tabletop & Functional exercises are complete.	Met	\$0	\$0 ¹²¹

¹²¹ PG&E did not provide funding information for this initiative.

2024 WMP Initiative	2024 WMP Activity Target	QDR	EC ARC	IE ARC	Attainment Status	Proposed Expenditure (\$ thousand)	Actual Expenditure (\$ thousand)
Annually review, and revise if appropriate the Company Emergency Response Plan (CERP) and the two wildfire-related annexes (the Wildfire Annex and the PSPS Annex) 8.4.3.1 EP-06	Review and revise if appropriate three documents (CERP and two wildfire-related annexes)	Met Target: CERP and two wildfire related annexes Actual: Wildfire annex was completed on March 29, 2024, PSPS annex was completed on July 31, 2024, CERP document review was completed in Nov. 2024.	Met Target: CERP & two wildfire related annexes Actual: CERP document review was completed in Nov. 2024, Wildfire Annex was completed in March 29, 2024 & PSPS Annex was completed on July 31, 2024	Met Target: Three Documents reviewed/Revised Actual: Three documents Reviewed/Revised	Met	\$0	\$0 ¹²²

¹²² PG&E did not provide funding information for this initiative.

2024 WMP Initiative	2024 WMP Activity Target	QDR	EC ARC	IE ARC	Attainment Status	Proposed Expenditure (\$ thousand)	Actual Expenditure (\$ thousand)
Community Engagement meetings 8.5.2 CO-01	Hold 22 community engagement meetings by September 30, 2024	Met Target: 22 meetings Actual: 25 meetings	Met Target: Community Engagement Meetings Actual: Completed 25 events in 2024	Met Target: 22 meetings Actual: 25 meetings	Met	\$0	\$0 ¹²³
Community Engagement Surveys 8.5.2 CO-02	Complete two PSPS education & outreach surveys	Met Target: Two surveys Actual: Two surveys	Met Target: Two surveys Actual: Two surveys	Met Target: Two surveys Actual: Two surveys	Met	\$0	\$0 ¹²⁴

¹²³ PG&E did not provide funding information for this initiative.

¹²⁴ PG&E did not provide funding information for this initiative.

2024 WMP Initiative	2024 WMP Activity Target	QDR	EC ARC	IE ARC	Attainment Status	Proposed Expenditure (\$ thousand)	Actual Expenditure (\$ thousand)
Provide 12,000 cumulative new or replacement batteries to PG&E customers at risk of PSPS & EPSS in 2023-2025 8.5.3 PS-06	Provide 4,000 portable new or replacement batteries.	Met Target: 4,000 batteries Actual: 4,376 portable batteries & 1,051 permanent batteries	Met Target: 4,000 batteries Actual: 4,347 temporary batteries & 1,447 permanent batteries	Met Target: 4,000 batteries Actual: 4,320 portable batteries	Met	\$13,064	\$13,197

2024 WMP Initiative	2024 WMP Activity Target	QDR	EC ARC	IE ARC	Attainment Status	Proposed Expenditure (\$ thousand)	Actual Expenditure (\$ thousand)
Reduce PSPS impacts by ~47k customer events (3.2%) for 2023-2025 period 9.1.5 PS-07	9,980 customer events mitigated based on 2024 wildfire mitigation projects.	Met Target: 9,980 events Actual: 10,529 events	Met Target: 9,980 events Actual: 10,491 events	Met Target: 9,980 events Actual: 10,4790 events	Met	\$0	\$0 ¹²⁵

¹²⁵ PG&E did not provide funding information for this initiative.

2024 WMP Initiative	2024 WMP Activity Target	QDR	EC ARC	IE ARC	Attainment Status	Proposed Expenditure (\$ thousand)	Actual Expenditure (\$ thousand)
Public Safety Power Shutoff Restoration Pilot 9.1.2 PS-11	Pilot using drones for PSPS restoration and/or damage assessment to improve PSPS outage restoration time.	Met Target: Pilot program to use UAVs for PSPS restoration Actual: Completed UAV pilot program which demonstrated significant benefits.	Met Target: Pilot program to use UAVs for PSPS restoration Actual: Documentation presented to Wildfire Risk Governance Steering Committee on 11/14/2024 showing the pilot programs effectiveness.	Met Target: Documentation presented to the Wildfire Risk Governance Steering Committee to show results of the pilot program effectiveness Actual: PG&E has completed the objective and the findings were presented in PG&E's WRGSC on 11/14/2024.	Met	\$0	\$0 ¹²⁶

¹²⁶ PG&E did not provide funding information for this initiative.

Appendix B: PG&E Vegetation Management Audit Report

On April 7, 2026, Energy Safety issued its Vegetation Management Audit (VMA) Report for PG&E. In the VMA, Energy Safety assesses completeness of each qualitative commitment and quantitative target associated with each initiative from the electrical corporation’s approved WMP. The VMA issues findings on the initiative level, as defined in Appendix A of the 2023-2025 Wildfire Mitigation Plan Technical Guidelines.¹²⁷ The VMA Report concluded that PG&E achieved the objective of 12 of the 13 vegetation management initiatives (92%) included in its 2024 WMP and was deficient in one:

- 8.2.3.2 Wood and Slash Management

The findings from Energy Safety’s VMA Report are detailed in Table 10, which provides a crosswalk between the vegetation management initiative numbers included in the VMA Report to the Utility Initiative Tracking IDs included in this APR. A finding of “Complete” for the VMA Report indicates that PG&E provided documentation to support that all work was completed. A finding of “Achieved Objective” indicates that, while Energy Safety identified some deficiencies, the majority of the work was completed and PG&E’s CAP provided corrective actions that will address any remaining deficiencies.

Table 9. Energy Safety Findings from PG&E 2024 VMA Report of WMP Vegetation Management Initiatives

Vegetation Management Initiative	Utility Initiative Tracking ID	VMA Report Determination
8.2.2 Vegetation Management Inspections	LiDAR Data Collection – Transmission (VM-01)	Complete
8.2.2 Vegetation Management Inspections	Focused Tree Inspection (VM-03)	Achieved Objective
8.2.2 Vegetation Management Inspections	Tree Removal Inventory (VM-04)	Complete
8.2.2 Vegetation Management Inspections	Defensible Space Inspections – Distribution Substation (VM-05)	Complete

¹²⁷ WMP Technical Guidelines, pages A-24-A-26.

Vegetation Management Initiative	Utility Initiative Tracking ID	VMA Report Determination
8.2.2 Vegetation Management Inspections	Defensible Space Inspections – Transmission Substation (VM-06)	Complete
8.2.2 Vegetation Management Inspections	Defensible Space Inspections – Hydroelectric Substations and Powerhouses (VM-07)	Complete
8.2.2 Vegetation Management Inspections	Routine Ground – Transmission (VM-13)	Complete
8.2.2 Vegetation Management Inspections	Second Patrol – Transmission (VM-14)	Complete
8.2.2 Vegetation Management Inspections	Integrated Vegetation Management – Transmission (VM-15)	Complete
8.2.2 Vegetation Management Inspections	Routine Patrol – Distribution (VM-16)	Complete
8.2.2 Vegetation Management Inspections	Second Patrol – Distribution (VM-17)	Complete
8.2.2 Vegetation Management Inspections	VM for Operational Mitigations (VM-18)	Complete
8.2.3.1 Pole Clearing	Pole Clearing Program (VM-02)	Achieved Objective
8.2.3.2 Wood and Slash Management	No Utility Tracking ID; Narrative and quantitative statements assessed	Deficient
8.2.3.3 Clearance	No Utility Tracking ID; Narrative and quantitative statements assessed	Complete
8.2.3.4 Fall-in Mitigation	No Utility Tracking ID; Narrative and quantitative statements assessed	Complete

Vegetation Management Initiative	Utility Initiative Tracking ID	VMA Report Determination
8.2.3.5 Substation Defensible Space	No Utility Tracking ID; Narrative and quantitative statements assessed	Complete
8.2.3.6 High-Risk Species	No Utility Tracking ID; Narrative and quantitative statements assessed	Complete
8.2.3.7 Fire-Resilient Rights-of-Way	No Utility Tracking ID; Narrative and quantitative statements assessed	Complete
8.2.3.8 Emergency Response Vegetation Management	No Utility Tracking ID; Narrative and quantitative statements assessed	Achieved Objective
8.2.4 VM Enterprise System	One VM Application Record Keeping Enhancement - Routine, Second Patrol (VM-19)	Complete
8.2.4 VM Enterprise System	Record Keeping Enhancement - VMOM, TRI (VM-20)	Complete
8.2.4 VM Enterprise System	FTI Record Keeping Enhancement (VM-21)	Achieved Objective
8.2.5 Quality Assurance and Quality Control	Vegetation Management – Quality Assurance (VM-08)	Complete
8.2.5 Quality Assurance and Quality Control	Vegetation Management – Quality Control (VM-22)	Complete
8.2.6 Open Work Orders	No Utility Tracking ID; Narrative and quantitative statements assessed	Achieved Objective
8.2.7 Workforce Planning	No Utility Tracking ID; Narrative and quantitative statements assessed	Achieved Objective

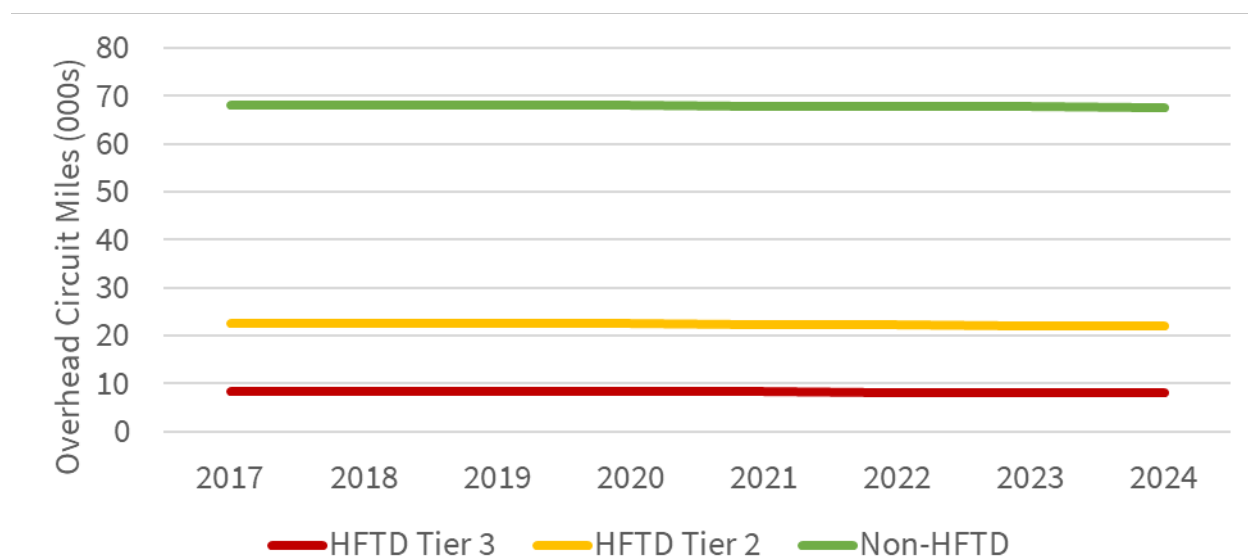
Appendix C: Normalizing Metrics and Raw Count Data

Data for this appendix comes from the QDRs and the DR-282 Response, as reported by PG&E.¹²⁸ Overhead circuit miles (OCM) are used to estimate rates for ignition risk metrics. Raw counts of ignition risk metrics are also presented in this appendix.

Overhead Circuit Miles

The number of overhead circuit miles (OCM) has remained almost constant between 2017 and 2024 (Figure 20).

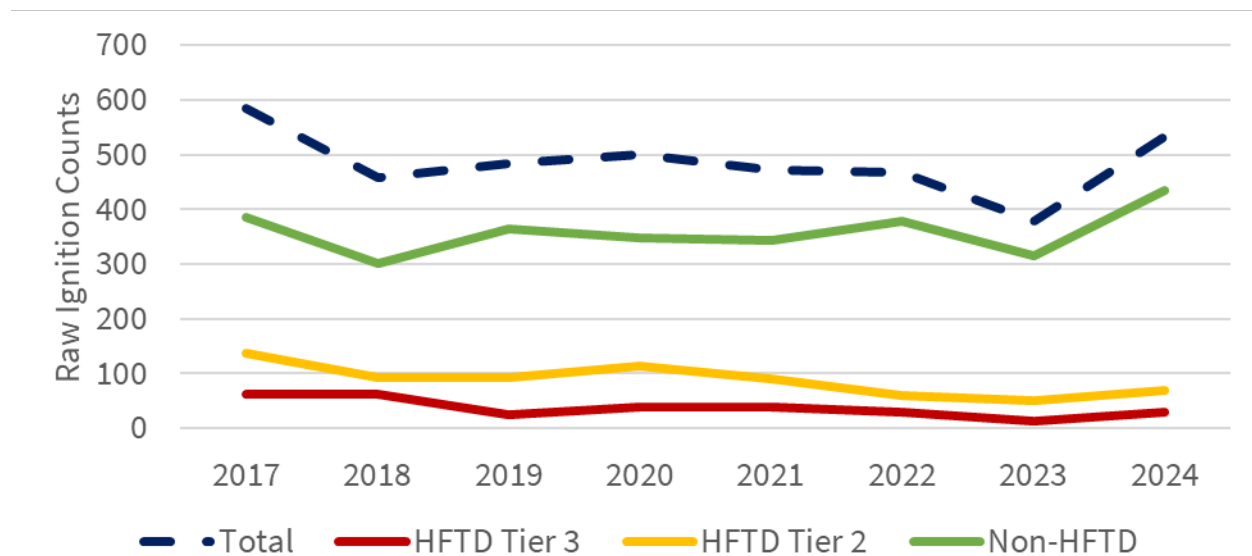
Figure 20. PG&E Overhead Circuit Miles (2017-2024) by HFTD Tier



Raw Ignition Event Counts

PG&E's ignition events remained relatively stable between 2017 and 2024, with total raw ignition counts fluctuating between approximately 379 and 585 across the study period, declining from a high of approximately 585 in 2017 to a low of approximately 379 in 2023 before rising again to approximately 534 in 2024. Non-HFTD ignition events made up 74% of the total ignitions throughout the period, while HFTD Tier 3 recorded the lowest counts across all years, not exceeding approximately 63 events (Figure 21).

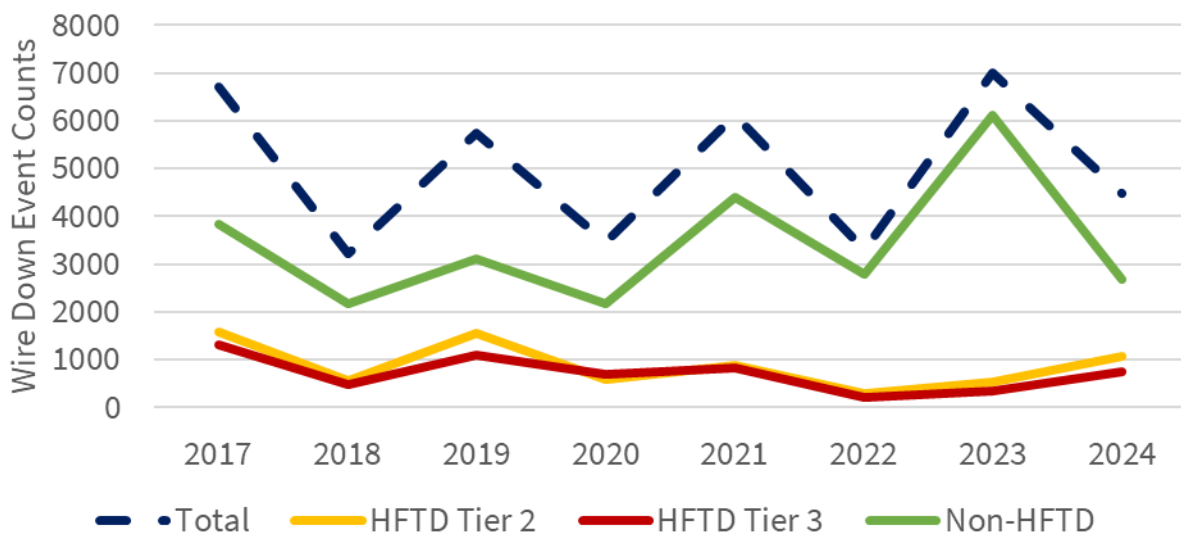
¹²⁸ 2022 Q3 QDR, 2023 Q4 QDR, 2024 Q4 QDR; and DR-282 Response.

Figure 21. PG&E Ignition Event Counts (2017-2024) by HFTD Tier

Raw Wire Down Event Counts

Total wire down event counts for PG&E remained variable across the 2017–2024 period, declining from approximately 6,700 in 2017 to a low of approximately 3,200 in 2018 before recovering and reaching a peak of approximately 7,000 in 2023, then declining to approximately 4,500 in 2024. Non-HFTD wire down events consistently accounted for the largest share of total counts throughout the period, ranging from approximately 2,200 to 6,100 events annually. HFTD Tier 2 ranked second, ranging from approximately 300 to 1,500 events, while HFTD Tier 3 recorded the lowest counts across all years, ranging from approximately 200 to 1,300 events (Figure 22).

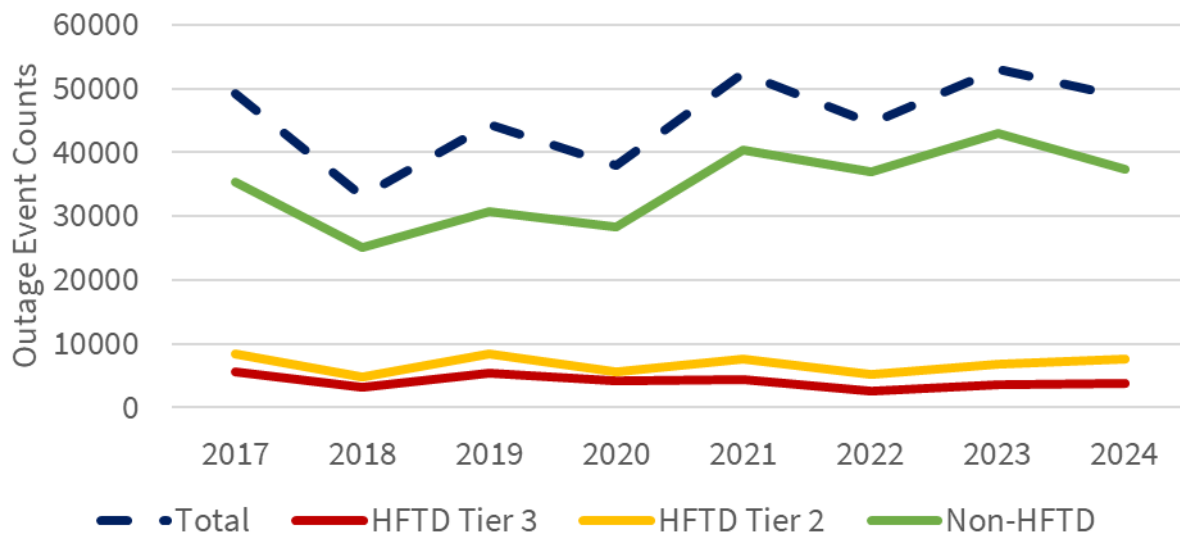
Figure 22. PG&E Wire Down Event Counts (2017-2024) by HFTD Tier



Raw Outage Event Counts

PG&E's outage event counts remained relatively stable between 2017 and 2024, with total raw outage counts fluctuating between approximately 33,000 and 53,000 across the study period, declining from approximately 49,000 in 2017 to a low of approximately 33,000 in 2018 before recovering and reaching a peak of approximately 53,000 in 2023, then declining modestly to approximately 48,000 in 2024. Non-HFTD outage events consistently made up the largest share of the total throughout the study period, ranging from approximately 25,000 to 43,000 events annually, followed by HFTD Tier 2, which ranged from approximately 4,000 to 8,300 events, while HFTD Tier 3 recorded the lowest counts across all years, ranging from approximately 2,500 to 5,500 events (Figure 23).

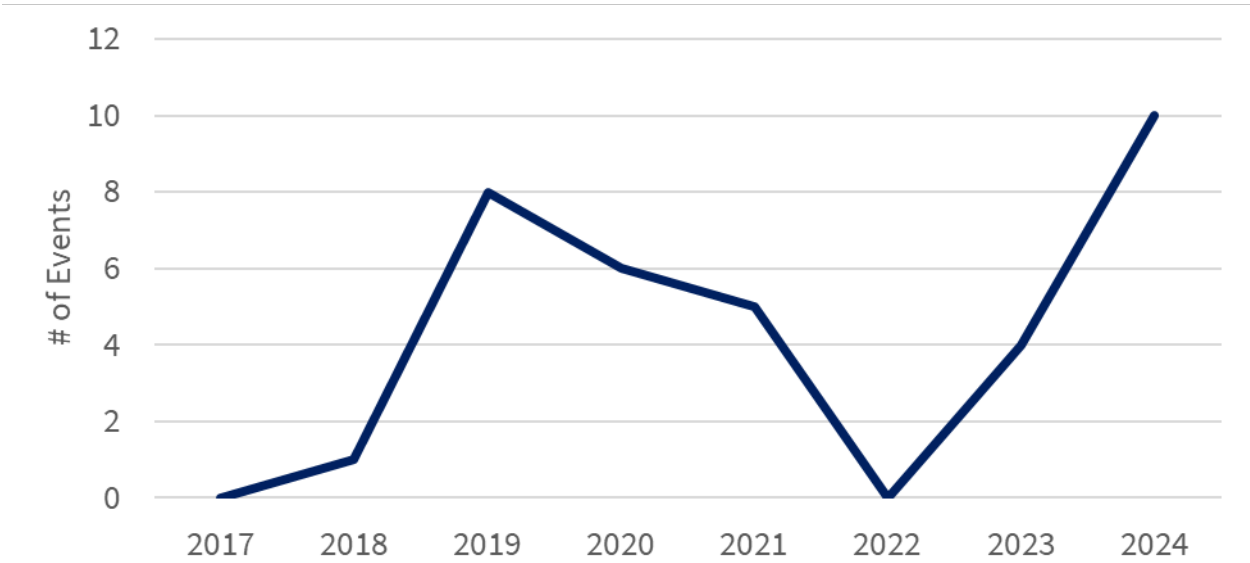
Figure 23. PG&E Outage Event Counts (2017-2024) by HFTD Tier



Frequency of PSPS Events

PSPS event frequency remained near zero in 2017 before rising to a peak of 8 events in 2019, then declining gradually through 2021 and dropping sharply to near zero in 2022, before rising steadily to 10 events in 2024 — the highest frequency recorded across the 2017–2024 period. The 2024 elevation is consistent with the broader pattern of increased PSPS activity observed across scope, duration, and customer impact metrics in that year, collectively indicating that 2024 represented the most active PSPS year across all metrics since 2019 (Figure 24).

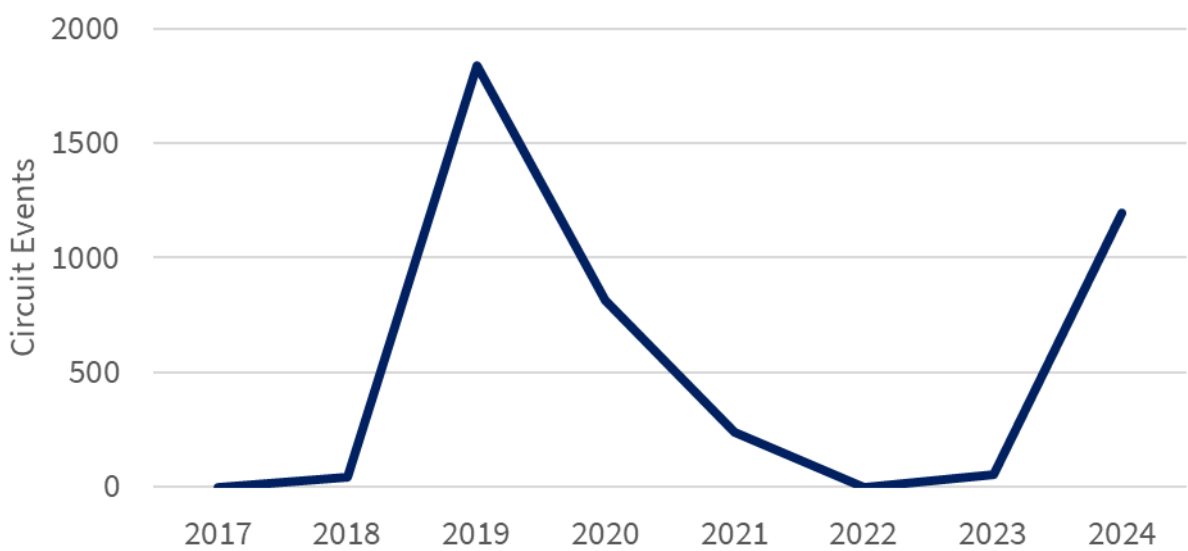
Figure 24. PG&E PSPS Events Frequency (2017-2024)



Scope of PSPS Events

PSPS event scope remained near zero from 2017 through 2018, before rising sharply to a peak of approximately 1,842 circuit events in 2019 — the highest recorded value prior to 2024 — then declining steeply to near-zero levels by 2022, before rising sharply again to approximately 1,200 circuit events in 2024, the second highest value recorded across the entire study period. This 2024 spike is consistent with the broader pattern of elevated PSPS impacts observed across frequency and duration metrics in that year, collectively indicating that 2024 PSPS activations were materially broader in circuit scope than any year since 2019 (Figure 25).

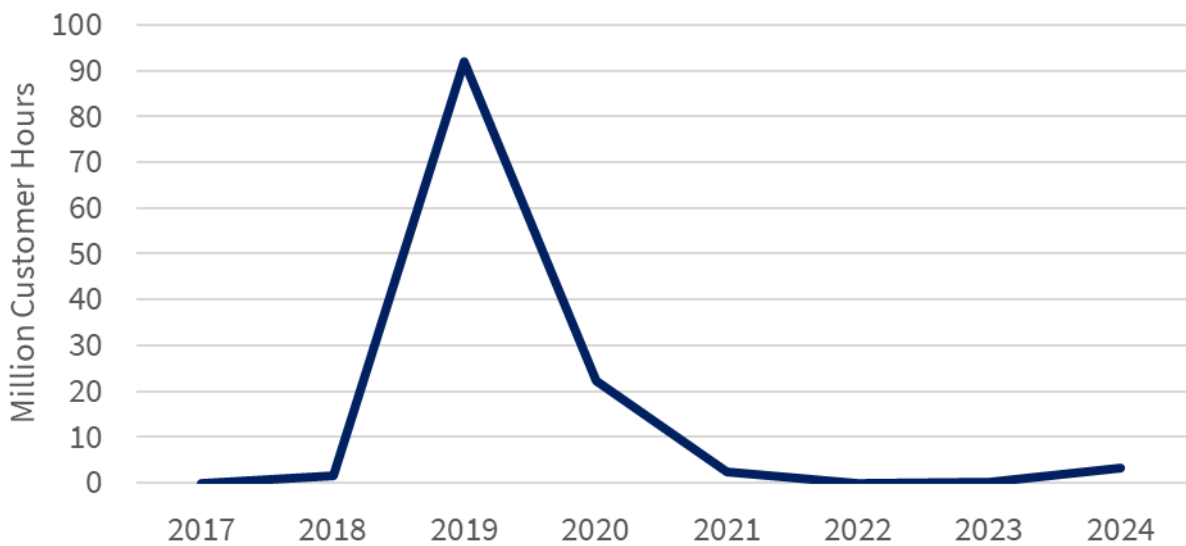
Figure 25. PG&E PSPS Event Scope (2017-2024)



Duration-Customers of PSPS Events

PSPS event duration customer hours from all PSPS Events remained near zero from 2017 through 2018, before rising sharply to a peak of approximately 92 million customer hours in 2019 — the highest recorded value across the entire study period by a substantial margin — then declining steeply to approximately 22 million customer hours in 2020 and continuing to near-zero levels by 2022, remaining low through 2024 at approximately 3 million customer hours. While 2024 levels remain substantially below the 2019 peak, the modest uptick is consistent with the broader pattern of elevated PSPS impacts observed across frequency and scope metrics in that year, collectively indicating that 2024 PSPS activations carried greater duration consequences than any year since 2021 (Figure 26).

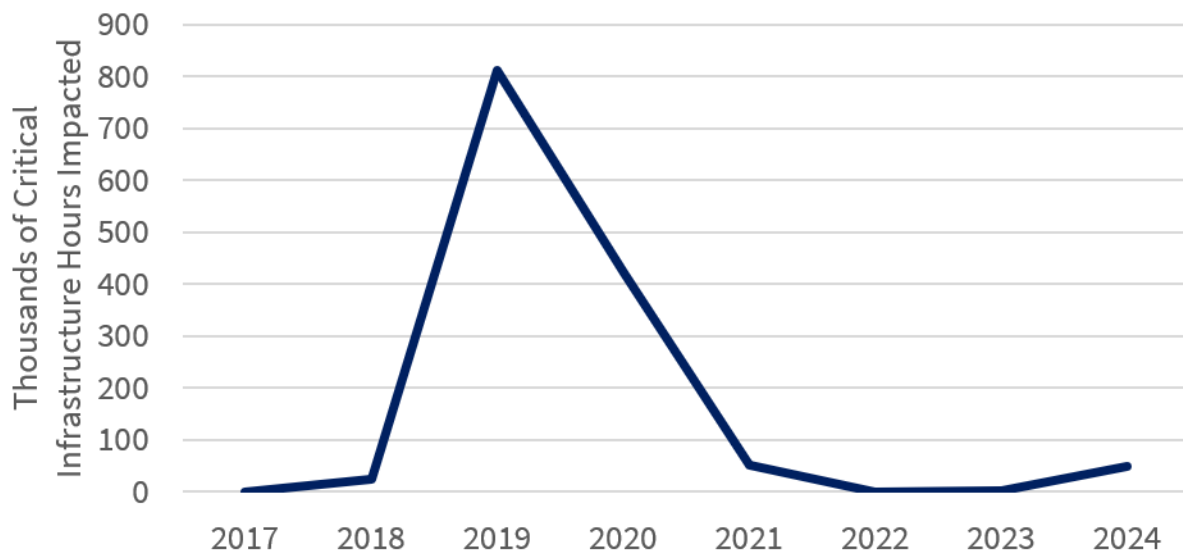
Figure 26. PG&E PSPS Event Duration (2017-2024)



Duration – Critical Infrastructure of PSPS Events

PSPS event impacts on critical infrastructure, similar to PSPS event duration for customers, remained near zero from 2017 through 2018, before rising sharply of approximately 810 thousand in 2019, before returning to near-zero levels through 2023 and recording a modest uptick to approximately 49 thousand in 2024. While levels remain substantially below the 2019 peak of approximately 810 thousand critical infrastructure hours — the highest value recorded across the entire study period — the 2024 uptick is consistent with the broader pattern of elevated PSPS impacts observed across frequency and scope metrics in that year, collectively indicating that 2024 PSPS activations carried greater consequences than any year since 2021 (Figure 28).

Figure 27. PG&E PSPS Event Impacts on Critical Infrastructure (2017-2024)



Impacts of PSPS Events

The impact of PSPS events remained near zero from 2017 through 2018, before rising sharply to a peak of approximately 2,036 thousand customers impacted in 2019 — the highest recorded value across the entire study period by a substantial margin — then declining steeply to approximately 650 thousand in 2020, continuing to near-zero levels by 2022, and remaining low through 2024 at approximately 51 thousand customers impacted. While the 2024 levels remain substantially below the 2019 peak, the modest uptick in 2024 is consistent with the broader pattern of elevated PSPS impacts observed across frequency and scope metrics in that year, collectively indicating that 2024 PSPS activations carried greater customer consequences than any year since 2021 (Figure 27).

Figure 28. PG&E PSPS Event Impacts (2017-2024)

