PACIFIC GAS AND ELECTRIC COMPANY

ANNUAL REPORT ON COMPLIANCE R1 FOR 2024 WILDFIRE MITIGATION PLAN

APRIL 30, 2025

Pacific Gas and Electric Company
Annual Report on Compliance for 2024 Wildfire Mitigation Plan

Consistent with the Office of Energy Infrastructure Safety's (Energy Safety) *Compliance Guidelines* (Guidelines) issued on September 8, 2024, and California Public Utilities Code Section 8386.3(c)(1), Pacific Gas and Electric Company (PG&E) submits this Annual Report on Compliance (2024 Annual Report) for our 2024 Wildfire Mitigation Plan (WMP). Energy Safety approved our 2023-2025 WMP on December 29, 2023, and on February 15, 2024, the California Public Utilities Commission (CPUC) ratified Energy Safety's approval.

I. EXECUTIVE SUMMARY

PG&E successfully delivered on our 2024 WMP, which benefited our customers and the communities that we serve. We implemented our WMP initiatives, achieved our stated objectives and goals, and reduced the wildfire risk in our service territory.

We are very proud of the mitigation work we accomplished in 2024. California's climate is experiencing more frequent and severe wind events, periods of extreme precipitation, and intense hot/dry conditions. This hydroclimate "whiplash" creates rapid transitions between wet periods that promote vegetation growth and dry conditions that turn this vegetation into highly combustible fuel, significantly increasing wildfire exposure. These phenomena significantly amplify wildfire and reliability risks, increasing the urgency for more targeted and scalable mitigations. We experienced an extreme heatwave in July 2024 that required us to quickly adjust our mitigation activities to respond to emerging ignition risk. We formed a taskforce that executed two additional initiatives to address elevated risk exposure: supplemental distribution pole clearing and deployment of Gridscope devices. Monitoring risk exposure is critically important, and PG&E remains committed to continuously assessing evolving threats and maintaining a proactive, adaptive approach to wildfire mitigation. Despite these adverse conditions, we were able to successfully execute our wildfire mitigation initiatives.

PG&E's 2024 WMP consists of initiatives that include both targets and objectives.[1] We structured our initiatives around three strategic goals: (1) reducing the potential for catastrophic wildfires; (2) reducing the potential for fires to spread; and (3) limiting the customer impact of Enhanced Powerline Safety Settings (EPSS) and Public Safety Power Shutoffs (PSPS) events. These goals purposefully align with our stand that catastrophic wildfires shall stop.

Throughout 2024, we worked to execute our WMP initiatives by creating new programs and implementing existing programs that reduce the risks and consequences of wildfires. As a result of these efforts, we were able to meet or exceed the targets and objectives for our 2024 WMP

[1] Please note that the total number of initiatives identified in PG&E's 2023-2025 WMP was 83. This larger number includes initiatives that did not have 2024 completion dates, such as: (1) 15 ten-year objectives; (2) 16 three-year objectives with no compliance milestones in 2024; (3) 4 targets that did not have external commitments in 2024; and (4) one target, GH-11, which is set to begin in 2025.

initiatives. Our initiative target implementation results are described in detail in Sections II.1 (a) through (d) below.

Highlights of our completed WMP commitments include:

- Completing more than 350 miles of system hardening, including over 100 miles of covered conductor and more than 250 miles of underground powerlines.
- Completing more than 275,000 inspections on distribution, transmission, and substation assets.
- Closing more than 96,000 tags, which included over 53,000 backlog distribution tags.
- Providing more than 4,000 portable and 1,000 permanent batteries to customers at risk of outages associated with Public Safety Power Shutoffs and Enhanced Powerline Safety Settings.
- Completing more than 78,000 miles of distribution line vegetation management inspections and working more than 1.8 million trees.

By carrying out our 2024 WMP initiatives, we achieved our goals and significantly reduced wildfire risk. We are seeing the results of our efforts.

Although there was an increase in reportable ignitions in 2024 compared to 2022 and to 2023, we experienced no major wildfires in 2024. Compared to the period before the implementation of EPSS, we saw an approximate 40% reduction in ignitions in 2024, which was a year of unprecedented environmental conditions that were highly conducive to wildfires. California experienced a record-setting heatwave in early July 2024, saw the hottest average temperature on record throughout July, and the average 1,000-hour dead fuel moisture reached a 22-year low.

We experienced an uptick in ignitions in 2024 as compared to 2022 and 2023, however, California experienced significantly more fires in 2024 than in any prior year recorded by CAL FIRE. We also note that, in 2024, we experienced fewer ignitions during high critical fire danger conditions compared to 2021. FIGURE 1 shows CAL FIRE Incident data comparing 2024 to years with similar weather exposure (2021 and 2022) compared to the count of our R3+ ignitions in HFTD/HFRA. R3+ ignitions occur in weather conditions that are associated with conditions conducive to fires. On June 30th, before the 2024 heat wave, CAL FIRE reported 225% more incidents than in 2022, while we experienced 45% fewer incidents than in 2022. After the extreme heat wave, on July 15th, CAL FIRE reported 309% more incidents than in 2022 while we experienced 43% more incidents than in 2022.

FIGURE 1: CAL FIRE INCIDENTS COMPARED TO PG&E REPORTABLE IGNITIONS IN HIGH AND CRITICAL FIRE DANGER CONDITIONS.

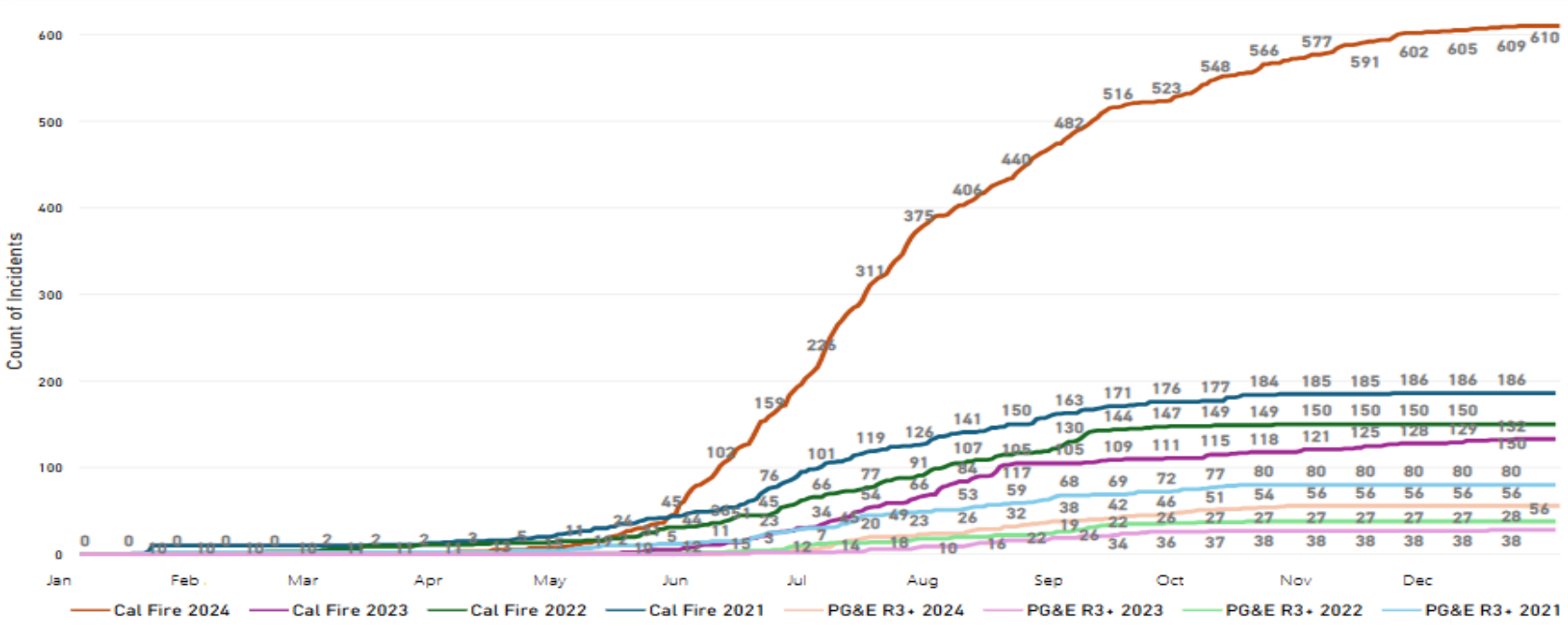
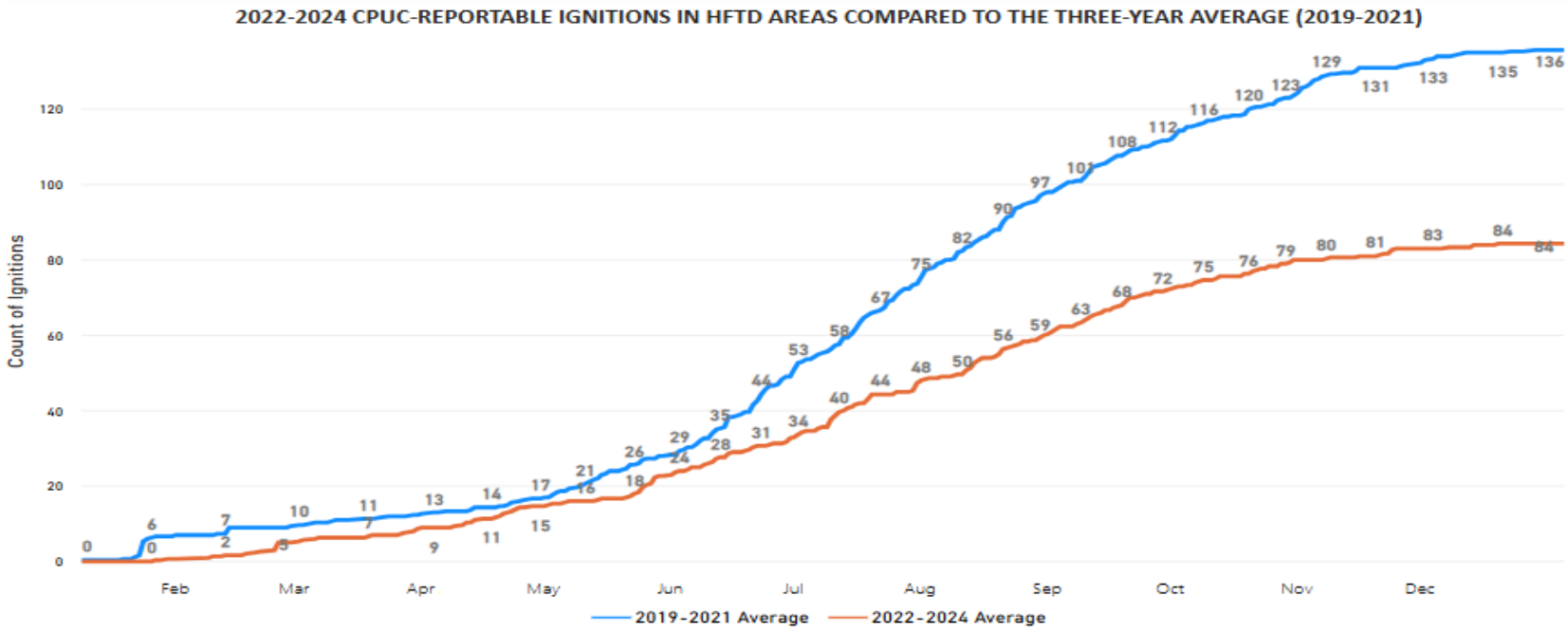


Figure 2 below depicts the reduction in three-year average CPUC-reportable ignitions in HFTD before and after implementation of EPSS.

FIGURE 2: CPUC-REPORTABLE IGNITIONS IN HFTD PRE-EPSS IMPLEMENTATION (2019-2021) COMPARED TO POST-EPSS IMPLEMENTATION (2022-2024)



Several additional graphics, set out below, help to highlight the change in ignitions that occurred in 2024 as compared to historical averages. For CPUC-reportable ignitions in HFTD, there was a slight increase in 2024 compared to the prior two years, but an overall decrease compared to the 2019-2021 range, as depicted in Figure 3, which shows the number of CPUC-reportable ignitions for each year since 2019.

FIGURE 3: CPUC-REPORTABLE IGNITIONS in HFTD BY YEAR

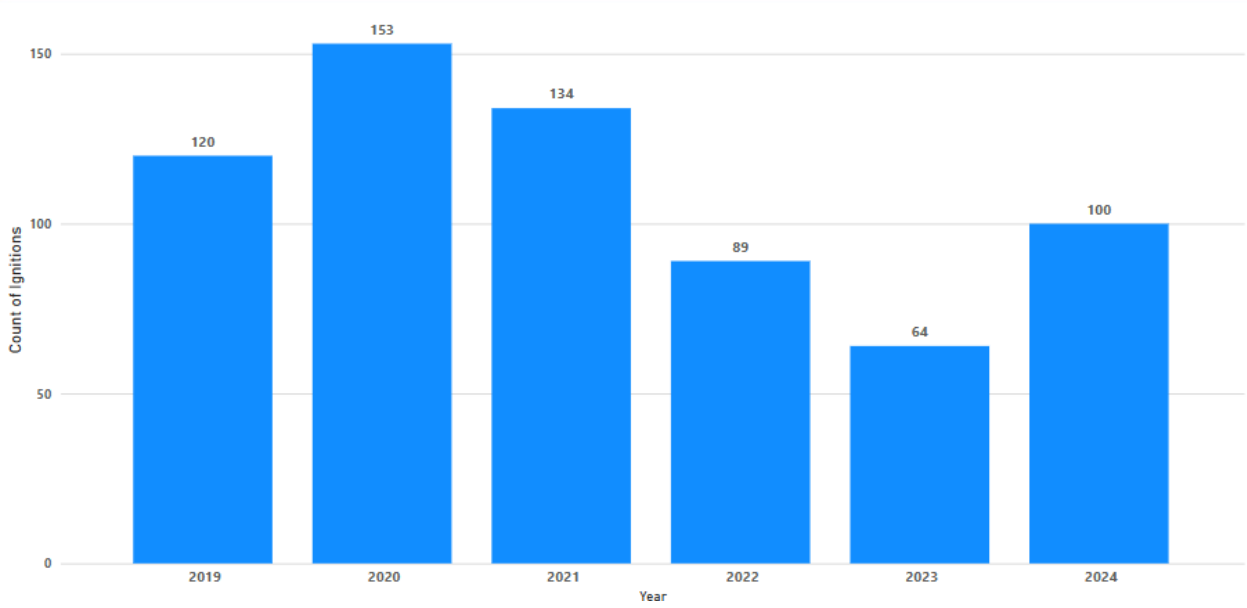


Figure 4 below depicts the significant reduction in CPUC-reportable ignitions caused by vegetation contact in HFTD compared to the 2019 to 2021 period. These are a subset of overall ignitions shown in Figure 3.

FIGURE 4: CPUC-REPORTABLE IGNITIONS CAUSED BY VEGETATION CONTACT IN HFTD AREAS BY YEAR

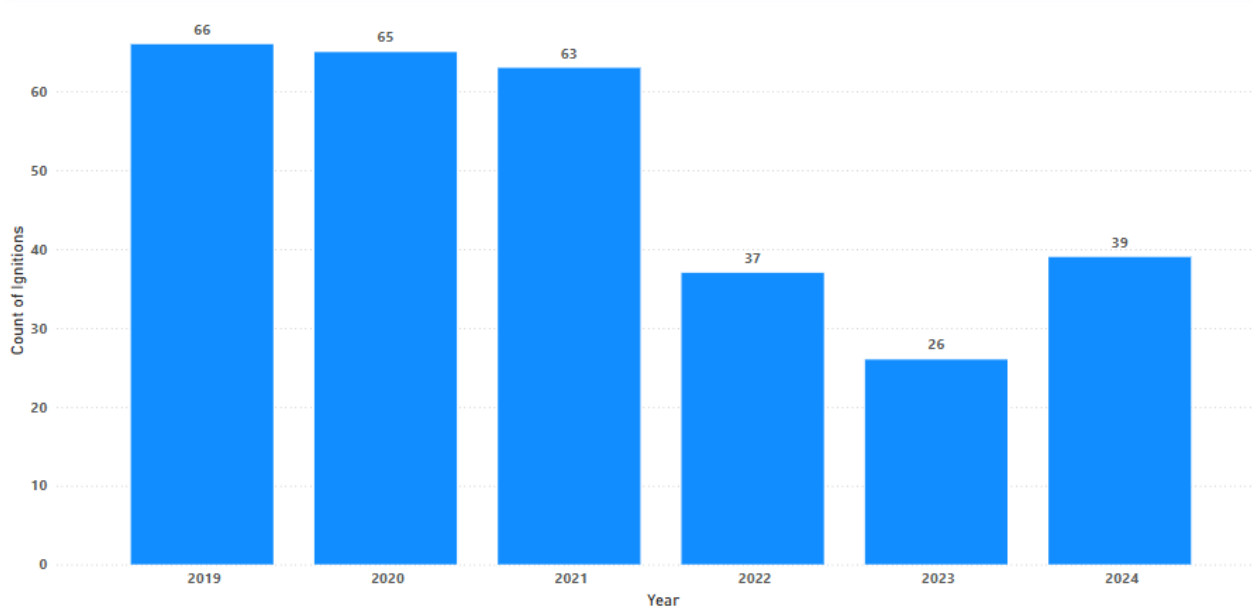
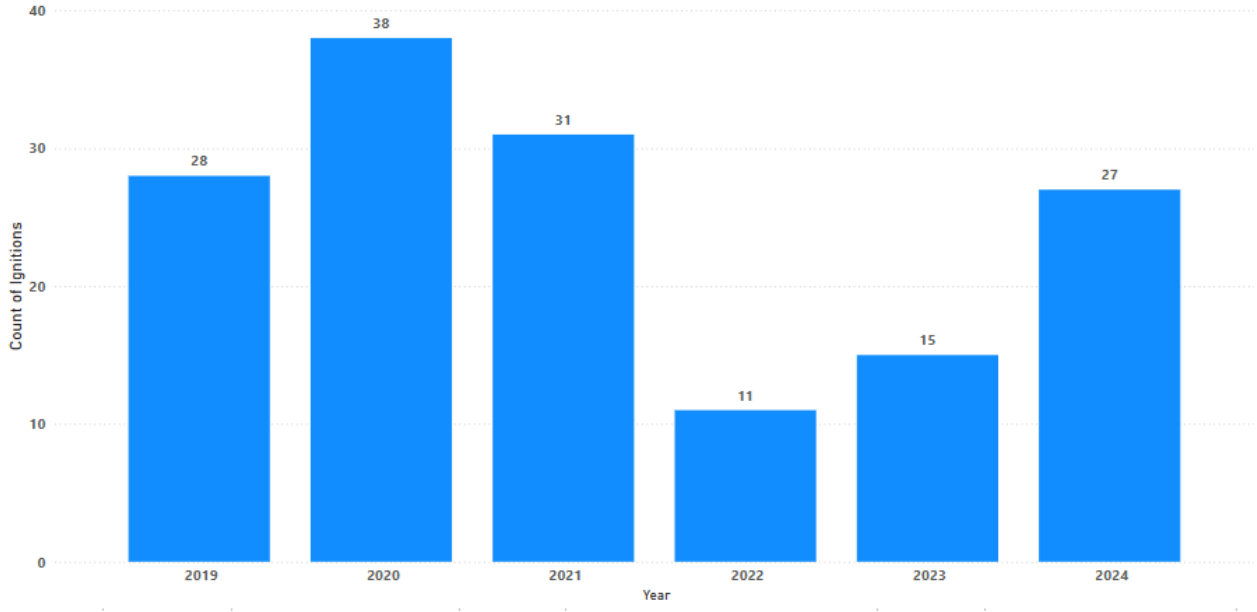


Figure 5 below depicts the significant reduction in CPUC-reportable ignitions caused by equipment failure and overload in HFTD compared to the 2019 to 2021 period. These are a subset of overall ignitions shown in Figure 3. The remaining ignitions are attributed to other causes, including animal contact, utility work and operations, and weather, which comprise a relatively small portion of ignitions.

FIGURE 5: CPUC-REPORTABLE IGNITIONS CAUSED BY EQUIPMENT FAILURE IN HFTD AREAS BY YEAR



As we continue to deploy longer-term wildfire risk reduction initiatives, such as undergrounding, the reduction of ignitions experienced over recent years is largely attributable to the near-term operational mitigations, such as PSPS and EPSS, which have been deployed at a much quicker pace. While these operational mitigations provide the needed protection from potential ignitions during high-risk times, we know they come at a reliability cost for our customers. We continue to refine our deployment and support of these initiatives to mitigate the reliability impacts to our customers' experience. In 2024, the EPSS program had a target of not exceeding 185 minutes for average outage duration of each customer. We experienced a Customer Average Interruption Duration Index (CAIDI) of 153 minutes including Major Event Days (MED), or about two and a half hours.[2] CAIDI represents the average duration of EPSS outages for all customer impacts. In addition, we leveraged information included in our 2024 EPSS Reliability Study to inform activities meant to improve reliability for customers experiencing outages on circuits protected by EPSS, including performing targeted vegetation management work and circuit sectionalization. Our customers experienced six PSPS events that resulted in de-energization in 2024. We also activated our Emergency Operations Center (EOC) for one additional potential PSPS event but, due to favorable weather conditions, we did not have to de-energize our customers for this event.

The reduction in wildfire risk that we were able to accomplish, as well as how we achieved our 2024 objectives and goals, are both described in more detail in Section II below.[3]

II. ELEMENTS TO BE INCLUDED IN THE ANNUAL REPORT ON COMPLIANCE

Pursuant to Energy Safety's 2024 *Compliance Guidelines*, we provide each of the required elements that must be included in an electrical corporation's Annual Report on Compliance below.[4]

1. A Written Narrative including:

a. A description of the electrical corporation's progress towards achieving the summarized objectives for the three- and ten-year WMP plan cycles, as identified in its most recently approved WMP. Progress must be discussed individually for each stated objective.

As stated in our 2023-2025 base WMP, PG&E strives to reduce ignition risk through several strategies, which include operational mitigations and long-term resilience work, while simultaneously minimizing customer impacts associated with these activities.[5] To achieve this,

[2] The CAIDI Excluding MED metric was 183 minutes for 2024.

[3] The specific requirements of the *Compliance Guidelines* are in bold and italics.

[4] Energy Safety *Compliance Guidelines* (Sep. 8, 2024), pp. 6-10.

[5] PG&E 2023-2025 WMP R8, p. 71.

we established objectives in four distinct areas: (1) comprehensive monitoring and data collection; (2) operational mitigations; (3) system resilience; and (4) community impacts. Each of these objectives is intended to work together to reduce wildfire risk and strengthen the resiliency of our electric distribution and transmission systems. Below is the progress made in these areas.

Comprehensive Monitoring and Data Collection Mitigations

Our objectives in this area include: (1) filling asset inventory and vegetation management (VM) data gaps; (2) system monitoring through installation of sensor technology and (3) implementing a best practices control process. The continued evolution of our asset and VM inspection programs is targeted towards identifying locations that pose the highest risk for an ignition event. These programs evolved based on our learnings over the past years. Improvement opportunities, gaps identified in processes, cause analysis, and trends were provided across organizations to allow for collaborative implementation of best practices. For example, we continue to leverage line sensor technology to ensure situational awareness of the system.

Our Comprehensive Monitoring and Data Collection framework continuously informs and influences mitigation activity scheduling. The proposed scope and schedule for newly identified mitigations are brought to the Wildfire Risk Governance Steering Committee (WRGSC) before they are added to the multi-year work plan. These activities provide insight into the current state of our electrical system and aid us in proactively identifying and addressing issues to reduce ignition risk. One instance is where we use the One VM software platform that can host records from multiple PG&E systems of records and create new records to capture and maintain multi-year, historical tree data. These operational mitigations will assist us in managing current risk on the system while we focus on applying longer-term improvements to permanently reduce risk.

Operational Mitigations

Our objectives in this area include: (1) PSPS; (2) EPSS; (3) grid maintenance activities and (4) vegetation clearing and monitoring.

The PSPS Program temporarily turns off power in specific areas during extreme weather conditions to prevent the electric system from becoming a potential source of ignition. PG&E initiates PSPS events as a last resort measure to keep our customers and communities safe. We estimate PSPS is 95 percent effective at reducing catastrophic wildfire risk and, for this reason, consider PSPS to be a cornerstone of our operational mitigations. Over the past five years we implemented 27 PSPS events that mitigated 1,439 instances of damage or hazards during high-risk weather conditions that had the potential to become catastrophic fires.

We know that losing power is disruptive for our customers. For this reason, we are working tirelessly to make our system safer and more resilient and reduce the impact of PSPS events for our customers and communities. We remain committed to executing our PSPS Program in a manner that complies with CPUC directives. We experienced six PSPS events in 2024.

Enhanced Power Safety Settings (EPSS) is a protective technology that allows line protection devices, such as line reclosers, to address faults of varying magnitude and rapidly de-energize the

line. When EPSS are enabled on distribution and transmission line protective devices, power automatically turns off within one-tenth of a second if a threat is detected on the line that could result in an ignition. We utilized information included in the 2024 EPSS Reliability Study and experienced reliability impacts to prioritize operational mitigations. This enabled us to execute targeted vegetation management work and circuit sectionalization to further reduce the impact of outages on EPSS enabled zones. We also optimized our existing Multiple Outage Review Evaluation (MORE) process in 2024 to create more targeted solutions on an individual outage basis. In many cases, this work resulted in adjusted EPSS device settings to improve coordination and targeted vegetation management work on many impacted zones. An additional focus for the EPSS program in 2024 was to deploy targeted animal guard/animal protection solutions where animal-caused outages trended higher, which has already shown promising improvements at the initial scoped locations.

PSPS, EPSS, and other system operational tools like Downed Conductor Detection (DCD) are operational mitigations that provide a layer of protection for our customers. While these programs are among the most impactful and cost-effective mitigations we deploy, they result in a reliability impact to customers. To address this reliability impact, we undertake initiatives to minimize the scope and duration of outages and support customers before, during, and after wildfire events.

System Resilience Mitigations

PG&E's system resilience activities are critical to permanently reducing wildfire risk, minimizing negative aspects of PSPS and EPSS, and strengthening the grid against extreme weather events. Targeted in our HFTD and HFRA locations, PG&E's system hardening initiatives—including overhead hardening with covered conductor, line removal and remote grid, and undergrounding—remain cornerstone activities in this resiliency effort. In 2024, PG&E continued to reduce wildfire risk on its distribution system by hardening 389 miles. This system hardening work included undergrounding 257.8 miles, thereby exceeding our GH-04 2024 target of 250 miles. PG&E also met its 2024 target for initiative GH-01 activities, including completion of covered conductor on 108 overhead line miles and line removal of 24 miles. Our grid hardening work in 2023 and 2024 delivered 5.67% permanent wildfire risk reduction against PG&E's GRC 2024 risk reduction target of 5%.

Community Impacts

Together with the mitigation programs that address risk drivers, we focused on reducing impacts to our customers being affected by EPSS and PSPS events. Our objectives in this area include: (1) reducing the impact to customers; and (2) community engagement. Additionally, we evaluated incorporation of approved Ignition Probability Weather (IPW) model enhancements into the PSPS distribution guidance to enhance the focus of PSPS events. For qualified customers frequently impacted by EPSS and/or PSPS outages, the Portable Battery Program (PBP) and the Disability Disaster Access and Resource (DDAR) Program delivered over 4,300 portable batteries and over 1,400 permanent batteries in 2024.

Our community outreach program utilizes meetings and customer surveys in part to refine and enhance our PSPS and Emergency response programs. Community outreach and public awareness are key components of emergency planning and preparedness. These efforts help to ensure customers and communities are informed and adequately prepared prior to a wildfire or wildfire safety outage like PSPS or EPSS. PG&E leverages the Safety Partner, Community-Based Organizations (CBO) and customer engagement opportunities.

Both in-progress and completed objectives are detailed below for the recently completed compliance period.

b. A description of the electrical corporation's progress towards achieving the three- and ten-year detailed objectives listed in the tables in Section 8 of its WMP, including all subsections, with completion dates within the recently completed compliance period. Each objective must be discussed individually and, at a minimum, include the following:

1. A listing of the initiative(s) and associated tracking identification numbers the electrical corporation is implementing to achieve the objective.

2. Reference(s) to the WMP section(s) or appendix, including page numbers, where the details of the objective are documented and substantiated.

3. The completion date listed in the approved WMP.

4. A summary of the electrical corporation's progress made during the most recently completed compliance period.

Below Tables 1.A to 1.F outline the significant progress made on all our WMP objectives during the 2024 compliance period. Section 8 consists of our wildfire mitigations: (1) Grid Design, Operations, and Maintenance; (2) Vegetation Management and Inspections; (3) Situational Awareness and Forecasting; (4) Emergency Preparedness; and (5) Community Outreach and Engagement. Section 9 of the WMP contains Public Safety Power Shutoff (PSPS) objectives and is included below for completeness. We made notable progress on our objectives, and we are on track to complete our objectives by the listed completion date in the WMP.

Table 1.A – Progress Update of 3- and 10-Year Objectives for 8.1 Grid Design, Operations, and Maintenance

WMP Category	Objective	Utility Initiative Tracking ID	Reference (section & page #)	Completion date listed in WMP	Summary of the progress made during the most recently completed compliance period
Grid Design, Operations and Maintenance	Retainment of Inspectors and Internal Workforce Development	AI-01	8.1.9.1 / p. 589	12/31/2025	As part of this three-year objective, we continue to put in place a plan to increase retention of trained and qualified inspectors. In 2024, we filled Inspector roles, demonstrating our commitment to increasing and sustaining year-over-year growth of our asset inspection workforce. We are on track to complete this three-year objective on time.
Grid Design, Operations and Maintenance	Filling Asset Inventory Data Gaps	AI-11	8.1.5 / p. 521	12/31/2025	In 2024, all planned work was timely completed, including establishing baselines targets for installation date fill rate, define TVAC record of evidence requirements, selecting and contracting for vendors. A pilot was conducted and completed successfully. The implementation phase of this work has started and will continue into 2025. This objective is on track to be completed on time.
Grid Design, Operations and Maintenance	Eliminate HFTD/HFRA distribution backlog	GM-08	8.1.1.1 / pp. 371 to 376	2/15/2026	This multi-year objective remains on track. PG&E is continuously working to eliminate the HFTD/HFRA EC notification distribution backlog by the end of 2029 and have all HFTD/HFRA EC notifications in compliance with GO 95, Rule 18. Please see target GM-03 for the progress made in 2024.

Table 1.B – Progress Update of 3- and 10-Year Objectives for 8.2 Vegetation Management and Inspections

WMP Category	Objective	Utility Initiative Tracking ID	Reference (section & page #)	Completion date listed in WMP	Summary of the progress made during the most recently completed compliance period
Vegetation Management and Inspection	Constraint Resolution Procedural Guideline	VM-09	8.2.1.1 / pp. 604 to 611	12/31/2023 12/31/2025	This multi-year objective remains on track. PG&E continues to track and facilitate reporting on each major constraint type, including time to resolve constraints.
Vegetation Management and Inspection	Inspection in HFTD and HFRA supporting key vegetation management initiatives	VM-10	8.2.1.1 / pp. 604 to 611	12/31/2032	This multi-year objective remains on track. PG&E continues with multiple inspection activities supporting key vegetation management initiatives.
Vegetation Management and Inspection	Enhance and refine Focus Tree Inspection – Areas of Concern (AOC)	VM-11	8.2.1.1 / pp. 604 to 611	12/31/2032	This multi-year objective remains on track. PG&E adopted a second version of the methodology for defining Focus Tree Inspection (FTI) AOCs in October 2024, which was used to define the scope of work for the FTI program starting in 2025.
Vegetation Management and Inspection	Evaluate emerging technologies	VM-12	8.2.1.1 / pp. 604 to 611	12/31/2032	This multi-year objective remains on track. PG&E continues to evaluate if emerging technologies could be used to support execution of vegetation management activities. For example, PG&E is assessing remote sensing technology to examine the use cases and limitations of each remote sensing technology and how it would be operationalized. Pilots will occur in 2025.

Table 1.C – Progress Update of 3- and 10-Year Objectives for 8.3 Situational Awareness and Forecasting

WMP Category	Objective	Utility Initiative Tracking ID	Reference (section & page #)	Completion date listed in WMP	Summary of the progress made during the most recently completed compliance period
Situational Awareness and Forecasting	Evaluate FPI and IPW Modeling enhancements in 2023 - 2025	SA-05	8.3.6.3 / p. 781	12/31/2025	This multi-year objective is on track. The new Fire Potential Index (FPI), the Ignition Probability Weather (IPW), and the Outage Probability Weather (OPW) models were approved by leadership for use in 2024 and operationalized before September 1, 2024. In 2025, additional data will be used to retrain these models with the goal of creating additional increases in model skill and accuracy.
Situational Awareness and Forecasting	Evaluate FPI and IPW Modeling enhancements in 2026 - 2032	SA-06	8.3.6.3 / p. 781	12/31/2032	This objective will start in 2026.
Situational Awareness and Forecasting	Monitor and evaluate the Cameras AI system's performance	SA-07	8.3.2.3 / p. 744	12/31/2025	This multi-year objective is on track. PG&E fully deployed HD Camera AI Fire Detection technology across the entire wildfire camera network. We continue to partner closely with the vendor to monitor and evaluate these early ignition detection and alerting capabilities. We also meet with the vendor regularly to review their roadmap for maturation and the enhancements that are currently being explored or implemented.
Situational Awareness and Forecasting	Evaluate the Cameras AI system functionalities and technologies	SA-08	8.3.2.3 / p. 744	12/31/2032	This multi-year objective is on track. PG&E continues to evaluate the AI system for opportunities to test new functionalities and newly developed break-through technologies. We will explore new best practices to ensure the ongoing effectiveness of the system.
Situational Awareness and Forecasting	EFD and DFA Reporting	SA-09	8.3.3.1 / p. 746	12/31/2025	This multi-year objective is on track. An analysis on sensor alert severity versus actual damage severity on existing deployments was completed. Co-relation studies between sensor findings and manual/aerial inspections are in progress.

Situational Awareness and Forecasting	Evaluate the use and effectiveness of real-time monitoring tools	SA-12	8.3.2.3 / p. 744	12/31/2032	This multi-year objective remains on track. PG&E continues to evaluate the use and effectiveness of real-time monitoring/situational awareness tools.

Table 1.D – Progress Update of 3- and 10-Year Objectives for 8.4 Emergency Preparedness

WMP Category	Objective	Utility Initiative Tracking ID	Reference (section & page #)	Completion date listed in WMP	Summary of the progress made during the most recently completed compliance period
Emergency Preparedness	Maintain All Hazards planning and preparedness program in 2023 - 2025	EP-02	8.4.3.1 / p. 837	12/31/2025	In 2024, PG&E met the annual commitment of maintaining the All-Hazards Planning and Preparedness Program as evidenced by the submittal of the GO-166 annual compliance report to the CPUC.
Emergency Preparedness	Expand All Hazards planning to include additional threats and scenarios	EP-04	8.4.3.1 / p. 837	12/31/2025	This multi-year objective remains on track. In 2024, PG&E Threat and Hazard Identification and Risk Assessment (THIRA) analysis informed the publication of the Extreme Weather and Physical Threat annexes to the PG&E Guidance Document Library.
Emergency Preparedness	Common Operating Picture Technology	EP-07	8.4.3.1 / p. 837	12/31/2028	This multi-year objective remains on track. PG&E is continuing its work to design and deploy common operating picture.
Emergency Preparedness	Threats and Hazards Identification and Risk Assessment (THIRA) updates	EP-08	8.4.3.1 / p. 837	12/31/2023 12/31/2026 12/31/2029 12/31/2032	In 2024 PG&E updated hazard annexes associated with company emergency response plan (CERP) and published to GDL (Guidance Document Library).
Emergency Preparedness	County Execute Briefings	EP-09	8.4.3.1 / p. 837	12/31/2032	This multi-year objective remains on track. County briefings will start in 2027 after each THIRA update.

Table 1.E – Progress Update of 3- and 10-Year Objectives for 8.5 Community Outreach and Engagement

WMP Category	Objective	Utility Initiative Tracking ID	Reference (section & page #)	Completion date listed in WMP	Summary of the progress made during the most recently completed compliance period
Community Outreach and Engagement	Community Engagement - Outreach to HFRA Infrastructure Customers	CO-04	8.5.1.1 / pp. 882 to 886	12/31/2032	In 2024, PG&E continued to perform outreach via email and/or phone to assigned critical infrastructure customers in the HFRA through Business Energy Solutions (assigned account managers). The outreach covered the CWSP, including potential PSPS and EPSS impacts, and updating contact information for critical accounts in the HFRA.
Community Outreach and Engagement	Community Engagement - Outage Preparedness Campaign	CO-05	8.5.1.1 / pp. 882 to 886	12/31/2032	In 2024, PG&E conducted one direct-to-customer outage preparedness campaign via email and/or direct mail targeting residential customers prone to PSPS or EPSS program scope.

Table 1.F – Progress Update of 3- and 10-Year Objectives for Section 9 Public Safety Power Shutoff[6]

WMP Category	Objective	Utility Initiative Tracking ID	Reference (section & page #)	Completion date listed in WMP	Summary of the progress made during the most recently completed compliance period
Public Safety Power Shutoff	Evaluate enhancements for the PSPS Transmission guidance	PS-01	9.1.3 / pp. 920 to 923	12/31/2025	In 2024, PG&E evaluated changes to the PSPS input models, which occurred since last season, and performed a sensitivity analysis. New guidance was presented to the WRGSC on August 29, 2024.

[6] While the *Guidelines* did not specify including a progress update for Section 9 of our WMP, PG&E is including an update here for completeness.

Public Safety Power Shutoff	Evaluate incorporation of approved IPW enhancements into the PSPS Distribution guidance	PS-02	9.1.3 / pp. 920 to 923	12/31/2025	In 2024, PG&E evaluated changes to the PSPS distribution input models, which occurred since last season, and new guidance was presented and approved at the WRGSC on July 18, 2024.
Public Safety Power Shutoff	Evaluate the transition of the Portable Battery Program to permanent battery solutions	PS-05	9.1.3 / pp. 920 to 923	12/31/2032	This multi-year objective is on track. PG&E is continuing to evaluate the transition of the Portable Battery Program to permanent battery solutions for PG&E customers at risk of PSPS or EPSS, focusing on but not limited to AFN, MBL, and self-identified vulnerable populations.
Public Safety Power Shutoff	Evaluate emerging technologies to reduce PSPS customer impact	PS-08	9.1.3 / pp. 920 to 923	12/31/2032	This multi-year objective is on track. PG&E is continuing to evaluate the emerging technologies for transmission and distribution that may further reduce scale, scope, or frequency of PSPS.
Public Safety Power Shutoff	Reduce PSPS size, duration, or frequency as part of 10,000-mile undergrounding program	PS-09	9.1.3 / pp. 920 to 923	12/31/2032	This multi-year objective is on track. PG&E continues to reduce the PSPS size, duration, or frequency as part of our undergrounding program.
Public Safety Power Shutoff	Continue sharing PSPS lessons learned	PS-10	9.1.3 / pp. 920 to 923	12/31/2025	In 2024, PG&E held monthly Joint Utility Public Safety Power Shutoff Working Group meetings to share PSPS lessons learned and best practices with CA IOUs. Each joint working group report was submitted to the CPUC and Energy Safety.

c. An assessment of the electrical corporation's completion of the three- and ten-year objectives listed in the tables in Section 8 of its WMP, including all subsections, with completion dates within the most recently completed compliance period. Each stated objective must be discussed individually and, at a minimum, include the following information:

1. A listing of the initiatives and associated tracking identification numbers the electrical corporation is implementing to achieve the objective.

2. Reference(s) to the WMP section(s) or appendix, including page numbers, where the details of the objective are documented and substantiated.

3. The completion date listed in the approved WMP.

4. The date the electrical corporation actually completed the objective.

5. An explanation of how the electrical corporation utilized the identified "Method of Verification" to assess the completion of the objective.

6. A summary of the electrical corporation's assessment of completing the objective following use of the verification method described above, including a listing of all evidence relied upon in the electrical corporation's assessment.

7. Whether activities counting toward completion of the objective in a given compliance year were carried over from previous compliance years, and if so to what degree.

8. For each objective that the electrical corporation failed to complete, a detailed explanation of what was incomplete, the reason the initiative was not completed, and associated corrective actions the electrical corporation has taken to prevent recurrence of such failures.

9. If the electrical corporation did not take corrective action to prevent recurrence of such failures, it must provide justification for such inaction.

Table 2 below summarizes the successful completion of the three-year objectives in Section 8 and 9 of our WMP for the 2024 compliance period.[7] In the 2024 compliance period, we completed a total of eight three-year objectives ahead of the initially forecasted completion date that we listed in the WMP.

[7] While the *Guidelines* did not specify including a progress update for Section 9 of our WMP, PG&E is including an update here for completeness.

Table 2 – list of Completed 3- and 10-Year Objectives

WMP Category	Utility Initiative Tracking ID / Objective	Reference (section & page #)	Completion date listed in WMP	Actual Completion date	Method of Verification	Objective Completion Assessment Method	Carried over from previous compliance years (Y/N)	Reasons for incompletion and corrective actions	Reasons for not implementing corrective actions
Community Outreach and Engagement	CO-01 / Community Engagement - Meetings	8.5.1.1 / pp. 882 to 886	9/30/2024	9/3/2024	For In-Person Meetings: Third-party prepared meeting summary For Virtual Meetings: Link to the recorded session and PowerPoint presentation.	A total of 25 events counting toward the CO-01 WMP initiative have been completed in 2024; 1 event in Q1; 13 events in Q2. In Q3, PG&E conducted 5 Regional Townhalls, 4 CWSP Safety Webinars, and 2 In-Person Open Houses. The commitment was assessed by reviewing the meeting summary for in person meetings and recordings, along with supporting PowerPoint presentations for the virtual meetings.	N	N/A	N/A
Emergency preparedness Plan	EP-01 / Complete PSPS and Wildfire Tabletop and Functional Exercises	8.4.1.1 / pp. 784 to 790	11/30/2024	11/7/2024	An After-Action Report (AAR) is utilized as the method of verification for each exercise. For each exercise, an AAR was written following completion of the exercise. The AAR	**PSPS Tabletop Exercise** • Exercise date: 3/19/24 • AAR date: 6/4/24 **PSPS Functional Exercise** • Exercise dates: 4/15/24 - 4/19/24 • AAR date: 6/25/24 **Wildfire Tabletop Exercise** • Exercise date: 8/22/24 • AAR date: 11/7/24 **Wildfire Functional Exercise** • Exercise dates: 4/15/24 - 4/19/24 • AAR date: 6/25/24	N	N/A	N/A

					summarizes the exercise details including dates, times, locations, objectives, scope, participation, strengths, and areas for improvement identified.				
Grid Design, Operations and Maintenance	GH-02 / Evaluate Covered Conductor Effectiveness	8.1.1.1 / pp. 371 to 376	3/29/2024	3/22/2024	Whitepaper showing the updated covered conductor effectiveness calculation using 2023 outage data	The Program updated the covered conductor estimated effectiveness calculation using 2023 outage data on the lines that have Covered Conductors for consideration in future system hardening workplans. The program was able to provide a Whitepaper showing the updated covered conductor effectiveness calculation.	N	N/A	N/A
Grid Design, Operations and Maintenance	GM-07 / Updates on EPSS Reliability Study	8.1.1.1 / pp. 371 to 376	2/15/2024	2/15/2024	Annual EPSS Reliability Study	The reliability study (outage data along with the narrative) was submitted to Energy Safety on February 15, 2024.	N	N/A	N/A

Public Safety Power Shutoff	PS-11 / Pilot using drones for PSPS restoration	9.1.3 / pp. 920 to 923	12/31/2024	11/27/2024	Documentation presented to the Wildfire Risk Governance Steering Committee (WRGSC) to show results of the pilot program effectiveness.	PG&E completed the objective to evaluate whether drones can be used to support PSPS restoration efforts. This involved running a pilot with the use of drones for PSPS patrol and damage assessment. The findings were presented in PG&E's WRGSC on November 14, 2024. UAV Patrols demonstrated significant benefits, including reduced risk to personnel compared to ground patrols and minimal environmental impact compared to helicopter use.	N	N/A	N/A
Vegetation Management and Inspection	VM-19 / One VM Application Record Keeping Enhancement (Routine, Second Patrol)	8.2.1.1 / pp. 604 to 611	1/31/2024	1/30/2024	Field in One VM capturing reason for removal for Routine, Second Patrol.	VM completed the enhancement of the One-VM application for Routine, and Second Patrol to include capability to capture factors for prescribing trees for removal on January 30, 2024.	N	N/A	N/A
Vegetation Management and Inspection	VM-20 / Record Keeping Enhancement (VMOM, TRI)	8.2.1.1 / pp. 604 to 611	11/15/2024	7/30/2024	Field capturing reason for removal for VMOM – VMPI2 - and TRI – Field Maps.	In 2024, VM enhanced the application for the Vegetation Management for Operational Mitigations (VMOM), One VM, and Tree Removal Inventory (TRI) Field Maps program to include capability to capture factors for prescribing trees for	N	N/A	N/A

						removal. The original objective, created in 2023, was to enhance VMPI2 for VMOM. However, in 2024, the VMOM system of record migrated to One-VM. As a result, the record-keeping enhancements were made to One VM.			
Vegetation Management and Inspection	VM-21 / FTI Record Keeping Enhancement	8.2.1.1 / pp. 604 to 611	3/31/2024	3/26/2024	Digitization of Tree Risk Assessment Form Reason for Tree Removal	This commitment was completed in 2024. The Tree Risk Assessment Form was digitized and provides the reason for tree removal. A Job Aid demonstrating record keeping of digitized Tree Risk Assessment Form was published.	N	N/A	N/A

d. ***An assessment of the electrical corporation's completion of all targets identified for each initiative listed in the tables in Section 8 of its WMP, including all subsections, with target completion dates within the most recently completed compliance period. The assessment of each target must be discussed individually and, at a minimum, include the following information:***

1. ***A complete listing of all applicable targets.***
2. ***The target value and associated target unit.***
3. ***The target completion date (i.e., year-end, Q2, Q3, etc.) listed in the WMP.***
4. ***The date the electrical corporation actually completed the target.***
5. ***An explanation of how the electrical corporation utilized the identified "Method of Verification" to assess the completion of the target.***
6. ***A summary of the electrical corporation's assessment of completing the target following use of the verification method described above, including a listing of all evidence relied upon in the electrical corporation's assessment.***
7. ***Whether activities counting toward completion of the target in a given compliance year were carried over from previous compliance years, and if so to what degree.***
8. ***For each target that the electrical corporation failed to complete, a detailed explanation of what was incomplete, why, and associated corrective actions the electrical corporation has taken to prevent recurrence of such failures. If the electrical corporation did not take corrective action to prevent recurrence of such failures, it must provide justification for such inaction.***
9. ***An explanation of whether the expected percentage risk reduction, as listed in the WMP, was achieved during the most recently completed compliance period. a. If the expected percentage risk reduction was not achieved, the electrical corporation must explain why and discuss any actions it has taken as a result. b. If the electrical corporation did not take action, it must provide justification for such inaction.***
10. ***An assessment of quality of implementation for initiatives that have a quality control/quality assurance component.***

Attachment PGE_2024-ARC_Table_3-Targets R1 provides our assessment of the completion of all 39 WMP targets in the 2024 compliance period. Below, we discuss our assessment of quality of implementation for several of our WMP initiatives that have a Quality Assurance/Quality Control (QA/QC) component. Additionally, there are some targets that benefit from further narrative discussion and are included below.

Assessment of Quality of Implementation for Initiatives that Have QA/QC Component

PG&E has a QA/QC component that is performed on both its asset management inspection programs. The QA program (GM-01 Asset Inspections – Quality Assurance) is intended to ensure that the QC and Execution program (GM-09 Asset Inspections – Quality Control) is performing as intended through ongoing audits of completed QC locations. As outlined below, our QA/QC programs ensured that we not only met all targets, but we also exceeded all pass rate percentages.

GM-01 Asset Inspections – Quality Assurance

We surpassed the QA target for System Inspections: pass rate of 99.97% on 2,970 System Inspections Transmission audit locations; pass rate of 99.69% on 7,098 System Inspections Distribution audit locations.

GM-09 Asset Inspections – Quality Control

We surpassed the QC target for System Inspections: pass rate of 99.95 % on 23,012 System Inspection Transmission audit locations and pass rate of 99.83% on 175,376 System Inspection Distribution audit locations.

Like our QA/QC on systems inspections mentioned above, VM's Quality Management System is designed to provide multiple layers of defense against hazards and failures. These layers of defense—Quality Control (QC), Quality Assurance (QA)—help build reliable, repeatable, and sustainable processes. QA (VM-08 Vegetation Management – Quality Assurance) ensures that the work completed by the QC and Execution teams meets our quality and compliance standards. QC (VM-22 Vegetation Management – Quality Control) ensures that completed inspections and tree work performed by VM Execution meet quality standards. Again, our VM QA/QC programs ensured that both targets and pass rate percentages exceeded our targets.

VM-08 Vegetation Management – Quality Assurance

We surpassed all targets for QA Vegetation Management: pass rate of 99.86% on 3,466 Vegetation Control (VC) pole clearing audit locations; pass rate of 99.95% on 4,477 Routine Distribution Vegetation Management audit locations; pass rate of 99.95% on 2,728 audit locations Routine Transmission Vegetation Management.

VM-22 Vegetation Management – Quality Control

We surpassed all target for QC Vegetation Management: pass rate of 88.3% on 21,740 VC pole clearing audit locations; pass rate of 97.38% on 80,931 Routine Distribution Vegetation Management audit locations; pass rate of 99.08% on 15,897 audit locations for Routine Transmission Vegetation Management.

As indicated above, of the 39 completed WMP targets listed in Attachment PGE 2024-ARC Table 3-Targets.xls, additional narrative discussion is provided for some targets, and which are set out below.

Additional Details on Targets

AI-07 Detailed Ground Inspections

PG&E completed detailed distribution ground inspections on 217,949 distribution poles against a target of 220,016. During inspections, an additional 5,173 poles were identified as no longer capable of being inspected because they had been removed from the field, giving us a total population of 223,122. We list this target as completed due to 100% of the scope of this work being achieved.

AI-08 Supplemental Inspections - Substation Distribution

This initiative involves completing supplemental inspections on 76 distribution substations, which entails ground, infrared, and aerial inspections. The program missed the Q2 target of 68 inspections. The delay was due to receiving the Change Order decision on May 31, 2024, preventing the safe completion of ground and infrared inspections by the end of Q2 (all aerial inspections were completed on time, in line with the 2024 change order request). Ground, infrared, and aerial inspections on all 76 distribution substations were completed by the end of Q3.

AI-09 Supplemental Inspections - Substation Transmission

This initiative involves completing supplemental inspections on 36 transmission substations, which entails ground, infrared, and aerial inspections. The program missed the Q2 target of 33 inspections. The delay was due to receiving the Change Order decision on May 31, 2024, preventing the safe completion of ground and infrared inspections by the end of Q2 (all aerial inspections were completed on time, in line with the 2024 change order request). Ground, infrared, and aerial inspections on all 36 transmission substations were completed by the end of Q3.

AI-10 Supplemental Inspections - Hydroelectric Substations and Powerhouses

This initiative involves completing supplemental inspections on 46 hydroelectric generation substations and powerhouses, which entails ground, infrared, and aerial inspections. The program missed the Q2 target of 45 inspections. The delay was due to receiving the Change Order decision on May 31, 2024, preventing the safe completion of ground and infrared inspections by the end of Q2 (all aerial inspections were completed on time, in line with the 2024 change order request). Ground, infrared, and aerial inspections on all 46 hydroelectric generation substations and powerhouses were completed by the end of Q3.

VM-06 Defensible Space Inspections - Transmission Substation

Our 2024 Change Order request to change the target for this work from 55 to 54 was denied by Energy Safety on procedural grounds. The reduction in this target is due to a transfer in ownership of one of the substations. Inspections of the remaining 54 substations were completed by the end of Q2. We list this target as completed due to 100% of the scope of this work being achieved.

VM-07 Defensible Space Inspections - Hydroelectric Substations and Powerhouses

Our 2024 Change Order request to lower the target for this work from 61 to 59 was denied on procedural grounds. The reduction in this target is due to a transfer in ownership of two of the

substations. Inspections of the remaining 59 substations were completed by the end of Q2. We list this target as completed due to 100% of the scope of this work being achieved.

VM-16 Distribution Routine Patrol

VM Completed Distribution Routine Annual Patrol Inspections of 78,307.8 overhead circuit miles against a target of 78,650. Please note that the target for this commitment was set using ED GIS Data, however the attainment value was based on VM system of record, which is not fully aligned with ED GIS Data. We are considering this target as complete due to all inspections being met per VM system of record.

VM-17 - Distribution Second Patrol

VM completed Distribution Second Patrol Inspections of 25,519.04 circuit miles in HFTD and HFRA locations. Please note that the target for this commitment was revised to 25,484.8 as communicated to Energy Safety during our biweekly update to Energy Safety. We are considering this target as complete due to exceeding the revised target.

Target Updates from 2023

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

We met our target for GM-02 in 2023 with the exception of external factors, which prevented us from being able to close 762 tags in 2023.[8] In 2024, we closed all remaining 762 tags that we were unable to close in 2023. Completion of these tags has been communicated to Energy Safety.

GH-08 - Surge Arrestor Removals

We met our target for GH-08 in 2023. However, in our 2023 ARC we stated that during our validation process we identified an additional 757 surge arrestors that still need to be replaced.[9] We completed these installations in 2024 and communicated the updates to Energy Safety.

Targets that Have Been Updated from the 2024 Q4 QDR

Please note that, as part of our normal course of work, we want to highlight that the following 15 targets have been updated since our filing of PG&E 2024 Q4 QDR as a result of either data validation, SAP transaction processing, and/or clerical work inputting data.

[8,9] Please refer to page 29 of PG&E's 2023 Annual Report on Compliance for the 2023-2025 Wildfire Mitigation Plan R1

AI-02 - Detailed Inspection Transmission – Ground
The final annual value for this work was updated from 21,713 transmission ground inspections to 21,684 transmission ground inspections.

AI-04 - Detailed Ground Inspections – Distribution
The final annual value for this work was updated from 22,865 transmission aerial inspections to 22,757 transmission aerial inspections.

AI-07 - Detailed Ground Inspections – Distribution
The final annual value for this work was updated from 223,146 distribution ground inspections to 223,122 distribution ground inspections.

GH-10 - Non-Exempt Expulsion Fuse - Removal
The final annual value for this work was updated from 3,106 fuses to 3,112 fuses.

PS-06 - Portable Batteries Program
The final annual value for this work was updated from 4,376 batteries to 4,347 portable batteries.

PS-07 – Reduce PSPS Impacts to Customers
The final annual value for this work was updated from 10,529 customer events to 10,491 customer events.

VM-01 - LiDAR Data Collection – Transmission
The final annual value for this work was updated from 17,989 circuit miles to 17,953 circuit miles.

VM-02 - Pole Clearing Program
The final annual value for this work was updated from 79,988 distribution poles to 77,152 distribution poles.

VM-03 - Focused Tree Inspection
The final annual value for this work was updated from 1,568.2 circuit miles to 1,557.09 circuit miles.

VM-04 - Tree Removal Inventory
The final annual value for this work was updated from 32,480 trees removed to 32,091 trees removed.

VM-13 Routine Transmission – Ground
The final annual value for this work was updated from 17,954 circuit miles to 17,953 circuit miles.

VM-14 - Transmission Second Patrol
The final annual value for this work was updated from 5,848 acres to 5,699.1 acres.

VM-16 - Distribution Routine Patrol
The final annual value for this work was updated from 78,307.8 circuit miles to 78,310.9 circuit miles.

VM-17 - Distribution Second Patrol

The final annual value for this work was updated from 27,259 circuit miles to 25,519 circuit miles.

VM-18 - VM for Operational Mitigations (VMOM)
The final annual value for this work was updated from 6,937 trees to 6,935 trees.

2. ***A complete listing of all change orders requested by the electrical corporation that were approved by Energy Safety. For each change order, the electrical corporation must include a description of the change requested, the date the electrical corporation requested the change order, and the date that Energy Safety approved the requested change order.***

Table 4 below lists all the requested Change Orders that were approved by Energy safety for the 2024 compliance period.

Table 4 – Change Orders

WMP Category	Utility Initiative Tracking ID	Initiative Name	Description Of Change Requested	Date Change Requested	Date Change Approved
Grid Design, Operations and Maintenance	GH-01	System Hardening – Distribution	PG&E proposed completing 280 circuit miles in 2024 versus the approved 470 circuit miles of system hardening work.	1/8/2024	5/31/2024
Grid Design, Operations and Maintenance	GH-04	10K Undergrounding	PG&E proposed completing 250 circuit miles of undergrounding in 2024 versus the approved 450 circuit miles.	1/8/2024	5/31/2024
Public Safety Power Shutoff	PS-07	Reduce PSPS Impacts to Customers	PG&E proposed changing its 2024 target for customer PSPS events mitigated from 18,000 to 9,980.	1/8/2024	5/31/2024
Grid Design, Operations and Maintenance	AI-07	Detailed Ground and Aerial Inspections – Distribution	PG&E proposed completing detailed inspections on approximately 220,016 distribution poles in 2024 versus the approved 233,501 distribution poles, but requests to also include aerial inspections.	1/8/2024	5/31/2024
Grid Design, Operations and Maintenance	GM-09	Asset Inspection Quality Control	Due to adding aerial inspections, PG&E proposed combining Quality Control (QC) desktop targets and field audit targets of High Fire Threat District (HFTD) transmission inspections into a single System Inspection Transmission audit target. PG&E proposed doing the same with System Inspection Distribution audit targets.	1/8/2024	5/31/2024
Grid Design, Operations	GM-01	Asset Inspection Quality Assurance	Due to adding aerial (desktop) inspections, PG&E proposed eliminating the terms “ground” and “field” for	1/8/2024	5/31/2024

and Maintenance			Quality Assurance (QA) asset inspections. The updated targets will be transmission inspection and distribution inspection audits, as opposed to transmission ground and distribution ground inspection audits.		
Vegetation Management and Inspection	VM-01	LiDAR Routine Inspections – Transmission	PG&E proposed to revise its 2024 quarterly targets for light detection and ranging (LiDAR) routine transmission inspections for Q2 from 17,500 to 16,000; and for Q3 from 17,500 to 17,000.	1/8/2024	5/31/2024
Vegetation Management and Inspection	VM-03	Focused Tree Inspection	PG&E proposed to revise its 2024 quarterly targets for focused tree inspections for Q2 from 500 to 300; and for Q3 from 1,250 to 1,050.	1/8/2024	5/31/2024
Vegetation Management and Inspection	VM-13	Routine Ground – Transmission	PG&E proposed to revise its 2024 quarterly targets for routine ground transmission inspections for Q2 from 16,396 to 9,000; and for Q3 from 17,738 to 16,000.	1/8/2024	5/31/2024
Vegetation Management and Inspection	VM-16	Routine Patrol – Distribution	PG&E proposed to revise its 2024 quarterly targets for routine distribution patrol inspections for Q2 from 39,325 to 31,460; and for Q3 from 58,988 to 51,123.	1/8/2024	5/31/2024
Vegetation Management and Inspection	VM-17	Second Patrol – Distribution	PG&E proposed to revise its 2024 quarterly targets for distribution second patrol inspections for Q2 from 11,831 to 10,274; and for Q3 from 17,947 to 16,695.	1/8/2024	5/31/2024

3. A list that includes the following information for each initiative identified in the WMP:

a) Utility Initiative Tracking ID, per WMP Guidelines.

b) Initiative name.

c) Planned budget (as reported in the WMP or approved Change Order) for the compliance period.

d) Actual expenditure for the most recently completed compliance period.

e) If the difference between the actual expenditure and the planned budget is more than 10%, provide a detailed explanation of the reason or reasons for the discrepancy.

In 2024, PG&E was able to complete its targets and objectives in line with the overall budget set for these specific commitments. In some cases, resources and funding were adjusted based on the changing execution environment to address emerging priorities. While actual expenditures for any one target or objective may vary from its original budget, those changes were necessary in completing our stated goals and reducing wildfire risks.

Per the *Compliance Guidelines*, PG&E provides Attachment PGE_2024-ARC_Table_3-Targets with actual expenditure and planned budget by Utility Initiative Tracking ID to the best of its ability. Utility Tracking IDs are tied to the targets and objectives that PG&E has outlined in its 2023-2025 WMP and are a subset of the total investments that PG&E has made to mitigate wildfires. For a full view of wildfire prevention and management investments please refer to PG&E 2024 Q4 QDR Table 11.

Furthermore, some targets and objectives have expenditures that are limited to Provider Cost Centers (PCCs), which are the costs associated with the departments or groups that provide services to the greater company. The cost of these services is allocated across multiple workstreams and are not directly charged to specific projects that can be aligned to a specific WMP initiative. For example, an engineering team may be responsible for evaluating and composing reports on different technologies for potential use across the company. One of the technologies they evaluate may contribute to an objective set forth in the WMP; however, the time that team spends on that specific evaluation, as opposed to all the other evaluations they conduct, is not tracked in a fashion that allows for an accurate accounting of expenditures aligned to this report.

4. CONCLUSION

As demonstrated above, PG&E implemented the 2024 wildfire mitigation initiatives described in the approved 2023-2025 Base WMP. We are proud of the work we performed in 2024 and the significant risk reduction we achieved throughout our service territory. We look forward to continuing to work with Energy Safety and living our stand that catastrophic wildfires shall stop.