

REPORT TO CALIFORNIA LEGISLATURE REGARDING FILSINGER ENERGY PARTNERS

**OPERATIONAL OBSERVER OF PACIFIC GAS & ELECTRIC TO MITIGATE
WILDFIRE RISK AND PUBLIC SAFETY POWER SHUTOFF EVENTS**

September 24, 2025

CONTENTS

1	EXECUTIVE SUMMARY	3
2	OPERATIONAL OBSERVER BACKGROUND.....	3
3	FEP 2025 OPERATIONAL OBSERVER ACTIVITIES FOR PG&E	4
4	PG&E ACTIONS AND KEY PROGRAM UPDATES	5
4.1	PSPS Events and Mitigations	5
4.2	Wildfire Mitigation Plan Filing	6
4.3	Ignitions	6
4.4	PG&E Independent Actions	7
4.4.1	Vegetation Management	7
4.4.2	System Inspections	8
4.4.3	Operational Mitigations	9
4.4.4	Situational Awareness	9
4.4.5	Risk Models	9
4.4.6	System Hardening	9
4.4.7	New Business	10
5	AREAS FOR CONTINUED FOCUS.....	13

1 EXECUTIVE SUMMARY

This report is being provided pursuant to agreement number 6152-2019 (“Operational Observer Agreement”) as amended on June 27, 2025 between the California Governor’s Office of Emergency Services (“Cal OES”) and Filsinger Energy Partners (“FEP”). This agreement continued funding of an operational observer for Pacific Gas & Electric (“PG&E”) through June 30, 2026. This report complies with the requirements of the Operational Observer Agreement and focuses on PG&E activity during the period from November 2024 through May 2025 (“Reporting Period”).

As part of the Operational Observer Agreement, FEP acts as PG&E's operational observer through an engagement with the California Governor’s Office (“Governor’s Office”), including Cal OES.

This report provides information specific to PG&E in the following areas: (1) activities undertaken, (2) specific issues identified in the Public Safety Power Shutoff (“PSPS”) processes, (3) qualitative and quantitative improvements to the PSPS processes resulting from these actions, (4) handling and coordination of new business¹ requests across its service territory, and (5) all work planning and execution processes related to new business requests and wildfire risk.²

A few of the highlights covered in this report include:

- PG&E had five PSPS events which ranged from impacting fewer than one thousand to 21 thousand customers during the Reporting Period;
- PG&E filed their 2026-2028 Wildfire Mitigation Plan (“WMP”) with significant changes to several programs;
- PG&E took a range of independent actions to improve wildfire mitigations, including advancements in vegetation management, inspection, reliability, risk models, and continuous monitoring.

2 OPERATIONAL OBSERVER BACKGROUND

FEP started operational observation of PG&E in May 2020. It was originally anticipated the observational role would continue through PG&E’s emergence from bankruptcy. Upon PG&E’s emergence from bankruptcy on the targeted date of June 30, 2020, FEP’s contract was extended through September 2020 to continue in an operational observer role with a reduced scope primarily focusing on the 2020 wildfire PSPS season. After September 2020, the observer contract was extended multiple times and currently

¹ New business consists of energization and establishment of new electric and gas services. The process begins with the customer application and is followed by PG&E’s actions to estimate/design, permit, schedule, construct, and provide energization to the customer.

² Work planning and execution processes include those that involve a) energization of new customers and b) repairs to existing assets for the purpose of remediation of the risk of wildfire which the damaged assets could cause. Steps include planning, scheduling, and execution of the work.

runs through June 30, 2026. As required by the Legislature, the operational observer focuses on (1) activities undertaken, (2) specific issues identified in the wildfire risk reduction processes of PG&E including the PSPS processes of PG&E, (3) qualitative and quantitative information on improvements to the wildfire risk reduction processes of PG&E resulting from these actions, (4) handling and coordination of new business requests across its service territory, and (5) the customer energization and distribution system (including the work, planning, and execution processes related to new business requests and wildfire risk).

3 FEP 2025 OPERATIONAL OBSERVER ACTIVITIES FOR PG&E

FEP continues to perform its operational observer function at PG&E. FEP's authorized activities include (1) attending portions of meetings of the board of directors and management meetings related to wildfire risk and public safety, (2) conducting field visits for all authorized activities, (3) observing and participating in meetings with PG&E leadership and subject matter experts for all authorized activities, (4) reviewing documentation for all authorized activities, (5) observing handling and coordination of new business requests across its service territory and all work planning and execution processes related to new business requests and wildfire risk, and (6) undertaking any other tasks reasonably required.

During the Reporting Period, FEP attended and observed hundreds of PG&E meetings. This included standing meetings with senior leaders, key operational leaders, operational teams, and key committees to develop independent observations regarding PG&E's planning and execution of its wildfire risk mitigation efforts, PSPS events, and new business processes. These meetings were supplemented by a review of PG&E documentation related to these activities, followed by 'deep dive' meetings with PG&E to facilitate a detailed discussion of particular issues and activities such as vegetation management, system inspection program changes, and new business processes.

In addition to meetings and review of internal documents, FEP performed eighteen site visits³ during the Reporting Period that included numerous interviews with subject matter experts to review a variety of planned, ongoing, and active programs. These programs included system hardening, vegetation management, system inspections, electric operations, and new business. The site visits augmented information gathered from the meetings attended and documents reviewed by providing perspectives on real-world conditions.

Idle transmission facilities were a particular area of emphasis during the Reporting Period. Relatedly, FEP requested and reviewed internal documents, held meetings with leadership and subject matter experts, and reviewed the transmission grounding practices and standards, risk and fire spread models.

³ PG&E requested a transition from monthly site visits to quarterly beginning in 2025. The site visits in the Reporting Period occurred in November 2024 and February 2025.

4 PG&E ACTIONS AND KEY PROGRAM UPDATES

4.1 PSPS Events and Mitigations

PG&E had five PSPS events during the Reporting Period. The summary statistics are included below:⁴

Event Date	11/5/2024	12/9/2024	1/13/2025	1/20/2025	1/22/2025
Customers Notified	22,541	587	582	583	583
Customers De-energized	21,357	571	583	583	583
Counties De-energized	1	1	1	1	1
Tribes De-energized	0	0	0	0	0
Customers Mitigated ^A	192,894	473	480	479	482
Transmission Circuits De-energized	5	0	4	4	4
Distribution Circuits De-energized	97	2	2	2	2
Damages/Hazard Count ^B	9 damages 2 hazards	0	0	0	0

^A The number of customers that were not de-energized as a result of mitigations such as sectionalizing devices, distribution switching, temporary generation, microgrids, permanent backup generation, and transmission switching.

^B Asset damages or hazards (e.g., wire down, fallen pole) identified during post PSPS event restoration patrols that could have caused an ignition but likely did not occur due to the PSPS event.

The PSPS events continued to have a lower impact than historically experienced partially due to more granular meteorological forecasting (i.e., resolution now at 0.7 x 0.7 km pixels down from historical 3.0 x 3.0 km and 2.0 x 2.0 km).⁵ During the events, PG&E continued to apply additional operational mitigations, notably Enhanced Powerline Safety Settings (“EPSS”) which protected circuits surrounding the PSPS footprint.

In addition, PG&E continued to mitigate PSPS impacts by opening community resource centers to provide shelter, snacks, water, device chargers, ice, and blankets to impacted customers.

⁴ Source: PG&E.

⁵ More refined resolution of meteorological data enables PG&E to isolate smaller areas to be impacted by a PSPS event. To illustrate, the 0.7 km x 0.7 km grid is approximately eight times greater resolution than the 2.0 km x 2.0 km grid.

Event Date	11/5/2024	12/9/2024	1/13/2025	1/20/2025	1/22/2025
Community Resource Centers	29	1	1	1	1
Snacks	4,529	224	512	260	221
Bottled Waters	4,353	192	518	255	253
Device Chargers	4,090	172	512	221	236
Bags of Ice	35	0	0	9	17
Blankets	2,999	204	497	215	244
Grab-and-Go Bags ^A	3,465	174	243	211	413

^A Grab-and-Go Bags contain a PSPS information card, water, non-perishable snacks, a mobile battery charger, and a blanket.

4.2 Wildfire Mitigation Plan Filing

PG&E submitted their 2026 Base WMP on April 4, 2025. A comparison of key changes between this document and the 2023-2025 WMP (R7) is included below.

- **Vegetation Management:** Consolidation of multiple programs (Focused Tree Inspections, Tree Risk Inventory, Vegetation Management for Operation Mitigations) into a single routine distribution inspection program. The consolidation is intended to produce more consistent performance, cost savings, and improved customer experience with fewer customer visits.
- **System Inspections:** Consolidation of transmission aerial and ground-based inspections into a single Transmission Detailed Inspection Program.
- **Continuous Monitoring:** the establishment of a real-time continuous monitoring system to detect potential ignition causes and alert first responders to mitigate those causes prior to or immediately following ignition events.
- **Risk-Informed Decision Making:** Updating the distribution and transmission risk models to the latest versions.

4.3 Ignitions

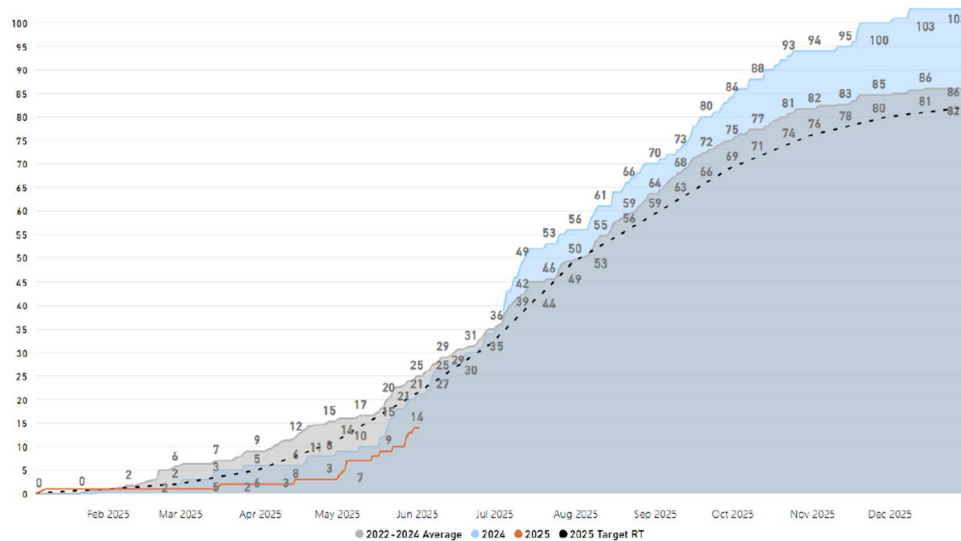
The chart shows California Public Utility Commission (“CPUC”) reportable ignitions⁶ in the HFTD and PG&E-designated high fire risk areas (“HFRA”). There were 14 ignitions through May 2025, which is 44% less than the 2022-2024 average.

PG&E identified vegetation contact, equipment failure, and contact from objects as the top three ignition risk drivers.⁷ This determination is based on the proportion of ignitions from 2015-2024 in HFTD/HFRA where one of these factors was the suspected initiating cause.

⁶ Reportable ignitions are defined as fire ignitions started by utility equipment that traveled more than one linear meter from the ignition point.

⁷ 2026-2028 WMP V0, pgs. 20-21.

Number of CPUC Reportable Fire Ignitions in HFTD + HFRA⁸



4.4 PG&E Independent Actions

During the Reporting Period, the operational observer continued to provide PG&E and the Governor’s Office substantial independent observations regarding PG&E’s processes and functions regarding wildfire mitigation programs (e.g., vegetation management, system inspections, system hardening), new business and work process execution, and various operational mitigations to reduce wildfire risk and the potential impact on reliability.

PG&E took or is taking several independent actions to implement modifications to its programs, including the following:

4.4.1 Vegetation Management

All 2024 WMP targets were met, however PG&E internal audits were unable to verify completion via records of evidence in 2024. The same issue occurred in 2023. PG&E intends to remedy this in the future using new tracking technology.

A new electronic Vegetation Incident Investigation Tool was developed to capture more details from each vegetation incident that will enable better analysis to inform programmatic changes. The quality control pass rates for vegetation work improved from earlier in 2024 after a change in organization structure and revisions to the standards and procedures — finishing in the “green” by year end 2024. Quality Control performance for the Routine Distribution and Distribution Pole Clearing programs is forecasted to be greater than 99% by the end of 2025.

The Vegetation Management team restructured the goals and targets for the 2026-2028 WMP to focus on risk reduction through utilization of data modeling, technology, and program consolidation. They began streamlining the inspection programs to improve safety while targeting high risk areas in the

⁸ Source: PG&E, June 3, 2025 Wildfire Risk Command Center Weekly Operating Review.

system to continuously reduce ignitions associated with vegetation-caused interruptions. A three-pronged approach was developed for execution, including a) program consolidation, b) remote sensing technology, and c) risk categorization.

Targeted Transmission Pole Clearing (a 50-foot radius clearing around the highest-risk transmission poles) was identified as a new one-time wildfire mitigation activity to be implemented and with targeted completion before peak fire season in 2025.

Work was initiated to align GRC requirements with WMP commitments for the first time. In years past, WMP commitments were misaligned with GRC funding levels – leading to gaps in budgeting to meet compliance.

Field execution of distribution pole clearing was completed for the 2025 WMP target during the Reporting Period.

4.4.2 System Inspections

System Inspections completed all training and started inspections in January 2025. This was the first time this milestone had been completed this early in the year, thus allowing the planned inspections to begin sooner.

The System Inspections team has evolved their approach over the last few years. There were two notable changes in 2024, including:

- The inspection checklist was shortened to focus on items most likely to cause an ignition within the next 12 months which could be detected through a visual (ground or aerial) inspection.
- The aerial inspections in the high fire threat districts (“HFTD”) were increased.

PG&E completed an analysis of the items which are best detected through a ground vs aerial inspection. The key conclusions were a) aerial inspections outperformed ground inspections and b) aerial inspections identify almost all General Order Number 165 (GO 165)⁹ related compliance issues that ground inspections identify but have some limitations. PG&E believes these limitations are addressable through training and revisions to the inspection checklist and aerial photography angles.

This analysis influenced their plans for 2025 including:

- Making GO 165 procedural changes to enable shift in 2026 to use aerial inspections for GO 165.
- Moving aerial inspections from a plat map to circuit approach in the HFTD to align with the inspection and maintenance (tags) cycles.
- Performing limited ground inspections (~3,000 HFTD poles) based on a 3-year cycle.

Changes planned for 2026 include:

- Use aerial for GO 165 compliance.

⁹ California Public Utilities Commission, GO 165: *Inspection Cycles for Electric Distribution Facilities*, adopted Mar. 31, 1997.

- Consider bringing forward some inspections to 2026 due to expected surge in 2027 (~300K HFTD poles).

4.4.3 Operational Mitigations

PSPS, EPSS, and Downed Conductor Detection (“DCD”) are some of the most effective ignition mitigations deployed by PG&E, but they impact reliability and the customer experience. PG&E has renewed its focus on improving reliability by setting up a Reliability Command Center to monitor and mitigate operational issues that impact reliability. Improvements to reliability are not limited to impacts from wildfire mitigations but also include improved work planning processes to reduce planned customer outages.

4.4.4 Situational Awareness

PG&E is in the early stages of building a real-time continuous monitoring system. The initial technologies being deployed are Gridscope, Early Fault Detection (EFD), and Distribution Fault Anticipation (“DFA”). PG&E also has constructed a prototype, proprietary equipment failure detection system using machine learning and smart meter data. These technologies have contributed to a number of “good catches” that have prevented potential ignitions. Continuous monitoring also contributes to reliability improvements and cost savings. Further evolution and improvements in this area are expected in the upcoming years.

4.4.5 Risk Models

For the 2026-2028 WMP, and some 2025 work, PG&E transitioned from the Wildfire Distribution Risk Model (“WDRM”) version 3 to version 4 (“WDRM v4”). WDRM v4 improves on the performance of the previous risk model by incorporating 1) improved data quality, 2) asset-level modeling for several equipment types, 3) an improved vegetation model that better accounts for climate change impacts, 4) increased fire spread simulation time frame, and 5) public egress and wildfire suppression models, among other improvements.

The Wildfire Transmission Risk Model has been updated to version 2, which similarly contains further refinements to both data and modeling methodology.

4.4.6 System Hardening

Overhead hardening includes the following components: (a) installation of covered primary and secondary covered conductor replacement, (b) pole replacements, (c) replacement of non-exempt equipment, (d) replacement of overhead distribution line transformers, (e) framing and animal protection upgrades, and (f) vegetation clearing related to the construction activities. Undergrounding system hardening includes replacement of overhead conductors by placing them in conduit below the surface. Other system hardening mitigations include overhead line removal and remote grid installations. During the Reporting Period, PG&E completed 127 miles¹⁰ of underground distribution lines and 106 miles of overhead

¹⁰ Includes Butte County underground fire rebuild and system hardening undergrounding.

hardening and line removal. Eleven remote grids were in operation as of 2024 with another twenty in development.

The table below provides a comparison of system hardening miles and costs included in the 2023 GRC (which covers 2023-2026) and the 2027 GRC (which covers 2027-2030).

System Hardening – Comparison of Miles and Cost – 2023 GRC and 2027 GRC^{11, 12}

System Hardening	2023 GRC Miles	2023 GRC Cost	2023 GRC Cost/Mile	2027 GRC Miles	2027 GRC Cost	2027 GRC Cost/Mile
Undergrounding	1,230	\$3.674B	\$2.99M	307 ¹³	\$0.932B	\$3.03M ¹⁴
Overhead Hardening	778	\$1.049B	\$1.35M	760	\$0.864B	\$1.02M
Line Removal	N/A	N/A	N/A	40	\$0.056B	\$1.72M
Total	2,008	\$4.723B	N/A	1,107	\$1.852B	N/A

4.4.7 New Business

4.4.7.1 Senate Bill 410

Senate Bill (“SB”) 410 enables utilities to file for incremental funding for energization costs above the approved General Rate Case (“GRC”) amount to cover related costs from 2023-2026. For PG&E, the funding is broken into various Major Work Codes (“MWCs”). The following is specific to MWC 16, which includes base customer connects, plug-in electric vehicle (“PEV”) residential connects, PEV non-residential connects, and transformers.

In July 2024, PG&E was approved to spend (in 2024, 2025 and 2026) \$3,620 million (\$2,098 million GRC imputed plus \$1,522 million incremental).

¹¹ *Decision On Test Year 2023 General Rate Case for Pacific Gas and Electric Company*, November 16, 2023, Page 273 (Figure F), Page 297.

¹² PG&E states in the 2027 GRC, “The System Hardening forecast has a significant decrease in forecasted costs from 2027 to 2030, because the forecast includes one year of undergrounding in 2027 (not four years as previously authorized in the 2023 GRC”).

¹³ PG&E proposed a Bridge Program to extend the approved 2023-2026 Undergrounding Program into the first year of the 2027 GRC at 307 miles. The Bridge Program also proposes an annual extension at 400 miles per year until an Electrical Undergrounding Plan (“EUP”) is approved.

¹⁴ The average unit cost from 2023-2026 is \$2.97M/mile. PG&E used the average unit cost from 2023-2026 as the basis for the 2027 unit cost assumption. An additional \$0.5M/mile has been added to the 2023-2026 unit cost assumption to account for transformer purchases.

The amount of the above approved specifically for 2024 was \$1,528 million (\$683 million GRC imputed plus \$845 million SB 410 incremental¹⁵). The year-end actual spend was \$1,306 million. According to PG&E, the underspend was due to receiving the final decision (approval) of SB 410 funds late in the year (July 2024), thus limiting their ability to spend the approved funds in entirety, and their improved efficiency resulting in lower unit costs.

In October 2024, PG&E filed a supplemental request (specific to 2025 and 2026) for an additional \$3,340 million. The additional funds were requested to work down the entire remaining backlog of new business jobs within those two years, and to cover the impact of higher unit cost due to the expected need for additional contracting support. The proposed decision related to the supplemental filing was not received within the Reporting Period.

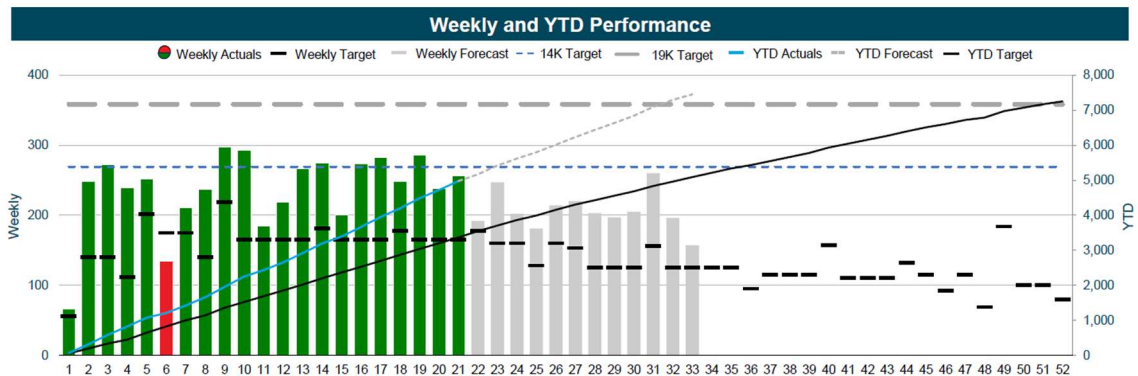
PG&E established a short term incident management team (“IMT”) to function through December 2024, with primary focus on reducing the backlog of new business jobs. As a result, more than 13,000 new business jobs were completed in 2024 — an increase of 30% over the number completed in 2023. In January 2025, PG&E shifted its focus from the IMT approach to building out a more sustainable process for completion of new business jobs.

The approved budget for 2025 was \$1,099 million (\$702 million GRC imputed plus \$397 million SB 410 incremental).¹⁶ PG&E took the approach of front-loading the year in spending and jobs completed, anticipating approval of the requested additional SB 410 funds. In the event the additional SB 410 funds were not approved, work would be slowed to a rate to support on-budget performance. This is indicated in the following graph, where the blue dashed line reflects the approved budget and the gray dashed line reflects the approved budget plus anticipated additional SB 410 funds.

¹⁵ “D.23-11-069 Authorized, PG&E Base Scenario Forecasted, and Incremental Contributions to Cap”.

¹⁶ Ibid.

New Business Jobs Completed – Weekly and YTD 2025¹⁷



PG&E added a customer experience team at the beginning of 2025, with focus to “examine PG&E processes through the lens of the Customer to build customer-driven solutions and process improvements”. The team is segmented into the following: (a) EV Charging, (b) Developer, (c) Telco, (d) Institutional and Agency, (e) Communications, and (f) Express Connections. The overall Customer Transaction Score (“CTS”) at the end of the Reporting Period was 8.7 (relative to a 10 point scale) which, according to PG&E, is an all-time high.

4.4.7.2 CPUC Energization Order Instituting Rulemaking (“OIR”)

The CPUC issued Decision 24-09-020, “Order Instituting Rulemaking to Establish Energization Timelines”, on September 17, 2024. Pursuant to Ordering Paragraph 18 of the OIR, PG&E issued their first biannual report on March 31, 2025. Approximately 59% of the applications submitted in 2023 and 2024 were not complete by the 3/20/25 reporting date and were excluded from the average energization timelines included in the report.

A summary of the average energization calendar days included in this first bi-annual report, compared to the targets established by the OIR, is included in the table below.

Energization Days Reported in Bi-Annual Report – Energization OIR

March 2025

Category	Target (Calendar Days)	Average Energization (Calendar Days)
Rule 15 – distribution line extensions	None reported	None reported
Rule 16 – service line extensions	182	122
Rule 29 – electric vehicle infrastructure	182	120
Main panel upgrades	38	51

¹⁷ Source: PG&E, May 28, 2025 EO/EE Weekly Operating Review.

5 AREAS FOR CONTINUED FOCUS

The primary areas of focus for the remainder of 2025 are 1) the completion of the 2025 WMP commitments, and 2) the development of policies and procedures required to enable the modified WMP programs beginning in 2026.