



April 8, 2024

The Honorable Nancy Skinner  
Chair, Committee on Budget and  
Fiscal Review  
California State Senate  
1021 O Street, Suite 8630  
Sacramento, CA 95814

The Honorable Jesse Gabriel  
Chair, Committee on Budget  
California State Assembly  
1021 O Street, Suite 8230  
Sacramento, CA 95814

The Honorable Steven Bradford  
Chair, Committee on Energy, Utilities,  
and Communications  
California State Senate  
1021 O Street, Suite 3350  
Sacramento, CA 95814

The Honorable Cottie Petrie-  
Norris  
Chair, Committee on Utilities  
and Energy  
California State Assembly  
1021 O Street, Suite 8120  
Sacramento, CA 95814

**Subject: Report on Operational Observer of covered utilities from the Governor's  
Office of Emergency Services (Cal OES)**

Dear Senator Skinner, Assemblymember Cottie Petrie-Norris, Senator Bradford,  
and Assemblymember Gabriel:

Pursuant to the California Budget Act of 2023 (SB 104), Section 2, line 0690-001-  
0001 provision 10, Cal OES is transmitting the attached report on the activities  
and expenditures of Filsinger Energy Partners serving as an Operational Observer  
to covered utilities.

Should you have any questions, please contact Chief Deputy Director of Policy  
and Administration, Lisa Mangat at (916) 845-8542 or  
[Lisa.Mangat@caloes.ca.gov](mailto:Lisa.Mangat@caloes.ca.gov).

Sincerely,

NANCY WARD  
Director

Enclosure

cc: Ann Patterson, Cabinet Secretary, Office of the Governor  
Joe Stephenshaw, Director, Department of Finance



**REPORT TO CALIFORNIA LEGISLATURE  
REGARDING FILSINGER ENERGY  
PARTNERS**

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

February 1, 2024

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# 1 EXECUTIVE SUMMARY

This report is being provided pursuant to Item 0690-001-0001 of Assembly Bill 179 (“AB 179”). California passed AB 179 that, in part, authorized the funding of an operational observer for Pacific Gas & Electric (“PG&E”) through February 1, 2024. Additionally, Senate Bill 104 (“SB 104”), passed in the 2023 legislative session, extended and further authorized the funding of the operational observer for PG&E. This report complies with the requirements of both AB 179 and SB 104 and focuses on activity since the last report which was prepared for October 1, 2023.

Filsinger Energy Partners (“FEP”) acts as the operational observer for PG&E through an engagement with the California Governor’s Office, including the Governor’s Office of Emergency Services, (“Governor’s Office”).

Consistent with AB 179, SB 104, and FEP’s agreement with the Governor’s Office of Emergency Services, this report provides information about (1) activities undertaken, (2) specific issues identified in the public safety power shutoff (“PSPS”) process of the covered utilities, and (3) qualitative and quantitative improvements to the PSPS processes of the covered utilities resulting from these actions. In addition, FEP’s scope and reports were expanded in SB 104 to also cover PG&E’s handling and coordination of new business requests across its service territory and all work planning and execution process related to new business requests and wildfire risk.

PG&E had two PSPS events in 2023 which were both small events with details provided below. In addition, PG&E continued to implement mitigations for potential PSPS events such as expanding the portable battery deployment to PG&E’s most vulnerable customers. PG&E also continued various wildfire mitigation actions including (1) executing operational mitigation programs such as enhanced powerline and safety settings (“EPSS”) and down conductor detection (“DCD”), (2) deploying the newly developed vegetation management distribution inspection procedure (“DIP”) for routine and second patrol to identify hazard trees, (3) finished analysis to evolve its system inspection program to identify and mitigate equipment failures that cause ignitions by more fully deploying aerial inspections for 2024, and (4) executing on their 2023 wildfire mitigation program (“WMP”) commitments which were approved by the OEIS in late December 2023 based on PG&E September 2023 revised WMP submission.

PG&E is working to improve its customer energization (new business) process to improve its customer on time delivery (COTD)<sup>1</sup> including a complete revision of the customer intake process and constructing a single work management platform.

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<sup>1</sup> COTD measures whether the customer was energized by the date the customer requested to be energized.

## **2 OPERATIONAL OBSERVER BACKGROUND**

FEP started operational observations for PG&E in May 2020, which was originally anticipated to continue through PG&E's emergence from bankruptcy, targeted for June 30, 2020. Upon PG&E's scheduled emergence from bankruptcy on 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 role was extended through January 31, 2025, consistent with AB 179 and SB 104, with a focus on PG&E's PSPS program and its wildfire mitigation plan. Currently, the operational observer reports on: (1) activities undertaken, (2) specific issues identified in the wildfire risk reduction processes of PG&E, including the public safety power shutoff 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 business requests across its service territory, and (5) the customer energization and distribution system, including the work, planning, and execution processes related to business requests and wildfire risk.

## **3 FEP 2023 OPERATIONAL OBSERVER ACTIVITIES FOR PG&E**

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

During 2023, FEP attended and observed hundreds of PG&E meetings. FEP also scheduled 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 and PSPS events. These meetings were supplemented by review of PG&E documentation related to wildfire risk and public safety performance and other activities, followed by "deep dive" meetings with PG&E to facilitate a detailed discussion of particular issues and activities such as vegetation management, distribution inspection procedure and system inspection strategy.

In addition to meetings and review of internal documents during 2023, FEP performed 42 site visits<sup>2</sup> to review a variety of planned, ongoing and active wildfire mitigation projects, such as system hardening, vegetation management, system inspections, and command centers. The site visits augmented

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<sup>2</sup> Feb 2023 (5), Mar 2023 (10), May 2023 (8), Jun 2023 (5), Aug 2023 (6), Sep 2023 (3), Nov 2023 (2), Dec 2023 (3)

information gathered from the meetings and document review by providing perspectives from real-world conditions.

## 4 PG&E ACTIONS

PG&E had a small PSPS event in September 2023 deenergizing 1,171 customers (5,234 customers were notified). In total, PG&E had two PSPS events in 2023 deenergizing 5,098 customers (13,672 customers were notified). PG&E achieved the following results across those two PSPS events:

- 100% deenergized customers with contact information were notified prior to power shutoff;
- 100% of the deenergized customers were restored within 24 hours of the all clear signal; and
- 58% estimated time of restoration (“ETOR”) accuracy primarily due to restoring two hours before the estimated ETOR with the misses in the west side of northern Sacramento Valley.

Throughout 2023, PG&E continued certain activities to reduce its PSPS scope and impact including:

- continued webinars and Town Halls (38 complete actual vs 32 target);
- expanded the generator and battery rebate program (2,752 actual vs 2,431 target); and
- delivered batteries (4,359 actual vs 4,000 target).<sup>3</sup>

During 2023, the operational observer provided to PG&E and the Governor’s Office substantial independent observations regarding PG&E’s processes and functions regarding wildfire mitigation metrics, vegetation management, systems inspections, system hardening, new business and work process execution, and operational mitigations (e.g., EPSS and DCD).

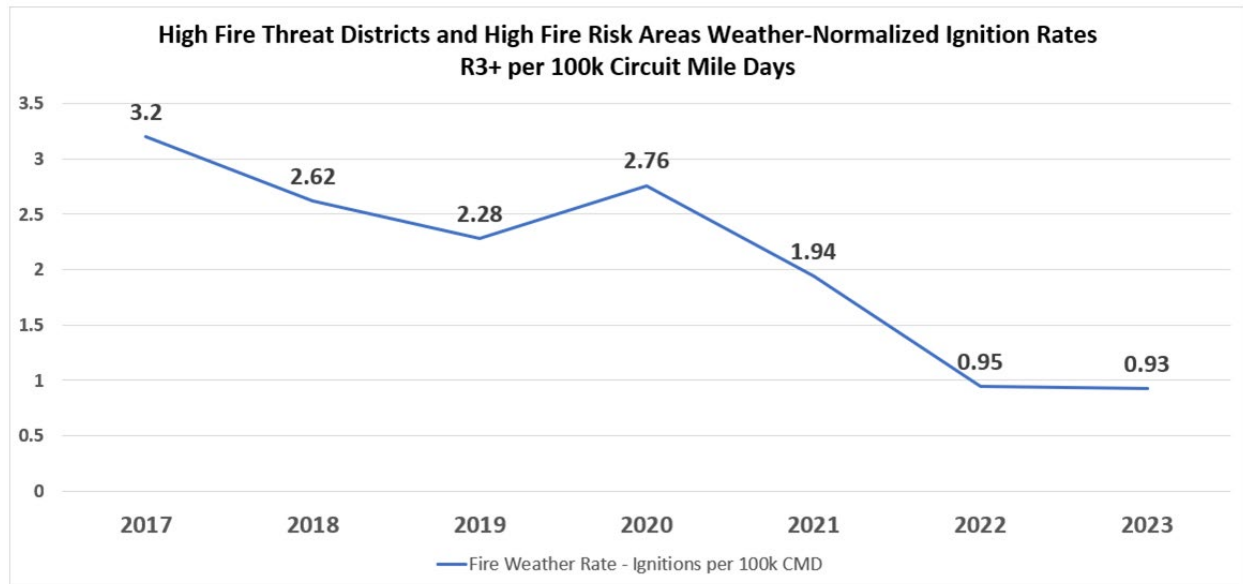
The key PG&E accomplishments across the major programs during 2023 are as follows:

- **Wildfire Mitigation Plan.** PG&E completed all its 42 commitments in 2023, excluding the 21 commitments with planned completion dates beyond 2023.
- **EPSS.** PG&E improved performance on ignitions and had a mixed impact on outages.
  - Ignitions: PG&E had 22 ignitions on EPSS enabled circuits in 2023, which is roughly a 30% reduction from 31 ignitions in 2022. Systemwide, PG&E had 65 total reportable fire ignitions (“RFIs”) in 2023 vs an annual average of 126 RFIs from 2020-2022 (a 48% reduction). Further, the ignition rate in the High Fire Threat District (“HFTD”) / High Fire Risk Areas (“HFRA”) in more severe weather conditions has steadily reduced since 2017 partially driven by PG&E’s wildfire mitigation initiatives. The following chart shows the ignition rate since 2017. The ignition rate chart focuses on the HFTD / HFRA area, and

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<sup>3</sup> Data as of 12/31/23

when conditions are in R3 or higher<sup>4</sup>. In the formula for the ignition rate, the numerator is: the number of ignitions that occurred in the HFTD/HFRA and in R3+ conditions; the denominator is the annual sum of the number miles of system in the HFTD / HFRA and in R3+ conditions for each day.



- **Outages:** PG&E had 2,250 outages on EPSS enabled circuits in 2023 which was a 5% reduction from the 2,379 outages in 2022. However, the customer average interruption duration index increased to 183 minutes in 2023 which was 3% higher than 178 minutes in 2022. While the outage duration slightly increased, the number of the most frequently impacted customers (five or more EPSS outages per year) reduced by 15% from approximately 120,000 in 2022 to approximately 102,000 in 2023.
- **DCD.** PG&E expanded coverage with 1,129 devices covering 17,000 HFRA miles by the end of 2023 which includes the 409 devices and 3,000 HFRA miles in place at the end of 2022. In addition, PG&E avoided 17 ignitions in 2023 from its DCD program based on a PG&E patrol after the DCD outages which had evidence (e.g., tree fall-in, down line or pole, etc) that the incident was sufficiently severe to result in an RFI.

<sup>4</sup> R3 or higher refers to high fire potential conditions

- **System Hardening.** PG&E completed 364 miles of undergrounding (target of 350 miles) and 446 miles of system hardening (target of 420 miles).<sup>5</sup> PG&E executed underground projects at a lower cost per mile in the latter half of 2023, reducing the cost from \$3.09M per mile (August 2023) to \$2.34M per mile (December 2023). The cost of underground miles during this period is comparable because they had the same level of difficulty. The key drivers of the cost reduction include implementing new construction standards, such as reducing trench width and depth, and economies of scale from executing more miles.
- **Maintenance Tags.** PG&E completed 58,000 tags in 2023 (including 41,000 backlog tags) representing a 52% risk reduction (vs a target of 48%), both of which exceed their WMP targets.

PG&E has taken several actions to implement modifications to its programs in 2023 and into 2024, including the following.

- **Equipment Failure Analysis.** As noted in the last report, equipment failures were the second-leading cause of ignitions. PG&E completed a data-driven equipment failure analysis that identified the strengths and weaknesses of its existing inspection and maintenance program. PG&E revised its system inspection process to better identify equipment that may fail, and adjusted its maintenance program to prioritize repair of equipment that could potentially cause ignitions.
- **2024 System Inspections and Maintenance.** The key planned program changes by PG&E for 2024 are to:
  - conduct primarily aerial (drone) inspections for the 2024 planned inspections in the HFTD;
  - streamline inspections to focus on the ignition component failures that can be identified through a visual inspection; and
  - create a comprehensive pole inspection program that incorporates two methods of intrusive testing with an aerial inspection to triage pole repairs and replacements.
- **Vegetation Management.** Earlier in 2023, PG&E consolidated multiple procedures to identify hazard trees in its routine and second patrol programs for distribution. In addition, PG&E continues to supplement these programs with other programs; notably, the Focused Tree Inspection (“FTI”) program to perform a more intrusive tree inspection in specified areas of concern, the Tree Removal Inventory (“TRI”) program to remove trees previously marked for removal, and the Vegetation Management for Operational Mitigations (“VMOM”) program to remove trees for customers most impacted by the EPSS program. PG&E is in the process of

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<sup>5</sup> The undergrounding target of 350 miles includes 70 miles of Butte County fire rebuild and 280 miles of system hardening. The system hardening target of 420 miles includes the 280 miles of system hardening undergrounding, 110 miles of overhead covered conductor hardening, and 30 miles of overhead line removal.



consolidating the FTI, TRI, and VMOM programs with the routine and second patrol to achieve greater efficiency.

- **Model Yards.** PG&E is deploying Lean principles to front line electric and gas workers in a “model yard” program across its distribution service centers. The program is designed to improve work efficiency, safety, and reporting visibility. They deployed 15 model yards by the end of 2023 with the goal to eventually deploy to all 72 distribution service centers over the next few years. PG&E is looking for ways to share learnings from the initial deployment of the 15 model yards to the other distribution service centers.
- **New Business Process.** The new business process is the process to fulfill customer requests to add a new service or expand its existing service (customer energization). PG&E has been experiencing a long cycle time to complete customer applications to energize (approximately on average 350 days) and has had poor performance for Customer On Time Delivery (COTD), which averaged around 10% historically. PG&E initiated a new business improvement process that has internal targets of 40% COTD by the end of 2023 and 80% COTD by the end of 2024. PG&E ended 2023 with a COTD just below 30%, which is a material improvement over historical performance but did not meet the internal target. PG&E has been studying how to reduce the cycle time and improve COTD performance, including engaging in a complete revision of the customer intake process and constructing a single work management platform.
- **Work execution bundling.** PG&E has created a work bundling tool to enable front line workers to create efficiency by bundling work on a circuit. PG&E has further identified 13 circuits, or mega-bundles, to coordinate multiple execution projects including tags remediation and new business to achieve cost efficiencies and improve the customer experience.