



November 30, 2023

The Honorable Nancy Skinner
Chair, Committee on Budget and Fiscal Review
California State Senate
1020 N Street, Suite 502
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
1020 N Street, Suite 408A
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 Gabriel, Senator Bradford, and
Assemblymember Petrie-Norris:

Pursuant to the California Budget Act of 2022 (AB 179), Section 2, line 0690-001-0001 provision 6, 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 Legislative Coordinator, Chris Hacker at (916) 261-4541 or Chris.Hacker@caloes.ca.gov.

Sincerely,


NANCY WARD
Director

Enclosure

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



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

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

October 1, 2023

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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.

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 and FEP’s agreement with the Governor’s Office, 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.

PG&E had 1 PSPS events in late August 2023 which was a small event impacting ~4K customers. 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. In addition, PG&E took various wildfire mitigation actions including (1) expanding its operational mitigation programs such as enhanced powerline and safety settings (“EPSS”) and down conductor detection, (2) standardizing certain vegetation management programs, standards and procedures to identify hazard trees, notably its distribution inspection procedure, (3) beginning analysis to evolve its system inspection program to more effectively identify and mitigate equipment failures that cause ignitions, and (4) continuing with its system hardening (including underground) programs.

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 has been extended through January 31, 2024, consistent with AB 179, with a focus on PG&E's PSPS program and its wildfire mitigation plan. The current plan is to further extend the observer role through January 31, 2025, which will include coverage of: (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; and undertaking any other tasks reasonably required.

Year to date through July 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, FEP performed 28 site visits¹ 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 information gathered from the meetings and document review by providing perspectives from real-world conditions.

¹ Feb 2023 (5), Mar 2023 (10), May 2023 (8), Jun 2023 (5)

4 PG&E ACTIONS

PG&E had a small PSPS event in late August 2023. The event impacted ~4K customers and PG&E met its metrics on with 100% performance on customers restored within 2 hours and customers notified before deenergization. However, PG&E missed the metric for percent of customers with an accurate estimated time of recovery (ETOR) with 65% performance².

As PG&E prepares for potential PSPS events later in 2023, PG&E continues certain activities to reduce its PSPS scope and impact including:

- continued webinars and Town Halls (20 complete YTD vs 20 target);
- increased enrollment for Medical Baseline Customers (281K actual enrolled vs 200K target);
- expanded the generator and battery rebate program (1,587 YTD vs 1,291 target); and
- conducted outreach and delivered to offer portable batteries for its most vulnerable customers
 - conducted outreach on 2,502 customers YTD vs a target of 3,827
 - delivered 703 batteries YTD vs a target of 858 target.³

Year to date through July 2023, the operational observer has provided to PG&E and the Governor's Office substantial independent observations regarding PG&E's processes and functions regarding wildfire mitigation metrics, holistic risk mitigation, risk-spend efficiency, risk modeling, vegetation management, systems inspections, system hardening, and operational mitigations (e.g., EPSS and down conductor detection).

PG&E has taken several actions to implement modifications to its programs, including the following.

- **Undergrounding.** PG&E is considering altering their underground program to include secondary lines and services (S&S) in addition to the primary lines, similar to San Diego Gas & Electric. Although they pose a lower ignition risk, S&S still pose an ignition risk as well as an ingress and egress risk.
- **Asset Inspections and Equipment Maintenance.** Historically, equipment failures have been the second-leading cause of ignitions. Despite PG&E's asset inspection and equipment maintenance efforts over the last four years, equipment failure rates remain significantly higher than historical levels. While the outage rate has increased, the number of CPUC reportable ignitions resulting from equipment failures has decreased from 33 in 2021 to 13 in 2022 and 11 in 2023 year-to-date, partially due to the implementation of EPSS. To address the increased equipment failure rates,

² Data pending QC validation

³ Data as of 7/26/23

PG&E has started to use a data-driven approach to begin integrating its asset inspection and equipment maintenance programs to reduce equipment failure rates.

- Equipment failure analysis. PG&E is conducting an analysis to determine the efficacy of the current distribution system inspections in determining potential equipment failures. PG&E has identified some preliminary observations, including: 1) visual inspections from the ground are effective at identifying only a subset of equipment failure modes, and (2) visual inspections are most effective at identifying equipment likely to fail within the next 12-18 months.
- Program strategy. PG&E is in the process of reconfiguring its asset inspections as a program that uses the most effective inspection or detection method for each equipment failure type. PG&E is considering alternate inspection and detection approaches including, but not limited to, (i) expanding aerial inspections for pole top equipment (ii) using either pole test and treat and aerial inspection to triage pole tags, (iii) data analysis programs to proactively identify overloaded transformers, and (iv) new sensing technologies such as early fault detection. PG&E intends to integrate the inspection results into an equipment maintenance program that will prioritize maintenance and repairs prior to failure.
- **Equipment maintenance tags backlog.** PG&E has two commitments to reduce the backlog of maintenance tags (48% risk reduction target) and maintain 2023 ‘steady state’ in accordance with GO 95 standards (100% on time). Regarding the open maintenance tags target, PG&E is looking for ways to bundle the tags on circuits to balance the goals of maximizing risk reduction while also maximizing productivity and minimizing cost and disruption to customers. Regarding the steady state target, this commitment is an open issue pending before the Office of Energy Infrastructure Safety (OEIS) as part of the 2023-2024 wildfire mitigation plan.
- **Tags program management.** PG&E created a program management office with a single accountable leader to manage the tag lifecycle from inspections to execution to close out. This was a change from the prior approach with the teams being managed separately with distributed accountability.
- **EPSS.** The EPSS program has had a material impact on the ignition rate per mile in the high fire threat district during fire weather where the fire protection index is R3 or above⁴. Following implementation of EPSS in 2022, the ignition rate dropped to 43% of the preceding five-year average (2017-2021). For 2023 year-to-date, the ignition rate has declined further to reach 24% of the 2017-2021 five-year average. The ignition rate reduction has occurred across all causes of ignitions, including vegetation and equipment failure.

⁴ R1 to R3 conditions denote a ‘working fire watch’ while R4 and R5 conditions denote a ‘dedicated fire watch’ requiring the availability of water and hoses.

While the ignition rate has dropped, PG&E continues to try to further reduce ignitions for high impedance faults and improve the customer experience during EPSS events.

- Further reduce ignitions from high impedance faults. Initiatives include expanding the deployment of down conductor detection, which has avoided 6 ignitions year-to-date, and partial voltage force out, which has avoided 10 identified hazards year-to-date.
- Improve customer experience. Initiatives include enhanced vegetation management targeted to the circuits with more than eight outages in 2022, planning to install additional animal guards, and evolving their multi-outage review to reduce the number of unknown outages (which has slightly reduced to 40% in 2023).
- **Vegetation Management.** Historically, vegetation has been the leading cause of ignitions on PG&E's system. PG&E is seeking to consolidate its vegetation management programs and improve their efficacy.
 - Consolidating distribution programs. PG&E consolidated 10 standards and procedures into a new distribution inspection standard and procedure. The revised standards and procedures are intended to reduce the risk of ignitions and outages by managing vegetation while complying with all state requirements and mandates.
 - Improving inspection efficacy. PG&E is piloting a focused tree inspection program using certified arborists who have a tree risk assessment qualification. PG&E is also increasing the number of its internal vegetation management inspectors, as well as providing additional training. The goal is to improve the quality of its vegetation inspections.
- **Quality management**
 - Consistency across enterprise. PG&E is looking for ways to standardize its quality assurance (QA) and quality control (QC) programs across the enterprise.
 - Feedback loop. PG&E is looking for ways to have a productive 360-degree feedback process on quality findings between quality management and the system inspection teams. The ability to provide 360-degree feedback is intended to improve the performance of both teams.
- **New Business.** PG&E has a long cycle time to connect new customers and has been challenged to meet customers' requested connection dates. PG&E has initiated a new effort to improve its new customer on time delivery date (COTD) with the targets to achieve 40% COTD by end of 2023 and 80% COTD by the end of 2024.