

November 1, 2023

OFFICE OF ENERGY INFRASTRUCTURE SAFETY OF THE CALIFORNIA NATURAL RESOURCES AGENCY

Subject:

Pacific Gas and Electric Company's Quarterly Notification Regarding the Implementation of Its Wildfire Mitigation Plan and Its Safety Recommendations; Submitted Pursuant to Public Utilities Code Section 8389(e)(7), the Office of Energy Infrastructure Safety's Compliance Operational Protocols, and Assembly Bill 1054

Pacific Gas and Electric Company (PG&E) respectfully submits this Quarterly Notification detailing: (1) the status of our current Wildfire Mitigation Plan (WMP); (2) recommendations of the most recent safety culture assessment; (3) recommendations of the Board of Directors' Safety Committee meetings that occurred during the quarter; and (4) a summary of the implementation of any safety committee recommendations from the previous quarterly submittal. This Quarterly Notification is provided pursuant to California Public Utilities Code (PUC) Section 8389(e)(7), the Office of Energy Infrastructure Safety's (Energy Safety) Compliance Operational Protocols, issued on February 16, 2021 (Compliance Operational Protocols) and subsequently clarified on September 8, 2021 by Energy Safety, and the 2023 Safety Certification Guidelines issued on June 28, 2023.

Background

On July 12, 2019, Governor Gavin Newsom signed Assembly Bill (AB) 1054 into law, adding Section 8389(e)(7) to the PUC. As one of the conditions for the issuance of a safety certification, Section 8389(e)(7) — as amended by AB 148 — requires documentation of the following:

The electrical corporation is implementing its approved wildfire mitigation plan. The electrical corporation shall file a notification of implementation of its wildfire mitigation plan with the office and an information-only submittal with the commission on a quarterly basis that details the implementation of both its approved wildfire mitigation plan and recommendations of the most recent safety culture assessments by the commission and office, and a statement of the recommendations of the board of directors safety committee meetings that occurred during the quarter. The notification and information-only submittal shall also summarize the implementation of the safety committee recommendations from the electrical corporation's

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¹ Energy Safety issued "Submission of Safety Certification Request and Supporting Documents" on September 8, 2021, which, among other items, clarified Assembly Bill 148, effective as of July 22, 2021, updated PUC Section 8389(e)(7) to reporting requirements, notably that the Quarterly Advice Letter (QAL) would change in format, but not content, to the Quarterly Notification.

previous notification and submission. If the office has reason to doubt the veracity of the statements contained in the notification or information-only submittal, it shall perform an audit of the issue of concern. The electrical corporation shall provide a copy of the information-only submittal to the office.

On February 16, 2021, Energy Safety issued Compliance Operational Protocols which, in addition to the existing requirements established by Section 8389(e)(7), provide further guidance and requirements for electrical corporations' quarterly submissions. Specifically, the Compliance Operational Protocols standardize the quarterly submission dates across electrical corporations, describe the information and materials to be included in the Quarterly Notifications.

On December 14, 2022, Energy Safety issued new Data Guidelines with the 2023-2025 WMP Technical Guidelines. The Data Guidelines require the submission of Quarterly Data Reports (QDR), concurrent with the QN, and detailed initiative commitment progress in Table 1 of the QDR.

This Quarterly Notification submission provides the requested information for the third quarter (Q3) of 2023, pursuant to the statutory requirements and the Compliance Operational Protocols.²

Q3 2023 Update

WMP Regulatory Background and Scope of Quarterly Notification:

We submitted our WMP on March 27, 2023, and a corrected version on April 6, 2023.³ A revision notice was issued by Energy Safety on June 22, 2023, and we submitted our WMP update on August 7, 2023. On September 11, 2023, we submitted a request to Energy Safety to supplement our Revision Notice Response, which was granted on September 12, 2023. We submitted our Supplemental Revision Notice Response on September 27, 2023. Table 1 of our Q3 2023 QDR, which is being submitted concurrently with this Quarterly Notification, provides progress updates for our 63 initiative commitments, which include both targets and objectives.⁴ This Quarterly Notification provides additional details associated with these initiative commitments.

2023 WMP Initiative Commitment Summary:

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² Section 8389(e)(7) provides that an electrical corporation shall report on implementation of its approved wildfire mitigation plan.

³ PG&E's 2023 WMP is available at: www.pge.com/wildfiremitigationplan.

⁴ This total does not include one target with no 2023 workplan (VM-18), seven three-year objectives with no compliance milestones due in 2023, and 11 ten-year objectives since there will be minimal updates for this long-term work in 2023.

A table of all 63 initiative commitments, including the status, is provided in Appendix 1. A summary of the status of these initiative commitments, broken down by WMP category, is provided in Table 1 below. The Compliance Operational Protocols indicate that five pre-designated status categories should be used for each initiative commitment.⁵

Table 1: Summary of 2023 WMP Initiative Commitments

2023 WMP Category	Completed	In Progress	Planned	Delayed	Total
A. Situational Awareness and Forecasting	4	4	0	0	8
B. Grid Design, Operations and Maintenance	8	13	0	4	25
C. Vegetation Management and Inspections	9	5	1	0	15
D. Public Safety Power Shut off	1	2	0	3	6
E. Emergency Preparedness Plan	2	2	0	1	5
F. Community Outreach and Engagement	3	1	0	0	4
Total	27	27	1	8	63

⁵ Compliance Operational Protocols at p. 9 (indicating status should be: completed, in progress, planned, delayed, or cancelled). Please note that there are no canceled initiatives so we have not included a column for that status.

Details of the Delayed Initiative Commitments:

In this section, we provide information regarding the initiative commitments that have been designated as "Delayed" at the end of Q3. In Table 7-3-1 and Table 7-3-2 of the WMP, we provided a Unique ID for each initiative commitment.⁶ Below, we have included the Unique ID, the name of the activity, a brief description of the activity, and the status.

As noted in our Q1 and Q2 updates, the unprecedented winter storms this year caused delays for several of the initiative commitments identified below. However, we implemented corrective actions and were able to catch up on multiple commitments so that they are no longer behind schedule. For the eight initiatives that are currently behind schedule, we have implemented catch back plans and forecast dates for when we anticipate each commitment will be back on track to the original plan.

GH-01 System Hardening – Distribution: This initiative involves the completion of 420 circuit miles of system hardening work, which includes overhead system hardening, undergrounding, and removal of overhead lines in High Fire Threat Districts (HFTDs), High Fire Risk Areas (HFRAs), or buffer zone areas except for any mileage being undergrounded and tracked separately as part of our Butte County Rebuild and other Community Rebuild efforts, barring External Factors.

The program is behind target with 222.6 miles completed as of the end of Q3 against the Q3 target of 283 miles. The 222.6 miles completed includes 123 miles of Overhead Hardening, 92.7 miles of Undergrounding, and 6.6 miles of Line Removal. The variance between the miles completed and the Q3 target is largely driven by underground performance. Projects have been delayed due to specific reasons including but not limited to: conduit installed but not yet energized (electric work is complete, but we are waiting on upstream project to energize), easement delays, and material issues. There are 296 miles in active construction and another 31.2 miles ready for construction. This program will be back on track with the original scope by December 15, 2023.

GH-04 10K Undergrounding: This initiative involves the completion of 350 circuit miles of undergrounding work, barring External Factors. The 350-circuit mile target includes: (1) undergrounding taking place as part of System Hardening, (2) undergrounding taking place as part of the Butte County Rebuild program (including a small volume of previously hardened overhead lines that are being placed underground) or other Community Rebuild programs, and (3) any other undergrounding work performed in HFTD, HFRA, Buffer Zone, or fire rebuild areas.

The program is behind target with 131.5 miles completed as of the end of Q3 against the Q3 target of 195.2 miles. Projects have been delayed due to specific reasons including but not limited to: conduit installed but not yet energized (electric work is complete, but we are waiting on upstream project to energize), easement delays, and material issues. There are 296.6 miles in active construction between System Hardening (258.9), Butte Rebuild (35.9) and Community Rebuild (1.8), and another 18.3 miles ready for

⁶ PG&E 2023 WMP at pp. 287, 332.

construction between System Hardening (17) and Community Rebuild (1.3). This program will be back on track with the original scope by December 15, 2023.

GH-06 System Hardening - Transmission Shunt Splices: This initiative involves installing shunt splices on 20 transmission lines traversing HFRA or HFTD areas, barring External Factors.

We fell behind the Q3 target of 17 by completing 16 units by the end of September. One project encountered a clearance issue and has delayed the work to late October/early November. We have adjusted the end-of-year forecast to reflect this change in the catch back target plan. The catch back plan is in place and the clearances in question have been rescheduled to late October/early November. With the catch back plan, this work is on track to meet the end-of-year target.

GH-07 Distribution Protective Devices: This initiative involves the installation and SCADA commissioning of 75 new SCADA protective devices (line recloser, Fuse Saver, or interrupter) to reduce Enhanced Powerline Safety Setting (EPSS) reliability impacts, barring External Factors.

We fell behind the Q3 target of 75 installations with 51 installations completed by the end of September. The delay was due to winter storms that occurred in Q1 which impacted working conditions and caused resource constraints as crews were diverted to storm response work. In Q3, the program completed 41 units. The program was re-baselined during Q2 to adjust to the interim completion targets. A catch back plan is in place to be back on track by the end of November.

PS-06 Provide portable batteries to PG&E customers: This initiative is to provide 4,000 new or replacement portable batteries to PG&E customers at risk of PSPS or EPSS each year for three years.

We fell behind the Q3 target of 2,926 with 2,010 portable batteries (1,505 batteries were installed through the portable battery program and 507 batteries installed as part of the CFILC DDAR⁷ program) installed by the end of September. Battery deliveries are behind target due to contracting delays during cyber security and privacy reviews for data sharing with contractors, causing the program to launch later than anticipated. We have contacted over 7,000 customers for potential battery installation, and over 4,600 customers have been assessed. In the next few weeks, we are forecasted to deliver on average 200-250 batteries per week. A catch back plan is in place and is forecast to be back on target by the end of November. Please note that the number of portable batteries installed includes the batteries installed as part of the CFILC DDAR program, since these numbers were included in the 12,000-battery, three-year cumulative target in the WMP.

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⁷ California Foundation for Independent Living Centers Disability Disaster Access and Resources Directory.

PS-07 PSPS Customer Impact Reduction: This initiative is to reduce PSPS impacts to 15,000 customers based on wildfire mitigation projects including, but not limited, to motorized switch operator replacements and undergrounded miles planned for 2023.

We fell behind the Q3 target of reducing the impact to 8,420 customers, with a reduction of 6,393 customers impacts reduced as of the end of September. This work is tied to the miles of undergrounding completed and the number of MSO devices replaced/removed. The multiple storm/snow events in Q1 delayed work and prevented access to underground construction sites where work was otherwise ready to execute. The Undergrounding Program is accelerating work readiness activities, with over 600 miles out of estimating to be worked in 2023 and 2024 that will result in having 40% to 50% of the 2024 work construction-ready by December 2023. A catch back is in place and this work is forecast to be back on target by mid-December.

EP-01 – Complete PSPS and Wildfire Tabletop and Functional Exercises: This initiative is to complete a PSPS and Wildfire Tabletop and Functional Exercise annually, in compliance with the guiding principles of the Homeland Security Exercise Evaluation Program (HSEEP).

We fell behind on the key milestones of completing the second seminars for the PSPS and Wildfire Tabletop exercises due to two recent Emergency Operations Center activations from PSPS events. To date, we have completed the Wildfire full-scale exercise and the first PSPS Seminar, while the second Wildfire Tabletop seminar was postponed. However, our catch back plan is in place, and we moved the meeting from the original date of August 29, 2023 to October 11, 2023, which allowed this commitment to be completed in October.

PS-02 – Evaluate incorporation of approved IPW enhancements into the PSPS Distribution guidance: This initiative is to evaluate incorporation of approved enhancements to the Ignition Probability Weather (IPW) model into the PSPS Distribution guidance.

Due to the two PSPS events that occurred in August and September, the sensitivity analysis presentation to the Wildfire Risk Governance Steering Committee (WRGSC) was delayed and rescheduled to October 5, 2023. This WRGSC presentation was the last milestone for this objective in 2023, and with the presentation, this commitment was completed in October.

Implementation of PG&E's Latest Safety Culture Assessment

PG&E's 2022 Safety Culture Assessment (SCA) was issued by Energy Safety on May 8, 2023. The SCA evaluated the personal and wildfire safety culture at PG&E through the use of a workforce survey, management self-assessments, and interviews. The SCA provided the following five recommendations for PG&E to act upon:

- Execute our 2025 Workforce Safety Strategy with clearly defined tactics and SMART performance measurements/goals for leadership, and the addition of leading indicators and wildfire metrics. Execute the PG&E Leadership Development Program ensuring engagement from both senior leadership and frontline supervisors in the field.
- 2. Improve Safety communications to support achieving and maintaining a strong safety culture. Further develop Safety Enabling Systems to improve the quality of event investigations (with a focus on controls), continue to share event investigation results across the organization, and improve the hazard and near-miss reporting process to align expectations on what to report and when to report.
- 3. Build on current training plan, incorporating new training modalities and integrate training with peer-to-peer, grassroots learning activities. Incorporate new peer learning activities and topics into training and improve training based on feedback.
- 4. Mitigate risk exposure posed by interactions with the public by recognizing and taking action to mitigate risk exposure posed by interactions with the public including effective customer communication.
- 5. Mitigate impairment risk including fatigue management, distracted driving, and stress management.

On June 16, 2023, PG&E formally notified Energy Safety that we agreed to implement all the findings and recommendations identified in the SCA and committed to work with Energy Safety and its third-party contractor, National Safety Council, to facilitate their implementation.

During Q3, some of the actions PG&E completed to advance the implementation of the recommendations from the 2022 SCA include:

- Pursuant to recommendation #1:
 - 98% of Supervisors have enrolled or completed at least one leadership development class.
 - 220 Supervisors have completed at least four leadership development classes.

2024 Safety Workplan draft has been completed and is being shared with all Operational teams to ensure safety strategy alignment. We have drafted proposed safety metrics, including leading and lagging indicators, as well as key work initiatives to support these goals. Initiatives include actions related to Workforce, Contractor and Public Safety, Training, Communications, and our PG&E Safety Excellence Management System (PSEMS) and are aligned with SCA recommendations. Detailed Tactical Implementation Plans will be completed by December 2023.

Pursuant to recommendation #2:

- An updated Near Hit standard has been published that further defines Near Hits and the reporting criteria.
- Ongoing daily safety messages, including near hits, safety trends, injuries, Motor Vehicle Incidents, Serious Injury and Fatalities (SIF), safety recognition, best practices, and psychological safety were published and shared/discussed companywide during Daily Operating Reviews. The messages were tied to the company's purpose, virtues, and stands.
- Monthly Safety Connection videos were published about public safety, psychological safety, and stopping the job.
- Ongoing communications and related collateral (e.g., stickers, SIF Field Guide) were distributed in the field promoting use of the SIF capacity and learning model and energy wheel to identify essential controls that can ensure that frontline coworkers recover safely when an incident occurs. This is an ongoing endeavor folded into all communications.
- Established certifications for cause evaluation performers and reviewers providing a method to ensure this population has the fundamental skill and knowledge to support improved quality of event investigations.
- Standards and procedures governing the conduct of injury cause evaluations have been improved to focus evaluation activities on quality outcomes, reducing implementation confusion.
- Cause Evaluation Team is collaborating with Contractor Safety and the Enterprise Lean Office to revise the process guiding contractor safety events to improve contractor led safety investigations and cause evaluations.

Pursuant to recommendation #3:

- Electrical Technical Training completed delivery of Rubber Glove Refresher training to 1,360 coworkers as of September 29, 2023.
- Electric Technical Training began delivery of Grounding Refresher training for Transmission Line/GC on October 2, 2023. Grounding refresher training for Distribution and Towerman are open for enrollment to the target audience and will begin delivery in January 2024.
- Gas Technical Training began delivery of Work Quality Assessment Refresher training for Lead Gas Service Representatives in September, with a target completion of October 27, 2023.

- Gas Technical Training is in the development phase of the Gas Service Representative Refresher training and is on target to begin delivery in December 2023.
- Training Alignment Committees for Gas and Electric, which kicked off in Q2, have continued. These committees bring Operations, Safety, IBEW Union Partners and Training together to make sure the right training is provided to the right people at the right time. Key topics in these committee meetings have been short-term and long-term refresher training plans and identification of emerging training needs, as well as review of existing trainings and training effectiveness measurement strategies to ensure training needs for Gas and Electric Operations are being met.
- Hosted a Grassroots brainstorming workshop to identify PG&E-wide and Functional Area specific grassroots best practices and learnings.
- The Charter was drafted for a new PG&E Grassroots-Led Safety Council
 which will include grassroots safety team members from organizations
 across the enterprise. It is currently being socialized with leadership, union
 leadership, and grassroots teams across the company for input.
- o Began development of the PG&E Grassroots resource page.
- Continue to develop leaders in the utility through Lean (5 Play) training courses provided by the Enterprise Lean Office (ELO) and Breakthrough training provided by GAP International, to broaden thinking and facilitate exposure of efficiency and improvement opportunities.
- As of Q4 2024, all PG&E supervisors, managers, directors, and officers have completed Lean training. An abridged Lean Orientation training has been integrated into PG&E's new hire orientation.

Pursuant to recommendation #4:

- The Corporate Security Investigators assigned to work on vegetation management issues have handled 320 hostile customers and other incidents from January 1 to October 5, 2023. They have been able to resolve disputes with a 99% success rate which allows tree crews and inspectors to safely complete their work.
- To improve employee capabilities to handle hostile citizen encounters, Corporate Security has completed professional filming of material for a new virtual reality security training for field employees. This material is currently in the editing stage with an anticipated release date of November 2023.
- On October 16, 2023, Corporate Security met with Electric Operations to discuss needs for additional Corporate Security Investigators focused on hostile citizen encounter response and embedded within the Vegetation Management group and the Paradise Rebuild/Undergrounding Project. The volume of hostile customer incidents occurring within Vegetation Management and Undergrounding work does support the need for greater resource allocation to this area. Electric Operations is currently analyzing

their 2024 budgets to identify a path to bring on these additional resources.

• Pursuant to recommendation #5:

- TRUCE: 1,951 active users since June 25, 2022; Suppressed 403,000 inbound texts, 103,000 calls and 924,000 app notifications, while travelling over 15 million miles. App users have a distraction frequency of approximately 1 per 35 miles versus those without the app who have a distraction frequency of approximately 1 per 8 miles.
- Brigade 360 Cameras: Retrofits began April 17, 2023 and completed October 2, 2023 for all 569 trouble trucks Model Year 2016 and newer. An additional 214 trucks are on order and will be delivered with cameras installed.
- Safe Driving Training: As of Q3, 1,319 coworkers have taken the 4-hour behind the wheel Smith driving course and 1,572 have taken either the Smith or the in-house 4-hour backing and close quarter maneuvering course.
- Distracted Driving In-Cab Camera Technology: A Request for Information was reviewed, and 6 vendors responded. Working with sourcing to create a Request for Proposal to send to the 6 vendors looking at safety technology, operational fit, and technology bundling opportunities.
- New Safe Driving policy and Driver Scorecard Enhancement: Launched August 1, 2023. Since that time, 64 Action Plans have been initiated. Of those, eight Action Plans have been completed.
- Developed and implemented a company-wide Fatigue Management Standard. Standard includes how to identify, prevent, and mitigate fatigue, along with guidelines on rest periods, consecutive workday limits, and what roles and responsibilities coworkers and leaders have in the process. <u>Implementation of the Standard included:</u>
 - Safety Awareness and other company-wide communications
 - New, dedicated Fatigue Management website with Toolkit (leader and coworker resources), including tailboards, fact sheets, safety advisories, posters, etc.
 - Learning sessions
 - Review with IBEW leadership
- Executed several webinars and communications focused on mental health topics (e.g., stress, anxiety, mindfulness).

Regarding PG&E's most recent safety culture assessment at the California Public Utilities Commission (Commission), as of May 18, 2023, Decision 23-05-009 was issued officially closing Order Instituting Investigation (OII) 15-08-019 (the NorthStar proceeding)⁸ and adopting the Safety Policy Division's Modified Staff Report. The Modified Staff report

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⁸ Order Instituting Investigation on the Commission's Own Motion to Determine Whether Pacific Gas and Electric Company and PG&E Corporation's Organizational Culture and Governance Prioritize Safety.

requests additional information on seventeen of the original NorthStar recommendations. As the proceeding is closed, the recommendations will be managed via Advice Letters with the first Advice Letter having been filed on July 18, 2023 and the second Advice Letter on October 2, 2023. Advice Letters will be filed bi-annually going forward, with the next advice letter to be filed on or around April 1, 2024, until all remaining NorthStar recommendations have been deemed to be closed. Since the Safety OII proceeding is closed, we are no longer required to complete the quarterly reports to the Commission on our progress in implementing the NorthStar recommendations, as this has been replaced by the abovementioned Advice Letter process.

We remain dedicated to continually improving our safety culture and will continue to provide further information on our progress each quarter.

Board of Directors' Safety and Nuclear Oversight Committee - Q3 2023 Update

The PG&E Board of Directors' Safety and Nuclear Oversight (SNO) Committee is an important part of our Board-level oversight of safety, enterprise risk, and other matters. A SNO Committee also concurrently exists at the PG&E Corporation Board (collectively referred to as the SNO Committees).

This section describes the oversight activities of the SNO Committees and is organized as follows:

- 1) Safety Topics Covered in SNO Committees' Meetings; and
- 2) Recommendations of the SNO Committees and Management Implementation.

Safety Topics Covered in SNO Committee Meetings

During the third quarter, the SNO Committees held both a joint meeting with the Audit Committees and a stand-alone meeting on September 12, 2023.

During the September joint meeting, the SNO and Audit Committees reviewed PG&E's risk management program, outstanding distribution electric corrective notifications, and wildfire safety efforts related to vegetation management. The Committees also reviewed the risk of a nuclear extended shutdown.

During the September stand-alone meeting, the SNO Committees reviewed safety performance, including: (1) a report on a public fatality in Mendota, CA; (2) a vault explosion in San Francisco; (3) the results of an assessment of PG&E's Safety Excellence Management System; and (4) and nuclear safety. The Committees also discussed risks associated with failure of electric distribution assets, gas loss of containment, and progress on the WMP.

⁹ Assessment of Pacific Gas and Electric Corporation and Pacific Gas and Electric Company's Safety Culture – Final Update.

Recommendations of Boards of Directors' Safety Committee Meetings During Q3 2023

There is an ongoing dialogue between the Chair of the SNO Committees (which includes feedback of the Committees members) and management, with frequent engagement around the implementation of the workforce safety strategy, safety performance updates, and corrective actions in the normal course of business. In addition, the SNO Committees made the following specific, safety-related recommendations to management during the third quarter of 2023:

- Ask vendors to install sensors on underground vaults to notify the Company when there has been an asset failure; and
- Consider applying learnings from Enhanced Powerline Safety Settings into engineering processes.

<u>Management Implementation of Recommendations Described in Q2 2023 Quarterly Notification</u>

The following summarizes actions that management has taken to implement guidance and direction from the SNO Committees that was described in our Quarterly Notification for the second quarter of 2023.

<u>Recommendation # 1</u>: To use weather station data to inform PG&E's wildfire risk models and asset inspections.

Management's response: PG&E uses weather station data as inputs to our operational risk models and planning risk models that, in turn, informs the HFTD/HFRA asset inspections. There are currently 1,424 weather stations across PG&E's service area which provide data on wind speed, wind gust speeds, wind direction, temperature, and relative humidity which are sampled on a 10-minute interval. The weather station observations incorporated into the risk models are maximum daily temperature, average daily temperature, summer precipitation, and summer gusts over 15 miles per hour. Inspections are prioritized in HFTDs based on the consequence layer of the risk model which identifies locations that may have a greater ignition consequence. The team does not prioritize inspections based on current weather station data or climatic zones. Given that PG&E already uses weather station data to inform its wildfire risk models and asset inspections, no further Board action is needed.

Recommendation # 2: To evaluate how the anticipated future utilization of unmanned aerial vehicles (UAVs) and drones can be incorporated into aviation strategy assessments.

Management's response: The team has evaluated this issue and is implementing the following programs to increase drone use to supplement helicopter inspection: (1) adding a new work method to the Aviation Operations portfolio by installing 50 remote UAV

stations by 2028 to conduct fault response/inspection; (2) increasing the inspection portfolio to 500,000 distribution & transmission structures in 2024; and (3) continuing the gas leak detection work method for Gas Transmission by conducting 16 miles of over water/under bridge leak detection. For how drone use expands Aviation's capabilities, our evaluation came to the following conclusions: (a) drones do not execute the majority of the daily operations, but would allow Aviation Services to execute specific work types more effectively; (b) drones will enable the replacement of some helicopter patrol activity, system inspections work, and wire stringing; (c) drone use will lead to a potential reduction in 10% of the helicopter portfolio, with nominal impact on Aviation strategy. The evaluation has been completed and no further Board action is needed.

<u>Recommendation # 3:</u> To perform annual weatherization inspections on PG&E's generation assets.

<u>Management's response:</u> PG&E has developed site specific Cold Weather Plans (CWP) for each of our Bulk Electric System (BES) generating units to satisfy Requirement 7 of the North American Electric Reliability Corporation (NERC) EOP-001-2 and to ensure the reliable delivery of power to the BES during cold weather.

- Plans were developed with participation in industry working groups along with the consideration of industry white papers, NERC alerts, future enforceable standards, and internal lessons learned.
- Annual inspection and maintenance of freeze protection measures, operating limitations (i.e., capability and availability, fuel supply and inventory concerns, fuel switching capabilities), minimum design temperature and/or historical operating temperature are addressed in the plans.
- The Cold Weather Plans, which include inspections and maintenance of all identified freeze protection measures, are implemented annually, prior to winter, through a recurring SAP Maintenance Plan. This recurring work order also requires the plans to be reviewed and updated if changes are needed. Additionally, outage and curtailment events are reviewed for all facilities, and the findings of that review can trigger updates to plans, if applicable.
- Power Generation just completed our first Western Electricity Coordinating Council (WECC) audit of EOP-011-2 R7 with no findings.

The aforementioned plans are now part of PG&E's standard work and will be performed annually going forward. No further Board action is needed.

Conclusion

We appreciate the opportunity to provide these updates on our progress implementing our WMP, progress implementing our latest Safety Culture Assessment, and progress implementing the SNO Committees' recommendations from the previous quarter. If there are any questions, please contact Wade Greenacre at Wade.Greenacre@pge.com.

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Meredith Allen

Vice President, Regulatory Affairs

Appendix 1 - 2023 WMP Initiative Commitments

cc: Service Lists I.19-09-016 and I.15-08-019

APPENDIX 1: 2023 WMP Initiative Commitments

Plan Area	2023 WMP Commitments ¹⁰				
A. Situational Awareness and Forecasting	SA-01 - AI in Wildfire Cameras	SA-02 - Line Sensor - Installations	SA-03 - EFD and DFA Reporting	SA-04 - FPI and IPW Modeling - Revision Evaluation	
	SA-05 - Evaluate FPI and IPW Modeling enhancements in 2023 - 2025	SA-10 - Distribution Fault Anticipation (DFA) Installations	SA-11 - Early Fault Detection (EFD) Installations	SA-12 - Evaluate the use and effectiveness of real-time monitoring tools	
B. Grid Design, Operations and Maintenance	AI-01 - Retainment of Inspectors and Internal Workforce Development	AI-02 - Detailed Inspection Transmission – Ground	Al-03 - Develop Distribution Aerial Inspections program	AI-04 - Detailed Inspection Transmission – Aerial	
	AI-05 - Detailed Inspection Transmission – Climbing	AI-06 - Perform transmission infrared inspections	AI-07 - Detailed Ground Inspections - Distribution	AI-08 - Supplemental Inspections - Substation Distribution	
	AI-09 - Supplemental Inspections - Substation Transmission	Al-10 - Supplemental Inspections - Hydroelectric Substations and Powerhouses	AI-11 - Filling Asset Inventory Data Gaps		
	GH-01 - System Hardening - Distribution	GH-03 - Evaluate and Implement Covered Conductor Effectiveness Impact on Inspections and Maintenance Standards	GH-04 - 10K Undergrounding	GH-05 - System Hardening - Transmission	
	GH-06 - System Hardening - Transmission Shunt Splices	GH-07 - Distribution Protective Devices	GH-08 - Surge Arrestor - Removals	GH-09 - Distribution Line Motor Switch Operator (MSO) - Replacements	
	GH-10 - Non-Exempt Expulsion Fuse - Removal	GM-01 - Asset Inspections - Quality Assurance	GM-02 - HFTD-HFRA Open Tag Reduction - Transmission	GM-03 - HFTD-HFRA Open Tag Reduction – Distribution Backlog	
	GM-09 – Asset Inspection-Quality Control	GM-06 - EPSS - Down Conductor Detection (DCD)			

¹⁰ Status color: Blue = "Completed on Time" - pending validation; Green = "On Track" – meets target; Amber = "At Risk" - not on track to meet target but has a catch back plan; Red = "Off Track / Missed" – not meeting target and does not have a catch back plan; Gray = Initiative has not started yet.

Plan Area	2023 WMP Commitments – Continued				
C. Vegetation Management and Inspection	VM-01 - LiDAR Data Collection - Transmission	VM-02 - Pole Clearing Program	VM-03 - Focused Tree Inspection Program	VM-04 - Tree Removal	
	VM-05 - Defensible Space Inspections - Distribution Substation	VM-06 - Defensible Space Inspections - Transmission Substation	VM-07 - Defensible Space Inspections - Hydroelectric Substations and Powerhouses	VM-08 - Vegetation Management – Quality Verification	
	VM-09 - Constraint Resolution Procedural Guideline	VM-13 - Routine Transmission – Ground	VM-14 - Transmission Second Patrol	VM-15 - Integrated Vegetation Management - Transmission	
	VM-16 - Distribution Routine Patrol	VM-17 - Distribution Second Patrol	VM-22 - Vegetation Management – Quality Control		
D. Public Safety Power Shut off	PS-01 - Evaluate enhancements for the PSPS Transmission guidance	PS-02 - Evaluate incorporation of approved IPW enhancements into the PSPS Distribution guidance	PS-06 - Provide 12,000 new or replacement portable batteries to PG&E customers at risk of PSPS or EPSS	PS-07 - PSPS Customer Impact Reduction	
	PS-08 - Evaluate emerging technologies to reduce PSPS customer impact	PS-10 - Continue sharing PSPS lessons learned			
E. Emergency Preparedness Plan	EP-01 - Complete PSPS and Wildfire Tabletop and Functional Exercises	EP-02 - Maintain all hazards planning and preparedness program in 2023 – 2025	EP-04 - Expand all hazards planning to include additional threats and scenarios in 2023 – 2025	EP-06 - Review, and revise the CERP and 2 Wildfire Related Annexes on a yearly basis	
	EP-08 - Threats and Hazards Identification and Risk Assessment (THIRA) updates				
F. Community Outreach and Engagement	CO-01 - Community Engagement – Meetings	CO-02 - Community Engagement - Surveys	CO-04 - Community Engagement - Outreach to HFRA Infrastructure Customers	CO-05 - Community Engagement - Outage Preparedness Campaign	