

February 1, 2024

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.<sup>1</sup>

**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

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<sup>1</sup> 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.

safety committee recommendations from the electrical corporation's 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.

Additionally, and pursuant to the 2023 Safety Certification guidelines, PG&E is simultaneously submitting this quarterly notification to the California Public Utilities Commission as an information-only submittal to the following email address: [safetypolicydivision@cpuc.ca.gov](mailto:safetypolicydivision@cpuc.ca.gov).

This Quarterly Notification submission provides the requested information for the fourth quarter (Q4) of 2023, pursuant to the above-identified guidelines from Energy Safety and statutory requirements.

#### **Q4 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.<sup>2</sup> 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. We received final approval of our WMP on December 29, 2023, and submitted a final, revised WMP on January 8, 2024.

Table 1 of our Q4 2023 QDR, which is being submitted concurrently with this Quarterly Notification, provides progress updates for our 63 initiative commitments, which include

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<sup>2</sup> PG&E's 2023 WMP is available at: [www.pge.com/wildfiremitigationplan](http://www.pge.com/wildfiremitigationplan).

both targets and objectives.<sup>3</sup> This Quarterly Notification provides additional details associated with these initiative commitments.

### **2023 WMP Initiative Commitment Summary:**

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.<sup>4</sup>

**Table 1: Summary of 2023 WMP Initiative Commitments**

<b>2023 WMP Category</b>	<b>Completed</b>	<b>In Progress</b>	<b>Planned</b>	<b>Delayed</b>	<b>Total</b>
A. Situational Awareness and Forecasting	8	0	0	0	<b>8</b>
B. Grid Design, Operations and Maintenance	24	1	0	0	<b>25</b>
C. Vegetation Management and Inspections	15	0	0	0	<b>15</b>
D. Public Safety Power Shut off	6	0	0	0	<b>6</b>
E. Emergency Preparedness Plan	5	0	0	0	<b>5</b>
F. Community Outreach and Engagement	4	0	0	0	<b>4</b>
<b>Total</b>	<b>62</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>63</b>

<sup>3</sup> This total does not include one target that is set to begin in 2024 (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.

<sup>4</sup> 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 on the Delayed Initiative Commitments:**

We have no delayed initiative commitments.

One commitment, GM-02 (HFTD/HFRA Open Tag Reduction – Transmission), is still in progress for completion due to external factors, including customer refusals, work clearance requirements, and other external issues preventing us from safely executing the work described.<sup>5</sup> As of the end of Q4 2023, 762 tags were unable to be worked due to these external issues. We will continue to work these tags as quickly and safely as possible and will provide Energy Safety updates on the progress of this work.

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<sup>5</sup> See PG&E 2023-2025 WMP R4 (Jan. 8, 2024) at 285-286 (describing how all targets and objectives may be subject to external factors limiting the ability to execute the work).

## **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 Safety Culture Assessment evaluated the personal and wildfire safety culture at PG&E through-the-use of a workforce survey, management self-assessments, and interviews. The Safety Culture Assessment provided the following five recommendations for PG&E to act upon:

1. 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 it agreed to implement all the findings and recommendations identified in the Safety Culture Assessment and committed to work with Energy Safety and its third-party contractor, National Safety Council, to facilitate their implementation.

During Q4 2023, some of the actions PG&E completed to advance the implementation of the recommendations from the 2022 Energy Safety Culture Assessment include:

- Pursuant to recommendation #1:
  - 98% of 1800 supervisors attended and completed at least one of the leadership development classes provided in 2023.

- 200 supervisors completed the Leading at PG&E program consisting of 9.5 to 13.5 days of leadership development classes.
- The 2024 Safety Workplan has been completed and is being shared with all operational teams to ensure alignment and ownership of the safety strategy execution. We have included leading and lagging indicators and 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 were developed to support the above initiatives to drive accountability and measure progress.
- PG&E hosted regional, leader-focused, educational forums with a core component focused on safety. This year we are focused on advancing leadership understanding and commitment to PSEMS.
  
- Pursuant to recommendation #2:
  - PG&E published a revised Near Hit Standard in 2023 and there was a 4% increase in the number of Near Hits reported in 2023 vs. 2022. Daily safety messages were read and discussed during companywide Daily Operating Reviews related to near hits, safety trends (injuries, motor vehicle incidents, Serious Injuries and Fatalities (SIF), safety recognition, best practices, and psychological safety). The messages were tied to the company's purpose, virtues, and stands.
  - A Monthly Safety Connection and other videos were published about how to use the energy wheel during pre-job safety briefings, line of fire hazards, essential controls, holiday season safety, dropped objects on hard hats, workforce safety improvements, and stopping the job.
  - PG&E completed the "Prevent Today, Protect Tomorrow" campaign to prevent injuries related to strains from push/pull/lift activities, slips/trips/falls, being in the line of fire, and lacerations. Completed the campaign: Road to Reducing Preventable Motor Vehicle Incidents.
  - We published the weekly safety and health newsletter (EH&S Snapshot) which is sent to all coworkers.
  - We led an enterprise safety communications summit meeting with cross-functional safety leaders to develop an integrated safety communication strategy and focus on engaging frontline coworkers more effectively.
  
- Pursuant to recommendation #3:
  - Electric Technical Training has delivered Grounding Refresher training for Transmission Line/General Construction to 77% percent of the target audience as of the end of Q4 2023 and began delivery of Grounding Refresher training for Distribution and Towerman.
  - Electric Technical Training began implementation of Level 3 Training Effectiveness strategy for Rubber Glove Refresher Training. Field

- observation data is being collected to assess the effectiveness of the training, with report-outs expected by Q2 2024.
- Gas Technical Training completed delivery of Work Quality Assessment Refresher training for Lead Gas Service Representatives.
  - Gas Technical Training began delivery of a multi-course Gas Service Representative Refresher training program.
  - Training Alignment Committees for Gas and Electric, which kicked off in Q2 2023, 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.
  - Gas, Electric, Power Gen and Safety & Compliance Training teams delivered 60,000+ days of instructor-led training to PG&E coworkers between Q1 and Q4 2023.
- Pursuant to recommendation #4:
    - Corporate Security investigators, assigned to work on vegetation management issues, handled 340 hostile customer incidents during 2023. Additionally, during 2023, Corporate Security investigators performed 264 “civil standbys,” during which they accompanied field personnel to work locations flagged due to previous hostile customer encounters, and stood by while new work was conducted, to mitigate the possible occurrence of a new hostile incident.
    - The development of contracted, PG&E-specific virtual reality (VR) training for field workers, on the topic of hostile citizen encounter mitigation, was completed in November 2023. In December 2023, deployment of VR training for field worker use began, focused initially on employees in Oakland, CA, to be expanded to other geographic areas in 2024.
    - Workload and functional business area request volumes demonstrated justification for embedding additional Corporate Security resources in field work functions, to mitigate threats posed by hostile citizen encounters. In December 2023, a new Corporate Security embedded investigator position was posted, to work directly with the company’s Paradise Rebuild/Electric Line Undergrounding project in and near Butte County. Hiring of three additional embedded Corporate Security investigators for the Vegetation Management Program is anticipated during the first half of 2024.
  - Pursuant to recommendation #5:
    - TRUCE Cell Phone Blocking Technology: 1,982 active users since June 25, 2022. Suppressed 462,000 inbound texts, 118,000 calls, and

- 1,058,000 app notifications, while travelling over 18 million miles. App users have a distraction frequency of ~1 per 35 miles vs those without the app at approximately 1 per 8 miles.
- New safe driving policy and driver scorecard enhancement launched on August 1, 2023. Since implementation, 161 action plans have been initiated. Of those, 93 action plans have been completed.
  - Distracted Driving In-Cab Camera Technology: Request for Information (RFI) completed and reviewed. The RFP process closes in January and response review criteria will focus on safety technology, cost, operational fit, and technology bundling opportunities.
  - Safe Driving Training: in 2023, 1,487 coworkers completed the 4-hour behind the wheel Smith driving course and 2,626 completed either the Smith or the in-house 4-hour backing and close quarter maneuvering course.
  - Webinars and training sessions on mental health were completed, and included topics like emotional fitness, mindfulness for safe driving, and an expert panel on sleep.
  - We shared several communications on mental health which included resources and “tips” topics such as holiday stress, finding a therapist, how leaders can support team members facing mental health challenges, coping with the anxiety and trauma of war, and a video from our senior leaders on the importance of caring for your mental health.
  - We provided Employee Assistance Program (EAP) support and debrief for trainees who completed our new virtual reality situational awareness training and are identified as field coworkers that may experience violence at work.
  - We implemented a simple referral process for the Human Resource Investigations, Ethics and Compliance, and Employee Relations teams to refer employees undergoing investigations to EAP to support them during the process.

On May 18, 2023, Decision 23-05-009 was issued officially closing the Safety Order Instituting Investigation (OII) 15-08-019 and adopting the Safety Policy Division’s Modified Staff Report. The Modified Staff report requested additional information on seventeen of the original NorthStar recommendations. The proceeding is now being managed via Advice Letters with two Advice Letters having been filed and the next Advice Letter coming due on March 29, 2024. Future bi-annual letters will follow as required, until all remaining Commission questions are addressed, and recommendations closed.

As the Safety OII proceeding has been formally closed, we are no longer required to submit quarterly reports to the California Public Utilities Commission (CPUC) related to this proceeding. The previous quarterly reports outlined our progress towards implementing all recommendations by NorthStar Consulting Group from their assessment of our safety culture for the CPUC in the May 8, 2017, NorthStar Report and the 2019 First Update. On September 16, 2022, we received the NorthStar Final Update and



provided opening comments to the Commission on October 7, 2022, and reply comments on October 21, 2022.

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

### **Board of Directors' Safety and Nuclear Oversight Committee – Q4 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 fourth quarter, the SNO Committees held a stand-alone meeting on December 12, 2023.

During the December stand-alone meeting, the SNO Committees received an update on preventable motor vehicle incidents and reviewed safety performance, including nuclear safety, and an update from the Nuclear Safety Oversight Committee. The Committees also discussed risks associated with third-party safety incidents and large uncontrolled water release. Lastly, the Committees received a current state assessment on PG&E's hydro assets, a review of individual safety and asset protection, and a review of progress on the WMP.

### **Recommendations of Boards of Directors' Safety Committee Meetings During Q4 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 fourth quarter of 2023:

- To explore anti-rollover technology for PG&E vehicles that could mitigate the potential risk of a vehicle rollover. This will include investigating to see if it is more cost effective in the long term to invest with the vehicle's Original Equipment Manufacturer—which has this technology available as part of the vehicle purchase—or to install this capability through the use of aftermarket technology;

- To coordinate with local authorities and agencies to ensure there is an effective emergency action plan in place in case an emergency evacuation is needed related to a potential failure of one of PG&E's hydro generation assets leading to a large uncontrolled water release; and
- To explore opportunities that would help ensure complete alignment between work that PG&E has committed to in the WMP and the work authorized in the General Rate Case (GRC). The significant timing difference between the WMP and the GRC creates a disconnect between the work needed to reduce the ever-evolving wildfire risk and the timely cost recovery associated with this work.

### **Management Implementation of Recommendations Described in Q3 2023 Quarterly Notification**

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 third quarter of 2023.

Recommendation # 1: Ask vendors to install sensors on underground vaults to notify the Company when there has been an asset failure.

Management's response: PG&E has now installed Temperature Alarm Devices in subsurface distribution transformer enclosures. In addition, PG&E is exploring expanded monitoring in the form of: (1) gas monitoring for underground vaults; and (2) secondary underground cable monitoring. Both of these monitoring techniques are scheduled to be piloted in the first half of 2024 and, depending on the outcome of those pilots, PG&E may look to expand use of these additional monitoring devices to underground cable.

Recommendation # 2: Consider applying learnings from Enhanced Powerline Safety Settings (EPSS) into engineering processes.

Management's response: Analysis of EPSS operational data has identified vegetation and equipment failure as the primary drivers of ignitions and outages on the Primary Distribution System since 2022. Utilizing this data to drive our strategy – PG&E began its shift from dependence on EPSS to catch outages and potential ignitions, to a focus on prevention of these outages and ignitions through targeted vegetation management and the evolution of our system inspection program.

To address the gap in vegetation caused Primary Distribution Outages, PG&E transitioned from its previous Enhanced Vegetation Management program to the Focused Tree Inspection (FTI) and Vegetation Management for Operational Mitigation (VMOM) programs. These programs are expected to increase the identification of and removal of at-risk trees through visual inspection, as well focusing on vegetation management on primary circuits with poor reliability history.

Feb 1, 2024

To address the gap in asset failure, PG&E identified the following areas of concentration which are expected to increase the effectiveness of the program:

- Reduction of the time horizon for failure criteria from 5 years to 1 year;
- Use of intrusive testing to measure the integrity of poles; and
- Expansion of the drone program to all high fire risk areas for risk identification and validation.

## **Conclusion**

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

Sincerely,

/S/

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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 <sup>6</sup>			
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	AI-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	AI-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)		

<sup>6</sup> 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			
<b>C. Vegetation Management and Inspection</b>	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	
<b>D. Public Safety Power Shut off</b>	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		
<b>E. Emergency Preparedness Plan</b>	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			
<b>F. Community Outreach and Engagement</b>	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