PACIFIC GAS AND ELECTRIC COMPANY
Wildfire Mitigation Plans Discovery 2023
Data Response

PG&E Data Request No.:	CalAdvocates_022-Q010		
PG&E File Name:	WMP-Discovery2023_DR_CalAdvocates_022-Q010		
Request Date:	May 2, 2023	Requester DR No.:	CalAdvocates-PGE-2023WMP-22
Date Sent:	May 12, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:		Requester:	Holly Wehrman

QUESTION 010

In response to data request CalAdvocates-PGE-2023WMP-02, question 1, PG&E provided its 2022 Quality Verification Distribution Audit report (WMP-Discovery2023_DR_CalAdvocates_002Q001Atch02CONF.pdf).

a) For each of the 15 “zero tolerance & high-risk findings” identified on page 4 of the above report, what actions has PG&E taken to mitigate these nonconformances in the future? B aid

b) For each of the 15 “zero tolerance & high-risk findings” identified on page 4 of the above report, describe *when and how* PG&E addressed the nonconformances to mitigate wildfire risk.

c) For each category of the “Top three Critical attribute findings” identified on page 4 of the above report, what actions has PG&E taken to mitigate these nonconformances in the future?

d) For each category of the “Top three Critical attribute findings” identified on page 4 of the above report, describe how PG&E addressed the nonconformances to mitigate wildfire risk.

e) For each category of the “Top three non-Critical attribute findings” identified on page 4 of the above report, what actions has PG&E taken to mitigate these nonconformances in the future?

f) Please describe all actions PG&E has taken to reduce the rate of critical attribute nonconformances in future distribution system inspections.

g) What is PG&E’s target Quality Pass Rate for 2023?

h) Please compare and contrast the 2022 Quality Verification Distribution Audit mentioned above and the QA program for systems inspections that PG&E plans to implement (section 8.1.6.1 in PG&E’s WMP).

ANSWER 010

The CONFIDENTIAL attachments are being provided pursuant to the accompanying confidentialty declaration.

a) The zero tolerance and high-risk findings were (page 4 of the report):

1. (5) Zero Tolerance – Work Not Done (WND): (4) Missed Inspections; (1) Unsafe conductor dead-end

   (10) High-Risk – (5) Exposed/damaged conductors (potential fire hazard); (3) Wrong pole inspected; (2) PCB transformers leaking oil

To mitigate the non-conformances in the future, below are some of the actions taken by PG&E for the zero-tolerance findings:

- **Missed Inspections** – PG&E performs quality reviews and dispatches any missed assets for urgent inspections. PG&E provides annual reporting to the CPUC on any and all late or missed GO165 Inspections.
- **Unsafe Conductor dead-end** – Based on page 15 of "*WMP-Discovery2023_DR_CalAdvocates_022-Q010Atch01CONF.pdf*", the guidance for the field employees is to visually check for excessively corroded or damaged connectors and dead-end hardware which has a potential to fail, drop conductor, or cause an ignition. If observed, create EC Notification to replace connectors or dead-end hardware.
- **Exposed/Damaged Conductors (Potential fire hazard)** – Based on page 14 of "*WMP-Discovery2023_DR_CalAdvocates_022-Q010Atch01CONF.pdf*," the guidance for the field employees is to visually check all the conductors (primary/secondary/service), associated attachments and dead-ends for damage from the structure being inspected to mid-span in all directions or the weather-head or to the conductor's termination point. If observed, create EC notification to repair or replace the conductor. Additionally, if the conductor has 40% or more of broken stands, a company representative stands by until a crew arrives to complete the work.
- **Wrong Pole Inspected** – If the field employees inspect a wrong pole or made an error during pole inspection, they have 48 hours to re-submit the inspection for the pole in inspect app. If beyond 48 hours, field employees must reach out to the Systems Inspection Team to have them reset the halo and perform re-inspection again.
- **PCB Transformers leaking oil** – Based on the TD-2305 EDPM Manual-Assessments and Notifications section for information about addressing oil in the field, the guidance for the field employees is that IF you observe a stain or leak, THEN 1) Look for exposure or contamination. Field employees can refer to the PCB Spill/Leak Category Response Matric to determine the appropriate action and priority. Field employees must comply with the oil spill matrix table for how to handle oil conditions. Field employees should use the oil "indicator" language from the oil spill matrix table to describe the oil condition in the comments of the EC notification.

b) Please see attachment "*WMP-Discovery2023_DR_CalAdvocates_022-Q010Atch02.pdf*" for the requested information. Please note, there is one location highlighted in orange in the attachment that we could not identify the corrective action for, and additional research is needed. The two highlighted in yellow are duplicate line items for the same issue with different risk ranks.

c) The top three Critical attribute findings were:

1. 4 (87) OH-C49: Line splices are present less than 2 ft. from conductor support.
2. 4 (72) OH-J59: Broken or slack guy wire.
3. 4 (65) OH-C97: The insulator or pin is broken or damaged / corroded / contaminated as noted.

To mitigate the non-conformances in the future, below are some of the actions taken by PG&E for the "Top three critical attribute findings:"

- **Line splices are present less than 2 ft from the conductor support** – As described in attachment "*WMP-Discovery2023_DR_CalAdvocates_022-Q010Atch01CONF.pdf*," the guidance for the field employees is to visually check all splices for all conductors inside the scope of the inspection. If observed splices are damaged, corroded, cracked, tied into the insulator or underneath the tie wire, installed underneath the vibration dampener that prevent free movement of the splices with the conductor. Use binoculars. If observed, create EC notification to repair or replace.
- **Broken or slack guy wire** – As described on page 91 of "*WMP-Discovery2023_DR_CalAdvocates_022-Q010Atch01CONF.pdf*," the guidance for the field employees is that before any work is performed on a down guy, inspect the guy insulator; if broken, check for presence of voltage (with dead tester). Pole must be straight with Guy no more than 2" from taut, that does not have significant impact on the structural integrity of the pole. Tighten the guy as minor work if possible. If not possible, create an EC Notification. If tightening the guy would exacerbate any pre-existing conditions on a facility (e.g., increase the lean of an already leaning pole, deform an already deforming pole), create an EC Notification with comments describing the situation. Heavily rusted and signs of pitting with material loss, higher priority. Do minor work and create EC notification. Select the Priority and Due Date based upon compelling abnormal condition that may adversely impact public safety and/or service reliability in the next 5 years.
- **The insulator or pin is broken or damaged / corroded / contaminated as noted –** As described on page 114 of "*WMP-Discovery2023_DR_CalAdvocates_022-Q010Atch01CONF.pdf*," the guidance for the field employees is that if Insulators are chipped, cracked, corroded, contaminated, flashed, have signs of tracking/arcing, broken, or damaged, then create EC notification. Replace ALL insulators if one is chipped, cracked, contaminated, broken, or damaged. **Do Not** mismatch insulators.
    - Note for construction: If an insulator is damaged due to gunshot, replace with epoxy or polymer insulators.
    - Note for construction: Cannot mix insulator types, always replace full set of insulators.
    - Note: Inspector should always consider replacing wood crossarm with composite crossarm, based on condition of crossarm. Select the Priority and Due Date for EC notification based upon compelling

abnormal condition that may adversely impact public safety and/or service reliability in the next 5 years.

d) To mitigate the wildfire risk, we created EC Notifications to address each individual instance and prioritized them based on their risk factor.

e) The top three non-Critical attribute findings were:

1. (746) DR-31: Inspect App Checklist completed incorrectly or missing information.
2. (87) OH-C49: Line splices are present less than 2 ft. from conductor support.
3. (86) OH-M1: The "High Voltage" sign(s) is damaged, illegible, or obstructed from view

To mitigate the non-conformances in the future, below are some of the actions taken by PG&E for “Top three critical attribute findings:”

- **Inspect app Checklist completed incorrectly or missing information -** If the field employees submit an inspection checklist incorrectly or made an error during inspection, they have 48 hours to re-submit the inspection checklist in inspect app. If it’s beyond 48 hours, field employees must reach out to SystemInspectionsHaloIssues@pge.com team to have them reset the halo and perform re-inspection again. There are required mandatory fields in the checklist which the field employees need to input in order to submit an inspection in inspect app.
- After the initial inspection has been submitted by the inspectors, the supervisors or QC /CIRT teams can audit any number of inspections completed and build a report of their findings. Based on their findings, Halos can be reset for assets that have incorrect or missing information.
- **Line splices are present less than 2ft from the conductor support** – As described on page 15 of “*WMP-Discovery2023_DR_CalAdvocates_022-Q010Atch01CONF.pdf*,” the guidance for the field employees is to visually check all splices for all conductors inside the scope of the inspection. If observed splices are damaged, corroded, cracked, tied into the insulator or underneath the tie wire, installed underneath the vibration dampener that prevent free movement of the splices with the conductor. Use binoculars. If observed, create EC notification to repair or replace.
- **The “High Voltage” sign(s) is damaged, illegible, or obstructed from view** – As described on page 125 of “*WMP-Discovery2023_DR_CalAdvocates_022-Q010Atch01CONF.pdf*,” the guidance for the field employees is to look for missing or broken high voltage signs during inspections. If inspectors find missing or broken signs, they should install new signs as minor work if they have the appropriate materials and equipment and can perform the work safely. If the inspector cannot install a sign as minor work, the inspector must create a Priority ‘F’ EC notification. Inspectors should follow the guidance in the Job Aid on how to evaluate high voltage signage. Select the Priority and Due Date based upon compelling abnormal condition that may

adversely impact public safety and/or service reliability in the next 5 years.

f) Prior to the 2023 Inspection season, PG&E significantly updated the Distribution Overhead Job Aid to provide improved direction to inspectors in the field, as well as adding many pages of photo examples for clarity. We put extra content and emphasis into our training programs so internal/external inspectors understand the importance of these ignition risks.

g) The target is 1.0 target at Distribution 79.77% Critical Attribute pass rate and Transmission at 97.25% Critical Attribute success rate.

h) There are no differences in the audit criteria (as defined by PG&E Distribution Asset Strategy group) from 2022 and 2023. The Quality Assurance program is being leveraged to ensure effectiveness of the Quality Control process within PG&E's quality management system, which provides complimentary layers of defense against.