## PACIFIC GAS AND ELECTRIC COMPANY Wildfire Mitigation Plans Discovery 2023-2025 Data Response

PG&E Data Request No.:	MGRA_010-Q001		
PG&E File Name:	WMP-Discovery2023-2025_DR_MGRA_010-Q001		
Request Date:	April 12, 2024	Requester DR No.:	3
Date Sent:	April 17, 2024	Requesting Party:	Mussey Grade Road Alliance
PG&E Witness:		Requester:	Joseph Mitchell

## PG&E Hardening Plans 2023-2025

Cal Advocates have submitted two data requests to SDG&E, one concerning hardening activities completed in 2023 (CalPA-3.10) and once concerning planned hardening activity in 2025. (CALPA-3.8). This Data Request asks for some of this data and additional fields from SCE, subject to the following caveats:

-PG&E may change the type and scope of its hardening during the course of the project due to unanticipated cost or technical factors

-PG&E may remove any field which is confidential.

-The term "customers" refers to all customers served by or downstream of the circuit segment

## QUESTION 001

Please provide a spreadsheet listing (as rows) of every undergrounding project completed during the period of January 1, 2023, through December 31, 2023, including non-WMP projects. For each project, please provide the following information (as columns):

- a. Project ID number or other identifier
- b. Circuit ID
- c. ID of each circuit segment that was entirely undergrounded in the project
- d. ID of each circuit segment that was partially undergrounded in the project
- e. Total overhead circuit-miles removed
- f. Total circuit-miles of underground conductor installed
- g. Total miles of trenching required
- h. Total electric costs of the project (i.e., costs attributed to your electric facilities), including costs for planning, design, permitting, and construction
- i. Total number of customers served by the project
- j. Total number of minutes of PSPS experienced by the project circuit segments since 2019.

## ANSWER 001

Please see attachment "*WMP-Discovery2023-2025\_DR\_MGRA\_010-Q001Atch01.xlsx*," worksheet "Q1 a-h", for a list of PG&E's system hardening projects with undergrounding miles—as well as the Community Rebuild undergrounding miles—completed in 2023. Descriptions of the included fields are as follows:

- a) In worksheet "Q1 a-h", please see column A (Order).
- b) In worksheet "Q1 a-h", please see column B (Circuit ID), also included are the following related fields:
  - Column C (Circuit Name);
  - Column D (Circuit Protection Zone (CPZ)).
- c) Not applicable. To date, no circuit segment (referred to as a CPZ in this response) has been fully undergrounded. When PG&E undergrounds a CPZ, 100% of the pre-existing overhead circuitry is not replaced because one or more of the following reasons may be applicable:
  - Hardening applied to a CPZ can be a hybrid of mitigation methods (overhead hardening, undergrounding, line removal).
  - There are portions of the CPZ in locations that are infeasible to replace with underground circuitry (e.g. water crossings).
  - Hardening a CPZ may be split into multiple sub-projects, each focused on different portions of the CPZ. Various project specific constraints (e.g. permits) lead to multi-year hardening of a whole CPZ.
- d) Please see the response to subpart (c). All circuit segments (referred to as a CPZ in this response) identified in this response are considered partially undergrounded; therefore, that field is not included in the attachment.
- e) PG&E interprets the request for "Total overhead circuit-miles removed" as the distance of existing overhead infrastructure that was replaced with underground infrastructure in an undergrounding project.

This information is not provided in this response because PG&E currently does not have complete tabular data to provide the total overhead circuit-miles removed relating to the undergrounding project. This information is actively being consolidated and will be available in PG&E's System Hardening Accountability Report in accordance with the requirements of GRC 23-11-069 (OP 20–23).

f) In worksheet "Q1 a-h", please see column T (UG – 2023 Complete). This includes the undergrounding miles completed in 2023.

In worksheet "Q1 a-h", please see column L (Total Planned UG Miles). This includes the sum of all undergrounding miles planned for the project for all years, including 2023 miles completed and pre- and post-2023, where applicable.

Also provided is mileage for our other system hardening methods (overhead hardening and line removal).

g) Trenching length data is not currently captured; therefore, that field is not provided in the attachment.

- h) In worksheet "Q1 a-h", please see column AA (Total Estimated Actual Cost). PG&E interprets "electric costs" as project costs associated with starting and completing an electric undergrounding project; therefore, both incurred and forecasted costs for the project are included.
- In worksheet "Q1 i-j," please see column B (Customer Count April 2024). PG&E does not currently have a complete mapping of customer counts by undergrounding order (job). PG&E is proving the number of customers associated with a CPZ as of April 2024 where undergrounding work has taken place in 2023.

Note, the customers reported by CPZ are not representative of the customers impacted by a specific undergrounding project.

- j) In worksheet "Q1 i-j," please see columns C and D. PSPS minutes are measured at the customer level, but PG&E does not currently have a completed mapping of customers to undergrounding orders (jobs). PG&E is providing two measures associated with total number of minutes of PSPS experienced by the project CPZs since 2019 where undergrounding work has taken place in 2023:
  - 1. The minutes reported in column C (Sum of PSPS Minutes for Average Customer Outage on CPZ) is a total of the average customer outage duration from events in 2019-2023.
  - 2. The minutes reported in column D (Sum of PSPS Minutes for Maximum Event Duration on CPZ) is a total from events in 2019-2023, measuring the duration from the beginning of the first outage start and concluding with the last outage end.

PG&E points out that the minutes reported in column C may be less than the minutes reported in column D for the following reasons:

- Some customers may experience multiple short-duration outages within the same PSPS event, such as microgrid switching. Column C reports the duration as the sum of these multiple outage durations, while column D calculates the time period between the earliest outage start (among these multiple outages) and the last outage end.
- Customers located on the same CPZ may be restored at different times. This
  results in the average outage duration reported, in column C, being lower than
  the duration reported in column D (which uses the restoration time of the last
  customer as the end time).

Note, the PSPS minutes reported by CPZ is not representative of the outages on a specific portion of that CPZ that is in scope of a specific undergrounding project.