

**PACIFIC GAS AND ELECTRIC COMPANY**  
**Wildfire Mitigation Plans Discovery 2022**  
**Data Response**

PG&E Data Request No.:	CalAdvocates_003-Q12		
PG&E File Name:	WMP-Discovery2022_DR_CalAdvocates_003-Q12Rev01		
Request Date:	January 25, 2022	Requester DR No.:	003
Date Sent:	February 10, 2022 Rev01: April 1, 2022	Requesting Party:	Public Advocates Office
PG&E Witness:		Requester:	Alan Wehrman

The following questions relate to your 2022 WMP Update submission.

If a full response to a given question will be included in your WMP submission, your response to that question of this data request may consist of a citation to the specific page(s) or table(s) of the WMP where the information may be found, a written response to the question, or both.

**QUESTION 12**

Please note that the geographical regions are mutually exclusive (i.e., “Other HFTD” excludes areas that are in either Tier 2 or Tier 3). Therefore, for any given circuit-segment, the following relationships should hold:

- Tier 2 miles + Tier 3 miles + Other HFTD miles = total HFTD miles.
- Tier 2 miles + Tier 3 miles + Other HFTD miles + non-HFTD miles = total circuit-segment miles.

Provide an Excel table of all distribution circuit-segments that traverse HFTD areas (i.e., the segment has greater than 0 circuit-miles in HFTD) existing as of January 1, 2022 (as rows) that includes the following information in separate columns.

For items (j) and (k), please include all relevant risk scores. For example, include vegetation risk score, conductor risk score, and any other driver-specific risk scores PG&E has developed. Please insert additional columns as needed to accommodate this.

- a. Circuit name
- b. Circuit ID number
- c. Circuit-segment ID number
- d. Total circuit-segment miles
- e. Circuit-segment miles in Non-HFTD Areas
- f. Circuit-segment miles in Other HFTD
- g. Circuit-segment miles in HFTD Tier 2
- h. Circuit-segment miles in HFTD Tier 3
- i. Circuit-segment voltage

- j. Wildfire Risk Score(s) according to the wildfire risk model used for your 2021 WMP Update submission (may require multiple columns)
- k. Wildfire Risk Score(s) according to the wildfire risk model used for your 2022 WMP Update submission (may require multiple columns)
- l. Number of times the circuit-segment was de-energized in a PSPS event in 2020.
- m. Number of times the circuit-segment was de-energized in a PSPS event in 2021.
- n. Total minutes that the circuit-segment was de-energized due to PSPS events in 2020 (sum of minutes across all PSPS events).
- o. Total minutes that the circuit-segment was de-energized due to PSPS events in 2021 (sum of minutes across all PSPS events).
- p. Total customer-minutes of de-energization on the circuit-segment due to PSPS events in 2020 (sum of customer-minutes across all PSPS events).
- q. Total customer-minutes of de-energization on the circuit-segment due to PSPS events in 2021 (sum of customer-minutes across all PSPS events).
- r. Number of times the circuit-segment was de-energized due to EPSS fast-trip settings in 2021.
- s. Total minutes the circuit-segment was de-energized due to EPSS fast-trip settings in 2021
- t. Total customer-minutes of de-energization on the circuit-segment due to EPSS fast-trip settings in 2021.
- u. Number of trees that were worked on for EVM in Non-HFTD in 2020
- v. Number of trees that were worked on for EVM in Non-HFTD in 2021
- w. Number of trees that were worked on for EVM in Other HFTD in 2020
- x. Number of trees that were worked on for EVM in Other HFTD in 2021
- y. Number of trees that were worked on for EVM in HFTD Tier 2 in 2020
- z. Number of trees that were worked on for EVM in HFTD Tier 2 in 2021
- aa. Number of trees that were worked on for EVM in HFTD Tier 3 in 2020
- bb. Number of trees that were worked on for EVM in HFTD Tier 3 in 2021
- cc. Miles of covered conductor installed in Non-HFTD in 2018
- dd. Miles of covered conductor installed in Non-HFTD in 2019
- ee. Miles of covered conductor installed in Non-HFTD in 2020
- ff. Miles of covered conductor installed in Non-HFTD in 2021
- gg. Miles of covered conductor installed in Other HFTD in 2018
- hh. Miles of covered conductor installed in Other HFTD in 2019
- ii. Miles of covered conductor installed in Other HFTD in 2020
- jj. Miles of covered conductor installed in Other HFTD in 2021

kk. Miles of covered conductor installed in HFTD Tier 2 in 2018  
 ll. Miles of covered conductor installed in HFTD Tier 2 in 2019  
 mm. Miles of covered conductor installed in HFTD Tier 2 in 2020  
 nn. Miles of covered conductor installed in HFTD Tier 2 in 2021  
 oo. Miles of covered conductor installed in HFTD Tier 3 in 2018  
 pp. Miles of covered conductor installed in HFTD Tier 3 in 2019  
 qq. Miles of covered conductor installed in HFTD Tier 3 in 2020  
 rr. Miles of covered conductor installed in HFTD Tier 3 in 2021  
 ss. Number of poles replaced in Non-HFTD in 2018  
 tt. Number of poles replaced in Non-HFTD in 2019  
 uu. Number of poles replaced in Non-HFTD in 2020  
 vv. Number of poles replaced in Non-HFTD in 2021  
 ww. Number of poles replaced in Other HFTD in 2018  
 xx. Number of poles replaced in Other HFTD in 2019  
 yy. Number of poles replaced in Other HFTD in 2020  
 zz. Number of poles replaced in Other HFTD in 2021  
 aaa. Number of poles replaced HFTD Tier 2 in 2018  
 bbb. Number of poles replaced HFTD Tier 2 in 2019  
 ccc. Number of poles replaced HFTD Tier 2 in 2020  
 ddd. Number of poles replaced HFTD Tier 2 in 2021  
 eee. Number of poles replaced HFTD Tier 3 in 2018  
 fff. Number of poles replaced HFTD Tier 3 in 2019  
 ggg. Number of poles replaced HFTD Tier 3 in 2020  
 hhh. Number of poles replaced HFTD Tier 3 in 2021  
 iii. Miles of underground conductor installation in Non-HFTD in 2018  
 jjj. Miles of underground conductor installation in Non-HFTD in 2019  
 kkk. Miles of underground conductor installation in Non-HFTD in 2020  
 ll. Miles of underground conductor installation in Non-HFTD in 2021  
 mmm. Miles of underground conductor installation in Other HFTD in 2018  
 nnn. Miles of underground conductor installation in Other HFTD in 2019  
 ooo. Miles of underground conductor installation in Other HFTD in 2020  
 ppp. Miles of underground conductor installation in Other HFTD in 2021  
 qq. Miles of underground conductor installation in HFTD Tier 2 in 2018  
 rrr. Miles of underground conductor installation in HFTD Tier 2 in 2019  
 sss. Miles of underground conductor installation in HFTD Tier 2 in 2020

ttt. Miles of underground conductor installation in HFTD Tier 2 in 2021  
 uuu. Miles of underground conductor installation in HFTD Tier 3 in 2018  
 vvv. Miles of underground conductor installation in HFTD Tier 3 in 2019  
 www. Miles of underground conductor installation in HFTD Tier 3 in 2020  
 xxx. Miles of underground conductor installation in HFTD Tier 3 in 2021  
 yyy. Miles of LiDAR inspection in Non-HFTD in 2020  
 zzz. Miles of LiDAR inspection in Non-HFTD in 2021  
 aaaa. Miles of LiDAR inspection Other HFTD in 2020  
 bbbb. Miles of LiDAR inspection Other HFTD in 2021  
 cccc. Miles of LiDAR inspection HFTD Tier 2 in 2020  
 dddd. Miles of LiDAR inspection HFTD Tier 2 in 2021  
 eeee. Miles of LiDAR inspection HFTD Tier 3 in 2020  
 ffff. Miles of LiDAR inspection HFTD Tier 3 in 2021  
 gggg. Number of detailed overhead inspections in Non-HFTD in 2020  
 hhhh. Number of detailed overhead inspections in Non-HFTD in 2021  
 iiii. Number of detailed overhead inspections in Other HFTD in 2020  
 jjjj. Number of detailed overhead inspections in Other HFTD in 2021  
 kkkk. Number of detailed overhead inspections in HFTD Tier 2 in 2020  
 llll. Number of detailed overhead inspections in HFTD Tier 2 in 2021  
 mmmm. Number of detailed overhead inspections in HFTD Tier 3 in 2020  
 nnnn. Number of detailed overhead inspections in HFTD Tier 3 in 2021  
 oooo. Number of sectionalization devices installed in Non-HFTD in 2018  
 pppp. Number of sectionalization devices installed in Non-HFTD in 2019  
 qqqq. Number of sectionalization devices installed in Non-HFTD in 2020  
 rrrr. Number of sectionalization devices installed in Non-HFTD in 2021  
 ssss. Number of sectionalization devices installed in Other HFTD in 2018  
 tttt. Number of sectionalization devices installed in Other HFTD in 2019  
 uuuu. Number of sectionalization devices installed in Other HFTD in 2020  
 vvvv. Number of sectionalization devices installed in Other HFTD in 2021  
 wwww. Number of sectionalization devices installed in HFTD Tier 2 in 2018  
 xxxx. Number of sectionalization devices installed in HFTD Tier 2 in 2019  
 yyyy. Number of sectionalization devices installed in HFTD Tier 2 in 2020  
 zzzz. Number of sectionalization devices installed in HFTD Tier 2 in 2021  
 aaaaa. Number of sectionalization devices installed in HFTD Tier 3 in 2018  
 bbbbb. Number of sectionalization devices installed in HFTD Tier 3 in 2019

- cccc. Number of sectionalization devices installed in HFTD Tier 3 in 2020
- dddd. Number of sectionalization devices installed in HFTD Tier 3 in 2021

## Answer 12 Revised 01

Pursuant to the Public Advocates Office’s revised Data Request received on January 13, 2022, PG&E is providing the requested distribution information at the circuit segment level, where possible, in the attachment named “WMP-Discovery2022\_DR\_CalAdvocates\_003-Q01Atch01CONF.xlsx.” Included in the table below are notes that document assumptions in the methodology for data collection as well as statements identifying where we are unable to provide the requested information at the circuit segment level. For purposes of this request, “Other HFTD” refers to Zone 1 areas.

In most cases, PG&E maintains the requested program data at the circuit level in GIS to effectively operate each program. When segmentation is required for a program, that program creates a program-specific segment and is separate from other potential segments that may be required in other programs. For programs that require segmentation beyond a circuit level, authoritative asset and geospatial data continues to be authoritatively maintained within GIS at the circuit level, and only the information specific to the program need is maintained outside of GIS for the segment. For the requests below, circuit segment level data exists for PSPS de-energization and Enhanced Vegetation Management.

Data	Question	Notes
Circuit Information	a-i	Only the Segment Name field is maintained by the PSPS and EVM departments. All other data is maintained at a Circuit level within GIS and has been provided in response to Question 1.
Wildfire Risk Scores	j-k	PG&E’s latest vintage of our Wildfire Risk Model utilizes segments generated in <del>2021</del> 2020. PG&E has previously provided this data to the Public Advocates Office (see PG&E’s response to Data Request CalAdvocates-PGE-2021WMP-01, Question 4, attachment “WildfireMitigationPlans_DR_CalAdvocates_035-Q04-Atch01.xlsx”. Segmentation as of 01/01/2022 has not been generated, as it would result in different segments and risk scores than those being utilized to develop PG&E’s work plans.
PSPS	l-q	See the “De-energization” notes in response Question 1. In addition, for Question 12 items

		<p>“n” and “o”, PG&amp;E has used the earliest customer outage time to reflect the de-energization time for the circuit segment listed, and the latest customer restoration time. These start/end times were used as reference points to calculate the total de-energization duration for the listed circuit-segments which were de-energized as part of the 2020 and 2021 PSPS season. The total duration per event per circuit-segment were then summed across all PSPS events to arrive at the total minutes the circuit-segments were de-energized across all events.</p> <p>Please note for Question 12 items “p” and “q”, the customer-minute values at the circuit segment-level cannot be aggregated to the customer-minute levels at the circuit level in such a way that matches the outputs in Question 1 items “s” and “t”. This is due to the fact that Question 1 includes circuits that traverse non-HFTD areas, whereas Question 12 only considers circuit-segments that traverse HFTD areas. Hence, if a circuit has segments in both non-HFTD and HFTD areas, the non-HFTD segment will not be reflected in Question 12, and the sum of customer-minutes will not match all the customer-minutes accounted for in Question 1.</p>
Enhanced Powerline Safety Settings (EPSS)	r-t	The data is maintained at a Circuit level and has been provided within Question 1.
EVM	u-bb	Circuit segments (Circuit Protection Zones) for EVM were based on the 2018-2019 Wildfire Distribution Risk Model.
Covered Conductor	cc-rr	The data is maintained at a Circuit level and has been provided within Question 1.
Number of Poles Replaced	ss-hhh	The data is maintained at a Circuit level and has been provided within Question 1.
Underground Conductor Installation	iii-xxx	The data is maintained at a Circuit level and has been provided within Question 1.

LiDAR inspection	yyy-ffff	The data will be provided, at a Circuit level, as a supplement to Question 1.
Detailed Overhead Inspections	gggg-nnnn	The data is maintained at a Circuit level and has been provided within Question 1.
Sectionalization Devices	oooo-ddddd	The data is maintained at a Circuit level and has been provided within Question 1.