

PACIFIC GAS AND ELECTRIC COMPANY
Wildfire Mitigation Plans
Rulemaking 18-10-007
Data Response

PG&E Data Request No.:	CalAdvocates_035-Q04		
PG&E File Name:	WildfireMitigationPlans_DR_CalAdvocates_035-Q04		
Request Date:	January 19, 2021	Requester DR No.:	CalAdvocates-PGE-2021WMP-01
Date Sent:	February 12, 2021	Requesting Party:	Public Advocates Office
PG&E Witness:		Requester:	Matthew Yunge, PE

QUESTION 04 - AMENDED FEBRUARY 1, 2021

Provide an Excel table of all distribution circuits existing in 2020 (as rows) that includes the following information in separate columns. Items (a) through (gk) are features of the circuit. Items (h) through (elggg) pertain to work performed for each circuit.

- a. Circuit Name
- b. Circuit ID Number
- c. Total Circuit Miles
- d. Circuit Miles in non-High Fire Threat District (HFTD) Areas
- e. Circuit Miles in HFTD Tier 2
- f. Circuit Miles in HFTD Tier 3
- g. Circuit Voltage
- h. Wildfire Risk Level¹
- i. Circuit SAIDI (System Average Interruption Duration Index) for 2020
- j. Circuit SAIFI (System Average Interruption Frequency Index) for 2020
- k. Circuit MAIFI (Momentary Average Interruption Frequency Index) for 2020
- l. Miles of Enhanced Vegetation Management (EVM) Work in Non-High-Fire Threat District (HFTD) Areas in 2020
- m. Miles of EVM Work in HFTD Tier 2 in 2020
- n. Miles of EVM Work in HFTD Tier 3 in 2020
- o. Miles of Routine Vegetation Management Work in Non-High-Fire Threat District (HFTD) Areas in 2020
- p. Miles of Routine Vegetation Management Work in HFTD Tier 2 in 2020
- q. Miles of Routine Vegetation Management Work in HFTD Tier 3 in 2020

¹ This refers to the risk calculated for each given circuit, as an output of your quantitative wildfire risk model, if the answer to Question 3(a) is "yes".

- r. Miles of Covered Conductor Installed in Non-HFTD in 2018
- s. Miles of Covered Conductor Installed in Non-HFTD in 2019
- t. Miles of Covered Conductor Installed in Non-HFTD in 2020
- u. Miles of Covered Conductor Installed in HFTD Tier 2 in 2018
- v. Miles of Covered Conductor Installed in HFTD Tier 2 in 2019
- w. Miles of Covered Conductor Installed in HFTD Tier 2 in 2020
- x. Miles of Covered Conductor Installed in HFTD Tier 3 in 2018
- y. Miles of Covered Conductor Installed in HFTD Tier 3 in 2019
- z. Miles of Covered Conductor Installed in HFTD Tier 3 in 2020
- aa. Number of Poles Replaced in Non-HFTD in 2018
- bb. Number of Poles Replaced in Non-HFTD in 2019
- cc. Number of Poles Replaced in Non-HFTD in 2020
- dd. Number of Poles Replaced HFTD Tier 2 in 2018
- ee. Number of Poles Replaced HFTD Tier 2 in 2019
- ff. Number of Poles Replaced HFTD Tier 2 in 2020
- gg. Number of Poles Replaced HFTD Tier 3 in 2018
- hh. Number of Poles Replaced HFTD Tier 3 in 2019
- ii. Number of Poles Replaced HFTD Tier 3 in 2020
- jj. Miles of Underground Conductor Installation in Non-HFTD in 2018
- kk. Miles of Underground Conductor Installation in Non-HFTD in 2019
- ll. Miles of Underground Conductor Installation in Non-HFTD in 2020
- mm. Miles of Underground Conductor Installation in HFTD Tier 2 in 2018
- nn. Miles of Underground Conductor Installation in HFTD Tier 2 in 2019
- oo. Miles of Underground Conductor Installation in HFTD Tier 2 in 2020
- pp. Miles of Underground Conductor Installation in HFTD Tier 3 in 2018
- ~~qq. Miles of Underground Conductor Installation in HFTD Tier 3 in 2018~~
- qq. Miles of Underground Conductor Installation in HFTD Tier 3 in 2019
- rr. Miles of Underground Conductor Installation in HFTD Tier 3 in 2020
- ss. Miles of Light Detection and Ranging (LiDAR) Inspection in Non-HFTD in 2020
- tt. Miles of LiDAR Inspection HFTD Tier 2 in 2020
- uu. Miles of LiDAR Inspection HFTD Tier 3 in 2020
- vv. Number of Detailed Overhead Inspections in Non-HFTD in 2020
- ww. Number of Detailed Overhead Inspections HFTD Tier 2 in 2020

- xx. Number of Detailed Overhead Inspections HFTD Tier 3 in 2020
- yy. Number of Sectionalization Devices Installed in Non-HFTD in 2018
- zz. Number of Sectionalization Devices Installed in Non-HFTD in 2019
- aaa. Number of Sectionalization Devices Installed in Non-HFTD in 2020
- bbb. Number of Sectionalization Devices Installed HFTD Tier 2 in 2018
- ccc. Number of Sectionalization Devices Installed HFTD Tier 2 in 2019
- ddd. Number of Sectionalization Devices Installed HFTD Tier 2 in 2020
- eee. Number of Sectionalization Devices Installed HFTD Tier 3 in 2018
- fff. Number of Sectionalization Devices Installed HFTD Tier 3 in 2019
- ggg. Number of Sectionalization Devices Installed HFTD Tier 3 in 2020

ANSWER 04

PG&E is providing the requested information in the attachment named "WildfireMitigationPlans_DR_CalAdvocates_035-Q04_Atch01.xlsx". Included in the table below are notes that document assumptions in the methodology for data collection. Where we have not included any notes, the data provided did not require adaptations or assumptions in answering the request.

Data	Question	Notes
Circuit Information	a. - g.	<ul style="list-style-type: none"> Assets (miles) in Zone 1 were not requested separately but do not fall into column d, e or f. For completeness of understanding HFTD assets miles in Zone 1 have been included in Tier 2 data in column e. Some circuits can have multiple voltages. Where this occurs the Circuit Voltage in column g reflects the voltage of the majority of the circuit (based on circuit miles).
Wildfire Risk Level	h.	<ul style="list-style-type: none"> Wildfire Risk Level is populated using the distribution risk model developed in 2018 as this was the primary model used to prioritize work from 2018-2020. That risk model was developed for circuits in high fire threat districts. Circuits not in high fire threat districts do not have a risk score via that model and are labeled as 'Non-HFTD'. Note also that some activities, including enhanced vegetation management, actually used further customized risk models for prioritizing work during this 2018-2020 period.
SAIDI / SAIFI / MAIFI	i. - k.	<ul style="list-style-type: none"> The denominator for this calculation is based on number of customers per circuit (so it is a circuit-specific average).

		<ul style="list-style-type: none"> Distribution outages were used for these calculations such that outages caused by the Transmission system are not included (even though distribution customers may have experienced an outage due to the transmission system outage).
Vegetation Management	l. - q.	<ul style="list-style-type: none"> Mileage by Risk zone has been capped at the length of the circuit thus if a location was inspected or worked multiple times in a year (which is common in many HFTD areas) that is not reflected in this data Zone 1 miles have been included in Tier 2 data
Miles of Covered Conductors	r. - z.	
Number of Poles	aa. - ii.	
Miles of Underground Conductors	jj. - rr.	
LiDAR Inspections	ss. - uu.	<ul style="list-style-type: none"> LiDAR inspection mileage has been capped at the length of the circuit thus ignoring any cases where a segment was inspected multiple times.
Detailed Overhead Inspections	vv. - xx.	<ul style="list-style-type: none"> Total OH inspection mileage was capped at the length of the circuit thus ignoring any cases where a segment was inspected multiple times.
Number of Sectionalization Devices	yy. - ggg.	<ul style="list-style-type: none"> Sectionalization devices include, but are not limited to, devices such as fuses that are replaced / installed on a regular basis across all circuits and by multiple programs. These devices can serve as sectionalized devices during planned or unplanned outages (including PSPS). This data includes locations where an existing device was replaced with a newly upgraded device, for example where a non-exempt fuse was replaced with a new, exempt fuse for wildfire risk mitigation This data counts all sectionalizing devices that were installed in the relevant year. Note that some devices are installed in tandem (a switch next to a fuse) for operational purposes and that on three-phase circuits one “sectionalizing point” often includes three devices, one for each phase of the electric distribution circuit.