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

PG&E Data Request No.:	TURN_022-Q04		
PG&E File Name:	WildfireMitigationPlans_DR_TURN_022-Q04		
Request Date:	March 10, 2021	Requester DR No.:	WMP 2021 DR TURN-PGE-008
Date Sent:	March 15, 2021	Requesting Party:	The Utility Reform Network
PG&E Witness:		Requester:	Tom Long

QUESTION 04

Has PG&E performed in the past – or does it intend to perform in the future – EVM work where System Hardening work (as described in Section 7.3.3.17.1) has been performed?

a. If not, why not?

b. If so:

   i. Provide an annual count, for 2019 and 2020, of miles of EVM work that have been performed where System Hardening work had already been performed and, for 2021, an estimate of miles of EVM work that will be performed where System Hardening work was previously performed.

   ii. Please provide PG&E's best quantitative estimate of the incremental RSE – that is, incremental risk reduction divided by incremental cost – of performing EVM on system miles where Distribution System Hardening as discussed in WMP Section 7.3.3.17.1 has been performed. Please provide the inputs and calculations to derive this quantitative estimate. If PG&E is unable to provide a quantitative estimate, explain why not.

ANSWER 04

a. See the response to Question 4 (b)(i) below for information responsive to this question.

b. (i) In 2019, PG&E performed EVM work on approximately 20 miles where System Hardening work was performed in either 2019 or 2020. In 2020, PG&E performed EVM work on approximately 10 miles where System Hardening work was performed work in either 2019 or 2020. Providing the specific project timeline for each of the EVM and system hardening projects involved would require additional time for a manual review of records.

   In 2021, PG&E does not plan to perform EVM work where System Hardening was previously performed in 2019, 2020 or is planned for 2021.

(ii) PG&E's incremental RSE is based off the difference between effectiveness of overlapping sub-drivers between EVM and System Hardening, see table below. For example, for EVM, a vegetation caused incident with Branch (Overhanging) has an effectiveness of 90%, while for System Hardening this incident has an effectiveness of 48%. Hence, the incremental effectiveness of EVM where System hardening is performed is 90% - 48% = 42%, for that driver. The incremental cost of performing EVM work where there is an overlap is assumed to be the full cost of an EVM mile. Using this analysis, the incremental RSE is 1.8, details of the calculation can be seen in attached workpaper 'WildfireMitigationPlans_DR_TURN_022-Q02-Atch01'.

Vegetation	SH	EVM	SH+EVM	Incremental SH on EVM-ed mile*	Incremental EVM on SH-ed mile
Branch (Not overhanging, > 12ft)	54%	0%	54%	54%	0%
Branch (Overhanging)	48%	90%	90%	0%	42%
Dead	54%	0%	54%	54%	0%
Fell into (Moderate-Severe defect)	46%	95%	95%	0%	49%
Fell into (No defect)	50%	0%	50%	50%	0%
Fell into (slight defect)	45%	50%	50%	0%	5%
Grow Into	50%	50%	50%	0%	0%
Other/Unknown	18%	0%	18%	18%	0%
Branch (Not overhanging, Distance Unknown)	51%	0%	51%	51%	0%
Branch (Not overhanging, 4-12ft)	65%	50%	65%	15%	0%
Branch (Not overhanging, within 4ft)	57%	90%	90%	0%	33%