

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

PG&E Data Request No.:	TURN_022-Q02		
PG&E File Name:	WildfireMitigationPlans_DR_TURN_022-Q02		
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 02

Please provide PG&E's best quantitative estimate of the incremental RSE – that is, incremental risk reduction divided by incremental cost – of performing Distribution System Hardening as discussed in WMP Section 7.3.3.17.1 on system miles in which PG&E has performed Enhanced Vegetation Management as discussed in WMP Section 7.3.5. 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 02

PG&E's incremental RSE is based off the System Hardening effectiveness, net of any overlapping sub-drivers between Enhanced Vegetation Management (EVM) and System Hardening in which EVM has higher effectiveness. See below table for the overlapping effectiveness for vegetation. For example, for system hardening, a vegetation caused outage with Branch (Not overhanging, 4-12ft) of 65%, while for EVM this incident has an effectiveness of 50%. Hence, the incremental effectiveness of system hardening where EVM is performed is $65-50\% = 15\%$, for that driver. The incremental cost of performing System Hardening work where this is an overlap is assumed to be the full cost of the system hardening mile. The incremental RSE is 3.5, 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%

Vegetation*	SH	EVM	SH+EVM	Incremental SH on EVM-ed mile*	Incremental EVM on SH-ed mile
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%

*Note: incremental effectiveness for all drivers other than vegetation for System Hardening remains the same.