

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

PG&E Data Request No.:	CalAdvocates_023-Q07		
PG&E File Name:	WMP-Discovery2022_DR_CalAdvocates_023-Q07		
Request Date:	June 29, 2022	Requester DR No.:	CalAdvocates-PGE-2022WMP-23
Date Sent:	July 14, 2022	Requesting Party:	Public Advocates Office
PG&E Witness:		Requester:	Henry Burton

Fast Curve Settings for 2021

QUESTION 07

Please provide the following details regarding fast curve settings that PG&E used in 2021 during high fire-risk weather:

- a) How PG&E calculates the fault duty of the next downstream recloser, including what type of faults PG&E calculates (e.g., line-to-ground, line-to-line, triple-line-to-ground)
- b) How PG&E coordinated circuit breakers and main line reclosers with fuses; and
- c) What the instantaneous tripping currents in 2021 were for the hot-line tag (HLT) settings mode.

ANSWER 07

- a) PG&E calculates¹ fault duty using a load flow and short circuit modeling tool named "CYME". PG&E uses CYME to analyze calculated fault duty values within protective zones for three-phase, line-to-line, and line-to-ground faults based upon the as-built GIS network model and equipment properties.
- b) As part of 2021 and 2022 EPSS settings, EPSS implementation attempts to overreach fuse protective zones where possible to mitigate to the extent possible certain high impedance backfeed conditions associated with 1/2, 1/3, or 2/3 fuses operating for a line to ground fault which could result in an uncleared fault. No coordination is provided between line reclosers vs. fuses or circuit breakers vs. fuses².
- c) For HLT settings mode, the instantaneous tripping pickup values are the normal phase and ground overcurrent pickup settings.

¹ PG&E states that it applies instantaneous tripping for the line length up to the next downstream recloser. See "WMP-Discovery2022_DR_CalAdvocates_023-Q07Atch01CONF" p. 2.

² See "WMP-Discovery2022_DR_CalAdvocates_023-Q07Atch01CONF" (p. 2) and "WMP-Discovery2022_DR_CalAdvocates_023-Q07Atch02CONF" (p. 3).