

**PACIFIC GAS AND ELECTRIC COMPANY  
Wildfire Mitigation Plans Discovery 2023  
Data Response**

PG&E Data Request No.:	OEIS_003-Q014		
PG&E File Name:	WMP-Discovery2023_DR_OEIS_003-Q014		
Request Date:	April 21, 2023	Requester DR No.:	P-WMP_2023-PG&E-003
Date Sent:	April 26, 2023	Requesting Party:	Office of Energy Infrastructure Safety
DRU Index #:		Requester:	Colin Lang

**SUBJECT: REGARDING PG&E’S FAULT RAMER REPLACEMENTS**

**QUESTION 014**

- a. Provide the numbers of fault tamers PG&E has replaced by year since 2020.
- b. Provide PG&E’s targets for fault tamer replacements in 2023 and 2024, as applicable.
- c. Provide the number of fault tamer devices within PG&E’s HFTD.
- d. Provide the number of fault tamer devices identified as needing replacement within PG&E’s HFTD.

**ANSWER 014**

- a. We interpret “replaced” to mean a proactive changing of an in-service fault tamer fuse that had not failed or operated normally due to a fault. In July 2021, in response to our 2020 causal evaluation of 4 apparent fault tamer failures, we published a bulletin that requires replacement of the entire fuse after a fault (no re-use of the backup limiter portion of the fuse).

We replaced fuses at seven locations associated with recent transformer changeouts in high wildfire consequence zones. At the time, there was a hypothesis that fault tamer failures were correlated with transformer changeouts. That hypothesis has since been disproven.

Several fault tamer replacements from circuits in the Sonoma division were completed in August 2022 to support our failure evaluation. On 10/06/2022, after identifying an internal weld separation issue as the root cause of a recent increase in failures associated with 2021 and newer vintage fuses, we issued a full stop of new fault tamer installs, and we purged and returned all fault tamer inventory.

- b. We do not have any defined targets for proactive replacements in 2023 and 2024, unless they are identified in our GO165 inspection program guidance, as revised for 2023 to better assess for fuse end of life conditions and to reflect recent updates in manufacturer guidelines. New fault tamers are not currently being installed, so when a fault tamer fuse operates after a fault, it is replaced with a substitute fuse.
- c. We have records indicating there are 59,102 fault tamer fuses in service for transformer protection in HFTD, installed between 2020 and 2022, through the

October 2022 purge of fault tamer inventory. There are additional fault tamers installed prior to 2020 and a separate smaller population of fault tamers installed for line protection. Those totals are not available in the limited amount of time to respond to this data request.

- d. Please reference our response to Q14 subpart (b).