

PACIFIC GAS AND ELECTRIC COMPANY
Wildfire Mitigation Plans Discovery 2023-2025
Data Response

PG&E Data Request No.:	CalAdvocates_043-Q006		
PG&E File Name:	WMP-Discovery2023-2025_DR_CalAdvocates_043-Q006		
Request Date:	April 12, 2024	Requester DR No.:	CalAdvocates-PGE-2025WMP-07
Date Sent:	April 17, 2024	Requesting Party:	Public Advocates Office
PG&E Witness:		Requester:	Holly Wehrman

System hardening alternatives analysis

Table ACI-PG&E-23-05-3 on page 55 of PG&E's 2025 WMP Update lists 10 possible alternatives PG&E anticipates using in its WBCA. Questions 1 through 9 relate to this table.

QUESTION 006

The table notes, "Not all substations are capable of having REFCL applied, and it cannot be isolated to a circuit segment only."

- a) How many substations does PG&E have that serve circuit segments within its HFTD/HFRA?
- b) How many of the substations in your response to part (a) are not capable of having REFCL applied?
- c) Provide a list of the substations in part (b). For each substation, state the reasons why REFCL cannot be applied.
- d) If PG&E has not conducted the analysis necessary to respond to parts (b) and (c) in full, please explain why not.

ANSWER 006

- a) Approximately 435 distribution substations serve circuit segments within HFTD/HFRA.
- b) After preliminary screening, 302 of these distribution substations are not feasible for REFCL deployment.
- c) Please see attachment WMP-Discovery2023-2025_DR_CalAdvocates_043-Q006Atch01.xlsx, which includes a list of all substations within an HFTD/HFRA (column A). Column B (Pass/Fail) denotes if the substation meets (Pass) or does not meet (Fail) the requirements where REFCL can or cannot be applied.

Substations that are categorized as not feasible (Fail) in the analysis are due to one or a combination of the following reasons below:

- Column C (kV): Connected circuits are not 12 kV;

- Column D (3 Wire or 4 Wire): Substations have 4-wire multi-grounded distribution circuits connected to the substation or a mix of connections.
- Column E (HFTD Miles): Total HFTD/HFRA circuit miles is less than twenty miles;
- Column F (Auto in the Sub): Autotransformer located inside the substation.
- Column G (Field Auto Analysis): Circuit mileage downstream of autotransformers is greater than twenty percent; and
- Column I (Coil Charge Amps): The total charging current exceeds 167 Amps, for each Distribution Substation bank (number of banks per substation outlined in Column H). The Coil Charge Amps are calculated as an alternative way to measure the proportion of a circuit underground (less than 50% of circuit is underground).

d) Not applicable, please see the responses provided in subparts (b) and (c) above.