

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

PG&E Data Request No.:	CalAdvocates_011-Q003		
PG&E File Name:	WMP-Discovery2023_DR_CalAdvocates_011-Q003		
Request Date:	April 5, 2023	Requester DR No.:	CalAdvocates-PGE-2023WMP-11
Date Sent:	April 10, 2023	Requesting Party:	Public Advocates Office
DRU Index #:		Requester:	Pui-Wa LI

The following questions relate to your 2023-2025 WMP submission and also the following documents:

- PG&E’s 2022 WMP, Section 7.1.E, Attachment 1 (Attch_Q3.pdf),
- PG&E’s presentation during the 2021 EPIC Symposium (Attch_Q6_EPIC_Presentation.pdf),
- PG&E’s Electric Preliminary Statement Part FY (Tariff Sheet No. 52259-E), and
- PG&E’s Test Year 2023 GRC, Application 21-06-021, Exhibit PG&E-04 and Exhibit PG&E-17.

TOPIC: RAPID EARTH FAULT CURRENT LIMITER (REFCL)

QUESTION 003

PG&E’s 2022 WMP, Section 7.1.E, Attachment 1 (Attch_Q3.pdf) states the following regarding the project status of EPIC 3.15—Proactive Wires Down Mitigation Demonstration Project (Rapid Earth Fault Current Limiter) as of February 25, 2022:

Evaluation of additional substations for suitability of additional REFCL installations has begun but is pending results and learnings of the initial EPIC project before design or field work starts on additional sites. After an initial screening process, 25 distribution substations with circuits in HFTDs are candidates for potential REFCL deployments.¹

- a) As of March 27, 2023, what is the status of PG&E’s “[e]valuation of additional substations for suitability of additional REFCL installations”?
- b) Given the status in subpart (a) of this question, please fill in the following table:

Year	2023	2024	2025	2026
Forecast Capital Expenditure for MWC 49R (\$)				
Forecast O&M Expenses for MWC 49R (\$)				

¹ PG&E’s 2022 WMP, Section 7.1.E, Attachment 1, p. 19.

- c) Given the status in subpart (a) of this question, what are PG&E’s spending plans on:
 - i. MWC 49R, and
 - ii. the REFCL pilot?
- d) As of March 27, 2023, what conclusions or findings has PG&E reached based on its “evaluation of additional substations for suitability of additional REFCL installations”?
- e) Please provide the date(s) when PG&E started “design or field work on additional sites.”
- f) Please identify each such site referred to in (e) and state the applicable dates for each.
- g) PG&E states that “25 distribution substations with circuits in HFTDs are candidates for potential REFCL deployments.” As of March 27, 2023, how many of PG&E’s distribution substations with circuits in HFTDs are currently candidates for potential REFCL deployments?
- h) For each of the candidate substations included in your response to part (e), please fill in the following table:

Name of Each Candidate Substation	Planned Start Date to Test REFCL on the Substation	Planned Start Date to Deploy REFCL on the Substation
<insert here>	<insert here>	

ANSWER 003

PG&E objects to the portions of this request relating to Major Work Category (MWC) 49R as beyond the scope of this proceeding. Notwithstanding and without waiving this objection, PG&E responds as follows:

- a. PG&E has not performed an evaluation of additional substations for suitability of additional REFCL installations since the previous list of 25 distribution substations. PG&E is still evaluating the technology in its demonstration project before making decisions about additional deployments.
- b. Given the ongoing evaluation described in response to subpart (a) above, our forecast as of 4/6/2023 is as follows:

Year	2023	2024	2025	2026
Forecast Capital Expenditure for MWC 49R (\$)	\$0	\$0	\$0	\$0
Forecast O&M Expenses for MWC 49R (\$)	\$0	\$0	\$0	\$0

- c. PG&E has no spending plans for MWC 49R in 2023 and limited spend to complete evaluation of the REFCL demonstration project under the EPIC budget.

- d. REFCL is less suitable in substations which have a high percentage of underground cable circuit miles on the distribution circuits. Many of PG&E's substations serving three-wire circuits do not have physical space available for the REFCL equipment. Lastly, all the banks in the substation must have 3-wire distribution circuits. Mixing 4-wire distribution banks and 3-wire distribution banks in the same substation affects suitability of REFCL.
- e. PG&E has not started detailed design or capital work of additional sites for REFCL.
- f. Not applicable, as described in response to subpart (e) above.
- g. PG&E has not performed evaluation of additional substations for potential REFCL deployments, so this number is still 25.
- h. Not applicable, as described in response to subparts (e) and (f) above.