

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

PG&E Data Request No.:	CalAdvocates_014-Q05		
PG&E File Name:	WMP-Discovery2022_DR_CalAdvocates_014-Q05		
Request Date:	March 10, 2022	Requester DR No.:	CalAdvocates-PGE-2022WMP-14
Date Sent:	March 15, 2022	Requesting Party:	Public Advocates Office
PG&E Witness:		Requester:	Dillon Copa

The following questions relate to your 2022 WMP Update submission.

**QUESTION 05**

On Pg. 451 of PG&E's 2022 WMP, PG&E states, "Recently, moisture intrusion issues have been identified in some of the "Viper" branded reclosers that have been installed on the PG&E system. After significant rains in the fall of 2021, this issue, which impacts the functionality but not the safety of these devices, was identified in several locations."

- a) Please describe the moisture intrusion issue occurring on the Viper reclosers.
- b) Please state the basis for PG&E's assertion that the issue "impacts the functionality but not the safety of these devices."
- c) Please describe the functionality issues occurring on the Viper reclosers.

**ANSWER 05**

- a) Since 10/24/21, approximately 70 Viper Reclosers have failed in the field from moisture intrusion into the connector cables at the interface with the junction box on the recloser assembly. The cause of the moisture intrusion stems from faulty cable connectors that do not fully seal the interface between the control cable and junction box on the Line Recloser (LR). The Moisture intrusion into the cable connector is creating a short that sends a false 69 Yellow Handle Trip Signal to the Controller, which causes the LR to open and lock out all three phase interrupters.
- b) The moisture intrusion does not appear to cause the Viper LR to fail into a closed position. Of the population of over 900 Viper Line Reclosers installed in the PG&E system with the connector cable design, less than 8% of the devices have mis-operated due to moisture intrusion. Given that the faulty devices have failed into an open position, the devices de-energize a circuit, which does not present an electrical safety hazard to workers or the public. As an added safety measure, PG&E revised the operating procedures for all Viper Line Reclosers to require that the LR is physically "locked out" by operating the yellow handles any time the LR is opened or used as a clearance point for maintenance work, PSPS events or other clearances. These additional measures will ensure that the LR cannot inadvertently close while in the open position.
- c) The Moisture intrusion into the cable connector is creating a short that sends a

false 69 Yellow Handle Trip Signal to the Controller, which causes the LR to open and lock out all three phase interrupters.