

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

PG&E Data Request No.:	MGRA_002-Q001		
PG&E File Name:	WMP-Discovery2023_DR_MGRA_002-Q001		
Request Date:	April 20, 2023	Requester DR No.:	MGRA-PGE-WMP23_No.2
Date Sent:	April 25, 2023	Requesting Party:	Mussey Grade Road Alliance
DRU Index #:		Requester:	Joseph Mitchell

**REFCL**

*With regard to PG&E's response to CalPA\_Set WMP-11\_Q14: PG&E states that one of the significant changes to the grid required for REFCL is "The replacement of old, direct bury underground cable":*

**QUESTION 001**

Please explain the incompatibility of "old, direct bury underground cable" with REFCL.

**ANSWER 001**

During the demonstration project, we reviewed primary distribution equipment insulation ratings. During REFCL operation, line-to-ground voltage increases by 1.7 times, so the equipment must be able to withstand this increased voltage. A long run of old (1970 build), direct bury underground cable was identified during the review. The cable was tested for concentric neutral resistance and tan delta. The cable sections did not pass the tests and would likely fail during REFCL operation, so the cable sections were replaced. Underground cable replacements like this may be needed before a REFCL can be put into service for a given distribution substation.