

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

PG&E Data Request No.:	CalAdvocates_028-Q04		
PG&E File Name:	WMP-Discovery2022_DR_CalAdvocates_028-Q04		
Request Date:	July 27, 2022	Requester DR No.:	CalAdvocates-PGE-2022WMP-28
Date Sent:	August 1, 2022	Requesting Party:	Public Advocates Office
PG&E Witness:		Requester:	Holly Wehrman

The following questions relate to PG&E's July 26, 2022 response to the Revision Notice For Pacific Gas And Electric Company's 2022 Wildfire Mitigation Plan Update issued by Energy Safety on May 26, 2022 (hereinafter, PG&E's response to the revision notice).

**QUESTION 04**

Page 2 of PG&E's response to the revision notice states,

“PG&E's subject matter experts estimate that placing overhead lines underground reduces ignition risk by approximately 99% in that location.”

- a) Please describe PG&E's validation process for your estimate of 99% ignition risk reduction, referenced in the quote above.
- b) Has PG&E compared the number of ignitions on a given circuit segment both prior to and after undergrounding the segment?
- c) If the answer to part (b) of this question is yes, please explain how PG&E performed this comparison.
- d) If the answer to part (b) is no, please explain why PG&E did not perform such a comparison.

**ANSWER 04**

- a) As indicated in the language quoted above, PG&E's estimate of the effectiveness of undergrounding in reducing ignitions is based on subject matter expertise. We validated this estimation using the ignition rate per mile for overhead and underground circuits respectively.

Based on 2015-2021 historical CPUC-reportable ignitions and the system circuit miles, the effectiveness of undergrounding is approximately 95-96% from an ignition rate perspective as indicated in Table 1 below. However, Table 1 does not fully represent wildfire risk reduction as an ignition is different than wildfire frequency or consequences. Based on the 2015-2021 dataset, no underground ignition resulted in a fire greater than 10 acres, further substantiating underground represents an even lower wildfire risk than overhead facilities.

As such, we determined that the CPUC-reportable ignition data information is consistent with subject matter expert estimations of 99%.

<b>Table 1: Underground v. Overhead Effectiveness</b>	<b>System</b>			<b>HFTD</b>		
	<b>Ignitions</b>	<b>Circuit Miles*</b>	<b>Annual Ignition Per 1K Miles</b>	<b>Ignitions</b>	<b>Circuit Miles*</b>	<b>Annual Ignition Per 1K Miles</b>
Underground	43	27,722	0.19	5	2,895	0.25
Overhead	3,091	80,662	5.47	921	25,219	5.22
UG Effectiveness = 1 – UG/OH			96%			

\*circuit mileage as of 7/28 data pull, may vary from figures provided in Q3

- b) PG&E has not compared the number of ignitions on a given circuit segment prior to or after undergrounding the segment.
- c) n/a
- d) At this point in time, PG&E is not aware of any reportable ignitions on a circuit segment that was undergrounded as a part of our Wildfire Mitigation Plan programs or initiatives. As such, any comparison would net as 100% effectiveness, based on the logic described in subpart a.