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

PG&E Data Request No.:	OEIS_003-Q006		
PG&E File Name:	WMP-Discovery2023_DR_OEIS_003-Q006		
Request Date:	April 21, 2023	Requester DR No.:	P-WMP_2023-PG&E-003
Date Sent:	April 28, 2023	Requesting Party:	Office of Energy Infrastructure Safety
DRU Index #:		Requester:	Colin Lang

SUBJECT: REGARDING PG&E'S AREAS OF CONCERN

QUESTION 006

a. Provide a GIS layer of PG&E's Areas of Concern (AOC) with the following attributes for each AOC polygon:

 i. Name of the AOC

 ii. Number of overhead circuit miles in the AOC that are in scope for Focused Tree Inspections

 iii. AOC in pilot? (Yes/No)

 iv. Cumulative probability of ignition caused by vegetation coupled with consequence of ignition as given by WDRM v3 (wdrmv3_v_c)

 v. Average probability of ignition caused by vegetation coupled with consequence of ignition as given by WDRM v3 (wdrmv3_v_c)

 vi. Cumulative Overall Utility Risk as defined by the 2023-2025 WMP Technical Guidelines, Appendix B

 vii. Cumulative Ignition Risk as defined by the 2023-2025 WMP Technical Guidelines, Appendix B

 viii. Cumulative PSPS Risk as defined by the 2023-2025 WMP Technical Guidelines, Appendix B

 ix. Cumulative Contact from Vegetation Likelihood of Ignition as defined by the 2023-2025 WMP Technical Guidelines, Appendix B

b. Has PG&E used any vegetation related data source to identify the density/presence of overstrike trees to create the AOCs? (e.g., LiDAR, satellite) If so, list the data source(s) and the date the data were collected. (e.g., distribution LiDAR flown by PG&E in 2019)

c. Has PG&E used any tree mortality data sets to:

 i. Create the AOCs? If so, list the data set(s) and the date the data were collected.

ii. Determine the prioritization of inspection among the AOCs? If so, list the data set(s) and the date the data were collected.

ANSWER 006

a. Please reference "*WMP-Discovery2023_DR_OEIS_003-Q006Atch01.xlsx*" and "*WMP-Discovery2023_DR_OEIS_003-Q006Atch02.zip*"[1] for the requested information.

Specifically for Overall Utility Risk, Ignition Risk, and PSPS Risk, these are typically presented in terms of circuit segments or circuit protection zones. The AOC polygons do not always align with CPZ segments so circuit segments can be partially included or completely included.

Since PG&E does not calculate the percentage of risk within the circuit segment designations, we will provide pro-rated risk scores based purely on the percentage of miles that fall within the AOC as an approximation for this data response.

b. Yes, PG&E used vegetation related data sources to identify the density/presence of overstrike trees to create the AOCs. Please see supporting data '*WMP-Discovery2023_DR_OEIS_003-Q006Atch03.zip*'[1]. The AOC drafting and development was completed using Google Earth and supporting KMZ files. The following imagery or KMZ data was available to inform density and presence of vegetation including overstrike trees.

   i. Satellite imagery was used as a base map layer in Google Earth and helped developers understand vegetation densities in proximity to other datasets used to aid development of AOC polygons.

   ii. Outage Clusters 2018-2021 by frequency and season. These layers help identify regional areas where vegetation failures have caused outages which can be considered a data-informed proxy for area with higher densities of overstrike trees and overhanging canopy conditions.

   iii. Fire Perimeters with strike trees identified through 2019-2020 LiDAR data was also made available to the AOC development team. Paired with the outage cluster data and satellite imagery this KMZ file could also help developers evaluate vegetation density and areas with higher populations of overstrike trees.

   iv. Vegetation caused ignitions (June 2014-2021) were also provided by resulting fire size. Paired with satellite imagery, this data could also help developers

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[1] Due to limitations around uploading compressed documents (zip files) to OEIS's Docket portal, we are unable to serve this attachment through the Docket. Interested stakeholders can find all attachments on PG&E's Wildfire Mitigation Plan Discovery page at https://www.pge.com/en_US/safety/emergency-preparedness/natural-disaster/wildfires/wildfire-mitigation-plan-discovery-data-requests.page

evaluate vegetation density and areas with higher populations of overstrike trees or canopy conditions that have resulted in CPUC reportable ignitions.

    v. PSPS Asset Damages (2020-2021) was provided to identify areas where trees with overstrike potential have been documented in association with problematic winds combined with seasonally extreme dry conditions.

c.

    i. Yes, PG&E utilized the Second Patrol VM review of tree mortality populations at a divisional level in October 2022.

    ii. The development team was expected to have strong local knowledge of regional tree mortality trends and utilize that knowledge to develop AOC polygons.