PACIFIC GAS AND ELECTRIC COMPANY
Wildfire Mitigations Plans Discovery 2023-2025
Data Response

PG&E Data Request No.:	CalAdvocates_0053-Q002
PG&E File Name:	WMP-Discovery2023-2025_DR_CalAdvocates_0053-Q002
Request Date:	September 18, 2024
Requester DR No.:	CalAdvocates-PGE-2025WMP-16
Requesting Party:	Public Advocates Office
Requester:	Matthew Taul
Date Sent:	September 27, 2024

This data request relates to both PG&E's Wildfire Distribution Risk Model version 4 (henceforth referred to as "WDRM v4") and as a follow-up data request to CalAdvocates-PGE-2025WMP-05 issued on April 5th, 2024.

PG&E's WDRM v4 contains 23 probability sub-models for ignition risk, compared to the 17 risk sub-models contained in PG&E's WDRM v3, as is shown in the table below.

TABLE 1
WDRM V3 VS. WDRM V4 SUB-MODEL COMPARISON

	WDRM v3		WDRM v4
1	Animal Bird	1	Animal – Bird
2	Animal Squirrel	2	Animal – Squirrel
3	Animal Other	3	Animal – Other
-	-	4	Capacitor Bank
-	-	5	DPD
-	-	6	Fuse
-	-	7	Primary Conductor – Line Slap
-	-	8	Primary Conductor – Wire Down
4	Primary Conductor	9	Primary Conductor – Other
5	Secondary Conductor	10	Secondary Conductor
-	-	11	Support Structure - Leaking
6	Support Structure Equipment cause	12	Support Structure – Equipment
7	Support Structure Electrical	-	-
-	-	13	Switch
8	Third-party Balloon	14	Third Party – Balloon
9	Third-party Vehicle	15	Third Party – Vehicle
10	Third-party Other	16	Third Party – Other
11	Transformer Equipment Cause	17	Transformer – Equipment
12	Transformer Equipment Leaking	18	Transformer – Leaking
13	Vegetation Branch	19	Vegetation – Branch
14	Vegetation Trunk	20	Vegetation – Trunk
15	Vegetation Other	21	Vegetation – Other
16	Voltage Control Equipment	22	Voltage Regulator
17	Other Equipment	23	Other Equipment

At least sixteen of the WDRM v4 sub-models appear to have the same or similar names to sub-models found in WDRM v3 (highlighted in green). Seven sub-models in WDRM v4 appear to be new sub-models not originally found in WDRM v3 (highlighted in orange). One sub-model from WDRM v3 appears to be missing in WDRM v4 (highlighted in yellow).

QUESTION 002

For each probability sub-model that was present in WDRM v3 and has a corresponding nearly identically-named sub-model in WDRM v4, please list and describe the ways in which the sub-model in WDRM v4 differs from the sub-model in WDRM v3.

ANSWER 002

The evolution of the Distribution Event Probability Models (sub-models) is described in the WDRM v4 Documentation suite that has been provided as attachment "*WMP-Discovery2023-2025_DR_CalAdvocates_053-Q006Atch01CONF.zip.*"

Relevant sections included in the "Distribution Event Probability Models v4 Documentation.pdf" include:

- **Section 2.1, Version Evolution,** provides an overview of event probability model evolution from v3 to v4. In particular, it showcases the transition from spatial pixel-based models to asset-based models for most equipment asset models for v4.

- **Section 2.2, Probability of Failure/Outage Improvements,** details general improvements that were made for v4 event probability models.

- **Section 3.5, Probability of Failure/Outage Improvements,** individually documents the development of each of the v4 event probability models. Each model section includes a *Key Developments* sub-section that describes important changes for v4.