

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

PG&E Data Request No.:	CalAdvocates_031-Q01		
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PG&E Witness:		Requester:	Holly Wehrman

The following questions relate to PG&E's Wildfire Distribution Risk Model version 3 (henceforth referred to as "WDRM v3"), and *E3 Review of PG&E's Wildfire Risk Model Version 3*, May 2022 (henceforth referred to as "E3 report").

QUESTION 01

- a) Please list all distinct risk scores generated by PG&E's WDRM v3 (for example, version 2 of PG&E's WDRM generated two different risk scores for distribution lines: a conductor risk score, and a vegetation risk score).
- b) For each risk score in part (a), please provide a category or brief description of the type of risk the score represents.
- c) For each risk score in part (a), please provide a brief explanation of how PG&E intends to use that risk score.
- d) For each risk score in part (a), please list all PG&E wildfire mitigation initiatives that are informed by that risk score.
- e) For each risk score in part (a), please state the most granular level available for that risk score. For example, in WDRM v2, the most granular level available would be the risk scores associated with individual 100m x 100m pixels.
- f) For each risk score in part (a), please state the granularity at which the risk score is used to inform wildfire mitigation initiatives (e.g. circuit segment, circuit, individual asset, etc.).

ANSWER 01

- a) The WDRM v3 developed 17 distinct risk scores which, to date have been composited or summed to provide a System Hardening risk score. These risk scores are detailed in the table below along with the associated responses requested in parts b through f.

Risk score	b) Category or brief description	c) Intended use	d) Informed mitigation initiatives	e) Most granular level	f) Granularity used to inform initiative
System Hardening	All risk drivers that System Hardening mitigations address (all 17)	To provide insights in to prioritizing System Hardening	System Hardening Program	Pixel (100mx100m)	Circuit Segment
Animal Squirrel	Risk related to ignitions caused by squirrels contacting energized equipment	Inform mitigation plans aimed at reducing squirrel related ignitions	Under development and not fully determined at this time.	Pixel (100mx100m)	Circuit Segment
Support Structure Electrical	Risk related to ignitions caused by failure of insulation of the support structure (i.e., pole fires)	Inform mitigation plans aimed at reducing pole fires	Under development and not fully determined at this time.	Pixel (100mx100m)	Pixel/Asset Level
Vegetation Trunk	Risk related to ignitions caused by the trunk failures of trees	Inform mitigation plans aimed at reducing vegetation tree trunk failure related ignitions	Under development and not fully determined at this time.	Pixel (100mx100m)	Circuit Segment
Voltage Control Equipment	Risk related to ignitions caused by failure of voltage regulators and shunt capacitors	Inform mitigation plans aimed at reducing voltage regulator and shunt capacitor related ignitions	Under development and not fully determined at this time.	Pixel (100mx100m)	Pixel/Asset Level
Vegetation Branch	Risk related to ignitions caused by the branch failures of trees	Inform mitigation plans aimed at reducing vegetation branch failure related ignitions	Under development and not fully determined at this time.	Pixel (100mx100m)	Circuit Segment

Risk score	b) Category or brief description	c) Intended use	d) Informed mitigation initiatives	e) Most granular level	f) Granularity used to inform initiative
Vegetation Other	Risk related to ignitions caused by the failure vegetation other than trunk or branches	Inform mitigation plans aimed at reducing vegetation related ignitions that are neither trunk nor branch failures	Under development and not fully determined at this time.	Pixel (100mx100m)	Circuit Segment
Animal Other	Risk related to ignitions caused by animals other than squirrels or birds	Inform mitigation plans aimed at reducing animal related ignitions that are not squirrels or birds	Under development and not fully determined at this time.	Pixel (100mx100m)	Circuit Segment
Third-party Vehicle	Risk related to ignitions caused by third-party vehicle making contact with electrical facilities	Inform mitigation plans aimed at reducing car-pole related ignitions	Under development and not fully determined at this time.	Pixel (100mx100m)	Circuit Segment
Animal Bird	Risk related to ignitions caused by birds	Inform mitigation plans aimed at reducing bird related ignitions	Under development and not fully determined at this time.	Pixel (100mx100m)	Circuit Segment
Primary Conductor	Risk related to ignitions cause by the failure of primary conductors	Inform mitigation plans aimed at reducing primary conductor related ignitions	Under development and not fully determined at this time.	Pixel (100mx100m)	Circuit Segment
Other Equipment	Risk related to ignitions caused by electrical	Inform mitigation plans aimed at reducing	Under development and not fully	Pixel (100mx100m)	Circuit Segment

Risk score	b) Category or brief description	c) Intended use	d) Informed mitigation initiatives	e) Most granular level	f) Granularity used to inform initiative
	equipment not specified in the other 16 models	ignitions related failure of equipment not specified in the other 16 models	determined at this time.		
Support Structure Equipment cause	Risk related to ignitions caused by the failure of the support structure (poles and attachments)	Inform mitigation plans aimed at reducing ignitions related to the failure of support structures	Under development and not fully determined at this time.	Pixel (100mx100m)	Pixel/Asset Level
Secondary Conductor	Risk related to ignitions caused by the failure of secondary conductors	Inform mitigation plans aimed at reducing primary conductor related ignitions	Under development and not fully determined at this time.	Pixel (100mx100m)	Circuit Segment
Third-party Other	Risk related to ignitions caused by third-parties making contact with electrical equipment	Inform mitigation plans aimed at reducing ignitions related to third-parties making contact with electrical equipment	Under development and not fully determined at this time.	Pixel (100mx100m)	Circuit Segment
Transformer Equipment Cause	Risk related to ignitions caused by the failure of pole mounted transformers	Inform mitigation plans aimed at reducing transformer related ignitions	Under development and not fully determined at this time.	Pixel (100mx100m)	Pixel/Asset Level
Transformer Equipment Leaking	Risk related to ignitions caused by the failure of	Inform mitigation plans aimed at reducing transformer	Under development and not fully determined at this time.	Pixel (100mx100m)	Pixel/Asset Level

Risk score	b) Category or brief description	c) Intended use	d) Informed mitigation initiatives	e) Most granular level	f) Granularity used to inform initiative
	transformers due to leakage	related ignitions			