

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

PG&E Data Request No.:	OEIS_016-Q01		
PG&E File Name:	WMP-Discovery2022_DR_OEIS_016-Q01		
Request Date:	August 9, 2022	Requester DR No.:	OEIS-PG&E-22-016
Date Sent:	August 12, 2022	Requesting Party:	Office of Energy Infrastructure Safety
PG&E Witness:	Paul McGregor	Requester:	Kevin Miller

SUBJECT: CIRCUIT PROTECTION ZONE RISK BUYDOWN CURVE

QUESTION 01

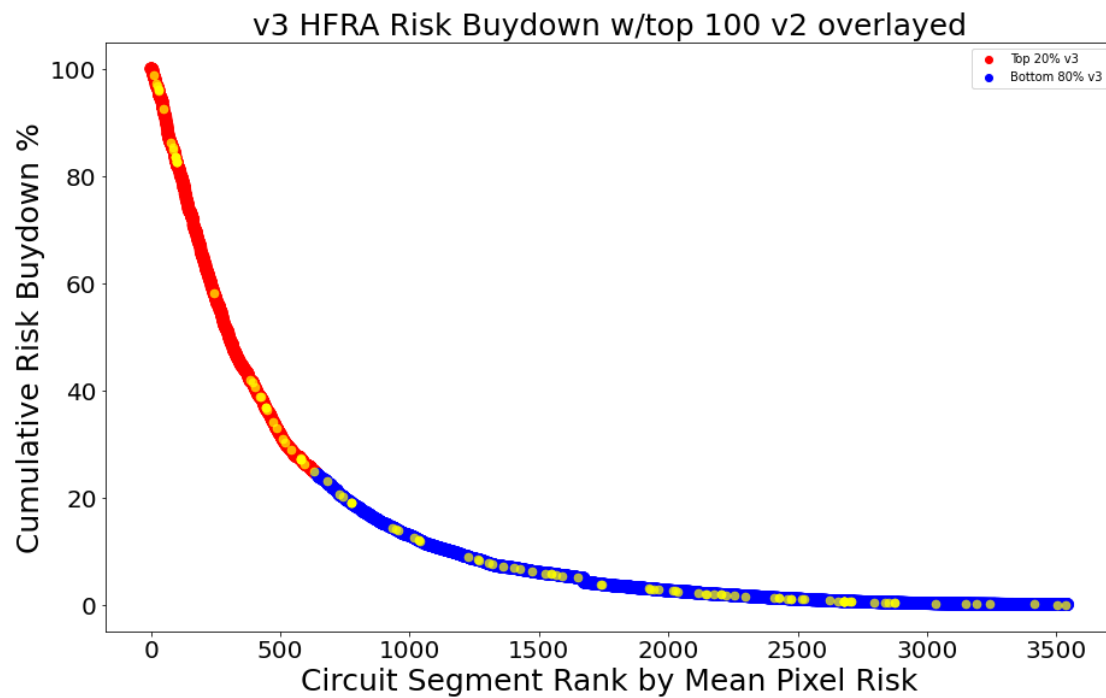
Provide a risk buydown curve, like the one provided to the Wildfire Safety Division in 2021 demonstrating the differences in CPZ risk rankings from V1 to V2, that demonstrates the changes between the V2 and V3 model outputs.

ANSWER 01

Two plots are provided below. These plots compare the WDRM v2 and v3 models by overlaying the top 100 circuit segments from one model on the risk buydown for another. This is a similar approach as was presented in January 2021.

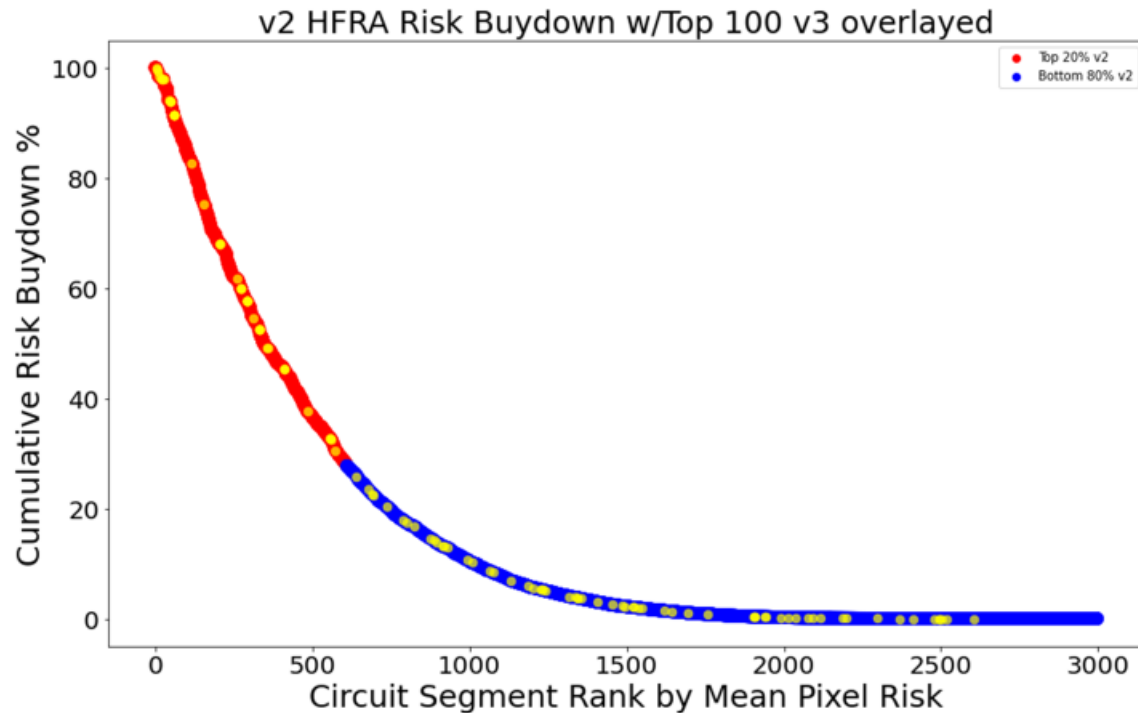
The first plot (Figure WMP-OEIS-016-01.1) displays the risk buy down curve for the latest WDRM v3 model in blue with the top 20% of circuit segments marked in red. The top 100 circuit segments from the WDRM v2 model are shown in the location of the WDRM v3 ranking with yellow dots.

Figure WMP-OEIS-016-01.1
2022 WDRM v3 Prioritization Output with top 100 Circuit Segments from 2021 WDRM v2



In a similar manner, the second plot (*Figure WMP-OEIS-016-01.2*) displays the risk buy down curve for the WDRM v2 model in blue with the top 20% of circuit segments marked in red. The top 100 circuit segments from the WDRM v3 model are shown in the location of the WDRM v2 ranking with yellow dots.

Figure WMP-OEIS-016-01.2
2021 WDRM v2 Prioritization Output with top 100 Circuit Segments from 2022 WDRM v3



As shown in both comparison plots, the top 100 circuit segments from the v2 and v3 model are spread across the risk buydown curve. This illustrates that while our models are changing based on improvements made, we are not observing the same level of shift between v2 and v3 as was observed between v1 and v2. (Please see PG&E's 2021 WMP Revision, Section 4.5.1 for a discussion on the changes between v1 and v2.) Many top circuit segments remain highly ranked after our model updates based on improvements in probability failure modules, circuit GIS geometry updates and corrections, as well as improvements to the consequence model.

As mentioned in previous responses, the risk models are a statistical prediction of a dynamic problem. In addition to model improvements, each new model is trained on the latest events which characterize the dynamic evidence of wildfire risk. The fact that one model ranks a location higher or lower than the previous model does not invalidate the previous model, but instead demonstrates continued improvement as our understanding of wildfire ignition and propagation increases and the dynamic nature of wildfire risk.