

PACIFIC GAS AND ELECTRIC COMPANY
Wildfire Mitigation Plans
Rulemaking 18-10-007
Data Response

PG&E Data Request No.:	WSD_011-Q04		
PG&E File Name:	WildfireMitigationPlans_DR_WSD_011-Q04		
Request Date:	March 16, 2021	Requester DR No.:	VM DR for PGE 20210316
Date Sent:	March 19, 2021	Requesting Party:	Wildfire Safety Division
PG&E Witness:		Requester:	Ryan Arba

Detail PG&E's timeline to improve its Vegetation Risk Model in the following areas.
If PG&E does not plan to make such improvements, justify this choice.

QUESTION 04

- 1) Use of the model to inform and prioritize Routine Patrol and Mid-Cycle Patrols (as described on p. 630).
- 2) Use of the model to inform and prioritize fuels management activities, including PG&E's Utility Defensible Space (UDS) program (as described in Section 7.3.5.5).
- 3) Inclusion of other initiatives in Section 7.3.5 into the model.
- 4) Reducing the time interval between updates to the model (e.g., from one year down to monthly, weekly, daily, etc.). To what time interval?
- 5) Automation of model updates and inputs.
- 6) Increasing the granularity of the model, beyond the level of CPZs. To what size?
- 7) Any additional improvement(s) PG&E is considering.

ANSWER 04

- 1) There are currently no plans to use the Vegetation Risk Model to inform and prioritize Routine Patrol and Mid-Cycle Patrols. The Vegetation Risk Model was built to target High Fire Threat Districts (HFTD) Tier 2 and Tier 3. Routine VM inspects all overhead primary and secondary distribution facilities annually regardless of whether facilities are in HFTD. As indicated on page 11 of the 2021 WMP, PG&E's planned routine inspection timeframe for all assets is November 15 of the prior year through November 15 of the current year (i.e. 11/15/20-11/15/21 for the 2021 plan year). However, delays including inaccessible facilities, sensitive environments or other limitations may delay some inspections for the current plan year by a few weeks, but still completing by the end of the calendar year (i.e. 12/31/21).
- 2) As described in section 7.3.5.5, PG&E is applying the Vegetation Risk Model to prioritize fuels management and Utility Defensible Space programs. In 2021, the Vegetation Risk Model is being used to help prioritize these programs. For the 2022 model, PG&E is exploring the development of risk mitigation and RSE

values for these programs based on the reduction in wildfire consequence by representing the change in the fuels in the Technosylva model. It is anticipated that this methodology will require refinements over the 2022 and 2023 model iterations to mature to a steady state.

- 3) Development of risk reduction values for specific VM mitigations, such as removal of overhanging branches as well as tree removal, will continue through the 2022 and 2023 model iterations to mature to a steady state.
- 4) As detailed in section 4.5.1(g), planning models are updated on an annual cadence while operational models used for events such as PSPS are updated as frequently as weekly during fire season. While operational models benefit from the latest meteorology and asset data to inform event-based decisions (e.g., PSPS), investment and planning models require less frequent updates. Planning models are used for annual planning decisions. However, as risk mitigations are completed through the year, planning models can be updated to measure the resulting risk reduction. The frequency of updates in planning models to reflect the completion of risk mitigations will occur on a quarterly basis beginning in 2021.
- 5) As described on page 231 of the PG&E's 2021 WMP, Risk Modeling, Full automation of current risk level, reduction, and RSE tools, including leveraging real time data and specific asset failure modes as modeling inputs are part of the long-term 3 to 10 year planning horizon. Automation efforts will begin to be developed as the itemized features (current risk level, risk reduction, Risk Spend Efficiency) as well as the suite of failure modes are put in place. The plan is to develop these features over the next three years and then automate the processes to update those features.
- 6) The Vegetation Risk Model is based, in part, on the Vegetation Probability of Ignition Model. As described on page 102 of the PG&E's 2021 WMP, the Vegetation Probability of Ignition Model is currently produced at the base granularity of 100-meter pixels. These 100-meter pixels are currently aggregated up to the Circuit Segment level. As PG&E's vegetation data sets improves, more detailed aggregations can be provided. While PG&E does not intend to produce a more granular base layer beyond the 100-meter pixels, more informative layers are envisioned over the 2022 and 2023 model iterations.
- 7) There are currently no other improvements being considered other than those listed above.