

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

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PG&E Witness:		Requester:	Kevin Miller

A. Risk Mapping and Simulation

QUESTION 02

Regarding PG&E's response to Maturity Survey question A.V.b (*How automated is the mechanism to determine whether to update algorithms based on deviations?*):

- a. How is PG&E planning to increase automation for algorithm updates based on deviations?
- b. How does PG&E currently perform partial (<50%) automation for this task?

ANSWER 02

- a. As described in the response to part b below, wildfire consequence algorithms are calibrated with data from recent fires and the ignition probability algorithms are re-run with updated failure and ignition data sets each year. With this cadence of data availability, the partially automated methods are deemed most appropriate, and PG&E does not plan to fully automate these processes at this time.
- b. For both the probability of ignition and wildfire consequence portions of the wildfire risk models, partially automated processes are used check the predictive performance of the algorithms and data employed. These processes are deemed partially automated in that the code is automated, but the initiation of the code is manual. For the wildfire consequence, the Technosylva algorithms are linked to the Cal FIRE fire alert system to enable the model to calibrate the simulation output with burn footprints. For the ignition probability, as new ignitions and failure data sets are made available, usually at the end of each year, the automated model code is executed with the updated data sets. The relative improvement of the Area Under the Receiver Operating Characteristic (ROC AUC or AUC) curves are used to evaluate the predictive performance of the algorithms. See 2022 WMP, p. 130 (defining ROC AUC).