Southern California Edison
Risk-Model-Group

DATA REQUEST SET O E I S - R M W G _ 2 0 2 4 - 0 0 1

To: Energy Safety
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Response Date: 6/11/2024

Question 05:
Regarding: description of any collaborations among the utilities

Please provide a description of all collaborations previously undertaken among the utilities, as well as details on any known consistency across utilities, including:

i. What modeling approaches are already consistent.
ii. Which modeling approaches have the potential for more consistency and how approaches would benefit from consistency.
iii. Where consistency is infeasible or not necessary.

Response to Question 05:
SCE engages in a wide variety of collaborative efforts and, while it is impractical to provide an exhaustive list, the response below is related to the major pertinent models and/or sub models of wildfire and/or PSPS risk modeling.

In this response, SCE is only able to provide definition information regarding its own modeling approach, and what it understands are modeling approaches employed by PG&E and/or SDG&E in their 2023-2025 Wildfire Mitigation Plan (WMP) submissions. Additionally, we note the list below is not exhaustive. For additional detail, please see Section 6 (pages 89-157) of SCE's 2023-2025 WMP submission.[1]

[1] *See* Southern California Edison Company. (2023). *Version Update to SCE's 2023-2025 Wildfire Mitigation Plan*, available at https://www.sce.com/

i. What modeling approaches are already consistent.

SCE's wildfire and PSPS risk modeling approach is consistent with California Public Utilities Commission (CPUC or Commission) and OEIS guidance and is based on the same technology employed by California Department of Forestry and Fire Protection (CAL FIRE). These primary components include:

Multi-Attribute Value Functions (MAVFs) – Risk Spend Efficiency/Monetization – Cost-Benefit Ratios - In the 2023-2025 WMP, SCE, PG&E, and SDG&E each utilize their own MAVFs, consistent with their most recent individual Risk Assessment and Mitigation Phase (RAMP) filings, to transform natural unit consequences into unitless risk values for the purpose of developing risk scores and Risk Spend Efficiency (RSE) estimates. In the future, SCE, PG&E, and SDG&E have been directed to transition to monetized values, based on guidance from the CPUC's Decision D.22-12-027 in the Risk Informed Decision-Making Proceeding,[2] beginning with PG&E's 2024 RAMP submission. These values may change depending on the results of the Lawrence Berkeley National Laboratory (LBNL) Interruption Cost Estimate (ICE) 2.0 Survey.

Probability of Ignition - SCE, PG&E, and SDG&E utilize variations of machine learning models and sub-models to derive probability of ignition.

Wildfire Consequence - SCE, PG&E, and SDG&E utilize variations of Technosylva physics-based wildfire propagation models to derive wildfire consequence.

Probability of De-energization - SCE, PG&E, and SDG&E utilize variations of a historical backcast based on historical weather and planned mitigation deployment to derive a probability of de-energization. These forecasts are predicated on the assumption that future fire weather conditions will be similar to past conditions.

PSPS Consequence - SCE, PG&E, and SDG&E utilize similar assumptions regarding Public Safety Power Shutoff (PSPS) consequences, consistent with CPUC guidance in the PSPS Proceeding.

ii. Which modeling approaches have the potential for more consistency and how approaches would benefit from consistency.

SCE does not recommend any additional guidance/consistency at this point in time. SCE, SDG&E, and PG&E regularly pilot and experiment with various approaches based on the availability of new data and methods, updated guidance from OEIS, stakeholder feedback, as well as Commission directives. It would be premature to require consistency until all utilities have completed the transition to monetized values, new guidance is received from the Commission in the Risk Informed Decision Making and Climate Change Adaptation

[2] *See* Appendix A of D.22-12-027, *Phase II Decision Adopting Modifications to the Risk-Based Decision-making Framework Adopted in Decision 18-12-014 and Directing Environmental and Social Justice Pilots.*

Proceedings, and additional data from the California Fifth Climate Change Assessment and LBNL ICE 2.0 Survey become available.

Furthermore, it is a strength for each utility to pilot and experiment with various approaches as each utility has unique geographical areas with specific fire regimes (e.g., seasonality, terrain, weather, vegetation, population density and proximity to the wildland urban interface [WUI], suppression availability and priorities). Each utility manages and operates their electrical and gas systems in slightly different ways owing to differences in asset age, type, configuration, and mitigation strategy. In this way, we can compare different approaches to determine what methodology produces the best results for those specific locations.

iii. Where consistency is infeasible or not necessary.

Please see the response to part ii above.