ENERGY SAFETY DATA REQUEST: OEIS-RMWG_2024-001
SDG&E RESPONSE

Date Received: May 16, 2024
Date Submitted: June 11, 2024

I. GENERAL OBJECTIONS

1. SDG&E objects generally to each request to the extent that it seeks information protected by the attorney-client privilege, the attorney work product doctrine, or any other applicable privilege or evidentiary doctrine. No information protected by such privileges will be knowingly disclosed.

2. SDG&E objects generally to each request that is overly broad and unduly burdensome. As part of this objection, SDG&E objects to discovery requests that seek "all documents" or "each and every document" and similarly worded requests on the grounds that such requests are unreasonably cumulative and duplicative, fail to identify with specificity the information or material sought, and create an unreasonable burden compared to the likelihood of such requests leading to the discovery of admissible evidence. Notwithstanding this objection, SDG&E will produce all relevant, non-privileged information not otherwise objected to that it is able to locate after reasonable inquiry.

3. SDG&E objects generally to each request to the extent that the request is vague, unintelligible, or fails to identify with sufficient particularity the information or documents requested and, thus, is not susceptible to response at this time.

4. SDG&E objects generally to each request that: (1) asks for a legal conclusion to be drawn or legal research to be conducted on the grounds that such requests are not designed to elicit facts and, thus, violate the principles underlying discovery; (2) requires SDG&E to do legal research or perform additional analyses to respond to the request; or (3) seeks access to counsel's legal research, analyses or theories.

5. SDG&E objects generally to each request to the extent it seeks information or documents that are not reasonably calculated to lead to the discovery of admissible evidence.

6. SDG&E objects generally to each request to the extent that it is unreasonably duplicative or cumulative of other requests.

7. SDG&E objects generally to each request to the extent that it would require SDG&E to search its files for matters of public record such as filings, testimony, transcripts, decisions, orders, reports or other information, whether available in the public domain or through FERC or CPUC sources.

8. SDG&E objects generally to each request to the extent that it seeks information or documents that are not in the possession, custody or control of SDG&E.

9. SDG&E objects generally to each request to the extent that the request would impose an undue burden on SDG&E by requiring it to perform studies, analyses or calculations or to create documents that do not currently exist.

10. SDG&E objects generally to each request that calls for information that contains trade secrets, is privileged or otherwise entitled to confidential protection by reference to statutory protection. SDG&E objects to providing such information absent an appropriate protective order.

II. EXPRESS RESERVATIONS

1. No response, objection, limitation or lack thereof, set forth in these responses and objections shall be deemed an admission or representation by SDG&E as to the existence or nonexistence of the requested information or that any such information is relevant or admissible.

2. SDG&E reserves the right to modify or supplement its responses and objections to each request, and the provision of any information pursuant to any request is not a waiver of that right.

3. SDG&E reserves the right to rely, at any time, upon subsequently discovered information.

4. These responses are made solely for the purpose of this proceeding and for no other purpose.

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III. RESPONSES

QUESTION 1

Regarding: visual depiction of risk models
Please provide a visual depiction of various models used by utilities and how such models are connected (e.g., swim lanes, flowchart).

RESPONSE 1

The WiNGS-Ops model considers several risk components that are comprised of more specific individual sub-models. These components and their relations are shown in SDG&E's WiNGS-Ops Technical Model Documentation at Figure 1: WiNGS-Ops Process Flow Diagram, (page 2) and Figure 4: WiNGS-Ops Calcualation Schematic (page 13). Additionally, please reference SDG&E's 2023-2025 Wildfire Mitigation Plan[1], Figure 6-5: WiNGS-Ops Calculation Process Flow Diagram (page 63) and Figure 6-8: WiNGS-Ops Calculation Schematic (page 67). These model dependencies depicted in the figures listed above can also be found in Section 1.2 in Appendix B in the 2023-2025 Wildfire Mitigation Plan.

WiNGS-Planning model considers several risk components that are comprised of more specific individual sub-models. These components and their relations are shown in SDG&E's WiNGS-Planning Technical Model Documentation at Figure 1: WiNGS-Planning Risk Calculation Process Flow Diagram (page 3) and Figure 2: WiNGS-Planning Model Process Flow Diagram (page 15). Additionally, please reference SDG&E's 2023-2025 Wildfire Mitigation Plan, Figure 6-4: WiNGS-Planning Risk Calculation Process Flow Diagram (page 61) and Figure 6-7: WiNGS-Planning Calculation Schematic (page 66). These model dependencies depicted in the figures listed above can also be found in Section 1.1 in Appendix B in SDG&E's 2023-2025 Wildfire Mitigation Plan.

[1] See 2023-2025 WILDFIRE MITIGATION PLAN (sdge.com)

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QUESTION 2

Regarding: data usage by model
Please provide data usage broken down by model (e.g., vegetation model, conductor model, transformer model, etc.) using the example table provided below. Include the following data usages:

i. Scale and geographical context.
ii. Topography.
iii. Quality of historical outage, fault, and ignition data.
iv. Usage of outage and fault events to augment ignition data.
v. Integration of potential ignitions avoided due to PSPS events.
vi. Asset data (including asset age, health, inspection results, type, etc.).
vii. Impacts of system hardening and other initiative efforts.
viii. Climate conditions (include historical wind conditions, relative humidity, temperature, etc.).
ix. Vegetation (include type, density, height, etc.).
x. Fuel characteristics (include load, size, continuity, vertical arrangement, moisture, etc.).
xi. Impacts of routine and enhanced vegetation management activities (including tree trimming, tree removal, inspections, etc.).
xii. Frequency of updates to datasets and inputs, including any associated triggers to determine the need for updates.
xiii. Accuracy and quality checks for data and inputs.

Example of Table Illustrating Data Usage by Model

Data Usage	Model 1	Model 2	Model 3	Model 4
Scale and geographical context	EXAMPLE: 100m x 100m pixels across the HFTD Tier 2&3.			
Topography	EXMAPLE: USGS Topographic Position Index			
…				

RESPONSE 2

In the Section 6.1.2 of the 2023-2025 Wildfire Mitigation Plan, OEIS Table 6-1: Summary of Risk Models summarizes the calculation approach for each risk and risk component, which provides the risk components and their corresponding design scenario(s), key inputs, sources of inputs, key outputs, and units. OEIS Table 6-2: Risk Modeling Assumptions and Limitations in

section 6.2.3, Key Assumptions and Limitations provides additional information on data use by risk models.

Data Usage	**WiNGS-Ops**	**WiNGS-Planning**
i. Scale and geographical context.	• PSPS event specific. WiNGS-Ops model quantifies Wildfire and PSPS risk for all the segments identified as potential candidates for PSPS.[2] Reference: PSPS Post-Event Group report for October 29-October 31, 2023 for model description and assumptions.	• Reference 2023-2025 Wildfire Mitigation Plan, section 7.1.3.1.1 Geographic Scale
ii. Topography	• Reference 2023-2025 Wildfire Mitigation Plan, section 5.3.5 Topography	• Reference 2023-2025 Wildfire Mitigation Plan, section 5.3.5 Topography
iii. Quality of historical outage, fault, and ignition data.	• Reference 2023-2025 Wildfire Mitigation Plan, section 6.2.3 Key Assumptions and Limitations • Reference 2023-2025 Wildfire Mitigation Plan, section Appendix B 1.2.2 Assumptions and Limitations	• Reference 2023-2025 Wildfire Mitigation Plan, section 6.2.3 Key Assumptions and Limitations
iv. Usage of outage and fault events to augment ignition data.	• Reference 2023-2025 Wildfire Mitigation Plan, section Appendix B 1.2.3 Calculation Procedure.	Ignition information informs the annual ignition rate. SDG&E is exploring the integration of WiNGS-Ops Probability of Failure

[2] See SDG&E's October 29- October 31, 2023 Public Safety Power Shutoff Post-event Report for model description and assumptions, at pp. A6 – A9, available at: https://www.sdge.com/sites/default/files/r1812005_sdge_psps_post-event_report_oct_29-31_2023.pdf

Data Usage	**WiNGS-Ops**	**WiNGS-Planning**
		and Probability of Ignition into WiNGS-Planning.
v. Integration of potential ignitions avoided due to PSPS events.	• Reference 2023-2025 Wildfire Mitigation Plan, section 6.3 Risk Scenarios.	Post patrol findings are not included in WiNGS-Planning model; however WiNGS-Planning calculates wildfire and PSPS reduction for each proposed circuit segment mitigation.
vi. Asset data (including asset age, health, inspection results, type, etc.).	• Reference 2023-2025 Wildfire Mitigation Plan, section 6.1.2 Summary of Risk Models. Conductor Probability of Failure Model	• Reference 2023-2025 Wildfire Mitigation Plan, section 6.1.2 Summary of Risk Models, • Reference 2023-2025 Wildfire Mitigation Plan, section 6.2.2.1 Likelihood
vii. Impacts of system hardening and other initiative efforts.	• Not currently documented - can include in next base WMP if required per guidelines	• Reference WiNGS Planning Technical Document, 2.5 Data Libraries • Reference WMP 2025 Update, section 5.6 SDGE-23-06: Demonstration of Proper Decision Making for Selection of Undergrounding Projects
viii. Climate conditions (include historical wind	• Reference 2023-2025 Wildfire Mitigation Plan,	• Reference 2023-2025 Wildfire Mitigation

Data Usage	**WiNGS-Ops**	**WiNGS-Planning**
conditions, relative humidity, temperature, etc.).	section 6.1.2 Summary of Risk Models	Plan, section 6.1.2 Summary of Risk Models • Reference WiNGS Planning Technical Document, 2.4.1.3 Wildfire LoRE
ix. Vegetation (include type, density, height, etc.).	• Reference 2023-2025 Wildfire Mitigation Plan, section 6.1.2 Summary of Risk Models	• Reference WiNGS Planning Technical Document, 2.4.1.3 Wildfire LoRE
x. Fuel characteristics (include load, size, continuity, vertical arrangement, moisture, etc.).	• Reference 2023-2025 Wildfire Mitigation Plan, section 6.1.2 Summary of Risk Models	• Reference 2023-2025 Wildfire Mitigation Plan, section 6.1.2 Summary of Risk Models and 6.3.1 Design Basis Scenarios
xi. Impacts of routine and enhanced vegetation management activities (including tree trimming, tree removal, inspections, etc.).	This is captured as part of the yearly update of the Vegetation probability of failure model • Reference 2023-2025 Wildfire Mitigation Plan, section 6.1.2 Summary of Risk Models	• Reference 2023-2025 Wildfire Mitigation Plan, section 6.1.2 Summary of Risk Models • Vegetation management impacts are assessed via annual updates to the Tree Strike model as well as the annual wildfire consequence update via Technosylva's FireSight model.

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Data Usage	**WiNGS-Ops**	**WiNGS-Planning**
xii. Frequency of updates to datasets and inputs, including any associated triggers to determine the need for updates.	• Reference WiNGS Ops Technical Document, Section 2.6.1 Data Quality Verification • Reference Table 4 in WMP 2025 update, section 1.1.2 Qualitative Updates	• Reference WiNGS Planning Technical Document, Section 2.5 Data Libraries
xiii. Accuracy and quality checks for data and inputs.	• Reference WMP 2025 update, section 5.7.5 Third Party Review Recommendations	• Reference WMP 2025 update, section 5.7.5 Third Party Review Recommendations

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QUESTION 3

Regarding: model descriptions
Please provide model descriptions for ignition, consequence, and PSPS models using the example table provided below. Include the following descriptions:

i. Algorithms used and machine learning capabilities.
ii. Inputs for the model.
iii. Outputs for the model.
iv. Description of any modules used, including but not limited to:
(1) Climate change.
(2) Ingress and egress.
(3) Suppression.
(4) Conflagration risks.
(5) Smoke impacts.
(6) Community vulnerability.
v. Modeling components, linkages, and interdependencies.
vi. Weight of each data component and input.
vii. Automatization implemented.
viii. Frequency of model updates, including the basis for each update.

Example of Table Illustrating Descriptions by Model

Descriptions	Ignition Model	Consequence Model	PSPS Model
Algorithms used and machine learning capabilities	EXAMPLE: Max Ent		
Inputs for the model			
…			

RESPONSE 3

In the Section 6.1.2 of the 2023-2025 Wildfire Mitigation Plan, OEIS Table 6-1: Summary of Risk Models summarizes the calculation approach for each risk and risk component, which provides the risk components and their corresponding design scenario(s), key inputs, sources of inputs, key outputs, and units.

Descriptions	**WiNGS-Ops**	**WiNGS-Planning**
i. Algorithms used and machine learning capabilities.	• Reference 2023-2025 Wildfire Mitigation Plan, Appendix B, section 1.2 WiNGS-Ops • Discussed in July 2022 RMWG workshop	• Reference WiNGS Planning Technical Document, section 2.4 Mathematical Foundation

Descriptions	**WiNGS-Ops**	**WiNGS-Planning**
		• Discussed in July 2022 RMWG workshop
ii. Inputs for the model.	• Reference 2023-2025 Wildfire Mitigation Plan, Appendix B, section 1.2.3 Calculation Procedure	• Reference, 2023-2025 Wildfire Mitigation Plan, Appendix B, section 1.1.3 Calculation Procedure
iii. Outputs for the model.	• Reference 2023-2025 Wildfire Mitigation Plan, Appendix B, section 1.2.3 Calculation Procedure	• Reference 2023-2025 Wildfire Mitigation Plan, Appendix B, section 1.1.3 Calculation Procedure
(1) Climate change.	• Not Applicable as WiNGS-Ops is used for PSSP De-Energization events based on current asset conditions, customer counts, and wind gust predictions forecasted three days in advance	• Reference 2023-2025 Wildfire Mitigation Plan, section 1.1.1.2 Wildfire Mitigation Strategy
(2) Ingress and egress.	• Discussed in June 2023 RMWG workshop	• Discussed in June 2023 RMWG workshop • Reference WMP 2025 Update, section 1.1.2 Qualitative Updates, Table 3: WiNGS-Planning Qualitative Risk Modeling Updates
(3) Suppression.	• Discussed in May 2023 RMWG Workshop	• Discussed in May 2023 RMWG Workshop • Reference WMP 2025 Update, section 1.1.2 Qualitative Updates, Table 3: WiNGS-Planning Qualitative Risk Modeling Updates

Descriptions	**WiNGS-Ops**	**WiNGS-Planning**
(4) Conflagration risks	• Discussed in April 2023 RMWG workshop • The adoption of conflagration risk is dependent on wildfire consequence model vendor.	• Discussed in April 2023 RMWG workshop • The adoption of conflagration risk is dependent on wildfire consequence model vendor.
(5) Smoke impacts	• Discussed in December 2022 RMWG workshop	• Discussed in December 2022 RMWG workshop
(6) Community vulnerability	• Reference 2025 WMP Update, Appendix D, ACI 22-04	• Reference 2025 WMP Update, section 1.1.2 Qualitative Updates, Table 3: WiNGS-Planning Qualitative Risk Modeling Updates
v. Modeling components, linkages, and interdependencies	• Discussed in July 2022 RMWG workshop • Reference WiNGS-Ops Technical Document, section 2.1.2 Problem Environment	• Discussed in July 2022 RMWG workshop • Reference WiNGS Planning Technical Document, Figure 2: WiNGS-Planning Model Process Flow Diagram.
vi. Weight of each data component and input.	• Reference 2023-2025 Wildfire Mitigation Plan, Section 6.1 Methodology, SDG&E Table 6-1: Enterprise CoRE MAVF Attributes[3] • Reference Figure 1: WiNGS-Ops Process Flow Diagram and Figure 4: WiNGS-Ops Calcualation Schematic of the WiNGS-Ops Technical Model Documentation	• Reference 2023-2025 Wildfire Mitigation Plan, Section 6.1 Methodology, SDG&E Table 6-1: Enterprise CoRE MAVF Attributes • Reference WiNGS Planning Technical Document, section 2.6.3 Calibration • Reference Figure 1: WiNGS-Planning Risk

[3] See SDG&E'sRisk Quantification Framework and Risk Spend Efficiency, page RAMP-C-11, available at: https://www.sdge.com/sites/default/files/regulatory/SCG_SDGE_RAMP-C_Risk_Quantification_Framework_and_Risk_Spend_Efficiency_5-17-21.pdf

Descriptions	**WiNGS-Ops**	**WiNGS-Planning**
	• Reference 2023-2025 Wildfire Mitigation Plan, Figure 6-5: WiNGS-Ops Calculation Process Flow Diagram and Figure 6-8: WiNGS-Ops Calculation Schematic	Calculation Process Flow Diagram, and Figure 2: WiNGS-Planning Model Process Flow Diagram of the WiNGS-Planning Technical Model Documentation • Reference 2023-2025 Wildfire Mitigation Plan, Figure 6-4: WiNGS-Planning Risk Calculation Process Flow Diagram, and Figure 6-7: WiNGS-Planning Calculation Schematic
vii. Automatization implemented.	• Reference 2023-2025 Wildfire Mitigation Plan, Section 6.2.1 Risk and Risk Component ID • Reference 2023-2025 Wildfire Mitigation Plan, Section 6.5 Enterprise System for Risk Assessment • Reference 2025 WMP Update Table 4: WiNGS-Ops Risk Modeling Qualitative Updates	• Reference 2023-2025 Wildfire Mitigation Plan, Section 6.5 Enterprise System for Risk Assessment • Reference WiNGS Planning Technical Document, section 2.3.3 Independent Review Results • Reference 2025 WMP Update Table 3: WiNGS Planning Qualitative Risk Modeling Updates
viii. Frequency of model updates, including the basis for each update	• RMWG workshop, November 2023 • Reference WiNGS-Ops Technical Document, Section 2.5 Data Libraries	• RMWG workshop, November 2023 • Reference 2023-2025 Wildfire Mitigation Plan, Section 6.6.2.3 Version Control

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QUESTION 4

Regarding: model outputs
Please provide how model outputs are analyzed and utilized for each model using the example table provided below. Include:

i. Confidences for each modeling component, including how such confidences were determined.
ii. Range of uncertainty for model outputs, including how those ranges are determined and how uncertainty is minimized.
iii. Systems used to verify the model outputs, including verifier (subject matter experts, third-party) and mechanisms for implementing lessons learned.
iv. How uncertainty affects the interpretations of model outputs.
v. Determination of highest risk areas based on model outputs.
vi. Use of subject matter expertise for inputs and further verification.
vii. Scaling of outputs in final determinations.
viii. Risk tolerances used for decision-making.

Example of Table Illustrating Outputs by Model

Output	Model 1	Model 2	Model 3	Model 4
Confidences for each modeling component, including how such confidences were determined.	EXAMPLE: Receiver Operating Characteristic (ROC) /Area Under the Curve (AUC)			
Range of uncertainty for model outputs, including how those ranges are determined and how uncertainty is minimized.	EXAMPLE: Evaluation of ROC/AUC, Precision, and Recall values			
…				

RESPONSE 4

Section 2.6 Substantiation of both the WiNGS-Ops and WiNGS-Planning Technical Documents describe SDG&E methodologies for Substantiation to ensure that the models are correct and suitable to their intended application, including verification, validation, and calibration practices.

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Output	**WiNGS-Ops**	**WiNGS-Planning**
i. Confidences for each modeling component, including how such confidences were determined.	Technosylva's fire model has a confidence level of 60% per their general literature and analysis	• Technosylva's fire model has a confidence level of 60% per their general literature and analysis
ii. Range of uncertainty for model outputs, including how those ranges are determined and how uncertainty is minimized.	• Reference 2025 WMP Update Table 14: WiNGS Ops Third Party Recommendations (ID R3.3)	• NA
iii. Systems used to verify the model outputs, including verifier (subject matter experts, third-party) and mechanisms for implementing lessons learned.	• Reference 2023-2025 Wildfire Mitigation Plan, Section 6.6.1 Independent Review • Reference WMP WiNGS-Ops Technical Model Documentation, Section 2.6.,1 Verification and Section 2.6.2 Validation.	• Reference 2023-2025 Wildfire Mitigation Plan, Section 6.6.1 Independent Review • Reference WiNGS Planning Technical Documention, Section 2.6.1 Verification
iv. How uncertainty affects the interpretations of model outputs.	• Not currently documented - can include in next base WMP if required per guidelines	• NA
v. Determination of highest risk areas based on model outputs.	• Reference 2023-2025 Wildfire Mitigation Plan, Section 6.2.2 Risk and Risk Components Calculation	• Reference 2023-2025 Wildfire Mitigation Plan, Section 6.2.2 Risk and Risk Components Calculation • Reference WiNGS Planning Technical Document, 2.4.2.1 Overall Risk • Reference WiNGS Planning Technical Document, 2.6.2 Validation

Output	**WiNGS-Ops**	**WiNGS-Planning**
		• Reference 2025 WMP Update Section 1.1.1 Top Risk-Contributing Circuit, Segments, or Spans
vi. Use of subject matter expertise for inputs and further verification.	• Reference WMP Technical Document, 2.6.1 Verification	• Reference WiNGS Planning Technical Document, 2.6.1 Verification
vii. Scaling of outputs in final determinations.	• Reference SDG&E's PSPS Post-event Report covers final determination for de-energization.[4]	• Reference 2023-2025 Wildfire Mitigation Plan, Section 7.1.4.1 Identifying and Evaluating Mitigation Initiatives
viii. Risk tolerances used for decision-making	• Reference WiNGS Ops Technical Document, Section 2.4.2.4 Overall Risk Calculus • Reference WMP Technical Document, section 2.1.3 Background Environment. Reference Figure 2: PSPS Decision Framework	• SDG&E targets a risk reduction of roughly 80% over the course of the project

QUESTION 5

[4] See SDG&E's October 29- October 31, 2023 Public Safety Power Shutoff Post-event Report for model description and assumptions, at pp. A6, available at: https://www.sdge.com/sites/default/files/r1812005_sdge_psps_post-event_report_oct_29-31_2023.pdf

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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 5

SDGE actively participates in:[5]

- Monthly Risk Modeling Working Groups (RMWG) with other IOUs, and other participants.
- Risk Informed Decision Making (RDF) Working Groups
- Climate Change Adaptation Proceeding

In addition, SDG&E also participates in monthly PSPS Joint IOU Emergency Management and Operations Risk Sub-Committee Meetings with a standing topic of risk modeling information exchange.

I) SDG&E, SCE, and PG&E model Wildfire and PSPS risk in a very similar way. The three IOUs follow the guidelines provided by OEIS where Wildfire and Public Safety Power Shutoff (PSPS) likelihood and consequence estimations are outlined. See Figure 6.1 of 2023 2025 WMP Technical Guidelines.

The large IOU's adhere to the framework of quantifying risk using the main risk components of Wildfire LoRE, Wildfire CoRE, PSPS Lore and PSPS CoRE. The ways in which these scores are calculated may differ between IOU's, with some using statistical or machine learning models, weighted sum models, or combinations of methods, but the basic framework applies to each company's risk models. Elements contributing to each main component may also differ slightly between IOU's, but the inputs outlined in Figure 6.1 of 2023 2025 WMP Technical Guidelines are generally adhered to.

[5]See WMP 2025 Update, Section 5.1 SDGE-23-01: Cross-Utility Collaboration on Risk Model Development, located at: https://www.sdge.com/2025-wildfire-mitigation-plan

Each utility utilizes internal data to estimate the probability (or likelihoods) of failure and ignitions and works independently with industry leader vendors to estimate potential wildfire consequence values at each asset location. These consequence estimates are converted into a unitless risk score based on their latest Multi-Attribute Value Function (MAVF). Each utility follows the SPD guidelines and utilizes different sub attributes, scales, and weights based on their own understanding of the attributes.

Similarly, each utility calculates PSPS likelihood based on historical de-energization events and calculates PSPS consequence values based on the MAVF.

ii) Currently, SDG&E is in the process of updating all the models for WiNGS-Planning and WiNGS-Ops, as specified in Tables 3 and 4 of the 2025 WMP update. In addition, SDG&E and the other IOUs are transitioning their entire risk framework to comply with the requirements set forth by the CPUC's Decision D.22-12-027 in the Risk Informed Decision-Making Proceeding. Further instructions, methods, or directives regarding some of the variables or assumptions are not recommended as each IOU should maintain the flexibility and adaptability of the model to account for unique conditions and challenges of their service territories
iii) Please see response in ii.

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QUESTION 6

Regarding: description of any additional collaborations
Please provide a description of all collaborations previously undertaken and/or ongoing with other entities.

RESPONSE 6

In addition to independent reviews, SDG&E collaborates with technical advisors, explores internal review boards, is involved with the International Wildfire Risk Modeling Consortium (IWRMC), collaborates with other IOUs, academia, industry partners, and external vendors, and seeks best practices when developing risk models. These are detailed in SDG&E's February 15th 2023 RMWG presentation: Coordination of Government Wildfire Plans with Utility Wildfire Mitigation Plans as shown below.

SDG&E

SDGE

- SDG&E collaborates with multiple external partner agencies that impact utility wildfire planning and mitigation strategies. Partner agencies include over 1,500 contacts from sectors like senior and elected officials, tribal agencies, fire and law enforcement agencies, critical facility/critical infrastructure agencies, emergency managers, and medical agencies.

- Agencies SDG&E Partners with:

➢ Office of Energy Infrastructure Safety (OEIS)	➢ Federal Fire Agencies ➢ United States Forest Service (USFS) ➢ United States Military (10 military installations within SDG&E service territory)
➢ California Public Utility Commission (CPUC)	➢ 16 Native American Tribal Nations (Federally recognized)
➢ California Governor's Office of Emergency Services (Cal OES)	➢ Department of Homeland Security (Border Patrol)
➢ CalFire	➢ Bureau of Land Management (BLM)
➢ SD County Fire Authority	➢ Federal, state, and local officials

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QUESTION 7

Regarding: attachments
Please provide attachments of:

i. All internal or third-party validations completed, and
ii. Description of any peer review of risk models utilized.

RESPONSE 7

Reference WiNGS-Ops Technical Document, section 2.3.3 Independent Review Results.
Reference WiNGS-Planning Technical Document, section 2.3.3 Independent Review Results.
Also, reference WMP 2025 Update, section 5.7.5 Third Party Review Recommendations[6]

[6] SDG&E 2025 Update is available at: https://www.sdge.com/sites/default/files/regulatory/2024-05-14_SDGE_2025_WMP-Update_R1_0.pdf

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END OF REQUEST