

**OFFICE OF ENERGY INFRASTRUCTURE SAFETY DATA REQUEST:
EXTENSION OEIS-SDGE-2023WMP-03
SDG&E RESPONSE**

**Date Received: June 2, 2023
Date Submitted: June 8, 2023**

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

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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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QUESTION 1

Regarding Table 8-38 “Emergency Preparedness Staffing and Qualifications”

- a. OEIS Table 8-38 “Emergency Preparedness Staffing and Qualifications” (ps. 345-354) lists a set of positions in the “Role” column. In some cases, it’s self-evident why a position is included (e.g., Access and Functional Needs Liaison) and in others it’s less self-evident (e.g., Gas Operations Commodity Liaison). By what criteria were positions selected to be included in that table?
- b. Which position in this table is the lead for PSPS emergency response concerns?
- c. Energy Safety notes that per the “Qualifications” column in that same table none of the positions included in this table are required to take the Incident Command System (ICS) 300 or ICS 400 courses. Is SDG&E intending to include these courses as requirements and if so for which positions? And/or does SDG&E have an equivalent training that it provides and if so for which positions?
- d. Are there any emergency preparedness trainings that are required of the positions in Table 8-38 that are not listed in the table under “Qualifications”?
 - i. If so, please give the title of the training(s), the name of the provider, and which positions are required to take the training(s).
- e. Are any trainings required of the positions in this table specifically aimed at supporting collaborations with tribal communities? Are any trainings specifically aimed at supporting access and functional needs communities?
 - i. If so, please give the title of the training(s), the name of the provider, and which positions are required to take the training(s).

RESPONSE 1

SDG&E objects to the request on the grounds set forth in General Objections Nos. 2 and 3. Subject to and without waiving the foregoing objections, SDG&E responds as follows:

- a. The positions were selected based on the direction from CAL OES California Standardized Training Institute (CSTI). All Command and General Staff positions will work towards a CAL OES EOC Utility Branch Credential. Command and General staff positions are section leads and above.
- b. There is no position that is considered a “lead” for PSPS emergency response concerns. SDG&E’s EOC is an all-hazards organization which does not change based on incident or event type. All positions with the EOC are trained on the appropriate protocols, processes, and procedures for PSPS response
- c. SDG&E follows the CAL OES CSTI training plan for the EOC credential which does not require ICS 300 & 400.

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- i. If so, please give the title of the training(s), the name of the provider, and which positions are required to take the training(s). N/A
- d. The only other trainings are internal which consist of EOC New Member Orientation, Summer Readiness, and Section Specific Mentoring. These trainings are provided by the internal Training & Exercise team and are required for all EOC responders.
- e. There are no required formal trainings for collaborations with tribal partners however our tribal liaisons work with our tribal partners on a consistent basis year-round. AFN Liaisons will be required to take a FEMA course ICS 368 which is in the process of being updated. There is a joint IOU team working with CSTI to customize the training to be more appropriate for utility AFN responders.

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QUESTION 2

Regarding Projected Risk Reduction on Highest-Risk Circuits Scoped Outside of this WMP Cycle for Mitigation

Please provide a list of the top 5% of highest-risk circuit segments scoped outside of this WMP cycle for mitigation (e.g., not found in OEIS Table 7-4) with a description of each such segment, including:

- a. Any risk analysis findings, including risk score for the segment
- b. Total circuit miles in the segment and the asset description
- c. What mitigation initiatives have been undertaken thus far for the segment, including the completion date for each initiative
- d. The type of mitigation initiative planned for the segment (e.g., undergrounding or covered conductor) in future WMP cycles
- e. By what year the circuit segment will be fully mitigated
- f. What, if any, interim mitigation initiatives are planned to reduce risk on the circuit segment

RESPONSE 2

SDG&E objects to the request on the grounds set forth in General Objections Nos. 2 and 9. Subject to and without waiving the foregoing objections, SDG&E responds as follows:

See file “2023_WMP_OEIS_DR 3_Question_2_nb_output_KM_2023_06_06.xlsx.” Please see sheet titled ‘output’ for the data, and sheet titled ‘notes’ for additional clarifications and metadata on the output.

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QUESTION 3

Regarding Risk Buy-down Estimates (Risk-Spend Efficiency) Information Required by the WMP Technical Guidelines

The WMP Technical Guidelines require utilities to provide specific information on their use of risk buy-down estimates (e.g., risk-spend efficiency), resource optimization to maximize risk reduction, and prioritization of mitigation initiatives (Sections 7.1.4.1 and 7.1.4.2). The information provided by SDG&E does not allow an evaluator to reconcile content from Section 7 and it is also missing important information about risk buy-down estimates. In particular, evaluators need a detailed description of the risk buy-down estimation process to reconcile with the information provided in Tables 7-4 and 8-1

a. Please provide the following information in MS Word or MS Excel, as appropriate:

- i. Risk buy-down information in a table as follows, ranked in descending order of risk buy-down estimate (column G).

Mitigation initiative (column “applicable initiatives”, Table 8-1)	Initiative Tracking ID	WMP Category	Circuit Segments Impacted	Estimated Risk Reduction	Estimated Cost	Risk Buy-Down Estimate (Risk Reduction/Cost)

- ii. Please submit an updated version of Table 7.4 that cross-references the table above. This cross-referencing can be done by assigning an index number to each mitigation initiative, where the index number is the risk buy-down estimate ranking from the table above.
- iii. Additionally, please submit a narrative explanation of how the information in the table above informed the prioritization of mitigation initiatives. Please include any instances where a mitigation initiative with a lower risk buy-down estimate received a higher priority over a mitigation initiative with a higher risk buy-down estimate.

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RESPONSE 3

SDG&E objects to the request on the grounds set forth in General Objections Nos. 2 and 9. Subject to and without waiving the foregoing objections, SDG&E responds as follows:

i. See attached spreadsheet titled “Q3_i_Risk reduction and costs.xlsx.”

ii. OEIS table 7-4 refers to the risk reduction at the circuit segment level for the Covered Conductor and Strategic Undergrounding programs as calculated by SDG&E’s WiNGS-Planning tool. The risk reduction values in this table are based on the segment-level information calculated within WiNGS-Planning. The risk reduction values presented in response to part ii reflect the risk reduction values of the programs at the tranche level for the respective HFTD tiers where installations occur for all mitigations. Due to the differences in the level of information and the calculations performed, these risk reduction values should not be directly compared against one another.

For these reasons, the mitigations provided in response to part ii cannot be directly cross-referenced to Table 7-4. SDG&E’s mitigations (outside of covered conductor and undergrounding) are largely scoped and performed across the entire HFTD including the circuits referenced in Table 7-4, but risk reduction is not calculated at the circuit segment level.

iii. SDG&E utilizes several components to make risk-informed decisions to prioritize mitigation initiatives. These components can be found in OEIS Table 4-2 of SDG&E’s 2023 WMP and are further described in Section 4.4.2. The risk reduction and RSE values represented at the tranche level are reviewed to ensure the programs will provide value and are one of many components that are taken into consideration when determining which mitigation is chosen. Subject matter expertise is utilized to understand the timeline for implementation, resource availability, and other factors to determine the capability to perform the work, and the appropriate level of investment.

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QUESTION 4

Regarding Appendix B Items That Are Currently Optional Or “By Request” Only

Please provide the following information, as described in the 2023-2025 Wildfire Mitigation Plan Technical Guidelines, Appendix B. If the information is tabular (e.g., formulas, tables, graphs, charts), please provide it in MS Excel format. If it is text-heavy, please provide it in MS Word format or (for very large files) PDF format.

- a. Please provide detailed model documentation for each model and sub-model discussed in SDG&E’s response to Section 6.1.2 “Summary of Risk Models” including all models outlined in Table 6-1.
 - i. Technical documentation should be presented according to ASTM E 1472 – Standard Guide for Documenting Computer Software for Fire Models.
 - ii. Include a list of assumptions and known model limitations according to ASTM E 1895 – Standard Guide for Determining Uses and Limitations of Deterministic Fire Models.
 - iii. Present verification and validation documentation according to the SFPE’s Guidelines for Substantiating a Fire Model for a Given Application or ASTM E 1355 – Standard Guide for Evaluating the Predicting Capability of Deterministic Fire Models.
 1. At a minimum, the documentation must include:¹
 - a. Purpose of the model/problem identification,
 - b. Model version,
 - c. Theoretical foundation,
 - d. Mathematical foundation,
 - e. External dependencies,
 - f. Model substantiation,
 - g. Sensitivity
 - i. Model Substantiation:² for each model, provide documentation of the following model substantiation studies:
 1. Validation data
 2. Model verification
 3. Model validation
 4. Model calibration
- b. Additional models supporting SDG&E’s risk calculation³

¹ As described in the 2023-2025 WMP Technical Guidelines, Appendix B, pages B-6 to B-7.

² As described in the 2023-2025 WMP Technical Guidelines, Appendix B, pages B-11 to B-12.

³ As described in the 2023-2025 WMP Technical Guidelines, Appendix B, pages B-11 to B-12.

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- i. For each additional model that supports the risk calculations, provide weather analysis and fuel conditions.
- c. Calculation of risk and risk components: likelihood.⁴ Please provide more information on:
 - ii. Ignition likelihood
 - iii. Equipment likelihood of ignition
 - iv. Contact from vegetation likelihood of ignition
 - v. Contact from object likelihood of ignition
 - vi. Burn probability
 - vii. PSPS likelihood
- d. Calculation of risk and risk components: consequence.⁵ Please provide more information on:
 - i. Wildfire consequence
 - ii. Wildfire hazard intensity
 - iii. Wildfire exposure potential
 - iv. Wildfire vulnerability
- e. Calculation of risk and risk components: PSPS consequence.⁶ Please provide more information on:
 - i. PSPS exposure potential
 - ii. Community vulnerability to PSPS
- f. Calculation of risk and risk components: risk.⁷ Please provide more information on:
 - i. Ignition risk
 - ii. PSPS risk
 - iii. Overall utility risk

RESPONSE 4

SDG&E objects to the request on the grounds set forth in General Objections Nos. 2 and 6. Subject to and without waiving the foregoing objections, SDG&E responds as follows:

NOTE: This question is identical to question 1 in OEIS-SDGE-2023WMP-01.

Link to the 2023 WMP: <https://www.sdge.com/2023-wildfire-mitigation-plan>

WiNGS Planning:

a.

⁴ As described in the 2023-2025 WMP Technical Guidelines, Appendix B, pages B-12 to B-16.

⁵ As described in the 2023-2025 WMP Technical Guidelines, Appendix B, pages B-16 to B-17.

⁶ As described in the 2023-2025 WMP Technical Guidelines, Appendix B, p. B-18.

⁷ As described in the 2023-2025 WMP Technical Guidelines, Appendix B, pp. B-18 to B-20.

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- i. WMP technical documentation: Attached as “Model Documentation_Wings Planning V1_FINAL SUBMITTED.pdf,”
- ii. Reference section 6.2.3 of WMP 2023 (page 73) and 2.4.3 – Technical document for WiNGS Planning.
- iii. Reference section 2.6 of technical document for WiNGS Planning.

At a minimum, the documentation must include:

- (a) Purpose of the model/problem identification – reference sections 1.1 and 2.1.1 - Technical document for Wings Planning
 - (b) Model version = reference section 1.2 - Technical document for Wings Planning
 - (c) Theoretical foundation – reference section 2.3 - Technical document for Wings Planning
 - (d) Mathematical foundation – reference section 2.4 - Technical document for Wings Planning
 - (e) External dependencies – reference section 2.5.1 - Technical document for Wings Planning
 - (f) Model substantiation - reference section 2.6 - Technical document for Wings Planning
 - (g) Sensitivity – reference section 2.6.2 - Technical document for Wings Planning
 - (i) Model Substantiation: for each model, provide documentation of the following model substantiation studies:
 - 1. Validation data reference section 2.6.2 - Technical document for Wings Planning
 - 2. Model verification - reference section 2.6.1 - Technical document for Wings Planning
 - 3. Model validation - reference section 2.6.2 - Technical document for Wings Planning
 - 4. Model calibration - reference section 2.6.3 - Technical document for Wings Planning
- b. Additional Models Supporting Risk Calculation:
- i. For each additional model that supports the risk calculations, provide weather analysis and fuel conditions. Reference section 2.5 - Technical document for Wings Planning
- c. Calculation of Risk and Risk Components: Likelihood - reference 6.2.2.1 of WMP 2023 (page 68) and section 2.4.1.3 - Technical document for Wings Planning
- i. Ignition Likelihood
 - ii. Equipment Likelihood of Ignition
 - iii. Contact from Vegetation Likelihood of Ignition
 - iv. Contact from Object Likelihood of Ignition
 - v. Burn Probability

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- vi. PSPS Likelihood
 - d. Calculation of Risk and Risk Components: Consequence - reference 6.2.2.2 of WMP 2023 (page 70) and section 2.4.1.4 - Technical document for Wings Planning
 - i. Wildfire Consequence
 - ii. Wildfire Hazard Intensity
 - iii. Wildfire Exposure Potential
 - iv. Wildfire Vulnerability
 - e. Calculation of Risk and Risk Components: PSPS Consequence - reference 6.2.2.2 of WMP 2023 (page 70)
 - i. PSPS Exposure Potential
 - ii. Community Vulnerability to PSPS
 - f. Calculation of Risk and Risk Components: Risk- reference section 6.2.1 and 6.2.2 of WMP 2023, page 59 and 64
 - i. Ignition Risk
 - ii. PSPS Risk
 - iii. Overall Utility Risk

WiNGS Ops:

- a.
 - i. WMP technical documentation: Attached as “Model Documentation_WiNGS-Ops V1_FINAL SUBMITTED.pdf.”
 - ii. Reference section 6.2.3 of WMP 2023 (page 73) and 2.4.3 – Technical document for WiNGS Ops.
 - iii. Reference section 2.6 of technical document for WiNGS Ops
At a minimum, the documentation must include:
 - (a) Purpose of the model/problem identification – reference sections 1.1 and 2.1.1 - Technical document for Wings Ops
 - (b) Model version –
 - (c) Theoretical foundation – Section 2.2.1 – Technical documentation for WiNGS Ops
 - (d) Mathematical foundation Section 2.2.1 - Technical documentation for WiNGS Ops
 - (e) External dependencies – reference section 2.5.1 - Technical document for Wings Ops
 - (f) Model substantiation - Section 2.6 - Technical documentation for WiNGS Ops
 - (g) Sensitivity – Section 2.6.2 - Technical documentation for WiNGS Ops
 - (i) Model Substantiation: for each model, provide documentation of the following model substantiation studies:
 - 1. Validation data

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2. Model verification – Section 2.6.1 - Technical documentation for WiNGS Ops
3. Model validation – Section 2.6.2 - Technical documentation for WiNGS Ops
4. Model calibration – Section 2.6.3 - Technical documentation for WiNGS Ops

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END OF REQUEST