MGRA DATA REQUEST: MGRA-2026-8-03
SDG&E RESPONSE

Date Received: 05-12-2025
Date Submitted: 05-15-2025

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.

MGRA DATA REQUEST: MGRA-2026-8-03
SDG&E RESPONSE

Date Received: 05-12-2025
Date Submitted: 05-15-2025

III. RESPONSES

QUESTION 1

With regard to Figure 1-1: 2026-2028 Expected risk Reduction:

a. Does the risk reduction indicated include SDG&E's convex risk weighting function/attitude?

b. If the answer to a) is yes, please provide an equivalent figure using a neutral risk attitude.

RESPONSE 1

a) No. Figure 1-1 does not include SDG&E's risk aversion.

b) Not applicable

MGRA DATA REQUEST: MGRA-2026-8-03
SDG&E RESPONSE

Date Received: 05-12-2025
Date Submitted: 05-15-2025

QUESTION 2

With regard to "Wind Gust Weight" described on p. 13, how is this weighting determined and the driver normalized?

RESPONSE 2

To distinguish and quantify the wildfire risk for a given risk driver that occurred at locations prone to wildfire conditions, the 99th percentile wind gust for a given location is compared to the 25th, 50th, 75th of the overall 99th percentile wind guests for all HFTD locations. The weight (WR_{wind}) of the wind component for a risk event is calculated using 2^0, 2^1, 2^2, and 2^3, respectively.

The frequency of the ignition events (R_{freq}) is aggregated by the FPI level, wind gust category, and consequence category. For drivers that do not have CPUC reportable ignitions, this multiply factor (n_ignition_events_normalized) would be 1.

For example, if 5 animal-contact caused ignitions occurred at locations where the 99th wind gust falls between 25th to 50th percentiles of the overall 99th wind gust ($WR_{wind} = 2^1$) and where the 50th consequence is above the overall 50th percentile threshold, the R_{freq} is calculated as follow:

R_{freq} = n_ignition_events_normalized × WR_{wind} × W_{con} × Σ_n R_{con}

The ignition events are normalized using the min-max scaling normalization formula:

$$x_{\text{norm}} = \frac{x - \min(x)}{\max(x) - \min(x)}$$

MGRA DATA REQUEST: MGRA-2026-8-03
SDG&E RESPONSE

Date Received: 05-12-2025
Date Submitted: 05-15-2025

QUESTION 3

Please provide technical documentation for the risk driver statistical analysis and testing mentioned on page 14: "*Topographical and climatological risk factors, which include factors include FPI, temperature, humidity, wind gust, elevation, slope, and aspect associated with the location where risk events were observed, were evaluated. Test statistics method Mann Whitney Test was used to compare the sample mean of a risk driver to the sample mean of the other risk drivers. If the difference was statistically significant, this risk factor is noted in OEIS Table 3-1 as influential for a risk driver. These factors are evaluated based on the historical climatological data and current topographical characteristics of the locations associated with each risk driver*."

RESPONSE 3

SDG&E objects to the request to the extent is seeks information that is publicly available and equally available to the requestor. Subject to and without waiving the foregoing objections, SDG&E responds as follows:

SDG&E does not have technical documentation regarding this Mann Whitney Test but abundant explanations can be found online. The goal is to test the statistical significance of a risk factor for a given risk driver. Risk events for each diver category are not normally distributed, which is the main reason Mann Whitney Test is used to run the statistical test instead of using T test. The data used for this test are processed in python, mannwhitneyu() function under "scipy.stats" library.

The underlying data have risk factors mapped to individual risk event observations. The data field, FPI value, is spatially and temporally mapped to each observation; whereas other risk factors, such as temperature and slope, are mapped spatially to the asset where the risk events were observed. The data are sampled into two groups, a given risk driver and all other observations before running this test. The OEIS table 3-1 shows the result of the test for each risk driver category when compared with all the other risk drivers.

MGRA DATA REQUEST: MGRA-2026-8-03
SDG&E RESPONSE

Date Received: 05-12-2025
Date Submitted: 05-15-2025

QUESTION 4

With regard to SDG&E Table 5-7, p. 42, please provide the justification and modeling that leads to the P100 percentile of a potential $211B loss in the SDG&E service area.

RESPONSE 4

As illustrated in Table 5-7, Wildfire risk constitutes the majority of the Overall Utility Risk, significantly outweighing the contributions from PSPS and PEDS risks. Over the course of the 5 million simulated years, the most extreme wildfire scenario, resulting in an estimated cost of approximately $211 billion, was driven by two ignition events that coincidentally occurred under the same simulation seed ID.

The table below shows how the maximum values are derived based on the Monte Carlo simulation:

	Ignition 1	**Ignition 2**	**Total**
Sim Weather Conditions Date	11/12/2018	11/17/2014	---
Ignition ID	403589	1012407	---
Seed ID	11792465	11792465	---
Total Acres Burned	43,703	35,934	79,637
Total Structures Destroyed	6,029	4,042	10,071
Sim Max Wind Gust Conditions	62	55	---
SCADA Sect. Device	907-1562AE	909-451	---
Feeder ID	907	909	---
Wildfire Total Risk (with Risk Aversion) [M$]	$136,729.33	$74,237.73	$210,967.06
Wildfire Total Risk (without Risk Aversion) [M$]	$7,559.78	$4,989.72	$12,549.50
Wildfire Safety Risk (without Risk Aversion) [M$]	$1,427.77	$863.42	$2,291.19
Wildfire Financial Risk (without Risk Aversion) [M$]	$6,132.00	$4,126.24	$10,258.25
Wildfire Reliability Risk (without Risk Aversion) [M$]	$0.01	$0.05	$0.06

MGRA DATA REQUEST: MGRA-2026-8-03
SDG&E RESPONSE

Date Received: 05-12-2025
Date Submitted: 05-15-2025

QUESTION 5

Please provide a list of the 125 worst fire weather days (p. 45) and associated wildfire hazard intensity data.

RESPONSE 5

Please see attached spreadsheet titled "SDGE Response MGRA-2026-8-03_Q5_SDGE_125_worst_fire_days_stats_2025_05_15.xlsx" for the list of 125 days and percentile values of acres burned and structure destroyed for each day. This is the data as referenced on page 45 of SDG&E's 2026-2028 WMP.

This list is currently under review by the Meteorology and Risk Analytics teams. Given the extreme fire weather conditions experienced within SDG&E's service territory between November 2024 and January 2025, SDG&E is evaluating the inclusion of these recent dates in future analyses.

MGRA DATA REQUEST: MGRA-2026-8-03
SDG&E RESPONSE

Date Received: 05-12-2025
Date Submitted: 05-15-2025

QUESTION 6

With regard to OEIS Table 4-3, and corresponding Excel table (MGRA-3-9 b), please break out customers into Residential, Small C&I, and Medium/Large C&I.

RESPONSE 6

SDG&E objects to the request to the extent it is unduly burdensome and calls on SDG&E to perform studies or analysis that do not currently exist. Subject to and without waving the foregoing objections, SDG&E responds as follows:

Commercial and Industrial customers are split based on their kW demand. SDG&E does not have C&I broken down by small, medium or large. The documentation provided includes customer hours broken out into Residential and C&I.

Please see the attached spreadsheet titled "SDGE Response MGRA-2026-8-03_Q06-OEIS-Table-4-3.xlsx."

MGRA DATA REQUEST: MGRA-2026-8-03
SDG&E RESPONSE

Date Received: 05-12-2025
Date Submitted: 05-15-2025

QUESTION 7

WiNGS-Planning still incorporates a decision tree that will default to underground if the Cost/benefit characteristics meet certain criteria, as was described in the SDG&E GRC? Or are all combinations evaluated as options prior to the decision tree?

a. If the answer is yes, the decision tree is prior to CBR calculation does the CBR use SDG&E's convex risk function/attitude for the decision tree?

RESPONSE 7

SDG&E objects to the request to the extent it is argumentative and mischaracterizes SDG&E's modeling functions. SDG&E further objects to the request to the extent it is vague and ambiguous, and fails to identify with specificity the information requested. Subject to and without waiving the foregoing objections, SDG&E responds as follows:

SDG&E does not default to undergrounding as the preferred mitigation strategy. For each feeder segment, SDG&E evaluates risk reduction and cost-benefit ratios for both Combined Covered Conductor and Strategic Undergrounding mitigation options. As stated in the 2026-2028 WMP filing, mitigations are selected by considering their Cost Benefit Ratio (CBR) estimates which encompass risk reduction estimates, as well as both upfront installation and lifecycle costs. Lifecycle costs are essential to making informed and cost-effective decisions in infrastructure investments. They encompass not only the initial investment in mitigation measures but also the ongoing costs of maintenance, operations, and potential upgrades. See section 6.1.3 of the 2026-2028 WMP filing for further details.

MGRA DATA REQUEST: MGRA-2026-8-03
SDG&E RESPONSE

Date Received: 05-12-2025
Date Submitted: 05-15-2025

QUESTION 8

SDG&E describes significant changes to the covered conductor management structure that are now ongoing (p. 98).

Will covered conductor deployment continue unabated while SDG&E reorganizes the management process?

RESPONSE 8

Yes, the covered conductor deployment is expected to continue unabated while SDG&E reorganizes the Project Management Office (PMO) services. There will be some overlap between the incumbent PMO service provider and the new PMO service provider to ensure a smooth transition. The new PMO service provider may also subcontract some of their services with the incumbent to ensure there are no disruptions in the program.

MGRA DATA REQUEST: MGRA-2026-8-03
SDG&E RESPONSE

Date Received: 05-12-2025
Date Submitted: 05-15-2025

QUESTION 9

Please provide tabular data in Excel spreadsheet format for the following figures:

a. OEIS Table 3-1: List of Risks and Risk Drivers to Prioritize

b. OEIS Table 4-3: Frequently De-energized Circuits

c. OEIS Table 6-1 and Appendix F, List of Prioritized Areas

d. SDG&E Table 6-1 Potential Mitigation Activities for Risk Drivers

e. OEIS Table 6-3 Risk Impact of Activities

f. Appendix G refers to a dead web link. Please provide the data in Excel spreadsheet as well as fix the weblink.

RESPONSE 9

For a-f all the requested tables are available on SDG&E's website at https://www.sdge.com/2026-2028-wildfire-mitigation-plan

MGRA DATA REQUEST: MGRA-2026-8-03
SDG&E RESPONSE

Date Received: 05-12-2025
Date Submitted: 05-15-2025

QUESTION 10

Please provide GIS data in the form of shapefiles or geodatabases that support the following figures (if these have not already been provided).

a. Figure 4-3: Frequently De-energized circuits, p. 22.

RESPONSE 10

Please see the attached gdb titled, "SDGE_Frequently_De-energized_circuits.gdb."

MGRA DATA REQUEST: MGRA-2026-8-03
SDG&E RESPONSE

Date Received: 05-12-2025
Date Submitted: 05-15-2025

QUESTION 11

Is FPI historic geographic data available, if so is it available through a public interface and if not how difficult would it to be to produce?

a. If SDG&E were asked to produce FPI estimates given a set of geographic points and date/time, how far back into history could SDG&E provide FPI data?

RESPONSE 11

SDGE divides the service territory into 8 operational districts. The FPI is computed daily for each operational district using live fuel moisture values, dead fuel moisture values, grass NDVI values, dewpoint depression and sustained wind speed forecast. The output is not gridded, and each district receives an FPI value from 1-17. Historical values are archived in a spreadsheet and are not posted publicly.

a. For operational FPI values, SDGE started keeping daily records of the data in April 2013 but there exists intermittent values as far back as late September 2012. Again, the FPI values are calculated per district and not for a set of otherwise specified geographic points.

MGRA DATA REQUEST: MGRA-2026-8-03
SDG&E RESPONSE

Date Received: 05-12-2025
Date Submitted: 05-15-2025

END OF REQUEST