MUSSEY GRADE ROAD
DATA REQUEST: MGRA-SDGE-2025WMP-02
SDG&E RESPONSE

Date Received: April 8, 2024
Date Submitted: April 11, 2024

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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Undergrounding versus Covered Conductor and Other mitigations (related to questions 1 – 6)

In 2024, a combined mitigation study is being conducted by a third-party vendor to understand the benefits and costs associated with increasing covered conductor effectiveness and how a combination of mitigations compares to undergrounding.

QUESTION 1

Who is the third-party vendor conducting the study?

RESPONSE 1

SDG&E objects to the request to the extent it is vague and ambiguous. SDG&E assumes the language in the introduction to the question refers to language used in SDG&E's 2025 WMP Update. Subject to and without waiving the foregoing objections, SDG&E responds as follows:

The third-party vendor conducting the study is Aerospace Technical Services.

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QUESTION 2

When did the study commence?

RESPONSE 2

SDG&E objects to the request to the extent it is vague and ambiguous. SDG&E assumes the language in the introduction to the question refers to language used in SDG&E's 2025 WMP Update. Subject to and without waiving the foregoing objections, SDG&E responds as follows:

The study commenced on November 1, 2023.

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QUESTION 3

When will a report for the study be complete?

RESPONSE 3

SDG&E objects to the request to the extent it is vague and ambiguous. SDG&E assumes the language in the introduction to the question refers to language used in SDG&E's 2025 WMP Update. Subject to and without waiving the foregoing objections, SDG&E responds as follows:

SDG&E anticipates a final report by year end 2024.

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QUESTION 4

Are there interim versions available?

RESPONSE 4

SDG&E objects to the request to the extent it is vague and ambiguous. SDG&E assumes the language in the introduction to the question refers to language used in SDG&E's 2025 WMP Update. Further, the term "interim versions" is unclear. Subject to and without waiving the foregoing objections, SDG&E responds as follows:

SDG&E anticipates a final report by year end 2024.

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QUESTION 5

Please provide the inputs and assumptions that were given to the vendor for the study.

RESPONSE 5

SDG&E objects to the request to the extent it is vague and ambiguous. SDG&E assumes the language in the introduction to the question refers to language used in SDG&E's 2025 WMP Update. Subject to and without waiving the foregoing objections, SDG&E responds as follows:

Inputs provided to vendor:

- Ignition data
- Outage data
- Meteorology data
- Covered Conductor install dates and location
- Undergrounding asset install dates and location
- Early Faut Detection install dates and location
- Falling Conductor Protection install dates and location

Assumptions provided to vendor:

- To only consider outage data with the following taken into accounted:
    - Risk events
    - Distribution events
    - HFTD location

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QUESTION 6

Please provide results when available including any interim results clearly marked as such.

RESPONSE 6

SDG&E objects to the request to the extent it is vague and ambiguous, specifically with respect to the term "interim results." SDG&E assumes the language in the introduction to the question refers to language used in SDG&E's 2025 WMP Update. SDG&E further objects to the request to the extent it seeks information that is subject to attorney client privilege, attorney work product, or any other applicable privilege or doctrine. Subject to and without waiving the foregoing objections, SDG&E responds as follows:

SDG&E anticipates a final report by year end 2024.

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Table 15: Efficiency of Covered Conductor
(related to questions 7 and 8)

QUESTION 7

What is the basis for dropping the wildfire mitigation effectiveness of CC for pole damage and anchor/guy failure?

RESPONSE 7

SDG&E objects to the request to the extent it seeks information already publicly available and described further in SDG&E's Wildfire Mitigation Plan Update. Subject to and without waiving the foregoing, SDG&E responds as follows:

As discussed within ACI SDGE-23-08:

> *The effectiveness of covered conductors against various equipment failure risk drivers was reduced in 2024 for several reasons. First, the estimated effectiveness against equipment failure drivers was originally derived using a year-over-year approach. Effectiveness was defined as the immediate protection gained from performing the covered conductor installation, which would replace aging or damaged equipment with new equipment. However, because these effectiveness numbers are being utilized for long-term investment planning, it is more appropriate to utilize a long-term effectiveness number for risk drivers. While a covered conductor will replace aging equipment in the short term, the covered conductor itself will age and degrade, reducing the effectiveness of the original installation over time. To address this issue, previous studies on the effectiveness of traditional (bare conductor) hardening were used to estimate the effectiveness of covered conductors on equipment failure risk drivers over time. As shown in Figure 12, traditional hardening had an estimated effectiveness of approximately 65% in year one, but that effectiveness steadily decreased over time and is now calculated as 32% effective. In contrast, the effectiveness of undergrounding electric lines (WMP.473) did not change, as the only ignition risk is related to vehicle contact with padmounted equipment, which remains constant over time. Because of the similarities in equipment being replaced in the covered conductor and traditional hardening initiatives, the 10-year recorded effectiveness of 30% for traditional hardening effectiveness against equipment failure risk events was also used to calculate covered conductor effectiveness for the same equipment failure risk drivers, resulting in a decrease in covered conductor efficacy from 78% in year one to 65% in year 10.*[1]

[1] SDG&E 2025 Wildfire Mitigation Plan Update p.90

The risk drivers for pole damage and anchor/guy failure are not directly addressed by the installation of covered conductor. The long-term risk reduction for these drivers was therefore aligned with the 30% recorded effectiveness seen in SDG&E's traditional hardening program.

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QUESTION 8

Please provide any calculations, data, or lab test results supporting this conclusion.

RESPONSE 8

SDG&E objects to the request to the extent it seeks information already publicly available and described further in SDG&E's Wildfire Mitigation Plan Update. Subject to and without waiving the foregoing, SDG&E responds as follows:

The 30% equipment failure efficacy was calculated utilizing an average of the recorded effectiveness of SDG&E's traditional hardening program. Please see attached spreadsheet titled "SDGE Response MGRA-SDGE-2025WMP-02_Q8.xlsx."

Figure 12: Hardening Efficiency over Time
(related to questions 9 – 11)

QUESTION 9

Please provide a table of ignitions since the SDG&E hardening program commenced that includes year of hardening of the circuit involved as an attribute.

RESPONSE 9

SDG&E objects to the request to the extent it is unduly broad and overly burdensome, as well as vague and ambiguous. SDG&E's response is limited to ignitions on hardened infrastructure in the HFTD. Subject to and without waiving this or any other objections, SDG&E responds as follows:

Please see attached spreadsheet titled "SDGE Response MGRA-SDGE-2025WMP-02_Question 9,12,13.xlsx."

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QUESTION 10

Provide the data supporting Figure 12. This should consist of ignition rate per year per mile for hardened wire divided into hardening year segments.

RESPONSE 10

SDG&E objects to the request to the extent it seeks information that is publicly available in SDG&E's 2025 WMP Update and is vague and unintelligible to the extent the question misstates the information provided in Figure 12. SDG&E further objects to the request that it calls for SDG&E to perform additional studies or analysis that do not exist. Subject to and without waiving the foregoing or any other objections, SDG&E responds as follows:

The data in Figure 12 does not represent the ignition rate per year per mile for hardened wire divided into hardening year segments, as claimed by MGRA. The ignition rate per year per mile was not calculated or incorporated as part of this analysis. Rather, the analysis represented in Figure 12 is sourced from SDG&E's distribution overhead (OH) hardening study, which utilized the pre- and post-mitigation fault rates per 100 miles within in the HFTD for all risk events, incorporating location-specific data.

SDG&E does not have enough data to perform a similar study for covered conductor. The Covered Conductor efficacy values are estimated efficacy values created utilizing subject matter expertise, joint IOU studies, and the OH hardening study results.

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QUESTION 11

Show the methodology for determining the slope of the covered conductor curve compared to the OH hardening curve.

RESPONSE 11

SDG&E objects to the request to the extent it seeks information that is publicly available in SDG&E's 2025 WMP Update, and is vague and unintelligible to the extent the question misstates the information provided in Figure 12. SDG&E further objects to the request that it calls for SDG&E to perform additional studies or analysis that do not exist. Subject to and without waiving the foregoing or any other objections, SDG&E responds as follows:

The covered conductor curve was created by utilizing the year one data point of 78% estimated effectiveness reported in SDG&E's 2023 WMP and the year ten data point of 65% estimated effectiveness as reported within the 2025 WMP Update. A straight line was drawn between these two points to create the covered conductor line.

The OH hardening line was created by utilizing SDG&E's recorded effectiveness data for year five and year ten (45% and 28% respectively) and SDG&E's estimated effectiveness for year one of 65%. These points were connected with straight lines.

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5.9 SDGE-23-10: Early Fault Detection Implementation
(related to questions 12 and 13)

QUESTION 12

Please provide a list of reportable ignitions for the last two years including the following additional attributes:

a. whether circuit was implemented with active FCP
b. whether circuit was implemented with active EFD
c. whether PSPS was activated anywhere on the system

RESPONSE 12

SDG&E objects to the request to the extent it is unduly broad and overly burdensome, as well as vague and ambiguous. SDG&E's response is limited to ignitions in the HFTD. Subject to and without waiving this or any other objections, SDG&E responds as follows:

Please see attached spreadsheet titled "SDGE Response MGRA-SDGE-2025WMP-02_Question 9,12,13.xlsx."

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QUESTION 13

Please provide a list of outages for the last two years including the following additional attributes:

a. whether circuit was implemented with active FCP
b. whether circuit was implemented with active EFD

RESPONSE 13

SDG&E objects to the request to the extent it is unduly broad and overly burdensome, vague and ambiguous, and seeks information irrelevant to SDG&E's Wildfire Mitigation Plan or 2025 WMP Update. SDG&E's response is limited to outages in the HFTD. Subject to and without waiving this or any other objections, SDG&E responds as follows:

Please see attached spreadsheet titled "SDGE Response MGRA-SDGE-2025WMP-02_Question 9,12,13.xlsx."

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END OF REQUEST