

**MUSSEY GRADE ROAD ALLIANCE DATA REQUEST:
MGRA-SDGE-WMP22_DATAREQUEST 4
SDG&E RESPONSE**

**Date Received: April 1, 2022
Date Submitted: April 5, 2022**

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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Wildfire Risk Modeling

In its response to MGRA Data Request 3 SDG&E stated that: The WiNGS-Planning model characterizes the likelihood of a risk event (LoRE) for a wildfire utilizing available historical ignition data, to create a base annual ignition rate for a given circuit-segment portion of the system. To account for more precise circuit-segment risk profiles, adjustment elements associated to specific risk factors are applied to the base annual ignition rate at the circuit segment level, which include risk factors such as vegetation, wind, conductor/pole age. For the wind risk factor adjustment element specifically, a 5- year historical max wind speed attribute is utilized for the adjustment to the ignition rate, the max being used in part to ensure the likelihood and consequence elements of the model employ aligned environmental conditions.

QUESTION 1

In the circuit-segment risk profiles, are the adjustments applied to specific risk factors applied to all ignitions equally or are they applied differently to different drivers? If the latter, how so?

RESPONSE 1

SDG&E objects to the Question on the grounds set forth in General Objections Nos. 2 and 3. Subject to the foregoing objections, SDG&E responds as follows:

The adjustments do not apply individually to specific ignition risk drivers in the current iteration of the WiNGS Planning model, but rather to the base calculated ignition rate for a given circuit-segment, which is estimated from the historical ignition counts across all risk drivers adjusted by the circuit-segment mileage of the given portion of the system being assessed. Current plans for updates to the wildfire likelihood methodology in WiNGS Planning include replacing the base ignition rate and adjustment factor elements with the circuit-segment outputs from the Probability of Ignition (PoI) models. The individual PoI models consist of specific asset and risk driver machine learning models, and therefore the update would constitute a more direct circuit-segment risk likelihood assessment based on individual risk drivers.

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QUESTION 2

What is the formula or algorithm by which the historical maximum wind speed is applied to the ignition rate?

RESPONSE 2

$$\text{Norm. Ignition Rate Adj. by Wind}_i = \frac{\text{Base Ignition Rate}_i * \text{Wind Speed Adj. Factor}_i * \text{Total Ignition Rate}}{\text{Total UnNorm. Wind Adj. Ignition Rate}}$$

Where,

$$\text{Total Ignition Rate} = \sum_{i=1}^n (\text{Base Ignition Rate}_i)$$

$$\text{Total UnNorm. Wind Adj. Ignition Rate} = \sum_{i=1}^n (\text{Base Ignition Rate}_i * \text{Wind Speed Adj. Factor}_i)$$

i = specific circuit-segment element

n = number of circuit-segment elements in scope

Wind Speed Adj. Factor = circuit-segment level adjustment factor calculated based on the historical Max Wind speed attribute, devised by internal Subject Matter Experts (SME) from Enterprise Risk Management (ERM) and Meteorology

Total Ignition Rate = annual rate based on historical counts across all ignition drivers associated to the scope of the model

Total UnNorm. Wind Adj. Ignition Rate = non-normalized adjusted annual rate based on the wind speed adjustment factor applied at the circuit-segment level

Note: Normalization of the ignition rates is achieved to ensure top-down alignment of the observed system level historical ignition rates with the more granular circuit-segment level ignition rates.

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QUESTION 3

How has this approach been validated? Please provide any internal validation documents with any confidential data removed.

RESPONSE 3

SDG&E objects to the Question on the grounds set forth in General Objections Nos. 2, 3, and 5. Subject to the foregoing objections, SDG&E responds as follows:

The methodology of the current wildfire likelihood calculation of the risk analysis within WiNGS Planning has been constructed and quality checked by, and alongside, multiple internal teams, including Enterprise Risk Management, Wildfire Mitigation, and Meteorology, along with third party support provided by an external vendor to help formulate and construct the model framework. Current plans for WiNGS Planning includes detailing and initiating processes to implement a third-party review of the model, including, but not limited to, the wildfire likelihood portion of the calculation methodology.

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END OF REQUEST