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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.

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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 SDG&E's Risk Vegetation Risk Index (VRI)
SDG&E's comments on the Draft Decision on San Diego Gas & Electric Company's 2023-2025 WMP (Draft Decision) include this comment (p. 4): "The VRI is not sufficient for vegetation management operational decision-making as it does not categorize circuits and transmission lines based on tree species, tree height, tree count, and historical vegetation-related outages." In SDG&E's 2023-2025 WMP Appendix D (p. 31) there is this statement: "The Vegetation Risk Index (VRI) is a situational awareness tool that categorizes circuits and transmission lines based on tree species, tree height, tree count, and historical vegetation-related outages."

 a. Please clarify which of the above statements is true.
 b. If the second statement is no longer true but was at the time, explain how SDG&E came to the conclusion made in the first statement.
 c. Explain the distinction between the two, including:
    i. How SDG&E uses the VRI currently.
    ii. How SDG&E plans on using the VRI in the future.
    iii. How SDG&E plans on improving the VRI to meet future needs.

RESPONSE 1

 a. The statement, "T*he Vegetation Risk Index (VRI) is a situational awareness tool that categorizes circuits and transmission lines based on tree species, tree height, tree count, and historical vegetation-related outages*" is a true statement. This statement in SDG&E's comments on the Draft Decision was intended to mean the VRI does not categorize such information based on the Vegetation Management Areas (VMA) that are used to perform operational activities. It is one of reasons why VRI alone is not sufficient for vegetation management operational decision-making.

 With respect to ACI-SDGE-23-07, SDG&E understands that Energy Safety's intent is for SDG&E to improve and implement a risk-informed decision-making process that can be operationalized for SDG&E's vegetation management operations. SDGE is working on a probabilistic approach to implement this requirement in the future through a new model that will be superior to the current VRI when assessing vegetation contact risk for the entire territory and operational use in vegetation management operations. Thus SDG&E requests that the ACI be revised to not specifically reference the VRI in its current form. The new model will likely use a different name, as further discussed below.

 b. N/A.

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c.

   i.   The VRI was originally constructed to set wind "Alert Speed" during the PSPS decision-making process and its use is limited to PSPS operations. The VRI is based on tree species, tree height, tree count, and historical vegetation-related outages. In its current form, the VRI places circuit segments in High, Medium, or Low categories (polygon) based on these inputs. There is currently no predictive power of the VRI as it never graduated to that level. Currently the VRI is being used to adjust the Alert Speed of a circuit or circuit segment. If the circuit segment is located in a "High" VRI polygon, the device associated with that polygon will have its Alert Speed adjusted to the 95th percentile of wind speeds for the weather station associated with that polygon. If the circuit segment is not located in a "High" VRI polygon, the Alert Speed will be set at the 99th percentile of the associated weather station. Alert Speed calculation will then move along the decision tree from there.

        For use by SDG&E's Vegetation Management operations, the VRI is simply a situational awareness tool expressed as a GIS map layer that displays the low, medium, and high VRI polygons over the Vegetation Management Areas (VMA) at a specific point in time. The VRI polygons overlayed upon the VMA polygon can visually represent the score of the VRI (low, medium, high). Many other VMAs are outside the VRI polygon area because the use of the current VRI for vegetation management is limited to situational awareness for a only a portion of SDG&E's service territory.

  ii.   SDG&E is evaluating a predictive model for the risk of vegetation-related outages. As these models are finalized, the current VRI will likely be retired from use.

 iii.   SDG&E is testing machine learning approaches to predict the likelihood of vegetation contact given wind and other weather conditions. This predictive model is currently under evaluation. When it has been fully assessed and tested, it is likely to replace the current VRI.

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QUESTION 2

Regarding a Comprehensive Tool for Risk-Based Vegetation Management
SDG&E's comments on the Draft Decision include this statement (p. 4), "SDG&E is currently developing a comprehensive tool that includes multiple risk-related indicators, which may inform a more risk-based approach to vegetation management in the future."
   a. What is the name of this tool?
   b. How does this tool differ from and/or improve upon the VRI? Please note which inputs for the new tool (e.g., risk-related indicators) are different from inputs for the VRI.
   c. SDG&E's comments also state that "[to] the extent the third-party consultant made recommendations regarding the VRI, SDG&E will consider them in the context of the WiNGS Model." (p. 4). Would this apply to improvements being made to this new tool, or separately updating the VRI to be sufficient for use in planning through the WiNGS Model?

RESPONSE 2

   a. The comprehensive tool is in development and does not yet have a specific name.

   b. The long-term objective is to create a tool that includes multiple risk indicators for vegetation management operational purposes. The intended improvement over the current VRI is to develop a probabilistic method that has predictive capabilities, rather than the limited GIS overlay described above. The output from this predictive model will be likelihood of vegetation contacts as one of the risk indicators. For operational purposes in the field, knowing only the likelihood of vegetation contact is not sufficient. In addition to the predictive capability as the "improvement upon VRI", other indicators that are not currently in the VRI calculation but could improve decision-making in the field include:
      o 95/99 percentile wind gust and wind speed
      o Soil moisture content
      o Likelihood of hazard tree conditions

   c. SDG&E is currently evaluating a replacement for its tree strike variable that is used to adjust the ignition rate based on localized conditions of tree strike risk. While the term, "Vegetation Risk" has been used in this context, the replacement for the tree strike variable should not be confused with the VRI polygon layer that is described in the response to question 1. To clarify, the current VRI is currently not a major consideration or input to WiNGS Planning, and thus was not reviewed by the third party consultant as an input for WiNGS Planning. The Vegetation Risk Index polygon layer is too generalized to distinguish risk between spans, which is a requirement of the WiNGS Planning model. All prospective vegetation risk models must be evaluated in the context of mitigation planning purposes prior to inclusion into the WiNGS Planning model.

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END OF REQUEST