Date Received: March 26, 2020 Date Submitted: March 31, 2020

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.

Date Received: March 26, 2020 Date Submitted: March 31, 2020

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.

Date Received: March 26, 2020 Date Submitted: March 31, 2020

III. RESPONSES

Historically, all IOUs interpreted the GO 95 wind loading requirements as 56 mph gusts for light loading districts. D.17-12-024 states on p. 67 that: "Going forward, utilities must design, build, and maintain their overhead facilities to withstand foreseeable fire-wind conditions in their service territories."

QUESTION 1:

How are the foreseeable wind conditions calculated that are used for wind loading requirements? (a reference is acceptable).

OBJECTION:

SDG&E objects to this request on the grounds set forth in General Objection Nos. 2 and 5. Subject to the foregoing objections, SDG&E responds as follows.

RESPONSE 1:

For design purposes, SDG&E performed a study to understand the maximum known local wind conditions within its service territory by focusing on certain areas and analyzing the 50-year maximum three-second gust. The end-product was a wind map that breaks up SDG&E's service territory into the following maximum wind speed categories:

- Green: 65 mph max wind speed
- Yellow: 85 mph max wind speed
- Red: 111 mph max wind speed

Please see the attached document "MGRA-SDGE DR 3 Q1.pdf" which details all the data that went into the creation of this map.

The light loading conditions outlined in General Order (GO) 95 assume an 8 pounds per square foot for wind, which is 56 mph, so SDG&E's design criteria is typically more conservative, and more in line with the worst case known local wind conditions.

Date Received: March 26, 2020 Date Submitted: March 31, 2020

QUESTION 2:

What return interval is used to estimate maximum wind speed for wind loading purposes?

OBJECTION:

SDG&E objects to this request on the grounds set forth in General Objection Nos. 2 and 5. Subject to the foregoing objections, SDG&E responds as follows.

RESPONSE 2:

The following intervals are used to estimate maximum wind speed for wind loading purposes:

- As discussed in the attached document "MGRA-SDGE DR 3 Q1.pdf", (provided in response to Question 1 above) SDG&E uses a 50-year interval for design purposes.
- Wind Gusts: The wind gusts are the highest three-second average of the wind samples taken over ten minutes.

Date Received: March 26, 2020 Date Submitted: March 31, 2020

QUESTION 3:

What fraction of the distribution circuit miles in the HFTD are built to a wind loading standard less than that of the known local conditions? Note: This will include circuits built to the 56 mph wind loading standard unless known local conditions for said circuits indicate that 56 mph wind gust speed will not be exceeded.

OBJECTION:

SDG&E objects to this request on the grounds set forth in General Objection Nos. 2, 5, and 9. Subject to the foregoing objections, SDG&E responds as follows.

RESPONSE 3:

Since the development of its wind map, SDG&E has hardened approximately740 miles of distribution circuits within the HFTD, designing and building the lines based on the known local conditions identified in SDG&E's 50-year wind map. All SDG&E distribution projects since 2010 within the HFTD (Fire Threat Zone at the time) were designed to meet the known local wind conditions and this will continue to be the case moving forward.

SDG&E has a total of 3,485 miles of overhead (OH) conductor within the HFTD, with approximately 2,745 miles unhardened. Those 2,745 miles were designed and constructed before SDG&E created the known local wind map and were designed to meet GO 95 light loading conditions or GO 95 heavy loading conditions depending on the elevation. SDG&E has not completed an engineering study on every structure in the HFTD to understand if that structure meets the known local conditions. Depending on how many conductors are attached to the structure, size of the conductors, the structure height and class, and the span length, it is possible that an existing structure would meet the known local conditions.

Based on confirmed information, however, the ratio in question is calculated as unhardened (not necessarily wind loading less than known local conditions) circuit miles over total circuit miles, which is 79%. That said there are mitigating forces here: SDG&E has a good inspection and maintenance program which leads to very few wood pole failures, and during extreme Fire Potential Index (FPI) combined with real time actual wind gusts that reach 99th percentile levels, SDG&E utilizes Public Safety Power Shutoffs (PSPS) to mitigate this risk of its unhardened system.

Date Received: March 26, 2020 Date Submitted: March 31, 2020

QUESTION 4:

If there are circuits currently not built to the expected wind loading taking in to account local conditions, are these circuits scheduled for rebuilding/hardening? If so, please provide an estimated timeline.

OBJECTION:

SDG&E objects to this request on the grounds set forth in General Objection Nos. 2, 5, and 9. Subject to the foregoing objections, SDG&E responds as follows.

RESPONSE 4:

SDG&E is focused on hardening the highest risk areas of the HFTD, which includes circuits with small conductor (high probability of failure), and areas that have experienced PSPS (areas that have seen high winds on a consistent basis). The total mileage that fits this criteria is 1,784 miles of the remaining approximately 2,745 miles. Of that, approximately 325 miles have been identified for undergrounding where these high-risk segments regularly see winds above 50 mph. Based on SDG&E's current hardening plan, SDG&E will harden an average of 100-125 miles a year for the next 5-10 years and plans to complete the 325 miles of underground scope. From there, SDG&E plans to install 200 miles per year of OH (mostly covered conductor going forward). At this pace, SDG&E anticipates completing the hardening scope of work in 11 years.

Date Received: March 26, 2020 Date Submitted: March 31, 2020

QUESTION 5:

Please provide a GIS file containing the circuit ranking shown in the "SDG&E Wildfire Risk Reduction Model: RISK REDUCTION" figure on page 48.

OBJECTION:

SDG&E objects to this request on the grounds set forth in General Objection Nos. 2, 5, and 9.

RESPONSE 5:

SDG&E utilizes the Wildfire Risk Reduction Model (WRRM) to perform live modeling of the ignition probability and failure rates of assets summed up to the circuit level given the current meteorological and fuel conditions within the service territory. This tool was designed as an operational tool and currently does not contain an export capability to provide this data within a GIS file.