

**PUBLIC ADVOCATES OFFICE DATA REQUEST: CALPA-SDGE-01  
2021 WILDFIRE MITIGATION PLAN  
SDG&E RESPONSE**

**Date Received: January 15, 2021  
Date Submitted: February 11, 2021**

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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:**

Please provide a list of all publicly owned electric utilities and electrical cooperatives (collectively, POUs) that you supply in part or whole.

**OBJECTION:**

SDG&E objects to this request on the grounds set forth in General Objection Nos. 2, 4, 5, and 7. Subject to the foregoing objections, SDG&E responds as follows.

**RESPONSE 1:**

SDG&E does not supply power directly to any POUs.

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**QUESTION 2:**

For each publicly owned electric utility and electrical cooperative (collectively, POU) to which you supply power, please respond to the following:

- a) Have you coordinated with the POU to ensure resilience of the POU during a public safety power shutoff (PSPS) event that you initiate? Please describe the nature of this coordination if so.
- b) In 2020, what coordination, planning, or other activities took place between you and the POU to mitigate the effect of a potential SDG&E-initiated PSPS event on the POU and its customers?

**OBJECTION:**

SDG&E objects to this request on the grounds set forth in General Objection Nos. 2, 4, 5, and 7. Subject to the foregoing objections, SDG&E responds as follows.

**RESPONSE 2:**

SDG&E does not supply power directly to any POUs.

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**QUESTION 3:**

Regarding your wildfire risk model:<sup>1</sup>

- a) Have you developed a risk-estimation model that quantifies the wildfire risk level of each of your circuits?
- b) If the answer to question 3(a) is yes, explain the finest level physical granularity (i.e. individual equipment, pole/tower, circuit-segment, circuit) with which you assess the wildfire risk level of your facilities.
- c) If the answer to question 3(a) is yes, explain the finest level of temporal granularity (i.e. day, week, month, year) with which you assess the wildfire risk level of your facilities.
- d) How are transmission and distribution circuits treated differently in the model referred to in question 3(a)?
- e) Does the model in question 3(a) allow you to rank circuits or circuit-segments by risk level?
- f) Does the model in question 3(a) rank transmission and distribution circuits together or separately?
- g) Are your wildfire risk model's outputs for transmission and distribution circuits comparable to each other?

**OBJECTION:**

SDG&E objects to this request on the grounds set forth in General Objection Nos. 2, 4, 5, and 7. Subject to the foregoing objections, SDG&E responds as follows.

**RESPONSE 3:**

- a) In 2020, SDG&E developed a risk-estimation model – Wildfire Next Generation System (WiNGS) – that quantifies the wildfire risk level for distribution circuits in the High Fire Threat District (HFTD) and a subset of the circuits in the non-HFTD that are in potentially risk regions (i.e., wildland urban interface, canyons). Prior to 2020, SDG&E developed the Wildfire Risk Reduction Model (WRRM) and leveraged it to inform its grid hardening activities as well as other efforts. At this time, not all circuits are modeled in WiNGS because the initial implementation of the model focused on the riskiest areas to help prioritize programs there.
- b) The finest level of granularity with which SDG&E assesses the wildfire risk in WiNGS is at the segment level. A segment is defined as a collection of spans and wires between two isolation points (e.g., SCADA devices). While more granular data is available at the asset level and is utilized to inform the analysis, WiNGS was structured at the segment

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<sup>1</sup> Wildfire risk model refers to a risk-estimation model that quantifies the wildfire risk level of your facilities.

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level because the model also quantifies Public Safety Power Shutoff (PSPS) risk and PSPS operations are implemented on a segment-by-segment basis, not on an asset basis.

- c) The assessment in WiNGS is a snapshot in time that reflects when the data is refreshed. The data used to analyze the segments reflects quarterly updates made in SDG&E's geographic information system (GIS) and is intended to reflect the annual likelihood and consequence of the fire risk.
- d) At this time, WiNGS is not used to evaluate transmission segments. The transmission risk is considered much lower compared to distribution, which is why the initial focus of the model was on distribution circuits in the HFTD and a subset in the non-HFTD as described above.
- e) Yes, the model allows for ranking of distribution segments or circuits based on risk.
- f) No, the model only allows for ranking of distribution segments and circuits in scope of the model as described above.
- g) As described above, the model does not evaluate transmission circuits at this time.

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**QUESTION 4:**

Provide an Excel table of all distribution circuits existing in 2020 (as rows) that includes the following information in separate columns. Items (a) through (gk) are features of the circuit. Items (hl) through (dddggg) pertain to work performed for each circuit.

- a. Circuit Name
- b. **Circuit ID Number**
- c. Total Circuit Miles
- d. **Circuit Miles in non-High Fire Threat District (HFTD) Areas**
- e. **Circuit Miles in HFTD Tier 2**
- f. **Circuit Miles in HFTD Tier 3**
- g. Circuit Voltage
- h. Wildfire Risk Level<sup>2</sup>
- i. Circuit SAIDI (System Average Interruption Duration Index) **for 2020**
- j. Circuit SAIFI (System Average Interruption Frequency Index) **for 2020**
- k. Circuit MAIFI (Momentary Average Interruption Frequency Index) **for 2020**
- l. Miles of Enhanced Vegetation Management (EVM) Work in Non-High-Fire Threat District (HFTD) Areas in 2020
- m. Miles of EVM Work in HFTD Tier 2 in 2020
- n. Miles of EVM Work in HFTD Tier 3 in 2020
- o. Miles of Routine Vegetation Management Work in Non-High-Fire Threat District (HFTD) Areas in 2020
- p. Miles of Routine Vegetation Management Work in HFTD Tier 2 in 2020
- q. Miles of Routine Vegetation Management Work in HFTD Tier 3 in 2020
- r. Miles of Covered Conductor Installed in Non-HFTD in 2018
- s. Miles of Covered Conductor Installed in Non-HFTD in 2019
- t. Miles of Covered Conductor Installed in Non-HFTD in 2020
- u. Miles of Covered Conductor Installed in HFTD Tier 2 in 2018
- v. Miles of Covered Conductor Installed in HFTD Tier 2 in 2019
- w. Miles of Covered Conductor Installed in HFTD Tier 2 in 2020
- x. Miles of Covered Conductor Installed in HFTD Tier 3 in 2018
- y. Miles of Covered Conductor Installed in HFTD Tier 3 in 2019
- z. Miles of Covered Conductor Installed in HFTD Tier 3 in 2020
- aa. Number of Poles Replaced in Non-HFTD in 2018
- bb. Number of Poles Replaced in Non-HFTD in 2019
- cc. Number of Poles Replaced in Non-HFTD in 2020
- dd. Number of Poles Replaced HFTD Tier 2 in 2018
- ee. Number of Poles Replaced HFTD Tier 2 in 2019
- ff. Number of Poles Replaced HFTD Tier 2 in 2020
- gg. Number of Poles Replaced HFTD Tier 3 in 2018

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<sup>2</sup> This refers to the risk calculated for each given circuit, as an output of your quantitative wildfire risk model, if the answer to Question 3(a) is “yes”.

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- hh. Number of Poles Replaced HFTD Tier 3 in 2019
  - ii. Number of Poles Replaced HFTD Tier 3 in 2020
  - jj. Miles of Underground Conductor Installation in Non-HFTD in 2018
  - kk. Miles of Underground Conductor Installation in Non-HFTD in 2019
  - ll. Miles of Underground Conductor Installation in Non-HFTD in 2020
  - mm. Miles of Underground Conductor Installation in HFTD Tier 2 in 2018
  - nn. Miles of Underground Conductor Installation in HFTD Tier 2 in 2019
  - oo. Miles of Underground Conductor Installation in HFTD Tier 2 in 2020
  - pp. Miles of Underground Conductor Installation in HFTD Tier 3 in 2018
  - ~~qq. Miles of Underground Conductor Installation in HFTD Tier 3 in 2018~~
  - qq. Miles of Underground Conductor Installation in HFTD Tier 3 in 2019
  - rr. Miles of Underground Conductor Installation in HFTD Tier 3 in 2020
  - ss. Miles of Light Detection and Ranging (LiDAR) Inspection in Non-HFTD in 2020
  - tt. Miles of LiDAR Inspection HFTD Tier 2 in 2020
  - uu. Miles of LiDAR Inspection HFTD Tier 3 in 2020
  - vv. Number of Detailed Overhead Inspections in Non-HFTD in 2020
  - ww. Number of Detailed Overhead Inspections HFTD Tier 2 in 2020
  - xx. Number of Detailed Overhead Inspections HFTD Tier 3 in 2020
  - yy. Number of Sectionalization Devices Installed in Non-HFTD in 2018
  - zz. Number of Sectionalization Devices Installed in Non-HFTD in 2019
  - aaa. Number of Sectionalization Devices Installed in Non-HFTD in 2020
  - bbb. Number of Sectionalization Devices Installed HFTD Tier 2 in 2018
  - ccc. Number of Sectionalization Devices Installed HFTD Tier 2 in 2019
  - ddd. Number of Sectionalization Devices Installed HFTD Tier 2 in 2020
  - eee. Number of Sectionalization Devices Installed HFTD Tier 3 in 2018
  - fff. Number of Sectionalization Devices Installed HFTD Tier 3 in 2019
  - ggg. Number of Sectionalization Devices Installed HFTD Tier 3 in 2020

**OBJECTION:**

SDG&E objects to this request on the grounds set forth in General Objection Nos. 2, 4, 5, and 7. Subject to the foregoing objections, SDG&E responds as follows.

**RESPONSE 4:**

Please refer to “2021WMP CalPA-SDGE DR1 Q4 and Q5.xlsx.” Below is a list of assumptions and additional information per column for the data provided within SDG&E’s response to Question 4:

- a-b. SDG&E circuit names and circuit IDs are the same.
- c-f. SDG&E determines mileage by summing all the circuit segment lengths across a circuit. Some segments traverse more than one tier and are categorized as ‘both’. For



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- these circuit segments, the exact length per tier is not known. For this response, all multi-tier segments are assumed to be in the majority tier for a given circuit.
- g. The majority circuit segment voltage for the entire circuit is provided.
  - h. As discussed above, SDG&E's WiNGS model currently includes only HFTD and some Non-HFTD circuits. SDGE is considering how to present wildfire risk scores on circuits that are not in the HFTD. For the current time, non-HFTD circuits can be thought of as having significantly lower wildfire risk than those in the HFTD. For the purposes of this table, the wildfire risk level for these circuits have been marked zero.
  - i-k. SDG&E has provided SAIDI, SAIFI, and MAIFI values per circuit for 2020 only.
  - l-n. SDG&E's enhanced vegetation management program only is applied within the HFTD. The data is tracked per tree and related structure. For the purposes of this table, the total number of non-duplicate structures were multiplied by the average distribution span length per tier to approximate the mileage worked.
  - o-q. SDG&E performs routine vegetation management system wide. The data is tracked per tree and related structure. For the purposes of this table, the total number of non-duplicate structures were multiplied by the average distribution span length per tier to approximate the mileage worked.
  - r-z. SDG&E only installed covered conductor on one circuit (972) in 2020.
  - aa-ai. SDG&E reported steel poles installed between 2018-2020. If a pole installed related to multiple circuits, the pole was counted for each circuit that was hardened.
  - aj-ar. SDG&E reported all underground installed 2018-2020. SDG&E determines mileage by summing all the circuit segment lengths across a circuit. Some segments traverse more than one tier and are categorized as 'both'. For these circuit segments, the exact length per tier is not known. For this response, all multi-tier segments are assumed to be in the majority tier for a given circuit.
  - as-au. SDG&E reported LiDAR captured for fire hardening engineering and design work. LiDAR data is tracked per structure. For the purposes of this table, the total number of non-duplicate structures were multiplied by the average distribution span length per tier to approximate the mileage captured.
  - av-ax. SDG&E reported data from CMP Detailed 5-year inspections, Tier 3 HFTD inspections, and Distribution Drone assessments.
  - ay-bg. SDG&E reported all installed dynamic protective devices (SCADA switches) for 2018-2020.

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**QUESTION 5:**

Provide an Excel table of all transmission circuits (as rows) that includes the same information listed above in Question 4(a)-(d) (del ggg).

**OBJECTION:**

SDG&E objects to this request on the grounds set forth in General Objection Nos. 2, 4, 5, and 7. Subject to the foregoing objections, SDG&E responds as follows.

**RESPONSE 5:**

Please refer to “2021WMP CalPA-SDGE DR1 Q4 and Q5.xlsx.” Below is a list of assumptions and additional information per column for the data provided within SDG&E’s response to Question 5:

- a-b. SDG&E circuit names and circuit IDs are the same.
- c-f. SDG&E determines mileage by summing all the circuit segment lengths across a circuit. Some segments traverse more than one tier and are categorized as ‘both’. For these circuit segments, the exact length per tier is not known. For this response, all multi-tier segments are assumed to be in the majority tier for a given circuit.
- g. The majority circuit segment voltage for the entire circuit is provided.
- h. As discussed above, SDG&E’s WINGS model currently does not include transmission circuits. For the purposes of this table, the wildfire risk level for these circuits have been marked zero.
- i-k. SDG&E has provided SAIDI, SAIFI, and MAIFI values per circuit for 2020 only.
- l-n. SDG&E’s enhanced vegetation management program does not apply to transmission circuits.
- o-q. SDG&E considers all vegetation management work performed on the transmission system routine. The data is tracked per tree and related structure. For the purposes of this table, the total number of non-duplicate structures were multiplied by the average transmission span length per tier to approximate the mileage worked.
- r-z. SDG&E does not install covered conductor on transmission.
- aa-ai. SDG&E reported steel poles installed between 2018-2020. If a pole installed related to multiple circuits, the pole was counted for each circuit that was hardened.

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- aj-ar. SDG&E reported all underground installed 2018-2020. SDG&E determines mileage by summing all the circuit segment lengths across a circuit. Some segments traverse more than one tier and are categorized as 'both'. For these circuit segments, the exact length per tier is not known. For this response, all multi-tier segments are assumed to be in the majority tier for a given circuit.
- as-au. SDG&E reported LiDAR captured for fire hardening engineering and design work. LiDAR data is tracked per structure. For the purposes of this table, the total number of non-duplicate structures were multiplied by the average transmission span length per tier to approximate the mileage captured.
- av-ax. SDG&E provided data for transmission detailed OH inspections. This does not include climbing or aerial inspection types.
- ay-bg. SDG&E does not install SCADA switches on transmission.

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**QUESTION 6:**

For each WMP initiative listed below, please state how the Wildfire Risk Levels provided in the Excel spreadsheet for Questions 4 and 5 influenced where you performed work in 2020 and how work was sequenced.

- a) EVM
- b) Covered conductor installation
- c) Pole replacement
- d) Undergrounding
- e) Grid sectionalization
- f) Detailed inspections of distribution assets
- g) Detailed inspections of transmission assets
- h) Aerial inspections of transmission assets
- i) Aerial inspections of distribution assets
- j) LiDAR inspections of distribution assets
- k) LiDAR inspections of transmission assets

**OBJECTION:**

SDG&E objects to this request on the grounds set forth in General Objection Nos. 2, 4, 5, and 7. Subject to the foregoing objections, SDG&E responds as follows.

**RESPONSE 6:**

As stated in the response to Question 3a above, the wildfire risk level for distribution circuits was developed as part of the WiNGS model in 2020. Therefore, these reported risk levels did not exist and were not used to influence where work was performed in 2020. The work performed in 2020 was sequenced as follows for the requested initiatives.

- a. EVM work is performed in the HFTD on five targeted species as described in the 2021 WMP Update, Section 4.4.2.9 and Section 7.3.5.9.
- b. Covered conductor was installed on C972, which is located in the HFTD and ranked with a Wildfire Risk Level. This circuit was chosen for the first covered conductor installation for its location within the HFTD, and it is a circuit where SDG&E had previously conducted hardening projects. This enabled SDG&E to see the impact the covered conductor installation would have on existing steel poles.
- c. Pole replacements are performed when inspected poles are identified for replacement as part of SDG&E's inspection programs, CMP and HFTD Tier 3 Inspections. The work is sequenced by when the infraction was detected and due dates for replacement being generated to meet the Commission's General Orders.

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- d. Undergrounding work was conducted for multiple reasons within SDG&E's service territory. Underground conductor was installed to replace failed conductor, as part of new installation jobs, and as part of the Strategic Undergrounding initiative described in the 2021 WMP Update, Section 7.3.3.16. Strategic Undergrounding work was sequenced based on several factors including the frequency of PSPS, number of customers impacted by PSPS, meteorological data, and vegetation data.
  - e. Grid sectionalization devices are installed for multiple reasons within SDG&E's service territory. These devices can be installed as part of a new installation, as a replacement for failed or outdated devices, or as part of PSPS Sectionalizing Enhancements as described in the 2021 WMP Update, Section 7.3.3.8.1. PSPS Sectionalizing Enhancements are installed in locations that allow for more customers to remain energized during PSPS events by sectionalizing the highest risk areas.
  - f. Detailed inspections of distribution assets are performed on a cyclical basis as part of our CMP and HFTD Tier 3 Inspection programs. These inspections are mandated by GO 165 as described in the 2021 WMP Update, Section 7.3.4.1.
  - g. Transmission assets are inspected on a three-year cycle across the system.
  - h. Aerial inspections of transmission assets are performed annually and include both visual and infrared inspections of all structures across the system. In addition, some drone inspections were performed on transmission assets in 2020. These were selected based on multiple attributes including age and location within the HFTD.
  - i. Aerial inspections of distribution assets were performed by the Drone Assessment of Distribution Infrastructure initiative as described in the 2021 WMP Update in Section 7.3.4.9.2. These inspections were sequenced by first inspecting all assets in the HFTD Tier 3 and then proceeding to the HFTD Tier 2.
  - j. LiDAR inspections of distribution assets were performed for vegetation around distribution lines and equipment as described in the 2021 WMP Update in Section 7.3.5.7. LiDAR inspections were also performed as part of the post-construction true-up analysis process.
  - k. LiDAR inspections of transmission assets were performed to capture data for upcoming project designs, post construction as-builts, or refreshing outdated data.

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**QUESTION 7:**

For each WMP initiative listed below, please complete Table A below, showing how much of the work you completed in 2020 was performed on distribution circuit-segments in each risk quintile.

- a) EVM
- b) Covered conductor
- c) Pole replacement
- d) Undergrounding
- e) Grid sectionalization
- f) Climbing inspections
- g) Aerial inspections
- h) LiDAR inspections

Table A		
Initiative:		
Quintile of circuit-segments, ranked by wildfire risk	Explanation	Amount of work completed in 2020
0 – 20	Top quintile of riskiest circuit-segments, which account for the first 20 percent of cumulative wildfire risk	
21 – 40	Second quintile of riskiest circuit-segments, which account for percentiles 21 to 40 of cumulative wildfire risk	
41 – 60	Third quintile of riskiest circuit-segments, which account for percentiles 41 to 60 of cumulative wildfire risk	
61 – 80	Fourth quintile of riskiest circuit-segments, which account for percentiles 61 to 80 of cumulative wildfire risk	
81 – 100	Last quintile of riskiest circuit-segments, which account for percentiles 81 to 100 of cumulative wildfire risk	
Total	Entire service territory	

**OBJECTION:**

SDG&E objects to this request on the grounds set forth in General Objection Nos. 2, 4, 5, and 7. Subject to the foregoing objections, SDG&E responds as follows.

**RESPONSE 7:**

As discussed in the response to Question 3a above, SDG&E developed wildfire risk levels for distribution circuits in the HFTD and a subset of the circuits in the non-HFTD that are in potential risk regions (i.e., wildland urban interface, canyons). These ranked circuits account for 190 of SDG&E's 1,060 circuits or approximately 18%. The table below reports on all work

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performed on these ranked circuits, which would represent the top quintile of riskiest circuits, versus the work performed on the unranked circuits.

	Distribution		
	Risk Ranked Circuits	Unranked Circuits	TOTAL
EVM	202.5	0.4	202.9
Covered conductor	1.9	0	1.9
Pole replacement	3,181	183	3364
Undergrounding	79.87	153	232.87
Grid sectionalization	31	48	79
Climbing inspection	28582	24293	52875
Aerial inspection	33641	65	33706
LiDAR inspection	161.4	6.09	167.49

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**QUESTION 8:**

For each WMP initiative listed below, please complete Table B below, showing how much of the work you completed in 2020 was performed on transmission circuit-segments in each risk quintile.

- a) EVM
- b) Covered conductor
- c) Pole replacement
- d) Undergrounding
- e) Grid sectionalization
- f) Climbing inspections
- g) Aerial inspections
- h) LiDAR inspections

Table B		
Initiative:		
Quintile of circuit-segments, ranked by wildfire risk	Explanation	Amount of work completed in 2020
0 – 20	Top quintile of riskiest circuit-segments, which account for the first 20 percent of cumulative wildfire risk	
21 – 40	Second quintile of riskiest circuit-segments, which account for percentiles 21 to 40 of cumulative wildfire risk	
41 – 60	Third quintile of riskiest circuit-segments, which account for percentiles 41 to 60 of cumulative wildfire risk	
61 – 80	Fourth quintile of riskiest circuit-segments, which account for percentiles 61 to 80 of cumulative wildfire risk	
81 – 100	Last quintile of riskiest circuit-segments, which account for percentiles 81 to 100 of cumulative wildfire risk	
Total	Entire service territory	

**OBJECTION:**

SDG&E objects to this request on the grounds set forth in General Objection Nos. 2, 4, 5, and 7. Subject to the foregoing objections, SDG&E responds as follows.

**RESPONSE 8:**

At this time, WiNGS is not used to evaluate transmission circuit-segments. The table below summarizes the work performed on transmission circuits by location in non-HFTD, HFTD Tier 2, and HFTD Tier 3.



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	Transmission			
	Non-HFTD	Tier 2	Tier 3	Total
EVM	0	0	0	0
Covered conductor	0	0	0	0
Pole replacement	115	142	376	633
Undergrounding	0.64	0.44	1.18	2.26
Grid sectionalization	0	0	0	0
Climbing inspection	0	0	0	0
Aerial inspection	0	0	0	0
LiDAR inspection	43.86	130.79	0.26	174.91

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2021 WILDFIRE MITIGATION PLAN  
SDG&E RESPONSE**

**Date Received: January 15, 2021  
Date Submitted: February 11, 2021**

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**QUESTION 9:**

Regarding your PSPS circuit modeling capabilities:

- a) Please describe your present circuit modeling capabilities with regard to PSPS thresholds (“PSPS circuit modeling capabilities”), including with what level of granularity they are able to determine how circuit hardening efforts or other changes to a line segment will affect PSPS thresholds.
- b) Please describe any improvements to the present PSPS circuit modeling capability that you expect to enact in 2021.
- c) Please describe the expected state of your PSPS circuit modeling capabilities at the conclusion of the 2020-2022 WMP cycle.

**OBJECTION:**

SDG&E objects to this request on the grounds set forth in General Objection Nos. 2, 4, 5, and 7. Subject to the foregoing objections, SDG&E responds as follows.

**RESPONSE 9:**

- a) SDG&E’s present circuit modeling capabilities consists of multiple high-performance computing clusters generating detailed weather information that is used by SDG&E’s team of meteorologists to produce detailed hourly forecasts for all 220 SDG&E’s weather station locations. This information is also incorporated into SDG&E’s Fire Potential Index (FPI) forecast, which predicts the probability that a wildfire will get large, should an ignition occur. The weather conditions and the FPI are both factors considered when considering the need and/or requirement of a PSPS. Additionally, circuit hardening efforts or other changes to a line segment are also factors that are considered during PSPS.
- b) SDG&E has been developing an artificial intelligence (AI)-based forecasting models to help predict the details of wind speed, including improved modeling capability to determine the timing and magnitude of the potentially damaging wind gusts impacting the need for PSPS. This capability was implemented for 59 weather stations in 2020 and SDG&E intends to expand this capability to the majority of its weather stations. This improvement is expected to enhance SDG&E’s ability to more accurately model the timing and locations of circuits that may be subjected to PSPS.
- c) From a predictive capability perspective, by the end of 2022, SDG&E intends to have AI-based forecasting models incorporated into weather and fire potential projects in an effort to better anticipate when and where dangerous fire weather conditions will materialize.

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**QUESTION 10:**

For each program identified in WMP section 5.3, Plan Program Targets:

- a) Provide the annual program targets from the year 2019 onward as identified in the 2019 WMP filing.
- b) Provide the annual program targets from the year 2020 onward as identified in the 2020 WMP filing.
- c) List the actual work completed for 2019.
- d) List the actual work completed for 2020.

**OBJECTION:**

SDG&E objects to this request on the grounds set forth in General Objection Nos. 2, 4, 5, and 7. Subject to the foregoing objections, SDG&E responds as follows.

**RESPONSE 10:**

Please refer to “2021WMP CalPA-SDGE DR1 Q10.xlsx.”

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**QUESTION 11:**

For each mitigation initiative identified in WMP section 7.3.1, Financial data on mitigation initiatives:

- a) Provide the spending forecasts from the year 2019 onward as identified in the 2019 WMP filing.
- b) Provide the spending forecasts from the year 2020 onward as identified in the 2020 WMP filing.
- c) Provide the actual spending for 2019.
- d) Provide the actual spending for 2020.

**OBJECTION:**

SDG&E objects to this request on the grounds set forth in General Objection Nos. 2, 4, 5, and 7. Subject to the foregoing objections, SDG&E responds as follows.

**RESPONSE 11:**

- a) Please refer to SDG&E's 2019 WMP, Appendix A, which is available here: <https://www.sdge.com/sites/default/files/regulatory/R.18-10-007%20SDG%26E%20Wildfire%20Mitigation%20Plan.pdf>
- b) Please refer to SDG&E's 2020 WMP, Tables 21-30, which are available here: [https://www.sdge.com/sites/default/files/regulatory/Appendix%20A%20-%20WMP%20Tables%201-31%20Revised%2003-02-2020\\_0.xlsx](https://www.sdge.com/sites/default/files/regulatory/Appendix%20A%20-%20WMP%20Tables%201-31%20Revised%2003-02-2020_0.xlsx)
- c) Please refer to SDG&E's 2020 WMP, Tables 21-30, which are available here: [https://www.sdge.com/sites/default/files/regulatory/Appendix%20A%20-%20WMP%20Tables%201-31%20Revised%2003-02-2020\\_0.xlsx](https://www.sdge.com/sites/default/files/regulatory/Appendix%20A%20-%20WMP%20Tables%201-31%20Revised%2003-02-2020_0.xlsx) Please note, there were updates to 2019 actuals, as accounting adjustments were made and new projects were added to scope that had 2019 spend.
- d) Please refer to SDG&E's 2021 WMP Update, Appendix B, Table 12, which is available here: <https://www.sdge.com/sites/default/files/regulatory/Attachment%20B%20-%20WMP%20Tables%201-12.xlsx>

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**QUESTION 12:**

Please identify and provide a copy of all quality assurance or quality control (QA/QC) reports — conducted by both internal and external entities — that were completed since January 1, 2020 and that examined any programs, initiatives, or strategies described in your 2020 Wildfire Mitigation Plan. External entities include, but are not limited to, contractors, auditors, and Independent Evaluators.

**OBJECTION:**

SDG&E objects to this request on the grounds set forth in General Objection Nos. 2, 4, 5, and 7. Subject to the foregoing objections, SDG&E responds as follows.

**RESPONSE 12:**

Please refer to “2021WMP CalPA-SDGE DR1 Q12.zip.” Employee names have been redacted.

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**QUESTION 13:**

Provide an Excel table of all defects in the year 2020 found by the Wildfire Safety Division's Compliance Branch (as rows) that includes the following information in separate columns.

- a) Associated Circuit Name
- b) Defect Type
- c) Description of defect
- d) WMP initiative associated with defect
- e) Date that defect was identified
- f) Date that defect was corrected
- g) Priority level of corresponding corrective tag
- h) Location of defect (latitude/longitude)

**OBJECTION:**

SDG&E objects to this request on the grounds set forth in General Objection Nos. 2, 4, 5, and 7. Subject to the foregoing objections, SDG&E responds as follows.

**RESPONSE 13:**

Please refer to "2021WMP CalPA-SDGE DR1 Q13.xlsx."