

**THE PUBLIC ADVISOR'S OFFICE DATA REQUEST**  
**CAPAO-DR- 02**  
**SDGE RESPONSE DR03**  
**SDG&E/SOCALGAS 2021 RAMP REPORTS- A.21-05-011/014**  
**DATE RECEIVED: OCTOBER 4, 2021**  
**DATE RESPONDED: OCTOBER 18, 2021**

On August 13, 2021, San Diego Gas & Electric Company (SDG&E) held a workshop regarding its 2021 Risk Assessment and Mitigation Phase (RAMP) filing, focusing specifically on the wildfire risk (the “August 13 workshop”).<sup>1</sup> On September 8, 2021 an additional workshop was held on the wildfire risk, specifically focusing on questions Cal Advocates had submitted<sup>2</sup> (the “September 8 workshop”).<sup>3</sup> This data request follows up on two topics from this workshop: SDG&E’s incorporation of climate change into its assessment of the wildfire risk, and the assessment of PSPS impacts to SDG&E customers.

**Question 1:**

During the August 13 workshop, SDG&E stated that it assumes a 30% increase in the Likelihood of Risk Event (LoRE) for the wildfire risk due to climate change. When asked about the origin of this percentage increase, SDG&E stated that it came from a study conducted by its meteorology department. SDG&E claimed that would likely revisit and/or update this number later.

- a. In terms of the abovementioned 30% increase in LoRE for the wildfire risk that SDG&E estimates due to climate change:
  - i. Please state the basis for the 30% increase.
  - ii. Please also provide materials (e.g., formulae, scientific assumptions, models, research papers, etc.) to support your response to part (a)(i).
  - iii. Please provide the abovementioned study done by SDG&E’s meteorology department which estimated the 30% increase.
- b. In terms of updating this 30% increase in LoRE for wildfire risk at a later date:
  - i. Please state when SDG&E plans to do so, including an estimated month and year.
  - ii. Please state the basis for this planned revisit of the LoRE 30% increase.
  - iii. How does SDG&E plan to re-evaluate this increase?
  - iv. Please also provide materials (e.g., formulae, scientific assumptions, models, research papers, etc.) regarding how you plan to re-evaluate this increase.
- c. Will SDG&E incorporate any planned revisions to the 30% increase in LoRE for the wildfire risk in its Test Year 2024 General Rate Case?

**SDG&E Response 1:**

- a. Basis of the 30% increase assumption:
  - i. During the August 13th Workshop, an SDG&E representative explained that SDG&E estimated a 30% increase in the LoRE for the Wildfire risk due to

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<sup>1</sup> August 13, 2021 workshop in A.21-05-011, Application of San Diego Gas & Electric Company (U 902 M) to Submit Its 2021 Risk Assessment and Mitigation Phase Report.

<sup>2</sup> See PDF file “Cal Advocates Additional Workshop Topics Wildfire”, sent by email from Joe McCawley to the A.21-05-011 service list on September 8, 2021.

<sup>3</sup> September 8, 2021 workshop.

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climate change. The SDG&E representative indicated that the source of the 30% was a study that SDG&E's meteorology team was working on with some academic institutions but caveated the response by stating: "I don't have a sense for where it came from or what time period it applies. We're going to revisit that number." (See Audio Recording of August 13 workshop.) However, upon further internal review, SDG&E has confirmed that the 30% climate change impact figure was an estimate developed circa 2018 by a subject matter expert, rather than by a study conducted with the meteorology team.

- ii. See Response 1.a.i.
  - iii. See Response 1.a.i.
- b. Regarding updating the 30% increase assumption:
- i. SDG&E is currently conducting a vulnerability assessment as required per decision 20-08-046 issued in the Climate Change Adaptation proceeding (R18-04-019). SDG&E anticipates using data from this assessment to inform the wildfire risk assessment in lieu of the 30% estimate currently being considered. Results from the vulnerability assessment are expected to be assessed for incorporation in the wildfire risk assessment by early 2023.
  - ii. SDG&E is planning to update the 30% factor by using results of the more up-to-date analysis coming out of the vulnerability assessment.
  - iii. SDG&E will determine how to re-evaluate the climate change impact on the wildfire risk when results of the vulnerability assessment become available.
  - iv. See Response 1.b.iii. above.
- c. SDG&E is looking into updating the 30% climate change-related increase in LoRE for the 2024 GRC.

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**Question 2:**

During the August 13 workshop, SDG&E discussed its methodology for assessing Public Safety Power Shutoff (PSPS) impacts on customers. During the September 8 workshop, SDG&E discussed specific RSE calculations and scoping for mitigations for the PSPS risk, such as sectionalizing.

- a. Please state all types of data SDG&E utilizes to analyze PSPS impacts to customers. This may include, but not be limited to:
  - i. Circuits subject to repeat PSPS events.
  - ii. Circuits subject to PSPS events longer than 72 hours.
  - iii. Health and safety impacts of PSPS to discrete classes of customers (e.g. critical, medical baseline, etc.).
  - iv. Health and safety impacts of PSPS to discrete types of customers (e.g. elderly, disabled, low-income, etc.).
  - v. Health and safety impacts to customers resulting from the loss of critical infrastructure (such as the loss of telecommunications, water wells in rural communities, etc.).
  - vi. Data derived from claims for PSPS-related outages and resultant losses submitted to SDG&E.
- b. Referring to the workpaper “Final 2021 RSE Workpaper-SDG&E Wildfire\_Level 2”:
  - i. Please describe how the types of data enumerated in SDG&E’s response to question 2(a) are used in calculating the values for “PSPS Pre-LoRE”, “PSPS Pre-CoRE”, “Extent of PSPS mitigation”, and “PSPS Risk Reduction” as used in tabs “C9M4-T1”, “C9M4-T2”, “C10M5-T2”, “C13M8-T1”, “C13M8-T2”, “C14M9-T1”, “C15M10-T1”, and “C15M10-T2”.
  - ii. Please define the terms “essential” and “urgent” as used in the above-mentioned tabs
- c. Please state all types of data SDG&E plans to further develop for analyzing PSPS harms to customers.
- d. For each data type listed in SDG&E’s response to Question 2.b, please state **by when (month and year)** SDG&E plans to develop and begin utilizing this data to analyze PSPS impacts on customers.
- e. For each data type listed in SDG&E’s responses to Questions 2.a and 2.b, please provide SDG&E’s current or planned methodology (as applicable) for utilizing the data in its analysis of PSPS impacts on customers.

**SDG&E Response 2:**

- a. In the WiNGS model, SDG&E uses the number of customers, types of customers, historical wind patterns, historical duration of PSPS events and historical PSPS outage information to quantify PSPS impacts to customers.

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- i. This is captured through the estimated probability of a shut-off which is based on historical wind patterns.
  - ii. Currently, the WiNGS model estimates a static average duration of PSPS across all segments, but SDG&E's teams are evaluating opportunities to refine this based on analyzing historical duration of PSPS events at the circuit/segment level.
  - iii. The current PSPS valuation framework distinguishes impacts to medical baseline customers and critical customers and gives those types of customers more weight in the estimation of risk in recognition of the potential differences in safety impacts to those types of customers when compared to other customers.
  - iv. This is an area of potential improvement and SDG&E will be evaluating modifications to its customer valuation framework to distinguish those types of customers.
  - v. The current PSPS valuation framework distinguishes impacts to critical customers which includes telecommunication and water districts and gives those types of customers more weight in the estimation of risk in recognition of the potential differences in safety impacts to those types of customers when compared to other customers.
  - vi. This is an area of potential improvement and SDG&E will be evaluating modifications to its assumptions based on this data point.
- b. The way in which the data described above is utilized in the RSE calculations is outlined below:
- i. PSPS Pre-LoRE: SME-based estimate reflecting likelihood that scope of customers that would benefit from mitigation are impacted by PSPS.

PSPS Pre-CoRE: This component of the RSE calculation utilizes the data described in Response 2.a.ii, 2.a.iii and 2.a.v. to estimate consequences of PSPS using the MAVF described in Chapter C of the RAMP Report.

Extent of PSPS mitigation: This is based on estimate of effectiveness of mitigation at reducing PSPS impacts. *E.g.* for sectionalizing devices, the potential reduction is heavily dependent on wind events and which areas might be impacted, so an SME estimate of 50% was used as a conservative estimate. On the other hand, for microgrids, because the reduction is more guaranteed due to ability to maintain power throughout wind events, the estimate of effectiveness is 100%.

PSPS risk reduction: This component of the RSE calculation builds on the LoRE, CoRE and Extent of PSPS Mitigation described above to arrive at a final estimate of overall PSPS risk reduction.

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- ii. As used in the referenced tabs, SDG&E defines “urgent” and “essential” customers as:
1. Urgent Customers: Highest level defined as a customer whose mission supports regional emergency response that is directly affecting life. Examples include:
    - Emergency Operations Centers
    - Fire
    - Hospital
    - Prison/Jail
    - 911 Center
    - FAA Control (SD Airport)
  2. Essential Customers: Middle level designation, given to Customers whose mission includes public health, safety, and security. Examples include:
    - Police Stations
    - Water Districts (including water treatment centers)
    - Telecom/Comm (including cell towers)
    - Government Facilities
    - Homeland Security
    - K-12/Universities
- c. SDG&E is still working on defining specific improvements to the PSPS impacts quantification.
- d. See Response to 2.c above.
- e. See Response to 2.a above.