Date Received: March 18, 2022 Date Submitted: March 23, 2022

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

Date Received: March 18, 2022 Date Submitted: March 23, 2022

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.

Date Received: March 18, 2022 Date Submitted: March 23, 2022

III. RESPONSES

QUESTION 1

Regarding collaboration with U.S. Forest Service on fuel reduction (Section 7.3.10.4 "Forest service and fuel reduction cooperation and joint roadmap," p. 350):

- a. Section 7.3.10.4 doesn't include the details on the initiative (parts 1-5): it only points to Section 7.3.5.2; Energy Safety did not find the initiative details in that section. Please provide these details as follows:
- 1. Risk to be mitigated / problem to be addressed
- 2. Initiative selection ("why" engage in initiative)
- 3. Region prioritization ("where" to engage initiative)
- 4. Progress on initiative since the last WMP submission and plans, targets, and/or goals for the current year
- 5. Future improvements to initiative—include known future plans (beyond the current year) and new/novel strategies the utility may implement in the next five years (e.g., references to and strategies from pilot projects and research detailed in Section 4.4)

See p. 74 of the 2022 Wildfire Mitigation Plan Update Guidelines Template for more information.

- b. Has SDG&E reached any agreements with the U.S. Forest Service for implementation of a long-term fuels management program?
 - i. If it does have any agreements with the U.S. Forest Service, please provide details of any agreements, including a description of the work being carried out under them and the timeline for implementation.
 - ii. If not, does SDG&E have any plans to collaborate with the U.S. Forest Service in the future?
 - 1. If it does have plans, what are these plans and at what stage of development are they?

RESPONSE 1

a. SDG&E believes the reference in Section 7.3.10.4 to Section 7.3.5.2 was made in error. SDG&E does not have specific agreements with the Forest Service regarding a fuels management program. SDG&E's is developing partnerships with the U.S. Forest Service in other areas; these are described below and referenced in Section 7.3.5.1 of the 2022 WMP Update.

Date Received: March 18, 2022 Date Submitted: March 23, 2022

b. In December 2021, SDG&E entered into agreement with the U.S. Forest Service on an updated plan to perform operations and maintenance (O&M) activities "Master Special Use Permit Operations and Maintenance Plan for Electric Facilities on the Cleveland National Forest" (Plan). Section B.3.3.1 of the Plan below describes fuels management activity requirements for wildfire management inside and outside the rights-of-way.

"Many of SDG&Es MSUP facilities on the CNF occur in Tiers 2 and 3 of the CPUC's HFTD, so SDG&E may submit fuel management projects (or programs) within the permitted ROW and easement areas of the CNF to mitigate or reduce the potential for wildfire ignition adjacent to poles and/or conductors consistent with SDG&E's most recent approved Wildfire Mitigation Plan (WMP). Any plan for fuels management activities that cannot be completed entirely within the permitted boundary and/or with BMPs and RPMs, would be submitted as a Class III activity. These fuels management projects or programs would include areas that occur outside of the NEPA analyzed permitted boundary, may require repeated treatments over time, will likely require more extensive environmental analysis and to ensure avoidance and minimization of impacts to environmental resources, including heritage resources, and will be developed in coordination with the USFS and the wildlife agencies".

SDG&E Vegetation Management (VM) does not have any current plans to perform specific fuels thinning activities on U.S. Forest Service property. SDG&E Fire Coordination does work and collaborate with all first responder agencies through the San Diego Fire Chiefs association and other community groups that would include the USFS as members. SDG&E continues to seek out additional partnerships related to fuels management and other programs to enhance the region's resiliency to fire.

Date Received: March 18, 2022 Date Submitted: March 23, 2022

QUESTION 2

Regarding Quantified Vegetation Management Compliance Targets:

- a. Does SDG&E plan to perform LiDAR inspections on transmission lines and equipment for vegetation management in 2022 (Section 7.3.5.8 "Remote sensing inspections of vegetation around transmission electric lines and equipment," p. 292)?
 - i. If so, how many circuit miles?
- b. In SDG&E's response to SDGE-21-07 "Quantified Vegetation Management Compliance Targets," SDG&E states that Section 7.3.5.7 does not have a quantitative target: "Section 7.3.5.7 of the 2022 WMP Update VM does not currently have quantifiable goals for the use of technologies such as LiDAR" (Attachment D, p. 19). However, in Table 5-2, SDG&E has a 730-mile target for "Remote sensing inspection of vegetation around distribution lines and equipment"; this is consistent with Table 12 where SDG&E shows the same number, 730, for initiative 7.3.5.7. Is the passage quoted above from p. 19 of Attachment D supposed to read "7.3.5.8" (i.e., SDG&E has no targets for remote sensing of **transmission** lines and equipment)?
 - i. Please state clearly the targets set by SDG&E for 2022 for different kinds of remote sensing for (1) transmission and (2) distribution (including a target of "0" if applicable).
- c. In SDG&E's response to SDGE-21-07, SDG&E states "SDG&E will begin quantifying [initiative 7.3.5.13, "Quality assurance/quality control of vegetation management"] in the WMP 2022 Update by recording the number of assets and percentage of completed work audited" (Attachment D, p. 20). In Section 7.3.5.13 of its 2022 WMP Update (p. 293), SDG&E states that it has a "minimum random sampling of 15 percent of completed work..." and in Table 12 under 7.3.5.13, SDG&E puts "15%" for "alternative units" (Cell AU84). However, this 15% does not appear in Table 5-2 "Plan Program Targets" (p. 150). Is this an error? Did SDG&E intend to include the 15% as a program target in Table 5-2?

RESPONSE 2

a. SDG&E does not plan to perform LiDAR inspection on transmission lines for vegetation management in 2022. SDG&E's Transmission Engineering Department utilizes LiDAR in their design activities. Any potential vegetation conditions identified during this activity are communicated to Vegetation Management. SDG&E's Transmission Construction and Maintenance Department has used LiDAR in past transmission equipment inspection activities and communicated findings to VM.

Date Received: March 18, 2022 Date Submitted: March 23, 2022

- b. SDG&E plans to refresh LiDAR data for all HFTD distribution circuits in 2022. This activity is described in Section 7.3.4.7. As part of this data capture, SDG&E has a target of 730 distribution circuit line miles in 2022 where vegetation clearance information will be calculated and reviewed. SDG&E does not have any target to complete LiDAR inspections of transmission lines for vegetation management in 2022.
 - a. 7.3.5.7 Remote sensing inspections of vegetation around distribution electric lines and equipment (LiDAR) Target 730 miles
 - b. 7.3.5.8 Remote sensing inspections of vegetation around transmission electric lines and equipment (LiDAR) 0 (No target)
- c. Yes, the 15% should be included as a program target in Table 5-2.

Date Received: March 18, 2022 Date Submitted: March 23, 2022

QUESTION 3

Regarding off-cycle vegetation management inspections (Section 7.3.5.2 "Detailed inspections and management practices for vegetation clearances around distribution electrical lines and equipment," p. 283):

a. SDG&E states that in 2022 it will (1) perform an off-cycle inspection of 100% of inventory trees in the HFTD, (2) perform an off-cycle inspection of 100% of its inventory Century plants, and (3) perform two off-cycle inspects of inventory bamboo. Considering that SDG&E knows the number of inventory trees in the HFTD, inventory century plants, and inventory bamboos, why does SDG&E omit these off-cycle inspections from its list of program targets in Table 5-2?

RESPONSE 3

a. Though SDG&E visually inspects all trees (assets) within the scope of its off-cycle HFTD inspections, Century plant, and bamboo patrols, it creates an inspection activity record only for those assets that require trimming or removal prior to the next routine-scheduled inspection activity. Since the number of units that will be identified as needing additional work during the off-cycle inspection activity is not known prior to the activity, a target value is not forecasted.

Date Received: March 18, 2022 Date Submitted: March 23, 2022

QUESTION 4

Regarding trainees completing the Apprentice Lineman Program (Emergency Planning and Preparedness issues from SDG&E's 2021 WMP Update):

In Energy Safety's Final Action Statement on SDG&E's 2021 WMP Update Section 5.9 "Emergency Planning and Preparedness," Energy Safety identifies three issues and remedies (p. 80). The first issue states, "SDG&E is making progress on training its workforce but doesn't provide the number of people trained. It mentions its preparation for service restoration through training with its Apprentice Lineman program for teaching construction standards and methods related to GO 95 and GO 128 and training its workforce in emergency preparedness in various programs." The first of two required remedies reads: "SDG&E must provide the number of trainees that complete its Apprentice Lineman program." On p. 169 of SDG&E's 2022 WMP Update, SDG&E provides the number of Service Restoration Apprentice Linemen currently in the program (68); however, SDG&E does not provide the number of SDG&E employees who have completed the program, as requested.

- a. Please provide the number of SDG&E employees who have completed the program.
- b. If the number provided in SDG&E's 2022 WMP Update (68) includes Apprentice Linemen that have completed the program, please provide the number currently in the program and the number who have completed the program.
- c. Please provide the number of Apprentice Linemen employed by SDG&E who are qualified to work on primary voltages.

- a. As of 12/30/21 SDG&E had 231 Qualified Electric Workers (QEW). Once an SDG&E employee becomes a QEW, they are considered to have completed the program which includes training of service restoration and emergency response.
- b. As of 12/30/21 SDG&E had 68 apprentices in the lineman apprentice program. In 2021 we had 9 apprentices graduate the program to journeyman lineman (QEW).
- c. In 2021 SDG&E had 30 apprentices that were qualified to work on the primary.

Date Received: March 18, 2022 Date Submitted: March 23, 2022

QUESTION 5

Regarding how customer feedback informs emergency planning (Emergency Planning and Preparedness issues from SDG&E's 2021 WMP Update):

The second issue listed in Energy Safety's Final Action Statement on SDG&E's 2021 WMP Update Section 5.9 "Emergency Planning and Preparedness" concerns the lack of detail provided by SDG&E about how customer feedback informs emergency planning ("SDG&E states that after a wildfire event the utility reviews and evaluates communications to customers and the general public..." [...] "The 2021 WMP Update did not provide sufficient details about this process," p. 80). The remedy reads: "SDG&E must explain what information is being collected about wildfire outreach efforts, how it is collected, and how it is used to inform future outreach efforts." The information SDG&E provided in Section 7.3.9.2 "Community outreach, public awareness, and communication efforts" (SDG&E 2022 WMP Update, p. 327) does not fully respond to the required remedy.

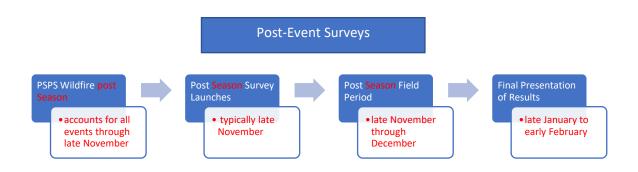
- a. Please provide a flowchart indicating at what points customer feedback is solicited (e.g., how long after a wildfire or PSPS event and/or the cycle of feedback solicitation if it happens on a regular schedule) and in what form (e.g., phone survey, online survey, etc.) and how each type of feedback informs emergency planning.
- b. If surveys are used to solicit customer feedback, please provide examples of survey questions and customer response options.
 - i. If possible, please provide a copy of a survey used to solicit customer feedback after a wildfire or PSPS event.
- c. Is feedback solicited from all affected customers, including AFN customers?
 - i. Are there different methods of solicitation for AFN customers? If so, what are they?
- d. Please provide specific examples of how customer feedback is used to "improve customer and public communications and outreach efforts for the following year" (SDG&E 2022 WMP Update, p. 329)
 - i. If possible, please provide specific examples of instances where a program, or part of a program, was changed or improved based on customer feedback and the nature of the feedback (in summary) that initiated the change(s).

Date Received: March 18, 2022 Date Submitted: March 23, 2022

a. Customer feedback is solicited in several ways, on five distinct instruments, those being: Pre and Post Wildfire Communications, Post-Event, Pre-Season, and Post-Season PSPS Wildfire Surveys.

Pre and Post Season Surveys. Currently, a Pre-Season Survey takes place each year in the 3rd quarter of the year leading up to wildfire season, with the Post-Season Survey occurring in typically in the 4th quarter of the year, or at the culmination of wildfire/PSPS events. These surveys combine insights on communication, customer overall sentiment of SDG&E processes, strategies, and outreach leading up to, during, and post PSPS/Wildfire season. Rather than focused on an individual incident or event, it is a higher-level survey that helps address overall strategic improvements that are used in planning for the next season.

Post Event Surveys. Post Event Surveys occur immediately following an event. These surveys are distributed via email and an online questionnaire. The results of these surveys provide insights into the communications, experience, and re-energization or estimated time of re-energization (ETR) of the event. Additional insights are gleaned on customers with accessibility and functional needs (AFN) to ensure accommodations align with customer needs. The following flowchart shows when customer feedback is solicited.



Date Received: March 18, 2022 Date Submitted: March 23, 2022

PSPS Wildfire Calendar

Below is the full calendar for PSPS Wildfire Feedback efforts throughout the calendar year and further details on the timeline of each of the five surveys. There is also a post-Wildfire Safety Fair that occurs.

PROJECTS	DESCRIPTION	Vendor	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	ОСТ	NOV	DEC
	PSPS Post-Event Survey - after													
	each event	Travis Research												
	Wildfire Safety													
	Communications (2 waves)													
	Wildire/PSPS Pre/Post													
	Mitigation (2 waves)													
	Wildfire Safety Fairs (summary	Qualtrics/In house												
	for each fair and roll-up													
	report)													

Wildfire Safety Communications. Wildfire Safety Communications occur throughout the year, typically beginning in quarter 2 in preparation for wildfire season, September through December, and inform the effectiveness of wildfire communications leading up to the season as well as after, as well as to inform strategic planning for communication efforts in the year ahead.

b. Customer surveys is the method utilized by SDG&E to solicit customer feedback. Please refer to "Appendix_SDGE PSPS Questionnaires_2021.docx" for samples of customer surveys employed.

Pre-Season. Questions focus on overall favorability of SDG&E, language preferences for receiving PSPS/Wildfire communications, awareness or recall of receiving wildfire communications and the communication channel recalled, satisfaction with SDG&E safety efforts and performance pertaining to events, overall. Additional questions focus on PSPS preparedness, as well as differences in response of those in high-fire threat districts vs. those in non-high fire threat districts.

Post-Season. Questions on the Post-Season Survey are like those of the Pre-Season, with the addition of questions pertaining to the experience of a power shutoff, amount of and type of communication or notification, and ease of understanding messaging. Finally, actions taken because of notification of a possible PSPS/Wildfire event. Both seasonal survey efforts take into consideration customers with accessibility and functional needs (AFN), as well as those in need of vial electrical equipment within the instrumentation for additional planning and initiatives by SDG&E.

Post – **Event.** Post Event surveys focus on communication strategies and customer experiences for those de-energized and those not de-energized alike. Unlike the seasonal

Date Received: March 18, 2022 Date Submitted: March 23, 2022

surveys, the Post-Event survey focuses specifically on an actual incident for insights on retroactive sessions that are held post-event focusing on ways to improve outreach, preparedness, and communications for future events. SDG&E conducts post-season surveys rather than post event surveys after every single event due to the small sample size of the same affected customers and the high risk of survey fatigue.

- c. Feedback is solicited from all affected customers through a post PSPS and/or wildfire season survey, which includes those self-identified with AFN in SDG&E's customer account data management system.
 - i. Feedback is solicited from customers with AFN through SDG&E's Post-Season surveys which solicits feedback on the effectiveness (informative and easy to understand) and frequency of PSPS notifications, the actions which recipients are likely to take in response to PSPS notifications, awareness and use of PSPS resources, and satisfaction with resources. The feedback is utilized to inform and modify PSPS notification content and preparedness materials the following season, as well as identify which solutions resonate most with customers so as to prioritize public education of those solutions the following year. In 2022, SDG&E is launching a monthly dedicated AFN customer research panel, where feedback will be solicited from customers on key topics (e.g. what channels are most effective?) and use this to further inform and refine communications and outreach to ensure they remain relevant and useful.
- d. There are several examples where customer feedback and insights have been used to either modify public education and communications in real-time and/or inform strategy the following year. Examples include, but are not limited to, PSPS customer notifications, in-community communications, increased accessibility of communications, and tribal communications. As a result of feedback received by customers affected by a PSPS in 2020, the 2021 PSPS customer notifications were completely revamped. The specific feedback received was that the content did not clearly associate a PSPS as a mitigation tool for wildfire safety; the content was not easy to understand for the layman (content was higher than at a 6th grade level) and notifications did not refer to resources that may be available. The revised notification content sample was then 'tested' with customers through an online focus chat group before the upcoming wildfire season. This led to a material increase in the customer satisfaction rating of the notifications in the 2021 post event survey. Additionally, 2020 feedback informed that during a PSPS event, in-community communications would be of value to customers, as such we began to extend notification content into high traffic areas of the high fire threat district, specifically, we employed over approximately 30 portable roadside signs in strategically placed locations considered to be high traffic areas. In addition to portable roadside signs,

Date Received: March 18, 2022 Date Submitted: March 23, 2022

we also partnered with tribal casinos, which are in the high fire threat district, in the use of their community marquees as an amplification of messaging included in customer PSPS notifications. Additionally, in-community flyers were developed to raise awareness of an impeding PSPS event, and the areas forecasted to be affected. Finally, from a notification perspective, we also posted messaging on community-based pages on Facebook and Nextdoor. We also increased accessibility of notifications and other public education in 2021. Notifications are also now translated into American Sign Language, via video translation; enhanced website accessibility is also now available to help meet the needs of those with sensory disabilities. From a public education perspective, customers advised that informational preparedness videos were valuable to customers which led the development of video addressing practical steps customers can take to prepare for and be resilient during a PSPS. Some of the content includes creating an emergency preparedness kit, how to prepare for a wildfire, generator safety, power outage safety tips, the full library of videos is available on SDGE's wildfire safety webpage, sdge.com/wildfire-safety. The videos are being translated into American Sign Language as well. A lesson learned from 2021 from feedback received by customers affected by a PSPS power outage was how SDG&E talked to customers about the PSPS process and the customer journey throughout the process, specifically, explaining the process in terms that was easily understood and the safety considerations that are followed by utility before power can be restored. As a result, an easy-to-understand video was developed, which can be viewed at SDG&E PSPS Power Restoration, as an example of video styles being developed as part of public education campaigns. These newly developed videos will be inclusive of close captioning, American Sign Language and Spanish close captioning as the census data indicates that the Spanish the prevalent language most often spoken behind English in SDG&E's service territory. Lastly, tribal partners and customers have informed SDG&E there is opportunity to customize communications, public education and the communication platforms used to be more relevant and culturally appropriate to our tribal nations. As such, we have contracted with a tribal communications and marketing consultant to advise on a customized tribal public education and communications campaign starting in 2022.

Date Received: March 18, 2022 Date Submitted: March 23, 2022

QUESTION 6

Regarding the formal mutual assistance training program (Section 7.3.9.5 "Preparedness and planning for service restoration," p. 336):

SDG&E states that it's developing a "formal mutual assistance training program" in 2022 (SDG&E 2022 WMP Update, p. 338).

a. Please provide details on this new program, including how it will differ from the current "just in time" training and how it will incorporate COVID-19 protocols.

RESPONSE 6

The updated mutual assistance training builds on the current "just in time" training, which is specific to outbound mutual assistance deployments, to also include information on how we will request and support inbound mutual assistance situations. This training will incorporate all facets of the mutual assistance process from the beginning request made through to demobilization and after-action review.

Additionally, this training will incorporate the EESC recommendations on COVID-19 protocols and how they are integrated into our processes.

Date Received: March 18, 2022 Date Submitted: March 23, 2022

QUESTION 7

Regarding post-incident debriefs (Section 7.3.9.6 "Protocols in place to learn from wildfire events," p. 338):

SDG&E states in Section 7.3.9.6 that its Emergency Management unit conducts facilitated debriefs after all "major" fire and PSPS-related incidents where an opportunity for improved safety, scene management, communications, and/or training has been identified.

- a. What qualifies as a "major" fire or PSPS incident (i.e., what are the criteria)?
- b. How long after the incident or activation does the debrief takes place?

- a. PSPS events resulting in pre-event customer and regulatory notifications formally trigger the After-Action Review (AAR) process to identify opportunities for improvement. The guidance (*i.e.*, criteria) for major fire AAR activities includes, but is not limited to, an Emergency Operations Center (EOC) activation at a level 1, 2, or 3; incidents/events which resulted in the loss of life, Company revenue, reputation, or critical infrastructure, as well as AAR requests made at the discretion of SDG&E leadership.
- b. Facilitated debriefs and/or web-based feedback surveys shall be initiated within 1-5 business days of the initial request, dependent on the availability of critical incident/event responders.

Date Received: March 18, 2022 Date Submitted: March 23, 2022

QUESTION 8

Regarding SDG&E's physical infractions test yard (Section 7.3.9.1 "Adequate and trained workforce for service restoration," p. 325):

SDG&E states that it has "completed construction on a physical infractions test yard with infractions that will be changed regularly for Journeymen to identify and properly code" (SDG&E 2022 WMP Update, p. 326).

- a. Is this a new facility, or a build out of an existing facility?
- b. Please describe the activities that take place at the infractions test yard.
- c. How does SDG&E define "infraction" in this context? Please provide examples.
- d. Is the infractions test yard exclusively for training Journeymen, or is it also used for training other personnel in other capacities?
 - i. If it is used for training other personnel, please provide a list of the personnel who train at the test yard along with descriptions of training and activities for each.

- a. This is a build out of an existing facility.
- b. Employees are required to patrol the overhead yard and identify and code fire potential infractions (QC).
- c. SDG&E modeled fire potential infractions identified under General Order 165.
- d. The infraction test yard is used strictly for training Journeymen.

Date Received: March 18, 2022 Date Submitted: March 23, 2022

QUESTION 9

Regarding SDG&E's responses to Cal Advocates' data requests 3 and 4 (in particular DR03 Questions 1 and 2 and DR04 Questions 3 and 4):

- a. Explain how the wildfire risk scores differ and compare between the Excel sheets provided.
- b. Provide the list of projects in SDGE DR04_2021CalPA by circuit ID number that correlate to the risk calculations for undergrounding and covered conductor provided in Table 5-4 of SDG&E's 2022 WMP Update.
- c. Provide the additional data in Excel format for SDG&E's 2023 and 2024 system hardening workplans for distribution circuits, similar to Cal Advocates' DR04 Questions 3 and 4.
 - i. Circuit-segment ID number (matching those provided in response to Questions 1 and 2 of Data Request CalAdvocates-SDGE-2022WMP-03) associated with the project.
 - ii. Relevant wildfire risk score(s).
 - iii. The start date of the project.
 - iv. The expected completion date of the project.
 - v. Length of covered conductor to be installed in 2023 in miles.
 - vi. Length of underground conductor to be installed in 2023 in miles.
 - vii. Length of traditional overhead system hardening to be performed in 2023 in miles.
 - viii. Length in miles of any other type of system hardening project to be installed in 2023 (if this is greater than zero, please describe the type of system hardening project).
 - ix. Length of covered conductor to be installed in 2024 in miles.
 - x. Length of underground conductor to be installed in 2024 in miles.
 - xi. Length of traditional overhead system hardening to be performed in 2024 in miles.
 - xii. Length in miles of any other type of system hardening project to be installed in 2024 (if this is greater than zero, please describe the type of system hardening project).
- d. Provide the additional data in Excel format for SDG&E's 2023 and 2024 system hardening workplans for transmission circuits. Include the same information detailed in Q09 (c) above (i xii).

RESPONSE 9

a. The wildfire risk scores provided in columns i and j of the main Excel sheet ('CONFIDENTIAL_2021CalPA-SDGE DR03') are the *circuit level* wildfire risk scores of the distribution and transmission circuits/tielines as scoped by the WiNGS-Planning

Date Received: March 18, 2022 Date Submitted: March 23, 2022

model. The additional attached sheet titled 'CONFIDENTIAL2021CalPA-SDGE_DR3_WF_Risk_Scores_Segment_Level_FINAL' is alternatively the *segment level* wildfire risk scores of the distribution circuits scoped by the WiNGS-Planning model, where a *segment* is defined as the portion of a circuit between two automatic reclosing devices, or SCADA switch devices. The wildfire risk score of a circuit is effectively the sum aggregation of the risk scores of the scoped segments that make up that circuit.

The wildfire risk score provided in Column J of the CalPA DR-03 file will match the wildfire risk score provided in Column B of the CalPA DR-04 file.

- b. SDG&E interprets this question to refer to Table 5-2 of SDG&E's 2022 WMP Update. The circuits used to calculate the risk percentages are the following circuits:
 - i. Covered Conductor
 - i. 442
 - ii. 448
 - iii. 212
 - iv. 445
 - -- 157
 - v. 157
 - ii. Strategic Undergrounding
 - i. 222
 - ii. 445
 - iii. 1030
 - iv. 221
 - v. 1458
- c. See attached file "OEIS SDGE 2022 006 Q9.xlsx"
- d. See attached file "OEIS SDGE 2022 006 Q9.xlsx"

Date Received: March 18, 2022 Date Submitted: March 23, 2022

QUESTION 10

Regarding the WRRM-Ops model:

a. Please explicitly list the limitations and assumptions of SDG&E's WRRM-Ops model.

RESPONSE 10

The following links to a PDF that details the limitations and assumptions of SDG&E's WRRM-Ops model.

https://www.wildfireanalyst.com/wfae-models-and-inputs/

Date Received: March 18, 2022 Date Submitted: March 23, 2022

QUESTION 11

Regarding PSPS and circuit 79:

According to Section 8.6 "Identification of Frequently De-Energized Circuits" (SDG&E 2022 WMP Update, p. 371), SDG&E indicates circuit 79 has been de-energized 12 times since January 2018. SDG&E listed a number of mitigating factors (p. 372).

- a. What percentage of the length of this circuit is addressed by mitigations listed on p. 372
- b. What percentage of the PSPS risk on this circuit has been addressed by these mitigations?
- c. How many customers on this circuit have benefitted from already-implemented mitigations?
 - i. What percentage of the customers on this circuit have benefitted from already-implemented mitigations?
- d. When are all mitigations for circuit 79 listed on p. 372 expected to be completed?

- a. 32% of the length of C79 is addressed by the mitigations listed on p. 372.
- b. 12% of PSPS risk on C79 has been reduced at this time. SDG&E quantifies current PSPS risk reduction on C79 utilizing WiNGS-Planning and analyzing customers impacted by direct undergrounding. PSPS risk reduction quantification through the WiNGS-Planning model does not include customers impacted by sectionalizing and resiliency programs.
- c. 121 customers have benefitted from undergrounding and customer resiliency programs. Overhead hardening programs do not have direct links to customer impacts but they do create a more robust infrastructure that can withstand stronger weather systems, and while sectionalizing devices do have customer counts tied to each device, the avoided impacts rely heavily on the weather during the specific PSPS event.
 - i. 14% of the customers on this circuit have benefitted from already-implemented mitigations
- d. The overhead hardening program has 2.24 miles of traditional hardening in scope to be completed in 2022 and 2.53 miles of Covered Conductor in scope to be completed in 2023. Customer resiliency programs like the Generator Grant Program, Generator Assistance Program, and Fixed Backup Power Program are ongoing programs designed to support customers in the High Fire Threat District that are frequently impacted by PSPS events but will not benefit from other traditional mitigations.

Date Received: March 18, 2022 Date Submitted: March 23, 2022

END OF REQUEST