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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

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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.

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QUESTION 1

SDG&E states in Table 5: Changes in Objective Completion Dates, on p. 15 of its 2025 WMP Update, that it is changing the target date for completion of its 3-year objective to "Install new CAL FIRE-approved power fuses to replace existing expulsion fuse equipment in the HFTD" from 12/31/2023 to 12/31/2025. SDG&E states on p. 16 of its 2025 WMP Update that it is doing so owing to "significant material supply chain concerns."

a) Please list and explain each of the abovementioned "material supply chain concerns" in the following table format:

Supply Chain Concern	Impact on ability to complete expulsion fuse replacement by original target date

RESPONSE 1

Supply Chain Concern	Impact on ability to complete expulsion fuse replacement by original target date	
Lightning Arrestors out of stock from Manufacturer	Lightning Arrestors determine the scope for all high volume (Lightning Arrestors, Fuses, Avian Protection & Hot Line Clamp replacement) fire hardening objectives. To avoid multiple crew visits to a pole, all fire hardening objectives are completed at the same time. The lightning arrestor shortage required all objectives to be put on hold	
CMU Fuse shortages	All smaller amp CMU fuse sizes (5, 10, 15) continue to be out of stock from the manufacturer and alternate Cal Fire Rated fuses have not been available to install. New manufacturers are being considered and testing is tentatively scheduled to begin April or May 2024.	

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QUESTION 2

SDG&E states on p. 19 of its 2025 WMP Update that "the expenditures reported in this 2025 WMP Update reflect the Proposed Settlement Agreement reached between SDG&E and Cal Advocates."

It then provides Table 6 (Qualifying Changes in Targets and Expenditures) and Table 7: Qualifying Changes in Expenditures Only.

- a) Are there any changes in expenditures reported in these tables that are due to factors other than the abovementioned proposed settlement agreement?
- b) If yes, then please list and explain any qualifying changes that are not due to the proposed settlement agreement, in the below table format:

WMP Initiative	Initiative Name	Reason for Expenditure Change

RESPONSE 2

- a) Qualifying changes in expenditures are not due to SDG&E's Proposed Settlement Agreement. Rather, qualifying changes in expenditures are embedded in the Proposed Settlement Agreement, which are the expenditures reflected in SDG&E's 2025 WMP Update. Factors impacting these changes are described in Section 2.2 of SDG&E's 2025 WMP Update.
- b) NA

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QUESTION 3

SDG&E states in Table 7: Qualifying Changes in Expenditures Only, on p. 22 of its 2025 WMP Update, that capital expenditures for Advanced Protection (Initiative WMP.450) decreased from \$8.2 million to \$3.4 million, and Operations and Maintenance (O&M) expenditures increased from \$2.4 million to \$4.4 million.

SDG&E states on p. 24 of its 2025 WMP Update that "The 2025 projected capital expenditures were decreased due to future projects having a smaller scope. The 2025 projected O&M expenditures were increased due to adjustments made to align 2025 expenditures with historical O&M spend data."

- a) Please explain what SDG&E means when it states that future projects will have a smaller scope.
- b) Please list and explain each of the above mentioned "adjustments made to align 2025 expenditures with historical O&M spend data".

RESPONSE 3

SDG&E objects to the request to the extent it is overly broad and unduly burdensome, as well as vague and ambiguous. Further, SDG&E objects to the request to the extent is misstates SDG&E's WMP, as further explained below. Subject to and without waiving the foregoing objections, SDG&E responds as follows:

- a) Future scope is expected to decrease because SDG&E will be near construction completion for advanced protection substation fire-hardening projects and will focus on distribution falling conductor protection projects.
- b) The O&M expenditures referenced in the question reflect those of Fire Potential Index (WMP.450). The O&M expenditures for Advanced Protection (WMP.463) *did not* increase from \$2.4 million to \$4.4 million. Rather, they are forecasted to increase from \$117,000 to \$207,000 as stated in Table 7 of SDG&E's 2025 WMP Update. A list of adjustments cannot be provided, as O&M expenditures are forecasted based on historical years' O&M trends and is adjusted to account for expected inflation.

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QUESTION 4

SDG&E states on p. 5 of its 2023 WMP Change Order Request, regarding its Covered Conductor Initiative, that "The target reduction is due to design and engineering delays for approximately 20 miles of work due to various factors. The design delays and subsequent activities in the project schedule forecast, including land rights, permitting, and environmental constraints pushed the forecasted issuance of jobs to construction into fourth quarter 2024."

SDG&E states on p. 23 of its 2025 WMP Update that as a result of the design delays described in the 2023 WMP Change Order request that "The 2024 [Covered Conductor] target was reduced by 33%". SDG&E also states that "The 2025 target and projected capital and O&M expenditures were increased due to a shift in work from 2024 to 2025." To this effect, SDG&E states in Table 6: Qualifying Changes in Targets and Expenditures, on p. 22 of its 2025 WMP Update, that its target for 2025 increased from 40 to 60 circuit-miles of Covered Conductor installed, that its capital expenditures for Covered Conductor increased from \$48.2 million to \$67.6 million, and that its O&M expenses for this initiative increased from \$592,000 to \$3.1 million.

Regarding SDG&E's 2023 Change Order Request and how it is reflected in SDG&E's 2025 WMP Update:

- a) Please list and explain the "design delays" mentioned in the 2023 Change Order Request, including explaining how they impacted SDG&E's progress in Covered Conductor installation.
- b) Please list and explain the "subsequent activities in the project schedule" mentioned in SDG&E's 2023 Change Order Request, including explaining how they impacted SDG&E's progress in Covered Conductor installation.
- c) Is the abovementioned increase in capital expenditures for Covered Conductor solely due to the 2023 Change Order Request?
- d) If not, please list and explain the other factors that led to the abovementioned increase in capital expenditures.
- e) Is the abovementioned increase in O&M expenditures for Covered Conductor solely due to the 2023 Change Order Request?
- f) If not, please list and explain the other factors that led to the abovementioned increase in capital expenditures.

RESPONSE 4

SDG&E objects to the request to the extent it is overly broad and unduly burdensome, as well as vague and ambiguous. Subject to and without waiving the foregoing objections, SDG&E responds as follows:

a) The "design delays" mentioned in the 2023 Change Order Request are due to the time and effort it takes to move projects through their pre-construction activities (i.e., design

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stages), which includes engineering, design, land rights review and acquisition's, environmental impact assessment and mitigation, permitting, and issuance of a job package to construction. Much of the work originally planned for 2024 was issued from SDG&E's scoping process at the same time, which created a large bubble of work and bottlenecks in the workflow process within each pre-construction activity. By the third quarter of 2023 our schedule forecast for 2024 indicated that approximately twenty miles of work would be issued to construction late third quarter to early fourth quarter of 2024. This volume did not seem realistic given the current stage of the projects (most in early stages of design), the fact that late in the year would coincide with the peak of the regional fire season, delays that can and often due occur due to weather (Redflag or winter storms) and helicopter availability, and crew availability due to holidays. Given these challenges with the forecasts, SDG&E elected to reschedule 20 miles worth of projects to complete in 2025 rather than 2024.

- b) See response to "a" above.
- c) Yes.
- d) N/A
- e) No.
- f) The increase in O&M expenditures is due to two factors. One factor is due to the increase in work in 2025 from 40 miles to 60 miles. The second factor is due to adjusting O&M to align with historical O&M trends.

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QUESTION 5

SDG&E states on p. 45 of its 2025 WMP Update in response to Area of Continued Improvement SDGE-23-03 (PSPS and Wildfire Risk Trade-Off Transparency):

As of this writing, WiNGS-Planning computes PSPS risk estimates at the circuit segment level; however, this information is not integrated into the circuit segment RSE score, which is utilized for the selection of appropriate mitigations. Instead, PSPS risk estimates are leveraged during the scoping process to determine where PSPS benefits can be achieved while prioritizing wildfire mitigations. The RSE of strategic undergrounding is always the first wildfire mitigation evaluated because of the associated PSPS risk reductions that are achieved through undergrounding electric wire. Future releases of WiNGS-Planning are expected to include PSPS risk in the mitigation decision framework.

- a) Why are SDG&E's PSPS risk estimates not integrated into the circuit segment RSE score?
- b) How does this affect SDG&E's decision making with respect to mitigation selection and scoping?
- c) When does SDG&E expect to integrate PSPS risk into its circuit segment RSE scores?
- d) How will this integration affect SDG&E's decision making with respect to mitigation selection and scoping?

RESPONSE 5

- a) As SDG&E seeks primarily to target efficient investment planning aimed at mitigating wildfire risk, WiNGS currently uses a simple and understandable decision framework that only incorporates wildfire risk. See SDGE 2025 Wildfire Mitigation Plan Update, section 1.1.1 Top Risk-Contributing Circuit, Segments, or Spans for details on Wildfire and PSPS risk scores, as well as the differences in risk magnitude.
 - Integrating PSPS risk into the mitigation selection framework is a complex operation that requires not only a new decision selection methodology, but also requires an extensive validation process with SME and management approval from multiple stakeholder groups. Until this point, the Risk development team has concentrated on higher priority model enhancements; however, SDG&E is committed to PSPS integration into the mitigation selection framework and has created and prioritized a model enhancement feature for this effort.
- b) The effect of not having PSPS risk in the mitigation selection framework makes wildfire risk the main risk driver in the model results. This is a known fact to scoping engineers who scrutinize each mitigation proposal when assessing the feasibility and suitability of

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the model results. While PSPS is not used in the WiNGS model's mitigation selection framework, it is an output of the model and serves as a key element in the scoping process. See SDGE 2025 Wildfire Mitigation Plan Update, section 5.3.1 PSPS Risk Prioritization in Risk-Based Decisions for more details.

- c) PSPS integration has been incorporated into the WiNGS Planning list of enhancements and has been assigned a priority relative to other enhancements. PSPS integration is expected to commence in Q4 of 2024, and subsequently be deployed late 2024 or early 2025.
- d) Mitigation selection in the WiNGS Planning model is based on wildfire risk, therefore integrating PSPS risk scores into the decision-making process could potentially affect grid hardening mitigation selection. Until integration is incorporated, tested, and validated, the actual effects of PSPS risk into the mitigation framework is unknown.

PSPS risk is utilized during the scoping process, therefore the only major change in the scoping process will be that the proposed mitigations will incorporate the PSPS risk upon execution of segment scoping.

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QUESTION 6

SDG&E states on p. 59 regarding undergrounding and covered conductor effectiveness:

The following wildfire efficacy assumptions are used in the production version of the WiNGS-Planning model.

Covered Conductor: 64%Undergrounding: 100%

While the efficacy rate of covered conductor varies across IOUs, the current efficacy rate will be maintained until more studies and analyses support the adoption of an alternative efficacy percentage.

- a) At what point (or number of studies) would SDG&E consider adopting an alternative efficacy percentage for covered conductor?
- b) Please explain your response to part (a).

RESPONSE 6

- a) SDG&E is already considering the adoption of an alternative efficacy percentage for covered conductor. Prior to accepting an alternative efficacy percentage, efficacy studies for covered conductor with and without mixed mitigations must undergo review and approval by subject matter experts across various internal teams. Combined mitigation study results are expected this year. In turn, SDG&E expects to make a decision on updating covered conductor efficacy based on these results. The general consensus is that the updated covered conductor efficacy score will be implemented in the WiNGS Planning model by the end of 2024 or early 2025. SDG&E currently expects that these new efficacy studies will be incorporated into SDG&E's 2026-2028 WMP.
- b) Efficacy changes in the WiNGS model are heavily scrutinized as they must be supported by data from trusted studies. Furthermore, changing efficacy rates may have a direct impact on the mitigation selection process and strategy. Prior to adoption of new efficacy rates, SDG&E must have complete confidence in the study results to avoid mitigation pivots, which can be costly in terms of wasted design costs and delayed deployment of grid hardening mitigations.

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QUESTION 7

SDG&E states on p. 56 of its 2025 WMP Update, in its response to ACI SDGE-23-06 (Demonstration of Proper Decision Making for Selection of Undergrounding Projects), regarding its selection process for undergrounding projects:

The first step in the mitigation selection process is to determine which circuit segments qualify for strategic undergrounding and/or covered conductor by comparing each mitigation's respective RSE score to each mitigation RSE threshold. Both covered conductor and strategic undergrounding mitigations are evaluated for every segment in the portfolio. After the RSE thresholds for strategic undergrounding and covered conductor have been evaluated, a decision tree is implemented to determine which mitigation will be recommended in the final model output, as shown in Figure 5.

- a) Please provide SDG&E's RSE thresholds for covered conductor and undergrounding as discussed above.
- b) Please explain how SDG&E's selected (i.e., determined) these thresholds.

RESPONSE 7

- a) The RSE threshold for both undergrounding and covered conductor based on the current WiNGS production model referenced in SDG&E's 2025 Wildfire Mitigation Plan Update is 0.047.
- b) SDG&E performed an analysis to compare different portfolios and identify the risk mitigation and hardening strategy that reflected an inflection point between risk and cost. The RSE is adjusted to meet targeted risk reduction percentages over time, recognizing limitations on annual construction capabilities.

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QUESTION 8

SDG&E states on p. 59 of its 2025 WMP Update that: "In 2024, a combined mitigation study is being conducted by a third-party vendor to understand the benefits and costs associated with increasing covered conductor effectiveness and how a combination of mitigations compares to undergrounding." SDG&E states that it expects the results of this report by end of 2024.

- a) When will this combined mitigation study begin to influence SDG&E's selection and scoping of system hardening mitigations?
- b) Does SDG&E expect to be able to incorporate the results of this analysis into its Comprehensive 2026-2028 WMP (to be submitted in 2025)?
- c) If the answer to part (b) is no, please explain why not.

RESPONSE 8

- a) Since a full report of this analysis is expected to be completed by end of 2024, SDG&E anticipates being able to evaluate and leverage the results in the year 2025. The potential changes to SDG&E's selection and scoping of system hardening mitigations are currently unknown.
- b) After undergoing the appropriate review, validation, and approval processes for the combined mitigation study, SDG&E plans to include its findings in the 2026-2028 WMP.
- c) Not Applicable

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QUESTION 9

SDG&E states on p. 67 of its 2025 WMP Update, in response to ACI SDGE-23-07 (Third Party Recommendations for Model Improvements), regarding the potential for usage of the WiNGs-Planning Model to inform mitigation work outside of grid hardening:

Beginning in 2024, the efficacy of mitigation combinations will be assessed and depending on the results, the WiNGS-Planning model could be expanded to include mitigations outside of grid hardening in conjunction with covered conductor installation

- a) When does SDG&E expect to complete the abovementioned assessment?
- b) When does SDG&E expect to expand the WiNGs-Planning model to include mitigations outside of grid hardening in conjunction with covered conductor installation?
- c) Will SDG&E incorporate such an expansion of the WiNGs-Planning model into its Comprehensive 2026-2028 WMP?
- d) If the answer to subpart (c) is no, please explain why not.
- e) How is the abovementioned assessment different from the analysis of Covered Conductor effectiveness in combination with other mitigations discussed at pp. 91-92 of SCE's 2025 WMP Update?
- f) Please confirm that this is the same study referenced in Question 8. If it is not, please explain how it is different.

RESPONSE 9

- a) SDG&E has not set a specific deadline for completing this assessment.
- b) SDG&E intends to finalize a combined mitigation study by the end of 2024. Based on the findings of this study, SDG&E will assess the potential inclusion of combined mitigations into WiNGS-Planning.
- c) Following the appropriate review, validation, and approval of the model updates, SDG&E plans to incorporate any available updates into the 2026-2028 WMP.
- d) Not Applicable.

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- e) SCE's Covered Conductor effectiveness references pertain to effectiveness assumptions when Covered Conductor is assessed in conjunction with other mitigations, such as enhanced vegetation management or the use of protective equipment devices. SDG&E's assessment is focused on updates to the WiNGS-Planning model framework required for the efficient and accurate integration of combined mitigation assumptions into the calculations.
- f) Yes, it pertains to the same study mentioned in Question 8.

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QUESTION 10

SDG&E states on p. 67 of its 2025 WMP Update, in response to ACI SDGE-23-07 (Third Party Recommendations for Model Improvements), regarding sensitivity analysis performed on its WiNGs-Planning model:

An increase in efficacy from 64% to 77% with a cost increase from \$1.4 to \$1.6 million per mile resulted in two mitigation pivots from undergrounding electric lines to covered conductor installation and 20 mitigation pivots from no mitigation to covered conductor installation.

SDGE further states: "Sensitivity analyses will continue to be developed throughout the 2023-2025 WMP cycle to better understand the reactivity of the mitigation selection process to each component change within the model."

- a) Please explain the methodology and parameters for the abovementioned sensitivity analyses.
- b) When does SDG&E expect to complete the abovementioned sensitivity analyses?
- c) How does SDG&E expect the results of these sensitivity analyses to change its mitigation selection process or the WiNGs-Planning model?
- d) When does SDG&E expect to make any updates to its mitigation selection process or the WiNGs-Planning model once these sensitivity analyses are complete?

RESPONSE 10

- a) SDG&E risk modelers manually adjusted only the assumed efficacy of Covered Conductor from 64% to 77% and the assumed cost per mile from \$1.4 to \$1.6 million.
- b) This manual sensitivity analysis is complete.
- c) SDG&E is currently updating the WiNGS-Planning model framework to facilitate automatic simulations based on a set of ranges for key variables. SDG&E anticipates completing this enhancement by the end of 2024. The potential changes to the mitigation selection process following the deployment of this enhancement are currently unknown.

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d) SDG&E will assess the outcomes of the sensitivity analysis and determine whether adjustments to its existing mitigation selection process are warranted. This decision will be collaboratively made with engineering, construction management, regulatory, and risk analytics teams after thoroughly considering the model results and their implications.

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END OF REQUEST