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Caroline Thomas Jacobs, Director
Office of Energy Infrastructure Safety
California Natural Resources Agency
715 P Street, 20th Floor
Sacramento, CA 95814

SUBJECT: Reply to Comments on Southern California Edison Company's 2025 Wildfire Mitigation Plan Update

Dear Director Thomas Jacobs:

Southern California Edison Company (SCE) appreciates the opportunity to respond to comments on its 2025 Wildfire Mitigation Plan (WMP) Update provided by stakeholders on May 7, 2024. Parties who submitted comments on SCE's 2025 WMP Update include the Public Advocates Office at the California Public Utilities Commission (Cal Advocates), the Green Power Institute (GPI), the Mussey Grade Road Alliance (MGRA), Rural County Representatives of California (RCRC), and the California Department of Fish and Wildlife (CDFW).

Collectively, the parties proposed several recommendations directed to all utilities or to SCE specifically. Certain stakeholder proposals are not focused on the pending 2025 WMP Update, but on future WMPs. The focus on future WMPs is appropriate, given that it would not be feasible to incorporate most, if any, such recommendations into the 2025 WMP Update in light of the schedule for review and approval. Given the high number of recommendations and the fact that some parties' comments overlap, SCE has limited its reply comments to the most salient comments on particular subjects. SCE's silence on any particular stakeholder recommendation should not be interpreted as acceptance of, or agreement to, that recommendation.

SCE'S REDUCTION TO ITS COVERED CONDUCTOR TARGET IS REASONABLE AND DOES NOT REPRESENT AN "OUTSIZED" IMPACT ON RISK REDUCTION ACHIEVED

GPI states that "SCE's proposed 2025 covered conductor target reduction has an outsized impact on the amount of risk reduction achieved".[1] SCE disagrees with this assessment, and clarifies that its proposed reduction to the 2025 covered conductor target does not translate into less overall and eventual risk reduction, as SCE has stated it intends to complete the miles in subsequent years.[2] The proposed 2025 reduction simply reflects operational dependencies that may not allow SCE to accomplish the original targets of 850 (strive) and 700 (compliance) covered conductor miles in 2025.

[1] Green Power Institute Comments on SCE's 2025 WMP Update, p. 17.
[2] See SCE's response to Cal Advocates Data Request Set 4, question 1: "SCE intends to largely complete the full scope of its wildfire covered conductor program by year-end 2028."

SCE further notes that the 2025 target was initially submitted in February 2023, nearly three years in advance of the year-end 2025 completion date. An operational target set nearly three years in advance cannot be provided with the same level of confidence and certainty as a target provided on a shorter timeframe, and as such it is reasonable that this and other 2025 targets may require modification based on the latest information available to SCE.

As SCE noted in its explanation of the covered conductor target reduction, SCE is entering the final years of the program, and exceeded covered conductor targets in prior years.[3] SCE's rapid and successful deployment of covered conductor in the 2019-2023 time period dramatically reduced wildfire risk and was based on risk analysis prioritizing high-risk areas. SCE notes that the risk reduction figures related to the target are based on a substantially lower level of overall risk in HFRA based on hardening mitigations deployed to date.[4]

GPI then states that OEIS should "require SCE to achieve a higher average risk impact per line mile, proportionally equivalent to, or greater than the original proposed covered conductor scope of work risk impact of 4 percent for 700 circuit miles."[5] SCE continues to deploy hardening mitigations on a risk-prioritized basis, but as SCE noted in its explanation of the proposed change to the covered conductor target, as less scope remains for execution, target achievement is more sensitive to constraints such as environmental reviews and permitting.

SCE is making reasonable and diligent efforts to continue to execute the highest-risk miles first, but as an operational reality it is not always possible to bundle the work strictly in adherence to risk model outputs or related metrics—especially as the pool of available miles gets smaller. Additionally, risk models are inherently limited and imperfect, meaning an over-reliance on outcomes strictly governed by their outputs is inadvisable.

SCE CONTINUES TO ADVANCE REFCL EXPEDITIOUSLY

Regarding SCE's proposed modification to the 2025 REFCL compliance target, GPI "recommends OEIS assess the completed and planned efforts conducted by SCE to overcome these barriers, and to establish a record of good faith effort to achieve the original target prior to approving the target reduction."[6] Cal Advocates also comments on SCE's REFCL target, stating that, "Given SCE's past challenges with implementing REFCL technologies, SCE may experience resource mismanagement and could forgo more immediate alternatives that possess similar benefits at lower costs."[7]

While both GPI and Cal Advocates' comments are critical of SCE's progress on REFCL, both parties appear to share SCE's view that REFCL continues to be an effective and meaningful grid hardening

[3] In 2021, SCE's compliance target for covered conductor (SH-1) was 1,000 miles and the strive target was 1,400 miles; SCE executed ~1,500 miles. In 2022, the compliance target was 1,100 miles and the strive target was 1,250 miles; SCE executed ~1,412 miles. In 2023, the compliance target was 1,100 miles and the strive target was 1,200 miles; SCE executed ~1,217 miles.

[4] In its comments, GPI cites the change in the risk reduction figure from 4% (which is based on the strive target of 850 miles) to 1.5% (based on the strive target of 600 miles). SCE clarifies that these two values are not entirely comparable, as the more recent 1.5% calculation includes updated risk data for factors including Probability of Ignition (POI) and vegetation (which affects potential consequence).

[5] Green Power Institute Comments on SCE's 2025 WMP Update, p. 17.

[6] Green Power Institute Comments on SCE's 2025 WMP Update, p. 19.

[7] Public Advocates Comments on SCE's 2025 WMP Update, p. 18.

mitigation. SCE sees REFCL as an integral part of its wildfire mitigation portfolio, which can be deployed on a standalone basis or in conjunction with covered conductor. As SCE noted in its response[8] to Cal Advocates Data Request Set 4, question 3:

> SCE continues to be the leading utility in North America with the deployment of REFCL technologies, and further notes that all of its 2025 WMP targets, including for SH-17, were developed in early 2023 based on SCE's best available information at the time. Forecasting a target three years in advance is inherently uncertain, especially for complex and technologically innovative work such as REFCL.

SCE also noted in its response to Cal Advocates Data Request Set 11, question 2:

> REFCL is not a "plug-and-play" solution that can be rapidly deployed at a utility scale…The delays in REFCL deployment are not unreasonable considering the complexity and novelty of the technology, and are relatively insignificant when considering the multi-decade useful life of REFCL, and are not a sufficient basis to question the viability or value of REFCL as a long-term wildfire mitigation. REFCL continues to be a valuable and promising mitigation in SCE's portfolio and is appropriate for continued development and implementation.

SCE is making a concerted effort to move REFCL forward as expeditiously as possible, while navigating external constraints like the limited number of vendors for REFCL equipment. SCE took a measured approach in its proposal to lower the REFCL compliance target and reaffirms that the selection of two stations is achievable in 2025, based on input from engineering and execution experts who are well versed in the program.

CLARIFICATIONS ON STRIVE AND COMPLIANCE TARGETS AND ASSOCIATED METRICS

In the context of WMP initiatives with both a strive target and a compliance target, GPI stated that "GPI is concerned that SCE could be selectively and inconsistently applying strive versus compliance-target-based costs for other initiatives in its WMP cost reporting and total planned expenditures." GPI states that the "practice of reporting only one estimated cost for two separate planning targets is unacceptable and is misleading to reviewers and the public."[9]

GPI overstates the issue. For targets that have both a strive target and a compliance target, SCE's understanding is that a single dollar value or risk reduction value should be provided, especially in instances in which the reporting is based on an Excel template provided by OEIS. SCE has used the strive target as the reference point as it is typically most aligned with General Rate Case (GRC) forecasts. This methodology should not be surprising to GPI, much less misleading as SCE used this practice consistently in the 2023-2025 WMP and in prior WMPs.

CAL ADVOCATES OVERSTATES THE RESULTS OF CERTAIN ASSET INSPECTIONS

In the context of asset inspections, Cal Advocates states, "The QC inspectors' identification of significant issues in 88 out of 194 non-conformances indicates a high rate of failure, flaws within SCE's inspection protocols, and possible training deficiencies" and concludes that, "SCE should develop a

[8] This response, as with all of SCE's WMP data request responses, is available at www.sce.com/wmp.

[9] Green Power Institute Comments on SCE's 2025 WMP Update, p. 22.

comprehensive strategy to address failures in QC audit findings, to ensure robust oversight and corrective actions are implemented efficiently."[10]

Cal Advocates' overbroad conclusions are based on an incomplete analysis of SCE's Quality Assurance / Quality Control (QA/QC) program and 2023 results. The 183 non-conforming structures resulting from 3,243 overhead detailed inspections that SCE performed in 2023[11] represents a pass rate of 94%, which indicates that SCE's inspections are achieving a high level of conformance with its procedures and guidelines, especially considering the scope and complexity of SCE's inspections.

SCE uses the QA/QC results to inform updates and revisions to its inspection programs and drive continuous improvement. This process includes conducting weekly meetings with inspection personnel to examine QA/QC findings and issuing updated inspection criteria and documentation. For instance, the distribution of a detailed bulletin in October 2023 on how to identify and assign appropriate ratings to improperly installed cotter keys was used during training with Overhead Detail Inspections (ODI) inspectors.

Since the issuance of that bulletin, SCE's non-conformance rate for this issue has dropped from 2.2% in 2023 to 1.1% in 2024 year to date, marking a significant decrease of 50%, and it is no longer the top finding for the ODI program. SCE continues to monitor this metric and other QA/QC data points on a monthly basis.

The fact that SCE identified and responded to these issues demonstrates the purpose and effectiveness of SCE's independent QA/QC program in identifying areas for improvement. Contrary to Cal Advocates' suggestion, the data shows that SCE's QA/QC program has functioned effectively as an independent second line of defense to review inspection findings and identify anomalies and improvement opportunities.

SCE'S INSPECTION BACKLOG IS DECREASING RELATIVE TO THE INCREASED VOLUME OF ASSET INSPECTIONS AND FINDINGS

Regarding SCE's management of asset work orders (also referred to as notifications), Cal Advocates states that "SCE has a substantial number of work orders that have multiple risk factors: flagged as posing an ignition risk, located in HFTD Tier 3, and greater than 180 days overdue." Also, Cal Advocates states that "SCE's work order prioritization should target the most critical issues first. SCE should prioritize work orders by their potential to cause fires or other public safety hazards, not just by how long they have been overdue."[12] In addition, Cal Advocates noted that "SCE had an average of 5,265 such work orders, which represents a 25 percent increase in one year."[13]

SCE applies a risk prioritization approach to closing past due work orders in addition to following work order completion due dates. SCE considers HFRA Tier and factors such as wildfire consequence and probability of ignition as part of its framework. In 2023, SCE also revised its risk-based approach and

[10] Public Advocates Comments on SCE's 2025 WMP Update, p. 7.
[11] SCE clarifies that the 194 non-conforming structures from a total of 3,357 structures quoted by Cal Advocates includes HFRA and Non-HFRA structures. For HFRA-specific inspections, SCE identified 183 non-conforming structures from a total of 3,243 structures.
[12] Public Advocates Comments on SCE's 2025 WMP Update, p. 13.
[13] Public Advocates Comments on SCE's 2025 WMP Update, p. 11.

added factors related to Areas of Concern[14] and Public Safety Power Shutoff across all open notifications, further improving the robustness of its risk-prioritization approach.

SCE has clarified through data requests to Cal Advocates[15] that the increase in asset maintenance notifications is driven by a 28% increase in the volume of asset inspections and an increase in the find rate from 14.6% to 17.3% between 2022 and 2023. Given this significant increase in the volume of inspections and increase in the yearly find rate that resulted in a higher volume of work orders year over year, the amount of past due notifications has slightly decreased when considered relative to the higher volume of inspections and the increased find rate. The volume of inspections increased by 28% but the notification backlog only increased by 25%, showing a lower rate of increase of the backlog. This downward trend supports the reasonable effectiveness of SCE's maintenance efforts to manage the backlog given the increased volume of inspections.

SCE's 2025 WMP Update explains SCE's plans and targets for different categories of notifications in response to the Area of Continued Improvement (ACI) SCE-23-13. SCE further notes that 60% of SCE's asset notification backlog is due to external constraints (General Order 95 exceptions and third-party issues). SCE continues to notify the appropriate third parties regarding notifications that are externally constrained and takes action on notifications that might pose an imminent risk (such as P1 notifications caused by third parties). In 2024, in addition to notifying the customer about identified issues, where feasible, SCE has developed a risk-based approach to close issues caused by unresponsive third parties.

SCE HAS MET THE REQUIREMENTS OF ACI SCE-23-02

Cal Advocates claims that "[d]espite Energy Safety directives to explore more statistically robust risk-assessment methods, SCE persists in its current risk modeling approach which is not in compliance with Energy Safety's directives."[16] Cal Advocates' statement is based on an incomplete recitation of ACI SCE-23-02, which provided SCE an alternative option to "demonstrate that its current methodologies are providing accurate outputs for calculating known risk."[17] SCE did just that.

SCE's response to ACI SCE-23-02 demonstrated that its current risk modeling methodologies are providing accurate outputs for calculating known risk because SCE's use of maximum consequence values is better suited than the use of probability distributions or averages for assessing wildfire risk.[18] As explained in the response to the ACI, catastrophic wildfires are rare events whose risk would not be adequately captured by probability distributions or averages. SCE's use of maximum consequence values enables its modeling efforts to identify the types of extreme events that have harmed Californians in recent years—events that could be missed or otherwise obscured if SCE was required to look solely at averages or probability-adjusted values. SCE's showing in the 2025 WMP

[14] Areas of Concern, or AOCs, are specific regions with unique fire risk based on climate, topography, population, and other factors. AOCs are used for several purposes, including for seasonal inspections that may be performed in addition to the standard risk-informed cadence.

[15] See SCE's response to Data Request, CalAdvocates-SCE-2025WMP-07, question 5 and question 6.

[16] Public Advocates Comments on SCE's 2025 WMP Update, p. 14.

[17] See Decision on Southern California Edison Company's 2023-2025 Wildfire Mitigation Plan, pp. 82-83, available at https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=55857&shareable=true.

[18] SCE 2025 WMP Update, pp. 35-43.

Update is directly responsive to the ACI, and Cal Advocates' claim that SCE did not comply with the ACI is inaccurate.

Moreover, SCE notes in its response to SCE-23-02 that "[i]n its 2026-2028 WMP filing, SCE intends to provide additional information for its wildfire simulations so that parties can better understand the historical return interval (e.g., quasi-probabilistic) of the weather scenarios used in its wildfire simulations. This return interval information can be used in conjunction with consequence values to better understand the relative risk of catastrophic wildfires in discrete locations."[19]

While SCE has provided a detailed description of many of the limitations and potential challenges of probabilistic modeling in its ACI response, SCE does not reject probabilistic modeling altogether and is evaluating how quasi-probabilistic approaches could be used to define catastrophic wildfires in discrete locations. SCE plans to provide additional information on this approach in future Risk Modeling Working Group (RMWG) meetings and in its 2026-2028 Base WMP, subject to progress in its evaluation and the readiness of any findings.

CONCLUSION

SCE appreciates the opportunity to reply to the comments submitted regarding its WMP. If you have questions, or require additional information, please contact me at connor.flanigan@sce.com.

Sincerely,

//s//
Connor J. Flanigan
Managing Director, State Regulatory Operations

[19] SCE 2025 WMP Update, p. 43.