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Via Electronic Filing

Caroline Thomas Jacobs, Director
Office of Energy Infrastructure Safety
California Natural Resources Agency
Sacramento, CA 95184
efiling@energysafety.ca.gov

Subject: Public Advocates Office's Opening Comments on the Draft Decision Approving Southern California Edison Company's 2023-2025 Wildfire Mitigation Plan

Docket: 2023-2025-WMPs

Dear Director Thomas Jacobs,

The Public Advocates Office at the California Public Utilities Commission (Cal Advocates) respectfully submits the following comments on the Draft Decision of the Office of Energy Infrastructure Safety (Energy Safety) approving Southern California Edison Company's (SCE) 2023-2025 Wildfire Mitigation Plan. Please contact Nathaniel Skinner (Nathaniel.Skinner@cpuc.ca.gov), Program Manager, or Henry Burton (Henry.Burton@cpuc.ca.gov), Program and Project Supervisor, with any questions relating to these comments.

We respectfully urge the Office of Energy Infrastructure Safety to adopt the recommendations discussed herein.

Respectfully submitted,

/s/ **Marybelle Ang**

Marybelle Ang
Attorney

Public Advocates Office
California Public Utilities Commission
505 Van Ness Avenue
San Francisco, California 94102
Telephone: (415) 696-7329
E-mail: Marybelle.Ang@cpuc.ca.gov

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I. INTRODUCTION

On March 27, 2023, Southern California Edison Company (SCE) filed its *2023-2025 Wildfire Mitigation Plan* (2023-2025 WMP).¹ On May 26, 2023, the Public Advocates Office at the California Public Utilities Commission (Cal Advocates) and other stakeholders filed formal comments on the 2023-2025 WMPs of SCE and other large utilities.²

On August 30, 2023, the Office of Energy Infrastructure Safety (Energy Safety) issued its *Draft Decision on 2023-2025 Wildfire Mitigation Plan of Southern California Edison Company* (Draft Decision).³ The cover letter of the Draft Decision invites interested persons to file opening comments by September 19, 2023 and reply comments by September 29, 2023.

Pursuant to the *Final 2023-2025 Wildfire Mitigation Plan Process and Evaluation Guidelines* (2023 WMP Process Guidelines) and the cover letter of the Draft Decision,⁴ Cal Advocates submits these comments on the Draft Decision. In these comments, Cal Advocates makes the following principal recommendations:

- Cal Advocates supports Energy Safety's requirement that SCE adopt a robust, statistically sound method of aggregating consequence values.
- Energy Safety should direct SCE to adopt a balanced risk assessment methodology, weighing both potential consequences and ignition likelihood.
- Energy Safety's final decision should require immediate, targeted actions from SCE to address the root causes of rising secondary conductor ignitions.
- Energy Safety should enhance its Draft Decision on SCE's covered conductor maintenance and inspections for immediate impact and improved accountability.

¹ SCE, *2023-2025 Wildfire Mitigation Plan*, March 27, 2023 (SCE 2023-2025 WMP).

² Cal Advocates, *Comments of the Public Advocates Office on the 2023 to 2025 Wildfire Mitigation Plans of the Large Investor-Owned Utilities*, May 26, 2023 in Docket 2023-2025-WMPs (Cal Advocates Comments on 2023-2025 WMPs).

³ Energy Safety, *Draft Decision on 2023-2025 Wildfire Mitigation Plan of Southern California Edison*, August 30, 2023 in Docket 2023-2025-WMPs (Draft Decision).

⁴ Energy Safety, *Final 2023-2025 Wildfire Mitigation Plan Process and Evaluation Guidelines*, December 6, 2022.

II. RISK METHODOLOGY AND ASSESSMENT

A. Cal Advocates supports Energy Safety's requirement that SCE adopt a robust, statistically sound method of aggregating consequence values.

Energy Safety's requirement that SCE discontinue the use of maximum consequence values in their risk assessment methodology represents a reasonable and prudent approach.⁵ Utilizing maximum consequence values in risk assessment increases biases in the results. This was demonstrated by Energy Safety through a dice analogy.⁶

When maximum consequence values are employed, they have the potential to significantly alter the outcomes of risk assessments. This could manifest in a variety of ways, most notably by unduly prioritizing certain types of risk mitigation measures over others.⁷ For instance, the methodology could disproportionately favor high-cost system hardening initiatives with long lead times, such as undergrounding.⁸ This could lead to an inefficient allocation of resources, particularly ratepayer funds, that could otherwise be used for similarly effective but less expensive solutions. An example of a less costly alternative is the installation of covered conductors, which can achieve a significant level of mitigation effectiveness at a fraction of the cost and time compared to undergrounding.⁹

The Draft Decision correctly urges SCE to adopt a statistically sound approach to risk assessment, incorporating mathematical standards that aggregate consequence values through probability distributions.¹⁰ Such an approach stands to provide a more nuanced and precise understanding of risk. It would take into account not just the maximum potential impact, but also the likelihood of various consequences, thereby presenting a more comprehensive view of the risk landscape.

By implementing an improved methodology, SCE would be better equipped to make well-informed decisions about resource allocation for risk mitigation. This can result in a more effective and efficient use of resources, including ratepayer funds. It is essential for SCE to not

⁵ Draft Decision, SCE-23-02: Calculating Risk Scores Using Maximum Consequence Values, at 84.

⁶ Draft Decision, at 25.

⁷ SCE 2023-2025 WMP, Table SCE 7-04 – Preferred Mitigation Portfolio per Risk Tranche, at 205.

⁸ SCE 2023-2025 WMP, Table SCE 7-06 – Efficacy of Mitigation Portfolios, at 207.

⁹ SCE 2023-2025 WMP, Table SCE 7-07 – Project Timelines for Wildfire Mitigations, at 210.

¹⁰ Draft Decision, at 25.

only enhance the efficacy of its mitigation measures but also ensure reasonable, judicious utilization of ratepayer monies.

Energy Safety's Draft Decision recognizes the complexities involved in risk assessment and the significant impact that a risk analysis methodology can have on resource allocation and, ultimately, public safety. By directing SCE to adopt a more statistically grounded approach, the Draft Decision has the potential to substantially improve the way SCE assesses and manages risk, thereby improving SCE's WMP outcomes.

B. Energy Safety should direct SCE to adopt a balanced risk assessment methodology, weighing both potential consequences and ignition likelihood.

In its 2023 WMP, SCE shifts from a quantitative approach to a more qualitative Integrated Wildfire Mitigation Strategy, which focuses on minimizing catastrophic wildfire consequences rather than balancing wildfire ignition likelihood and consequences.¹¹ In doing so, SCE diverges from industry-standard practices in risk assessment methodology. This departure has a direct impact on customer safety and the effectiveness of SCE's 2023-2025 WMP. Ratepayers carry the financial burden of SCE's wildfire mitigation measure implementation. This makes it crucial that ratepayer funds are used judiciously. If the risk assessment methodology used by SCE is not robust and in alignment with industry standards, it may lead to wildfire mitigation decisions that are less cost effective and less beneficial to customers.

In its Draft Decision, Energy Safety directs SCE to provide a plan to transition from its current method of using maximum consequence values for risk assessment to a method that does not deviate from fundamental mathematical standards.¹² However, Energy Safety's decision does not sufficiently address this critical issue, because it does not emphasize aligning SCE's risk assessment methodology with established industry standards. SCE's approach fails to consider

¹¹ SCE 2023-2025 WMP, at 203.

¹² “[Fundamental] mathematical standards support aggregating consequence values using probability distributions. When this is not possible, a suitable alternative is using average consequence values (also known as expected value).” See Draft Decision at 25. Aggregating consequence values refers to the process of collecting and combining various measurements or assessments of outcomes, often to make a more comprehensive evaluation or decision.

both the likelihood of ignition and the potential impact of wildfires, could result in a distorted set of priorities.¹³

As we have previously noted in our comments on SCE's 2023 WMP, the company must be required to go beyond its sole focus on potential wildfire consequences.¹⁴ A balanced approach, which gives equal weight to the potential impact of a wildfire and the likelihood of its occurrence, will enable SCE to allocate ratepayer funds more effectively. This, in turn, will significantly mitigate the risk of catastrophic wildfires.

To rectify the concerns described above, Energy Safety should revise its Draft Decision and incorporate the following requirements into the Areas for Continued Improvement regarding Risk Methodology and Assessment.¹⁵ In its 2025 WMP update, Energy Safety should require SCE to:

- Present a roadmap outlining key stages for implementing a risk assessment approach aligned with industry norms, one that presents a balanced model that considers both the probability of ignition and the potential repercussions of wildfires. This method is intended for utilization within the 2026-2028 WMP. If SCE cannot make the shift towards employing a more balanced model that considers both the probability of ignition with the potential consequence of wildfires, it should provide the basis for its inability and suggest an alternative approach.
- Submit a plan for a third-party assessment to confirm its compliance with industry standards, and then present the results with the 2026 WMP. The assessment must be completed prior to implementation of the revised risk assessment approach within SCE's 2026-2028 WMP. This will serve as an additional layer of oversight and ensure the methodology's reliability.

By integrating these crucial elements into its final decision, Energy Safety can substantially enhance the effectiveness of SCE's WMP. This will serve to reduce wildfire risk more effectively and contribute to the responsible management of wildfire mitigation spending.

¹³ Cal Advocates Comments on 2023-2025 WMPs, at 51.

¹⁴ Cal Advocates Comments on 2023-2025 WMPs, at 50-52.

¹⁵ See sections 6.5 and 11.1 of the Draft Decision.

III. GRID DESIGN AND SYSTEM HARDENING

A. Energy Safety’s final decision should require immediate, targeted actions from SCE to address the root causes of rising secondary conductor ignitions.

Between 2019 and 2021, SCE experienced a near tripling of ignitions related to secondary conductors, with equipment failure as the leading cause.¹⁶ While SCE has “seen a reduction in reportable ignitions caused by secondary conductors from 30% in 2021 to 20% in 2022,” this level is still too high and signals an urgent need for corrective action.¹⁷ The Draft Decision states that, “SCE has sufficiently addressed the required” progress thus far; however, it does not go far enough to adequately address the elevated risk associated with secondary conductors.¹⁸

SCE has made efforts to address the increase in secondary ignitions, notably through enhanced asset inspection procedures and targeted vegetation management around structures.¹⁹ These are practical steps; in fact, Energy Safety recognized SCE's "notable progress," citing a 57 percent decrease in QC findings for secondary conductors.²⁰ However, the available data does not yet confirm that these interim efforts have resulted in a corresponding decline in ignitions.

It is worth noting that equipment failure is responsible for 70 percent of ignition incidents involving secondary conductors.²¹ While interim measures like improved asset inspections and focused vegetation management around structures have their advantages, they predominantly target risk factors such as vegetation contact and foreign object interference, which are implicated in a smaller proportion of incidents.²² These measures may only partially mitigate equipment failures. Therefore, it is prudent for SCE to direct more resources and focus equipment failure as a major cause of ignition incidents with secondary conductors.

¹⁶ SCE’s 2023 - 2025 WMP, at 764. In 2019, SCE reported 17 ignitions. In 2020, SCE reported 33 ignitions. In 2021, SCE reported 48 ignitions.

¹⁷ SCE’s 2023 - 2025 WMP, at 765.

¹⁸ Draft Decision, at A-10.

¹⁹ SCE 2023 - 2025 WMP, at 764.

²⁰ Draft Decision, at 50 – 51.

²¹ SCE 2023 - 2025 WMP, at 764.

²² SCE 2023 – 2025 WMP, SCE-22-17 Address Secondary Conductor Issues, at 764-766.

Cal Advocates has previously discussed the potential limitations of SCE's current strategies and provided recommendations to proactively address the striking rise in secondary ignitions.²³ Among these recommendations were the accelerated development of a predictive model for secondary conductor failure, expediting the replacement of old conductors, and a more focused approach to mitigating the leading cause of the problem, which is equipment failure.²⁴ Unfortunately, SCE's proposed timeline for the replacement of outdated conductors starts in 2024. Given the current rate of ignition incidents, more immediate action may be needed to prevent further escalation of the issue.

Given these considerations, it would be advisable for Energy Safety's final decision to include a requirement for immediate, targeted, and comprehensive measures from SCE. These should specifically aim to mitigate the risks associated with secondary conductors, with a focus on addressing the predominant cause of incidents: equipment failure. Energy Safety should revise the Draft Decision to incorporate the following requirements:

- In its 2025 WMP update (filed in 2024), SCE must show substantial progress towards the development and implementation of a predictive model for secondary conductors. Further, SCE should report on its progress in future quarterly reports.
- SCE must implement its predictive model for secondary conductors as part of its 2026-2028 WMP, at latest.
- In its 2025 WMP update, SCE must provide a plan with milestones to expedite the replacement of all outdated open wire secondary and weather resistant aluminum secondary conductors. Failure to remove outdated secondary conductors can lead to ignitions in HFRAs. SCE should report on its progress in future quarterly reports.

The Draft Decision presents an opportunity for Energy Safety to require SCE to implement a more proactive approach. This change in approaches could lead to a significant reduction in the rate of ignition incidents, and thereby contribute to enhanced public safety.

²³ Cal Advocates Comments on 2023-2025 WMPs, at 46 – 49.

²⁴ Cal Advocates Comments on 2023-2025 WMPs, at 49.

IV. ASSET MANAGEMENT AND INSPECTIONS

A. Energy Safety should enhance its Draft Decision on SCE's covered conductor maintenance and inspections for immediate impact and improved accountability.

The Draft Decision on SCE's procedures for covered conductor maintenance and inspections is a step in the right direction, particularly in its recognition of unique failure modes such as water-induced corrosion.²⁵ However, there are aspects that should be strengthened to make the decision more immediately impactful and to ensure ongoing accountability.

Firstly, while the Draft Decision sets an admirable goal for comprehensive updates by the 2025 WMP update,²⁶ it leaves room for more immediate, actionable steps that SCE can undertake to mitigate existing risks. The Draft Decision's requirements need to be complemented with short-term measures that provide for more immediate safety improvements.

Secondly, the Draft Decision encourages SCE's participation in inter-utility workshops about covered conductor, which is a good approach for fostering industry-wide collaboration.²⁷ However, unless there is a mechanism for ensuring that the knowledge gained from these sessions is implemented, the benefits of such collaborations could be lost.

To address these concerns and strengthen the decision, Energy Safety should adopt the following requirements:

- In the next quarterly report, SCE should present a detailed covered conductor inspection plan that includes specific inspection procedures tailored to identify known failure modes associated with covered conductors. This proactive approach will contribute to enhancing the safety and reliability of SCE's electrical distribution system.
- In subsequent quarterly reports, SCE should submit details on its efforts to implement best practices learned from inter-utility workshops. The reports should detail how SCE is adapting its procedures and any early outcomes of these changes.
- SCE should engage an independent auditor to evaluate the newly developed inspection and maintenance protocols for covered conductors. The findings from this audit should be incorporated as an attachment into the 2025 WMP update to provide an assessment of protocol effectiveness.

²⁵ Draft Decision, at 89 – 90.

²⁶ Draft Decision, at 90.

²⁷ Draft Decision, at 46.

By incorporating these recommendations related to covered conductor maintenance, Energy Safety can promote a more robust, actionable, and accountable framework that ensures both long-term planning and immediate risk mitigation.

V. CONCLUSION

Cal Advocates respectfully requests that Energy Safety adopt the recommendations discussed herein.

Respectfully submitted,

/s/ ***Marybelle Ang***

Marybelle Ang
Attorney

Public Advocates Office
California Public Utilities Commission
505 Van Ness Avenue
San Francisco, California 94102
E-mail: Marybelle.Ang@cpuc.ca.gov

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