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July 5, 2022

Caroline Thomas Jacobs, Director
Office of Energy Infrastructure Safety
California Natural Resources Agency
715 P Street, 20th Floor
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E-file Docket# 2022-WMPs

SUBJECT: Southern California Edison Company's Reply to Comments on the Office of Energy Infrastructure Safety's June 2, 2022 Draft Decision Approving Southern California Edison Company's 2022 Wildfire Mitigation Plan Update

Dear Director Thomas Jacobs,

SCE respectfully submits this reply to the comments submitted on June 22, 2022 on the Office of Energy Infrastructure Safety's (Energy Safety) Draft Decision approving Southern California Edison Company's (SCE) 2022 Wildfire Mitigation Plan (WMP) Update. Comments on the Draft Decision were submitted by the California Public Advocates Office (Cal Advocates), the Green Power Institute (GPI), the Mussey Grade Road Alliance (MGRA), and SCE.

INTRODUCTION

SCE appreciates the participation of Cal Advocates, GPI and MGRA in the Draft Decision comment process. Although none of these parties challenged Energy Safety's approval of SCE's WMP Update, they raised several issues that SCE wishes to address. SCE's reply focuses on comments regarding: (1) the link between risk drivers and risk outcomes in risk modeling; (2) wildfire simulation duration; (3) fire suppression modeling (SCE-22-05); (4) C-Hooks insulator attachment hardware replacement (SH-13); and (5) open inspection findings/remediations (SCE-22-15). SCE's silence on any particular stakeholder proposal or comment should not be interpreted as acceptance, agreement, or acquiescence with that proposal.

COMMENTS

1. MGRA Overstates the Importance of Mathematically Correlating Risk Drivers with Risk Outcomes

MGRA states that, “MGRA’s 2021 work was to provide evidence that the majority of catastrophic fires in California were wind-driven, and that specifically the faults that ignited them were wind-driven.” MGRA describes its efforts to address this issue, noting that, “... it became clear that the root of the problem may not be fully on the probability modeling side, but rather on how the probability was coupled to the consequence, which has been up to now a simple multiplication of probability and consequence to obtain risk.”¹ Later, MGRA concludes that, “The result is that SDG&E and SCE artificially amplify risk from drivers such as animals, vehicles, and balloons that are rarely if ever responsible for catastrophic fires. This is not a harmless problem: Different risk drivers are likely to have different distributions across the landscape, and ‘red herring’ risk drivers will lead utilities to invest in mitigating areas of comparatively low wildfire risk.”²

SCE does not agree with MGRA’s conclusions that current risk modeling approaches may create “red herring” risk drivers and sub-optimal resource allocation. Simply because a particular driver has not yet caused a catastrophic wildfire does not mean that driver should be disregarded or deprioritized. In addition, as SCE described in Section 7.1.2.1 of its 2022 WMP Update, SCE’s updated mitigation strategy is based on prioritizing mitigation deployment to areas in which the potential wildfire consequences are greatest. In addition to serving as a method to prudently allocate mitigation resources to areas with the greatest public safety risk, this approach addresses the concern expressed by MGRA that utilities may “invest in mitigating areas of comparatively low wildfire risk”.

Further, the portfolio of mitigations selected by SCE are effective at addressing a wide range of ignition risk drivers across a wide range of weather and wind conditions. For example, covered conductor, undergrounding, and inspections are effective at mitigating ignition risks from multiple drivers, including both the risks that MGRA believes are truly concerning and the ones it believes are “red herrings,” in windy and non-windy conditions.

Although SCE disagrees with MGRA’s conclusions on this issue, SCE appreciates the feedback and welcomes MGRA’s recommendation that Risk Modeling Workshops “should continue into 2023 with a goal of resolving how to incorporate correlations between outage drivers (such as wind) and consequence models.”³

¹ MGRA comments, p. 3.

² MGRA comments, p. 8.

³ *Ibid.*

2. GPI's Proposal to Increase Wildfire Simulation Duration to 24 Hours Would Significantly Increase Modeling Error and Uncertainty

GPI recommends that SCE change its wildfire simulation duration from 8 hours to 24 hours. GPI notes that "SCE included a threshold of 300 acres in 8-hours as a benchmark for selectively conducting longer fire-spread simulations. ... GPI is concerned that running longer wildfire spread durations only in select simulations could generate bias in wildfire consequence maps, risk scores/rankings, and RSEs. ... GPI currently supports a 24-hour wildfire spread simulation duration for all modeled ignitions (match-drop)."⁴

SCE agrees that use of a standard duration metric across all wildfire simulations is a sound practice. In consultation with fire science experts, and consistent with other IOUs, SCE has selected a standard simulation duration of eight hours to assess the relative ignition risk (as understood via potential consequence) across each overhead asset in SCE's HFRA.

SCE respectfully disagrees with GPI that a 24-hour simulation would be the more appropriate value. The capability to accurately predict fire spread and impact is linked to input data uncertainty, such as the time of ignition, ignition location, forecast weather conditions, and fuel loading. Results can and do vary greatly depending on the accuracy of these key input parameters. This uncertainty increases with longer simulation durations, to the point where 24-hour simulations appear to be significantly less certain than 8-hour simulations.⁵ Longer-duration simulations also require dynamic adjustments for probabilistic changes in weather, terrain, slope, and other environmental factors. A 24-hour duration simulation also assumes that a fire would last for 24 hours, which may not be the case depending on factors such as fuel conditions, wind, and suppression activity. As SCE notes below, as the duration from ignition increases, chances are generally higher that fire suppression resources can be deployed.

In light of the factors stated above, further evaluation and review is necessary to understand how to create greater input data certainty and how to properly address probabilistic changes in the factors identified above before this recommendation can be considered. Therefore, it is a reasonable topic for discussion as an area of future development, and SCE welcomes including the topic in the Risk Modeling Working group.

3. SCE-22-05: SCE Agrees that Wildfire Suppression Modeling Should Be a Topic for Further Discussion

GPI stated that, "It is well known that wildfire spread models do not currently include fire suppression considerations, and therefore reflect a worst-case scenario for wildfire

⁴ GPI comments, p. 4.

⁵ For a visual example of the decrease in modeling confidence associated with longer duration, please see Figure 2 on page 10 of "2019 PSPS Event – Wildfire Analysis Report" for SCE. The report is available at: <https://www.cpuc.ca.gov/consumer-support/psps/technosylva-2019-psps-event-wildfire-risk-analysis-reports>

consequence.”⁶ GPI further states that, “GPI supports this effort to assess and model the effects of fire suppression. However, we have significant concerns regarding the many assumptions and uncertainties that may affect model outcomes.”⁷

SCE agrees with GPI regarding the challenges associated with modeling fire suppression, and with GPI’s statement that attempting to model fire suppression raises “big picture questions”⁸ about the intent and approach to wildfire simulation modeling.

SCE further notes that fire suppression modeling is related to the issues raised above regarding model simulation duration. Generally speaking, as the duration from ignition grows longer, the chances improve that suppression authorities will be able to respond (although this may still be affected by resource constraints or other factors). It is prudent to take a more measured approach when modeling shorter duration simulations (i.e., SCE’s current approach of 8 hours) without an assumption of a suppression response, as this illustrates the worst-case scenario if the ignition is not observed immediately and/or if suppression resources or local conditions prevent a rapid response.

SCE appreciates GPI’s comments for pointing out these issues and questions and concurs that wildfire suppression modeling questions are appropriate for further discussion through the Risk Modeling Working Group or other forums with Energy Safety, utilities, and interested parties.

4. SCE’s Current Approach Regarding C-Hooks Insulator Attachment Hardware Replacement Is Appropriate (SH-13)

Cal Advocates recommends that SCE modify its current approach to C-Hooks and include mitigation of C-Hooks outside of high fire risk areas. Cal Advocates’ comments state that “Energy Safety should direct SCE to identify and mitigate all C-Hooks present on SCE transmission assets, including those outside of the High Fire Threat District (HFTD).”⁹

SCE supports identifying and replacing all C-Hooks in HFRA and believes all C-Hooks have been inventoried in HFRA as stated in the 2022 WMP Update.¹⁰ However, that same effort has not been performed outside of HFRA, as it has not been supported by SCE’s most recent risk analysis. In addition to lacking support on the basis of risk reduction at this time, expansion beyond HFRA would require increased costs and potential redirection of resources that are performing higher priority work. Through our ongoing inspection and maintenance programs in non-HFRA, SCE will continue to identify damaged or deteriorated C-Hooks on our system and remediate as necessary.

⁶ GPI comments, p. 4.

⁷ *Ibid.*

⁸ GPI comments, p. 5.

⁹ Cal Advocates comments, pp. 2-3.

¹⁰ 2022 WMP Update, p. 333.

5. SCE-22-15: SCE Agrees to Present Its Plan to Address Open Inspection Findings/Remediations

Energy Safety stated that, “In its 2023 WMP, SCE must identify overdue repairs that present a potential ignition risk, and provide a plan to address the overdue repairs, including prioritization and quantitative targets for overdue repairs relating to wildfire risk, so that Energy Safety can track the completion and timing.”¹¹ Cal Advocates indicated its support for this requirement,¹² and GPI states that this requirement “should be expanded to require that SCE provide a plan/method for how they will present past-due remediation of work orders in the future.”¹³

SCE agrees with Energy Safety, Cal Advocates, and GPI regarding a plan to address overdue repairs and will be incorporating this requirement as part of its 2023 WMP.

SCE respectfully notes that, in some cases, external factors beyond SCE’s control may delay completion of a repair. Consistent with General Order 95, Rule 18-B, the time to perform corrections can be extended under “reasonable circumstances” such as third-party refusal, customer issue, no access, permits required and system emergencies (e.g., fires, severe weather conditions).

CONCLUSION

SCE appreciates the opportunity to submit its reply comments.

If you have any questions, or require additional information, please contact me at michael.backstrom@sce.com.

Sincerely,

//s//

Michael A. Backstrom
VP Regulatory Affairs
Southern California Edison

¹¹ Draft Decision, p. 61.

¹² Cal Advocates comments, p. 3.

¹³ GPI comments, p. 6.