

*Southern California Edison*

*WSD-011 – Resolution implementing the requirements of Public Utilities Code Sections 8389(d)(1), (2) and (4) related to catastrophic wildfire caused by electrical corporations subject to the Commission’s regulatory authority*

**DATA REQUEST SET T U R N - S C E - 0 0 9**

**To: TURN**

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**Job Title: Advisor**

**Received Date: 3/18/2021**

**Response Date: 3/23/2021**

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**Question 003:**

Is the only difference between the risk curves relied on in SCE’s 2021 GRC Filing and the 2021 WMP reliance on the updated methodology at the circuit segment level?

a. Table 4-4 of SCE’s Wildfire Mitigation Plan identifies that the WF consequence Component was based on the Reax Consequence in 2019 and the Technosylva Consequence in 2020 is this the updated methodology at the circuit segment level referenced in TURN-SCE-007, Q 1 (c)?

b. If the answer to subpart (a) is no, please provide a citation to the discussion of this updated methodology in SCE’s 2021 WMP.

c. To the extent SCE’s risk analysis has significantly changed the prioritization of circuits in its HFRA compared to the GRC analysis, please explain and quantify by how much. Please include in the explanation why the Reax and Technosylva results differed dramatically in some instances. Please provide all workpapers and calculations.

d. Please explain whether SCE will from this point forward use the WMP risk analysis to prioritize circuits for covered conductor deployment or whether it will still use the GRC analysis. Please provide the date at which SCE finished this analysis, and whether this immediately informed SCE’s prioritization of covered conductor deployment,

**Response to Question 003:**

SCE objects to this question on the following grounds: (1) the question seeks general rate case information that is outside the scope of this proceeding under Public Utilities Code Sections 8386 & 8386.4(b)(1); (2) the question seeks information not relevant to evaluation of SCE’s Wildfire Mitigation Plan; (3) the question seeks information not reasonably likely to lead to WMP comments that would be appropriate under Public Utilities Code Section 8386(d); and (4) there is no support for this question under Resolution WSD-001 or the “Wildfire Safety Division Guidance on Resolution WSD-001 and Data Request Best Practices” (January 29, 2021). Notwithstanding these objections, SCE responds as follows:

No, there are several differences between the risk curves relied on in SCE’s 2021 GRC Filing and the 2021 WMP beyond the updated methodology.

- a) No, the response to TURN-SCE-007, Q1(c) does not employ the same methodology as described in Table 4-4 of SCE's 2021 WMP Update. The risk curve in TURN-SCE-007, Q1(c) was developed using Technosylva consequence and the contact-with-foreign object model and the equipment facility failure model were calibrated using forecasts of ignitions. Conversely, Table 4-4 describes a model that includes PSPS probability and consequence components, which were not included in the risk curve calculation used in TURN-SCE-007, Q1(c).
- b) For the methodology used to provide a response to TURN-SCE-007, Q1(c), please see the Ignition Consequence Models discussed in Section 4.3.6 on page 57 and the Probability of Ignition Models discussed in Section 4.3.5 on page 56 of SCE's 2021 WMP Update. Calibration of the WRRM to the forecasted baseline for wire-down, outage, and CPUC ignition levels is briefly mentioned in part 3 of the RSE Calculation Method discussed in Section 4.3.8 on page 63.
- c) SCE disagrees with the characterization of the terms "significantly changed" and "dramatically." For a quantification of the changes, see the Sankey chart in SCE's response to SCE-5 Action Statement<sup>1</sup> which quantifies the extent to which prioritization changes due to the shift from Reax to Technosylva. As stated in SCE's 2021 WMP Update,

In 2020, SCE transitioned to a Technosylva-based consequence model, which included improvement over the Reax-based consequence model. Key improvements include updated and more granular model inputs (e.g., buildings, assets, fuels, population), more advanced fire propagation techniques (e.g., urban encroachment), and direct mapping of consequence scores to individual assets. Technosylva fire spread model uses individual building footprints, population count, SCE asset data, and a 20-year climatology and surface fuel data specifically calibrated to SCE's service area. This will enable SCE to re-run this simulation on an annual, or semi-annual, basis based on updated and calibrated information from previous fire weather seasons which is a significant improvement from the Reax models in targeting mitigations to HFRAs. Please see Table SCE 4-5 for a list of model inputs, outputs, and algorithms.<sup>2</sup>

For information on the differences in risk prioritization from Technosylva and the prior model, please refer to SCE's response to the WSD's data request WSD-SCE-004 Q9, submitted on March 17, 2021.

- d) SCE is now using the WMP risk analysis to help prioritize future deployment of covered conductor that will likely be deployed in 2022 or beyond. Because scoping, designing, permitting, constructing, etc. covered conductor can take substantial time – often greater than 12 months – current covered conductor scope in 2021 is based on prior risk analysis methods. This allows for meaningful and substantial risk reduction to occur while new scope is positioned for future deployment based on the latest risk modeling capabilities. All

<sup>1</sup> See Southern California Edison 2021 Wildfire Mitigation Plan Update Supplemental Filing – Corrected, filed February 26, 2021, at pp. 353-354.

<sup>2</sup> Southern California Edison 2021 Wildfire Mitigation Plan Update, filed February 5, 2021, at p. 57.

versions of the risk modeling are focused on HFRA, which the Commission deems to be inherently risky.