

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 W S D - S C E - 0 0 4

To: WSD

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Response Date: 3/17/2021

Question 023:

How does SCE differentiate ignition risks within its risk modeling efforts and weigh different ignition risks when determining mitigation options? For example, does SCE change inputs based on the risk ranking of an ignition source (such as weighing vehicle or balloon contacts more heavily), or change inputs based on the probability of an ignition source occurring under particular climate conditions or in areas of higher consequence?

Response to Question 023:

SCE does not differentiate ignition risks within its WRRM when determining mitigation options. Mitigation options are informed by an understanding of total risk by asset location. SCE assumes “inputs” to mean its inputs to its WRRM. SCE does not manually change the weighting of ignition sources based on certain conditions (e.g., climate conditions or in areas of higher consequence) as the model dictates the appropriate weighting of ignition sources.

SCE differentiates between ignition risks by modeling each asset class separately. This results in a probability of failure for each piece of equipment in the field. This probability is “weighted,” or more accurately, calibrated, to the number of expected fires based on past fires attributed to the corresponding asset class. In this way, there is an expected frequency of fires at the specific asset level whose sum total of fires is aligned with historical fire counts attributed to that specific asset class. In other words, historical fire events are assigned to their causes, e.g., conductor, transformer, etc. The weighting that converts the probability of outage into frequency of ignition is based on these historical fire counts by classification. Mitigations are chosen by how effective they are at reducing the overall risk.

SCE anticipates evolving its cross-mitigation optimization. Please see SCE’s 2021 WMP Update, Chapter 4, Section 4.3.10 for more details.