Southern California Edison
2023-WMPs – 2023-WMPs

DATA REQUEST SET O E I S - P - W M P _ 2 0 2 3 - S C E - 0 0 1

To: Energy Safety
Prepared by: Gary Cheng
Job Title: Sr. Advisor
Received Date: 4/7/2023

Response Date: 4/12/2023

Question 03 c. :
Regarding Portfolio Level Risk Analysis and Risk Spend Efficiency

c. Are probability distributions and interdependencies used as inputs to outputs for the bowties used in SCE's WMP submission (see examples present in Appendix B)? If so, provide an example using the bowtie charts presented in SCE's Appendix B submission. As appropriate, response should be provided in Excel.

Response to Question 03 c. :

SCE does not use a probability distribution or interdependencies as inputs for output calculations.

For wildfire risk, the Probability of Ignition (POI) for assets utilizes machine learning to calculate the relevant ignition sub-drivers. Input variables range from historical asset outage data, current asset condition (e.g., age, loading, voltage, etc.) and relevant environmental attributes (e.g., historical wind, asset loading, number of customers, temperature, relative humidity, etc.). More information on POI modeling and algorithms can be found in the response to Question 01. The wildfire consequences are modeled based on 444 specific wind and weather scenarios, from which SCE selects the worst outcome for each point at which the ignition was modeled.

For PSPS risk, The Probability of De-energization (POD) uses historical wind/gust and FPI conditions in conjunction with SCE's PSPS operation protocols to calculate the likelihood of a PSPS event given the weather conditions. SCE calculates PSPS consequences based on the methodology described in Section 6, which does not utilize probabilistic outcomes.

In its calculations of wildfire and PSPS risk, SCE does not assume an interdependence between the two or otherwise link the calculations (other than adding the results to obtain total utility risk).