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: Lisa Mau
Job Title: Senior Advisor
Received Date: 4/7/2023

Response Date: 4/12/2023

Question 01:
Regarding Appendix B Items That Are Currently Optional Or "By Request" Only
Provide the following, which are outlined in the 2023-2025 Wildfire Mitigation Plan Technical Guidelines, Appendix B. If the data is tabular (formulas, tables, graphs, charts) provide it in MS Excel. If the data is text-heavy, provide the information in MS Word.
a. Detailed Model Documentation for each model and sub-model discussed in SCE's response to Section 6.1.2 Summary of Risk Models (Technical documentation should be presented according to ASTM E 1472 – Standard Guide for Documenting Computer Software for Fire Models.).
i. Include a list of assumptions and known model limitations according to ASTM E 1895 – Standard Guide for Determining Uses and Limitations of Deterministic Fire Models.
ii. Present verification and validation documentation according to the SFPE's Guidelines for Substantiating a Fire Model for a Given Application or ASTM E 1355 – Standard Guide for Evaluating the Predicting Capability of Deterministic Fire Models.
At a minimum, the documentation must include:1
(1) Purpose of the model/problem identification,
(2) Model version,
(3) Theoretical foundation,
(4) Mathematical foundation,
(5) External dependencies,
(6) Model substantiation, and
(7) Sensitivity
b. Model Substantiation:2
i. For each model, provide documentation of the following model substantiation studies:
(1) Validation data,
(2) Model verification,
(3) Model validation, and
(4) Model calibration
c. Additional Models Supporting Risk Calculation:3
i. For each additional model that supports the risk calculations, provide weather analysis and fuel conditions.
d. Calculation of Risk and Risk Components: Likelihood4
i. More detailed information on:
(1) Ignition Likelihood,
(2) Equipment Likelihood of Ignition,
(3) Contact from Vegetation Likelihood of Ignition,
(4) Contact from Object Likelihood of Ignition,
(5) Burn Probability, and

(6) PSPS Likelihood
e. Calculation of Risk and Risk Components: Consequence5
i. More detailed information on:
(1) Wildfire Consequence,
(2) Wildfire Hazard Intensity,
(3) Wildfire Exposure Potential, and
(4) Wildfire Vulnerability
f. Calculation of Risk and Risk Components: PSPS Consequence6
i. More detailed information on:
(1) PSPS Exposure
(2) Community Vulnerability to PSPS
g. Calculation of Risk and Risk Components: Risk7
i. More detailed information on:
(1) Ignition Risk,
(2) PSPS Risk, and
(3) Overall Utility Risk

Response to Question 01:
The attached file, "Supplemental Appendix B", provides SCE's Appendix B Items that are currently optional or "by request" only. The attachment contains detailed documentations for each model and sub-model discussed in SCE's response to Section 6.1.2 Summary of Risk Models.

a. *At a minimum, the documentation must include:*
(1) Purpose of the model/problem identification,
(2) Model version,
(3) Theoretical foundation,
(4) Mathematical foundation,
(5) External dependencies,
(6) Model substantiation, and
(7) Sensitivity
SCE's discussion of the (1) Purpose of the model/problem identification, (2) Model version, (3) Theoretical foundation, (4) Mathematical foundation, (5) External dependencies, (6) Model substantiation, and (7) Sensitivity begins on page 5 of the file, "Supplemental Appendix B.pdf".

b. *Model Substantiation:*
i. For each model, provide documentation of the following model substantiation studies:
(1) Validation data,
(2) Model verification,
(3) Model validation, and
(4) Model calibration
SCE's discussion of the model substantiation begins on page 34 of the file, "Supplemental Appendix B.pdf"..

c. Additional Models Supporting Risk Calculation:
i. For each additional model that supports the risk calculations, provide weather analysis and fuel conditions.
SCE's discussion of each additional model that supports the risk calculations, provide weather analysis and fuel conditions begins on page 41 of the file, "Supplemental Appendix B.pdf".

d. Calculation of Risk and Risk Components: Likelihood4
i. More detailed information on:
(1) Ignition Likelihood,
(2) Equipment Likelihood of Ignition,
(3) Contact from Vegetation Likelihood of Ignition,
(4) Contact from Object Likelihood of Ignition,
(5) Burn Probability, and
e. Calculation of Risk and Risk Components: Consequence
i. More detailed information on:
(1) Wildfire Consequence,
(2) Wildfire Hazard Intensity,
(3) Wildfire Exposure Potential, and
(4) Wildfire Vulnerability
f. Calculation of Risk and Risk Components: PSPS Consequence6
i. More detailed information on:
(1) PSPS Exposure
(2) Community Vulnerability to PSPS
g. Calculation of Risk and Risk Components: Risk7
i. More detailed information on:
(1) Ignition Risk,
(2) PSPS Risk, and
(3) Overall Utility Risk

SCE's discussion of the Calculation of Risk and Risk Components (d-g) begins on page 44 of the file, "Supplemental Appendix B.pdf".