

***Southern California Edison  
2026-WMPs – 2026-WMPs***

**DATA REQUEST SET O E I S - P - W M P \_ 2 0 2 5 - S C E - 0 0 8**

**To: OEIS**

**Prepared by: Kyle Ferree**

**Job Title: Senior Advisor**

**Received Date: 6/17/2025**

**Response Date: 6/20/2025**

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**Question 01:**

Regarding Risk Model Validation:

On page 139 of SCE's 2026-2028 Base WMP, SCE states that in 2022 it "began developing a more formal validation process of its risk models for transmission using field input."

- a. Provide any supporting procedures and documentation relating to the validation referenced by that statement.
- b. Provide a list of risk models and associated risk model components that are included as part of this validation process.
- c. Provide a list and description of the various risk model updates SCE has made as a result of this validation process.
- d. Describe the frequency and schedule for which this validation process occurs.

**Response to Question 01:**

- a. Please see the attached document titled "OEIS-SCE-008 01\_JG-Transmission\_San Jacinto Grid\_Analysis\_Project\_Summary\_Redacted.pdf," which contains a summary of the referenced validation process. Personal identifying information has been redacted. SCE solicits feedback from grid Senior Patrolmen to help ensure alignment with the risk methodology. Doing so allows additional input and considerations from the field. Such feedback is then considered in the annual transmission inspection scope release.
- b. SCE takes into account both the probability of ignition (POI) and consequence models when soliciting feedback from transmission personnel.
- c. The Technosylva risk model updates for WRRM 7.6 have been supported by the field input in previous years.
- d. This process takes place yearly in preparation for the next year's scope release.

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**To: OEIS**  
**Prepared by: Gary Cheng**  
**Job Title: Senior Advisor**  
**Received Date: 6/17/2025**

**Response Date: 6/20/2025**

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**Question 02:**

Regarding Wildfire Vulnerability:

On page 97 of SCE's 2026-2028 Base WMP, SCE describes how it uses access and functional needs (AFN) and non-residential critical infrastructure (NRCI) multipliers as part of its wildfire vulnerability calculation.

- a. Explain why SCE has decided to use AFN and NRCI multipliers in order to represent wildfire vulnerability, and include an explanation of what other metrics SCE has explored to represent wildfire vulnerability.
- b. Explain how SCE has validated the use of AFN and NRCI multipliers, including the results of such validations.
- c. Provide a narrative description of how use of the AFN and NRCI multipliers has impacted SCE's risk scores,
- d. Provide a list of the changes to risk ranking of circuit segments based on the changes to risk scores due to incorporating AFN and NRCI as multipliers.

**Response to Question 02:**

- A) SCE has decided to use Access and Functional Needs (AFN) and Non-Residential Critical Infrastructure (NRCI) multipliers to represent wildfire vulnerability because of their ability to highlight and prioritize areas and populations that are more susceptible to wildfire consequences. The AFN score for each circuit addresses multiple customer criteria, including: Critical Care, Disabled, Medical Baseline, Low Income, limited English, pregnant, and children. Similar to the AFN score, the NRCI score of each circuit incorporates those customers in the Healthcare and Public Health, water and Wastewater Systems, Emergency Services, Communication, Transportation, Government Facilities, or Energy Sectors.

Wildfire vulnerability in the IWMS strategy is considered when evaluating locational risk factors such as Communities of Elevated Fire Concern, locations with high fire frequency and population egress concerns.

- B) SCE first described its AFN and NRCI Multipliers in its 2021 WMP. Since then, SCE has appreciated feedback and dialogue on the derivation and application of these multipliers.

These multipliers help make reasonable estimates of the impacts to customers with AFN and NCRI to be incorporated into SCE's wildfire risk model outputs. SCE continues to welcome feedback and collaboration from stakeholders throughout the WMP process and looks forward to continuing this dialogue, including in the upcoming June OEIS workshop.

- C) SCE describes the application of these multipliers in Chapter 5 of its WMP, and summarizes the methodology and application below. SCE's response to part (d) illustrates the impact of these multipliers on risk scores.

The Safety Consequence Calculation is:

$$\text{Safety Index} = [(\# \text{ of Fatalities}) + (1/4 * \# \text{ of Serious Injuries})] * \text{Wildfire Vulnerability}$$

Where

$$\text{Wildfire Vulnerability}_{\text{circuit}} = \text{AFN Multiplier}_{\text{circuit}} \times \text{NCRI Multiplier}_{\text{circuit}}$$

$$\text{AFN Multiplier}_{\text{circuit}} = 1 + \frac{\text{AFN Score}_{\text{circuit}}}{\text{AFN Score}_{\text{MAX}}}$$

$$\text{NCRI Multiplier}_{\text{circuit}} = 1 + \frac{\text{NCRI Score}_{\text{circuit}}}{\text{NCRI Score}_{\text{MAX}}}$$

In summary, each circuit has an AFN and NCRI score. The "AFN Multiplier", for each circuit, is calculated by dividing the circuit's AFN score by the maximum AFN score amongst all circuits and adding one. The overall impact is that the multiplier score will always be between 1 and 2. The same methodology is used for the "NCRI Multiplier". The product of these two multipliers, at the circuit level, is what SCE refers to as the "Wildfire Vulnerability." The Wildfire Vulnerability is then used as a multiplier to the "Safety Index Score."

- D) See attachment "OEIS-SCE-008 Q2".

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**Prepared by: Eric X Wang**  
**Job Title: Sr. Manager**  
**Received Date: 6/17/2025**

**Response Date: 6/20/2025**

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**Question 03:**

Regarding Fire Weather Methodology:

On pages 82 to 89 of SCE's 2026-2028 Base WMP, SCE describes its updated fire weather day selection process, including defining fire climate zones (FCZ), as well as using fire behavior matrix (FBM) and fire behavior outcome (FBO).

- a. Describe what step(s) within SCE's integrated wildfire mitigation strategy (IWMS) risk framework is/are impacted by SCE's new fire weather methodology.
- b. Describe how the implementation of SCE's new fire weather methodology has impacted the output of the IWMS risk framework, including any changes to the miles associated with each IWMS risk category (defined in Table SCE 5-02, on page 59 of SCE's 2026-2028 Base WMP)

**Response to Question 03:**

- a. In the previous fire simulation and its wildfire consequence quantifications, SCE had used the worst 444 fire weather days across its service territory, focusing on HFRA, in the match drop simulations. In the updated model that was completed later last year, SCE used an updated fire weather day selection process, including defining fire climate zones (FCZ), as well as using fire behavior matrix (FBM) and fire behavior outcome (FBO), to select the fire weather days at the FCZ level, which provides more refined and localized fire weather information for the fire simulation engines. The results from the new model (FireSight8) provide input (specifically, the number of acres burned within the first 8 hours of an ignition) to the IWMS risk framework.
- b. These changes can impact fire simulation results and some miles associated with each IWMS risk category (see table below for miles based on results from FireSight8). SCE continues to evaluate these results.

<b>IWMS Category</b>	<b>Miles</b>
Severe	2931
High-Consequence	2955
Other HFRA	3814

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**Question 04:**

Regarding SCE's IWMS Risk Framework:

- a. Describe how ignition risk is integrated into SCE's IWMS risk framework.
- b. Describe how SCE's risk model outputs are integrated into SCE's IWMS risk framework.

**Response to Question 04:**

- a. SCE's IWMS risk framework focuses on the consequences of an ignition and the impacts to communities. The IWMS has 3 different categories to capture the different level of severity that fires may impact communities:
  - "Severe" Category, where the 8-hour fire simulation yields 10,000+acres, the location poses significant egress issues if a fire were to start at those locations, wind speeds will be significantly above SCE's current covered conductor wind speed thresholds, or where terrain, construction, and other factors could lead to smaller, fast-moving fires threatening populated locations under normal weather conditions;
  - "High Consequence" Category, where the 8-hour fire simulation yields acres burned between 300 acres and 10,000 acres; and
  - "Other HFRA" Category, where the 8-hour fire simulation yields acres burned below 300 acres.

As part of its wildfire mitigation strategy, SCE uses ignition risk to help evaluate and scope certain initiatives.

- b. SCE's risk model generates outputs that estimate the potential acres burned resulting from an ignition. This output is used to inform IWMS categorization based on acres burned, as discussed in response to part (a).

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**Question 05:**

Regarding Wildland Urban Interface (WUI) Buffer:

On page 160 of SCE's 2023-2025 Base WMP, SCE states that as part of its HFRA boundary assessment, SCE creates/adds a 600-ft buffer from a WUI boundary into urbanized landcover.

- a. Is this buffer still included within SCE's HFRA?
  - i. If not, explain why.
  - ii. If so, explain how this is captured within SCE's 2026-2028 Base WMP including how it impacts decision making on grid hardening installations.

**Response to Question 05:**

a. SCE has never included a 600-ft buffer from WUI boundaries into urbanized landcover as a part of its HFRA. SCE has in the past produced a map with a 600-ft buffer from overhead assets in WUI as part of its process to review HFRA boundaries. SCE compared this buffer area to other data, including historical fire scars and wildfire consequence models, to determine which areas should be added to the HFRA.

i. SCE uses Silvis Labs Wildland-Urban Interface ("WUI") data and urbanized landcover data from Technosylva Fuels 2030 (LandFire 2016 updated with additional classifiers from Technosylva) in assessing the boundaries of SCE's HFRA and proposed additions to the HFTD (*see* SCE's 2026-2028 WMP, pp. 132-133).

Use of a 600-ft buffer from overhead assets in WUI may be confused with footnote 101 on the same page 160 of SCE's 2023-2025 WMP, which states that in applying wildfire mitigations, "SCE uses a 200-foot buffer extended from the HFTD to account for possible internal mapping discrepancies of assets." That 200-foot buffer is still included in SCE's HFRA.

ii. N/A