

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: Gary Cheng
Job Title: Senior Advisor
Received Date: 6/17/2025

Response Date: 6/20/2025

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 NRCI 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

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

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

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

In summary, each circuit has an AFN and NRCI 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 "NRCI 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".