

Southern California Edison
2023-UPS – 2023-UPS

DATA REQUEST SET E S - D R - E U P - 2 4 - 0 4

To: Energy Safety
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Job Title: Senior Advisor
Received Date: 7/5/2024

Response Date: 7/15/2024

Question 01.a-n:

Please provide information requested as it pertains to Electrical Undergrounding Plan (EUP) reliability modeling.

Below are several scenarios for a limited model of Outage Program Risk. For each scenario, please comment on the expected time it would take SCE to develop the model and any major concerns with using said model for EUP purposes. For each case, if there is a significant difference in the difficulty of performing the separate, collective, and ablation analyses, please specify which analyses are more difficult and why. If there is a difference at the system and portfolio level for any of the listed scenarios, please explain why. If there are any significant differences in the development of the PSPS (Public Safety Power Shutoff) and Fast Trip models and settings for any scenario, please indicate which cases and explain why.

- a. A model that examines a mitigation on a single isolatable circuit segment at a time and computes likelihoods of PSPS/Fast Trip activation and the consequences of PSPS/Fast Trip activation to customers on that segment alone based purely on back casting historical data.
- b. The same as (a) but using projected weather/climate factors.
- c. A model that examines a single mitigated isolatable circuit segment at a time and computes likelihoods of PSPS/Fast Trip activation being called on that isolatable circuit segment and the consequences of PSPS/Fast Trip activation on that isolatable circuit segment and ‘downstream’ customers based purely on back casting historical data.
- d. The same as (c) but using projected weather/climate factors.
- e. Same as (a), but also includes likelihood of the segment being de-energized due to a PSPS/Fast Trip activation event on an upstream circuit segment.
- f. Same as (e) but using projected weather/climate factors.
- g. Same as (c), but also includes likelihood of the segment being de-energized due to an upstream PSPS/Fast Trip activation event.
- h. Same as (g) but using projected weather/climate factors.
- i. Same as (e) but also considering all other proposed EUP Projects.
- j. Same as (f) but also considering all other proposed EUP Projects.
- k. Same as (g) but also considering all other proposed EUP Projects.
- l. Same as (h) but also considering all other proposed EUP Projects.
- m. A model with similar levels of granularity, specificity, and accuracy as the WDRM (Wildfire Distribution Risk Model)
- n. Is there a modeling gap between Scenario (l) and (m)? If so, please explain what factors or features are absent in scenario (l).

Response to Question 01.a-n:

SCE has not taken steps to develop these new models and does not wish to speculate on the time and effort required. SCE does not currently plan to participate in the EUP process and therefore cannot speak to concerns with using the models for that purpose.