

Southern California Edison
2023-WMPs – 2023-WMPs

DATA REQUEST SET Cal Advocates - SCE - 2023 WMP - 08

To: Cal Advocates
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Response Date: 4/10/2023

Question 11. a-d:

Referring to section 8.1.1.2 Targets, on p.237 of your WMP, SCE states that:

In Table 8-3 below, SCE provides the expected risk impact for each initiative at the scoping unit level and at the HFRA-level. As such, a given mitigation might appear to have a relatively smaller impact at the HFRA-level due to a limited scope of deployment, but a much larger impact at the segment or structure level. The risk impact percentages are in MARS and as discussed in Sections 6 and 7, SCE's IWMS Risk Framework takes into account additional factors not considered by MARS. SCE includes additional columns in the table below showing the percentage of an initiative's scope that is in Severe Risk Area (SRA) and High Consequence Areas (HCA).

- a) Please provide a detailed explanation of the methodology used to calculate the expected risk impact at the scoping unit level for each mitigation initiative.
- b) Please provide a detailed explanation of the methodology used to calculate the expected risk impact at the HFRA-level for each mitigation initiative.
- c) How does SCE account for the differences between risk reduction at the scoping unit level and the HFRA-level when prioritizing mitigation initiatives?
- d) How does the combination of Severe Risk Areas (SRA) and High Consequence Areas (HCA) in Table 8-3 affect the overall risk reduction assessment?

Response to Question 11. a-d:

a) Please provide a detailed explanation of the methodology used to calculate the expected risk impact at the scoping unit level for each mitigation initiative.

SCE uses the planned mitigation initiative scope for each year to determine total MARS risk for all assets in scope for that initiative. This value, calculated as of January 1 for each year, is used as the denominator and represents total risk. SCE then determines the risk reduction due to executing the planned scope over the course of the year. SCE divides the risk reduction (from the mitigations performed) by the total risk to arrive at the percentage of risk impacted.

SCE refers to this approach for calculating risk reduction as “scoping unit level” because it looks at risk reduction from a before/after perspective due to the mitigation initiative solely within the population of assets in scope for the given mitigation initiative in the given year.

Please see Table SCE 7-04 and Appendix F2 of SCE's 2023-2025 WMP for further detail on mitigation effectiveness assumptions.

b) Please provide a detailed explanation of the methodology used to calculate the expected risk impact at the HFRA-level for each mitigation initiative.

SCE determines total MARS risk for its entire HFRA. This value, calculated as of January 1 for each year, is used as the denominator and represents total risk. SCE then determines the risk reduction due to executing the planned scope over the course of the year. SCE divides the risk reduction (from the mitigations performed) by the total risk to arrive at the percentage of risk impacted.

SCE refers to this approach for calculating risk reduction as “HFRA level” because it looks at risk reduction from a before/after perspective due to the mitigation initiative in the context of total risk in SCE’s HFRA.

Please see Table SCE 7-04 and Appendix F2 of SCE’s 2023-2025 WMP for further detail on mitigation effectiveness assumptions.

c) How does SCE account for the differences between risk reduction at the scoping unit level and the HFRA-level when prioritizing mitigation initiatives?

SCE does not consider either the scoping-level calculation or the HFRA level calculation to be determinative or appropriate for use as a sole risk reduction metric. The scoping-level calculation can be helpful to understand, within the assets in scope, how much risk can be reduced and where to prioritize the mitigation. However, this lacks the broader context of total risk in all of SCE’s HFRA. Looking at the HFRA-level risk reduction provides this context, but typically will show a much lower value for risk reduction given the large denominator.

SCE considers both values along with the overall framework for risk analysis and mitigation selection that SCE describes in Sections 6 and 7 of its 2023-2025 WMP. For example, in Section 6.2.1.2 (starting on page 101), SCE explains how it uses its IWMS Risk Framework to define risk tranches within its HFRA, which in turn informs mitigation selection. In Section 7.1.4.1 (starting on page 191), SCE further describes the mitigation selection and evaluation process.

d) How does the combination of Severe Risk Areas (SRA) and High Consequence Areas (HCA) in Table 8-3 affect the overall risk reduction assessment?

SCE uses the three risk tranches defined by its IWMS Risk Framework as a key factor in determining mitigation scope and locations (see Section 7.1.4.2, starting on page 204). This is why most mitigations in Table 8-3 show high values for the percentage in SRA/HCA each year, as they primarily occur in SRA or HCA.

Below SCE provides further context for mitigation initiatives in Table 8-3 that show relatively low values for percentage in SRA/HCA:

- SH-5 (Remote Controlled Automatic Reclosers Settings Update): This program provides SCE with increased ability to sectionalize circuits and remotely control switching, which allows for greater ability to limit PSPS de-energizations. As such, scope is primarily driven by PSPS analysis, as opposed to by IWMS risk tranches.
- SH-10 (Tree Attachments Remediation): This program addresses an outdated contraction method used in forested areas. SCE is remediating all instances of this method throughout its HFRA, with an intended conclusion in 2025. As such, program scope includes areas outside of SRA and HCA, lowering the percentage.
- SH-15 (Vertical Switches): This program enters its final year in 2023 and has a minimal remaining scope.