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Docket# 2023-UPs

November 1, 2023

Kristin Ralff Douglas
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Office of Energy Infrastructure Safety
715 P Street, 20th Floor
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SUBJECT: Comments on Development of the Draft Electrical Undergrounding Plan Guidelines for Large Electrical Corporations

Dear Program Manager Douglas:

SCE respectfully submits these comments to respond to the questions in the Office of Energy Infrastructure Safety's (Energy Safety) letter dated October 16, 2023, entitled Request for Comments on Development of Guidelines for the 10-Year Electrical Undergrounding Distribution Infrastructure Plan (Undergrounding Plan).

PART I – REQUIREMENTS FOR ENERGY SAFETY APPROVAL

Reliability

Public Utilities Code section 8388.5(d)(2) directs Energy Safety to approve an Undergrounding Plan only if the large electrical corporation "has shown" that the Undergrounding Plan ***will substantially increase electric reliability by reducing the use of public safety power shutoffs (PSPS), enhanced powerline safety settings (EPSS), deenergization events and any other outage programs****, and will substantially reduce the risk of wildfire.*

a) ***Outage Programs.*** *Section 8388.5(d)(2) refers to "reducing the use of public safety power shutoffs (PSPS), enhanced powerline safety settings (EPSS), deenergization events and any other outage programs . . ." The term "deenergization event" is defined by 8388.5(a)(3) as "the proactive interruption of electrical service for the purpose of mitigating or avoiding the risk caused by a wildfire." The term "outage program" is not defined. Propose how "outage program" should be defined for purposes of implementation of Section 8388.5(d)(2). Explain why this is an appropriate definition.*

SCE proposes that "outage program," for purposes of implementation of Section 8388.5(d)(2), be defined as all outages that de-energize overhead electrical assets for wildfire mitigation purposes. These outages encompass PSPS and relay operations that occur due to detected fault conditions (e.g., storm damage, contact from foreign object, asset failure), regardless of whether fast curve

settings are enabled (fast curve is SCE's equivalent to Enhanced Powerline Safety Settings). SCE notes that fast curve settings, while part of this proposed definition of "other outage programs," should not be considered as "proactive." Fast curve settings simply detect a fault condition faster than traditional means and result in less fault energy being released when an outage occurs. Outages on lines that occur under fast curve settings are also in many cases likely to have occurred without that protocol in place.

This interpretation is appropriate because these types of outages occur to mitigate against electrical circuits causing a potential wildfire ignition, and over time they should be utilized less often following implementation of targeted undergrounding efforts. PSPS outages should be eliminated on undergrounded circuits, assuming upstream circuitry is not vulnerable to PSPS de-energizations. Other faults and relays are also likely to be reduced when circuity is no longer exposed to typical overhead hazards.

b) ***Baseline for PSPS, EPSS, De-energization and Other Outage programs.***
Propose a methodology for determining a level of reliability that should be used as the baseline level of reliability against which any assessment of whether the use of PSPS, EPSS, de-energization and other outage programs is increased or decreased is measured. Should the reliability baseline be set as of the date of plan submission, application approval, or another date? Address whether the proposed baseline can be determined using existing data (and if so, where that data can be accessed), or whether a new data set would be necessary.

A reliability baseline will be most meaningful if established at a local level, such as by circuit, and for areas that are slated for mitigation under the Undergrounding Plan. In contrast, comparing reliability outcomes at the system level would make it more challenging to isolate and measure changes in the areas that have been mitigated through targeted undergrounding.

This new analysis should be measured using existing outage data and metrics captured through a utility's outage management systems and should be set as of the date of plan submission.

c) ***Substantial Increase.*** *What would constitute a "substantial" increase in reliability under the proposed methodology?*

SCE anticipates that each utility may experience varying levels of reliability changes due to circumstances unique to their service area, grid design and other factors. However, a utility should be able to justify the substantiality of its Undergrounding Plan's reliability benefits using the following considerations:

- A circuit's average interruption frequency should be reduced for customers on the undergrounded portion of each respective circuit
- Reductions to a circuit's average interruption duration may be less pronounced or not realized, given that outages on underground circuits (while less frequent) may take longer to locate and remedy.

SCE anticipates that outage reduction measurement will be substantial when considered over the multi-decade lifespan of undergrounding, and that shorter-term measurements may not

immediately show a substantial reduction, and therefore not be reflective of the actual long-term reliability benefits of undergrounding mitigations.

While targeted undergrounding will likely lead to reliability improvements, SCE notes that wildfire risk reduction is the foremost and primary driver for the utilities' undergrounding proposals. Thus, reliability metrics should not be seen as a primary indicator of wildfire-driven undergrounding success.

Reduction of Risk of Wildfire.

Public Utilities Code section 8388.5(d)(2) directs Energy Safety to approve an Undergrounding Plan only if the large electrical corporation "has shown" that the Undergrounding Plan will substantially increase electric reliability by reducing the use of public safety power shutoffs (PSPS), enhanced powerline safety settings (EPSS), deenergization events and any other outage programs, and ***will substantially reduce the risk of wildfire****.*

d) ***Baseline for Wildfire Risk.*** *Propose a methodology for determining a level of wildfire risk that should be used as the baseline level of wildfire risk against which any assessment of whether wildfire risk was reduced is measured. The baseline and comparisons should isolate wildfire risk reduction from other factors (such as cost, reliability, etc.). Should the wildfire risk baseline be set as of the date of plan submission, application approval, or another date?*

Baseline wildfire risk could be established using the current utility risk model, consistent with existing OEIS Wildfire Mitigation Plan (WMP) requirements, at the date of plan submission. Utilities will likely continue to improve and refine models, but planning, engineering and other pre-construction implementation steps must move forward following the risk-informed scoping decisions made at the time the project was scoped. Those decisions cannot reasonably or fairly be challenged or re-litigated based on potential risk modeling changes the utility prudently pursued post-scoping.

e) ***Substantial Reduction of Wildfire Risk.*** *What would constitute a "substantial" reduction in wildfire risk under the proposed methodology?*

Wildfire risk reduction may vary from utility to utility, given factors unique to each utility's undergrounding deployment locations. SCE anticipates that circuit segments selected for targeted undergrounding should see wildfire ignition risk associated with utility infrastructure on those circuit segments reduced by 90% or more.

<u>PART II – REQUIRED COMPONENTS OF UNDERGROUNDING PLAN</u>

Section 8388.5(c) sets out the required components for the Undergrounding Plan. Subsections 8388.5(c)(2) – 8388.5(c)(4) direct the large electrical corporation to identify, prioritize, and compare undergrounding projects.

Undergrounding Projects

a) ***Definition of Undergrounding Projects.*** *Public Utilities Code section 8388.5 refers to "undergrounding projects" that will be constructed as part of the program. The term*

"undergrounding project" is not defined. How should "undergrounding project" be defined for purposes of section 8388.5? What features or characteristics should be used to differentiate individual undergrounding projects? Should there be minimum or maximum size requirements for individual undergrounding projects?

Undergrounding projects should be defined at the project level based on how they are constructed in the field, which is typically at the isolatable circuit segment-level. There should be no minimum or maximum length requirements for individual projects, as this could impose a confusing and artificial constraint that would conflict with how a utility defines a project.

b) Section 8388.5(c)(2) requires the large electrical corporation to identify the undergrounding projects that comprise the plan. Energy Safety intends to require the large electrical corporation to provide the circuit number, mileage, and location (including whether the project is in a tier 2 or tier 3 high fire-threat district or rebuild area) for each undergrounding project. What other information should be provided for this identification? Should the large electrical corporation include projects located in in utility-identified high fire risk areas (HFRA)?

In SCE's service area, the concepts of "HFTD" and "HFRA" are currently almost identical. However, as that may not always be the case, utilities should continue to have discretion to target areas of utility-specific HFRA outside of HFTD, assuming they still meet the intent of Undergrounding Plan guidelines to reduce elevated or extreme wildfire risk. Restricting Undergrounding Plans to only HFTD could be unduly prescriptive, especially as risk profiles change. Allowing reasonable flexibility appropriately allows utilities to target highest risk areas and not wait for formal CPUC-driven HFTD map changes that may undergo lengthy process updates.

CONCLUSION

SCE appreciates the opportunity to provide comments on the requested subject areas. If you have questions, or require additional information, please contact me at connor.flanigan@sce.com.

Sincerely,

//s//
Gary Chen
Director, Safety & Infrastructure Policy