

January 27, 2025

Kristin Ralff Douglas
Program Manager, Electrical Undergrounding Division
Office of Energy Infrastructure Safety
715 P Street, 20th Floor
Sacramento, CA 95814

Re: Pacific Gas and Electric Company's Comments on the Second Revised Draft 10-Year Electrical Undergrounding Plan Guidelines Issued by Energy Safety on January 6, 2025

Dear Ms. Douglas:

Thank you for the opportunity to provide comments on the Second Revised Draft 10-Year Electrical Undergrounding Plan (EUP) Guidelines (Second Revised Guidelines) issued by the Office of Energy Infrastructure Safety (Energy Safety) on January 6, 2025. In our comments, PG&E confirms our understanding of the expanded definition of Key Decision-Making Metrics (KDMMs) and highlights certain challenges in the Second Revised Guidelines.

Key Decision-Making Metrics

The definition of KDMMs has been revised in the Second Revised Guidelines. Section 2.7.3 now states that KDMMs do not reflect financial considerations and must be used alongside financialized metrics reported in Screen 2 and Screen 4 to evaluate projects. The financialized metrics in Screen 2 and Screen 4 are the reliability benefits, financial benefits, safety benefits, and total risk reduction presented in dollarized values and the project unit cost per overhead mile deenergized, the project unit cost per circuit mile energized, the total project costs, and the project Cost-Benefit Ratio (CBR).¹

¹ Reliability benefits, financial benefits, safety benefits, total risk reduction, and CBR are as defined in Decision (D.)22-12-027.

During the January 17, 2025, Public Workshop, PG&E asked Energy Safety to clarify the revised definition of the KDMMs to ensure that we clearly understand what is allowed for calculating risk reduction under the Second Revised Guidelines. As PG&E explained during the workshop, to calculate consequence scores and overall utility risk, PG&E transforms data into like units—e.g. dollars—so that it can be added together. For example, when calculating ignition consequence, acres burned, structures destroyed, and fatalities are transformed into like units so they can be combined. If we do not transform data, we cannot calculate ignition risk, reliability risk, or overall utility risk.

Energy Safety confirmed that a Large Electrical Corporation can dollarize, or otherwise transform, KDMMs into like units as long as the dollarization is based on a linear calculation and does not reflect any scaling adjustments or risk attitudes. A Large Electrical Corporation can also propose additional KDMMs that can be dollarized as long as the dollarization is based on a linear calculation and does not reflect any scaling adjustments or risk attitudes.

In light of this workshop discussion, PG&E recommends that that definition of KDMM be further clarified as follows (clarifications are shown in *italics*).

The Key Decision-Making Metrics (KDMMs) are defined to be the collection of top-level metrics that the Large Electrical Corporation proposes to use to evaluate the efficacy of an Undergrounding Project. These KDMMs are not influenced by risk attitudes, risk tolerances, opportunity costs or any other decision-making parameters. They do not reflect financial considerations and must be used alongside financialized metrics reported in Screen 2 and Screen 4 to evaluate projects. The KDMMs measure key elements of risk and can be substantiated by real-world observations. *The Large Electrical Corporation can dollarize, or otherwise transform, KDMMs into like units as long as the dollarization is based on a linear calculation and does not reflect any scaling adjustments or risk attitudes. A Large Electrical Corporation can also propose additional KDMMs that can be dollarized as long as the dollarization is based on a linear calculation and does not reflect any scaling adjustments or risk attitudes.*

In the event this recommendation is not incorporated into the final guidelines, PG&E will prepare and submit our EUP based on the clarification provided by Energy Safety at the workshop.

Challenges in the Second Revised Guidelines

Energy Safety, PG&E, and other stakeholders have actively participated in the development of the Second Revised Guidelines. PG&E appreciates this combined effort, and we look forward to working with Energy Safety and stakeholders as we prepare and implement our EUP.

During both the guideline review and comment process, and through public workshops, PG&E has raised concerns about the EUP guidelines not aligning with other regulatory requirements and/or how we manage our undergrounding program. While we recognize that there may no longer be an opportunity to change or modify certain issues in the guidelines, PG&E takes this opportunity to briefly reiterate several of our concerns.

- **Risk Attitude Function** – Section 2.7.3 states that KDMMs are not influenced by risk attitudes, risk tolerances, opportunity costs or any other decision-making parameters. However, incorporating a risk attitude function into risk calculations allows Large Electrical Corporations like PG&E to demonstrate their risk preferences in order to remain consistent with the State’s prioritization of mitigating catastrophic wildfire risk and is consistent with how we calculate risk in our Risk Assessment Mitigation Phase (RAMP), Wildfire Mitigation Plan (WMP) and General Rate Case (GRC). Using values that do not incorporate a risk attitude function will result in a different relative amount of risk being addressed between wildfire and reliability, which is contrary to PG&E’s approach towards managing risk in our service territory. PG&E’s primary focus is to select locations for undergrounding that will reduce the greatest amount of wildfire risk. We recognize the importance of also improving reliability risk, and we will incorporate reliability improvements into our EUP, but we do not wish to do so at the expense of reducing less wildfire risk. Large Electrical Corporations should be allowed to express their values-based preferences through a risk attitude.

- **Risk Scaling and Weighting** – Section 2.7.3 states that determining Overall Utility Risk, Ignition Risk, Ignition Likelihood, and Outage Program Risk is based on unweighted and unscaled calculations. This approach is inconsistent with the methods PG&E uses to calculate these same values in our RAMP, WMP, and GRC. Using an inconsistent method in the EUP will result in different risk scores among proceedings. It is also inconsistent with how utilities and regulators have been measuring risk and using risk to determine risk-based decision making.
- **Risk Targets and Metrics** – The number of, and interrelationships among, the metrics, objectives, targets, thresholds, and standards in the Revised Guidelines will significantly restrict how Large Electrical Corporations select and execute a portfolio of work. There are over 50 metrics at the system-, portfolio-, and project-level—and a total of approximately 60 metrics when including those required by the CPUC in Resolution SPD-15. Managing to this multitude of metrics will be extremely difficult because of the challenges in selecting and executing projects that will allow each metric to be met.
- **Lack of Compliance Requirements** – Energy Safety has indicated that it will issue compliance guidelines after the Second Revised Guidelines are finalized. We anticipate these guidelines will clarify how Energy Safety will assess a Large Electrical Corporation’s compliance with the EUP requirements and may outline requirements for addressing deficiencies. Given the complexity of the EUP requirements and the large number of risk targets and metrics that a Large Electric Corporation must manage, it is critical that a Utility understand how the metrics and targets in the guidelines will be used when evaluating compliance. The separation of EUP guidelines from compliance-related implications makes it challenging for a Large Electric Corporation to submit an EUP without a clear understanding of the implications of the objectives, thresholds, standards, and key decision-making metrics outlined in the plan.
- **Circuit Segment Changelog** - Table C.6 states that Circuit Segments must be represented by unique identification names and cannot be reused for a “new” Circuit Segment. A Circuit segment is considered new and requires a new Circuit Segment ID if equipment that defines

the boundaries are moved, removed, or added. PG&E’s circuit segment names are not arbitrary but rather are formulaically developed based on the interrupter device on that segment. If, for example, a new interrupter device is added and a single circuit segment becomes two, one circuit segment retains the original circuit segment name (because the interrupter device on that segment is the same as before) and the new circuit segment receives a new name based on the new interrupter device. In this example, PG&E would be “reusing” a circuit segment name as defined by the Revised Guidelines. If PG&E is required for the EUP to create a new name for the portion of the circuit segment that, under the standard naming process, retained the original name, the naming of that circuit segment would be inconsistent between PG&E’s system of record and the EUP. Such a situation where a Utility is reporting circuit segment names slightly different in the EUP than in PG&E’s system of record, creates the risk of errors or confusion. PG&E recommends that a Large Electrical Corporation be allowed to retain the original name of a circuit segment, consistent with its system of record, even if it has changed in some manner, and only provide new names for newly created circuit segments.

- **Wildfire Rebuild Area Requirements** – Section 2.3.5 states that pre-wildfire distribution infrastructure and associated risk scores are used to determine if a Circuit Segments located in wildfire risk areas meet the Project Thresholds. PG&E recommends that all circuit segments in the HFTD that need to be rebuilt due to damage from a wildfire automatically become Eligible Circuit Segments because once infrastructure is damaged by wildfire it becomes “realized risk” — the risk of a wildfire damaging the asset is now a reality — and the most appropriate response is often to manage future wildfire risk through undergrounding. Requiring a Large Electrical Corporation to evaluate the Circuit Segment based on pre-wildfire risk scores ignores the reality that a wildfire already occurred. PG&E has developed extensive operational processes focused on ensuring public, employee and contractor safety while expediting the disaster response for restoring and rebuilding significantly interrupted services caused by wildfires. Automatically designating any circuit segment damaged by wildfire as EUP-eligible would allow rebuild work to proceed as quickly as possible.

- **Mapping Secondary Lines and Services** – PG&E reiterates that our Electric Distribution (ED) GIS system includes primary distribution line information, some secondary distribution line information, and only limited information about the associated services.² To confirm and update geospatial secondary line information and collect information about services and enter it into ED GIS before submission would significantly delay PG&E’s EUP. Requiring PG&E to provide GIS information about secondary lines and services for the entire distribution system before submission is an unnecessary expenditure of time and resources. Information about services located outside the high fire threat district (HFTD) or in HFTD locations not selected for undergrounding is not needed for underground project selection. Rather, PG&E recommends that information about secondary lines and services be collected during scoping and underground project execution and input into ED GIS post-construction, during the project mapping phase.
- **Project Level Threshold Changes** - Section 2.7.9.2 states that the Project-Level Standards are fixed when the EUP is approved and cannot be altered when risk model versioning or calibration changes occur or when any other changes are made. PG&E intends to use the outputs from our risk models to establish the Thresholds and expects that these outputs will change over time as models are updated. The evolution of risk models, particularly wildfire risk models, as more data or better analysis tools become available has been discussed in several regulatory proceedings including RAMP, the WMP and the GRC. This continuous improvement in risk modeling is widely accepted as a positive and necessary step to ensure wildfire mitigation activities, and the risk analysis that supports them, are as well informed as possible. Therefore, PG&E does not support fixing these Thresholds for the duration of the EUP.

² PG&E notes that secondary and service lines operate in the same voltage class and for planning purposes we consider secondary and service lines essentially the same.

Thank you in advance for considering our comments. Please feel free to contact me if you have questions about these items or need additional information from me at Megan.Ardell@pge.com.

Very truly yours,

/s/ Megan Ardell

Megan Ardell