PACIFIC GAS AND ELECTRIC COMPANY
10 Year Electrical Undergrounding Plan (EUP)
Data Response

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Requesting Party:	Office of Energy Infrastructure Safety
Requester:	David Rey
Date Sent:	October 28, 2026
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SUBJECT: ALTERNATIVE MITIGATIONS AND PORTFOLIO PROJECT SELECTION

Consideration of Alternative Screen 2 Alt 2 Configurations

QUESTION 002

1. Identify whether PG&E considered alternative configurations for Screen 2 Alternative Mitigation 2 (Alt 2) other than 100% Remote Grid, including but not limited to combinations of overhead hardening with Rapid Earth Fault Current Limiters (REFCL) or other advanced protection, advanced grid monitoring, line removal, system reconfiguration, or partial Remote Grid:
    a. For each configuration evaluated, identify the components, feasibility and risk reduction criteria, and the results or basis for eliminating it from further consideration.
    b. For mitigation combinations not evaluated, explain the reasons they were not considered and whether PG&E anticipates assessing their use during EUP implementation.
2. Explain whether PG&E considered using different Screen 2 Alternative Mitigation 2 configurations for Eligible Circuit Segments based on technical applicability, rather than a single 100% Remote Grid design variation, and provide any existing supporting analysis. Include whether PG&E performed any automated circuit segment screening or technical suitability assessments, such as simple checks based on customer count, segment length, and position on the circuit.

ANSWER 002

1. PG&E did not evaluate alternative configurations of Screen 2 Alternative Mitigation 2 (Alt 2), other than 100% Remote Grid with associated line removal, as separate Screen 2 design variations. PG&E used 100% Remote Grid as a standardized configuration to provide a consistent planning-level basis for comparing mitigation alternatives across the Eligible Circuit Segment population (EUP Vol. 1, Table 3-9, p. 115). Screen 2 does not represent a determination that 100% Remote Grid is

technically feasible across the entirety of every Circuit Segment. Rather, Screen 2 BCRs are high-level Circuit Segment-level values, and project-specific configurations and feasibility are evaluated in Screen 3 as more detailed scoping and technical information becomes available (EUP Vol. 1, Ch. 3, p. 110-111; Table 3-9, note (b), p. 115).

The EUP provides for evaluation of project-specific combinations of undergrounding, overhead hardening, and Remote Grid at Screen 3 when more detailed scoping and feasibility information is available (Table 3-9 and note (b), p. 115; Figure 3-8, p. 140). Opportunities to remove idle lines and redundant circuit ties are evaluated through the Screen 3 Alternative Mitigation Review (Ch. 3, Section D.3.a.5, p. 131; Figure 3-6, p. 130). Configurations that include undergrounding are evaluated as Additional Comparisons rather than as separate Screen 2 Alt 2 design variations.

a. PG&E did not evaluate configurations other than 100% Remote Grid with associated line removal as separate Screen 2 Alt 2 design variations. Accordingly, PG&E does not have configuration-specific Screen 2 analyses identifying the components, feasibility, and risk reduction criteria, or results or bases for eliminating the other combinations identified in the question from further consideration.

b. PG&E did not evaluate the combinations identified in the question as separate Screen 2 Alt 2 design variations for two reasons.

   First, configurations involving line removal, system reconfiguration, partial Remote Grid, or combinations of Remote Grid with overhead hardening require project-specific topology, scoping, and feasibility information that is not available at Screen 2. These configurations may be evaluated at Screen 3 based on the portions of undergrounding, overhead hardening, and/or Remote Grid that are feasible for the particular project. Remote Grid feasibility considerations include customer willingness, site availability, land rights, environmental and permitting requirements, and engineering feasibility. Opportunities to remove idle lines and redundant circuit ties are also evaluated during the Screen 3 Alternative Mitigation Review (EUP Vol. 1, Table 3-9 and note (b), p. 115; Ch. 3, Section D.3.a.5, p. 131; Figure 3-6, p. 130; Figure 3-8, p. 140).

   Second, PG&E included in the Project Acceptance Framework all permanent wildfire mitigation technologies approved for wide-scale use by PG&E that could be evaluated as alternatives under the EUP Guidelines. REFCL was not evaluated as a separate Screen 2 Alt 2 configuration because it is not currently an approved PG&E standard mitigation practice, and PG&E does not have an approved standard for REFCL installation. As described in PG&E's 2026-2028 WMP, Section 8.7.1.3.1, REFCL continues to undergo testing and evaluation, including evaluation of its reliability and safety impacts.

   Similarly, Continuous Grid Monitoring sensors and Early Fault Detection are being implemented and evaluated through PG&E's 2026-2028 WMP but are not approved standard mitigation practices for inclusion as separate Alternative Mitigations in the EUP Project Acceptance Framework (EUP Vol. 1, Ch. 3, Section D.2.d, p. 118). Enhanced Powerline Safety Settings (EPSS) and Downed Conductor Detection (DCD) are reflected in the Baseline rather than evaluated as separate permanent-infrastructure alternatives (EUP Vol. 1., Ch. 3, pp. 110-111; Table 3-9, note (a); Ch. 3, Section D.3.a.11, p. 143).

During EUP implementation, PG&E will continue to evaluate new and innovative practices involving line sensing, protection, and other wildfire mitigations. If a technology becomes an approved standard mitigation practice, PG&E would determine how it should be evaluated within the Project Acceptance Framework, including whether its applicability can be evaluated through a standardized Screen 2 comparison or requires project-specific evaluation at Screen 3. PG&E will continue to evaluate applicable project-specific combinations of approved mitigations through the Screen 3 Alternative Mitigation Review and Additional Comparisons.

2. PG&E did not evaluate different Screen 2 Alternative Mitigation 2 configurations for individual Eligible Circuit Segments based on technical applicability. As described above, PG&E used 100% Remote Grid with associated line removal as a standardized Screen 2 configuration to provide a consistent planning-level basis for comparing mitigation alternatives across the Eligible Circuit Segment population. Screen 2 does not represent a determination that 100% Remote Grid is technically feasible across the entirety of each Circuit Segment. Rather, project-specific configurations and feasibility are evaluated at Screen 3 as more detailed scoping and technical information becomes available (EUP Vol. 1, Ch. 3, pp. 110-111; Table 3-9 and note (b), p. 115).

   PG&E did not perform automated Circuit Segment screening or technical suitability assessments at Screen 2 to identify different Alt 2 configurations based on factors such as customer count, segment length, or position on the circuit. At Screen 3, as part of the project-specific Remote Grid feasibility review, PG&E identifies potential Remote Grid locations, including portions of a Circuit Segment that are end of line, relatively long, and serve relatively few customers, and evaluates site-specific feasibility considerations. These considerations include customer willingness, site availability, land rights, environmental and permitting requirements, and engineering feasibility (EUP Vol. 1, Table 3-9 and note (b), p. 115; Figure 3-8, p. 140).

   Accordingly, PG&E does not have a separate Screen 2 analysis identifying different Alt 2 configurations for individual Eligible Circuit Segments based on technical suitability. The supporting analysis for the Screen 2 approach and the subsequent consideration of project-specific configurations is reflected in the EUP Project Acceptance Framework and Screen 3 Alternative Mitigation Review described above.