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

| | |
|---|---|
| **PG&E Data Request No.:** | OEIS_003-Q008 |
| **PG&E File Name:** | EUP-PhI_DR_OEIS_003-Q008 |
| **Request Date:** | October 23, 2026 |
| **Requester DR No.:** | Energy Safety-DR-EUP-26-08 |
| **Requesting Party:** | Office of Energy Infrastructure Safety |
| **Requester:** | David Rey |
| **Date Sent:** | October 28, 2026 |
| **Responsible Person(s):** | Justin Sadler |

**SUBJECT: ALTERNATIVE MITIGATIONS AND PORTFOLIO PROJECT SELECTION**

New Mitigation Technologies

**QUESTION 008**

In Chapter 3, page 116 of PG&E's EUP, PG&E states that it considers Minimum Cover Distribution Systems (MCDS) and Ground Level Distribution Systems (GLDS) to be improvements to existing undergrounding methods rather than separate mitigation alternatives.

a. Explain the basis for this classification, particularly given the differences in installation methods and potential differences in risk characteristics and cost compared to conventional undergrounding.

b. Describe how PG&E envisions incorporating MCDS and GLDS into the EUP if these technologies become suitable for deployment at a greater scale.

   i. Would they be used in place of conventional undergrounding on certain projects and evaluated as undergrounding in Screens 2 and 3?

   ii. How would PG&E assess and account for any differences in the technologies, including in wildfire risk reduction, reliability, and costs?

c. Provide a brief technical description of MCDS and GLDS, including their intended applications, current testing and pilot status, and what additional testing or validation is needed before deployment at a greater scale.

**ANSWER 008**

a. PG&E interprets “new mitigation technologies” to mean new mitigation alternatives considered in Screens 2 and 3. The EUP identifies MCDS and GLDS, along with Fluid-Free Steerable Boring and Native Slurry Backfill, as technologies aimed at increasing the cost efficiency of existing mitigations rather than as new mitigation alternatives. MCDS and GLDS are alternative construction methods being assessed as potentially faster and less costly approaches to placing electric distribution facilities deeper underground in specific locations. These technologies remain in

development and pilot testing and are not currently relied upon as standalone mitigation alternatives for long-term EUP planning. Rather, they are being evaluated as potential improvements to how undergrounding is constructed and deployed. Accordingly, PG&E classified these technologies as improvements to existing mitigations rather than separate mitigation alternatives.

b.

i. If validated and determined suitable for broader deployment, MCDS or GLDS could be used in place of conventional underground construction on projects or portions of projects where technically and economically appropriate. Consistent with the EUP's treatment of MCDS and GLDS as technologies aimed at increasing the cost efficiency of undergrounding, the applicable construction method, scope, and costs would be reflected in the project evaluation.

ii. PG&E would evaluate MCDS and GLDS based on available engineering, safety, reliability, wildfire risk, cost, permitting, and operational information and incorporate appropriate technology-specific assumptions into project design and applicable EUP analyses. Broader deployment may also require further engagement with other regulators, including the CPUC, before deploying these technologies at scale

c. MCDS and GLDS are alternative construction methods that PG&E is assessing as potentially faster and less costly approaches to undergrounding electric lines in specific locations, including difficult terrain and environmentally/culturally sensitive areas. MCDS installs the system below grade using minimum cover, while GLDS installs the system at ground level. PG&E has piloted MCDS & GLDS, including an installation on the Antler 1101 circuit that was energized in May 2026 and the other on the Woodside 1101 circuit energized in December 2023. Both are serving customer load. PG&E continues to assess these construction methods for broader applicability, including necessary engineering, safety, reliability, cost, permitting, and operational considerations.