

**COMMENTS OF PACIFIC GAS AND ELECTRIC COMPANY ON STAFF PROPOSAL FOR
CORRECTIVE ACTIONS STEMMING FROM THE ROOT CAUSE ANALYSIS OF THE
2017 AND 2018 WILDFIRES ASSOCIATED WITH PG&E EQUIPMENT.**

At the request of the California Public Utilities Commission (Commission or CPUC) staff, Pacific Gas and Electric Company (PG&E) offers the following comments on the July 2023 Staff Proposal for Corrective Actions Stemming from the Root Cause Analysis of the 2017 and 2018 Wildfires Associated with PG&E Equipment. We appreciate the consideration of our recommended corrective actions and the CPUC's thoughtful suggestions.

Our proposed corrective actions and associated funding were developed to incorporate items and suggestions identified by Commission staff and other ideas generated from stakeholder discussions following the December 5, 2022, workshop on the Final Root Cause Analyses Report from Envista Forensics, Inc. (Envista). We offer the following suggestions and recommendations to the CPUC comments to our proposed actions.

- **Corrective Action 1: Assess In-service Condition of Bare Conductors & Replace Deteriorated Bare Conductors.** Step 1 of this Corrective Action proposes a pilot study that identifies the data required and establishes a process and methodology to calculate and assess the "in-service" condition of bare conductors. PG&E's ongoing causal analysis and lab testing of distribution conductor failure incidents have shown that the conductor failures are highly correlated to localized defects (e.g., weak connector, broken strands) rather than a bulk material strength. As such, sampling and testing of remaining strength of bulk conductor may not measure the true health of the span and/or circuit. Furthermore, PG&E is not currently aware of any in-situ remaining strength technologies. Therefore, bulk sampling of conductors will require planned outages as samples require lab testing.

For all the reasons above, assessing the "in-service" condition of bare conductors within HFTD areas through a pilot study which uses a sampling/analysis methodology will be a costly, time-consuming process and cannot be completed within the proposed 90-day timeframe.

However, PG&E has a robust overhead conductor risk model that establishes a process and methodology for assessing the "in-service" condition of bare overhead conductor based on historical failure incidents and correlated attributes of the conductors in the system.

We recommend identifying and risk-rank all bare conductor within HFTD using the currently accepted risk modeling methodologies and identify a proposed portfolio of overhead bare conductor replacements based on this ranking. Post replacement of the scoped conductors, an in-depth strength assessment could be conducted on a sample set of the bare conductors. This will help determine the "in-service" condition of the conductors prioritized based on the risk model and allow PG&E to further improve the risk model's prioritization methodology.

- **Corrective Action 2: Install Gang Operated Protective Devices - Upgrade PG&E Distribution Hardware.** We recommend Phase 1, section e, include reliability as one of the other risk factors that contribute to the analysis.

- **Corrective Action 3: Deploy Early Fault Detection on 60 - 70 kV Transmission Lines.** We believe this project supports findings associated with Finding 12, Asset Management, rather than Finding 11, 3-Wire System because this corrective action addresses the transmission system.

This corrective action will provide us with early identification of potential component issues reducing fault events. It will not reduce the duration of potential fault events as stated in the Recommendation section.

This corrective action will be implemented on the transmission system and therefore will not reduce wildfire risks associated with potential back feed and high impedance fault conditions as stated in Phase 1. As a result, section e, does not apply.

- **Corrective Action 4: Supplement SEI-20 Project.** We believe with detailed discussions with existing bidders, clarifying scope and expectations, we may be able to reduce their bids. If, after working with the bidders the suggested additional funding is required, we agree to allocate up to \$1.25M to complete the study. Unspent funds from this corrective action should be allocated to other infrastructure related corrective actions.

We appreciate the CPUC Staff's proposed corrective actions. We also appreciate the opportunity to provide our comments. As can be seen from our comments, we support the CPUC staff recommendations and have provided comments to clarify the intent of the recommendations and actions to be taken to successfully complete them. As we have stated in earlier communications, we look forward to continuing to partner with the Commission on this important work as we understand there is much still to be done.