

PACIFIC GAS AND ELECTRIC COMPANY
Wildfire Mitigation Plans Discovery 2023
Data Response

PG&E Data Request No.:	CalAdvocates_022-Q006		
PG&E File Name:	WMP-Discovery2023_DR_CalAdvocates_022-Q006		
Request Date:	May 2, 2023	Requester DR No.:	CalAdvocates-PGE-2023WMP-22
Date Sent:	May 5, 2023	Requesting Party:	Public Advocates Office
PG&E Witness:		Requester:	Holly Wehrman

QUESTION 006

- a) Given the best information now available to PG&E, is the expected useful life of newly installed covered conductor identical to that of newly installed bare overhead conductor?
- b) Does PG&E expect that the asset management and maintenance needs for covered overhead conductor are identical to those of bare overhead conductor?
- c) Does PG&E intend, either now or at any point in the future, to apply different PSPS criteria (such as wind speed thresholds) for circuit-segments that are hardened with covered conductor, relative to those with bare overhead conductor?
- d) If the answer to the previous part is yes, how will PG&E determine which PSPS criteria to apply without having accurate information about where on its system it has installed covered conductor?

ANSWER 006

- a) The expected life of newly installed Covered Conductor (CC) is not identical to the newly installed Bare Conductor (BC) because the failure modes are different between the two conductor types.
At this time, PG&E does not have a set useful life expectancy for covered conductor due to ongoing evaluation of UV exposure and the possibility of accelerated corrosion from water intrusion to the protective jacket. These failure modes were documented in PG&E's Covered Conductor Testing. The Joint IOU effort is continuing to evaluate PG&E's testing results and the impacts of the expected useful life of newly installed covered conductor..
- b) PG&E uses the same inspection methods for CC and BC. As noted in the 2023 WMP Joint IOU CC Report, most inspection practices of BC also apply to CC. In addition, in 2023, PG&E updated the Detailed Ground Inspection Checklist to include prompts for identifying failure modes that are unique to CC, such as CC wire jacket cut into and internal conductor exposed, CC exposed and burnt, and dead-end cover mis-aligned on CC construction. PG&E is continuing to evaluate test results, discussed in response to subpart (a), to assess if additional updates to inspection methods are required.

- c) As stated in response to ACI PG&E-22-31 in the 2023-2025 WMP, due to PG&E's PSPS modeling approach, PG&E would not manually adjust our PSPS criteria (such as wind speed thresholds) for circuit-segments to account for covered conductor or any other program that reduces the probability of catastrophic outcomes. Our Catastrophic Fire Probability model (discussed in Section 9) is a risk-based assessment of the probability of ignition given an outage multiplied by the probability of catastrophic fires (Fire Potential Index). Thus, we would not adjust the threshold at which PSPS is executed (each area is scoped for PSPS at the same risk threshold), but any program or external factor that results in a beneficial outcome would reduce the probability of ignitions and therefore decrease the chance of achieving the PSPS threshold.

We incorporate new outage data each year into our Outage Producing Winds (OPW) and Ignition Probability Weather (IPW) machine learning models. These updates account for any updated wind to outage to ignition responses in local areas of the grid. We are also exploring if adding covered conductor as a feature of the IPW model in future iterations provides benefits (see Objective SA-04).

- d) See the response to Subpart (c).