

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

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QUESTION 007

For each WMP initiative listed below, please state how the modeled Wildfire Risk Scores for each circuit or circuit-segment influence where you plan to perform work in 2023.

- a. EVM
- b. Covered conductor installation
- c. Undergrounding
- d. Distribution pole replacement
- e. Grid sectionalization
- f. Detailed inspections of distribution assets
- g. Detailed inspections of transmission assets
- h. Aerial inspections of distribution assets
- i. Aerial inspections of transmission assets
- j. LiDAR inspections of distribution assets
- k. LiDAR inspections of transmission assets

ANSWER 007

- a. PG&E is not conducting EVM in 2023..
- b. As described in the 2023 WMP Section 8.1.2.1 “Covered Conductor Installation – Distribution,” PG&E’s System Hardening program, which includes targeted CC installation, focuses on mitigating potential catastrophic wildfire risk caused by distribution overhead assets. The System Hardening Program applies various mitigations to circuit segments that have the highest wildfire risk. For 2023, the highest wildfire risk miles are identified using the following categories:
 - 1. Top Risk Based on Wildfire Distribution Risk Models (WDRM): The primary approach for selecting system hardening miles used two risk prioritization methodologies: (1) top 20 percent circuit segments based on the 2021 WDRM v2 and (2) the Wildfire Feasibility Efficiency (WFE) ranked circuit segments based

- on the 2022 WDRM v3. Overhead hardening was selected where undergrounding was deemed infeasible for the WDRM v3 selection.
2. Fire Rebuilds: Rebuilding electric distribution lines within towns and communities in the aftermath of catastrophic wildfires. Overhead hardening Fire Rebuild work is identified through a decision tree to determine the type of rebuild (overhead hardening, undergrounding, or other solution) in areas that have been impacted by a wildfire and may include fire-impacted areas in both HFTD and non-HFTD; and
 3. PG&E's Public Safety Specialist (PSS) Identified: Locations identified by PG&E's PSS team as presenting elevated wildfire risk, such as ingress/egress constraints and community risk factors.
- c. As described in the 2023 WMP Section 8.1.2.2 "Undergrounding of Electric Lines and/or Equipment – Distribution," The 2023-2026 undergrounding portfolio is focused on undergrounding lines in the highest risk areas, which include the following:
1. Top Risk-Ranked Circuit Segments Based on WDRMs: The primary approach for selecting miles used two risk prioritization methodologies: (1) Top 20 percent circuit segments based on the 2021 WDRM v2; and (2) the WFE-ranked circuit segments based on the 2022 WDRM v3 and considering undergrounding feasibility. Both approaches used to select undergrounding projects represent approximately 70 percent of our total wildfire risk.
 2. Fire Rebuilds: Undergrounding electric distribution lines within towns and communities that are rebuilding in the aftermath of catastrophic wildfires. Undergrounding work in Fire Rebuild areas typically results from the use of a decision tree to determine the type of asset to rebuild and occurs in areas that have been impacted by an actual wildfire that may include fire-impacted areas in both HFTD and non-HFTD.
 3. PSPS Mitigation Projects: Projects identified that would reduce PSPS customer impacts.
 4. PG&E's PSS Identification: Locations identified by PG&E's PSS team as presenting elevated wildfire risk such as ingress/egress constraints and community risk factors.
- d. As described in the 2023 WMP Section 8.1.2.3, "Distribution Pole Replacements and Reinforcements," PG&E leveraged the Wildfire Distribution Risk Model (WRDM) v3 to determine what pole replacement work is planned to be performed in 2023. Pole replacements are driven primarily by asset condition, namely maintenance tags found through enhanced inspections and intrusive inspections (Pole Test and Treat). These tags are then prioritized using the WRDM, which considers both wildfire ignition likelihood and consequence. In addition, pole replacements are also prioritized based on CPUC commitments, self-reports or other regulatory conditions. Starting in 2023, PG&E began to bundle distribution pole replacements with non-pole maintenance tags to gain efficiencies and minimize customer impacts. The goal of bundling is to perform all of the corrective maintenance (pole and non-pole) on the line segment under one clearance.

- e. For transmission line, there is no targeted work planned in 2023 for grid sectionalization. For distribution, the program was modified to install additional protective devices to mitigate reliability impacts associated with EPSS. Projects are based upon reliability risk rather than wildfire risk.
- f. In 2023, PG&E's detailed ground inspection plan is informed by wildfire risk and wildfire consequence as described in 2023 WMP Section 8.1.3.2.1. PG&E developed a frequency recommendation for each level of wildfire consequence: extreme and severe consequence plat maps will be inspected annually; high consequence plat maps will be inspected every other year; and all other plat maps will be inspected once every three years. Structures that constitute the top 10 percent of wildfire risk but are not already included in a plat map that is being inspected by ground or aerial are also included in the 2023 ground inspection plan.
- g. In 2023, wildfire risk and wildfire consequence inform the annual overhead detailed inspection scope at a structure level (in addition to other considerations such as inspection trends and a baseline frequency of every three years for HFTD/HFRA assets). Specifically, highest wildfire risk and wildfire consequence locations were included in the 2023 scope.
- h. In 2023, PG&E's distribution aerial inspection pilot is informed by wildfire risk and wildfire consequence as described in 2023 WMP Section 8.1.3.2.1. For aerial inspections, PG&E used the same prioritization framework with the same plat map level designation that we used for detailed ground inspections and is described in Section 8.1.3.2.1. In 2023, PG&E will prioritize the new aerial inspection where an ignition would potentially have the greatest consequences, which include the Extreme and Severe plat maps as well as some of the High consequence plat maps.
- i. In 2023, wildfire risk and wildfire consequence inform the annual overhead detailed inspection scope at a structure level (in addition to other considerations such as inspection trends and a baseline frequency of every three years for HFTD/HFRA assets). Specifically, highest wildfire risk and wildfire consequence locations were included in the 2023 scope.
- j. PG&E does not have a stand-alone LiDAR distribution inspection program but collects LiDAR data on distribution to support various needs, including flight planning for aerial inspections and engineering analyses, such as pole loading calculations. PG&E did not use the wildfire risk model in 2022 or 2023 to select locations or sequence LiDAR collection activities
- k. PG&E does not use risk-informed prioritization for Transmission LiDAR inspections, rather, it inspects 100 percent of the system annually using LiDAR. The Transmission Routine NERC and Non-NERC Inspection cycle consists of a LiDAR inspection followed by a ground patrol based on LiDAR findings. The LiDAR inspection provides an inventory of potential vegetation for ground patrol, and the results of the ground patrol prescribe the forecasted tree work to comply with state and federal regulations.