**PACIFIC GAS AND ELECTRIC COMPANY**
**Risk Spending Accountability Report Discovery 2025**
**Data Response**

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| **PG&E Data Request No.:** | ED_002-Q007 |
| **PG&E File Name:** | RSARDiscovery2025_DR_ED_002-Q007 |
| **Request Date:** | September 24, 2026 |
| **Requester DR No.:** | 002 |
| **Requesting Party:** | Energy Division |
| **Requester:** | Abigail "Bender" Bender |
| **Date Sent:** | October 8, 2026 |
| **PG&E Witness(es):** | N/A |

**QUESTION 007**

**Capital – Electric Distribution – MWC 09 E Dist Automation and Protection MAT 09B ED Sub SCADA/RTU Replace (RAMP Risk Name: (1) Distribution Overhead and (2) Wildfire)**

| Type | Functional Area | MWC | MWC Name | MAT | MAT Name | Difference for 2025 ($000) | Spending Percent Variance for 2025 (%) | Unit Percent Variance for 2025 (%) |
|---|---|---|---|---|---|---|---|---|
| Capital | Electric Distribution | 09 | E Dist Automation and Protection | 09B | ED Sub SCADA/RTU Replace | $(7,119.6)<br>$22,278.6 | -33.1%<br>100.0% | N/A<br>N/A |

PG&E Explanation

No explanation is provided for these sub-programs. The first program does not meet the spending variance threshold nor the percentage variance threshold. However, the second sub-program does mean the cost variance threshold and PG&E did not provide an explanation.

MWC 09 covers investments in substation automation and protection devices including installing or replacing substation Remote Terminal Units (RTU) and Human Machine Interfaces (HMI); installing or replacing SCADA peripherals; replacing obsolete protection equipment, primarily relays, in electric distribution substations; replacing automation or protection equipment due to unanticipated failure; and continuing the Fire Risk Management initiative that allows remote operation of reclose relays on certain circuit breakers and line reclosers to reduce the likelihood of wildland and urban fires. This program relates to safety, reliability, or maintenance because it directly funds projects which support the automation of substation equipment and electric distribution protective devices.

MAT 09B replaces obsolete SCADA/RTUs and HMIs in electric distribution substations to provide visibility and remote controllability to Operations and may also be replaced to

ensure compatibility with new automation systems. This program work targets proactive replacements of SCADA systems in distribution substations that possess obsolete SCADA and protective relay assets, which, if failed, would jeopardize PG&E's ability to operate the electric facility remotely and properly gather data for system operators. This program relates to safety, reliability, or maintenance because it serves as a risk control to reduce the frequency or consequence of risk of failure of electric distribution OH assets and as a mitigation to reduce the frequency or consequence of risk of wildfire.

DR Questions to PG&E:

1. Unlike other programs with line items below the SRM Total level, only one of the sub-programs (RAMP Risk: Distribution Overhead) utilizes the imputed values from the SRM total program. The other RAMP Risk (Wildfire) does not have imputed values. Both sub-programs have actual costs. This presentation also differs from other projects with categories under SRM Total, where the same spending values are associated with each sub-program. Please explain how PG&E chose to allocate spending below the SRM Total level in this example.
2. As no costs were imputed, please explain the overspend in this sub-program.
3. Is there any backlog associated with the sub-programs or the program overall?
4. Please also explain the associated overspend in the SRM-Total line item of this program. PG&E states that program expenditures exceeded imputed regulatory values due to relay compatibility needs with PG&E's EPSS program, thus driving a need to replace un-targeted hardware.
    a. Please explain the need for compatibility with PG&E's EPSS program to MAT 09B.

**ANSWER 007**

Pursuant to D.22-12-002, PG&E interprets the RSAR variance reporting requirement as pertaining to programs as defined in D.19-04-020, which is reflected in the SRM Total.

1. Work recorded to MAT 09B replaces obsolete Supervisory Control and Data Acquisition/ Remote Terminal Units (SCADA/RTUs) and Human Machine Interfaces (HMIs) in electric distribution substations to provide remote controllability and visibility to Operations, and also to ensure compatibility with new automation systems.

    Spending in MAT 09B addresses two RAMP risks:

    Failure of Distribution Overhead Assets - PG&E's 2023 GRC forecast for MAT 09B was to proactively replace legacy substation RTUs and associated peripheral devices to maintain SCADA system reliability and Fault Location, Isolation and Service Restoration (FLISR) scheme operability. This work is considered a control for the Failure of Electric Distribution Overhead (OH) Assets (DOVHD) risk. The imputed values and recorded costs shown on the SRM Total line and the RAMP

Risk: Distribution Overhead line reflect this work. Costs recorded to this category are for lifecycle replacement work as described in the 2023 GRC.[1]

Wildfire - The second line shows costs for SCADA replacement work in MAT 09B that was required to enable the Enhanced Powerline Safety Settings (EPSS) – a wildfire risk mitigation (WLDFR). EPSS enabled circuits have equipment sensitivity adjusted to automatically turn the power off faster if the system detects a problem. Because the scope and funding needs were uncertain when PG&E filed the 2023 GRC, PG&E did not include a capital forecast for the EPSS wildfire mitigation, including enabling costs in MAT 09B, and therefore, no capital costs were adopted. This is why the imputed adopted amount for the WLDFR risk is zero for this program. Costs recorded to this category, which were not specifically forecast in the 2023 GRC, are for SCADA/RTU replacement work needed to enable the EPSS mitigation on selected circuits.

2. EPSS reduces wildfire ignition risk by using more sensitive protective settings to quickly de-energize lines during fault conditions. Some substation circuit breakers with older protective relays could not be enabled with EPSS until their relays were replaced with modern relay cabinets that allow for direct control of settings groups. This resulted in overspend as this work was not included in PG&E's 2023 GRC forecast.
3. There is no backlog of MAT 09B work. The number of sites addressed annually by the proactive lifecycle replacement plan is determined by the funding provided by the overall investment plan. Replacements required to enable EPSS are identified as EPSS is enabled on additional circuits.
4. The associated overspend for the program was due to the additional replacement work needed to enable EPSS on specific circuits.
    a. PG&E's EPSS program requires updated equipment on a circuit to enable the equipment sensitivity settings to quickly deenergize the circuit if a problem is detected The work in MAT 09B to support EPSS is replacing or retrofitting relays at various substations to provide Down Conductor Detection (DCD) capability for high-impedance fault detection. Additionally, some substation circuit breakers with older protective relays cannot be enabled with EPSS and DCD capability until those relays are replaced with modern relay cabinets.

[1] See PG&E's 2023 GRC, A.21-06-021, Exhibit (PG&E-4), Chapter 16, pgs. 16-11 to 16-12.