

PG&E CENTRAL COAST DIVISION
ELECTRIC DISTRIBUTION AUDIT FINDINGS RESPONSE
April 21-25, 2025

I. Records Review

During the distribution audit, Electric Safety and Reliability Branch (ESRB) staff reviewed the PG&E's current¹ and previous standards and procedures, and records for PG&E's Central Coast Division:

- TD-2305M, Electric Distribution Preventive Maintenance Manuals, Rev. 2 effective 11/05/2024
- TD-2305M-JA02, Job Aid: Overhead Assessment, January 1, 2020 – December 31, 2024
- TD-2305M-JA03, Job Aid: Underground Inspection, January 1, 2020 – December 31, 2024
- TD-2305M-JA12, Overhead Clearance Evaluation, Rev. 1, March 2013
- TD-2305M-JA13, EC Job Aid: Create, Complete Cancel EC Notifications – Field Employees, Rev 1.2, April 2016
- TD-2305M-JA14, Liquid Fuse Level Check, Rev. 0. August 12, 2022
- TD-2301S, Patrols and Detailed/Intrusive Inspections of Electric Overhead and Underground Distribution Facilities, Rev 1: May 15, 2020
- TD-2305S, Electric Distribution Maintenance Requirements, Rev. 0, January 31, 2020
- TD-2302S, Electric Distribution Maintenance Requirements for Overhead and Underground Equipment, Rev 2: August 02, 2022 and previous revisions
- TD-8123S, Electric System (T/S/D) Patrol, Inspection, and Maintenance Program, Rev. 0, January 31, 2020
- TD-8123M-B001-JA01, Distribution: Priority A Notification Management, Rev. 0, August 20, 20204
- TD-8123S-B001, Level 2 Priority B Tag Management Requirements, Rev. 1, April 29, 2024
- TD-8125S, Level 2 Priority X Electric Corrective (EC) Standard, Rev. 0, March 25, 2024
- CIRT Manual 2024, Rev. n/a, December 1, 2024
- Electric Corrective Notifications list, January 1, 2020 – December 31, 2024
- Patrol and Inspection Records list, January 1, 2020 – December 31, 2024
- Central Coast Division Reliability Indexes and Outage list, January 1, 2020 – December 31, 2024

¹ In response to the PreAudit Data Request, PG&E provided TD-2305M-JA02 Job Aid: Overhead Assessment, Rev. 14, publication 1/6/2025, effective 1/14/2025. This and other manuals that fall outside the audit period and were only reviewed if they addressed a potential finding.

- Central Coast Division New Projects list, January 1, 2024 – December 31, 2024
- Pole Loading Calculations list, January 1, 2024 – December 31, 2024
- Incoming Third-Party Notifications list, January 1, 2020 – December 31, 2024
- Outgoing Third-Party Notifications list, January 1, 2020 – December 31, 2024
- Inspector training records, January 1, 2020 – December 31, 2024
- Equipment test records, January 1, 2020 – December 31, 2024
- Intrusive Inspections, January 1, 2024 – December 31, 2024
- PG&E Pre-Audit Preliminary Analysis for Audit Readiness – Records Review
- Central Coast Division Quality Management Audit Results, January 1, 2020 –
- December 31, 2024

II. Records Violations

ESRB staff observed the following violations during the record review portion of the audit:

1. **General Order (GO) 95, Rule 18-B (1), Maintenance Programs** states in part:

“Each company (including electric utilities and communications companies) shall establish and implement an auditable maintenance program for its facilities and lines for the purpose of ensuring that they are in good condition so as to conform to these rules.

Each company must describe in its auditable maintenance program the required qualifications for the company representatives who perform inspections and/or who schedule corrective actions. Companies that are subject to GO 165 may maintain procedures for conducting inspections and maintenance activities in compliance with this rule and with GO 165.

The maximum time periods for corrective actions associated with potential violation of GO 95 or a Safety Hazard are based on the following priority levels:

- (i) Level 1 -- An immediate risk of high potential impact to safety or reliability:*
 - *Take corrective action immediately, either by fully repairing or by temporarily repairing and reclassifying to a lower priority.*
- (ii) Level 2 -- Any other risk of at least moderate potential impact to safety or reliability:*
 - *Take corrective action within specified time period (either by fully repair or by temporarily repairing and reclassifying to Level 3 priority). Time period for corrective action to be determined at the time of identification by a qualified company representative, but not to exceed: (1) six months for potential violations that create a fire risk located in Tier 3 of the High Fire- Threat District; (2) 12 months for potential violations that create a fire risk located in Tier 2 of the High Fire-Threat District; (3) 12 months for potential violations that compromise worker safety; and (4) 36 months for all other Level 2 potential violations.*
- (iii) Level 3 -- Any risk of low potential impact to safety or reliability:*
 - *Take corrective action within 60 months subject to the exception specified below.”*

GO 95, Rule 31.1, Design, Construction and Maintenance states in part:

“Electrical supply and communication systems shall be designed, constructed, and maintained for their intended use, regard being given to the conditions under which they are to be operated, to enable the furnishing of safe, proper, and adequate service.

For all particulars not specified in these rules, design, construction, and maintenance should be done in accordance with accepted good practice for the given local conditions known at the time by those responsible for the design, construction, or maintenance of communication or supply lines and equipment.”

GO 128, Rule 17.1, Design, Construction and Maintenance states in part:

“Electrical supply and communication systems shall be designed, constructed, and maintained for their intended use, regard being given to the conditions under which they are to be operated, to enable the furnishing of safe, proper, and adequate service.

For all particulars not specified in these rules, design, construction, and maintenance should be done in accordance with accepted good practice for the given local conditions known at the time by those responsible for the design, construction, or maintenance of [the] communication or supply lines and equipment.”

PG&E’s current TD-2305M, Electric Distribution Preventive Maintenance Manual, Rev. 2, published September 5, 2024, does not define priority codes nor specify time frames for repairs. Revisions of TD-2305M prior to March 29, 2024 listed both priority codes and specified time frames for corrective action.

PG&E’s TD-2305M-JA02, Job Aid: Overhead Assessment, Rev. 14, page 5, published on January 6, 2025,² defines the priority codes and associated time frames for the response/repair action as follows in Figure 1 for overhead facilities:

PG&E Prioritization				
	PG&E Priority	Tier 3	Tier 2/HFRA	Non-HFTD
Level 1: Immediate risk of high potential impact to safety and reliability	A	Within 24 hours	Within 24 hours	Within 24 hours
Level 2: at least moderate potential impact	X	Up to 7 days	Up to 7 days	Up to 7 days
	B	Up to 6 months	Up to 6 months	Up to 6 months
	E	Up to 6 months	Up to 12 months	Up to 36 months
Level 3: low potential impact	F	60 months	60 months	60 months

Figure 1: PG&E Prioritization, TD-2305M-JA02 p. 5

- a) PG&E’s TD-2305M-JA02, Job Aid: Overhead Assessment establishes maximum corrective action period based on HFTD Tier/HFRA and PG&E Priority. Level 2, PG&E Priority E in Non-HFTD areas allows up to 36 months for corrective action and has no call out for non-conformances affecting worker safety. The 36- month corrective action period exceeds GO 95, Rule 18-B (1) (ii) (3) 12 months for potential violations that compromise worker safety, regardless of if the condition is in HFTD or not.

PG&E Response:

Electric Distribution Compliance Inspectors and other PG&E co-workers are expected to assess and prioritize compelling abnormal conditions on overhead facilities, defined as “any electric distribution pole, equipment, component, conductors, vegetation, or third party condition that causes a safety or fire ignition risk that, in the judgment of the field

² The same PG&E Prioritization table appears in TD-2305M-JA02 Rev. 12 and Rev. 13

employee may adversely impact public safety and/or service reliability.” As described in the TD-2305M-JA02 Job Aid: Overhead Assessment, the job aid was intended to “provide guidance on issues that field employees may encounter most frequently in the field, but is not intended to be an all-inclusive listing of all abnormal conditions or corrective actions.” The job aid provides photos and descriptions of more common conditions field employees would encounter, with recommendations for tag priorities.

The “PG&E Prioritization” chart provides default deadlines for tags based upon location and correlated to the risk level of the condition. The job aid explicitly notes that field personnel have the ability to set deadlines shorter than the default deadlines for B and E tags based on specific location/consequence potential. The inspectors/co-workers are expected to use their expertise and judgment to determine the appropriate priority of a tag or to provide shorter deadlines when appropriate based upon potential impacts to safety and/or reliability. We recognize that the chart does not specifically state that abnormal conditions reflecting a potential moderate risk to worker safety should be addressed within a maximum period of 12 months. TD-2305M-JA02 is currently being revised and will be published in 2025. The new revision and/or other new/updated guidance documents will reflect this guidance.

- b) PG&E’s current TD-2305M-JA03, Job Aid: Underground Inspection, Rev. 5, September 9, 2024, instructs inspectors to assign a priority or to prioritize based on condition when a non-conformance is found. TD-2305M-JA03 does not provide guidance nor contain definition of priority levels nor correction completion intervals. TD-2305M-JA03 previously used the parent document, PG&E’s TD-2305M, to define priorities. The current revision of PG&E’s TD- 2305M no longer contains priority definitions nor completion intervals.³

PG&E Response:

TD-2305M-JA03 is currently being revised and will be published in 2025. These updates will include the prioritization table for underground asset inspections.

- c) ESRB staff reviewed work orders created within the Central Coast Division from January 1, 2020 through December 31, 2024 and determined that PG&E did not address a total of 60,242 work orders (57.7%)⁴ by their required end date.⁵ Table 1 below breaks down the 60,242 late work orders by their given priority, and work order status.⁶

³ ESRB noted this finding in previous audit reports with an earlier revision of TD-2305M-JA03 (Rev 4). The issue still exists with the newer revision.

⁴ PG&E reported 104,648 total work orders in the Central Coast division including 333 Priority H work orders. The percentage is based on non-H priority work orders.

⁵ DRU15080_Q03_Atch01_Central Coast_WorkOrderHistory_Final_CONF

⁶ PG&E data contained 282 records with a Notification Status of “Check Missing Status” (priority B: 255, E: 27). ESRB categorized those based on completion date entry (282 open, 1 completed).

Table 1: Late Work Orders in Central Coast Division⁷

Priority Code	Late Work Orders Completed⁸	Late Work Orders Pending*	Late Work Orders Cancelled	Total by Priority
A	7,049	139	991 ⁹	8,179
X	7	—	1	8
B	3,268	125	621	4,014
E	11,620	27,808	6,669	46,097
F	922	249	773	1,944
Total	22,866	28,321	9,055	60,242

* As of December 31, 2024

PG&E shall provide ESRB with its corrective action plan to complete the 28,321 late pending work orders and its preventive measures to prevent any work orders from being addressed late in the future.

PG&E Response:

Corrective Action Plan for Tag Completion and Going Forward Compliance

In 2019, we began the Wildfire Safety Inspection Program (WSIP) to proactively expand inspections of poles and associated equipment in High Fire Threat Districts (HFTD)/High Fire Risk Areas (HFRA) on an accelerated and enhanced basis to mitigate ignition risk. The WSIP inspections led to a significant increase in the volume of notifications.

Along with the WSIP inspections, other programs added notifications to the backlog such as Pole Test and Treat (PT&T), Post-Event Patrols, Patrol Inspections, and Infrared Inspections.

We have developed a plan to reduce the wildfire risk associated with the backlog of ignition risk tags in HFTD/HFRA by 77 percent at the end of the 2023-2025 Wildfire Mitigation Plan (WMP) cycle. We submitted details of the work plan in PG&E's 2023-2025 WMP R6 (revision 6).

Our highest priority is to complete all A and B tags based on required compliance dates:

- Priority A tags (Level 1 under GO 95) require response by taking corrective action immediately, either by fully repairing or by temporarily repairing, and reclassifying to a lower priority; and
- Effective April 29, 2024, Priority B (Level 2 under GO 95) tags are addressed within six months for potential violations that create risk of at least moderate potential impact to safety or reliability per bulletin TD8123S-B001 Level 2 Priority B Tag Management Requirements.

⁷ Calculation based on the Required End Date. See **Appendix A** for a table based on the later of Required End Date and Funded Repair Date (Authorized Repair Date).

⁸ ESRB noted that 26 Work Orders listed a Notification Status of OPEN but had Work Order completion dates (by priority A: 2, B: 3, E: 20, F: 1). ESRB used a completion date entry, rather than Notification Status, as the indication of order completion.

⁹ Includes cancelled work order EC 118899884 which does not have a cancellation date.

We divide remaining notifications into two groups: (1) ignition risk notifications tags within the HFTD/HFRA; and (2) non-ignition risk tags within the HFTD/HFRA. Ignition risk tags within HFTD/HFRA areas are the highest priority tags. Our focus is on HFTD ignition risk tags. Our risk analysis indicates these types of tags contain 20 times more risk than non-ignition or non-HFTD tags.

Tags identified prior to 2023 will be prioritized by risk. We began bundling work by isolation zones starting in 2023 to reduce customer impact and improve operational efficiency and safer working conditions. Our 2023 work plan and WMP commitment was to reduce the wildfire risk associated with the backlog of ignition risk tags within HFTDs/HFRAs by 48 percent. We exceeded this target and reduced the backlog of ignition risk tags and the risk of wildfire within HFTDs/HFRAs by over 52 percent. By the end of 2024, we reduced more than 73 percent of the risk from the backlog of ignition risk tags* by targeting specific high-risk work (in comparison to our target of 68 percent). By the end of 2025, we are forecasted to remove more than 80 percent of the risk (in comparison to our target of 77 percent) from the backlog of ignition risk tags* within HFTD/HFRA locations.

*Backlog ignition risk tags are open ignition EC notifications known as of January 5, 2023, and found prior to Jan 1, 2023, within HFTD/HFRA locations.

We are continuing to expand the prioritization of E and F tags through a bundled risk spend efficiency approach. A and B tag prioritization is not planned to be included in this bundling approach. While we anticipate that most of the E and F tags will be prioritized using this method, there may be instances that warrants a different approach.

The bundled risk spend efficiency approach will enable us to execute EC notifications more efficiently by reducing the number of times we perform corrective work on the same circuit, executing more tags with the same resources, and reducing the number of clearances required to close tags. We are proposing to use the bundled risk spend efficiency approach through 2029 to reduce our backlog of tags.

Table 2 below identifies the most overdue work orders as of December 31, 2024.

Table 2: Most Overdue Work Orders**

Priority Code	Most Past Due Work Orders (WO#s)	Number of Days Past Due***
A	121753550	1,582
A	126237144	583
B	119826457	1,463
E	118401147	1,638
F	119467500	1,444

**Days past due determined using the Required End Date

***As of December 31, 2024

PG&E identified work order # 121753550 (A-Open) on August 25, 2020, to replace the burned pole with a required end date of September 1, 2020. As of December 31, 2024, the work order is open.

PG&E Response:

EC notification 121753550 was created on August 25, 2020. This was a customer-initiated rebuild service tag following a major fire. Emergency conditions were remedied prior to the creation of these tags. Field verification was conducted and there has been no active construction on the property identified as an idle facility. This notification was cancelled on April 21, 2025.

PG&E identified work order #126237144 (A-Open) on May 28, 2023, to replace an underground facility with a required end date on the same date. The notification status is open as of December 31, 2024. The user status is marked as cancelled but no cancellation date is listed.¹⁰

PG&E Response:

EC notification 126237144 was created on May 28, 2023. This was a customer-initiated rebuild service tag following a major fire. Emergency conditions were remedied prior to the creation of these tags. Due to a scope change in the customer's service request, this notification was cancelled on July 22, 2025.

PG&E identified work order # 119826457 (B-Open) on September 29, 2020, to repair a damaged pothead and riser with a required end date of December 29, 2020. As of December 31, 2024, the work order is open.

PG&E Response:

EC notification 119826457 involves replacing flashed insulators and risers with new plastic components due to the unavailability of old-style porcelain ones. There were multiple exemption approvals spanning from 2020 to 2022 due to substation clearance. In 2025, it was identified that the Facility Damage Action repairing the broken substation pothead insulator will also require replacement of the 600A UG primary from V0004 to CB 2104, which is located inside the Camp Evers substation. This is due to the inability to re-terminate the existing flashed porcelain potheads. An underground tag 131301264 was created for this work with a funded repair date of January 19, 2026. Once the underground tag is completed, this EC notification will be closed in our system of record, SAP.

PG&E identified work order # 118401147 (E-Open) on January 7, 2020, to replace a decayed pole with a required end date of July 7, 2020. As of December 31, 2024, the work order is open.

PG&E Response:

EC notification 118401147 was prioritized according to our risk-ranking criteria and it was included in the tag backlog population. A field safety reassessment was performed on July 23, 2024, and all work was found completed upon arrival. This notification was cancelled in our system of record, SAP, on July 28, 2025.

PG&E identified work order # 119467500 (F-Open) on July 17, 2020, to replace primary jumpers with a required end date of January 17, 2021. As of December 31, 2024, the

¹⁰ As the Notification Status for this work order is OPEN and there is no completion date, ESRB included this EC with the Late Pending work orders in Table 1.

work order is open.

PG&E Response:

EC notification 119467500 was created as an E tag to replace the insulinks in the primary jumper. Our Inspector performed field safety reassessments on April 9, 2021, and May 13, 2022, and confirmed the condition had not escalated. The priority E tag was downgraded to a priority F tag on March 3, 2025, to align with our new guidance on insulinks. EC notification 119467500 was prioritized according to our risk-ranking criteria and was included in the tag backlog population. This work was completed on April 14, 2025.

- d) ESRB staff identified 7,188 late or late pending Central Coast Division Priority A work orders (31.8% of total A Priority work orders) active between January 1, 2020 and December 31, 2024.¹¹ ESRB noted that 5,443 work orders completed after the required due date were designated by PG&E as “On-Time, Complete”.

PG&E’s TD-2305M-JA02, Job Aid: Overhead Assessment, Rev. 14, page 5, published on January 6, 2025, defines the Priority A as “Immediate risk of high potential impact to safety and reliability (due within 24 hours).”

Additionally, GO 95 Rule 18 B (1) (a) (i) Level 1 states “*Take corrective action immediately, either by fully repairing or by temporarily repairing and reclassifying to a lower priority*”.

PG&E Response:

Emergency (*i.e.*, priority A tags) EC notifications are created when “an outage to customers or an unsafe condition requiring immediate response and standby to protect the public” occurs. We meet the requirements of GO 95, Rule 18 for these Level 1 Safety Hazards by acting immediately to address the emergent condition (either by PG&E crews or other resources). The results of the immediate action are captured in the creation of an Emergency EC notification. Priority A tags capture the nature of the work, the date the work was performed, and the identity of the persons performing the work.

The Required End Date for Emergency EC notifications have previously been used to designate tags as “late” Emergency EC notifications. However, to align with the requirements of GO 95 and company procedures, we no longer report these as late because the “Required End Date” is not an accurate deadline for A tags.

- e) PG&E states “Priority A notifications include work that is categorized as priority A for cost recovery, not due to Level 1 hazards subject to corrective action timeframes under GO 95 Rule 18. A portion of this work is bundled under multi- year rebuild plans (e.g. Wildfire Rebuilds and Hardening Projects).”¹²

PG&E’s use of Priority A for cost recovery and not due to Level 1 hazards is counter to both PG&E’s TD-2305M-JA02, Job Aid and GO 95 Rule 18 B(1)(a)(i). PG&E must properly prioritize by hazard level and not by cost recovery.

¹¹ DRU15080_Q03_Atch01_Central Coast_update_Work Order History_CONF

¹² In DRU15080_Q03_Atch01_Central Coast_update_Work Order History_CONF, Tab: Column Definitions.

PG&E Response

We are reevaluating the priority designation of tags generated under MAT code 95F and IFF for Major Event Rebuild work to align with GO 95 Rule 18-B.

- ESRB staff reviewed work orders created within the Central Coast Division and found 156 work orders (67 open, 89 closed) with erroneous latitude and longitudes.¹³ The 15 selected work orders with location errors are listed in Table 3. The full list of open and closed work orders with erroneous latitude and longitudes are listed in Appendix B. The analysis is based on work orders with latitudes and longitudes outside the Central Coast Division. ESRB could not assess the accuracy of work orders with latitudes and longitudes within the Central Coast Division.

Table 3. Selected Work Orders with Locations outside the Central Coast Division

Priority Code	Notification Number	Status	Latitude	Longitude
E	128495764	Open	0	-121.7374743
E	118506859	Open	0	0
E	119032778	Open	0	0
E	119175082	Open	0	0
E	119221030	Open	0	0
F	120687634	Open	0	0
E	120763266	Open	0	0
F	120866331	Open	0	0
E	122048038	Open	0	0
F	122085719	Open	0	0
B	110020993	Closed	36.558108	121.92438
F	110195492	Closed	37.07527	122.01732
F	110360072	Closed	36.54385	121.92928
F	110415901	Closed	36.57967	121.92072
F	110415906	Closed	36.57969	121.92072

PG&E shall provide ESRB with its corrective action plan to resolve work orders with erroneous locations and its preventive measures to assure correct location information on future work orders.¹⁴

¹³ ESRB found 156 open and closed work orders with latitudes and longitudes outside the Central Coast Division latitudes less than 35.79 or greater than 37.25°, and longitudes less than -122.43 or greater than -120.44°). Additionally, there are 752 cancelled work order with latitudes and longitudes outside the Central Coast Division. All open and closed work orders with lat/long outside the Central Coast Division are shown in **Appendix B**.

¹⁴ In DRU15531, PG&E notes that “PG&E links EC to the appropriate asset when it is being created in all our technology that generates EC. One of the steps taken before creating the work order tag is to check that the Inspector is at the correct asset in the field. This is done by validating that the barcode on the asset in the field matches the barcode in the GIS for that asset.” Per this note, an incorrect work order locations indicates that the GIS file for the asset is in error.

PG&E Response:

The lat/long coordinates in an EC notification are automatically populated from the SAP equipment ID record lat/log coordinates. Beginning around 2015, EC notifications are required to be linked to the SAP equipment ID in SAP, *when one exists*. This is to ensure the EC notification is associated with the correct asset in the field. In the case where an EC notification is generated for an asset not mapped in GIS, an EC notification that is not linked to an SAP equipment ID may be generated.

An EC notification includes many other points of data that identify the location, such as Division, Main Work Center, address, and city. The EC notification includes a copy of the “map,” showing the asset the EC notification is linked to. EC notifications are also displayed in Maps+, which our Field Personnel use for Asset Navigation, as a pending EC notification linked to an asset (pole, enclosure, padmount, *etc.*). Finally, field crew verify that the location is correct by confirming barcodes in the field for poles, and operating numbers installed on UG assets, *etc.* Field crew do not only rely on the lat/long coordinates as all information in an EC notification ensures field crew are at the correct location.

We are creating a Corrective Action Plan (CAP) to perform a Root Cause Analyses and provide an Issue Resolution Plan (IRP) by June 30, 2026. This IRP will enable us resolve and rectify the existing errors in the system by the planned date of December 31, 2026. In the meantime, to ensure that our Field Personnel are at the correct location while inspecting and maintaining equipment, they will continue using the multiple other GIS/Mapping Data Reference Systems.

- f) PG&E’s current Job Aid TD-2305M-JA13 (EC Job Aid: Create, Complete Cancel EC Notifications – Field Employees, April 2016) lists Priority Levels A, B, E, and F. The procedure does not list Priority Level X which is cited in current TD- 2305M-JA02 (Overhead Job Aid, January 2025).¹⁵ Additionally, the corrective action intervals cited in current TD-2305M-JA13 do not align with the values cited in current TD-2305M-JA02. See Table 4.

Table 4: Comparison of Corrective Action Intervals

Priority	2305M-JA13	2305M-JA02
A	Immediate Response	Within 24 hours
X	Not listed	Up to 7 days
B	0-3 Months	Up to 6 months

¹⁵ Issue also found in TD2305M-JA02, Job Aid: Overhead Assessment, Rev 12, and Rev 13

Priority	2305M-JA13	2305M-JA02
E	3 to 12 Months	6 to 36 Months ¹⁶
E	UG: 3 Years OH 5 Years	Up to 60 months

PG&E must update procedures to provide inspectors consistent guidance for non-conformance Priority (Safety Hazard Level) and corrective action intervals.

PG&E Response:

We agree with this finding. We are in the process of revising TD-2305M-JA13, which will include updating the timelines. Regarding TD-2305M-JA02 our inspectors can upgrade or give an E priority tag a sooner due date between 6 to 36 months.

The corrective action intervals cited in Table 4 have been removed from the latest revision of TD-2305M-JA13 that was published on May 1, 2025. It is now cited in TD-2305M-JA02 as the primary source of reference.

- g) ESRB staff reviewed PG&E’s Inspector Training log noted 12 inspectors (4.8 % of 249 inspectors) who had no training records found.¹⁷¹⁸¹⁹

PG&E must provide evidence that all inspectors are trained and qualified to perform the required inspections. Here is the link:

PG&E Response:

We were subsequently able to find a signed refresher training record for one of the Inspectors for 2022 reducing the “no electronic training record found” to 11.

We were not able to locate evidence that the remaining inspectors received refresher training in the years indicated in the report. Until 2023, training records were maintained in hard copy and were not consistently uploaded into the My Learning system. To address this gap, we have recently improved our roster documentation practices by transitioning to electronic rosters. This enhancement is aimed at preventing the loss of scanned copies and ensuring better record retention moving forward.

2. GO 165, Section III-C, Record Keeping states in part:

*“The utility shall maintain records for (1) at least ten (10) years of patrol **and** detailed inspection activities, and (2) the life of the pole for intrusive inspection activities.”*

PG&E’s TD-2305M, Electric Distribution Preventive Maintenance Manual, Rev. 2,

¹⁶ TD2305M-JA02, Job Aid: Overhead Assessment, Rev 14, January 6, 2025 Tier 3: Up to 6 months, Tier 2: up to 12 months, Non-HFTD: up to 36 months.

¹⁷ DRU15080_Q11_Atch01_CC Inspector List_2020-2024_CONF

¹⁸ Out of privacy concerns, the names and LANs of the employees are not listed in this report.

¹⁹ As not all inspection documents contain inspector IDs, it cannot be determined if the 12 inspectors who have no training records conducted inspections.

Effective November 5, 2024, Section 7.4 Compliance Requirement / Regulatory Commitment, GO 165 Record Retention Guidelines Table 3, Record Retention Matrix lists requirements of 2 inspection cycles or 5 years with minimum record retention of 5 to 10 (years, note: no time unit is specified; in context, years is implied). See Figure 2.

G.O. 165 Record Retention Guidelines

Table 3. Record Retention Matrix

Record Type	Requirement	Minimum Record Retention
OH Inspection Maps/MPs, Electric Maintenance Patrol/Inspection Daily Logs, and Paper or Electronic Notification Forms	2 Inspection cycles or 5 years, whichever is longer	10
UG Inspection Maps/MPs, Electric Maintenance Patrol/Inspection Daily Logs, and Paper or Electronic Notification Forms	2 Inspection cycles or 5 years, whichever is longer	6
OH Patrol Maps/MPs, Electric Maintenance Patrol/Inspection Daily Logs, and Paper or Electronic Notification Forms	2 Patrol cycles or 5 years, whichever is longer	5
UG Patrol Maps/MPs, Electric Maintenance Patrol/Inspection Daily Logs, and Paper or Electronic Notification Forms	2 Patrol cycles or 5 years, whichever is longer	5

Figure 2: GO 165 Record Retention Guidelines, TD-2305M p. 57

Per GO 165, Section III-C, records shall be maintained for at least 10 years for patrol and inspection activities. PG&E's TD-2305M, Electric Distribution Preventive Maintenance Manual and practices need revision requiring a minimum record retention as prescribed.²⁰

PG&E Response:

We agree with this finding that the table in the Electric Distribution Preventive Maintenance Manual (EDPM) is incorrect and not consistent with our practice of maintaining patrol and inspection records for the required minimum 10-year period. Revision 4 of the EDPM is scheduled to be published in 2025, which will detail a "Minimum Record Retention" period of 10 years. The revision will also state "The life of the pole for intrusive inspection activities."

3. GO 95, Rule 31.2, Inspection of Lines states in part:

"Lines shall be inspected frequently and thoroughly for the purpose of ensuring that they are in good condition so as to conform with these rules. Lines temporarily out of service shall be inspected and maintained in such condition as not to create a hazard."

GO 165, Section III-B, Standards for Inspection states in part:

"Each utility subject to this General Order shall conduct inspections of its distribution facilities, as necessary, to ensure reliable, high-quality, and safe operation, but in no case may the period between inspections (measured in years) exceed the time specified in Table 1."

²⁰ ESRB has noted this finding in previous audits since June 2024. ESRB requested a revision date from PG&E to address the inconsistencies listed. PG&E responded that no revision is scheduled outside of a five-year review but is the second revision (publication dates: March 29, 2024, and September 5, 2024) to contain the error.

Table 1: Distribution Inspection Cycles (Maximum Intervals in Years)

	Patrol		Detailed		Intrusive	
	Urban	Rural	Urban	Rural	Urban	Rural
Transformers						
Overhead	1	2 ¹	5	5	---	---
Underground	1	2	3	3	---	---
Padmounted	1	2	5	5	---	---
Switching/Protective Devices						
Overhead	1	2 ¹	5	5	---	---
Underground	1	2	3	3	---	---
Padmounted	1	2	5	5	---	---
Regulators/Capacitors						
Overhead	1	2 ¹	5	5	---	---
Underground	1	2	3	3	---	---
Padmounted	1	2	5	5	---	---
Overhead Conductor and Cables	1	2 ¹	5	5	---	---
Streetlighting	1	2	x	x	---	---
Wood Poles under 15 years	1	2	x	x	---	---
Wood Poles over 15 years which have not been subject to intrusive inspection	1	2	x	x	10	10
Wood Poles which passed intrusive inspection	---	---	---	---	20	20

(1) Patrol inspections in rural areas shall be increased to once per year in Tier 2 and Tier 3 of the High Fire-Threat

- a. ESRB staff identified that PG&E completed a total of 34,595 patrol and detailed inspections (4.8 %)²¹ of padmount/underground (UG) and overhead (OH) electric facilities past their GO 165 required completion date, as shown in Table 5.

²¹ DRU15080_Q04(a)_Atch01_CC PI Data (2020-2024) listing 725566 asset patrols and detailed inspections (531,244 Map Based, 194,322 Asset Based inspections)

Table 5: Late Overhead Patrols and Inspections in Central Coast Division²²

Year	OH Patrol	OH Detail Inspection	UG Patrol	UG Detailed Inspection	Total Structures
2020	-	1,691	-	3 ²³	1,694
2021	20,191 ²⁴	11,575	-	3 ²⁵	31,769
2022	-	261	-	-	261
2023	868 ²⁶	1	-	1	870
2024*	-	-	1	-	1
Total	21,059	13,528	1	7	34,595

* Preliminary information, final report due July 1, 2025

PG&E Response:

In 2020, the 1,691 overhead (OH) inspections in the Central Coast Division were late due to external weather events. On August 15, 2020, unprecedented lightning strikes occurred, that resulted in multiple fires across California. These fires were the August Complex Fire, the North Complex Fire, the Lake Napa Unit (LNU) Lightning Complex Fire, the Santa Clara Unit (SCU) Lightning Complex Fire, the Sequoia National Forest (SQF) Complex Fire, and the Creek Fire. Because it took several months for the containment of these fires, many of our assets were not accessible due to unsafe field conditions. At the time, our top priority was to safely restore service to our customers. Furthermore, we had multiple Public Safety Power Shutoff (PSPS) events take place in September, October, and November, which compounded our planned patrol and detailed inspections. Consequently, by the end of 2020, OH inspections were completed after the respective GO 165 due dates. We identified and included the 1,691 assets located within the Central Coast Division as late inspections in our 2020 GO 165 Annual Report.

Additionally in 2020, three underground (UG) inspections within the Central Coast Division were late due to various access issues. During the initial attempt to inspect these assets, notifications were created as CGIs to complete a detailed inspection, which are detailed below. We identified and included the three assets as late inspections in our 2020 GO 165 Annual Report.

- EC notification 119359017 – Customer Access Issue and External Event
 - Inspector unable to gain access due to construction gate set up over underground facility. A padlock combination needed to move the fence which was preventing access. External events - Fires/PSPS impacted resources to complete on time.
- EC 119508048 – Customer Access Issue and External Event
 - Unable to gain access to underground facility due to inoperable vehicle parked over enclosure. Customer told inspector he would have it towed. Also,

²² DRU15080_Q04(c)_Atch01_CC Late Units (2020-2024)

²³ CGI (cannot get in)

²⁴ Quantity is actual units in 338 Plat Map grids

²⁵ CGI (cannot get in)

²⁶ Quantity is actual units in 24 Plat Map grids

external events -Fires/PSPS impacted resources to complete on time.

- EC 119597760 – External Event
 - Inspector unable to find vault and requested resource to locate & mark asset. External events (fires/PSPS) impacted resources to complete on time.

In 2021, the 11,575 OH inspections and 20,191 OH assets patrolled in the Central Coast Division were late due to our 2020 WMP commitment to prioritize detailed inspections in HFTDs prior to peak fire season. This change in inspection priorities caused a misalignment with CPUC due dates as defined in GO 165. Consequently, by the end of 2021, OH inspections and patrols were completed after the GO 165 due dates. We mitigated this error beginning in 2022, by ensuring our workplan reflects both the WMP commitment dates and the GO 165 due dates. We identified and included the 11,575 assets as late inspections and 20,191 assets as late patrols for the Central Coast Division in our 2021 GO 165 Annual Report.

Additionally in 2021, the three UG inspections in the Central Coast Division were late due to access issues. During the initial attempt to inspect these assets, notifications were created as CGIs to complete a detailed inspection, see details below. We identified and included these assets as late inspections in our 2021 GO 165 Annual Report.

- EC 121335808 – Access Constraints
 - Initial attempt to inspect unable to locate asset; coordinate with locate and mark workgroup to assist. Additional assistance needed to have vegetation clearing. Resource constraints to remove vegetation to complete on time. Inspection was completed on August 5, 2021.
- EC 121343198 – Customer Access Issue
 - Initial attempt to inspect confirmed the asset had been covered up with landscaping (decorative rocks). We contacted the customer to coordinate removal of rocks. Inspection was completed on August 2, 2021.
- EC 122206562 – Customer Access Issue
 - Initial attempt to inspect unable to locate asset. It had been covered by customer's (new) planter box; coordinate with locate and mark workgroup to assist. Inspection was completed on November 10, 2021.

In 2022, the 261 OH inspections in the Central Coast Division were late due to human error listed below, which are also detailed in our 2022 GO 165 Annual Report.

- 1 asset was late because the inspector was unable to locate the pole.
- 3 assets were late because an inspector took photos but did not gain access to the pole, and the inspector inadvertently completed the checklist. These inspections were identified as late during an internal quality audit, and the poles were reinspected.
- 257 assets were late due to human error. There was a miscommunication with the Internal Leadership and Contractor support with internal due dates for these assets. .

In 2023, the one OH inspection and 868 OH assets patrolled in the Central Coast Division were late due to human error. The information is detailed below and included in our 2023 GO 165 Annual Report.

- 1 late OH inspection
 - The Mapping department identified duplicate photos submitted for a map correction in error for another pole. The Pole was re-inspected on December 28, 2023, which was due April 28, 2023.
- 868 late OH patrol (assets)
 - During validation of the 2023 workplan, including re-confirming CPUC due dates, we identified that some patrols had an incorrect CPUC due date calculation, based on PG&E's revised interpretation for how to calculate the GO 165 due date (Utility Bulletin: TD-2305M-B010). This error was identified and corrected in late April, 2023, however, we subsequently had some patrols completed late, due to the timing of identifying the error. Please see Attachment 1 – Late Inspection Patrols to our 2023 GO 165 Annual Report for a detailed list of plat maps with patrol completion dates through December 31.

Additionally in 2023, an UG inspection was late due to a permit delay. During the initial attempt to inspect the asset, a notification was created as a CGI to complete a detailed inspection, see details below. We identified and included the one asset as a late inspection in our 2023 GO 165 Annual Report.

- EC 126350979 – Permit Delay
 - Inspection was completed late due to permitting delay. The enclosure required cleaning before an inspection could be completed. Once we obtained the approved permit, the enclosure was cleaned, allowing the inspection to be completed.

In 2024, one UG asset was patrolled late due to human error. Central Coast Division Map D0907 was initially patrolled on time but we were unable to locate the record. Map D0907 was re-patrolled after the due date. This information was included in our 2024 GO 165 Annual Report.

Additionally in 2024, we reported 250 OH inspections as late due to human error. We validated asset due dates after the inspections were completed. This validation effort identified incorrect due dates that were subsequently updated. These updates caused the inspections to be completed late. All referenced OH inspections for these assets were completed before December 31, 2024. We identified and included the 250 OH inspections as late in our 2024 GO 165 Annual Report.

- b. ESRB requested patrol and detailed inspection records from January 1, 2020 to December 31, 2024 for 5 poles in HFTD Tier 2 and 3 areas to assess PG&E's compliance with GO 165 requirements. In HFTD Tier 2 and 3 areas, patrol inspections are required annually. ESRB staff reviewed inspection records provided in response to our request and found:

Table 6: Patrol and Detailed Inspections of Selected Facilities by Year²⁷

SAP Number	101777479	101669578	101669759	101694906	101805653
2020	Yes	Yes	Yes	Yes	Yes
2021	Yes	Yes	Yes	Yes	Yes
2022	Yes	Yes	Yes	Yes	Yes
2023	<i>No</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>No</i>
2024	<i>No</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>No</i>

i. No inspection was conducted in 2023 for any of the 5 poles requested.

ii. No inspection was conducted in 2024 for any of the 5 poles requested.

PG&E must implement procedures and conduct training to assure that all structures are inspected at the required intervals.

PG&E Response:

Prior to 2023, Tier 3 HFTDs were inspected annually and Tier 2 HFTDs were inspected every three years. In 2023, HFTD plans/assets were inspected by Consequence, see attachment, “*DRU15988_Q03(b)_Atch01_TD-8123P-201 (Rev 1, 2023)_Redacted.*” In 2023 and 2024 these poles were categorized as “low,” therefore moving to a three-year inspection cycle. These assets located within HFTDs were patrolled annually in 2023 and 2024, which is in accordance with GO 165 as listed in the table below.

SAP ID	HFTD	Map #	2023 Patrol Completion Date	2024 Patrol Completion Date
101777479	Tier 3	M0219	10/17/2023	08/15/2024
101669578	Tier 3	M0219	10/17/2023	08/15/2024
101694906	Tier 3	M05	07/24/2023	08/14/2024
101805653	Tier 3	M1207	07/16/2023	08/23/2024
101669759	Tier 2	M02	11/02/2023	08/15/2024

4. GO 95, Rule 56.2, Overhead Guys, Anchor Guys and Span Wires, Use states in part:

“Guys shall be attached to structures, as nearly as practicable, at the center of load. They shall be maintained taut and of such strength as to meet the safety factors of Rule 44.”

PG&E’s TD-2305M-JA02, Job Aid: Overhead Assessment, Rev. 14, Effective January 14, 2025 Miscellaneous Other Compelling Abnormal Conditions, Guy Broken/Slack/Corroded states, *“Pole must be straight with Guy no more than an arm’s length (3ft) from taut, that does not have significant impact on the structural integrity of*

²⁷ DRU15624_Audit_DR_CPUC_Final

the pole.” See Figure 3.

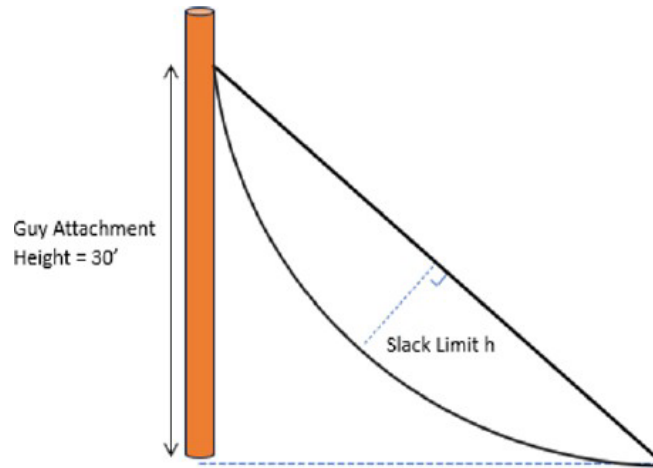


Figure 3: Guy slack limit, TD-2305M-JA02

Per GO 95, Rule 56.2, guys are to be maintained taut. PG&E’s TD-2305M-JA02 allows a deviation from taut by as much as 3 feet without regard to length or angle of attachment.

PG&E’s TD-2305M-JA02, Job Aid, Miscellaneous Other Compelling Abnormal Conditions, Guy Broken/Slack/Corroded needs revision to comply with GO 95, Rule 56.2 requiring guys to be maintained taut in all circumstances.

PG&E Response:

Our Applied Technology Services (ATS) team performed an engineering assessment to consider the impact of poles leaning with respect to the acceptable slack on the guy wire, which concluded the allowable slack to be 1.5 feet. Based on this ATS assessment, we updated the guidance in TD-2305M-JA02-B005 on February 14, 2025, to allow one-foot of slack in the guy wire.

III. Field Inspection

During the field inspection, ESRB staff inspected the following facilities in PG&E’s Central Coast Division, listed in Table 7:

Table 7: Central Coast Division Field Inspection Locations

Location	Structure Type	SAP ID Number	Latitude	Longitude
1	Wood Pole	101724259 The correct SAP ID is 101724759	36.6329555	-121.6980457
2	Wood Pole	103975807	36.6332033	-121.6981611
3	Wood Pole	101781858	36.6332961	-121.6981282
4	Wood Pole	103309822	36.6333249	-121.6980816
5	Wood Pole	101761742	36.66560	-121.75281
6	Wood Pole	101761741	36.6657968	-121.7533562
7	Wood Pole	101761894	36.6654808	-121.7524946
8	Padmount	107396334 The correct SAP ID is 107306334	36.660809	-121.7596195
9	Underground Enclosure	107289892	36.6609155	-121.7595726

Location	Structure Type	SAP ID Number	Latitude	Longitude
10	Underground Enclosure	107289895	36.6598765	-121.7594837
11	Underground Enclosure	107303824	35.9048794	-120.9925037
12	Padmount	107334281	35.9040975	-120.99191
13	Wood Pole	104232124	35.880404	-120.9901092
14	Wood Pole	104039609	35.8811484	-120.990707
15	Wood Pole	101705030	35.8815176	-120.9912025
16	Wood Pole	101705026	35.8792903	-120.9896988
17	Wood Pole	101705025	35.8781846	-120.9893461
18	Wood Pole	104251293	35.8989611	-120.9399254
19	Wood Pole	101704395	35.8992576	-120.9422485
20	Wood Pole	101704378	35.9149342	-120.9882963
21	Wood Pole	101764241	35.9153971	-120.98750
22	Wood Pole	101764227	35.9137972	-120.9875819
23	Wood Pole	101705057	35.9125704	-120.987255
24	Wood Pole	103408632	35.8970971	-121.0113275
25	Wood Pole	101704354	35.89708	-121.01264
26	Wood Pole	101704356	35.8970816	-121.0138427
27	Wood Pole	103850053	35.8970835	-121.0111659
28	Wood Pole	101704203	35.9221106	-121.0588857
29	Wood Pole	101704207	35.92219	-121.05717
30	Wood Pole	101704206	35.9219349	-121.0588968
31	Wood Pole	101669574	36.4183134	-121.913065
32	Wood Pole	101669564	36.418734	-121.9115818
33	Wood Pole	101669565	36.4185691	-121.9095017
34	Wood Pole	101777479	36.4181609	-121.9082702
35	Wood Pole	101669579	36.41586	-121.91353
36	Wood Pole	103406589	36.4165427	-121.9122104
37	Wood Pole	101669578	36.4159809	-121.911912
38	Wrapped Pole	104165715 The correct SAP ID is 104165716	36.4389985	-121.9204934
39	Wrapped Pole	104172709	36.4389985	-121.9204934
40	Wood Pole	101669758	36.4389986	-121.9204934
41	Wood Pole	101669554	36.436504	-121.9191583
42	Wood Pole	101669759	36.4370065	-121.9194031
43	Wood Pole	101669738	36.4600442	-121.9248459
44	Wood Pole	101777013	36.4601332	-121.9243953
45	Underground Enclosure	107281168	36.4670269	-121.8227389
46	Padmount	107321669	36.4670269	-121.8227389
47	Underground Enclosure	107281174	36.4663495	-121.8207645
48	Underground Enclosure	107281171	36.4663495	-121.8207645
49	Underground Enclosure	107314012	36.4658774	-121.8195733
50	Underground Enclosure	107313506	36.4651591	-121.8166403
51	Wood Pole	101694906	36.42672	-121.78667
52	Wood Pole	101753462	36.5318802	-121.8444021
53	Wood Pole	101774643	36.5311509	-121.8443931
54	Wood Pole	101753469	36.53023	-121.84436
55	Wood Pole	101675434	37.0814789	-122.0939049
56	Wood Pole	101805792	37.0812561	-122.0935261
57	Wood Pole	101675431	37.0811996	-122.0932699
58	Wood Pole	101805653	37.081584	-122.0936716

Location	Structure Type	SAP ID Number	Latitude	Longitude
59	Wood Pole	104229557	37.0815519	-122.0933101
60	Underground Enclosure	107380482 The correct SAP ID is 107380486	37.0508202	-122.07339
61	Padmount	107359224	37.0502625	-122.0740009
62	Underground Enclosure	107389280	37.0510607	-122.0742125
63	Underground Enclosure	107390655	37.0497075	-122.074134
64	Padmount	108232624	37.0497624	-122.0743265
65	Wood Pole	101797410	37.0492839	-122.0742866
66	Wood Pole	101671282	37.04849	-122.0743171
67	Wood Pole	104068206	37.0477587	-122.0743318
68	Wood Pole	104154912	37.0720602	-121.9961102
69	Wood Pole	104050627	37.0717325	-121.9960549
70	Wood Pole	104235534	37.0715773	-121.9961917
71	Wood Pole	104044834	37.0711391	-121.9962339
72	Padmount	107359960	37.0423927	-122.0257111
73	Padmount	107359950	37.0423097	-122.026554
74	Wood Pole	103824076	37.04244	-122.02769
75	Wood Pole	103898984	37.0430218	-122.0265241
76	Underground Enclosure	107386368	37.0518718	-122.0259364
77	Wood Pole	104235738	37.0625887	-121.2279065
78	Wood Pole	101785410	37.0625467	-121.228065
79	Wood Pole	101785409	37.0610457	-121.2226591
80	Wood Pole	104055226	37.0607643	-121.2216864
81	Wood Pole	103447712	37.06178	-121.21906
82	Wood Pole	104136219	37.062777	-121.2166854
83	Wood Pole	103832580	37.0637182	-121.2142245

IV. Field Inspection Violations

ESRB staff observed the following violations during the field inspection:

1. GO 95, Rule 31.1, Design, Construction and Maintenance states in part:

“Electrical supply and communication systems shall be designed, constructed, and maintained for their intended use, regard being given to the conditions under which they are to be operated, to enable the furnishing of safe, proper, and adequate service.”

ESRB’s findings related to the above rule are listed in Table 8:

Table 8: GO 95, Rule 31.1 Findings

Location	Finding	Notes	PG&E Response
27	Splice under damper.	EC 131150528 created	We agree with this finding. EC notification 131150528 was created to address this condition.
35	Missing damper.	Could not create EC in	We disagree with this finding. EC notification 119212878 was documented in our system of

Location	Finding	Notes	PG&E Response
		field	record, SAP, to address this condition prior to the field audit. This EC notification was completed on July 15, 2025.
35	Corroded insulator bracket.	Could not create EC in field	We disagree with this finding. EC notification 119212878 was documented in our system of record, SAP, to address this condition prior to the field audit. This EC notification was completed on July 15, 2025.
40	Broken bond wire.	EC 131153842 created	We agree with this finding. EC notification 131153842 was created to address this condition.
42	Loose conductor tie wire.	EC 131153843 created	We agree with this finding. EC notification 131153843 was created to address this condition. This EC notification was completed on May 22, 2025.
58	Split cross arm.	EC 131158410 created	We agree with this finding. EC notification 131158410 was created to address this condition. This EC notification was completed on May 30, 2025.
81	Missing vibration damper.	EC 131163298 created	We agree with this finding. EC notification 131163298 was created to address this condition.
81	Damper over splice.	EC 131163298 created	We agree with this finding. EC notification 131163298 was created to address this condition.

2. GO 95, Rule 51.6 A, High Voltage Marking states in part:

“Poles which support line conductors of more than 750 volts shall be marked with high voltage signs. This marking shall consist of a single sign showing the words “HIGH VOLTAGE”, or pair of signs showing the words “HIGH” and “VOLTAGE”, not more than six (6) inches in height with letters not less than 3 inches in height. Such signs shall be of weather and corrosion– resisting material, solid or with letters cut out therefrom and clearly legible.

The grounding conductor from each ground rod to the base of the pole shall not be less than 1 foot below the surface of the ground.”

ESRB’s finding related to the above rule are listed in Table 9:

Table 9: GO 95, 51.6 A Finding

Location	Finding	Notes	PG&E Response
57	Missing High Voltage Sign.		We disagree with this finding. Per TD-2305M-JA02, one High Voltage sign is allowed if it is legible. One side has a legible High Voltage sign located on the crossarm.

3. GO 95, Rule 54.8-B (1) Service Drops, 0 - 750 Volts, Clearances above Ground, Above Public Thoroughfares states:

“A Service drop conductors shall have a vertical clearance of not less than 18 feet above public thoroughfares, except that this clearance may grade from 18 feet at a position not more than 12 feet horizontally from the curb line to a clearance of not less than 16 feet at the curb line, provided the clearance at the centerline of any public thoroughfare shall in no case be less than 18 feet. Where there are no curbs the foregoing provisions shall apply using the outer limits of possible vehicular movement in lieu of a curb line.”

ESRB’s finding related to the above rule are listed in Table 10:

Table 10: GO 95, Rule 54.8-B(1) Finding

Location	Finding	Notes	PG&E Response
71	Supply drop less than 16 feet above the roadway at curb.	Repaired in field.	We agree with this finding. This condition was addressed in the field at the time of the audit.

4. GO 95, Rule 54.6-E (2), Risers states in part:

“All risers from underground cables or other conductors which pass through an unrelated conductor or cable level shall be covered or encased by material as described in Rule 54.6-E1 or by a suitable protective covering as described in Rule 22.8 from a distance of 8 feet “

GO 95, Rule 84.6-D (2), Vertical Runs states in part:

“Where bridled runs are not required to be covered by these rules, they shall be supported by bridle hooks or rings spaced at intervals of not more than 24 inches. “

ESRB’s findings related to the above rule are listed in Table 11:

Table 11: GO 95, Rule 54.6-E (2) and 84.6-D (2) Findings

Location	Finding	Notes	PG&E Response
19	Loose, unsecured vertical cable	EC 131149522 created	We agree with this finding. EC notification 131149522 was created to address this condition.
42	Loose antenna cable		We disagree with this finding. After reviewing Location 42 we did not find a loose antenna cable. For this location, we created EC notification 131153843 for a broken tie wire during the field audit.

5. GO 95, Rule 54.6-I Guy Marker, Attachment of Protective Covering states in part:

“Protective covering shall be attached to poles, structures, crossarms, and other supports by means of corrosion-resistant materials (straps, plumbers tape, lags, nails, staples, screws, bolts, etc.) which are adequate to maintain such covering in a fixed position.”

ESRB’s finding related to the above rule are listed in Table 12:

Table 12: GO 95, Rule 54.6-I Finding

Location	Finding	Notes	PG&E Response
57	Broken moulding.	Repaired in field.	We agree with this finding. This condition addressed in the field at the time of the audit.

6. GO 95, Rule 56.7-B Location of Sectionalizing Insulators, Anchor Guys states in part:

“An insulator shall be installed in each anchor guy which is required to be sectionalized by Rule 56.6–A or 56.6–B, so that such insulator is located:

(1) 8 Feet or more above the ground; and

(2) 8 Feet or more below the level of the lowest supply conductor, or 6 feet or more from surface of pole and one foot or more below the level of the lowest supply conductor.”

“In order to prevent trees, buildings, messengers, metal-sheathed cables or other similar objects from grounding portions of guys above guy insulators, it is suggested that anchor guys be sectionalized, where practicable, near the highest level permitted by this Rule”

ESRB’s findings related to the above rule are listed in Table 13:

Table 13: GO 95, Rule 56.7 B Findings

Location	Finding	Notes	PG&E Response
54	Vegetation spanning down guy insulator.	EC 131156200 created.	We agree with this finding. EC notification 131156200 was created to address this condition.
59	Down guy insulator within proximity of primary supply line.	EC 131158513 created.	We agree with this finding. EC notification 131158513 was created to address this condition.

7. GO 95, Rule 56.9 Guy Marker (Guy Guard) states:

“A substantial marker of suitable material, including but not limited to metal or plastic, not less than 8 feet in length, shall be securely attached to all anchor guys. Where more than one guy is attached to an anchor rod, only the outermost guy is required to have a marker.”

ESRB’s finding related to the above rule are listed in Table 14:

Table 14: GO 95, Rule 56.9 Finding

Location	Finding	Notes	PG&E Response
21	Missing down guy marker.	Repaired in field.	We agree with this finding. This condition was addressed in the field at the time of the audit.

8. GO 128, Rule 35.1, Marking and Guarding, Identification of Cables states:

“Cables operating at a voltage in excess of 750 volts shall be permanently and clearly identified by tags or other suitable means to indicate their operating voltage and the circuit with which they are normally associated at each manhole or other commonly accessible location of the underground system.”

ESRB’s findings related to the above rule are listed in Table 15:

Table 15: GO 128, Rule 35.1 Findings

Location	Finding	Notes	PG&E Response
9	Missing voltage tag.		We disagree with this finding. An EC notification is not required if a condition can be completed as minor work. (See TD-2305M-JA03 (Rev 5, 2024) Underground Job Aid at page 66.) Additionally, an Inspector may perform minor work only if it is safe to do so. During the field audit, the Inspector assessed the situation to not be safe.
10	Missing voltage tag.		We disagree with this finding. An EC tag is not required if a condition can be completed as minor work. (See TD-2305M-JA03 (Rev 5, 2024) Underground Job Aid at page 66.) Additionally, an Inspector may perform minor work only if it is safe to do so. During the field audit, the Inspector assessed the situation to not be safe.

9. GO 95, Rule 18-B (1), Maintenance Programs states in part:

“Each company (including electric utilities and communications companies) shall establish and implement an auditable maintenance program for its facilities and lines for the purpose of ensuring that they are in good condition so as to conform to these rules.”

GO 95, Rule 31.1, Design, Construction and Maintenance states in part:

“Electrical supply and communication systems shall be designed, constructed, and maintained for their intended use, regard being given to the conditions under which they are to be operated, to enable the furnishing of safe, proper, and adequate service.

During the field audit, ESRB observed the following existing non-conformances with past due corrective actions.

Table 16: Observed Field Findings with Past Due Work Orders

Loc	Non-Conformance	GO / Rule	Existing EC	Due Date
16	Replace pole, decayed	95/49.1 A (1)	123374140	4/2023
21	Replace pole, loose molding, incorrect connector, replace fuse	95/54.6-I	123262923	4/2023
24	Replace pole, woodpecker damage	95/49.1 A (1)	123304016	4/2023
25	Replace pole, woodpecker damage. Conductor clearance, Incorrect connector	95/49.1 A (1) & 31.1	123306340	4/2023
26	Replace pole, woodpecker damage	95/49.1 A (1)	123307685	4/2023
27	Connector Adjustment	95/31.1	123279610	4/2023
28	Replace pole, Incorrect connector	95/49.1 A (1) & 31.1	123385432	4/2023
29	Incorrect connector/ splice closer to pole than damper (Note: splice EC will be cancelled due to new standards)	95/31.1	123386597	4/2023
30	Connector incorrectly installed (Insulink secondary splices on primary)	95/31.1	123385719	4/2023
52	Vegetation overgrown	54.7	124097453	7/2023
53	Vegetation contacting down guy above insulator	56.7-B	112966146	6/2022
54	Vegetation overgrown, overload test	31.1	124097452	7/2023
66	tree overgrown, ground exposed, clearance to tree (note: exposed ground fixed in field)	95/35	121370374 The correct EC Notification is 119491583	7/2022

PG&E response:

In response to Table 16, please reference the Corrective Action Plan for Tag Completion and Going Forward Compliance response provided in Section II – Records Violations.

Note: These findings are already included in the records review section of this report.

10. Rule 31.1, Design, Construction and Maintenance states in part

“Electrical supply and communication systems shall be designed, constructed, and maintained for their intended use, regard being given to the conditions under which they are to be operated, to enable the furnishing of safe, proper, and

adequate service.

ESRB observed the following non-conformances during the field portion of the audit. PG&E has previously noted these non-conformances and has pending on-time work orders to correct the non-conformances.

Table 17: Observed Field Findings with Pending On-Time Work Orders

Loc	Non-Conformance	GO / Rule	Existing EC	Due Date
1	Broken insulator, corroded anchor	95/31.1	101724259 The correct EC Notification is 121662725	7/2026
17	Cutout/Fuse Damage-Replace	95/31.1	130885041	2/2026
42	High Voltage Sign Missing (Note: to be cancelled due to new standards)	95/51.6-A	123923369	6/2027
51	Leaning pole	95/31.1	121446680	
76	Broken conductor, splice breaking down	95/31.1	129369946	8/2025

PG&E response:

[We have previously noted these non-conformances and have pending on-time work orders to correct the non-conformances.](#)

V. Observations

1. GO 95, Rule 18, Reporting and Resolution of Safety Hazards Discovered by Utilities
states in part:

“For purposes of this rule, “Safety Hazard” means a condition that poses a significant threat to human life or property...”

GO 95, Rule 18-A, Resolution of Potential Violations of General Order 95 and Safety Hazards states in part:

“(3) If a company, while performing inspections of its facilities, discovers a Safety Hazard(s) on or near a communications facility or electric facility involving another company, the inspecting company shall notify the other entity of such Safety Hazard(s) no later than ten (10) business days after the discovery.

(4) To the extent a company that has a notification requirement under (2) or (3) above cannot determine the facility owner/operator, it shall contact the pole owner(s) within ten (10) business days if the subject of the notification is a Safety Hazard, or otherwise within a reasonable amount of time not to exceed 180 days after discovery. The notified pole owner(s) shall be responsible for promptly (normally not to exceed five business days) notifying the company

owning/operating the facility if the subject of the notification is a Safety Hazard, or otherwise within a reasonable amount of time not to exceed 180 days, after being notified of the potential violation of GO 95.”

During the field inspection, ESRB observed the following third-party safety concerns.

Table 18: Third-Party Audit Observations

Location	Finding	Notes	PG&E Response
6	Exposed ground, abandoned ground.	TPN 131145891 created	We agree with this finding. Third-Party Notification (TPN) 131145891 was created to address this condition.
16	Unauthorized third-party attachment.	Fixed in field.	We agree with this finding. This condition was addressed in the field at the time of this audit.
27	Unauthorized third-party attachment.	Existing TPN.	We disagree with this finding. TPN 131150287 was created and documented in our system of record, SAP, to address this condition.
35	Communication line on ground.	Existing TPNs (120772896, 120886862)	We disagree with this finding. TPN 120772896 and TPN 120886862 were created and documented in our system of record, SAP, prior to the field audit to address this condition.
36	Corroded communications down guy, communication line clearance to ground.	TPN 131152922 created	We agree with this finding. TPN 131152922 was created to address this condition.
37	Low communications span guy over road.	TPN 131152923 created	We agree with this finding. TPN 131152923 was created to address this condition.
58	Third-party attachments.	Existing TPN (121544455).	We disagree with this finding. TPN 121544455 was created and documented in

Location	Finding	Notes	PG&E Response
			our system of record, SAP, prior to the field audit to address this condition.
70	Loose vertical communication line.	TPN 131159727 created	We agree with this finding. TPN 131159727 was created to address this condition.
74	Loose vertical riser cover (communication line).	Fixed in field.	We agree with this finding. This condition was addressed in the field at the time of this audit.

Appendix A: Late work orders based on Authorized End Date.²⁸

Appendix Table A. Late Work Orders by Priority and Type Based on Authorized End Date

Priority Code	Late Work Orders Completed	Late Work Orders Pending *	Late Work Orders Cancelled	Total by Priority
A	2,570 (7,049)	2 (139)	1,015 (991)	3,587
X	7 (7)	—	1 (1)	8
B	2,572 (3,268)	87 (125)	573 (621)	3,232
E	10,643 (11,620)	27,782 (27,808)	6,326 (6,669)	44,751
F	874 (922)	197 (249)	811 (773)	1,882
Total	16,666	28,068	8,726	53,460

* As of December 31, 2024

Note: Values in parentheses based on Required End Date only, not Funded Date.

Appendix B: Open and closed work orders with Locations outside the Central Coast Division.

Appendix Table B. Closed Work Orders with Locations outside the Central Coast Division.

Priority Code	Notification Number	Status	Latitude	Longitude
F	110433564	Closed	36.56895	121.92953
F	110455985	Closed	36.54073	121.91489
A	118461746	Closed	0	0
A	118462617	Closed	0	0
A	118478754	Closed	0	0
A	118484285	Closed	0	0
E	118506859	Open	0	0
A	118544404	Closed	0	0
E	119032778	Open	0	0
A	119034619	Closed	0	0
A	119034841	Closed	0	0
B	119079122	Closed	0	0

²⁸ Per DRU15080_Q03_Atch01_Central Coast_WorkOrderHistory_Final_CONF Tab: Column Definitions: “Derived Due Date: Logic: use Funded Repair Date if it exists. Else, use Required End Date”

Priority Code	Notification Number	Status	Latitude	Longitude
E	119175082	Open	0	0
A	119200058	Closed	0	0
E	119221030	Open	0	0
A	119304271	Closed	0	0
A	119509413	Closed	0	0
B	119556526	Closed	0	0
A	119570662	Closed	0	0
B	119581869	Closed	0	0
B	119595878	Closed	0	0
B	119595987	Closed	0	0
A	119750341	Closed	0	0
B	119850444	Closed	0	0
B	119936219	Closed	0	0
A	120007654	Closed	0	0
A	120041057	Closed	0	0
A	120043764	Closed	0	0
A	120082372	Closed	0	0
A	120163711	Closed	0	0
B	120192960	Closed	0	0
B	120212689	Closed	0	0
A	120228881	Closed	0	0
B	120234701	Closed	0	0
B	120427369	Closed	0	0
B	120427452	Closed	0	0
A	120456880	Closed	0	0
A	120457013	Closed	0	0
A	120460158	Closed	0	0
A	120463175	Closed	0	0
A	120464692	Closed	0	0
A	120465928	Closed	0	0
A	120491891	Closed	0	0
A	120506887	Closed	0	0
A	120535006	Closed	0	0
B	120536310	Closed	0	0

Priority Code	Notification Number	Status	Latitude	Longitude
B	120536701	Closed	0	0
B	120565507	Closed	0	0
A	120572063	Closed	0	0
B	120617081	Closed	0	0
F	120687634	Open	0	0
E	120763266	Open	0	0
B	120822472	Closed	0	0
F	120866331	Open	0	0
A	121188832	Closed	0	0
B	121333801	Closed	0	0
A	121766849	Closed	0	0
A	121916560	Closed	0	0
A	121917381	Closed	0	0
A	121917382	Closed	0	0
A	121917383	Closed	0	0
A	121917384	Closed	0	0
A	121917385	Closed	0	0
A	121920045	Closed	0	0
E	122048038	Open	0	0
B	122060016	Closed	0	0
F	122085719	Open	0	0
E	122105235	Open	0	0
F	122143308	Open	0	0
A	122151479	Closed	0	0
A	122157477	Closed	0	0
B	122246023	Closed	0	0
A	122495988	Closed	0	0
E	122565942	Open	0	0
F	122603128	Open	0	0
F	122626953	Open	0	0
F	122907285	Open	0	0
A	122993089	Closed	0	0
A	122993184	Closed	0	0
A	123058733	Closed	0	0

Priority Code	Notification Number	Status	Latitude	Longitude
B	123069141	Closed	0	0
A	123453868	Closed	0	0
A	124059120	Closed	0	0
E	124383650	Open	0	0
E	124656613	Open	0	0
A	124773675	Closed	0	0
A	124973535	Closed	0	0
A	125206037	Closed	0	0
A	125408323	Closed	0	0
E	125542608	Open	0	0
E	125799884	Open	0	0
E	126175436	Open	0	0
A	126503355	Closed	0	0
E	126570176	Open	0	0
A	126761692	Closed	0	0
E	127054307	Open	0	0
E	127504991	Open	0	0
A	127553382	Closed	0	0
E	128301825	Open	0	0
E	128301831	Open	0	0
E	128301840	Open	0	0
E	128301980	Open	0	0
E	128302210	Open	0	0
E	128302309	Open	0	0
E	128302480	Open	0	0
E	128302501	Open	0	0
E	128302611	Open	0	0
E	128302902	Open	0	0
E	128354739	Open	0	0
E	128354784	Open	0	0
E	128355080	Open	0	0
E	128355138	Open	0	0
E	128355148	Open	0	0
E	128355202	Open	0	0

Priority Code	Notification Number	Status	Latitude	Longitude
F	128355246	Open	0	0
E	128355257	Open	0	0
F	128355310	Open	0	0
E	128355485	Open	0	0
E	128355604	Open	0	0
E	128355647	Open	0	0
E	128355791	Open	0	0
E	128355847	Open	0	0
E	128355873	Open	0	0
E	128356012	Open	0	0
E	128356057	Open	0	0
E	128398682	Open	0	0
E	128399308	Open	0	0
E	128399865	Open	0	0
E	128401089	Open	0	0
E	128402813	Open	0	0
E	128405025	Open	0	0
F	128458934	Open	0	0
E	128495504	Open	0	0
F	128495706	Open	0	0
E	128495824	Open	0	0
E	128495834	Open	0	0
A	128499367	Closed	0	0
E	128608772	Open	0	0
E	128608834	Open	0	0
E	128609001	Open	0	0
E	128623540	Open	0	0
F	128699201	Open	0	0

Distribution Line Enhanced Annual Inspection Plan Creation [Document Title]

SUMMARY

This utility procedure summarizes how the 2023 Distribution Line Detailed Inspection Work Plan was created.

Level of Use: Informational Use

TARGET AUDIENCE

PG&E personnel in System Inspections, Distribution Asset Strategy, and Asset Knowledge Management.

SAFETY

This procedure describes administrative tasks that do not expose personnel to any significant hazards.

BEFORE YOU START

NA

TABLE OF CONTENTS

SECTION	TITLE	PAGE
1	Milestone 1. Base Plan Identification.....	2
2	Milestone 2. Plan Creation – Detailed Ground Inspections Scope	4
3	Milestone 3. Plan Approval and Communication	10
4	Source Data	11

Distribution Line Enhanced Annual Inspection Plan Creation [Document Title]

PROCEDURE STEPS

1 Milestone 1. Base Plan Identification

- 1.1 From 2020 to 2022, PG&E based the frequency of inspection on the High Fire Threat District (HFTD) tier in which an asset is located. SEE [Table 1](#). Support structures in Tier 3 were inspected annually, and support structures in Tier 2 were inspected once every three years.
- 1.2 In 2023, PG&E is shifting to a detailed inspections strategy based on wildfire risk, as opposed to a strategy based solely on an asset location's the HFTD tier. PG&E's Wildfire Distribution Risk Model (WDRM v3, dated January, 2022) indicates that the riskiest support structures are found throughout PG&E's high fire areas across Tier 2 and Tier 3, as well as in High Fire Risk Areas (HFRAs).

Because the wildfire risk associated with the support structures in each of these designated areas exhibits a range of values, it makes sense to evolve PG&E's detailed inspection program to be based on the risk of individual structures instead of the tier designation associated with each structure.

Table 1. Comparison of 2022 and 2023 Distribution Strategy (HFTD/HFRA)

	2020 – 2022 Strategy	2023 Strategy
Baseline Inspection Frequency	Annual in Tier 3 Every 3 years in Tier 2	1 – 3 years based on wildfire consequence of each plat map
Basis for Inspection Frequency	HFTD Tier	WDRM v3 consequence score
Inspection Unit	Circuit-based maintenance plans	Plat map-based maintenance plans
Risk-Based Additions to Work Plan	None	Add top 10% of risk structures on areas of concern (AOC)
Other Considerations	Balances structure count across years	Balances Eyes on Risk and structure count across years

Distribution Line Enhanced Annual Inspection Plan Creation [Document Title]

- 1.3 PG&E's 2023 inspection plan ensures that plat maps and structures meet the criteria in [Table 2](#), based on their wildfire risk consequence scores.

Table 2. Inspection Cycles Based on Plat Maps and Structure Types

Type of Plat Maps and Structures	Inspection Cycle
Extreme	Annual inspections by July 31 or by their California Public Utilities Commission (CPUC) General Order (GO)-165 due date, whichever is earlier.
Severe	
High Consequence	Every other year by July 31 or by their GO-165 due date, whichever is earlier.
Medium	Every 3 years by September 30 or by their GO-165 due date, whichever is earlier.
Low Consequence	Every 3 years by December 31 or by their GO-165 due date, whichever is earlier.
Non-HFTD	Every 5 years by their GO-165 due date.

- 1.4 INSPECT any poles discovered in HFTD or HFRA's after December 27, 2022 in accordance with their Wildfire Mitigation Plan (WMP)-indicated frequency. SEE [Table 3](#) below.

Table 3. Pole Inspections in HFTDs and HFRA's

Consequence of Plat Map	Frequency of Inspection (in years)	Must Add to 2023 Inspection Plan if Year Last Inspected is Before...
Extreme, Severe	1	2023 (unless pole is installed in 2022 or later)
High	2	2022 (unless pole is installed in 2022 or later)
Medium, Low	3	2021 (unless pole is installed in 2022 or later)

1. IF new or replacement poles have a field installation date in 2022 or later,
THEN DO NOT ADD them to the 2023 inspection plan.

- 1.5 INSPECT any poles discovered in non-HFTDs/non-HFRA's after December 27, 2022, with a GO-165 last inspection date on or before 2018 by its GO-165 compliance date.

1. IF new or replacement poles have a field installation date in 2022 or later,
THEN DO NOT ADD them to the 2023 inspection plan.

Distribution Line Enhanced Annual Inspection Plan Creation [Document Title]

- 1.6 ENSURE that assets that change plat maps within the inspection year maintain the 2023 WMP compliance due date set by the original (v3) plat map assigned in the 2023 workplan.

2 Milestone 2. Plan Creation – Detailed Ground Inspections Scope

PERFORM the following steps in the Foundry tool to create a pole-by-pole inspection work plan:

2.1 PREPARE a data set for analysis.

1. ADD a column to the Foundry “support_structures_v2” data set for unique plat map IDs.
2. ADD “Div-Plat-District” attribute by concatenating “Division,” “Distmap,” and the first two numeric digits of the “functional_location” attributes.
3. CREATE new Foundry data set (named [01. All Support Structures \(palantirfoundry.com\)](#)) and a .csv file for documentation (named [01. All Support Structures.csv](#)).

2.2 GENERATE the initial population of inspectable structures by applying the definition of an inspectable pole to all structures in the asset registry. SEE [Section 4, Source Data](#) for the definition of an inspectable pole.

1. FILTER All Support Structures data set for inspectable structures using only the “inspectable” attribute.
2. CREATE a new Foundry data set (named [02. Inspectable Support Structures \(palantirfoundry.com\)](#)) and a .csv file for documentation (named [02. Inspectable Support Structures.csv](#)).

2.3 CALCULATE the last inspection date for every inspectable structure.

1. Within the Inspectable Support Structures data set, CREATE “last_inspection_year” attribute as the most recent year of the “installation_year_calculated” and “insp_date_last_go165_insp_incl_ap” attributes.

Distribution Line Enhanced Annual Inspection Plan Creation [Document Title]

2.4 CALCULATE the G.O. 165 last inspection year for each plat map.

1. PERFORM these steps for each unique plat map (based on “Div-Plat-District” attribute) in the Inspectable Support Structures data set:
 - a. IF more than 85% of “last_inspection_year” for structures within the plat map are the same,

THEN ASSIGN “last_inspection_year” attribute of the plat map as “last_inspection_year” for those structures.
 - b. OTHERWISE, IF 85% or less of “last_inspection_year” for structures within the plat map are the same,

THEN ASSIGN “last_inspection_year” attribute of the plat map as the earliest “last_inspection_year” of any pole within that plat map.
 - c. CALCULATE “go165_due-year” as “last_inspection_year” plus 5 years.

2.5 ADD a Risk and Data Analytics (RaDA)-provided wildfire consequence category and a corresponding inspection frequency (1, 2, or 3 year) for each plat map based on the wildfire consequence scores of the inspectable HFTD and HFRA structures within that plat map.

Wildfire consequences scores are from Wildfire Distribution Risk Model version 3 (WDRMv3). SEE [Section 4, Source Data](#) for how consequence scores were assigned.

1. ASSIGN wildfire consequence ranks based on the WDRM v3 for each structure within the plat map.
2. For each unique plat map (based on “Div-Plat-District” attribute) in Inspectable Support Structures data set, ADD the following attributes, based on the same attributes in the [Distribution OH Inspection Strategy 5x5 \(2022-12-23\)](#) provided by RaDA and .csv (OH is an acronym for “overhead”):
 - “consequence_version_3_4_backstop” (extreme, severe, high, medium, low)
 - “inspection_cycle_year” (1,2,3)

2.6 CALCULATE the next inspection year in Foundry for each plat map.

1. For plat maps containing any HFTD/HFRA structures, ASSIGN the next inspection year by these criteria:
 - a. COMBINE the last inspection year for each plat map and the recommended inspection frequency for each plat map.

For example, if a low consequence plat map was inspected in 2020, then it would be included in the 2023 inspection plan, since low consequence plat maps must be inspected every three years.

Distribution Line Enhanced Annual Inspection Plan Creation [Document Title]

2.6.1 (continued)

- b. BALANCE the structure count and Eyes on Risk across the next three years, so that approximately 1/2 of high, 1/3 of medium, and 1/3 of low plat maps get inspected each year. REFER to [Table 4](#) below.

Table 4. Assigning the Next Inspection Year: Plat Maps with HFTD/HFRA Structures

Wildfire consequence_rank	Structure Count	Next_prescribed_year	Aerial (A) Ground (G)
extreme	All	2023	AG
severe	All	2023	AG
high	If plat map is in earlier 50% by "go165 due-year"	2023	G
	If plat map is in later 50% by "go165 due-year" * reduce by 10,000 structures	2023	A
medium	If plat map is in earliest 33% by "go165 due-year"	2023	G
	If plat map is in later middle 33% by "go165 due-year"	2024	G
	If plat map is in most recent 33% by "go165 due-year"	2025	G
low	If plat map is in earliest 33% by "go165 due-year"	2023	G
	If plat map is in later middle 33% by "go165 due-year"	2024	G
	If plat map is in most recent 33% by "go165 due-year"	2025	G

2. For plat maps without any HFTD/HFRA structures, ASSIGN the "next_prescribed_year" as "last_inspection_year" plus 5 years.

Distribution Line Enhanced Annual Inspection Plan Creation [Document Title]

2.6 (continued)

3. CREATE new Foundry data set ([2023 OH Inspection Strategy - Plat Map \(palantirfoundry.com\)](#)) and a .csv file of the plat map level plan: ([2023 OH Inspection-Plat Maps.xlsx](#)) 2023 OH Inspection-Plat Maps.xlsx).

2.7 GENERATE a pole-by-pole plan based on the plat-map level plan.

1. For each unique plat map (based on “Div-Plat-District” attribute) in ([2023 OH Inspection-Plat Maps.xlsx](#)) containing any HFTD/HFRA structure, PULL all structures from the Inspectable Support Structures database whose “Div-Plat-District” attribute matches the “Div-Plat-District” attribute of that plat map.
2. CREATE new Foundry data sets:
 - a. [2023 OH Inspection Strategy - \(Ground\) Structures List \(palantirfoundry.com\)](#) and a .csv file of the pole to pole plan: [2023 OH Inspection-\(Ground\) Structures+mwc.xlsx](#).
 - b. [2023 OH Inspection Strategy - \(Aerial\) Structures List \(less 10k\) \(palantirfoundry.com\)](#) and a .csv file of the pole to pole plan: [2023 OH Inspection-\(Aerial\) Structures+mwc.xlsx](#).

2.8 ADD individual structures whose plat map is not captured in the 2023 inspection plan in Step 2.7 above as areas of concern (AOCs) to the 2023 inspection plan. This includes a review of due dates for all inspectable structures, which encompasses those that had a different year last inspected than the rest of their plat map.

1. FOR each structure in Inspectable Support Structures data set, PERFORM the following steps:
 - a. IF the structure is present in [2023 OH Inspection-\(Ground\) Structures+mwc.xlsx](#) data set,

THEN TAKE no further action.
 - b. OTHERWISE, IF the structure is not present in [2023 OH Inspection-\(Ground\) Structures+mwc.xlsx](#) data set,

THEN CREATE the attribute “GO165_Due_Year” as the most recent year of the “installation_year_calculated” and “insp_date_last_go165_insp_incl_ap” plus 5 years.

(1) IF the structure’s “GO165_Due_Year” is 2023,

THEN ADD structure to the AOC list to be completed within 63 months of the last GO-165 inspection date.

Distribution Line Enhanced Annual Inspection Plan Creation [Document Title]

2.8.1 (continued)

- (2) IF the structure's "top_10_percent" = "Y" in
Distribution_OH_Inspection_Strategy_5x5 (2022-12-23) AND the
structure is not present in 2023 OH Inspection-(Aerial)
Structures+mwc.xlsx,

THEN ADD the structure to the AOC list to be completed by July 31.

- (3) IF "HFRA_HFTD_grouped" = "Tier 2 / Non-HFTD + HFRA" OR
"Tier 3 / Zone 1,"

THEN ADD attribute "Consequence_Category" from the plat map level
plan [2023 OH Inspection-Plat Maps.xlsx](#)),

AND CHECK if next inspection year would exceed WDRM v3 prescribed
inspection frequencies if not inspected in 2023.

- c. CREATE a new attribute "WDRM_Due_Year" as detailed in [Table 5](#) below:

Table 5. WDRM_Due_Year Attribute Based on Consequence Category

Consequence Category	WDRM Due Year
Null	2023
Extreme	2023
Severe	2023
High	Use the most recent year of "installation_year_calculated" plus 2 and "insp_date_last_go165_insp_incl_ap" plus 2 years
Medium	Use the most recent year of "installation_year_calculated" plus 3 and "insp_date_last_go165_insp_incl_ap" plus 3 years
Low	Use the most recent year of "installation_year_calculated" plus 3 and "insp_date_last_go165_insp_incl_ap" plus 3 years

Distribution Line Enhanced Annual Inspection Plan Creation [Document Title]

2.8.1 (continued)

- (1) IF "WDRM_Due_Year" is 2023,
THEN CREATE a new attribute "Due_Date" as detailed in [Table 6](#).

Table 6. Assigning "Due_Date" Attribute

Consequence Category	Set Due Date As
Extreme	7/31/2023
Severe	7/31/2023
High	7/31/2023
Medium	9/30/2023
Low	12/31/2023

- (2) CREATE a new Foundry data set ([2023 OH Inspection Strategy - AOC List \(palantirfoundry.com\)](#)) and a .csv file for documentation ([2023 OH Inspection Strategy - AOC List.xlsx](#)).

2.9 CONDUCT a quality check by having multiple PG&E team members in Asset Strategy and RaDA review the steps above for completeness and correctness.

1. VERIFY that the Foundry script operates as intended.
2. IF a plat map appears to be a duplicate or has multiple district IDs in Foundry,
THEN REVIEW the plat map AND USE correct division information from the Electric Distribution Geographic Information System (EDGIS), if necessary.
3. DELETE all duplicates.
4. VERIFY prescribed years on all structures against last inspection dates.
5. VERIFY [GO 165](#) compliance dates.
6. VERIFY AOC list through monthly validation process.

Distribution Line Enhanced Annual Inspection Plan Creation [Document Title]

- 2.10 CREATE Maintenance Plans and Work Orders in SAP based on the pole-by-pole inspection work plan.
 - 1. VALIDATE data AND CONVERT it to a loadfile.
 - 2. GENERATE maintenance plans (MPs) in SAP.
 - 3. VERIFY that MPs pass Foundry data readiness checks.
 - 4. VERIFY SAP equipment numbers exist in Geomart.
 - 5. GENERATE orders in SAP.
- 2.11 CONDUCT a monthly inspection plan discrepancy review in Foundry to identify structures added to the Asset Registry in Geographical Information System (EDGIS) that are not included in the inspection plan.
 - 1. System Inspections personnel VALIDATE the discrepancy report (System Inspections).

3 Milestone 3. Plan Approval and Communication

- 3.1 Milestone 3 obtains approval and communicates the approved plan to the relevant stakeholders.
- 3.2 Approvals
 - 1. As the inspection plan is being finalized, PRESENT the plan to the Wildfire Governance Steering Committee for approval.

Distribution Line Enhanced Annual Inspection Plan Creation [Document Title]

3.2 (continued)

2. After the Wildfire Governance Steering Committee approves the inspection plan, ROUTE the plan in EDRS.
 - a. ASSIGN the following roles as EDRS Reviewers:
 - Senior Manager, Distribution Asset Maintenance and Inspections
 - Senior Manager, Inspection Planning and Work Management
 - b. ASSIGN the following roles as EDRS Approvers:
 - Director, System Inspections Distribution
 - Senior Director, Distribution Asset Strategy
 - Vice President, System Inspections
 - Vice President, Electric Asset Management

4 Source Data

The following information serves as inputs to the plan creation process.

- 4.1 ACCESS Foundry data set “support structure v2” at [supportstructure_v2_enriched \(palantirfoundry.com\)](https://supportstructure_v2_enriched.palantirfoundry.com). This data set was accessed on December 27, 2022.
- 4.2 The definition of an “inspectable pole” varies between Asset Strategy and WDRMv3. SEE [Table 7, Inspectable Pole Definition Comparison](#).

Distribution Line Enhanced Annual Inspection Plan Creation [Document Title]

4.2 (continued)

1. SAP is the system of record for inspectable pole structures. MPMT pulls its data from SAP.

The data from SAP and GIS needs to match for the poles to be inspectable. Foundry has a 30-point checklist to ensure that SAP, EDGIS, Engage, Inspect App, and BW work properly.

Table 7: Inspectable Pole Definition Comparison

	Definition Used by Asset Strategy	Definition Used by WDRM v3
Object Type	ED. Pole	ED. Pole
Pole Owner	PG&E Customer Owned w/PG&E equipment	PG&E
Pole Subtype	Pole Tower Guy Stub Push Brace Tree Other Structure	Idle In Service
System Status	"INST" "PTTD" "UNVF"	"INST"
User Status	"PTTV" "PTTC" "INSV"	"PTTV" "PTTC" "INSV"
Functional Location	Starting with "ED"	"Starting with "ED"
Valid to Date	12/31/1999	12/31/1999
Material	Does not limit materials to wood, throughbore, or centerbore	Wood Throughbore Centerbore

Distribution Line Enhanced Annual Inspection Plan Creation [Document Title]

4.2 (continued)

2. The WDRMv3 provides wildfire consequence scores at the structure level. For HFTD and HFRA areas, these consequence scores are the basis for plat map consequence scores and inspection frequencies.

The planning model calculates wildfire probabilities of ignition, consequence, and risk scores for structures in the overhead distribution system in areas of PG&E's service territory.

- a. WDRM v3 produces these values for all wooden support structures. The RaDA team provides documentation [at this link](#). The EDGIS uses WDRM v3, dated January, 2022.
- b. [Table 8](#) summarizes the WDRM v3 output that was provided to Asset Strategy. RaDA assigned consequence scores to inspectable structures as follows:
 - (1) FOR inspectable support structures that were omitted from the WDRM v3, CALCULATE "consequence_version_3_4_backstop" as a proxy wildfire consequence scores per [Table 5](#). These include structures that were added to Foundry after January 1, 2022, non-wood structures, and tree connections.
 - (2) CALCULATE "consequence_version_3_4_backstop" of each plat map by averaging the wildfire consequence for all support structures in the plat map.
 - (3) CALCULATE "consequence_percent_rank" of each plat map as the percentage of the total plat maps whose consequence scores are lower than that value.
3. CATEGORIZE and ASSIGN plat maps to an inspection cycle according to [Table 8](#).

Table 8: Inspectable Pole Definition Comparison

consequence_percent_rank	Wildfire consequence_rank	inspection_cycle_year
> 0.99	extreme	1
≤0.99 and >0.98	severe	1
≤0.98 and >0.90	high	2
≤0.90 and >0.80	medium	3
≤0.80	low	3

Distribution Line Enhanced Annual Inspection Plan Creation [Document Title]

4.2 (continued)

4. CREATE "Distribution_OH_Inspection_Strategy_5x5 (2022-12-23).csv" and PROVIDE it to Asset Strategy.

Note that wildfire consequence varies significantly across plat maps, with the highest consequence plat maps in high fire areas being over 100-fold higher in consequence than the lowest -consequence plat maps. SEE [Table 9](#).

The highest consequence plat maps are also roughly 10-fold higher in consequence than the average plat map. As a result, very few structures and plat maps comprise a significant amount of the total wildfire consequence.

Table 9. WDRM v3 for Plat Map Level

3 Year		2 Year	1 Year	
11,904 plat maps	1,488 plat maps	1,190 plat maps	149 plat maps	149 plat maps
485,899 support structures	93,828 support structures	65,648 support structures	6,812 support structures	5,347 support structures
22.51% risk	27.91% risk	37.87% risk	5.94% risk	5.76% risk
78 top 10% risk structures	555 top 10% risk structures	2053 top 10% risk structures	757 top 10% risk structures	819 top 10% risk structures
Consequence				
Low	Medium	High	Severe	Extreme

4.3 About the proxy risk data set from RaDA.

1. Due to differences in the asset registry at the time of the model build, and the movement of structures throughout the year, the WDRMv3 model does not include approximately 150,000 inspectable structures.

Out of the 150,000 structures, 66,000 were omitted from the WDRMv3 due to a known error that caused the issue. The remaining structures were omitted due to structure movement throughout the year.

The RaDA team assigned omitted structures proxy scores for probability of ignition, consequence, and overall risk. A summary of these proxy scores is provided in [Table 10](#).

The resulting proxy scores are considered a conservative estimate of the risk of the structure.

Distribution Line Enhanced Annual Inspection Plan Creation [Document Title]

4.3 (continued)

2. Tree connections were assigned the same scores as the nearest support structure modeled in the WDRM. This is reasonable, as a tree connection is similar to a wood pole.

For omitted wood poles, we selected the largest values from a modeled WDRM support structure within a 500-meter radius. Various radii were used to determine the optimal distance for a representative structure. As the WDRM only modeled wood poles, this was a reasonable approximation.

The maximum value was chosen to be the most conservative estimate, as the covariates included in the model are unknown for the omitted structure. The worst-case scenario is assumed for the structure.

For non-wood structures, the largest values of consequence were selected to be the most conservative risk input. Due to the unknown variables of the structure, as well as not modeling non-wood structures, this was considered a reasonable estimate.

For all other structures that did not have a risk score, the 90th percentile, or P90 value, was used as the estimated point of inspection (POI) and consequence score. This provided the most conservative estimate for risk.

Distribution Line Enhanced Annual Inspection Plan Creation [Document Title]

Table 10. Proxy Risk Assignments for Structures Omitted from WDRMv3

Structure Type	Count	Variable	Methodology
Tree Connection	18,886	Probability of Ignition	Nearest support structure with a WDRM v3 risk score
		Consequence	
		Wildfire Risk	
Wood Pole	40,395	Probability of Ignition	Largest value from a structure with a WDRM v3 risk score within a 500-meter radius
		Consequence	
		Wildfire Risk	
Non-Wood Pole	5,795	Probability of Ignition	Medial probability of ignition for all HFRA structures with a WDRM v3 probability of ignition score
		Consequence	Largest consequence value in a 500-meter radius
		Wildfire Risk	Product of proxy wildfire consequence and probability of ignition
Structure more than 500 meters from a structure with a WDRM v3 risk score	836	Probability of Ignition	90 th percentile of probability of ignition proxy scores
		Consequence	90 th percentile of consequence proxy scores
		Wildfire Risk	90 th percentile of wildfire risk proxy scores

Distribution Line Enhanced Annual Inspection Plan Creation [Document Title]

Table 11 Consequence-Based Inspection Frequency

	Structure Count		Eyes on Risk	2023	2024	2025	2026	2027
Extreme	5,348	5,348	5.9%	AG	AG	AG	AG	AG
Severe	6,815	6,815	5.9%	AG	AG	AG	AG	AG
High 1	65,860	30,308	17.3%	G	A	G	A	G
High 2		35,372	20.5%	A	G	A	G	A
Medium 1	93,884	30,062	8.8%	G		A	G	
Medium 2		29,552	8.8%	A	G		A	G
Medium 3		34,260	10.2%		A	G		A
Low 1	486,048	162,116	7.4%	G	A		G	A
Low 2		156,445	7.2%		G	A		G
Low 3		167,487	8.0%	A		G	A	

Note: A is for Arial, G is for Ground

END of Instructions

DEFINITIONS

High Fire Risk Area (HFRA): A purpose-built map for use in scoping Public Safety Power Shutoff events identifying areas where risk factors for the potential of catastrophic fire from utility infrastructure ignition during offshore wind events is higher.

High Fire Threat District (HFTD): Areas adopted by the California Public Utilities Commission (CPUC) with elevated or extreme wildfire risk and in proximity to communities at risk.

Wildfire risk score: The wildfire risk score is the quantification of wildfire risk, represented by the probability of ignitions associated with electric grid infrastructure, combined with the consequences if that ignition propagates into a wildfire.

Eyes on risk (EOR): A calculated percentage of total wildfire risk that is evaluated as part of an inspections program, with a goal of continued risk awareness rather than risk mitigation.

Top 10% of wildfire risk: Structures in the top 10% of wildfire risk are the structures with the largest VDRM v3 wildfire risk values that, combined, account for 10% of the total wildfire risk.

Inspectable pole: Asset Strategy uses an inspectable pole dataset in Foundry. Information in Foundry is pulled from GIS and SAP. If there is a mismatch between data, Foundry uses GIS data, and notes the mismatch between GIS and SAP. The WDRM v3 included a different definition of inspectable structures than used by Asset Strategy.

Distribution Line Enhanced Annual Inspection Plan Creation [Document Title]

IMPLEMENTATION RESPONSIBILITIES

Asset Strategy personnel are responsible for implementing this procedure.

GOVERNING DOCUMENT

[Utility Standard TD-8123S, "Electric System \(T/S/D\) Patrol, Inspection, and Maintenance Program"](#)

COMPLIANCE REQUIREMENT / REGULATORY COMMITMENT

[CPUC GO 165, "Inspection Requirements for Electric Distribution and Transmission Facilities"](#)

Records and Information Management:

Information or records generated by this procedure must be managed in accordance with the Enterprise Records and Information Management (ERIM) program, policy, standards, and Enterprise Records Retention Schedule (ERRS). Refer to [GOV-7101S, "Enterprise Records and Information Management Standard,"](#) and related standards. Management of records includes, but is not limited to:

- Integrity
- Storage
- Retention and Disposition
- Classification and Protection

REFERENCE DOCUMENTS

Developmental References:

- [Electric Distribution Preventive Maintenance Manual \(TD-2305M\)](#)
- [Utility Procedure TD 8123P 100, "Transmission Patrols and Enhanced Inspection Frequency Guidelines"](#)
- Utility Standards
 - [TD-2305S, "Electric Distribution Maintenance Requirements"](#)
 - [TD-8124S, "Detailed System Inspections Framework"](#)
- [Wildfire Mitigation Plan \(WMP\)](#)

Distribution Line Enhanced Annual Inspection Plan Creation [Document Title]**REFERENCE DOCUMENTS (continued)****Supplemental References:**

- [Utility Standard 1464S, "Preventing and Mitigating Fires While Performing PG&E Work"](#)

APPENDICES

NA

ATTACHMENTS

NA

DOCUMENT RECISION

This document cancels and supersedes "Distribution Line Enhanced Annual Inspection Plan Creation," Rev. 0, dated 8/25/2022.

DOCUMENT APPROVER Senior Director, Asset Strategy Director, System Inspections**DOCUMENT OWNER** Senior Director, Asset Strategy**DOCUMENT CONTACT** Program Manager, Principal, Distribution Asset Strategy Senior Manager, Asset Maintenance and Inspection**REVISION NOTES**

Where?	What Changed?
Entire document	This entire procedure was revised to reflect the strategic changes in creating the 2023 Distribution Line Detailed Inspection Work Plan.