

PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3298



August 27, 2020

TA2020-867

Lise Jordan, Sr. Director
Regulatory Compliance and Quality Assurance
Pacific Gas and Electric Company (PG&E)
77 Beale Street
San Francisco, CA 94105

SUBJECT: Record Review Findings - Audit of PG&E's Lakeville Division, Transmission

Dear Ms. Jordan:

On behalf of the Electric Safety and Reliability Branch (ESRB) of the California Public Utilities Commission (CPUC), Ivan Garcia, Stephen Lee, Brandon Vazquez, and Lana Tran of ESRB staff conducted the records review part of PG&E Lakeville Division Transmission audit. ESRB will conduct the field portion of the audit from September 14 through September 18, 2020.

ESRB's review of PG&E Lakeville's records identified violations of one or more General Orders. An itemized copy of the violations identified by staff is enclosed along with this letter. Please provide an electronic copy of all corrective actions and preventive measures performed by PG&E to remediate and prevent the recurrence of such violations by September 28, 2020.

If you have any questions concerning this audit, please contact Ivan Garcia at (916) 928-5875 or ivan.garcia@cpuc.ca.gov.

Sincerely,

A handwritten signature in blue ink, appearing to read "Banu Acimis".

Banu Acimis, P.E.
Program and Project Supervisor
Electric Safety and Reliability Branch
Safety and Enforcement Division
California Public Utilities Commission

Enclosure: CPUC Audit Record Review Findings

Cc: Lee Palmer, Director, Safety and Enforcement Division (SED), CPUC
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Stephen Lee, Utilities Engineer, ESRB, SED, CPUC
Lana Tran, Public Utilities Regulatory Analyst, ESRB, SED, CPUC

PG&E LAKEVILLE DIVISION TRANSMISSION AUDIT RECORD REVIEW FINDINGS

I. Records Review

During the record review part of the audit, ESRB staff reviewed the following records:

- The current version of PG&E’s “Electric Transmission Preventive Maintenance (ETPM) Manual TD-1001M”
- Vegetation Management Quality Control and Quality Assurance policy and procedures
- A list of all circuits in the division and circuit maps, with the circuits in Tier 2 or Tier 3 High Fire Hazard areas identified.
- The circuits in the division that are subject to Public Safety Power Shutoff (PSPS)
- Detailed inspections, detailed climbing inspections and patrols for the Lakeville Division for the past 10 years
- A summary of modifications, to the inspection and patrol procedures as a result of the Wildfire Safety Inspection Program (WSIP)
- Completed work orders with notifications from the past 12 consecutive calendar months, cancelled work orders with notifications from the past 12 consecutive calendar months, and completed late work orders from the last 60 consecutive calendar months.
- Infrared testing results from four of the circuits in the division
- LiDAR and spectral imagery records taken in the Lakeville Division
- Intrusive test results from four poles in each of the circuits in the division
- New overhead and underground construction projects completed in the last 12 months for the entire division
- Insulator wash records for 2018-2020
- Vegetation management records from January 2018 through April 2020
- Relevant periodic or non-periodic inspection records or maintenance items for 2019 and 2020.
- Qualification records of all PG&E employees and contractors who conducted inspections, patrols, and vegetation related inspections and tree trimming in the Lakeville Division in 2018, 2019, and 2020

II. Records Violations

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

1. General Order (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.”

ESRB staff reviewed work orders from Attachment 4 - Data Request # 9 that were created between April 1, 2015 and April 23, 2020 for the Lakeville Division. PG&E’s Electric Transmission Preventive Maintenance Manual (ETPM), Revision 4, effective November 20, 2018, Table 5 below defines the priority codes and associated time frames for the response/repair action.

Table 5. Priority Codes

Priority Code	Priority Description
A	The condition is urgent and requires immediate response and continued action until the condition is repaired or no longer presents a potential hazard. SAP due date will be 30 days to allow time for post-construction processes and notification close-out.
B	Corrective action is required within 3 months from the date the condition is identified. The condition must be reported to the transmission line supervisor as soon as practical.
E	Corrective action is required within 12 months from the date the condition is identified.
F	Corrective action is recommended within 24 months from the date the condition is identified, (due beyond 12 months, not to exceed 24 months). Requires Director approval.

ESRB found a total of 1,490 work orders in Attachment 4 - Data Request # 9, Tab 1, that were completed late from their respective due dates per Table 5, Priority Codes specified in PG&E’s ETPM, Revision 4. Table 1 below is a breakdown of the 1,490 work orders completed late for each priority. It also shows the percentage breakdown of the total work orders completed for the period.

Table 1 - Number and percentage of work orders completed late by priority codes

Priority Codes	Work Orders Completed Late	Total Work Orders	Percent of Late Work Orders
A	18	39	46.2%
B	359	892	40.2%
E	1,051	5,952	17.7%
F	62	794	7.8%
Total	1,490	7,677	19.4%

Table 2 below identifies the most overdue completed work orders for each priority.

Table 2 - Most overdue completed work orders per priority and number of days past due

Priority Codes	Most Overdue Completed Work Orders (WO #s)	Number of Days Past Required End Dates
A	117391195	285
B	115649497	366
E	114624969	389
F	111794200	370

Work order #117391195 was identified on June 4, 2019 and given a required end date of July 4, 2019 for the corrective action. The work was not completed until April 14, 2020.

Work order #115649497 was identified on January 7, 2019 and given a required end date of April 7, 2019 for the corrective action. The work was not completed until April 7, 2020.

Work order #114624969 was identified on April 4, 2018 and given a required end date of April 4, 2019 for the corrective action. The work was not completed until April 27, 2020.

Work order #111794200 was identified on May 24, 2016 and given a required end date of May 24, 2018 for the corrective action. The work was not completed until May 29, 2020.

ESRB also found a total of 1,848 work orders in Attachment 4 - Data Request # 5, Tab 3, that are either completed late or still open, but have extended beyond their respective due dates per Table 5, Priority Codes specified in PG&E's ETPM, Revision 4. Table 3 below is a breakdown of the 1,848 work orders that are still open

and past their required due date for each priority. It also shows the percentage breakdown of the total work orders that are still open for the period.

Table 3: Late Non-Exempt Work Orders by Priority

Priority Code	Number of Work Orders	Total Work Orders	Percent of Late Work Orders
B	40	40	100%
E	1,787	1,873	95.4%
F	21	28	75%
Total	1,848	1,941	95.2%

Table 4 below identifies the most overdue late non-exempt work orders for each priority.

Table 4 – Most Overdue Non-exempt Work Orders Past the Required End Date by Priority and Number of Days Past Due

Priority Codes	Most Overdue Open Work Orders (WO #s)	Number of Days Past Required End Date*
B	115557540	388
E	113120277	628
F	111429232	802

**If the work order is still pending, the number of days past the required end date will be calculated as of April 23, 2020.*

Work order #115557540 was identified on December 19, 2018 and given a required end date of March 19, 2019. The work was not completed until April 10, 2020.

Work order #113120277 was identified on August 4, 2017 and given a required end date of August 4, 2018. As of April 23, 2020, this work is still not complete.

Work order #111429232 was identified on February 11, 2016 and given a required end date of February 11, 2018. As of April 23, 2020, this work is still not complete.

2. 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 128, Rule 17.2, Inspection states in part:

“Systems shall be inspected by the operator frequently and thoroughly for the purpose of insuring that they are in good condition and in conformance with all applicable requirements of these rules.”

PG&E reported that there were no patrols or inspections that were completed late from the list in Data Request #7a. However, ESRB identified the following patrols and inspections that were completed late.

PG&E states in Pre-Audit Data Response #2, Question 3(a), “The Notification Date refers to the date that the LC/PR tag was created. The Reference Date refers to the date that the LC/PR tag was completed. The Required End Date refers to the date that the LC/PR tag was due.”

ESRB staff identified that PG&E completed two overhead inspections past their required end date for the following notifications provided below in Table 5.

Table 5: Overhead Inspections Completed Late

OH Inspection Notification Number	Required End Date	Reference Date	Days Past Due
115531374	06/30/2019	08/13/2019	44
115531366	06/30/2019	08/13/2019	44

ESRB staff identified that PG&E completed 7,101 overhead patrols past their required end date. Due to the number of these identified late patrols, ESRB will not individually list the notification numbers in this report.

ESRB staff identified that PG&E completed four underground inspections past their required end date for the following notifications provided below in Table 6.

Table 6: Underground Inspections Completed Late

UG Inspection Notification Number	Required End Date	Reference Date	Days Past Due
106009054	04/11/2012	09/04/2012	146
105982287	09/30/2012	10/25/2012	25
105158693	11/01/2011	11/16/2011	15
105158702	11/01/2011	11/16/2011	15