

## PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE  
SAN FRANCISCO, CA 94102-3298



September 30, 2019

EA2019-844

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

**SUBJECT:** Audit of PG&E's San Francisco Division

Dear Ms. Jordan:

On behalf of the Electric Safety and Reliability Branch (ESRB) of the California Public Utilities Commission (CPUC), Quang Pham, Rickey Tse, Andie Biggs, and Karin Nguyen of ESRB staff conducted an electric distribution audit of PG&E's San Francisco Division (Division) from July 22, 2019 through July 26, 2019. During the audit, ESRB staff conducted field inspections of PG&E's facilities and equipment and reviewed pertinent documents and records.

As a result of the audit, ESRB staff identified violations of one or more General Orders (GOs). A copy of the audit findings itemizing the violations is enclosed. Please provide a response within 30 days of your receipt of this letter indicating all corrective actions and preventive measures, taken or planned, to address the violations to ensure compliance with GO requirements. The response should indicate the date of each remedial action and preventive measure completed within 30 days. For any outstanding items not addressed within 30 days, please provide the projected completion dates of all actions for all violations outlined in Sections II & IV of the enclosed Audit Findings and responses to Sections V & VI.

If you have any questions concerning this audit, please contact Quang Pham at 415-703-4763 or [quang.pham@cpuc.ca.gov](mailto:quang.pham@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 Findings

Cc:

Lee Palmer, Director, Safety and Enforcement Division, CPUC  
Charlotte TerKeurst, Program Manager, ESRB, CPUC  
Quang Pham, Senior Utilities Engineer – Specialist, ESRB, SED, CPUC

## AUDIT FINDINGS

### I. Records Review

During the audit, ESRB staff reviewed the following records:

- 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.
- Patrol and detailed inspection records from the past 72 consecutive calendar months.
- Feeder reliability metrics and sustained outages in the Division from the last 60 calendar months.
- Master Map displaying approximate locations of the plat maps administered by the Division.
- New Construction (both overhead and underground) projects in the last 12 months not subject to a patrol or detailed inspection.
- Pole loading calculations from the last 12 consecutive calendar months including completion dates.
- Third-party notifications sent in the last 60 consecutive calendar months and received from the last 60 consecutive calendar months.
- List of inspectors and patrolmen active in the Division from 2014 to year to date (YTD).
- Electronic training records for inspectors from 2014 to YTD.
- Completed equipment test records, deferred equipment test records, and temporarily delayed equipment tests during the last three years.

### II. Records Violations

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

#### 1. GO 95, Rule 18-B 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.”*

**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.”*

ESRB staff reviewed late work orders completed within the San Francisco Division for the past 60 months (from June 1, 2014 to May 31, 2019). PG&E’s Electric Distribution Preventative Maintenance (EDPM) Manual, published April 1, 2016, defines the priority codes and associated time frames for the response/repair action as follows:

- **Priority A – Safety / Emergency Immediate Response**  
An emergency is defined as any activity in response to an outage to customer(s) or an unsafe condition requiring immediate response or standby to protect the public.
- **Priority B – Urgent Compliance (Due within 3 months)**
- **Priority E – Compliance (Due 3-12 months)**
- **Priority F – Compliance (For Regulatory Conditions, the Recommended Repair Date is the due date for the next Inspection (UG = 3 years, OH = 5 years).**

ESRB staff reviewed late work orders and determined that PG&E did not address a total of 184 work orders by their assigned due dates. Of these 184 work orders, 151 were classified as “late non-exempted” and 33 were classified as “late-exempt”.

Per GO 95, Rule 18B(1)(b), “Correction times may be extended under reasonable circumstances, such as: third party refusal, customer issue, no access, permits required, system emergencies (e.g. fires, severe weather conditions)”.

PG&E classifies work orders under these circumstances as “late-exempt” as they are exempted from completion by their assigned due date.

Table 1 below breaks down the 184 late work orders by the given priority, including the total number of late work orders, as well as non-exempt and cancelled work orders, which are included in the total. No work orders with the priority code “A” were late in the past 60 months.

Table 1: Late Work Orders

<b>Priority Codes</b>	<b>Total Late Work Orders</b>	<b>Non-Exempt Late Work Orders</b>	<b>Cancelled Late Work Orders</b>
<b>B</b>	29	26	12
<b>E</b>	140	111	3
<b>F</b>	15	14	11
<b>Total</b>	184	151	26

Of the 151 non-exempt late work orders, PG&E completed only one work order two years past the assigned due date. Table 2 below identifies the most overdue non-exempt work orders for each priority.

Table 2: Most Overdue Work Orders

<b>Priority Codes</b>	<b>Most Overdue Work Order (WO#s)</b>	<b>Number of Days Past Assigned Due Date</b>
<b>B</b>	114373294	141
<b>E</b>	111701736	698
<b>F</b>	115670997	70

PG&E identified work order #114373294 on March 8, 2018 to replace a damaged vault cover with an expected completion date of June 8, 2018. PG&E did not complete the work until October 27, 2018.

PG&E identified work order #111701736 on June 6, 2016 to replace a damaged vault cover with an expected completion date of June 6, 2017. PG&E did not complete the work until May 5, 2019.

PG&E identified work order #115670997 on January 8, 2019 to replace a damaged relay with an expected completion date of March 1, 2019. PG&E cancelled the work order on May 10, 2019.

### III. Field Inspection

During the field inspection, ESRB staff inspected the following facilities:

Order of Site Visits	Structure Type	Structure ID	Address
1	Pad mount Transformer	T-7265	3271 18 <sup>th</sup> St
2	Buddy pole	Pole ID: 120245806	18 <sup>th</sup> St & Shotwell St
3	UG Transformer	T-6738	2055 Folsom St
4	Switch	SW-18489	2011 Folsom St
5	Pole	Pole ID: 110036416	Folsom St & 16 <sup>th</sup> St
6	UG Transformer	T-79759	701 Alabama St
7	Pole	Pole ID: 1208000928	Dwight and Bowdoin
8	Pole	Pole ID: 110011162	618 Dwight St
9	Pole	Pole ID: 110031781	730 Dwight St
10	Pole	Pole ID: 120079121	1 Bayview Park Road
11	Pole	Pole ID: 110026555	1326 Shafter Ave
12	Pole	Pole ID: 110454978	Palou Ave & Hawes St
13	Pole	Pole ID: 11021946	4248 Balboa St
14	Pole	Pole ID: 110021947	697 44 <sup>th</sup> Ave
15	Pole	Pole ID: 110021948	725 44 <sup>th</sup> Ave
16	Pole	Pole ID: 110021946	725 44 <sup>th</sup> Ave
17	Pole	Pole ID: 110021944	745 44 <sup>th</sup> Ave
18	Electrical Distribution Line	N/A	757 44 <sup>th</sup> Ave
19	Pole	Pole ID: 110021942	767 44 <sup>th</sup> Ave
20	Pole	Pole ID: 110021958	795 44 <sup>th</sup> Ave
21	Pole	Pole ID: 110013889	4036 Balboa St.
22	Pole	Pole ID: 110013723	678 41 <sup>st</sup> Ave
23	Pole	Pole ID: 110013725	656 41 <sup>st</sup> Ave
24	Pole	Pole ID: 110020287	1272 34 <sup>th</sup> Ave
25	Pole	Pole ID: 110050457	2131 Quintara St
26	Pole	Pole ID: 110050484	2100 31 <sup>st</sup> Ave
27	Pole	Pole ID: 110050462	2182 31 <sup>st</sup> Ave
28	Pole	Pole ID: 110049265	2170 25 <sup>th</sup> Ave
29	Pole	Pole ID: 110041056	527 Santiago St
30	Pole	N/A	27 Santa Rita Ave
31	Pole	Pole ID: 110043937	543 Burnett Ave
32	Pole	Pole ID: 110046852	24 Beulah St
33	Pad mount Transformer	T - 6879	Stanyan St & Waller St
34	UG Transformer	T - 6878	Stanyan St & Haight St
35	UG Transformer	T - 3311	Shrader St & Haight St
36	Pole	Pole ID: 110046837	530 Schrader St
37	Electrical Distribution Line	N/A	536 Shrader St
38	Pole	Pole ID: 110046836	Haight St & Shrader St
39	UG Transformer	T-3312	Haight St & Shrader St
40	Switch	SW-1428	270 Masonic Ave

Order of Site Visits	Structure Type	Structure ID	Address
41	Secondary Box	N/A	109 Masonic Ave
42	Pole	Pole ID: 110051731	120 Anza St
43	UG Transformer	T-3493	1 Clement St
44	Secondary Splice Box	N/A	12 Clements St
45	UG Transformer	T-2687	2186 Geary Blvd
46	Pole	Pole ID: 120800915	421 Los Palmos Drive
47	Pole	Pole ID: 110034225	401 Los Palmos Drive
48	Pole	Pole ID: 110041545	625 Edna St
49	Pole	Pole ID: 110032949	1253 Alemany Blvd
50	Pole	Pole ID: 110038573	665 Cayuga Ave
51	Pole	N/A	628 Cayuga Ave
52	Pole	Pole ID: 110042508	Cayuga Ave & Russeu St
53	Pole	Existing Pole ID: 110025074	44 Fredson Court
54	Pole	Pole ID: 110014984	519 Huron Ave
55	Pole	Pole ID: 110045482	255 Farallones St

#### IV. Field Inspection Violations

ESRB staff observed the following violations during the field inspection:

**1. GO 95, Rule 18-A-2, Resolution of Potential Violations of General Order 95 and Safety Hazards** states:

*“Where a communications company’s or an electric utility’s (Company A’s) actions result in potential violations of GO 95 for another entity (Company B), that entity’s (Company B’s) remedial action will be to transmit a single documented notice of identified potential violations to the communications company or electric utility (Company A) within a reasonable amount of time not to exceed 180 days after the entity discovers the potential violations of GO 95. If the potential violation constitutes a Safety Hazard, such notice shall be transmitted within ten (10) business days after the entity discovers the Safety Hazard.”*

1.1 ESRB staff identified a buddy pole on Shotwell St and 18<sup>th</sup> St (Location 2) that required a 3<sup>rd</sup> party notification of a communications transfer. In response to data requests, PG&E confirmed there was no Third-Party Notification at this location and PG&E did not notify the third party in a timely manner. Only after the audit, on September 17, 2019, PG&E issued a Third-Party Notification (#117891173).

1.2 ESRB staff identified a pole at 421 Los Paltos Drive (Location 46) that required a 3<sup>rd</sup> party notification of a communications transfer. In response to data requests, PG&E confirmed there was no Third-Party Notification at this location and PG&E did not notify the third party in a timely manner. Only after the audit, on September 13, 2019, PG&E issued a Third-Party Notification (#117880603).

**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 poles located at the following addresses had either a missing or damaged ‘high voltage’ sign:

2.1 Pole located at Folsom St & 16<sup>th</sup> St, San Francisco (Location 5)

2.2 Pole located at 401 Los Paltos Drive, San Francisco (Location 47)

2.3 Pole located at 519 Huron Ave, San Francisco (Location 54)

**3. 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.”*

3.1 Pole located at 543 Burnett Ave, San Francisco (Location 31) had a guy wire under strain from a tree branch. Additionally, a nearby tree engulfed in vines was identified as possibly being under strain and in danger of collapsing.

3.2 Pole located at Palou Ave and Hawes St, San Francisco (Location 12) had vegetation contact above the anchor guy insulator.

3.3 The guy wire at 757 44<sup>th</sup> Ave, San Francisco (Location 18) was in contact with a nearby service drop causing discoloration and abrasion between the lines. ESRB staff noted PG&E made repairs by using electrical tape and plastic tubing to provide a physical buffer from the abrasion between the guy wire and service drop.

The following poles showed signs of damages:

3.4 Pole located at 2100 31<sup>st</sup> Ave (Location 26) showed signs of deterioration at the top of pole.

3.5 Pole located at Haight Street and Shrader Street (Location 38) showed circumference reduction and deterioration at the bottom half of the pole.

3.6 Pole located at Cayuga Ave and Russeu Street (Location 52) showed signs of splitting.

**4. GO 95, Rule 91.3-B, Location of Steps** states in part:

*“The lowest step shall be not less than 8 feet from the ground line, or any easily climbable foreign structure from which one could reach or step. Above this point steps shall be placed, with spacing between steps on the same side of the pole not exceeding 36 inches, at least to that conductor level above which only circuits operated and maintained by one party remain.”*

4.1 Pole located at 745 44<sup>th</sup> Ave (Location 17) lowest pole step measured at 7 feet 10 inches from the ground line during the audit. ESRB staff noted PG&E removed the pole step during the audit.



4.2 Pole located at 2182 31<sup>st</sup> Ave (Location 27) lowest pole step measured at 7 feet 2 inches from the ground line during the audit. ESRB staff noted PG&E removed the pole step during the audit.

4.3 Pole located at Cayuga Ave and Russeu St (Location 52) lowest pole step measured at 7 feet 6 inches from the ground line during the audit. ESRB staff noted PG&E remove the pole step during the audit.

**5. 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.”*

5.1 The secondary box located at 109 Masonic Ave, San Francisco (Location 41) has a grade difference between the sidewalk and lid which poses a potential tripping hazard.

**V. Observations**

The following locations had third-party potential safety concerns, please provide documentation showing that the following third parties were notified:

1. Pole located at 697 44<sup>th</sup> Ave, San Francisco (Location 14) had a third-party guy wire in contact with the cross arm.
2. Pole located at 697 44<sup>th</sup> Ave, San Francisco (Location 14) had corrosion on the bottom of the meter box.
3. Pole located at 678 41<sup>st</sup> Ave, San Francisco (Location 22) had corrosion on the communication box.
4. Four communication lines at 656 41<sup>st</sup> Ave, San Francisco (Location 23) were tied to electrical service drops.
5. Pole located at 2170 25<sup>th</sup> Ave, San Francisco (Location 28) has a communication line installed closer than the required 6 feet clearance between the electrical distribution lines.
6. Fire alarm line at 536 Shrader St, San Francisco (Location 37) had balloon remnants on the line.

## VI. Outstanding Items

As part of the response to this letter, please provide responses to the following pending data requests:

1. **DR#11.3c** – Missing Test and Treat (#114414589). After reviewing requested records, ESRB staff requested work orders for reinforced pole & replaced pole for 101834166 and replaced pole for 101832282.
2. **DR#21** – Did not receive correct records. Test and Treat results for DR#21 are the same as those provided in DR#20.
3. **DR#22** – As part of the DR, PG&E produced new Pole Loading Calculation (PLC) for location 53. However, original PLC had pole class at 1 and the new PLC provided has pole class at 2. Please confirm pole class of the incoming replacement pole.
4. **DR#23** – ESRB staff requested a follow up for 3<sup>rd</sup> party notifications created for SAP ID: 101815803 [“Issued Third Party Notification #117822139, unauthorized attachment” & “Issued Third Party Notification # 117822594, inadequate guying of communication facilities”].