

**PACIFIC GAS AND ELECTRIC COMPANY**

**GENERAL ORDER 165**

**ANNUAL ELECTRIC DISTRIBUTION INSPECTION REPORT**

**FOR 2016**

June 26, 2017

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# **PACIFIC GAS AND ELECTRIC COMPANY GENERAL ORDER 165 ANNUAL ELECTRIC DISTRIBUTION INSPECTION REPORT FOR 2016**

## **I. 2016 ELECTRIC DISTRIBUTION INSPECTION SUMMARY**

Pursuant to Section III.D of the California Public Utilities Commission's (Commission) General Order (GO) 165, Pacific Gas and Electric Company (PG&E) submits its Annual Electric Distribution Inspection Report which details PG&E's 2016 electric distribution patrol and inspection activities.

Table 1 lists five categorical types<sup>1</sup> of electric distribution inspections required by GO 165: Overhead (OH) Patrols, Underground (UG) Patrols, OH Detailed Inspections, UG Detailed Inspections, and Wood Pole Intrusive. Table 1 denotes the total units of work due by inspection type for the 2016 reporting period and the number of outstanding or late (not completed before the date due) inspections within the same reporting period for each of the five categories.

The data presented in Table 1 is a point-in-time reporting of inspections due and outstanding/late in 2016, and is, as of June 26, 2017, the date this report was signed by the verifying officer, deemed as the most accurate data available. As shown in the table, by December 31, 2016, PG&E had completed 99.99% of its OH patrols, 99.97% of its OH detailed inspections, 99.99% of its UG patrols, 99.82% of its UG detailed inspections, and 100% of its wood pole intrusive inspections by their 2016 due dates.

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<sup>1</sup> GO 165 only requires four categorical types, but in order to present the data in a more meaningful format, like prior reports this report divides the "Patrol" category in the sample report template in GO 165 into the subcategories "OH Patrols" and "UG Patrols".

**Table 1 – 2016 Electric Distribution Inspection Summary**

Type of Inspections (1)	Due (2)	Outstanding / Late (3)
OH Patrols	1,148,538	4
OH Detailed Inspections	489,818	130
UG Patrols	247,445	1
UG Detailed Inspections	143,577	251
Wood Pole Intrusive	171,057	0

**Notes:****(1) Definition of Reporting Unit Basis**

- a. OH: PG&E defines an overhead unit as any PG&E solely owned, PG&E jointly owned, or third party owned pole supporting PG&E equipment or conductors operating at less than 60,000 volts. PG&E also patrols and inspects the PG&E owned overhead equipment, overhead conductors, and streetlights on those poles, but these facilities are not counted as additional overhead units for the purposes of this report.
- b. UG: PG&E defines an underground unit as any PG&E or third party owned padmount facility, subsurface enclosure, or vault containing PG&E primary cables or equipment. PG&E also patrols padmount facilities, subsurface enclosures, and vaults containing only secondary facilities, but these facilities are not counted as underground units for the purposes of this report.
- c. Wood Pole Intrusive: PG&E defines a wood pole intrusive unit as any intrusively inspected PG&E solely or jointly owned pole.

The patrol unit counts are generally based on the most recent preceding detailed inspection map unit counts.

**(2) Definition of “Due”**

Units in the “Due” column represent the total units of work by inspection type that PG&E determined should have been completed by the end of 2016. This data is based on year-end analysis and not on projections made at the beginning of 2016.

In addition to regularly scheduled patrol and inspection units, this column includes re-inspection units that PG&E scheduled for completion in 2016. Re-inspection units are discussed in previously submitted GO 165 Annual Inspection Reports.

Although GO 165 requires detailed inspections of padmount facilities on a minimum five year cycle, PG&E performs detailed inspections of padmount facilities on a three year cycle. For the purposes of this report, padmount facilities are “due” based on PG&E’s more frequent underground three year detailed inspection cycle.

Wood pole intrusive data in this column represents the total poles intrusively tested by PG&E’s Pole Test & Treat Program. PG&E maintains a 10 year inspection cycle for most poles; however, poles under 15 years old and previously tested poles under 50 years old with an original treatment of pentachlorophenol are intrusively tested on a 20 year cycle per the maximum inspection interval required by GO 165.

### (3) Definition of “Outstanding / Late”<sup>2</sup>

Units in the “Outstanding / Late” column represent the total units of work by inspection type that PG&E did not inspect within a year as defined by D.13-06-011, Appendix B, at p. B-3:

“For the purpose of implementing the patrol and detailed inspection intervals in [GO 165 Table 1], the term ‘year’ is defined as 12 consecutive calendar months starting the first full calendar month after an inspection is performed, plus three full calendar months, not to exceed the end of the calendar year in which the next inspection is due. A required inspection may be completed any time before the expiration of the associated inspection interval using this definition of ‘year,’ but not after. The completion of an inspection starts a new inspection interval that must be completed within the prescribed timeframe using this definition of ‘year.’”

See Section II below for additional detail on the “Outstanding / Late” units.

As discussed above under the definition of “Due”, PG&E performs detailed inspections of padmount facilities on a three year cycle as opposed to the five year cycle established by GO 165. For the purposes of this report, padmount facilities are considered “Outstanding / Late” if they were due to be inspected by the due dates discussed above, adjusted for PG&E’s three year inspection cycle, but were not.

For wood pole intrusive inspections, the term “year” is defined in GO 165 as a calendar year. Units in the wood pole intrusive “Outstanding / Late” column in

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<sup>2</sup> Although the Sample Report Template in GO 165 Section III.D uses the heading “Outstanding”, it defined Outstanding as inspection reports that were not completed in the reporting period. As discussed above, PG&E is including in the “Outstanding / Late” column units that were completed in 2016 (the reporting period), and hence are not really Outstanding, but were not done within a year as discussed above, and hence are “Late”.

Table 1 represent the total units that PG&E determined should have been intrusively inspected by the end of the 2016 calendar year but were not.

## **II. EXPLANATION OF OUTSTANDING/LATE UNITS**

There are a total of 4 OH patrol, 130 OH detailed inspection, 1 UG patrol and 251 UG detailed inspection units in the “Outstanding / Late” column in Table 1. There were no “Outstanding” wood pole intrusive inspection units in 2016.

- a. One hundred twenty six (126) OH and two hundred seventeen (217) UG detailed inspection units are in the “Outstanding / Late” column of Table 1 due to inspection documentation issues identified with one inspector’s work in PG&E’s Kern Division. PG&E’s work verification program found that this inspector did not perform a thorough inspection on the overhead and underground facilities. These units are being included as outstanding because PG&E cannot be certain they were inspected before their 2016 GO 165 inspection due date. These units were to be inspected in April through May 2016 and were re-inspected in May and June 2016. Days from due date to re-inspection date range from 1 to 47 days.
- b. Six (6) UG detailed inspections in PG&E’s Diablo Division, three (3) UG detailed inspections in PG&E’s East Bay Division, three (3) UG detailed inspections in PG&E’s San Jose Division, two (2) UG detailed inspections in PG&E’s Central Coast Division and one (1) UG detailed inspection in PG&E’s North Valley Division were not inspected on time due to human error. The transfer of department responsibilities from Transmission Operations to Distribution Operations resulted in these missed inspections. This gap was identified during the risk assessment on February 22, 2017.

- Once the error was discovered, PG&E updated maintenance plans and inspected all the facilities by May 24, 2017.
- c. Four (4) OH detailed inspections in PG&E's Sierra Division were not performed on time due to human error. Four PG&E owned transformers were identified on a privately owned line during an internal investigation in January 2017. Once PG&E discovered the issue, maintenance plans were updated and units were inspected by May 18, 2017.
  - d. Four (4) OH patrol and two (2) UG detailed inspection units in PG&E's Yosemite Division were not performed on time due to human error. The facilities were installed in 2013 and were not input into PG&E's mapping system. The facilities were identified through a subsequent internal PG&E GO 165 automation review and were added to the mapping system. Maintenance plans were created and the facilities were inspected by June 02, 2017.
  - e. One (1) UG patrol unit in PG&E's Diablo Division was not patrolled on time due to a technical mapping issue. During an internal audit conducted in April 2017 a splice box was identified that was not mapped. The splice box has since been added to PG&E maps and was inspected by May 1, 2017.
  - f. One (1) UG detailed inspection unit in PG&E's Sierra Division was not inspected on time due to a technical mapping issue. The inspector utilized a newly deployed GIS map for this inspection that did not include the underground facility. The GIS map was updated and this unit was inspected on July 14, 2016.

- g. One (1) UG detailed inspection unit in PG&E's Humboldt Division was not inspected on time due to human error. The inspector did not follow the appropriate internal process to request access to an enclosure that had been welded shut preventing access to this unit. Once the error was discovered, PG&E inspected the unit on December 8, 2016.
- h. Fourteen (14) UG detailed inspection units in PG&E's in North Bay Division were not inspected on time. PG&E identified the units during our GO 165 automation process review and determined the 14 units did not have maintenance plans. Once the error was discovered, PG&E created maintenance plans and inspected the units by May 25, 2017.
- i. One (1) UG detailed inspection unit in PG&E's Peninsula Division was not inspected on time due to difficulty coordinating with a customer for entry. The inspector correctly completed a form to revisit the site however the inspector could not access the unit until December 14, 2016.