



**Pacific Gas and  
Electric Company** <sup>TM</sup>

***2022 Quality Verification Transmission  
Audit #713 – System Inspections Audit  
Final Report***

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Date 11/21/2022

Revised 12/27/22

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<b>Final Report</b>	<b>QVT System Inspections Audit</b>	<b>Report Number: 2022 QVT #713 Transmission</b>
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<b>Review Lead</b>	QVT	<b>Status</b>	Final Report	<b>Plan Date</b>	02/10/22
<b>Review Category</b>	Audit of documentation and field work			<b>Start Date</b>	03/08/22
<b>Locations</b>	System Wide			<b>End Date</b>	10/03/22

<b>Review Team</b>	Quality Verification Transmission (QVT)				
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<b>PG&amp;E Legal Dept. Purview</b>	Yes				
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### ***Sampling Methodology***

Sampling for the Transmission System Inspection audit included a Confidence Level of 99%, Estimated Compliance of 98% and a Margin of Error of 4.0%. To calculate the number of samples required, the total population of completed inspections in 2021 was used as an approximate value for the estimated population for 2022. As the 2022 population unfolded, it was verified that the sampling targets based on 2021 were still statistically valid. The samples were calculated per region (5 regions) per month (7 months of auditing). The total number of samples per region per month was then calculated using these parameters resulting in 77 sample locations per region and totaling 385 total sample locations per month of the audit.

### ***Executive Summary***

In January 2022, Quality Verification Transmission (QVT) was requested by the Enterprise Risk & Safety functional area to perform a monthly rolling audit of System Inspections for the duration of the 2022 enhanced overhead (OH) Inspection cycle. This audit was part of the 2022 Wildfire Mitigation Plan and the PG&E STIP (Short Term Incentive Program).

Quality Verification Transmission (QVT) performed an audit of System Inspections records and field assets from 03/08/22 – 10/03/22

#### **Audit Assumptions:**

- Transmission Inspections would commence in January and end in July 2022. Therefore, Audits would commence in February and end in August.
- Quality would pull completed inspections from the previous month to create a sample for the audit team in the first few business days of each month. Quality verification had not audited in this manner previously.

#### **Audit Assumption Impacts:**

- Transmission System Inspections did not start performing inspections until February; therefore, the audit did not commence until March 8, 2022. The timeframe of 7 months was reduced to 5 as Transmission System Inspections essentially completed inspections in June. The number of inspections completed in July were less than the sample target. Electric Quality Management, System Inspections Quality Control and System Inspections Execution approved on 8/2 to pull from months before July to meet the statistically valid sample target.
- Planned inspections were 42,000, actual came in at ~ 38,000.

217 overall nonconformances (NC) were found out of 2,696 locations audited. The overall <sup>1</sup> Quality Pass Rate (QPR) of the audit was 96.29%. This was above the QPR <sup>2</sup> target of 95.5%.

- 217 total NC
  - 107 were classified as <sup>3</sup> Critical Attribute NC
  - 108 were classified as Non-Critical Attribute NC

Critical Attribute nonconformances (NC) were used to calculate the overall Quality Pass Rate (QPR) with a pre-audit determined QPR of 95.5%. The actual QPR was **above target at 96.29%**.

#### **Zero High Findings**

**The top three Critical Attribute findings were:**

1. <sup>4</sup> Guy is loose or slack – 28
2. <sup>4</sup> Guy hardware bonding is installed incorrectly, damaged or missing – 13
3. <sup>4</sup> Pole-top has damage or split – 7

**The top three Non-Critical findings were:**

1. High signs missing or installed incorrectly - 43
2. Climbing steps installed incorrectly - 16
3. Fencing issues – 8

**Quality Pass Rate – STIP**

For Transmission System Inspections:

Score	EOY Target
0.5 Threshold	93.5%
1.0 Target	95.5%
2.0 Maximum	97.5%

<sup>1</sup> The Transmission Quality Pass rate was measured by the following equation:  $100 \times (\text{Locations Pass} \div \text{Locations Total})$ . Locations Pass was defined as: Number of System Inspection (SI) inspections in HFTD Tier 3 and Tier 2 from the statistical sample that pass quality verification reviews regarding "STIP Failures." Locations Total was defined as: Total statistical random sample of all completed SI inspections in the prior calendar month, one equipment ID per inspection. STIP Failures were defined as: There are two points of failure. An inspection is reviewed by Quality Verification to ensure all critical attribute conditions are documented, and, if there is a critical attribute condition that requires a maintenance notification, that a notification has been created or updated in the system of record. If either or both are missing, there is one STIP failure.

<sup>2</sup> Target setting methodology: Threshold is set at 93.5% (historical performance is limited to partial data in 2021). Target is set at 95.5% and assumes process improvement efforts (skills assessment, improved feedback process, field work verification timing, etc.) in 2022 to improve the quality of Transmission Inspections. Maximum is a 97.5%.

<sup>3</sup> Critical Attribute Condition: A condition(s) that could lead to either an ignition point or a wire down situation that could result in a potential fire ignition.

<sup>4</sup> This type of NC could lead to a potential wildfire ignition.