## PACIFIC GAS AND ELECTRIC COMPANY Wildfire Mitigations Plans Discovery 2026-2028 Data Response

PG&E Data Request No.:	OEIS_005-Q004			
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Requester DR No.:	OEIS-P-WMP-2025-PG&E-005			
<b>Requesting Party:</b>	Office of Energy Infrastructure Safety			
Requester:	Nathan Poon			
Date Sent:	April 25, 2025			

## SUBJECT: REGARDING QUALITY ASSURANCE AND QUALITY CONTROL UNIT EQUIVALENTS

## QUESTION 004

On page 410 of its 2026-2028 Base WMP, PG&E lists "Inspections" as the "Population/Sample Unit" for VM-08D&T, and VM-22D&T. In the "Population Size" and "Sample Size" columns, PG&E then indicates the unit is either "miles" or "spans." This makes it unclear whether the "Population/Sample Unit" is "inspections" or another factor.

- a. Clarify what the sample unit is for quality control and quality assurance audits by describing:
  - i. The randomization software PG&E uses to draw samples randomly.
  - ii. The unit that the randomization software draws from the population to create a sample (i.e., describe if PG&E selects from a population of inspections, miles, spans, or another population).
  - iii. Any procedural differences when auditing randomly sampled areas for VM-08D, VM-08T, VM-22D, and VM-22T. For example, procedural differences might include selecting an inspection location randomly and then auditing an entire mile in a specific direction or selecting an inspection location randomly and then auditing the span where the inspection occurred.
    - A. In the table below, for VM-08D&T and VM-22D&T, convert all values in "Population Size" and "Sample Size" columns from "miles" to actual or estimated numbers of inspections by completing the "2026, 2027, or 2028 Inspection Population Size" and "2026, 2027, and 2028 Inspection Sample Size" columns.

Initiative/ Activity Being Audited Vegetation Management Quality Assurance Distribution Routine (VM-08D)	Population/ Sample Unit Inspections	Mile or Span Population Size 25,748 miles	2026, 2027, or 2028 Inspection Population Size inspections	Mile or Span Sample Size 500 miles	2026, 2027, or 2028 Inspection Sample Size inspections
Vegetation Management Quality Assurance Transmission Routine (VM-08T)	Inspections	5,624 miles	inspections	200 miles	inspections
Vegetation Management Quality Control Distribution Routine (VM-22D)	Inspections	551,643 spans	inspections	80,000 spans	inspections
Vegetation Management Quality Control Transmission Routine (VM-22T)	Inspections	5,624 miles	inspections	13,500 spans	inspections

## ANSWER 004

- a.
- i. **QC** (VM-22D, -22P and -22T): Excel will be used as our randomization tool in 2026-28 for both distribution and transmission.

**QA** (VM-08D): Distribution uses ArcGIS Pro to randomize sample locations with Python scripts.

**QA** (VM-08T): Transmission is randomized by excel.

ii. **<u>QC** (VM-22D)</u>: The randomization software selects from a population of Work Packets consisting of spans inspected.

**<u>QC** (VM-22T):</u> The randomization software selects from a population of Work Packets consisting of a group of individual inspected locations. Transmission locations may consist of individual spans, portions of spans or multiple spans inspected, depending on the system of record, as described in greater detail in OEIS\_001, Q001.

**<u>QC</u>** (VM-22P): The randomization software selects from a population of poles inspected and/or cleared.

**QA** (VM-08D): The randomization software selects from a population of Distribution units calculated based off overhead circuit mileage.

**<u>QA</u>** (VM-08T): The randomization software selects from a population of Transmission units calculated based on transmission structures.

iii. **QC** (VM-22D and VM-22T): QC verifies Distribution and Transmission span/locations inspected to affirm procedural scope met.

**QA** (VM-08D and VM-08T): QA uses randomized starting locations of overhead (OH) line segments for distribution and structures for transmission, independent of whether there is an existing inspection record. Distribution target mileage for each audit segment is 0.5-line mile segments. Transmission designates 1-mile line segments for transmission audits that originate from the transmission structure sample selected. QA

then assesses whether VM Operations is compliant with applicable regulatory requirements.

A. <u>QC (VM-22D)</u>: The estimated 'inspection' unit is determined by a span (pole to pole) inspected by the VMI in One VM.

**QC** (VM-22T): The QC Transmission Routine inspection record may not be a full span (pole to pole). We estimated 5.5 inspection records per mile for the Inspection Population, and 1 inspection record per span for the Inspection Sample Size. Please see the table below.

**QA** (VM-08D and VM-08T): The estimated 'inspection' unit is measured in miles. Distribution Routine, there are two inspection audit segments for each mile; and for transmission routine, it is one inspection audit segment per mile that originates from the transmission structure selected in the audit sample.

Initiative/ Activity Being Audited	Population/ Sample Unit	Mile or Span Population Size	2026, 2027, or 2028 Inspection Population Size	Mile or Span Sample Size	2026, 2027, or 2028 Inspection Sample Size
Vegetation Management Quality Assurance Distribution Routine (VM-08D)	Inspections	25,748 miles	51,496 inspections	500 miles	1,000 inspections
Vegetation Management Quality Assurance Transmission Routine (VM-08T)	Inspections	5,624 miles	5,624 inspections	200 miles	200 inspections
Vegetation Management Quality Control Distribution Routine (VM-22D)	Inspections	551,643 spans	551,643 inspections	80,000 spans	80,000 inspections
Vegetation Management Quality Control Transmission Routine (VM-22T)	Inspections	5,624 miles	30,932 inspections	13,500 spans	13,500 inspections