

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

<b>PG&amp;E Data Request No.:</b>	OEIS_020-Q001
<b>PG&amp;E File Name:</b>	WMP-Discovery2026-2028_DR_OEIS_020-Q001
<b>Request Date:</b>	August 22, 2025
<b>Requester DR No.:</b>	OEIS-P-WMP_2025-PG&E-020
<b>Requesting Party:</b>	Office of Energy Infrastructure Safety
<b>Requester:</b>	Nathan Poon
<b>Date Sent:</b>	August 27, 2025

**QUESTION 001**

**Regarding objective verification that hazard trees or tree parts will strike infrastructure**

Across the industry, utility vegetation management pre-inspectors may only perform an “eyeball” estimate of strike potential and then prescribe hazard tree mitigation work. Laser rangefinders and other digital and analog tools provide potentially more accurate and precise objective measures of tree distance and height.<sup>1</sup>

- a. Describe how PG&E uses measurement tools (e.g., rangefinders) to assess whether a tree or tree part will strike infrastructure. In doing so, discuss:
  - i. Tools that pre-inspectors use to measure tree or tree part height, and distance from infrastructure.
  - ii. Tools that auditors use to measure tree or tree part height, and distance from infrastructure.
  - iii. Tools that tree crew workers use to measure tree or tree part height, and distance from infrastructure.
  - iv. Onboarding and refresher training PG&E or PG&E contractors provide on best management practices for using height and distance measurement tools.
- b. Prior to hazard tree mitigation, do quality assurance (QA) auditors, quality control (QC) auditors, and/or tree crews use measurement tools to verify that a pre-inspector’s measurements are correct (i.e., a tree or tree part will likely strike electrical infrastructure if it fails)?
  - i. If yes, indicate which worker type performs the measurement verification: QA auditors, QC auditors, or tree crews.
  - ii. If yes, does measurement verification occur for all trees or tree parts with fall-in potential that a pre-inspector lists for work?
    1. If no, provide examples of:

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<sup>1</sup> Martin, A.J.F., Accuracy and Precision in Urban Forestry Tools for Estimating Total Tree Height, Published November 2022, URL: (<https://auf.isa-arbor.com/content/48/6/319>).

- a) When verification will occur.
- b) When verification will not occur.
- iii. If no, indicate how PG&E ensures it only mitigates trees and tree parts whose height or length is such that the tree or tree part would contact electrical infrastructure if it failed.<sup>1</sup> Martin, A.J.F., Accuracy and Precision in Urban Forestry Tools for Estimating Total Tree Height, Published November 2022, URL: (<https://auf.isa-arbor.com/content/48/6/319>).

## ANSWER 001

- a.
  - i. Vegetation Management Inspectors (VMI) and Senior Vegetation Management Inspectors (SVMI) use rangefinders to measure the height of the tree, length of tree part and the distance to facility. They also may use the stick method to estimate the height of the tree using basic geometry as a backup method if a rangefinder is unavailable or unable to be used.
  - ii. Vegetation Management Quality Control/Auditors (VMQC/VMQA) use rangefinders to measure tree or tree part height, and distance from infrastructure.
  - iii. Tree crews are not required to use rangefinders or analog measuring tools before conducting their work.
  - iv. As part of the onboarding, VMI and SVMI must take VEGM-180 WBT which provides a brief overview of how to utilize the stick method when a rangefinder is unavailable or unable to be used. Additionally, the VEGM-0500 Instructor-Led Training course provides in-field training on how to utilize rangefinders to identify if a tree or tree part has potential to reach a facility. These methods are then reinforced in the VEGM-0510 Instructor-Led Training refresher course.  
  
These PG&E training resources are made available to external VMIs for delivery by the contract company if they choose to use them.
- b. No, quality assurance (QA) auditors, quality control (QC) auditors, and/or tree crews do not use measurement tools to verify that a pre-inspector's measurements are correct.
  - i. N/A
  - ii. N/A
  - iii. Quality Auditors (VMQC/VMQA) do not verify whether inspectors' measurements are correct. Quality Auditors verify that all fall-in trees requiring mitigation within the annual maintenance cycle are mitigated and/or prescribed for work. During the quality assessment, auditors will use the aforementioned measurement tools to identify fall-in trees requiring mitigation within the annual maintenance cycle that were not previously prescribed/and or mitigated by VM operations.

Tree crews do not use measurement tools to verify whether inspectors' measurements are correct prior to hazard tree mitigation.

PG&E ensures it only mitigates trees and tree parts whose height or length is such that the tree or tree part would contact electrical infrastructure if it failed, via its inspection process. All inspectors are provided with rangefinders to capture tree heights and distances to infrastructure. They also use the stick method when a rangefinder is unavailable or unable to be used. In addition to available tools, inspectors follow a set scope of work which outlines conditions which constitute prescribing work (i.e. dead, dying or diseased trees which can impact the facilities). PG&E ensures the quality of its inspections through various means, including local auditing of work prescribed and the use of a structured QA/QC program.