



**OFFICE OF ENERGY INFRASTRUCTURE SAFETY**  
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Caroline Thomas Jacobs, Director

February 18, 2024

To: Pacific Gas and Electric Company  
Jerrod Meier  
Director, Regulatory Compliance  
300 Lakeside Drive Suite 210,  
Oakland, CA 94612

SUBJECT: Office of Energy Infrastructure Safety's Audit on Pacific Gas and Electric Company's 2023 Vegetation Management Work

Pursuant to the requirements of California Public Utilities Code section 8386.3(c)(5)(A), the Office of Energy Infrastructure Safety (Energy Safety) completed its audit of Pacific Gas and Electric Company's (PG&E's) 2023 vegetation management work pursuant to its 2023-2025 Wildfire Mitigation Plan.

Energy Safety found that PG&E did not provide information consistent with the completion of the work required for six of the thirteen vegetation management initiatives. PG&E must submit its Corrective Action Plan response to the 2023 SVM docket<sup>1</sup> in Energy Safety's e-filing system within 30 days from the issuance of this audit. If you have any questions concerning this audit, please e-mail Karen McLaughlin ([Karen.McLaughlin@energysafety.ca.gov](mailto:Karen.McLaughlin@energysafety.ca.gov)) and provide a copy to Alec Latuszek ([alec.latuszek@energysafety.ca.gov](mailto:alec.latuszek@energysafety.ca.gov)) and [environmentalsciencedivision@energysafety.ca.gov](mailto:environmentalsciencedivision@energysafety.ca.gov).

Sincerely,

Sheryl Bilbrey  
Program Manager | Environmental Science Division  
Office of Energy Infrastructure Safety

Cc:  
Forest Kaser, CPUC  
Leslie Palmer, CPUC  
Eva Miller, PG&E

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<sup>1</sup> All documents related to PG&E's 2023 SVM audit are available on Energy Safety's e-filing under the "2023 SVM" docket and available here: (<https://efiling.energysafety.ca.gov/Lists/DocketLog.aspx?docketnumber=2023-SVM>)



State of California – A Natural Resources Agency

Gavin Newsom, Governor

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**OFFICE OF ENERGY INFRASTRUCTURE SAFETY**

**2023 SUBSTANTIAL VEGETATION**

**MANAGEMENT AUDIT**

**PACIFIC GAS AND ELECTRIC COMPANY**

February 2025



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# EXECUTIVE SUMMARY

The Office of Energy Infrastructure Safety (Energy Safety) completed an audit of Pacific Gas and Electric Company's (PG&E's) vegetation management commitments from its 2023-2025 Wildfire Mitigation Plan (WMP).<sup>1</sup> The PG&E 2023-2025 WMP had 13 vegetation management initiatives in six programmatic areas. Energy Safety found that PG&E did not provide information consistent with the completion of all work commitments for six of its 13 vegetation management initiatives.

For each audit finding for which Energy Safety determined PG&E did not provide information supporting completion of all work commitments in a vegetation management initiative in the WMP, PG&E must address that deficiency as part of a corrective action plan. PG&E must title its response "Pacific Gas and Electric Company 2023 SVM Audit Corrective Action Plan" and submit the response on the 2023 SVM Docket in Energy Safety's E-Filing System within 30 days of receipt of this audit. Requirements for the response are discussed in Section 4 of this document.

Energy Safety is available to meet with PG&E to discuss the audit findings and provide any clarification necessary for PG&E to timely respond to Energy Safety's audit.

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<sup>1</sup> [PG&E's 2023-2025 WMP](https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=56145&shareable=true) (Rev. #4, January 8, 2024), p. 594,  
(<https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=56145&shareable=true>).

# 1. OVERVIEW

Pursuant to Public Utilities Code section 8386.3(c)(5), the Office of Energy Infrastructure Safety (Energy Safety) must, on an annual basis, audit the vegetation management work performed by an electrical corporation upon notification that the electrical corporation has completed a substantial portion of the vegetation management requirements in its Wildfire Mitigation Plan (WMP). Specifically, the Vegetation Management and Inspections requirements audited in this document are in Section 8.2 of the WMP. Vegetation Management and Inspections include the following programmatic areas:

- Vegetation inspections
- Vegetation and fuels management
- Vegetation management enterprise system
- Quality assurance / quality control
- Open work orders
- Workforce planning

The WMP identifies the electrical corporation's objectives in each of these programmatic areas as well as the initiatives that will achieve the stated objectives. Initiatives include one or more specific work commitments. These commitments include both quantitative targets (e.g., completion of a specified number of inspections) and verifiable narrative statements (e.g., implementation of personnel training programs). Work commitments for each initiative may include only quantitative targets, both quantitative targets and narrative statements, or only narrative statements. Energy Safety assesses completeness for all targets and statements.

The substantial vegetation management (SVM) audit includes Energy Safety's analysis of the electrical corporation's work products over the audit year and determines if the electrical corporation provided documentation sufficient to determine if all work commitments were completed for each initiative in its WMP. While the WMP lists the initiatives under programmatic headings, Energy Safety assesses work completion at the initiative level.

## 2023 Pacific Gas and Electric Company (PG&E) Substantial Vegetation Management Audit

PG&E submitted its final SVM 2023 completion notification on December 28, 2023.<sup>2</sup>

Energy Safety has completed its SVM audit of PG&E's vegetation management program activities for 2023. As part of the SVM audit process, Energy Safety identified both quantitative targets and verifiable statements from section 8.2 of the PG&E 2023-2025 WMP. Energy Safety then compared the WMP vegetation management targets and statements to the work performed by PG&E in 2023 using Quarterly Data Reports (QDR), non-spatial data tables, and data request responses submitted by PG&E.

Table 1 of this report includes a list of all vegetation management initiatives and Energy Safety's findings of whether PG&E completed all required work.

The appendix includes a summary of targets and/or narrative statements, supporting information and analysis, conclusions, and findings for each initiative.

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<sup>2</sup> [PG&E's Notice of Substantial Completion of Vegetation Management Initiatives Pursuant to Public Utilities Code § 8386.3\(c\)\(5\)\(A\)](https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=56130&shareable=true) (December 28, 2023),  
(<https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=56130&shareable=true>).  
[PG&E's Notice of Substantial Completion of Vegetation Management Initiatives Pursuant to Public Utilities Code § 8386.3\(c\)\(5\)\(A\)](https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=55833&shareable=true) (November 22, 2023),  
(<https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=55833&shareable=true>).  
[PG&E's Notice of Substantial Completion of All Vegetation Management Initiatives Pursuant to Public Utilities Code § 8386.3\(c\)\(5\)\(A\)](https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=55833&shareable=true) (October 16, 2023),  
(<https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=55833&shareable=true>).

## 2. 2023 SVM AUDIT FINDINGS

The PG&E 2023-2025 WMP had 13 vegetation management initiatives in six programmatic areas. Energy Safety's findings regarding completion of all work for each initiative are shown in Table 1. Audit findings in bold indicate that PG&E was unable to provide sufficient documentation demonstrating that all work was completed for that initiative. A detailed analysis of quantitative targets and narrative statements, supporting information, conclusions and findings for each initiative are included in the appendix.

Table 1. PG&E 2023 SVM Audit Finding Summary

Programmatic Area	Vegetation Management Initiative	Audit Finding
<b>8.2.2 Vegetation Management Inspections</b>	<b>8.2.2.1-3 Vegetation Management Inspections</b>	<b>Did not complete all work</b>
8.2.3 Vegetation and Fuels Management	8.2.3.1 Pole Clearing	Completed all work
<b>8.2.3 Vegetation and Fuels Management</b>	<b>8.2.3.2 Wood and Slash Management</b>	<b>Did not complete all work</b>
8.2.3 Vegetation and Fuels Management	8.2.3.3 Clearance	Completed all work
<b>8.2.3 Vegetation and Fuels Management</b>	<b>8.2.3.4 Fall-In Mitigation</b>	<b>Did not complete all work</b>
8.2.3 Vegetation and Fuels Management	8.2.3.5 Substation Defensible Space	Completed all work
8.2.3 Vegetation and Fuels Management	8.2.3.6 High-Risk Species	Completed all work
8.2.3 Vegetation and Fuels Management	8.2.3.7 Fire Resilient Right-of-Ways	Completed all work
<b>8.2.3 Vegetation and Fuels Management</b>	<b>8.2.3.8 Emergency Response Vegetation Management</b>	<b>Did not complete all work</b>



8.2.4 Vegetation Management Enterprise System	8.2.4 Vegetation Management Enterprise System	Completed all work
8.2.5 Quality Assurance and Quality Control	8.2.5.1-2 Quality Assurance and Quality Control	Completed all work
<b>8.2.6 Open Work Orders</b>	<b>8.2.6 Open Work Orders</b>	<b>Did not complete all work</b>
<b>8.2.7 Workforce Planning</b>	<b>8.2.7.1-2 Workforce Planning</b>	<b>Did not complete all work</b>

### 3. 2023 SVM AUDIT CONCLUSION

Energy Safety reviewed the 13 vegetation management initiatives in PG&E's 2023-2025 WMP and found PG&E provided documentation or information demonstrating it performed all work in seven vegetation management initiatives but was unable to provide supporting documentation or information demonstrating completion of work described in statements and/or targets for the remaining six vegetation management initiatives.

For each audit finding for which Energy Safety determined PG&E did not provide documentation or information demonstrating completion of all work in its vegetation management commitments, PG&E must submit a response per the requirements outlined in Section 4 to Energy Safety within 30 days of receipt of this audit.

This audit is not an assessment of the quality of PG&E's execution of its vegetation management program.

## 4. PG&E's AUDIT RESPONSE

PG&E must provide Energy Safety with a response for each initiative in Table 1 with a finding of “did not complete all work” that includes a response addressing the following criteria as described in the Compliance Guidelines <sup>3</sup>:

1. Should PG&E disagree with an audit finding that all work was not performed per the WMP, PG&E must provide the basis for that conclusion including detailed supporting documentation and rationale for that response.
2. If PG&E contends that the intent of the initiative was met because either a large percentage of the work was completed and/or other vegetation management actions taken by PG&E addressed the wildfire risk at issue, PG&E must provide specific details and documentation supporting that conclusion.
3. Should PG&E agree with the audit finding that all work was not performed for a vegetation management initiative, PG&E must provide the following in a corrective action plan:
  - a. Data and/or supporting documents explaining why a commitment was missed,
  - b. The circumstances or mitigating factors as to why a commitment was missed,
  - c. If PG&E was aware of the missed commitment during the compliance period, a detailed accounting of any corrective action measures implemented since the end of the compliance period to avoid future missed commitments including long term strategies to reduce or eliminate wildfire risk, and
  - d. Additional actions PG&E plans to implement to ensure commitments of a similar nature are not missed in the future.
4. The response must be titled “Pacific Gas and Electric Company’s 2023 SVM Audit Corrective Action Plan YYYYMMDD<sup>4</sup>.”

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<sup>3</sup> [Energy Safety Compliance Guidelines \(September 2024\)](https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=57320&shareable=true), pp. 12-13, (<https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=57320&shareable=true>).

<sup>4</sup> “YYYYMMDD” represents the date of submission.

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# **APPENDIX**

## **WORK COMMITMENTS, SUPPORTING INFORMATION AND ANALYSIS, CONCLUSIONS, AND FINDINGS**





## APPENDIX SUMMARY

Energy Safety analyzed each of the 13 vegetation management initiatives listed in Pacific Gas and Electric Company's (PG&E) 2023-2025 Wildfire Mitigation Plan (WMP) as part of this audit. Energy Safety identified the vegetation management work commitments, including quantitative targets and narrative statements, relevant to each initiative and compared that to the work performed by PG&E in 2023. Determination of whether all work was complete for each initiative was based on documentation submitted by PG&E. For any commitment or statement for which PG&E was not able to provide supporting documentation or information to support completion, PG&E must submit a response as part of a corrective action plan per the requirements outlined in Section 4.

## INITIATIVE ANALYSIS

For each initiative in Section 8.2 (Vegetation Management and Inspections) of PG&E's 2023-2025 Wildfire Mitigation Plan (WMP), Energy Safety assessed completion of all quantitative targets as well as verifiable, narrative statements. For each target/statement, Energy Safety documented the supporting information provided by PG&E, Energy Safety's analysis of that information, and Energy Safety's conclusion regarding completion of work described by the target/statement. Energy Safety then provided a finding for each initiative. A finding of "completed all work" was given only if PG&E provided sufficient documentation or supporting information demonstrating completion of all targets and/or statements within that initiative. If any target or statement was incomplete or insufficiently documented, the overall finding for the initiative was "did not complete all work."

## 8.2.2 Vegetation Management Inspections

The purpose of this initiative was to describe the “Inspections of vegetation around and adjacent to electrical facilities and equipment that may be hazardous by growing, blowing, or falling into electrical facilities or equipment.”<sup>5</sup>

### 8.2.2.1.1 Routine Transmission NERC and Non-NERC

#### Quantitative Targets or Commitments, Supporting Information & Analysis, and Conclusion

PG&E included the following Routine Transmission targets in its 2023-2025 WMP.<sup>6</sup> For ease of comparison, the WMP targets and work completed are summarized below:

Initiative Activity	PG&E's 2023 Quantitative Target	Actual Completed in 2023
LiDAR Data Collection - Transmission	17,500 circuit miles	17,741 circuit miles
Routine Ground - Transmission	17,740 circuit miles	17,741 circuit miles

#### Lidar Data Collection – Transmission

Supporting Information and Analysis: Because PG&E's 2023-2025 WMP stated that LiDAR inspections start in late summer and early fall of the prior year,<sup>7</sup> Energy Safety assessed the work performed by PG&E to meet this target in both 2022 and 2023.

PG&E provided a report published by its vendor containing all vegetation clearance analyses collected using aerial LiDAR acquisition methods during the 2023 inspection cycle.<sup>8</sup> The report included the following information: a list of Electric Transmission Line (ETL) numbers (unique identifiers for PG&E's transmission system), the date each ETL was inspected, and the length of each ETL in miles. The Excel file indicated that PG&E's vendor collected LiDAR data along 17,741 miles of the transmission system and delivered the processed data to PG&E between October 25, 2022, and March 30, 2023.

<sup>5</sup> [Energy Safety's 2023-2025 Wildfire Mitigation Plan Technical Guidelines](https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=53286&shareable=true) (December 2022), p. A-24, (https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=53286&shareable=true).

<sup>6</sup> [PG&E's 2023-2025 WMP](https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=56145&shareable=true) (Rev. #4, January 8, 2024), pp. 608, 612, (https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=56145&shareable=true).

<sup>7</sup> [PG&E's 2023-2025 WMP](https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=56145&shareable=true) (Rev. #4, January 8, 2024), p. 614, (https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=56145&shareable=true).

<sup>8</sup> Data Request 265, question 6; attachment “DRU14286\_Q006\_Atch01\_ PG&E NV5 Final Attestation\_CONF.pdf.”

Because the vendor's report did not specify whether the mileage was recorded in circuit or line miles, Energy Safety also reviewed an Excel file provided by PG&E which contained the number of circuit miles completed by PG&E's vendor.<sup>9</sup> The Excel file disaggregated the total circuit mileage by ETL and included the dates and mileage of each ETL inspected. The Excel file indicated that PG&E's vendor collected LiDAR data along 17,741 circuit miles of PG&E's transmission system thus exceeding PG&E's 17,500 circuit mile target.

While Energy Safety utilized the information provided in Data Request 265 to assess PG&E's completion of this target, Energy Safety noted inconsistencies with PG&E's 2023 QDR submissions. PG&E's non-spatial, Quarterly Initiative Update data (QIU) contained in Table 1 of PG&E's quarter 4 (Q4) Wildfire Mitigation Data Tables reported that PG&E completed 17,817 circuit miles towards this target.<sup>10</sup> In contrast, the "cumulative progress" field of the vegetation inspection line feature class provided in PG&E's Q1 spatial QDR submission reported that PG&E completed 17,798 line miles for this target.<sup>11</sup> PG&E did not include data for this target in its 2023 quarters 2, 3 or 4 spatial QDR submissions. Lastly, Energy Safety's analysis of PG&E's 2023 spatial QDR submissions found that PG&E submitted enough geospatial data to support the completion of 17,800 miles for this target.<sup>12</sup>

PG&E later reported in Revision 1 of its Annual Report on Compliance (ARC), published on April 25, 2024, that because of data validation after PG&E's 2023 Q4 QDR submission, PG&E determined it had actually completed 17,741 circuit miles towards this target.<sup>13</sup> This updated mileage aligned with the total mileage documented in the Excel file received in Data Request 265.

Energy Safety understands that the cutoff dates for quarterly data submission may result in submission of incomplete data or data that has not yet undergone quality control checks; however, the Data Guidelines require PG&E to submit a revision to previously submitted data when it identifies errors or updates at the next quarterly submission date.<sup>14</sup> PG&E submitted its last revision of its 2023 Q4 QDR data on April 19, 2024.<sup>15</sup> PG&E then submitted a revised final attainment value for work completed towards its LiDAR Data Collection Transmission target in revision 1 of its 2023 ARC, published on April 25, 2024. However, PG&E did not

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<sup>9</sup> Data Request 265, question 6; attachment "DRU14286\_Q006\_Atch02\_Q6-Q7 VM-01 - LiDAR Routine Execution Data.xlsx."

<sup>10</sup> [PG&E's non-spatial, Q4 Wildfire Mitigation Data Tables](https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=56510&shareable=true) (Rev. #2, April 19, 2024), Table 1, (https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=56510&shareable=true).

<sup>11</sup> PG&E's geospatial 2023 quarter 1 Quarterly Data Report, PGE Vegetation Inspection Line 2023, VM-01.

<sup>12</sup> PG&E's geospatial 2023 quarters 1-4 Quarterly Data Report, PGE Vegetation Inspection Line 2023, VM-01.

<sup>13</sup> [PG&E's 2023 ARC for the 2023-2025 WMP](https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=56539&shareable=true) (Rev. #1, April 25, 2024), p. 32, (https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=56539&shareable=true).

<sup>14</sup> [Energy Safety's Data Guidelines](https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=53314&shareable=true) (version 3.0, December 14, 2022), p. 6 (https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=53314&shareable=true).

<sup>15</sup> [PG&E's non-spatial, Q4 Wildfire Mitigation Data Tables](https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=56510&shareable=true) (Rev. #2, April 19, 2024), Table 1, (https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=56510&shareable=true).



update its QIU data nor its spatial QDR data to reflect this updated final attainment value in its 2024 Q1 QDR submission in May 2024 nor during any subsequent QDR submissions.

In this case, the discrepancy did not affect the conclusion related to completion of work on this target. However, it is incumbent upon PG&E to update QDR data in accordance with data guidelines to demonstrate that PG&E completed all work and that it was appropriately documented and reported to Energy Safety.

Conclusion: PG&E provided information consistent with the completion of work identified in this target.

### **Routine Ground - Transmission**

Supporting Information and Analysis: For this target, PG&E committed to completing Routine Transmission Ground Inspection of 17,740 circuit miles as defined by its transmission's Routine LiDAR detection point data systemwide.<sup>16</sup> To verify PG&E's completion of this target, Energy Safety reviewed four Excel files provided by PG&E which contained: 1) the amount of circuit miles for which PG&E's vendor collected LiDAR data, 2) records of all locations identified by LiDAR that may have needed vegetation management work from project year 2023, 3) dates of ground patrol inspections of locations identified by LiDAR associated with the Transmission Routine North American Electric Reliability Corporation (NERC) Program, and 4) dates of ground patrol inspections of locations identified by LiDAR associated with the Transmission Routine Non-NERC Program.

The Excel file containing records of LiDAR data collected by PG&E's vendor disaggregated the total circuit mileage by ETL, included the dates and mileage of each ETL inspected, and whether each ETL consisted of NERC critical or non-critical lines.<sup>17</sup> The Excel file indicated that PG&E's vendor collected LiDAR data on a total of 17,741 circuit miles of transmission lines during PG&E's 2023 inspection cycle. The total mileage was composed of 6,678.8 circuit miles of NERC critical lines, and 11,062.5 circuit miles of NERC non-critical lines.

The Excel file containing LiDAR records identifying locations where ground inspections were prescribed to assess need for vegetation management work (latitude and longitude), the date each location was identified, and whether each location occurred along NERC critical or non-NERC critical lines.<sup>18</sup> The Excel file indicated that 237,537 locations were identified along NERC critical lines and that 794,503 locations were identified along NERC non-critical lines. These locations were identified between June 13, 2022, and November 29, 2022.

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<sup>16</sup> [PG&E's 2023-2025 WMP](https://efiling.energy.ca.gov/eFiling/Getfile.aspx?fileid=56145&shareable=true) (Rev. #4, January 8, 2024), p. 612, (https://efiling.energy.ca.gov/eFiling/Getfile.aspx?fileid=56145&shareable=true).

<sup>17</sup> Data Request 256, question 6; attachment "DRU14286\_Q006\_Atch02\_Q6-Q7 VM-01 - LiDAR Routine Execution Data.xlsx."

<sup>18</sup> Data Request 265, question 8; attachment "DRU14286\_Q008\_Atch01\_Q8-Q9 2023 Lidar Detections.xlsx."

The Excel files containing ground patrol visual inspection and tree work records included the dates ground patrol inspections were conducted, and the outcome of the inspections (if work was identified).<sup>19</sup> The Excel files indicated that the Transmission Routine NERC and non-NERC programs verified LiDAR locations via ground patrols between November 8, 2022, and November 22, 2023. As a result of the ground patrols, 46,988 units of vegetation management work were prescribed to address vegetation compliance issues.

The provided information indicated that PG&E completed its Routine Ground-Transmission target by collecting LiDAR data along 17,741 circuit miles of PG&E's Transmission system, and by completing ground inspections based on work identified by LiDAR.

While Energy Safety used the information provided in Data Request 265 to assess PG&E's completion of this target, Energy Safety identified inconsistencies with PG&E's 2023 QDR submissions. PG&E's non-spatial, QIU data contained in Table 1 of PG&E's Q4 Wildfire Mitigation Data Tables reported that PG&E completed 18,172 circuit miles towards this target in 2023.<sup>20</sup> Regarding the discrepancy in reported mileage, PG&E included the following statement in its 2023 Q4 QIU submission: "GIS data [which was the data provided in Data Request 265] is shown in Alignment Miles that do not account for parallel circuit miles, thus the GIS value will be lower [than] the attainment circuit miles [reported in the QIU data]." <sup>21</sup> PG&E also stated in an email to Energy Safety that the mileage reported in the QIU data used mileage calculated by taking average conductor lengths, and that in contrast, the mileage in the Excel file referenced above was calculated using pole-to-pole alignment distances.<sup>22</sup>

Energy Safety found the pole-to-pole alignment distances to be a more accurate representation of PG&E's work as opposed to average conductor lengths, therefore, Energy Safety applied the pole-to-pole alignment distances reported in the Excel file referenced above to assess PG&E's completion of this target. Moving forward, PG&E must ensure that it clearly labels the units of measure used to report the progress of its targets in QIU data and spatial QDR submissions to ensure Energy Safety assesses work completed by PG&E in the same unit of measure as was intended by PG&E's WMP.

Additionally, the "cumulative progress" field of the vegetation inspection line feature class provided in PG&E's Q4 spatial QDR submission indicated that PG&E completed 18,172 circuit miles towards this target.<sup>23</sup> However, because PG&E only submitted spatial data for this

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<sup>19</sup> Data Request 265, questions 8, 9; attachments "DRU14286\_Q008\_Atch02\_2023 NERC Project Status Review.xlsx," "DRU14286\_Q009\_Atch01\_2023 Non-NERC Project Status Review.xlsx."

<sup>20</sup> [PG&E's non-spatial, Q4 Wildfire Mitigation Data Tables](https://efiling.energy.ca.gov/eFiling/Getfile.aspx?fileid=56510&shareable=true) (Rev. #2, April 19, 2024), Table 1, (https://efiling.energy.ca.gov/eFiling/Getfile.aspx?fileid=56510&shareable=true).

<sup>21</sup> [PG&E's non-spatial, Q4 Wildfire Mitigation Data Tables](https://efiling.energy.ca.gov/eFiling/Getfile.aspx?fileid=56510&shareable=true) (Rev. #2, April 19, 2024), Table 1, (https://efiling.energy.ca.gov/eFiling/Getfile.aspx?fileid=56510&shareable=true).

<sup>22</sup> PG&E email to Energy Safety, November 27, 2024, clarifying response to initiative target VM-13.

<sup>23</sup> PG&E's geospatial 2023 quarter 1 Quarterly Data Report, PGE Vegetation Inspection Line 2023, VM-01.

target in Q3 and Q4 of 2023, PG&E's 2023 spatial QDR submissions only contained 1,200 miles of spatial data for this target. Without spatial data from Q1 and Q2 for this target, Energy Safety could not utilize PG&E's submitted spatial data to confirm that the entire 18,172 circuit miles reported in the "cumulative progress" field in Q4 were completed.<sup>24</sup>

Energy Safety understands that the cutoff dates for quarterly data submission may result in submission of incomplete data or data that has not yet undergone quality control checks; however, the Data Guidelines require PG&E to submit a revision to previously submitted data when it identifies errors or updates at the next quarterly submission date.<sup>25</sup> PG&E submitted its quarterly data as specified by the Data Guidelines, with the last quarterly submission by February 1, 2024. PG&E's final quarterly submission contained a reported final attainment value for this target of 18,172 circuit miles. However, PG&E did not provide updates during its Q4 QDR submission nor during any subsequent 2024 QDR submissions that contained updated 2023 Q1 and Q2 spatial data for this target. Without spatial data for this target from Q1 and Q2, Energy Safety could not validate with spatial data that the reported final attainment value for this target was met.

In this case, PG&E was able to provide documentation which supported PG&E's completion of this target. However, it is incumbent upon PG&E to update spatial QDR data in accordance with Data Guidelines to demonstrate that PG&E completed all work and that it was appropriately documented and reported to Energy Safety.

Conclusion: PG&E provided information consistent with the completion of work identified in this target.

## Narrative Statements, Supporting Information & Analysis, and Conclusion

### Statement 1

Statement: "Routine NERC inspections are prioritized each year so that 100 percent of tree work can be completed by December 31." <sup>26</sup>

Supporting Information and Analysis: PG&E provided an Excel file containing records of all tree work that was completed by the Routine NERC program in 2023.<sup>27</sup> The Excel file indicated that the Routine NERC Program prescribed work to 14,619 trees to address vegetation compliance issues identified during ground patrol visual inspections, and that all of the prescribed work was completed before December 31, 2023.

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<sup>24</sup> PG&E's geospatial 2023 quarters 1-4 Quarterly Data Report, PGE Vegetation Inspection Line 2023, VM-13.

<sup>25</sup> [Energy Safety's Data Guidelines](https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=53314&shareable=true) (version 3.0, December 14, 2022), p. 6 (https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=53314&shareable=true).

<sup>26</sup> [PG&E's 2023-2025 WMP](https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=56145&shareable=true) (Rev. #4, January 8, 2024), p. 655, (https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=56145&shareable=true).

<sup>27</sup> Data Request 265, question 8; attachment "DRU14286\_Q008\_Atch02\_2023 NERC Project Status Review.xlsx."

Conclusion: PG&E provided information consistent with the completion of work identified in this target.

### 8.2.2.1.2 Transmission Second Patrol

#### Quantitative Targets or Commitments, Supporting Information & Analysis, and Conclusion

PG&E included the following Transmission Second Patrol target in its 2023-2025 WMP.<sup>28</sup> For ease of comparison, the WMP target and work completed is summarized below:

Initiative Activity	PG&E's 2023 Quantitative Target	Actual Completed in 2023
Second Patrol - Transmission	5,625 circuit miles	5,655 circuit miles

Supporting Information and Analysis: PG&E provided an Excel file containing Transmission Second Patrol ortho imagery inspection data from 2023. The Excel file included the following information: circuit names where inspections occurred, the dates each circuit was inspected, and the number of circuit miles inspected on each circuit.<sup>29</sup> The Excel file indicated that PG&E's Transmission Second Patrol Program inspected 5,655 circuit miles of transmission lines along 547 different circuits in 2023. The Excel file contained an additional 26 miles of completed inspections. However, because the 26 miles had no reported inspection dates, and were reported to be "out of scope," Energy safety did not count the 26 miles towards PG&E's target. Regardless, PG&E exceeded its target by completing 5,655 circuit miles of Transmission Second Patrol inspections in 2023.

Conclusion: PG&E provided information consistent with the completion of work identified in this target.

<sup>28</sup> [PG&E's 2023-2025 WMP](https://efiling.energy.ca.gov/eFiling/Getfile.aspx?fileid=56145&shareable=true) (Rev. #4, January 8, 2024), p. 612, (https://efiling.energy.ca.gov/eFiling/Getfile.aspx?fileid=56145&shareable=true).

<sup>29</sup> Data Request 265, question 11; attachment "DRU14286\_Q011\_Atch01\_Transmission Second Patrol Execution 2023.xlsx."



### 8.2.2.1.3 Integrated Vegetation Management

#### Quantitative Targets or Commitments, Supporting Information & Analysis, and Conclusion

PG&E included the following Integrated Vegetation Management (IVM) target in its 2023-2025 WMP.<sup>30</sup> For ease of comparison, the WMP target and work completed is summarized below:

Initiative Activity	PG&E's 2023 Quantitative Target	Actual Completed in 2023
Integrated Vegetation Management - Transmission	11,194 acres	13,019 acres

Supporting Information and Analysis: PG&E provided an Excel file containing inspection records from its 2023 IVM Right of Way (ROW), and IVM Fee Inspection Programs. The Excel file included location information, inspection dates, and the total number of acres inspected by the programs in 2023. The Excel file indicated that the programs inspected 13,019 total acres in 2023 thus exceeding PG&E's 11,194-acre target.

While Energy Safety used the information provided in Data Request 265 to assess PG&E's completion of this target, Energy Safety identified inconsistencies between these data and PG&E's 2023 QDR submissions. PG&E's non-spatial, QIU data contained in Table 1 of PG&E's Q4 Wildfire Mitigation Data Tables reported that PG&E completed 11,742 acres of IVM inspections in 2023.<sup>31</sup> Additionally, the "cumulative progress" field of the vegetation inspection polygon feature class provided in PG&E's Q4 spatial QDR submission also reported that PG&E completed 11,742 acres of IVM inspections in 2023.<sup>32</sup> However, because PG&E only submitted spatial data for this target in Q4 of 2023, PG&E's 2023 spatial QDR submissions only contained enough spatial data to support that 599 acres of IVM inspections were completed.<sup>33</sup> Without spatial data from the other quarters, Energy Safety could not utilize PG&E's submitted spatial data to confirm that the entire 11,742-acres of IVM inspections reported in the "cumulative progress" field in Q4 of PG&E's 2023 spatial QDR submission and QIU data were completed.<sup>34</sup>

<sup>30</sup> [PG&E's 2023-2025 WMP](https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=56145&shareable=true) (Rev. #4, January 8, 2024), p. 612,

(<https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=56145&shareable=true>).

<sup>31</sup> PG&E's non-spatial, Q4 Wildfire Mitigation Data Tables, (Rev. #2, April 19, 2024), Table 1,

(<https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=56510&shareable=true>).

<sup>32</sup> PG&E's geospatial 2023 quarter 4 Quarterly Data Report, PGE Vegetation Inspection Polygon 2023, VM-13.

<sup>33</sup> PG&E's geospatial 2023 quarters 1-4 Quarterly Data Report, PGE Vegetation Inspection Polygon, VM-15.

<sup>34</sup> PG&E's geospatial 2023 quarters 1-4 Quarterly Data Report, PGE Vegetation Inspection Polygon, VM-15.

PG&E later reported in Revision 1 of its ARC, that because of data validation after PG&E's 2023 Q4 QDR submission, PG&E determined it had actually completed 13,019 acres towards this target.<sup>35</sup> This updated mileage aligned with the total mileage documented in the Excel file received in Data Request 265.

Energy Safety understands that the cutoff dates for quarterly data submission may result in submission of incomplete data or data that has not yet undergone quality control checks; however, the Data Guidelines require PG&E to submit a revision to previously submitted data when it identifies errors or updates at the next quarterly submission date.<sup>36</sup> PG&E submitted its last revision of its 2023 Q4 QDR data on April 19, 2024.<sup>37</sup> PG&E then submitted a revised final attainment value for work completed towards its Integrated Vegetation Management-Transmission target in revision 1 of its 2023 ARC, published on April 25, 2024. However, PG&E did not provide an update of its 2023 QIU data nor its 2023 spatial QDR data to reflect this updated final attainment value in its 2024 Q1 QDR submission in May of 2024 nor during any subsequent QDR submissions.

In this case, PG&E was able to provide documentation which supported the completion of work for this target. However, it is incumbent upon PG&E to update spatial QDR data in accordance with Data Guidelines to demonstrate that PG&E completed all work and that it was appropriately documented and reported to Energy Safety.

Conclusion: PG&E provided information consistent with the completion of work identified in this target.

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<sup>35</sup> [PG&E's 2023 ARC for the 2023-2025 WMP](https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=56539&shareable=true) (Rev. #1, April 25, 2024), p. 32, (https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=56539&shareable=true).

<sup>36</sup> [Energy Safety's Data Guidelines](https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=53314&shareable=true) (version 3.0, December 14, 2022), p. 6 (https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=53314&shareable=true).

<sup>37</sup> [PG&E's non-spatial, Q4 Wildfire Mitigation Data Tables](https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=56510&shareable=true) (Rev. #2, April 19, 2024), Table 1, (https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=56510&shareable=true).

### 8.2.2.2.1 Distribution Routine Patrol

#### Quantitative Targets or Commitments, Supporting Information & Analysis, and Conclusion

PG&E included the following Distribution Routine Patrol target in its 2023-2025 WMP.<sup>38</sup> For ease of comparison, the WMP target and work completed is summarized below:

Initiative Activity	PG&E's 2023 Quantitative Target	Actual Completed in 2023
Distribution - Routine Patrol	79,000 circuit miles	79,950 circuit miles

Supporting Information and Analysis: PG&E stated in its 2023-2025 WMP that its Distribution Routine Patrol Program followed PG&E's internal procedure TD-7102P-01.<sup>39</sup> PG&E provided the procedure version used at the start of the 2023 inspection cycle.<sup>40</sup> The procedure stated that the Distribution Routine Patrol inspection cycle generally runs between November 15 of the current year and November 14 of the following year.<sup>41</sup> As a result, Energy Safety included inspection work completed for this target in both 2023 and November 15 – December 31 of 2022.

PG&E provided an Excel file containing records of its 2023 Distribution Routine Patrol Program.<sup>42</sup> The inspection records were organized into distinct “project names,” and included details such as inspection dates, the “project workplan year” and the number of circuit miles inspected per project. Energy Safety analyzed all inspections designated in the Excel file as part of PG&E's 2023 project workplan year to assess PG&E's completion of its 2023 target.

The Excel file indicated that the Program inspected 79,950 circuit miles of distribution lines as part of PG&E's 2023 project workplan between December 8, 2022, and December 18, 2023. In

<sup>38</sup> [PG&E's 2023-2025 WMP](https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=56145&shareable=true) (Rev. #4, January 8, 2024), p. 612, (https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=56145&shareable=true).

<sup>39</sup> [PG&E's 2023-2025 WMP](https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=56145&shareable=true) (Rev. #4, January 8, 2024), p. 666, (https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=56145&shareable=true).

<sup>40</sup> Data Request 276, question 5; attachment “DRU14563\_Q005\_Atch02\_TD-7102P-01 Rev 1 (2015) Obsolete\_Redacted.pdf.”

<sup>41</sup> Data Request 276, question 5; attachment “DRU14563\_Q005\_Atch02\_TD-7102P-01 Rev 1 (2015) Obsolete\_Redacted.pdf.”

<sup>42</sup> Data Request 265, question 14; attachment “DRU14286\_Q014\_Atch02\_Legacy.xlsx.”

addition, if all 2022 inspection dates were excluded from the analysis, PG&E would have exceeded its target by completing 79,493 circuit miles in 2023 alone.

Conclusion: PG&E provided information consistent with the completion of work identified in this target.

### 8.2.2.2.2 Distribution Second Patrol

#### Quantitative Targets or Commitments, Supporting Information & Analysis, and Conclusion

PG&E included the following Distribution Second Patrol target in its 2023-2025 WMP.<sup>43</sup> For ease of comparison, the WMP target and work completed is summarized below:

Initiative Activity	PG&E's 2023 Quantitative Target	Actual Completed in 2023
Distribution - Second Patrol	43,000 circuit miles	43,222 circuit miles*
<p>*For this target, PG&amp;E committed to completing the Distribution Second Patrol Inspections in FHSZ, WUI, SRA, FRA, HFTD, and HFRA areas. PG&amp;E provided documentation indicating the targeted mileage was completed. However, Energy Safety could not confirm if all project year 2023 inspections were completed in the areas stated in the target. Additionally, Energy Safety could not verify that the project year 2023 Distribution Second Patrol inspections were completed approximately six months offset from project year 2023 Distribution Routine Patrol inspections. Consequently, Energy Safety found that PG&amp;E did not provide information consistent with all work identified in this target.</p>		

Supporting Information and Analysis: PG&E's project year 2023 Distribution Second Patrol data was collected in two separate databases: a legacy VM database and PG&E's One VM database. PG&E provided two Excel files: one containing inspection data from the legacy VM database, and the other containing data from the One VM database.

The inspection data exported from the legacy VM database was organized into distinct "Projects," with each project containing the number of circuit miles inspected, along with the start and completion dates of the inspections for each project. The Excel file indicated that PG&E completed 43,222 circuit miles of Distribution Second Patrol inspections between November 16, 2022, and December 28, 2023.<sup>44</sup> PG&E's WMP stated that Distribution Second patrol inspections occur with an approximate six month offset from Distribution Routine

<sup>43</sup> [PG&E's 2023-2025 WMP](#) (Rev. #4, January 8, 2024), p. 612, (<https://efiling.energy.ca.gov/eFiling/Getfile.aspx?fileid=56145&shareable=true>).

<sup>44</sup> Data Request 265, question 16; attachment "DRU14286\_Q016\_Atch02\_Legacy.xlsx."



Patrols to maintain clearances and to identify dead, dying, and declining trees in the HFTD.<sup>45</sup> However, Energy Safety could not verify that the project year 2023 Distribution Second Patrol inspections were completed approximately six months offset from PG&E's project year 2023 Distribution Routine Patrol inspections. PG&E must provide a corrective action response which supports that circuits were inspected by the project year 2023 Distribution Second Patrol Program approximately six months offset from project year 2023 Distribution Routine Patrol inspections.

In addition, part of this target's commitment was to perform the Distribution Second patrol inspections in fire hazard severity zones (FHSZ), wildfire urban interfaces (WUI), state responsibility areas (SRA), federal responsibility areas (FRA), High Fire Threat Districts (HFTD), and high fire risk areas (HFRA). Therefore, Energy Safety also reviewed the information provided by PG&E to ensure all inspections were completed in these areas.<sup>46</sup> However, the Excel file exported from PG&E's legacy VM database did not contain location information. As a result, Energy Safety was unable to verify that PG&E inspected the locations it had committed to inspect. PG&E stated that location information for the inspections was documented on patrol maps used by inspectors.<sup>47</sup> PG&E did not provide these patrol maps and instead referenced PG&E's Distribution Inspection Procedure (DIP) TD-7102P-01, which outlined the geographic areas for the Second Patrol Program and stated that inspections must be conducted in the areas listed above.<sup>48</sup>

To demonstrate that PG&E addressed the location data limitation in its legacy VM database, PG&E provided an additional Excel file containing Distribution Second Patrol inspection data exported from PG&E's One VM database. This Excel file indicated that the One VM database records location data for FHSZ, WUI, SRA, FRA, HFTD, and HFRA areas.<sup>49</sup>

While the Excel file containing data from the One VM database demonstrated improvements in PG&E's recordkeeping, it only included 31,016 of the total 43,220 circuit miles in the legacy VM database for the 2023 inspection cycle. As a result, Energy Safety could only verify that 31,016 circuit miles of Distribution Second Patrol inspections occurred in FHSZ, WUI, SRA, FRA, HFTD, and HFRA locations. Without location data for all 43,220 circuit miles inspected, Energy Safety cannot verify that all inspections were completed in the locations listed in this target.

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<sup>45</sup> [PG&E's 2023-2025 WMP](https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=56145&shareable=true) (Rev. #4, January 8, 2024), p. 667, (https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=56145&shareable=true).

<sup>46</sup> [PG&E's 2023-2025 WMP](https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=56145&shareable=true) (Rev. #4, January 8, 2024), p. 612, (https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=56145&shareable=true).

<sup>47</sup> Data Request 276, question 16; attachment "DRU14563\_Audit\_DR\_OEIS\_D001.pdf," p. 6.

<sup>48</sup> Data Request 276, question 5; attachment "DRU14563\_Q005\_Atch01\_TD-7102P-01 (Rev 2, 2023) \_Redacted.pdf."

<sup>49</sup> Data Request 265, question 16; attachment "DRU14286\_Q016\_Atch01\_OneVM\_2P\_Miles.csv."

The provided information indicated that PG&E inspected over 43,000 circuit miles, exceeding its target. However, the target also committed to completing these inspections in specified areas, and that the inspections would occur approximately six months offset from Distribution Routine Patrol inspections. Without location information for all project year 2023 inspection work or documentation supporting that project year 2023 Second Patrol inspections were completed approximately six months offset from project year 2023 Distribution Routine Patrol inspections, Energy Safety found that PG&E could not provide information consistent with the completion of all work identified in this target.

Conclusion: PG&E did not provide information consistent with the completion of all work identified in this target.

### 8.2.2.2.3 Vegetation Management for Operational Mitigations

PG&E stated in its 2023-2025 WMP that it did not include a 2023 target for the VMOM Program, because the extent of work necessary for the program had not been fully determined in 2023. PG&E has set targets for this program in 2024 and 2025 that Energy Safety will audit in future compliance years.<sup>50</sup>

### 8.2.2.2.4 Tree Removal Inventory

#### Quantitative Targets or Commitments, Supporting Information & Analysis, and Conclusion

PG&E included the following Tree Removal Inventory (TRI) target in its 2023-2025 WMP.<sup>51</sup> For ease of comparison, the WMP target and work completed is summarized below:

Initiative Activity	PG&E's 2023 Quantitative Target	Actual Completed in 2023
TRI	15,000 trees	35,760 trees

Supporting Information and Analysis: PG&E provided an Excel file containing tree work and inspection records that demonstrated the completion of mitigation work in its TRI Program.<sup>52</sup> In its 2023-2025 WMP, PG&E describes mitigation work for trees in the TRI target as either “(1) removed by the TRI program, (2) removed by another PG&E VM program and no longer present, or (3) no longer poses a threat to PG&E facilities because the facilities have been

<sup>50</sup> [PG&E's 2023-2025 WMP](https://efiling.energy.ca.gov/eFiling/Getfile.aspx?fileid=56145&shareable=true) (Rev. #4, January 8, 2024), p. 614, (https://efiling.energy.ca.gov/eFiling/Getfile.aspx?fileid=56145&shareable=true).

<sup>51</sup> [PG&E's 2023-2025 WMP](https://efiling.energy.ca.gov/eFiling/Getfile.aspx?fileid=56145&shareable=true) (Rev. #4, January 8, 2024), p. 608, (https://efiling.energy.ca.gov/eFiling/Getfile.aspx?fileid=56145&shareable=true).

<sup>52</sup> Data Request 265, question 18; attachment “DRU14286\_Q018\_Atch01\_TRI\_v2.xlsx.”

relocated.”<sup>53</sup> The Excel file included inspection dates, inspection locations (latitude and longitude), and the outcomes of the inspections (whether work was completed or if facilities had been relocated). The Excel file indicated that in 2023, the TRI program completed some form of tree work on 15,599 trees initially identified by the EVM program. The Excel file also indicated that 19,442 trees identified by the EVM program had been removed by a program other than TRI, and that 719 trees identified by the EVM program were no longer a threat to PG&E facilities because the facilities had been relocated. In total, PG&E exceeded its target by completing “mitigation work,” as defined in its 2023-2025 WMP, to address 35,760 trees that were first identified by the EVM program.

While Energy Safety utilized the information provided in Data Request 265 to assess PG&E’s completion of this target, Energy Safety identified inconsistencies between these data and PG&E’s 2023 QDR submissions. PG&E’s non-spatial, QIU data contained in Table 1 of PG&E’s Q4 Wildfire Mitigation Data Tables and the “cumulative progress” field of the vegetation management project point feature class provided in PG&E’s Q4 spatial QDR submission also reported that PG&E completed “mitigation work” to address 35,760 trees that were first identified by the EVM program.<sup>54</sup> However, Energy Safety’s analysis of PG&E’s 2023 spatial QDR submissions found that PG&E only submitted enough geospatial data to support the completion of 32,700 units of “mitigation work.”<sup>55</sup>

Energy Safety understands that the cutoff dates for quarterly data submission may result in submission of incomplete data or data that has not yet undergone quality control checks; however, the Data Guidelines require PG&E to submit a revision to previously submitted data to correct errors or update incomplete records in its QDR data submission by the next quarterly submission date.<sup>56</sup> PG&E submitted its last revision of its 2023 Q4 QDR data on April 19, 2024. It then submitted the Excel file received in Data Request 265 on October 7, 2024. PG&E could have submitted updates to its 2023 spatial QDR submissions to ensure alignment across datasets during its spatial QDR submissions in May or August of 2024.

In this case, PG&E was able to provide documentation which supported the completion of work for this target. However, it is incumbent upon PG&E to update spatial QDR data in

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<sup>53</sup> [PG&E’s 2023-2025 WMP](https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=56145&shareable=true) (Rev. #4, January 8, 2024), p. 614, (https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=56145&shareable=true).

<sup>54</sup> [PG&E’s non-spatial, Q4 Wildfire Mitigation Data Tables](https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=56510&shareable=true) (Rev. #2, April 19, 2024), Table 1, (https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=56510&shareable=true), PG&E’s geospatial 2023 quarter 4 Quarterly Data Report, PGE Vegetation Management Project Points 2023, VM-04.

<sup>55</sup> PG&E’s geospatial 2023 quarters 1-4 Quarterly Data Report, PGE Vegetation Management Project Points 2023, VM-04.

<sup>56</sup> [Energy Safety’s Data Guidelines](https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=53314&shareable=true) (version 3.0, December 14, 2022), p. 6 (https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=53314&shareable=true).

accordance with Data Guidelines to demonstrate that PG&E completed all work and that it was appropriately documented and reported to Energy Safety.

Conclusion: PG&E provided information consistent with the completion of work identified in this target.

## Narrative Statements, Supporting Information & Analysis, and Conclusion

### Statement 2

Statement: “The Tree Removal Inventory Program digitally records data into a system called Field Maps. The data entered into the system includes information about Level 2 inspections. Our current procedure requires that a photograph of the TRAQ form is taken after the inspection is completed for digital record keeping purposes if the TRAQ certified arborist determines abatement is not required.”<sup>57</sup>

Supporting Information and Analysis: PG&E provided an Excel file exported from its Field Maps software containing records of all trees first identified by the EVM program that were reassessed by a Tree Risk Assessment Qualification (TRAQ) certified arborist in 2023 and were determined to no longer require work.<sup>58</sup> The Excel file included inspection dates, inspection locations (latitude and longitude), the outcome of each inspection, and whether a TRAQ form was uploaded to Field Maps for each inspection performed. Per the procedure stated in PG&E’s 2023-2025 WMP, the TRAQ certified arborist was required to complete a TRAQ form for each tree determined to no longer require work and attach the completed form to the tree’s digital record in Field Maps. The Excel file indicated that TRAQ certified arborists determined that 9,255 trees first identified for work by the EVM program no longer required work in 2023. However, 355 of the trees determined to no longer require work did not have a TRAQ form attached to their digital record in Field Maps. Therefore, PG&E did not fully adhere to the procedures in this statement.

Conclusion: PG&E did not provide information consistent with the completion of work identified in this statement.

### Statement 3

Statement: “The TRI Program is working down its tree inventory in a risk informed manner and is focused on mitigating the trees in the highest risk CPZs in 2023.”<sup>59</sup>

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<sup>57</sup> PG&E’s 2023-2025 WMP (Rev. #4, January 8, 2024), p. 646, (<https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=56145&shareable=true>).

<sup>58</sup> Data Request 265, question 5; attachment; "DRU14286\_Q005\_Atch01\_TRI.xlsx."

<sup>59</sup> PG&E’s 2023-2025 WMP (Rev. #4, January 8, 2024), p. 650, (<https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=56145&shareable=true>).

Supporting Information and Analysis: PG&E provided an Excel file listing all 11,136 Circuit Protection Zones (CPZs) that were delineated in its service territory in 2023 ranked in order from most to least risk.<sup>60</sup> Additionally, PG&E provided a second Excel file containing the CPZs in which TRI work was performed in 2023.<sup>61</sup> The second Excel file indicated that all 2023 TRI work was performed in PG&E’s top 100 highest risk ranked CPZs.

Conclusion: PG&E provided information consistent with the completion of work identified in this statement.

## 8.2.2.2.5 Focused Tree Inspections

### Quantitative Targets or Commitments, Supporting Information & Analysis, and Conclusion

PG&E included the following Focused Tree Inspections (FTI) target in its 2023-2025 WMP.<sup>62</sup> For ease of comparison, the WMP target and work completed is summarized below:

Initiative Activity	PG&E’s 2023 Quantitative Target	Actual Completed in 2023
FTI in Areas of Concern (AOC)	250 circuit miles	274 circuit miles

Supporting Information and Analysis: PG&E provided an Excel file containing inspection records from its 2023 FTI program.<sup>63</sup> The Excel file included inspection locations (latitude and longitude), inspection dates, and the AOCs in which the inspections were completed. The Excel file indicated that PG&E’s FTI program inspected 274 circuit miles in AOC locations in 2023, exceeding PG&E’s target of 250 circuit miles.

While Energy Safety utilized the information provided in Data Request 265 to assess PG&E’s completion of this target, Energy Safety identified inconsistencies between these data and PG&E’s 2023 QDR submissions. PG&E’s non-spatial, QIU data contained in Table 1 of PG&E’s Q4 Wildfire Mitigation Data Tables reported that the FTI program inspected 267 circuit miles.<sup>64</sup> Additionally, the “cumulative progress” field of the vegetation inspection line feature class provided in PG&E’s Q3 spatial QDR submission, which was the only quarter PG&E included FTI

<sup>60</sup> Data Request 276, question 11; attachment “DRU14563\_Q011\_Atch01\_WDRM v3 Trunk Model - Master.xlsx.”

<sup>61</sup> Data Request 265, question 1; attachment “DRU14286\_Q001\_Atch01\_TRI.xlsx.”

<sup>62</sup> [PG&E’s 2023-2025 WMP](#) (Rev. #4, January 8, 2024), p. 608, (<https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=56145&shareable=true>).

<sup>63</sup> Data Request 265, question 19; attachment “DRU14286\_Q019\_Atch01\_FTI 2023 Final Span Inspection Data.xlsx.”

<sup>64</sup> [PG&E’s non-spatial, Q4 Wildfire Mitigation Data Tables](#) (Rev. # 2, April 19, 2024), Table 1, (<https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=56510&shareable=true>).

inspection data in its 2023 spatial QDR submissions, reported that the FTI Program inspected 254 circuit miles.<sup>65</sup> However, because PG&E only submitted spatial data for this target in Q3 of 2023, PG&E's 2023 spatial QDR submissions only contained 51 miles of spatial data for this target. Without spatial data from the other quarters, Energy Safety could not utilize PG&E's submitted spatial data to confirm that the entire 254 circuit miles reported in the "cumulative progress" field in Q3 of PG&E's 2023 spatial QDR submission nor the 267 circuit miles reported in PG&E's Q4, 2023 QIU data were completed.<sup>66</sup>

PG&E later reported in Revision 1 of its ARC, published on April 25, 2024, that because of data validation after PG&E's 2023 Q4 QDR submission, PG&E determined it had actually completed 274 circuit miles towards this target.<sup>67</sup> This updated mileage aligned with the total mileage documented in the Excel file received in Data Request 265.

Energy Safety understands that the cutoff dates for quarterly data submission may result in submission of incomplete data or data that has not yet undergone quality control checks; however, the Data Guidelines require PG&E to submit a revision to previously submitted data when it identifies errors or updates at the next quarterly submission date.<sup>68</sup> PG&E submitted its last revision of its 2023 Q4 QDR data on April 19, 2024.<sup>69</sup> PG&E then submitted a revised final attainment value of work completed for its FTI target in revision 1 of its 2023 ARC, published on April 25, 2024. However, PG&E did not update its QIU data nor its spatial QDR data to reflect this updated final attainment value in its 2024 Q1 QDR submission in May of 2024 nor during any subsequent QDR submissions.

In this case, PG&E was able to provide documentation which supported the completion of work for this target. However, it is incumbent upon PG&E to update QDR data in accordance with Data Guidelines to demonstrate that PG&E completed all work and that it was appropriately documented and reported to Energy Safety.

Conclusion: PG&E provided information consistent with the completion of work identified in this target.

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<sup>65</sup> PG&E's geospatial 2023 quarter 4 Quarterly Data Report, PGE Vegetation Inspection Polygon 2023, VM-03.

<sup>66</sup> PG&E's geospatial 2023 quarters 1-4 Quarterly Data Report, PGE Vegetation Inspection Line 2023, VM-03.

<sup>67</sup> [PG&E's 2023 ARC for the 2023-2025 WMP](https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=56539&shareable=true) (Rev. #1, April 25, 2024), p. 32, (https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=56539&shareable=true).

<sup>68</sup> [Energy Safety's Data Guidelines](https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=53314&shareable=true) (version 3.0, December 14, 2022), p. 6 (https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=53314&shareable=true).

<sup>69</sup> [PG&E's non-spatial, Q4 Wildfire Mitigation Data Tables](https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=56510&shareable=true) (Rev. #2, April 19, 2024), Table 1, (https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=56510&shareable=true).



### 8.2.2.3.1 Defensible Space Inspection

#### Quantitative Targets or Commitments, Supporting Information & Analysis, and Conclusion

PG&E included the following defensible space Inspection targets in its 2023-2025 WMP.<sup>70</sup> For ease of comparison, the WMP targets and work completed are summarized below:

Initiative Activity	PG&E's 2023 Quantitative Target	Actual Completed in 2023
Defensible Space Inspections – Distribution Substation	131 inspections	131 inspections*
Defensible Space Inspections – Transmission Substation	55 inspections	55 inspections
Defensible Space Inspections – Hydroelectric Substations and Powerhouses	61 inspections	61 inspections
<p>* PG&amp;E provided documentation which indicated that 131 distribution substations were inspected. However, two inspections were completed outside of the target's stated timeframe. Because PG&amp;E did not adhere to the target's stated timeframe, Energy Safety found that PG&amp;E did not provide information consistent with the completion of all work identified in this target.</p>		

#### Defensible Space Inspections – Distribution Substation

Supporting Information and Analysis: PG&E provided an Excel file containing records of all defensible space inspections completed at PG&E's distribution substations during its 2023 inspection cycle.<sup>71</sup> The Excel file included distribution substation names and locations (latitude and longitude), HFTD/HFRA designations, and inspection dates. The Excel file indicated that PG&E completed defensible space inspections at 131 distribution substations in HFTD areas between November 21, 2022, and June 12, 2023. Although PG&E met its target

<sup>70</sup> [PG&E's 2023-2025 WMP](#) (Rev. #4, January 8, 2024), pp. 609-610

(<https://efiling.energy.ca.gov/eFiling/Getfile.aspx?fileid=56145&shareable=true>).

<sup>71</sup> Data Request 265, question 21; attachment "DRU14286\_Q021\_Atch01\_VM-05\_Distribution Substation.xlsx."

of completing inspections at 131 distribution substations, two of the inspections occurred in June 2023 which was outside of the inspection cycle stated in PG&E's Procedure LAND 4001P-01 (November 15 of the prior year to May 31 of the current year).<sup>72</sup> Because PG&E stated in its 2023-2025 WMP that it would "complete defensible space inspections in alignment with the guidelines set forth in LAND 4001P-01," and two of the inspections were completed outside of Procedure LAND 4001P-01's inspection cycle timeframe, PG&E did not fully adhere to the work commitments in this target.

Conclusion: PG&E did not provide information consistent with the completion of all work identified in this target.

### **Defensible Space Inspections – Transmission Substation**

Supporting Information and Analysis: PG&E provided an Excel file containing records of all defensible space inspections completed at PG&E's transmission substations during its 2023 inspection cycle.<sup>73</sup> The Excel file included transmission substation names and locations (latitude and longitude), HFTD/HFRA designations, and inspection dates. The Excel file indicated that PG&E completed defensible space inspections at 55 transmission substations in HFTD areas between December 1, 2022, and May 30, 2023, which aligned with the inspection cycle outlined in Procedure LAND 4001P-01 (November 15 of the prior year to May 31 of the current year).

Conclusion: PG&E provided information consistent with the completion of work identified in this target.

### **Defensible Space Inspections – Hydroelectric Substations and Powerhouses**

Supporting Information and Analysis: PG&E provided an Excel file containing records of all defensible space inspections completed at PG&E's hydroelectric generation substations and powerhouses during its 2023 inspection cycle.<sup>74</sup> The Excel file included substation IDs and locations (latitude and longitude), HFTD/HFRA designations, and inspection dates. The Excel file indicated that PG&E completed defensible space inspections at 61 hydroelectric generation substations and powerhouses in HFTD areas between January 19, 2023, and May 30, 2023, which aligned with the inspection cycle outlined in Procedure LAND 5201P-01 (November 15 of the prior year through November 15 of the current year).

Conclusion: PG&E provided information consistent with the completion of work identified in this target.

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<sup>72</sup> Data Request 276, question 6; attachment "DRU14563\_Q006\_Atch01\_LAND-4001P-01\_Redacted.pdf."

<sup>73</sup> Data Request 265, question 22; attachment "DRU14286\_Q022\_Atch01\_VM-06\_Transmission Substation.xlsx."

<sup>74</sup> Data Request 265, question 23; attachment "DRU14286\_Q023\_Atch01\_VM-07\_DS Data for Q23\_Q29\_Q30.xlsx."

**Finding - 8.2.2.1 Vegetation Management Inspections**

PG&E did not provide information consistent with the completion of all work identified in Initiative 8.2.2.1 Vegetation Management Inspections. PG&E must supply a corrective action response addressing the deficiencies identified in the Distribution Second Patrol target, Defensible Space Inspections – Distribution Substation target, and Statement 2.

### 8.2.3.1 Vegetation and Fuels Management- Pole Clearing

The purpose of this initiative was to describe the “Plan and execution of vegetation removal around poles per Public Resources Code section 4292 and outside the requirements of Public Resources Code section 4292 (e.g., pole clearing performed outside of the State Responsibility Area).”<sup>75</sup>

#### Quantitative Targets or Commitments, Supporting Information & Analysis, and Conclusion

PG&E included the following pole clearing target in its 2023-2025 WMP.<sup>76</sup> For ease of comparison, the WMP target and work completed is summarized below:

Initiative Activity	PG&E’s 2023 Quantitative Target	Actual Completed in 2023
Pole Clearing Program	77,503 poles	79,885 poles

Supporting Information and Analysis: PG&E’s Procedure TD-7112S stated that PG&E’s annual VC pole clearing cycle runs from October of the previous year through September of the current year.<sup>77</sup> Therefore, Energy Safety assessed work completed by PG&E to meet this target from October 2022 to September 2023.

PG&E provided an Excel file containing records of all poles inspected and cleared where clearing was necessary during its 2023 pole clearing cycle.<sup>78</sup> The Excel file included the following information: pole number, inspection date, and the date any prescribed clearing work was completed. The Excel file indicated that PG&E inspected and cleared where clearing was necessary a total of 79,885 poles between October 3, 2022, and September 30, 2023, exceeding PG&E’s target. Of those poles, 20,887 (26%) were PRC 4292 exempt, and 58,998 (74%) were PRC 4292 non-exempt. Energy Safety noted that work records from seven additional poles were included in the Excel file. Energy Safety did not count these seven poles

<sup>75</sup> [Energy Safety’s 2023-2025 Wildfire Mitigation Plan Technical Guidelines](https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=53286&shareable=true) (December 2022), p. A-24, (https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=53286&shareable=true).

<sup>76</sup> [PG&E’s 2023-2025 WMP](https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=56145&shareable=true) (Rev. #4, January 8, 2024), p. 608, (https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=56145&shareable=true).

<sup>77</sup> Data Request 276, question 7; attachment “DRU14563\_Q007\_Atch01\_TD-7112S\_Redacted.pdf.”

<sup>78</sup> Data Request 265, question 24; attachment “DRU14286\_Q024\_Atch01\_Q24\_and\_Q25\_Redacted.xlsx.”

towards the target as the clearing work was completed outside of the project year 2023 pole clearing cycle.

While Energy Safety utilized the information provided in Data Request 265 to assess PG&E's completion of this target, Energy Safety identified inconsistencies between these data and PG&E's 2023 QDR submissions. PG&E's non-spatial, QIU data contained in Table 1 of PG&E's Q4 Wildfire Mitigation Data Tables reported that PG&E inspected and cleared 79,882 poles in 2023.<sup>79</sup> Additionally, the "cumulative progress" field of the vegetation management project point feature class provided in PG&E's Q3 spatial QDR submission, which was the last quarter PG&E reported pole clearing data in its 2023 spatial QDR submissions, reported that PG&E inspected and cleared 80,374 poles.<sup>80</sup> However, Energy Safety's analysis of the 2023 spatial QDR submissions found that PG&E only submitted enough geospatial data to support that 78,000 poles were inspected and cleared.<sup>81</sup>

Energy Safety understands that the cutoff dates for quarterly data submission may result in submission of incomplete data or data that has not yet undergone quality control checks; however, the Data Guidelines require PG&E to submit a revision to previously submitted data to correct errors or update incomplete records in its QDR data submission by the next quarterly submission date.<sup>82</sup> PG&E submitted its last revision of its 2023 Q4 QDR data on April 19, 2024. It then submitted the Excel file referenced above on October 7, 2024. PG&E could have submitted updates to its 2023 QDR submissions to ensure alignment across datasets during its QDR submissions in May or August of 2024.

In this case, the discrepancy did not affect the conclusion related to completion of work on this target. However, it is incumbent upon PG&E to update QDR data in accordance with Data Guidelines to demonstrate that PG&E completed all work and that it was appropriately documented and reported to Energy Safety.

Lastly, the information provided in Data Request 265 indicated that PG&E met its 2023 Pole Clearing Program target, and Energy Safety's review of PG&E's 2023 QDR submissions indicated that PG&E provided pole asset data in compliance with the Data Guidelines. However, Energy Safety noted that PG&E indicated a Public Resource Code 4292 exemption status of "unknown" for the "exemption status" field contained in each record of PG&E's

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<sup>79</sup> [PG&E's non-spatial, Q4 Wildfire Mitigation Data Tables](https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=56510&shareable=true) (Rev. # 2, April 19, 2024), Table 1, (https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=56510&shareable=true).

<sup>80</sup> PG&E's geospatial 2023 quarter 3 Quarterly Data Report, PGE Vegetation Management Project Point 2023, VM-02.

<sup>81</sup> PG&E's geospatial 2023 quarters 1-4 Quarterly Data Report, PGE Vegetation Management Project Point 2023, VM-02.

<sup>82</sup> [Energy Safety's Data Guidelines](https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=53314&shareable=true) (version 3.0, December 14, 2022), p. 6 (https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=53314&shareable=true).

“support structure” feature classes in its 2023 spatial QDR submissions.<sup>83</sup> While Energy Safety’s data guidelines permitted PG&E to submit an exemption status of “unknown,”<sup>84</sup> Energy Safety expects PG&E to continue maturing its vegetation management program by submitting accurate exemption status information for all of its support structures in future spatial QDR submissions as opposed to defaulting to the “unknown” selection. Non-exempt support structures require that vegetation clearances are maintained. To ensure that all non-exempt support structures are receiving adequate vegetation clearance work, PG&E’s database must correctly identify whether support structures are exempt or non-exempt. Having records with an “unknown” exemption status could result in insufficient clearances which increase risk on the system.

Conclusion: PG&E provided information consistent with the completion of work identified in this target.

### **Finding – 8.2.3.1 Pole Clearing**

PG&E provided information consistent with the completion of all work identified in Initiative 8.2.3.1 Pole Clearing.

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<sup>83</sup> [PG&E’s 2023 Q4 Spatial Data Status Report](https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=56268&shareable=true) (February 1, 2024), (https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=56268&shareable=true).

<sup>84</sup> [Energy Safety’s Data Guidelines](https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=53314&shareable=true) (version 3.0, December 14, 2022), p. 25 (https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=53314&shareable=true).



## 8.2.3.2 Vegetation and Fuels Management- Wood and Slash Management

The purpose of this initiative was to take actions “to manage all downed wood and “slash” generated from vegetation management activities.”<sup>85</sup>

### Narrative Statements, Supporting Information & Analysis, and Conclusion

#### Statement 4

Statement: “Debris less than 4 inches in diameter that is generated during pruning activities are chipped or lopped and scattered on the property in accordance with applicable regulations. Chips are left on site or removed off site based on owner preferences.”<sup>86</sup>

Supporting Information and Analysis: PG&E stated that “there is no field in the PG&E database for the tracking or documentation of debris generated by vegetation management activities less than four inches in diameter; however, the expectation is that the management of wood and debris resulting from trees worked by [vegetation management] activities adhere to the requirements and expectations in our VM Wood Management Program Standard.”<sup>87</sup> Energy Safety reviewed the document, and confirmed that it required PG&E’s contractors to comply with applicable regulations and best management practices when completing debris management work. However, Energy Safety could not verify that the work described in Statement 4 above was completed in 2023.

Conclusion: PG&E did not provide information consistent with the completion of work identified in this statement.

#### Statement 5

Statement: “The Wood Management program addresses large wood generated by PG&E’s VM activities. This includes post-fire work activities, and wood generated by the EVM Program. Wood Management is a voluntary program in which property owners must opt in to participate. The program is designed to help alleviate the potential burden caused by the presence of larger diameter wood on customer properties resulting from PG&E activities.”<sup>88</sup>

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<sup>85</sup> [Energy Safety's 2023-2025 Wildfire Mitigation Plan Technical Guidelines](https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=53286&shareable=true) (December 2022), p. A-24, (https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=53286&shareable=true).

<sup>86</sup> [PG&E's 2023-2025 WMP](https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=56145&shareable=true) (Rev. #4, January 8, 2024), p. 680, (https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=56145&shareable=true).

<sup>87</sup> Data Request 265, question 26; attachment “DRU14286\_Audit\_DR\_OEIS\_D001,” p. 12.

<sup>88</sup> [PG&E's 2023-2025 WMP](https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=56145&shareable=true) (Rev. #4, January 8, 2024), p. 680, (https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=56145&shareable=true).

Supporting Information and Analysis: PG&E provided an Excel file containing wood management requests that were directed to its Central Wood Management team in 2023.<sup>89</sup> The Excel file indicated that PG&E's Central Wood Management team completed 54,588 wood management units in 2023. The work comprised of the removal (hauling off site) or relocating/processing on site of material greater than 4 inches in diameter.<sup>90</sup>

Conclusion: PG&E provided information consistent with the completion of work identified in this statement.

### **Finding – 8.2.3.2 Wood and Slash Management**

PG&E did not provide information consistent with the completion of all work identified in Initiative 8.2.3.2 Wood and Slash Management. PG&E must supply a corrective action response addressing the deficiency identified in Statement 4 above.

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<sup>89</sup> Data Request 265, question 27; attachment "DRU14286\_Q027\_Atch01\_CWM wood management 2023\_Redacted.xlsx."

<sup>90</sup> Data Request 265, question 27; attachment "DRU14286\_Audit\_DR\_OEIS\_D001," p. 13.

### 8.2.3.3 Vegetation and Fuels Management- Clearance

The purpose of this initiative was to take actions “after inspection to ensure that vegetation does not encroach upon electrical equipment and facilities, such as tree trimming.”<sup>91</sup>

#### Narrative Statements, Supporting Information & Analysis, and Conclusion

##### Statement 6

Statement: “PG&E is transitioning the maintenance of enhanced clearances that were achieved in EVM to Routine VM patrols. We established routine maintenance requirements for electric distribution circuits where EVM scope clearances have been performed (in HFTD designated areas) and passed by work verification.”<sup>92</sup>

Supporting Information and Analysis: PG&E’s 2023 Distribution Routine Patrol data was collected using two different databases: PG&E’s legacy VM database and its One VM database. PG&E provided two Excel files, one containing data from the legacy VM database and the other from the One VM database. Both Excel files documented tree work identified and completed by PG&E’s Distribution Routine Patrol in 2023 to maintain EVM clearances.

The Excel files included information such as tree inspection dates, whether work was prescribed for inspected trees, and the completion dates for prescribed tree work. The Excel files indicated that PG&E’s Distribution Routine Patrol Program prescribed tree work to 117,832 trees in 2023. Of these, work was completed on 73,826 trees within the same year. The remaining prescribed work was either completed in 2024 (39,374 trees) or lacked a reported completion date (4,632 trees). The provided information indicated that in 2023, PG&E utilized its Distribution Routine Patrol Program to maintain enhanced clearances initially established by the EVM program to satisfy the objective of this initiative.

Conclusion: PG&E provided information consistent with the completion of work identified in this statement.

#### Finding – 8.2.3.3 Clearance

PG&E provided information consistent with the completion of work identified in Initiative 8.2.3.3 Clearance.

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<sup>91</sup> [Energy Safety's 2023-2025 Wildfire Mitigation Plan Technical Guidelines](https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=53286&shareable=true) (December 2022), p. A-24, (https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=53286&shareable=true).

<sup>92</sup> [PG&E's 2023-2025 WMP](https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=56145&shareable=true) (Rev. #4, January 8, 2024), p. 674, (https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=56145&shareable=true).

## 8.2.3.4 Vegetation and Fuels Management- Fall-in Mitigation

The purpose of this initiative was to take actions “to identify and remove or otherwise remediate trees that pose a high risk of failure or fracture that could potentially strike electrical equipment.”<sup>93</sup>

### Narrative Statements, Supporting Information & Analysis, and Conclusion

#### Statement 7

Statement: “In 2023, PG&E is implementing three new VM Programs that support fall-in mitigations: VM for Operational Mitigations; Tree Removal Inventory; and Focused Tree Inspections.”<sup>94</sup>

Supporting Information and Analysis: PG&E provided Excel files containing records of work completed by the VMOM, TRI, and FTI programs in 2023.<sup>95</sup> The Excel files included the dates and locations (latitude and longitude) of remediation work completed by each program. The Excel files indicated that the VMOM program completed remediation work on 4,919 trees, the TRI Program completed remediation work on 15,600 trees, and the FTI Program completed remediation work on 2,714 trees.

Conclusion: PG&E provided information consistent with the completion of work identified in this statement.

#### Statement 8

Statement: From Section 8.2.2.2: “PG&E has implemented a plan to complete the identified dead/dying tree work [from PG&E’s Second Patrol Program] within 180 days for HFTD areas and within 365 days for non-HFTD areas.”<sup>96</sup>

Supporting Information and Analysis: While this statement was included in section 8.2.2.2 Vegetation Management Inspections of PG&E’s 2023-2025 WMP, it describes work that includes the remediation of trees with potential to fail or fracture on PG&E’s electrical equipment and was therefore relevant to the objective of the Fall-in Mitigation Initiative.

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<sup>93</sup> [Energy Safety's 2023-2025 Wildfire Mitigation Plan Technical Guidelines](https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=53286&shareable=true) (December 2022), p. A-24, (https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=53286&shareable=true).

<sup>94</sup> [PG&E’s 2023-2025 WMP](https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=56145&shareable=true) (Rev. #4, January 8, 2024), p. 683, (https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=56145&shareable=true).

<sup>95</sup> Data Request 265, questions 18, 20, 31; attachments “DRU14286\_Q018\_Atch01\_TRI\_v2.xlsx,” “DRU14286\_Q020\_Atch01\_OneVM FTI Trees.xlsx,” “DRU14286\_Q031\_Atch02\_VMOM\_Update.xlsx.”

<sup>96</sup> [PG&E’s 2023-2025 WMP](https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=56145&shareable=true) (Rev. #4, January 8, 2024), p. 667, (https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=56145&shareable=true).

Consequently, Energy Safety has included its analysis of the work described in Statement 8 within the Vegetation and Fuels Management- Fall-in Mitigation section of the 2023 SVM Audit.

PG&E's Second Patrol tree work data was collected in two different databases: PG&E's legacy database and PG&E's One VM database. PG&E provided two Excel files, one containing data from the legacy database, and the other from the One VM database. Together, the Excel files contain records of all trees that were identified as dead or dying by PG&E's Second Patrol Program in 2023.<sup>97</sup> The Excel files included the following information: the dates trees were first identified as dead or dying, the prescribed mitigation work, the date the work was completed, HFTD and non-HFTD designations, and constraint types (e.g., pending permits with land agencies, environmental review, etc.) associated with the prescribed work.

The Excel file from the legacy database contained 12,808 tree records, and the One VM database file contained 34,882 tree records. By combining the data from both databases, the information indicated that a total of 47,689 trees were identified as dead or dying and prescribed for mitigation work by PG&E's Second Patrol program in 2023, of which, 40,954 were in HFTD areas and 6,735 were in non-HFTD areas.<sup>98</sup>

Of the 40,954 trees in HFTD areas:

- 32,881 had a reported work completion date within 180 days of inspection
- 4,981 had a reported work completion date ranging from 181 and 580 days after inspection
- 3,063 had no reported work completion date and had been pending work for more than 180 days
- 29 trees had a reported work completion date that occurred before the inspection date.

Of the 6,735 trees in non-HFTD areas:

- 6,046 had a reported work completion date within 365 days of inspection
- 98 had a reported work completion date ranging from 366 and 513 days after inspection
- 387 had no reported work completion date and had been pending work for more than 365 days
- 203 had no reported work completion date, but had not been pending work for more than 365 days as of October 7, 2024
- 1 tree had a reported work completion date that occurred before the inspection date.

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<sup>97</sup> Data Request 265, question 17; attachment "DRU14286\_Audit\_DR\_OEIS\_D001.pdf." p. 9.

<sup>98</sup> Data Request 265, question 17; attachments "DRU14286\_Q017\_Atch01\_Legacy.xlsx," "DRU14286\_Q017\_Atch02\_OneVM 2P DaD.xlsx."



In review of the various constraint types listed in the Excel files, PG&E cited pending permit approvals from multiple land agencies, and environmental reviews as the primary constraint types. However, constraints were not listed for every dead or dying tree with delayed or pending mitigation work.

These data indicated that PG&E completed only 82 percent of identified mitigation work to address dead and or dying trees within the timeframe stated in its 2023-2025 WMP. Additionally, 3,450 trees had no reported mitigation date and had elapsed the allowable amount of time in which mitigation work was required. Although the provided Excel files indicated that some work was delayed due to constraints, a constraint was not recorded for every instance of delayed work. PG&E must supply supporting documentation in its Corrective Action Plan that demonstrates actions taken by PG&E to ensure all dead and or dying trees are mitigated within the timeframes stated in its 2023-2025 WMP.

Conclusion: PG&E did not provide information consistent with the completion of work identified in this statement.

### **Finding – 8.2.3.4 Fall-in Mitigation**

PG&E did not provide information consistent with the completion of work identified in Initiative 8.2.3.4 Fall-in Mitigation. PG&E must supply a corrective action response addressing the deficiencies identified in Statement 8 above.

## 8.2.3.5 Vegetation and Fuels Management-Substation Defensible Space

The purpose of this initiative was to take actions “to reduce ignition probability and wildfire consequence due to contact with substation equipment.”<sup>99</sup>

### Narrative Statements, Supporting Information & Analysis, and Conclusion

#### Statement 9

Statement: “Inspection and mitigation activities [related to PG&E’s substation utility defensible space program] are prioritized based on elevation and annual fuel growth in which lower elevations are inspected first as they have a higher rate of growth and dry out earlier in the season while higher elevations grow slower and later into the year.”<sup>100</sup>

Supporting Information and Analysis: PG&E stated that the prioritization language written in its 2023-2025 WMP was only intended for hydroelectric sites which have a more variable elevation range that contributes to varied seasonal vegetation growth rates. Furthermore, the transmission and distribution substations are located primarily at low elevation, and prioritizing VM work based on elevation alone would be inefficient.<sup>101</sup> Due to this fact, PG&E only provided elevation and corresponding prioritization information for its hydroelectric sites. Energy Safety accepts this explanation.

For its hydroelectric sites, PG&E provided an Excel file documenting defensible space inspection and mitigation work that occurred at 61 of its hydroelectric generation substations during its 2023 substation defensible space inspection cycle.<sup>102</sup> The Excel file also included elevation information for each substation and assigned a priority ranking for each substation based on elevation: First priority substations were at sites lower than 3,000 ft. elevation, and second priority substations were at sites greater than 3,000 ft. elevation. The Excel file indicated that defensible space inspections were completed at the first priority substations ahead of the second priority substations, and that mitigation activities including herbicide application, brush work, and tree removal occurred at each substation in 2023.

<sup>99</sup> [Energy Safety's 2023-2025 Wildfire Mitigation Plan Technical Guidelines](https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=53286&shareable=true) (December 2022), p. A-25, (https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=53286&shareable=true).

<sup>100</sup> [PG&E's 2023-2025 WMP](https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=56145&shareable=true) (Rev. #4, January 8, 2024), p. 685 (https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=56145&shareable=true, accessed December 4, 2024).

<sup>101</sup> Data Request 276, question 18; attachment “DRU14563\_Audit\_DR\_OEIS\_D001.pdf,” p. 6.

<sup>102</sup> Data Request 265, question 29; attachment “DRU14286\_Q023\_Atch01\_VM-07\_DS Data for Q23\_Q29\_Q30.xlsx.”

For its Transmission and Distribution substations, PG&E provided an additional Excel file containing the dates of VM mitigation activities performed at the substations in 2023.<sup>103</sup> The Excel file indicated that 186 substations received vegetation management mitigation work between January 9, and September 22, 2023.

Conclusion: PG&E provided information consistent with the completion of work identified in this statement.

### **Finding – 8.2.3.5 Substation Defensible Space**

PG&E provided information consistent with the completion of work identified in Initiative 8.2.3.5 Substation Defensible Space.

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<sup>103</sup> Data Request 276, question 18; attachment “DRU14563\_Q018\_Atch01\_2023 Substation Defensible Space Inspection\_mitigation Dates.xlsx.”

## 8.2.3.6 Vegetation and Fuels Management- High-Risk Species

The purpose of this initiative was to take actions “to reduce the ignition probability and wildfire consequence attributable to high-risk species of vegetation.”<sup>104</sup>

### Narrative Statements, Supporting Information & Analysis, and Conclusion

#### Statement 10

Statement: “PG&E seeks to identify trees at elevated risk of failing and striking our electrical facilities. Species is just one factor of many that PG&E takes into account to reliably identify the higher risk trees.”<sup>105</sup>

Supporting Information and Analysis: PG&E stated that in 2023, it implemented two programs aimed at identifying and managing high-risk tree species: Focused Tree Inspection (FTI) and Vegetation Management for Operational Mitigations (VMOM).<sup>106</sup> PG&E provided Excel files detailing the work completed by each program in 2023 to trim and remove trees that threatened PG&E’s facilities.

For the FTI Program, the Excel file included tree work completion dates, the type of tree work performed (trim vs removal), the location of the work (latitude and longitude), and the reason the work was prescribed.<sup>107</sup> The data indicated that the FTI Program completed some form of tree work on 2,714 trees in 2023. Comments within the Excel file that were in reference to the prescribed tree work indicated that some of the trees were removed due to high risk factors such as "POOR STRUCTURE," "CAVITY," "DEAD TREE," and "SIGNIFICANT LEAN." These comments indicated that PG&E considered multiple high-risk factors apart from plant species information to identify trees with higher risk.

For the VMOM program, the Excel file included the dates and location (latitude and longitude) of all tree work completed by the VMOM program in 2023.<sup>108</sup> The Excel file indicated that PG&E’s VMOM program completed some form of tree work on 4,919 trees that threatened PG&E’s facilities in 2023.

<sup>104</sup> [Energy Safety's 2023-2025 Wildfire Mitigation Plan Technical Guidelines](https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=53286&shareable=true) (December 2022), p. A-25, (https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=53286&shareable=true).

<sup>105</sup> [PG&E's 2023-2025 WMP](https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=56145&shareable=true) (Rev. #4, January 8, 2024), p. 686,

(https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=56145&shareable=true).

<sup>106</sup> Data Request 265, question 31; attachment “DRU14286\_Audit\_DR\_OEIS\_D001.pdf,” p. 15.

<sup>107</sup> Data Request 265, question 31; attachment “DRU14286\_Q031\_Atch01\_Tree Prescription Data - 2023 Pilot FTI 9.23.2024\_Redacted.xlsx.”

<sup>108</sup> Data Request 265, question 31; attachment “DRU14286\_Q031\_Atch02\_VMOM\_Update.xlsx.”

Conclusion: PG&E provided information consistent with the completion of work identified in this statement.

### **Finding – 8.2.3.6 High-Risk Species**

PG&E provided information consistent with the completion of work identified in Initiative 8.2.3.6 High-Risk Species.



### 8.2.3.7 Vegetation and Fuels Management- Fire-Resilient Rights-of-Way

The purpose of this initiative was to take actions “to promote vegetation communities that are sustainable, fire-resilient, and compatible with the use of the land as an electrical corporation right-of-way.”<sup>109</sup>

#### Narrative Statements, Supporting Information & Analysis, and Conclusion

##### Statement 11

Statement: “Integrated VM for transmission, which is not compliance driven, promotes desirable, stable, low-growing plant communities that resist invasion by tall growing tree and brush species through appropriate, environmentally sound, and cost-effective control methods. IVM control methods include a combination of chemical, biological, cultural, mechanical, and/or manual treatments.”<sup>110</sup>

Supporting Information and Analysis: PG&E provided an Excel file containing the locations, work completion dates, and the total number of acres treated by the IVM program in 2023. The Excel file indicated that PG&E treated 4,287 acres of its transmission right of way system using IVM control methods in 2023.<sup>111</sup>

Conclusion: PG&E provided information consistent with the completion of work identified in this statement.

##### Statement 12

Statement: “PG&E has an ongoing Transmission ROW Expansion program that is focused on reliability and was initiated in 2017. That program will continue in 2023 but is not directly related to wildfire mitigation. However, to the extent ROWs are being expanded, there will be incremental wildfire mitigation benefits resulting from decreased vegetation around PG&E’s transmission lines.”<sup>112</sup>

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<sup>109</sup> [Energy Safety's 2023-2025 Wildfire Mitigation Plan Technical Guidelines](https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=53286&shareable=true) (December 2022), p. A-25, (https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=53286&shareable=true).

<sup>110</sup> [PG&E's 2023-2025 WMP](https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=56145&shareable=true) (Rev. #4, January 8, 2024), p. 687, (https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=56145&shareable=true).

<sup>111</sup> Data Request 256, question 32, attachment; “DRU14286\_Q032\_Atch01\_2023 IVM-FEE Project Status Review.xlsx.”

<sup>112</sup> [PG&E's 2023-2025 WMP](https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=56145&shareable=true) (Rev. #4, January 8, 2024), p. 656, (https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=56145&shareable=true).

Supporting Information and Analysis: PG&E provided an Excel file containing the locations, work completion dates, and the total number of Electric Transmission Line (ETL) miles completed by the ROW Expansion program in 2023.<sup>113</sup> The Excel file indicated that PG&E's ROW Expansion Program cleared 93 ETL miles along PG&E's transmission right of way system in 2023.

Conclusion: PG&E provided information consistent with the completion of work identified in this statement.

### Statement 13

Statement: "In 2023, PG&E will pilot other new initiatives. For example, we are purchasing access to robust land management analysis for the Tahoe National Forest (which includes PG&E assets) and land around other PG&E assets in nearby Nevada and Placer-counties. This data will help us to better understand the benefits of fuels management for public safety and asset defense in specific locations."<sup>114</sup>

Supporting Information and Analysis: PG&E stated that "the goal of this pilot was to better understand the Land Tender land management analytics platform, potential application and value for PG&E, and potential for such a tool to recruit more partners or co-founders in collaborative and/or large-scale fuels treatment and wildfire resilience risk reduction projects."<sup>115</sup> PG&E provided a license agreement between Vibrant Planet PBC, and PG&E signed on December 31, 2022 which granted PG&E access to the Land Tender land management analytics platform.<sup>116</sup> Additionally, PG&E provided "key learnings" from PG&E's analysis of the program to date. Some of the "key learnings" included:

- Detailed fuels treatment recommendations and associated costs are a surprisingly powerful feature of the Land Tender analytics platform.
- It was hard to leverage this tool to operationalize fuel treatments in the context of other potential investments or risk management alternatives.
- Diverse operational PG&E teams received tutorials on the tool, however, none ended up using the tool for their own operations.<sup>117</sup>

<sup>113</sup> Data Request 265, question 10; attachment "DRU14286\_Q010\_Atch01\_ROW Ex Miles Completed in 2023\_Redacted.xlsx."

<sup>114</sup> [PG&E's 2023-2025 WMP](https://efiling.energy.ca.gov/eFiling/Getfile.aspx?fileid=56145&shareable=true) (Rev. #4, January 8, 2024), p. 687, (https://efiling.energy.ca.gov/eFiling/Getfile.aspx?fileid=56145&shareable=true).

<sup>115</sup> Data Request 265, question 34; attachment "DRU14286\_Audit\_DR\_OEIS\_D001.pdf," p. 16.

<sup>116</sup> Data Request 265, question 33; attachment "DRU14286\_Q033\_Atch01\_PGE\_VP SSA 2022\_FinalClean\_Redacted.pdf."

<sup>117</sup> Data Request 265, question 34; attachment "DRU14286\_Audit\_DR\_OEIS\_D001.pdf," p. 16.

The information indicated that PG&E had access to advanced land management analysis software in 2023 and explored its potential applications for public safety and asset protection.

Conclusion: PG&E provided information consistent with the completion of work identified in this statement.

**Finding – 8.2.3.7 Fire-Resilient Rights-of-Way**

PG&E provided information consistent with the completion of work identified in Initiative 8.2.3.7 Fire-Resilient Rights-of-Way.

## 8.2.3.8 Vegetation and Fuels Management- Emergency Response Vegetation Management

The purpose of this initiative was the “planning and execution of vegetation activities in response to emergency situations including weather conditions that indicate an elevated fire threat and post-wildfire service restoration.”<sup>118</sup>

### Narrative Statements, Supporting Information & Analysis, and Conclusion

#### Statement 14

Statement: “All trees identified for work by pre-inspectors are prioritized. If vegetation is determined to be an immediate risk to PG&E facilities, described as a Priority 1 Condition in the VM Priority Tag Procedure (TD-7102P-17), the condition will be mitigated within 24 hours of identification as long as conditions are safe for the tree crew to proceed with work.”<sup>119</sup>

Supporting Information and Analysis: PG&E provided an Excel file containing records of all trees identified with a Priority 1 (P1) condition in 2023. The Excel file included tree location (latitude and longitude), priority designation, the date each tree was identified and prescribed work, and the date the prescribed work was completed.<sup>120</sup> The Excel file indicated that 7,648 trees were identified with a P1 condition in 2023. Of those trees:

- 7,530 were reported as remediated within 1 day of initial identification
  - 41 were reported as remediated between 2 and 157 days after initial identification
  - 77 had a reported work completion date that occurred before the inspection date.
- PG&E stated that this occurs when a tree was immediately mitigated in the field before the tree was inputted into its system.<sup>121</sup>

Of the 41 trees with identified P1 conditions that the Excel file indicated were not remediated within one day of identification, PG&E provided an explanation for each occurrence with supporting documentation.

PG&E stated that 26 of the trees were remediated on time, and provided email and text correspondence between VM personnel documenting that remediation work was completed the same day the trees were identified for work. PG&E stated that these 26 trees did not display the correct date in its system of record due to reasons such as personnel entering the

<sup>118</sup> [Energy Safety's 2023-2025 Wildfire Mitigation Plan Technical Guidelines](https://efiling.energy.ca.gov/eFiling/Getfile.aspx?fileid=53286&shareable=true) (December 2022), p. A-25, (https://efiling.energy.ca.gov/eFiling/Getfile.aspx?fileid=53286&shareable=true).

<sup>119</sup> [PG&E's 2023-2025 WMP](https://efiling.energy.ca.gov/eFiling/Getfile.aspx?fileid=56145&shareable=true) (Rev. #4, January 8, 2024), pp. 689-690

(https://efiling.energy.ca.gov/eFiling/Getfile.aspx?fileid=56145&shareable=true).

<sup>120</sup> Data Request 265, question 35; attachment “DRU14286\_Q035\_Atch01\_P1 Trees.xlsx.”

<sup>121</sup> Data Request 265, question 35; attachment “DRU14286\_Audit\_DR\_OEIS\_D001.pdf,” p. 17.

wrong date, and limited cell reception at the tree locations which delayed crews from closing the work orders.<sup>122</sup>

PG&E also stated that five of the trees were the result of updating a Priority 2 (P2) condition to a P1. PG&E stated that “the veg team should have no-worked the P2 record and re-listed as a P1, since [it didn’t], the inspection date didn’t reset and resulted in the P1 showing overdue.”<sup>123</sup> PG&E provided email and text messages between VM personnel discussing the work. The messages indicated that the remediation work was carried out the same day that the P2 conditions were upgraded to a P1 condition.<sup>124</sup>

Additionally, PG&E provided information which indicated that four trees were delayed due to constraints such as customer refusals and complex removals that required power shutoffs. Although these four trees were not mitigated within one day of identification, PG&E’s provided documentation indicated that PG&E responded to the constraints and completed the work when conditions were safe for tree crews.<sup>125</sup>

For the remaining six trees in the Excel file with reported delayed remediation work, PG&E provided supporting documentation which indicated that the mitigation dates reported in the Excel file were inaccurate because of one of the following conditions: tree crews entered the wrong billing date for the completed work, inspectors failed to communicate on time to vegetation management supervisors that tree work was completed, or delayed activation of Operations Emergency Centers resulted in work not being sent to tree crews immediately.<sup>126</sup> While the provided information explained why these six trees were reported in the Excel file as receiving mitigation work more than one day after identification, Energy Safety could not confirm that these six trees were completed within one day of identification.

In conclusion, Energy Safety’s analysis identified errors and inconsistencies in PG&E’s recordkeeping regarding resolution of P1 work orders. PG&E’s provided information indicated that P1 work order information was not always inputted into PG&E’s system of record accurately due to various clerical errors and failure to follow internal procedures. Although PG&E was able to provide documentation and supporting information demonstrating that some of the 41 trees with reported delayed mitigation dates were actually mitigated per the WMP’s stated timeframe, and that some of the trees were delayed due to constraints which made conditions unsafe for tree crews to complete work within one

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<sup>122</sup> Data Request 265, question 36; attachments “DRU14286\_Q036\_Atch02\_Late P1 Trees.xlsx,” “DRU14286\_Q036\_Atch01\_P1 Trees\_Redacted.zip.”

<sup>123</sup> Data Request 265, question 36; attachment “DRU14286\_Q036\_Atch02\_Late P1 Trees.xlsx.”

<sup>124</sup> Data Request 265, question 36; attachment “DRU14286\_Q036\_Atch02\_Late P1 Trees.xlsx,” “DRU14286\_Q036\_Atch01\_P1 Trees\_Redacted.zip.”

<sup>125</sup> Data Request 265, question 36; attachment “DRU14286\_Q036\_Atch02\_Late P1 Trees.xlsx,” “DRU14286\_Q036\_Atch01\_P1 Trees\_Redacted.zip.”

<sup>126</sup> Data Request 265, question 36; attachment “DRU14286\_Q036\_Atch02\_Late P1 Trees.xlsx,” “DRU14286\_Q036\_Atch01\_P1 Trees\_Redacted.zip.”



day, Energy Safety was not able to verify that every P1 work order was completed within one day of identification.

PG&E must supply a corrective action response that addresses how PG&E will ensure that all P1 work orders are completed following procedure TD-7102P-17 moving forward, and that accurate remediation dates are entered into PG&E's official system of record.

Conclusion: PG&E did not provide information consistent with the completion of work identified in this statement.

#### Statement 15

Statement: "Vegetation identified as pending Priority 2 work within the RFW area will be reviewed and mitigated as outlined in the VM Priority Tag Procedure (TD-7102P-17)."<sup>127</sup>

Supporting Information and Analysis: PG&E provided an Excel file containing records of all trees that were identified with a P2 condition and that were in a location that received a red flag warning (RFW) in 2023. The Excel file included tree location (latitude and longitude), priority designation, the date each tree was identified and prescribed work, the date the prescribed work was completed, if the prescribed work was completed during a RFW and the dates of RFWs issued in 2023. The Excel file indicated that nearly all of the trees with P2 conditions received mitigation work in advance of the RFWs, and that no mitigation work occurred during RFWs in 2023.<sup>128</sup> For the trees that did not receive mitigation work prior to RFWs, PG&E stated that those trees were "quarantined," a type of constraint.<sup>129</sup> Because the trees were constrained, PG&E followed Procedure TD-7102P-17 which states that P2 work must be completed within 20 business days unless constrained.<sup>130</sup>

Because all trees with identified P2 conditions in active RFWs were either constrained per TD-7102P-17 procedure, or received mitigation work prior to the RFWs being activated, PG&E performed all work identified in Statement 15 above.

Conclusion: PG&E provided information consistent with the completion of work identified in this statement.

#### Statement 16

Statement: "The second phase of VM activities [regarding VM work in post fire areas] are focused on reliability by mitigating hazard trees that have the potential to fail into PG&E

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<sup>127</sup> [PG&E's 2023-2025 WMP](https://efiling.energy.ca.gov/eFiling/Getfile.aspx?fileid=56145&shareable=true) (Rev. #4, January 8, 2024), pp. 689-690,

(<https://efiling.energy.ca.gov/eFiling/Getfile.aspx?fileid=56145&shareable=true>).

<sup>128</sup> Data Request 265, question 37; attachment "DRU14286\_Audit\_DR\_OEIS\_D001.pdf," p. 18.

<sup>129</sup> Data Request 265, question 37; attachment "DRU14286\_Audit\_DR\_OEIS\_D001.pdf," p. 18.

<sup>130</sup> Data Request 276, question 9; attachment "DRU14563\_Q009\_Atch02\_TD-7102P-17 Rev 2 (September 2023)\_Redacted.pdf."

assets. PG&E performs a hazard tree assessment of the burned area to determine whether trees pose a threat to electric assets and if they should be abated.”<sup>131</sup>

Supporting Information and Analysis: PG&E provided an Excel file containing records of hazard tree assessments in burn areas in 2023. The Excel file included details such as the fire associated with the assessment, assessment dates, and the type of tree work prescribed as a result of the assessments. The Excel file indicated that PG&E conducted post-fire hazard tree assessments on 249 trees in response to four separate fires that occurred in PG&E’s service area in 2023.<sup>132</sup>

PG&E provided a second Excel file containing records of hazard tree mitigation work performed by PG&E in 2023 and 2024. The Excel file included the dates the mitigation work was prescribed, the dates the mitigation work was completed, and the fire associated with the mitigation work. The Excel file indicated that 191 trees within burn areas were prescribed mitigation work in 2023. Of those trees, 27 received mitigation work in 2023, 162 received mitigation work in 2024, and two did not have a reported mitigation date.<sup>133</sup>

While not all of the trees identified for mitigation had a reported mitigation date, and some work was not completed until 2024, PG&E’s 2023-2025 WMP did not specify a required timeframe for completion of this work. Energy Safety expects PG&E to continue maturing its vegetation management program by ensuring that mitigation work on hazard trees in post-fire areas is conducted promptly, minimizing the time these trees pose a threat to PG&E’s system. However, because the provided information indicated that PG&E completed hazard tree assessments and mitigation work in burned areas to address trees that threatened PG&E’s facilities, Energy Safety found that PG&E performed the work described in Statement 16.

Conclusion: PG&E provided information consistent with the completion of work identified in this statement.

#### Statement 17

Statement: “PG&E’s VM Wildfire Inspection Guide served as an interim guidance document through 2022. This interim document is being replaced by a PG&E Standard that will be published in early 2023 and a supporting procedure to be developed in Quarter 1 2023. PG&E will engage with Energy Safety, CAL FIRE, the Wildfire Safety Advisory Board, and other stakeholders to receive feedback on the Standard in Quarter 1 2023.”<sup>134</sup>

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<sup>131</sup> [PG&E’s 2023-2025 WMP](https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=56145&shareable=true) (Rev. #4, January 8, 2024), p. 690,

(<https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=56145&shareable=true>).

<sup>132</sup> Data Request 265, question 38; attachment “DRU14286\_Q038\_Atch01\_ArcGISWildfire.xlsx.”

<sup>133</sup> Data Request 265, question 39; attachment “DRU14286\_Q039\_Atch01\_ArcGISWildfire\_v2.xlsx.”

<sup>134</sup> [PG&E’s 2023-2025 WMP](https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=56145&shareable=true) (Rev. #4, January 8, 2024), p. 1098,

(<https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=56145&shareable=true>).

Supporting Information and Analysis: PG&E provided its Vegetation Management Post Wildfire Standard document published March 20, 2023. The document details the expectations, roles, and responsibilities of PG&E's VM department in response to a wildfire event.<sup>135</sup>

PG&E also provided its Vegetation Management Post Wildfire Procedure published on June 6, 2024. The document contained procedures for planning and executing VM activities in response to a wildfire.<sup>136</sup> Although Energy Safety could not verify that PG&E began developing the procedure in the first quarter of 2023, as the WMP language did not specify a definitive 2023 publication date, the procedure's eventual publication indicated that PG&E met the intent of the work outlined in its WMP.

PG&E also provided a letter addressed to PG&E from Energy Safety and dated January 13, 2023.<sup>137</sup> The letter contained recommendations provided by Energy Safety and CAL FIRE regarding PG&E's Vegetation Management Post Wildfire Standard document. The letter indicated that PG&E engaged with Energy Safety to receive feedback on its Vegetation Management Post Wildfire Standard document.

Lastly, PG&E provided email correspondence between PG&E and the Wildfire Safety Advisory Board (WSAB) dated February 28, 2023.<sup>138</sup> The correspondence indicated that PG&E submitted its draft Vegetation Management Post Wildfire Standard document to the WSAB for review, and that the WSAB responded with recommendations for the document.

Conclusion: PG&E provided information consistent with the completion of work identified in this statement.

### **Finding – 8.2.3.8 Emergency Response Vegetation Management**

PG&E did not provide information consistent with the completion of all work identified in Initiative 8.2.3.8 Emergency Response Vegetation Management. PG&E must supply a corrective action response addressing the deficiencies identified in Statement 14 above.

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<sup>135</sup> Data Request 265, question 40; attachment "DRU14286\_Q040\_Atch01\_TD-7114S Rev 0 - Post Wildfire Standard\_Redacted.pdf."

<sup>136</sup> Data Request 265, question 40; attachment "DRU14286\_Q040\_Atch02\_TD-7114P – Post Wildfire Procedure\_Redacted.pdf."

<sup>137</sup> Data Request 265, question 41; attachment "DRU14286\_Q041\_Atch01\_PG&E VM Wildfire Standard Response Letter\_Redacted.pdf."

<sup>138</sup> Data Request 265, question 41; attachment "DRU14286\_Q041\_Atch02\_FW\_WSAB response - PG&E Vegetation Management Documents\_Redacted.pdf."

## 8.2.4 Vegetation Management Enterprise System

The purpose of this initiative was to describe the “Operation of and support for centralized vegetation management and inspection enterprise system(s) updated based upon inspection results and activities such as hardening, maintenance, and remedial work.”<sup>139</sup>

### Narrative Statements, Supporting Information & Analysis, and Conclusion

#### Statement 18

Statement: “The One VM Tool development team created an internal SharePoint website for PG&E and contract VM staff with supportive tools such as user guides, quick reference cards, how-to videos, a training information hub, and a case management system where users can submit a ticket for issues they encounter.”<sup>140</sup>

Supporting Information and Analysis: PG&E provided a screenshot of its internal SharePoint website that houses information related to the One VM Tool.<sup>141</sup> The screenshot indicated that the website contained links to One VM Tool user guides and provided contact information to a hotline created to address One VM Tool related questions and concerns.

Conclusion: PG&E provided information consistent with the completion of work identified in this statement.

#### Statement 19

Statement: “PG&E started implementing the One VM Tool with the Routine and Second Patrol programs.”<sup>142</sup>

Supporting Information and Analysis: PG&E provided Excel files containing data extracted from its One VM database related to its project year 2023 Routine and Second Patrol programs.<sup>143</sup> PG&E also provided screenshots of Power BI dashboards which contained Routine and Second Patrol inspection data collected using the One VM Tool in 2023. The Excel

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<sup>139</sup> [Energy Safety's 2023-2025 Wildfire Mitigation Plan Technical Guidelines](https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=53286&shareable=true) (December 2022), p. A-25, (https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=53286&shareable=true).

<sup>140</sup> [PG&E's 2023-2025 WMP](https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=56145&shareable=true) (Rev. #4, January 8, 2024), p. 691,

(https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=56145&shareable=true).

<sup>141</sup> Data Request 265, question 42; attachment “DRU14286\_Q042\_Atch01\_Screenshots.pdf.”

<sup>142</sup> [PG&E's 2023-2025 WMP](https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=56145&shareable=true) (Rev. #4, January 8, 2024), p. 692,

(https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=56145&shareable=true).

<sup>143</sup> Data Request 265, questions 14, 16; attachments “DRU14286\_Q014\_Atch01\_OneVM Routine Miles.xlsx,” “DRU14286\_Q016\_Atch01\_OneVM\_2P\_Miles.csv.”

files and Power BI dashboards indicated that PG&E collected Routine and Second Patrol data using the One VM Tool in 2023.<sup>144</sup>

Conclusion: PG&E provided information consistent with the completion of work identified in this statement.

#### Statement 20

Statement: Regarding PG&E's rollout of the One VM program, PG&E stated: "Currently, Phase 2 includes integration of the Pole Clearing program and is planned for release in 2023. This phase will include integration with work management (work planning, scheduling, tracking, and verification)."<sup>3</sup>

Supporting Information and Analysis: PG&E provided an Excel file containing 2023 pole clearing records extracted from PG&E's One VM database. The Excel file indicated that PG&E began collecting data for its Pole Clearing Program using the One VM database in October of 2023 in support of its 2024 pole clearing cycle.<sup>145</sup>

PG&E also provided procedural documents published in 2023 that provide step by step instructions for inputting pole clearing data into the One VM database.<sup>146</sup>

The provided information indicated that PG&E began integrating its Pole Clearing Program into the One VM database in 2023.

Conclusion: PG&E provided information consistent with the completion of work identified in this statement.

### Finding – 8.2.4 Vegetation management Enterprise System

PG&E provided information consistent with the completion of all work identified in Initiative 8.2.4 Vegetation Management Enterprise System.

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<sup>144</sup> Data Request 265, question 43, attachments "DRU14286\_Q043\_Atch01\_OneVM 2P PowerBi\_Rx.JPG," "DRU14286\_Q043\_Atch02\_OneVM 2P PowerBi\_Span.JPG," "DRU14286\_Q043\_Atch03\_OneVM Routine PowerBi\_Rx.JPG," "DRU14286\_Q043\_Atch04\_OneVM Routine PowerBi\_Span.JPG."

<sup>145</sup> Data Request 276, question 27; attachment "DRU14563\_Q027\_Atch03\_IC\_Oct-Dec\_CONF.xlsx."

<sup>146</sup> Data Request 276, question 27; attachments "DRU14563\_Q014\_Atch02\_TRA-0045-V04 One VM VC Field Reference Guide\_Redacted.pdf," "DRU14563\_Q027\_Atch01\_TRA-0048-V05-One-VM-VC-Map-Symbology-Guide.pdf," "DRU14563\_Q027\_Atch02\_One-VM-Pole-Clearing-Job-Aid-1-10-24-ver-1.0\_Redacted.pdf."

## 8.2.5 Quality Assurance / Quality Control

The purpose of this initiative was to describe the “Establishment and function of audit process to manage and confirm work completed by employees or contractors, including packaging QA/QC information for input to decision-making and related integrated workforce management processes.”<sup>147</sup>

### Quantitative Targets or Commitments, Supporting Information & Analysis, and Conclusion

PG&E included the following vegetation management quality assurance (QA) and quality control (QC) targets in its 2023-2025 WMP.<sup>148</sup> For ease of comparison, the WMP targets and work completed are summarized below:

Initiative Activity	PG&E's 2023 Quantitative Target	Actual Completed in 2023
Quality Assurance Distribution Routine VM – HFTD	2,500 audit locations, 95% pass rate	4,285 audit locations, 99.75% pass rate
Quality Assurance Transmission VM – HFTD	1,200 audit locations, 95% pass rate	2,038 audit locations, 99.93% pass rate
Quality Assurance Vegetation Control Pole Clearing – HFTD	1,800 audit locations, 95% pass rate	2,284 audit locations, 99.04% pass rate
Quality Control Distribution Routine VM – HFTD	75,000 audit locations, 80% pass rate	75,102 audit locations, 86% pass rate
Quality Control Transmission VM – HFTD	12,500 audit locations, 88% pass rate	17,063 audit locations, 93% pass rate
Quality Control Vegetation Control Pole Clearing – HFTD	10,500 audit locations, 80% pass rate	10,791 audit locations, 86% pass rate
Field Quality Control (FQC) Distribution Routine	90% sample size, 88% pass rate	96% sample size, 91% pass rate
Field Quality Control (FQC) Second patrol	90% sample size, 88% pass rate	95% sample size, 89% pass rate

<sup>147</sup> [Energy Safety's 2023-2025 Wildfire Mitigation Plan Technical Guidelines](https://efiling.energy.ca.gov/eFiling/Getfile.aspx?fileid=53286&shareable=true) (December 2022), p. A-25, (https://efiling.energy.ca.gov/eFiling/Getfile.aspx?fileid=53286&shareable=true).

<sup>148</sup> [PG&E's 2023-2025 WMP](https://efiling.energy.ca.gov/eFiling/Getfile.aspx?fileid=56145&shareable=true) (Rev. #4, January 8, 2024), pp. 611, 613, 704, (https://efiling.energy.ca.gov/eFiling/Getfile.aspx?fileid=56145&shareable=true).



Field Quality Control (FQC) Transmission	90% sample size, 88% pass rate	100% sample size, 89% pass rate
Field Quality Control (FQC) Vegetation Control	90% sample size, 88% pass rate	99% sample size, 89% pass rate

## Vegetation Management – Quality Assurance

Supporting Information and Analysis: PG&E provided an Excel file containing vegetation management QA audit data from 2023 which included separate data sets of QA audit results for PG&E’s Distribution Routine, Transmission, and Pole Clearing Programs. Each dataset included unique identification numbers for each completed audit, the location of each audit (latitude and longitude), HFTD designation, and the result of each audit (pass or fail). The Distribution Routine Program and Transmission Program datasets also included the total number of trees inspected at each audit location.

PG&E determined the pass rate for the Distribution Routine and Transmission Programs based on the number of trees that complied with PG&E’s internal procedures at each audit location. PG&E determined the pass rate for its Pole Clearing Program based on an inspection of the vegetation surrounding each audited pole location.

For the Distribution Routine Program, the Excel file indicated that PG&E completed 4,285 audits at different locations within HFTD areas, and that PG&E inspected a total of 12,251 trees throughout the audit locations. PG&E failed 31 of the inspected trees resulting in a cumulative pass rate of 99.75%. The Excel file indicated that the inspectors failed the 31 trees because one of the following conditions existed: “stubs” or “tears” left by tree crews were identified in the trees; the trees were breaking minimum distance requirements between conductors and vegetation; the trees were breaking EVM overhang requirements; the trees were determined to likely fail on PG&E’s facilities within 13 months.

For the Transmission Program, the Excel file indicated that PG&E completed 2,038 audits at different locations within HFTD areas, and that PG&E inspected a total of 4,559 trees across the audit locations. PG&E failed three of the inspected trees resulting in a cumulative pass rate of 99.93%. Of the three trees that were failed by auditors, one was identified with “stubs” left by tree crews, a second was breaking minimum distance requirements between conductors and vegetation, and a third was dead and had potential to fail on PG&E’s facilities.

For the Pole Clearing Program, the Excel file indicated that PG&E audited 2,284 different poles in HFTD areas. Auditors failed 22 of the poles resulting in a cumulative pass rate of 99%. Of the 22 poles that failed, auditors found that either the pole clearing work did not meet the scope of PG&E’s internal requirements and applicable regulations, or that tree crews left “stubs” or “tears” in trees that received recent pruning work.

The provided information indicated that PG&E met this target by performing QA audits at the number of locations specified for each VM program, and by achieving its targeted pass rates for each program.

While Energy Safety utilized the information provided in Data Request 265 to assess PG&E's completion of this target, Energy Safety identified inconsistencies between these data and PG&E's 2023 spatial QDR submissions. Specifically, PG&E's spatial QDR submissions for Q1 through Q4 included only 48,299 "vegetation inspection points" within its initiative audit point feature classes.<sup>149</sup> This number was lower than the total audits reported in the Excel files provided in Data Request 265, which relate to PG&E's 2023 QA and QC targets.

Energy Safety understands that the cutoff dates for quarterly data submission may result in submission of incomplete data or data that has not yet undergone quality control checks; however, PG&E must ensure that it reports all audits of vegetation management inspections, and vegetation management projects in future spatial QDR submissions in accordance with Energy Safety's Data Guidelines so that Energy Safety has accurate data for the audit process and does not have to weigh inconsistencies among datasets.<sup>150</sup>

PG&E submitted its last revision of its 2023 Q4 QDR data on April 19, 2024. It then submitted the Excel files received in Data Request 265 on October 7, 2024. PG&E could have submitted updates to its 2023 spatial QDR submissions to ensure alignment across datasets during its spatial QDR submissions in May or August of 2024.

In this case, PG&E was able to provide documentation which supported the completion of work for this target. However, it is incumbent upon PG&E to update spatial QDR data in accordance with Data Guidelines to demonstrate that PG&E completed all work and that it was appropriately documented and reported to Energy Safety.

Conclusion: PG&E provided information consistent with the completion of work identified in this target.

## **Vegetation Management – Quality Control**

Supporting Information and Analysis: PG&E provided an Excel file containing vegetation management QC audit data from 2023 which included separate data sets of QC audit results for PG&E's Distribution Routine, FTI, Transmission, and Pole Clearing Programs. Each dataset included unique identification numbers for each audit completed, the location of each audit (latitude and longitude), HFTD designation, and the result of each audit (pass or fail). Because PG&E determined the pass rates for the Distribution Routine, Transmission, and FTI Programs based on an assessment of trees near the audit locations, the datasets for those programs also included the total number of trees inspected at each audit location.<sup>151</sup>

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<sup>149</sup> PG&E's geospatial 2023 Q1-4 Quarterly Data Report, PGE Initiative Audit Point 2023 Q1-4

<sup>150</sup> [Energy Safety's Data Guidelines](https://efiling.energy.ca.gov/eFiling/Getfile.aspx?fileid=53314&shareable=true) (version 3.0, December 14, 2022), Section 3.7.5.6 Initiative Audits, pp. 137-138 (https://efiling.energy.ca.gov/eFiling/Getfile.aspx?fileid=53314&shareable=true).

<sup>151</sup> Data Request 265, question 47; attachment "DRU14286\_Q047\_Atch01\_VM-22\_WMP\_ROE\_YTD\_with\_Summary\_Redacted.xlsx."

Regarding the FTI Program data set included in the Excel file, PG&E stated that because the FTI Program has a similar scope to the Distribution Routine Program and was an attachment of the Distribution Routine Program's procedural documents, it included the QC audit results from the FTI Program in its reporting for this target.<sup>152</sup> PG&E reported in its non-spatial, Q4 QDR Tables 1-15 Revision 2 that 117,285 trees were audited for the Distribution Routine Program, which incorporated trees audited for both the Distribution Routine and FTI Programs.<sup>153</sup> Revision 1 of PG&E's ARC published on April 25, 2024, also incorporates QC work completed to audit the FTI program as well and reported that 80,877 audit locations were completed for the Distribution Routine Program component of this target.<sup>154</sup> However, because the target stated that 75,000 audit locations would be completed to assess the work of the Distribution Routine Program alone, and did not state that it intended to audit other programs with similar scopes or that are attachments of the Distribution Routine Program, Energy Safety did not include work completed by the FTI Program in its analysis.

For the Distribution Routine Program, the Excel file indicated that PG&E completed 75,102 audits at different locations within HFTD areas, and that PG&E inspected a total of 109,754 trees at the audit locations. Auditors failed 15,270 of the inspected trees, resulting in a pass rate of 86%. One or more of the following conditions existed for each of the failed trees: "stubs" or "tears" left by tree crews were identified in the tree, the tree was breaking minimum distance requirements between conductors and vegetation, the tree was breaking EVM overhang requirements, or the tree was determined to likely fail on PG&E's facilities within 13 months. Despite Energy Safety's exclusion of QC audit work completed to assess the FTI Program, PG&E still exceeded the Distribution Routine Program component of this target.

For the Transmission Program, the Excel file indicated that PG&E completed 17,063 audits at different locations within HFTD areas, and that PG&E inspected a total of 15,902 trees at the audit locations. Auditors failed 1,122 of the inspected trees, resulting in a cumulative pass rate of 93%. One or more of the following conditions existed for each of the failed trees: "stubs" or "tears" left by tree crews were identified in the tree, the tree was breaking minimum distance requirements between conductors and vegetation, the tree was breaking transmission overhang requirements, or the tree was determined to likely fail on PG&E's facilities within 13 months.

For the Pole Clearing Program, the Excel file indicated that PG&E completed 10,791 audits at different pole locations within HFTD areas. Auditors failed 1,495 of the poles, resulting in a pass rate of 86%. Pole locations were failed because either the pole clearing work did not

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<sup>152</sup> Data Request 276, question 28; attachment "DRU14563\_Audit\_DR\_OEIS\_D001.pdf," p. 11.

<sup>153</sup> [PG&E's non-spatial, Q4 QDR Tables 1-15](https://efiling.energy.ca.gov/eFiling/Getfile.aspx?fileid=56510&shareable=true) (Rev. #2, April 19, 2024), Table 1, (https://efiling.energy.ca.gov/eFiling/Getfile.aspx?fileid=56510&shareable=true).

<sup>154</sup> [PG&E's 2023 ARC for the 2023-2025 WMP](https://efiling.energy.ca.gov/eFiling/Getfile.aspx?fileid=56539&shareable=true) (Rev. #1, April 25, 2024), p. 28, (https://efiling.energy.ca.gov/eFiling/Getfile.aspx?fileid=56539&shareable=true).

meet the scope of PG&E's internal pole clearing requirements and applicable regulations, or tree crews left "stubs" or "tears" in trees that received recent pruning work.

The provided information indicated that PG&E completed the targeted number of audits and received the targeted pass rates for each of the three programs included in the target.

While Energy Safety utilized the information provided in Data Request 265 to assess PG&E's completion of this target, Energy Safety identified inconsistencies between these data and PG&E's 2023 spatial QDR submissions. Specifically, PG&E's spatial QDR submissions for Q1 through Q4 included only 48,299 "vegetation inspection points" within its initiative audit point feature classes.<sup>155</sup> This number was lower than the total audits reported in the Excel files provided in Data Request 265, which relate to PG&E's 2023 QA and QC targets.

Energy Safety understands that the cutoff dates for quarterly data submission may result in submission of incomplete data or data that has not yet undergone quality control checks; however, PG&E must ensure that it reports all audits of vegetation management inspections, and vegetation management projects in future spatial QDR submissions in accordance with Energy Safety's Data Guidelines so that Energy Safety has accurate data for the audit process and does not have to weigh inconsistencies among datasets.<sup>156</sup>

PG&E submitted its last revision of its 2023 Q4 QDR data on April 19, 2024. It then submitted the Excel files received in Data Request 265 on October 7, 2024. PG&E could have submitted updates to its 2023 spatial QDR submissions to ensure alignment across datasets during its spatial QDR submissions in May or August of 2024.

In this case, PG&E was able to provide documentation which supported the completion of work for this target. However, it is incumbent upon PG&E to update spatial QDR data in accordance with Data Guidelines to demonstrate that PG&E completed all work and that it was appropriately documented and reported to Energy Safety.

Conclusion: PG&E provided information consistent with the completion of work identified in this target.

## **Vegetation Management – Field Quality Control (FQC)**

Supporting Information and Analysis: In 2023, PG&E's VM FQC program completed "active side by side observations" that audited the work of Vegetation Management Inspectors (VMI) performing work in support of PG&E's Vegetation Control, Transmission, Second Patrol, and Routine Distribution Programs.<sup>157</sup> PG&E provided Excel files containing FQC audit results, the

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<sup>155</sup> PG&E's geospatial 2023 Q1-4 Quarterly Data Report, PGE Initiative Audit Point 2023 Q1-4

<sup>156</sup> [Energy Safety's Data Guidelines](https://efiling.energy.ca.gov/eFiling/Getfile.aspx?fileid=53314&shareable=true) (version 3.0, December 14, 2022), Section 3.7.5.6 Initiative Audits, pp. 137-138 (<https://efiling.energy.ca.gov/eFiling/Getfile.aspx?fileid=53314&shareable=true>).

<sup>157</sup> [PG&E's 2023-2025 WMP](https://efiling.energy.ca.gov/eFiling/Getfile.aspx?fileid=56145&shareable=true) (Rev. #4, January 8, 2024), p. 704, (<https://efiling.energy.ca.gov/eFiling/Getfile.aspx?fileid=56145&shareable=true>).

amount of eligible VMI audited for each program, and each program's yearly pass rate for 2023.<sup>158</sup>

The Excel files indicated that a portion of each audit consisted of an “active side by side observation.” During the active observation, the auditor asked the VMI a series of questions specific to the program the VMI supported. The questions consisted of topics that assessed if the VMI had the necessary tools to perform the required work (e.g. range finder and DBH tape), and if the VMI had knowledge of best management practices and procedures related to the work being performed. The auditor also assessed the vegetation within the area where the active side by side observation occurred to ensure that the VMI prescribed necessary VM work to any vegetation that did not meet PG&E’s or other applicable regulatory requirements at the time of inspection. Pass rates were determined based on the responses from the audited VMI during the side-by-side observation process and how effectively the VMI implemented the program’s procedures.

As detailed in Table 12 above, the Excel files indicated that the VM FQC program audited over 90% of eligible inspectors in each of the four programs reviewed, and that all four Vegetation management programs achieved a yearly pass rate in 2023 that exceeded the 88% target.

While Energy Safety utilized the information provided in Data Request 265 to assess PG&E’s completion of this target, Energy Safety identified inconsistencies between these data and PG&E’s 2023 spatial QDR submissions. Specifically, PG&E’s spatial QDR submissions for Q1 through Q4 included only 48,299 “vegetation inspection points” within its initiative audit point feature classes.<sup>159</sup> This number was lower than the total audits reported in the Excel files provided in Data Request 265, which relate to PG&E’s 2023 QA and QC targets.

Energy Safety understands that the cutoff dates for quarterly data submission may result in submission of incomplete data or data that has not yet undergone quality control checks; however, PG&E must ensure that it reports all audits of vegetation management inspections, and vegetation management projects in future spatial QDR submissions in accordance with Energy Safety’s Data Guidelines so that Energy Safety has accurate data for the audit process and does not have to weigh inconsistencies among datasets.<sup>160</sup>

PG&E submitted its last revision of its 2023 Q4 QDR data on April 19, 2024. It then submitted the Excel files received in Data Request 265 on October 7, 2024. PG&E could have submitted

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<sup>158</sup> Data Request 265, questions 49-52; attachments “*DRU14286\_Q049\_Atch01\_Routine Distribution Program\_CONF.xlsx*,” “*DRU14286\_Q050\_Atch01\_Second Patrol Program\_CONF.xlsx*,” “*DRU14286\_Q051\_Atch01\_Transmission Program\_CONF.xlsx*,” “*DRU14286\_Q052\_Atch01\_Vegetation Control Program\_CONF.xlsx*.”

<sup>159</sup> PG&E’s geospatial 2023 Q1-4 Quarterly Data Report, PGE Initiative Audit Point 2023 Q1-4

<sup>160</sup> [Energy Safety’s Data Guidelines](https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=53314&shareable=true) (version 3.0, December 14, 2022), Section 3.7.5.6 Initiative Audits, pp. 137-138 (<https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=53314&shareable=true>).

updates to its 2023 spatial QDR submissions to ensure alignment across datasets during its spatial QDR submissions in May or August of 2024.

In this case, PG&E was able to provide documentation which supported the completion of work for this target. However, it is incumbent upon PG&E to update spatial QDR data in accordance with Data Guidelines to demonstrate that PG&E completed all work and that it was appropriately documented and reported to Energy Safety.

Conclusion: PG&E provided information consistent with the completion of work identified in this target.

## Narrative Statements, Supporting Information & Analysis, and Conclusion

### Statement 21

Statement: “PG&E is developing a training path for QVVM team members to be completed by Q2 2023.”<sup>161</sup>

Supporting Information and Analysis: PG&E provided a training path document that it developed for its Quality Verification Vegetation Management (QVVM) team members in 2023. The document has a stated publication date of June 9, 2023, and includes a list of courses that the QVVM team was required to complete in 2023. The required trainings covered topics related to tree work safety, and pre-inspection work procedures.

Conclusion: PG&E provided information consistent with the completion of work identified in this statement.

### Statement 22

Statement: “FQC Assessment records (the FQCPM field observation) are captured in Survey 123. Assessments are summarized in dashboards and metric reports are published on a regular basis. All findings are communicated to the execution teams to provide lessons learned and assist in process improvement. The FQC team has conducted Quality Learning Forums to support the execution teams improved awareness and performance.”<sup>162</sup>

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<sup>161</sup> [PG&E's 2023-2025 WMP](https://efiling.energy.ca.gov/eFiling/Getfile.aspx?fileid=56145&shareable=true) (Rev. #4, January 8, 2024), p. 695, (https://efiling.energy.ca.gov/eFiling/Getfile.aspx?fileid=56145&shareable=true).

<sup>162</sup> [PG&E's 2023-2025 WMP](https://efiling.energy.ca.gov/eFiling/Getfile.aspx?fileid=56145&shareable=true) (Rev. #4, January 8, 2024), p. 703, (https://efiling.energy.ca.gov/eFiling/Getfile.aspx?fileid=56145&shareable=true).



Supporting Information and Analysis: PG&E provided screenshots of dashboards created with Microsoft Power BI software that summarized the results of its 2023 FQC program.<sup>163</sup> These dashboards break down the FQC audit pass rate results by week, region, vendor, and year, and include bar graphs that display the performance of each vendor and region.

Additionally, PG&E provided email correspondence from 2023 between PG&E's FQC and execution teams.<sup>164</sup> The emails indicated that the FQC team shared audit result information with the execution teams in 2023.

Lastly, PG&E provided an agenda used to conduct Quality Learning Forums (QLF) in 2023 as well as accompanying rosters signed by the QLF attendees.<sup>165</sup> The rosters indicated that PG&E held 12 QLFs in 2023. The QLF agenda indicated that the QLFs summarized the intent of the FQC program and discussed the top five quality findings discovered by the FQC program in 2023, which included:

- VC pole clearing scope not met
- Correct fire risk ratings were not documented
- Stubs and tears were found on recently completed tree work
- VMI could not provide two examples of abnormal field conditions
- VMI did not have adequate knowledge of environmental best management procedures

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<sup>163</sup> Data Request 265, question 53; attachments "DRU14286\_Q053\_Atch01\_FQC Dashboard for Routine.PNG," "DRU14286\_Q053\_Atch02\_FQC Dashboard for Second Patrol.PNG," "DRU14286\_Q053\_Atch03\_FQC Dashboard for Transmission.PNG," "DRU14286\_Q053\_Atch04\_FQC Dashboard for VC Tech.PNG."

<sup>164</sup> Data Request 265, question 54; attachments "DRU14286\_Q054\_Atch01\_FQC Regional Review Central Valley\_Redacted.pdf," "DRU14286\_Q054\_Atch02\_MID QM Reporting Week 25 Dashboards & CC Visuals.pdf," "DRU14286\_Q054\_Atch03\_MID QM Reporting Week 41 Dashboards & CC Visuals.pdf," "DRU14286\_Q054\_Atch04\_MID QM Reporting Week 45 Dashboards & CC Visuals.pdf."

<sup>165</sup> Data Request 265, question 55; attachments "DRU14286\_Q055\_Atch13\_Agenda - VC\_QLF\_062823.pdf," "DRU14286\_Q055\_Atch01\_Roster 1\_Redacted.pdf," "DRU14286\_Q055\_Atch02\_Roster 2\_Redacted.pdf," "DRU14286\_Q055\_Atch03\_Roster 3\_Redacted.pdf," "DRU14286\_Q055\_Atch04\_Roster 4\_Redacted.pdf," "DRU14286\_Q055\_Atch05\_Roster 5\_Redacted.pdf," "DRU14286\_Q055\_Atch06\_Roster 6\_Redacted.pdf," "DRU14286\_Q055\_Atch07\_Roster 7\_Redacted.pdf," "DRU14286\_Q055\_Atch08\_Roster 8\_Redacted.pdf," "DRU14286\_Q055\_Atch09\_Roster 9\_Redacted.pdf," "DRU14286\_Q055\_Atch10\_Roster 10\_Redacted.pdf," "DRU14286\_Q055\_Atch11\_Roster 11\_Redacted.pdf," "DRU14286\_Q055\_Atch12\_Roster 12\_Redacted.pdf."

The provided information indicated that PG&E summarized FQC assessment records in dashboards, communicated the information to its execution teams, and held QLFs that summarized common FQC findings.

Conclusion: PG&E provided information consistent with the completion of work identified in this statement.

### **Finding – 8.2.5 Quality assurance / quality control**

PG&E provided information consistent with the completion of all work identified in Initiative 8.2.5 Quality assurance / quality control.

## 8.2.6 Open Work Orders

The purpose of this initiative was to describe the “Actions taken to manage the electrical corporation’s open work orders resulting from inspections that prescribe vegetation management activities.”<sup>166</sup>

### Quantitative Targets or Commitments, Supporting Information & Analysis, and Conclusion

PG&E included the following Constraint Resolution Procedural Guideline target in its 2023-2025 WMP.<sup>167</sup> For ease of comparison, the WMP target and work completed is summarized below:

Initiative Activity	PG&E’s 2023 Quantitative Target	Actual Completed in 2023
Constraint Resolution Procedural Guidelines	Develop procedural guidelines and evaluation of a “right tree-right place” program.	Achieved

Supporting Information and Analysis: PG&E’s 2023-2025 WMP committed to completing this target in two parts. The following analysis assesses PG&E’s completion of the first part of the target which was to publish procedural guidelines and complete an evaluation of a “right tree-right place” program.<sup>168</sup> Additionally, the target identified three “major categories”<sup>169</sup> of constraints: customer constraints, environmental constraints (including internal PG&E procedures required to perform work) and permitting constraints (including both Land and Environmental permits).<sup>170</sup> PG&E provided procedural guidelines published in 2023 that related to each of the three “major categories.”

Regarding the customer constraints category identified in the target, PG&E provided a procedural document published in 2023 which provides instructions to follow when a customer/property owner interferes with PG&E’s access to a property or interferes with

<sup>166</sup> [Energy Safety's 2023-2025 Wildfire Mitigation Plan Technical Guidelines](https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=53286&shareable=true) (December 2022), p. A-25, (https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=53286&shareable=true).

<sup>167</sup> [PG&E's 2023-2025 WMP](https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=56145&shareable=true) (Rev. #4, January 8, 2024), p. 598, (https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=56145&shareable=true).

<sup>168</sup> [PG&E's 2023-2025 WMP](https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=56145&shareable=true) (Rev. #4, January 8, 2024), p. 598, (https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=56145&shareable=true).

<sup>169</sup> [PG&E's 2023-2025 WMP](https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=56145&shareable=true) (Rev. #4, January 8, 2024), p. 598, (https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=56145&shareable=true).

<sup>170</sup> [PG&E's 2023-2025 WMP](https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=56145&shareable=true) (Rev. #4, January 8, 2024), p. 598, (https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=56145&shareable=true).

PG&E's ability to perform the work necessary to maintain compliance on distribution lines.<sup>171</sup> The procedure outlines different scenarios in which a customer may interfere with VM work, and gives clear, step by step directions on how to handle each scenario. The procedure indicated that if the customer interference persists after multiple attempts are made to discuss the necessary work, the Constraints Management Team must coordinate with VM Operations, Law, Electrical Operations, and Corporate Security to complete the work.

Regarding the environmental constraints category identified in the target, PG&E provided its Vegetation Management Bird Nest Procedure published in 2023.<sup>172</sup> The procedure provides guidance to VM personnel that encounter bird nests in close proximity to VM work. The procedure outlines when tree work should be constrained due to nearby active nests, how the tree work should be constrained, and when the constraint can be released for tree work. PG&E also provided its Vegetation Management Riparian Review Procedure.<sup>173</sup> PG&E stated that the procedure was updated in 2024 and thus has a 2024 publication date.<sup>174</sup> However, as indicated on page nine of the document, the preceding version was published in 2023.<sup>175</sup> The procedure outlines the steps personnel must follow when prescribing vegetation management work in riparian areas, and lists scenarios in which the vegetation management work needs to be constrained.

Regarding the permitting constraints category identified in the target, PG&E provided its Vegetation Management Encroachment Permit Bulletin procedure published in 2023. The bulletin discusses how to request a site-specific encroachment permit, and states that "a site-specific encroachment permit is required for vegetation work on Caltrans and railroads agency managed lands that are not included in the annual permit."<sup>176</sup> The bulletin also states that "the Vegetation Permits team (VegPermits) facilitates permit package creation, review, and submission of these site-specific encroachment permits."<sup>177</sup>

Lastly, PG&E provided its Right Tree, Right Place 2024 Proposal document published in 2023.<sup>178</sup> The document stated that a portion of the program's budget will be dedicated to tree

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<sup>171</sup> Data Request 265, question 56; attachment "DRU14286\_Q056\_Atch01\_Distribution Customer interference Procedure\_Redacted.pdf."

<sup>172</sup> Data Request 265, question 56; attachment "DRU14286\_Q056\_Atch02\_Bird Nest Procedure\_Redacted.pdf."

<sup>173</sup> Data Request 265, question 56; attachment "DRU14286\_Q056\_Atch03\_Riparian Review Procedure\_Redacted.pdf."

<sup>174</sup> Data Request 265, question 56; attachment "DRU14286\_Audit\_DR\_OEIS\_D001.pdf."

<sup>175</sup> Data Request 265, question 56; attachment "DRU14286\_Q056\_Atch03\_Riparian Review Procedure\_Redacted.pdf."

<sup>176</sup> Data Request 265, question 56; attachment "DRU14286\_Q056\_Atch04\_Encroachment Permit Bulletin\_Redacted.pdf."

<sup>177</sup> Data Request 265, question 56; attachment "DRU14286\_Q056\_Atch04\_Encroachment Permit Bulletin\_Redacted.pdf."

<sup>178</sup> Data Request 265, question 57; attachment "DRU14286\_Q057\_Atch01\_Right Tree Right Place Report 12.08.23.pdf."

giveaways, and providing plant materials to customers impacted by PG&E's tree removal programs. PG&E stated in the document that it hopes the programs will ultimately lead to fewer customer constraints, promote goodwill with its customers, and lead to reduced operation spending in the long term.<sup>179</sup>

The provided information indicated that PG&E has completed the first portion of this target by publishing procedural guidelines related to the three constraint categories identified in the target, and by creating guidelines for a "right tree-right place" program.

Conclusion: PG&E provided information consistent with the completion of work identified in this statement.

## Narrative Statements, Supporting Information & Analysis, and Conclusion

### Statement 23

Statement: "Currently, there are time constraints in Second Patrol and on Priority Tag work. If an inspector determines that vegetation is an immediate risk to PG&E facilities the Priority Tag Utility Procedure is followed (TD-7102P-17). Under normal conditions, Priority 2 tags are issued for vegetation that is within MDR to the electric lines and must be mitigated within 20 business days."<sup>180</sup>

Supporting Information and Analysis: PG&E provided an Excel file containing records of all trees identified with a Priority 2 (P2) condition in 2023. The Excel file included the following attributes: tree location data (latitude and longitude); "inspection date" (the date the P2 condition was identified and mitigation work was prescribed); "work date" (the date the mitigation work was completed); "due date per compliance" (the date by which PG&E was required to complete the mitigation work to maintain compliance with internal procedures); and "resolved date" (the date any constraints preventing the completion of mitigation work were resolved).<sup>181</sup> The dates reported in the "due date per compliance" column were calculated by adding 20 business days to the reported dates in the "resolved date" column of the Excel file.

The Excel file indicated that PG&E identified 81,984 trees with P2 conditions in 2023. Based on the "due date per compliance" column and the reported mitigation dates, 81,375 trees, or 99%, received mitigation work in accordance with PG&E's internal procedures. However, 604

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<sup>179</sup> Data Request 265, question 57; attachment "DRU14286\_Q057\_Atch01\_Right Tree Right Place Report 12.08.23.pdf."

<sup>180</sup> [PG&E's 2023-2025 WMP](https://efiling.energy.ca.gov/eFiling/Getfile.aspx?fileid=56145&shareable=true) (Rev. #4, January 8, 2024), p. 706, (https://efiling.energy.ca.gov/eFiling/Getfile.aspx?fileid=56145&shareable=true).

<sup>181</sup> Data Request 265, question 58; attachment "DRU14286\_Q058\_Atch01\_2023 Insp P2 export.xlsx."

trees did not receive mitigation work within the required timeframe, and five trees had no reported mitigation date but were still within the procedure's stated timeframe.

For the 604 trees that did not receive timely mitigation work, PG&E took between 21 and 264 business days to complete the work after resolving associated constraints. PG&E must provide a corrective action response that addresses these delays.

Conclusion: PG&E did not provide information consistent with the completion of work identified in this statement.

### **Finding - 8.2.6 Open Work Orders**

PG&E did not provide information consistent with the completion of all work identified in Initiative 8.2.6 Open Work Orders. PG&E must supply a corrective action response addressing the deficiency identified in Statement 23 above.



## 8.2.7 Workforce Planning

The purpose of this initiative was to describe “Programs to ensure that the electrical corporation has qualified vegetation management personnel and to ensure that both employees and contractors tasked with vegetation management responsibilities are adequately trained to perform relevant work”<sup>182</sup>

### Narrative Statements, Supporting Information & Analysis, and Conclusion

#### Statement 24

Statement: PG&E uses the completion of VMI Basics training to ensure minimum qualifications are met before contractors can perform work in the field.”<sup>183</sup>

Supporting Information and Analysis: PG&E provided an Excel file containing records of all employees that completed PG&E’s Skills Assessment for VMIs Course (VEGM-0110 and VEGM-0110 WBT) in 2023 which was the final component of the VMI Basics training.<sup>184</sup> The Excel file included the date each employee completed the course, and the first day the employee began working in the field. The Excel file indicated that 1,541 employees completed the course in 2023. Of those employees, 78 performed work in the field prior to completing the course.

Conclusion: PG&E did not provide information consistent with the completion of work identified in this statement.

#### Statement 25

Statement: “to bolster recruitment and the pipeline of qualified personnel, we have partnered with the International Brotherhood of Electrical Workers and educational institutions, such as the California Community College system, to establish a training program designed to provide the skills and knowledge necessary to perform tree crew work safely and competently.”<sup>185</sup>

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<sup>182</sup> [Energy Safety's 2023-2025 Wildfire Mitigation Plan Technical Guidelines](https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=53286&shareable=true) (December 2022), p. A-26, (https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=53286&shareable=true).

<sup>183</sup> [PG&E's 2023-2025 WMP](https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=56145&shareable=true) (Rev. #4, January 8, 2024), p. 711, (https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=56145&shareable=true).

<sup>184</sup> Data Request 265, question 59; attachment “DRU14286\_Q059\_Atch01\_2021-2023 VEGM110 Completion\_Redacted.xlsx.”

<sup>185</sup> [PG&E's 2023-2025 WMP](https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=56145&shareable=true) (Rev. #4, January 8, 2024), p. 712, (https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=56145&shareable=true).

Supporting Information and Analysis: PG&E stated that it “supported the development of the tree crew training programs for the California Community College system, however, PG&E does not host or proctor the courses.”<sup>186</sup> To demonstrate that PG&E sponsored and supported the development of the courses, it provided a slide deck presented by UpSkill California which was the host of the training programs. The slide deck indicated that PG&E contributed several million dollars to UpSkill California between 2019 and 2023 that went towards the development of the courses.<sup>187</sup> PG&E also provided an email correspondence from 2023 that was addressed to PG&E from UpSkill California’s Executive Director thanking PG&E for its partnership in the program.<sup>188</sup>

PG&E also provided the course curriculum for Upskill California’s Utility Line Clearance Arborist Training.<sup>189</sup> The curriculum indicated that the course contained 200 hours of training and consisted of topics related to arboricultural work including tree biology and identification, chainsaw and woodchipper operations, pruning techniques, and tree climbing techniques. Lastly, PG&E provided attendance records containing a list of all courses that were held in 2023 as well as a list of attendees for each class.<sup>190</sup>

Conclusion: PG&E provided information consistent with the completion of work identified in this statement.

#### Statement 26

Statement: “We note that there are insufficient TRAQ qualified inspectors to perform the system-wide inspections that are in scope for PG&E’s Routine Distribution Inspection and Second Patrol programs. In addition, TRAQ certification was not required per PG&E’s union agreement. At the same time, PG&E recognizes the benefits of TRAQ and has continued to proactively sponsor TRAQ training sessions. PG&E has also updated the letter agreement with the union to provide financial incentives to inspectors who become TRAQ qualified.”<sup>191</sup>

Supporting Information and Analysis: PG&E provided email correspondence between PG&E’s Vegetation Management communications and execution teams that discussed four TRAQ

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<sup>186</sup> Data Request 265, question 62; attachment “DRU14286\_Audit\_DR\_OEIS\_D001.pdf,” p. 27.

<sup>187</sup> Data Request 276, question 26; attachment “DRU14563\_Q026\_Atch02\_2.27.23\_UpSkill California Colleges Arborist and PreInspector.pdf.”

<sup>188</sup> Data Request 276, question 26; attachment “DRU14563\_Q026\_Atch03\_FW\_Tree Crew (arborist) Training and Certificate Program\_Redacted.pdf.”

<sup>189</sup> Data Request 265, question 62; attachment “DRU14286\_Q062\_Atch01\_Utility Line Clearance Arborist Training Curriculum.pdf.”

<sup>190</sup> Data Request 265, question 62; attachment “DRU14286\_Q062\_Atch02\_2023 Attendance Tracking\_Utility Line Clearance Arborist Training\_All Colleges\_CONF.pdf.”

<sup>191</sup> [PG&E’s 2023-2025 WMP](https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=56145&shareable=true) (Rev. #4, January 8, 2024), p. 630, (https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=56145&shareable=true).

training courses in 2023 that were sponsored by PG&E and dedicated to PG&E personnel.<sup>192</sup> The courses were hosted by the Western Chapter International Society of Arboriculture (WCISA) at the following locations and times:<sup>193</sup>

TRAQ Full Course – San Ramon: June 28-30, 2023

TRAQ Full Course – Chico: July 12-14, 2023

TRAQ Full Course – Tulare July 24–26, 2023

TRAQ Full Course – Placerville: August 9–11, 2023

PG&E also provided a letter written by the Executive Director of the Western Chapter International Society of Arboriculture (WCISA) confirming that the WCISA hosted the four TRAQ trainings referenced above.<sup>194</sup>

Additionally, PG&E provided an updated letter agreement between the International Brotherhood of Electrical Workers (IBEW), and PG&E that was signed by representatives from both parties on May 24, 2023.<sup>195</sup> The letter agreement states that “Sr. VM Inspectors who obtain their Tree Risk Assessment Qualified (TRAQ) Certification, and one (1) year of Sr. VM Inspector work experience, will receive a three percent (3%) hourly wage premium.”<sup>196</sup>

Conclusion: PG&E provided information consistent with the completion of work identified in this statement.

### **Finding - 8.2.7 Workforce Planning**

PG&E did not provide information consistent with the completion of all work identified in Initiative 8.2.7 Workforce Planning. PG&E must supply a corrective action response addressing the deficiency identified in Statement 24 above.

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<sup>192</sup> Data Request 276, question 25; attachments “DRU14563\_Q025\_Atch01\_FW\_VM Weekly Lookahead - Week of February 21st, 2023\_Redacted.pdf,” “DRU14563\_Q025\_Atch02\_FW\_VM Weekly Lookahead - Week of March 27th, 2023\_Redacted.pdf,” “DRU14563\_Q025\_Atch03\_FW\_VM Weekly Lookahead - Week of July 10th, 2023\_Redacted.pdf.”

<sup>193</sup> Data Request 265, question 3; attachment “DRU14286\_Audit\_DR\_OEIS\_D001.pdf,” p. 2.

<sup>194</sup> Data Request 265, question 3; attachment “DRU14286\_Q003\_Atch02\_TRAQ Letter.pdf.”

<sup>195</sup> Data Request 265, question 4; attachment “DRU14286\_Q004\_Atch01\_LA-23-20-PGE\_Redacted.pdf.”

<sup>196</sup> Data Request 265, question 4; attachment “DRU14286\_Q004\_Atch01\_LA-23-20-PGE\_Redacted.pdf,” p. 2.