
PACIFIC GAS AND ELECTRIC COMPANY

2021 WILDFIRE MITIGATION PLAN

ERRATA

RULEMAKING 18-10-007

MARCH 17, 2021



Errata to Pacific Gas and Electric Company's 2021 Wildfire Mitigation Plan

Pacific Gas and Electric Company (PG&E) has identified a limited number of updates to the 2021 Wildfire Mitigation Plan (2021 WMP), submitted February 5, 2021. A number of these updates resulted from discovery requests submitted by parties that identified items in the 2021 WMP that required revision. The updates to the 2021 WMP are described below and this document has been posted to the PG&E Wildfire Mitigation Plan website: www.PGE.com/wildfiremitigationplan (WMP Website).

In addition to this document, PG&E is providing limited updates to the 2021 WMP, Attachment 1 – All Data Tables Required by 2021 WMP Guidelines, and several Risk Spend Efficiency (RSE) workpapers.

The tables below summarize the changes made to the updated documents.

- Table 1: Summarizes updates to the 2021 WMP; location of the update, the original text, a redline version of the update and a brief explanation of the reason for the correction.
- Table 2: Provides a summary of updates to Attachment 1 – All Data Tables Required by 2021 WMP Guidelines, Tables 1 – 12. Because it is not practical to show entire tables in a summary table format, most of the updates are described rather than fully shown in a redline format. In the Updated Attachment 1 – All Data Tables Required by 2021 WMP Guidelines-March 17.xlsx, all of changes in the tables are reflected in **Red** font and only the tabs that have been highlighted red have been updated from the original submission of Attachment 1. Understanding that stakeholders may want to compare the old tables to the updated tables, PG&E has retained a copy of the original version of Attachment 1 on the WMP website called "Attachment 1: All Tables Required by the 2021 WMP Guidelines."
- Table 3: Provides a summary of updates to RSE calculations in Updated Attachment 1 – All Data Tables Required by 2021 WMP Guidelines – March 17 (Table 12) and the associated RSE Workpapers.

Finally, as discussed in our March 4, 2021 letter to the Wildfire Safety Division (WSD) and Safety and Enforcement Division (SED) entitled "PG&E 2019 and 2020 Wildfire Mitigation Plan Update", where we self-identified missed enhanced inspections on a small percentage of our assets in High Fire Threat District (HFTD) areas, we are still in the process of validating the substations asset counts. Where updated data is known, we have provided updates to the substation related sections of the 2021 WMP through this Errata, however, not all sections and associated references to substation asset counts in the WMP have been fully updated (e.g. Attachment 1 – All Data Tables Required by 2021 WMP Guidelines, Table 8 has not been revised) as we are continuing to validate asset counts. We will provide any updates resulting from the validation process to WSD and SED when the process is complete.

Table 1: Summary of Updates to the WMP

Location	Original	Updated (with redline)	Reason for Correction						
<p>Page 9, TABLE PG&E- EXECUTIVESUMMARY-1: Row: Asset Inspections Column: 2021 TARGETS*</p>	<p>Substations – 100% of Tier 3 & Zone 1 and ~33% of Tier 2 by July 31</p>	<p>Complete inspections on all transmission and distribution substations and power generation switchyards in Tier 3 & Zone 1 annually and once every three years (~33%) for Tier 2 by July 31</p>	<p>Language has been aligned with PG&E’s March 4th letter to the CPUC. This change clarifies the inclusion of Power Generation switchyards in PG&E’s substation inspection program.</p>						
<p>Page 9, TABLE PG&E- EXECUTIVESUMMARY-1: Row: Asset Inspections Column: 2020 PROGRESS*</p> <p>and</p> <p>Page 293, TABLE PG&E- 7.1-2: Row: Asset Inspections Column: 2020 PROGRESS</p>	<table border="1"> <tr> <td data-bbox="386 764 768 863">Transmission – 100% of Tier 3 & Zone 1 and ~33% of Tier 2 structures</td> </tr> <tr> <td data-bbox="386 863 768 926">Distribution – 100% of Tier 3 & Zone 1 and ~33% of Tier 2</td> </tr> <tr> <td data-bbox="386 926 768 989">Substations – 100% of Tier 3 & Zone 1 and ~33% of Tier 2</td> </tr> </table>	Transmission – 100% of Tier 3 & Zone 1 and ~33% of Tier 2 structures	Distribution – 100% of Tier 3 & Zone 1 and ~33% of Tier 2	Substations – 100% of Tier 3 & Zone 1 and ~33% of Tier 2	<table border="1"> <tr> <td data-bbox="803 764 1182 863">Transmission – 100% of Tier 3 & Zone 1 and ~33% of Tier 2 structures</td> </tr> <tr> <td data-bbox="803 863 1182 961">Distribution – 100% of Tier 3 & Zone 1 and ~33% of Tier 2</td> </tr> <tr> <td data-bbox="803 961 1182 1398">Electric transmission and distribution substations – 100% of Tier 3 & Zone 1 and ~33% of Tier 2; As reflected in the March 4, 2021 letter entitled “PG&E 2019 and 2020 Wildfire Mitigation Plan Update”, PG&E did not complete full detailed inspections on 63 power generation switchyards (24 in Tier 3 and 39 in Tier 2)</td> </tr> </table>	Transmission – 100% of Tier 3 & Zone 1 and ~33% of Tier 2 structures	Distribution – 100% of Tier 3 & Zone 1 and ~33% of Tier 2	Electric transmission and distribution substations – 100% of Tier 3 & Zone 1 and ~33% of Tier 2; As reflected in the March 4, 2021 letter entitled “PG&E 2019 and 2020 Wildfire Mitigation Plan Update”, PG&E did not complete full detailed inspections on 63 power generation switchyards (24 in Tier 3 and 39 in Tier 2)	<p>Zone 1 was not a focus area of PG&E’s 2020 inspection program as described in the 2020 WMP. The references to Zone 1 were incorrectly copied into the 2020 column but only the 2021 WMP plan includes the reference to Zone 1. The substation reference has been aligned with PG&E’s March 4th letter to the CPUC regarding the inspection of Power Generation switchyards through PG&E’s substation inspection program.</p>
Transmission – 100% of Tier 3 & Zone 1 and ~33% of Tier 2 structures									
Distribution – 100% of Tier 3 & Zone 1 and ~33% of Tier 2									
Substations – 100% of Tier 3 & Zone 1 and ~33% of Tier 2									
Transmission – 100% of Tier 3 & Zone 1 and ~33% of Tier 2 structures									
Distribution – 100% of Tier 3 & Zone 1 and ~33% of Tier 2									
Electric transmission and distribution substations – 100% of Tier 3 & Zone 1 and ~33% of Tier 2; As reflected in the March 4, 2021 letter entitled “PG&E 2019 and 2020 Wildfire Mitigation Plan Update”, PG&E did not complete full detailed inspections on 63 power generation switchyards (24 in Tier 3 and 39 in Tier 2)									

Location	Original	Updated (with redline)	Reason for Correction
Page 37, TABLE 3-1	2021 WMP Planned \$4,829,752 2020 Actual \$4,862,464 Difference (\$32,712) 2021 Planned \$4,955,161 2022 Planned \$5,197,811 2020-22 Planned \$15,015,436	2021 WMP Planned \$4,831,061 2020 Actual \$4,864,063 Difference (\$33,002) 2021 Planned \$4,933,925 2022 Planned \$5,164,859 2020-22 Planned \$14,962,847	In the initial 2021 WMP submission, we incorrectly included spend on activities that are outside of the scope of initiatives 7.3.3.11.2 and 7.3.3.12.4 as part of those initiatives. Through Subject Matter Expert (SME) input, we have since corrected the scope of the financial spend for those initiatives. Identified through data request CalAdvocates_042-Q10.
Page 38, TABLE 3-2 Row: Grid Design and System Hardening	2020 WMP Planned \$2,624,433 2020 Actual \$2,692,241 Difference (\$67,808) 2021 Planned \$2,698,098 2022 Planned \$3,017,543 2020-22 Planned (w/ 2020 Actual) \$8,407,881	2020 WMP Planned \$2,625,742 2020 Actual \$2,693,839 Difference (\$68,097) 2021 Planned \$2,676,862 2022 Planned \$2,984,590 2020-22 Planned (w/ 2020 Actual) \$8,355,291	In the initial 2021 WMP submission, we incorrectly included spend on activities that are outside of the scope of initiatives 7.3.3.11.2 and 7.3.3.12.4 as part of those initiatives. Through Subject Matter Expert (SME) input, we have since corrected the scope of the financial spend for those initiatives. Identified through data request CalAdvocates_042-Q10.

Location	Original	Updated (with redline)	Reason for Correction
<p>Page 38, TABLE 3-2</p> <p>Row: Total</p>	<p>2020 WMP Planned \$4,829,752</p> <p>2020 Actual \$4,862,464</p> <p>Difference (\$32,712)</p> <p>2021 Planned \$4,955,161</p> <p>2022 Planned \$5,197,811</p> <p>2020-22 Planned (w/ 2020 Actual) \$15,015,436</p>	<p>2020 WMP Planned \$4,831,061</p> <p>2020 Actual \$4,864,063</p> <p>Difference (\$33,002)</p> <p>2021 Planned \$4,933,925</p> <p>2022 Planned \$5,164,859</p> <p>2020-22 Planned (w/ 2020 Actual) \$14,962,847</p>	<p>In the initial 2021 WMP submission, we incorrectly included spend on activities that are outside of the scope of initiatives 7.3.3.11.2 and 7.3.3.12.4 as part of those initiatives. Through Subject Matter Expert (SME) input, we have since corrected the scope of the financial spend for those initiatives. Identified through data request CalAdvocates_042-Q10.</p>
<p>Page 47, footnote 2</p>	<p>Before September 1, with the possible exception of locations where an inspection was attempted before September 1 but access restrictions, customer refusals or other external factors prevent initial completion of the inspection.</p>	<p>Before September 1<u>July 31</u>, with the possible exception of locations where an inspection was attempted before September 1<u>July 31</u> but access restrictions, customer refusals or other external factors prevent initial completion of the inspection.</p>	<p>The September 1 date in this footnote was an error, which was identified in a data request propounded by the Public Advocates Office of the California Public Utilities Commission (Cal Advocates). The July 31st date used in other places in the 2021 WMP for this work is accurate.</p>

Location	Original	Updated (with redline)	Reason for Correction
<p>Page 228, TABLE PG&E-5.2-1:</p> <p>Row: Asset Management and Inspections (Unique ID D.02)</p>	<p>Complete supplemental ground and aerial inspections of 100 substations: 42 in HFTD Tier 3, 38 in HFTD Tier 2; and 20 in substations adjacent to Tier 2 and 3 HFTD areas.</p>	<p>Complete inspections on all transmission and distribution substations and power generation switchyards in Tier 3 annually and once every three years (~33%) for Tier 2 by July 31</p>	<p>Language has been aligned with PG&E's March 4th letter to the CPUC. The change clarifies the inclusion of Power Generation switchyards in PG&E's substation inspection program.</p>
<p>Page 228, TABLE PG&E-5.2-1:</p> <p>Row: Grid Design and System Hardening (Unique ID C.15)</p> <p>Column: Commitment Description</p> <p>And Pages 285, 566, 910</p>	<p>Replace approximately 92 miles of conductor on lines traversing HFTD, including associated asset hardware.</p>	<p>Replace or remove approximately 92 miles of conductor on lines traversing HFTD, including associated asset hardware.</p>	<p>As part of our transmission conductor risk reduction activities in HFTD areas, conductor may be removed, completely eliminating the risk associated with that line, in addition to being replaced. This was always an intended aspect of this program, but the text has now been explicitly updated to clarify this.</p>
<p>Page 237, TABLE 5.3-1:</p> <p>Row: C.15 – 7.3.3.17.2 – System Hardening - Transmission Conductor</p> <p>Column: Underlying Assumptions</p>	<p>Some of the mileage may not be in HFTD as some transmission lines traverse both HFTD and non-HFTD areas. Only electric transmission capital project greater than \$1M are in scope. Smaller span reconductoring via maintenance tags is not counted in this overall mileage. 2021 target is adjusted from the original STAR filing to account for potential execution risks.</p>	<p>Some of the mileage may not be in HFTD as some transmission lines traverse both HFTD and non-HFTD areas. Only electric transmission capital project greater than \$1M are in scope. Smaller span reconductoring via maintenance tags is not counted in this overall mileage. 2021 target is adjusted from the original STAR filing to account for potential execution risks. The 2021 and 2022 Targets include removals.</p>	<p>As part of our transmission conductor risk reduction activities in HFTD areas, conductor may be removed, completely eliminating the risk associated with that line, in addition to being replaced. This was always an intended aspect of this program, but the text has now been explicitly updated to clarify this.</p>

Location	Original	Updated (with redline)	Reason for Correction
<p>Page 237, TABLE 5.3-1:</p> <p>Row: D.01 - 7.3.4.1 - Distribution HFTD Inspections (poles)</p> <p>Column: 2020 Performance</p>	<p>100% of Tier 3 & Zone 1 and 33% of Tier 2 (339,728)</p>	<p>100% of Tier 3 & Zone 1 and 33% of Tier 2 (339,728)</p>	<p>Zone 1 was not a focus area of PG&E's 2020 inspection program as described in the 2020 WMP, these references to Zone 1 were incorrectly copied into the 2020 column but only the 2021 WMP plan includes reference to Zone 1.</p>
<p>Page 237, TABLE 5.3-1:</p> <p>Row: D.01 - 7.3.4.1 - Distribution HFTD Inspections (poles)</p> <p>Column: Units</p>	<p># of overhead distribution structures Inspected in HFTD and Buffer Zone "Zone 1"</p>	<p># of overhead distribution structures Inspected in HFTD and Buffer Zone "Zone 1"</p>	<p>This is a typographical error; Zone 1 is part of HFTD areas and does not need to be referenced after "Buffer Zone".</p>
<p>Page 237, TABLE 5.3-1:</p> <p>Row: D.02 – 7.3.4.15 – Substation HFTD Inspections (substations)</p> <p>Column: 2019 Performance</p>	<p>222</p>	<p>222 (63)</p>	<p>The substation information has been revised to address the inclusion of Power Generation switchyards through PG&E's substation inspection program with the number of switchyard inspections in parenthesis.</p>

Location	Original	Updated (with redline)	Reason for Correction
<p>Page 237, TABLE 5.3-1:</p> <p>Row: D.02 – 7.3.4.15 – Substation HFTD Inspections (substations)</p> <p>Column: 2020 Performance</p>	<p>100% of Tier 3 & Zone 1 and 33% of Tier 2</p> <p>(99)</p>	<p>100% of Tier 3 & Zone 1 and 33% of Tier 2</p> <p>(0)</p>	<p>Zone 1 was not a focus area of PG&E’s 2020 inspection program as described in the 2020 WMP, these references to Zone 1 were incorrectly copied into the 2020 column but only the 2021 WMP plan includes reference to Zone 1. The substation information has been revised to address the inclusion of Power Generation switchyards through PG&E’s substation inspection program with the number of switchyard inspections in parenthesis.</p>
<p>Page 237 TABLE 5.3-1:</p> <p>Row: D.02 – 7.3.4.15 – Substation HFTD Inspections (substations)</p> <p>Column: Projected Target by end of 2021</p>	<p>100% of Tier 3 & Zone 1 and 33% of Tier 2</p> <p>(100)</p>	<p>100% of Tier 3 & Zone 1 and 33% of Tier 2</p> <p>(TBD)</p>	<p>The substation information has been revised to address the inclusion of Power Generation switchyards through PG&E’s substation inspection program with the number of switchyard inspections in parenthesis.</p>

Location	Original	Updated (with redline)	Reason for Correction
Page 237, TABLE 5.3-1: Row: D.02 – 7.3.4.15 – Substation HFTD Inspections (substations) Column: Projected Target by end of 2022	100% of Tier 3 & Zone 1 and 33% of Tier 2 (100)	100% of Tier 3 & Zone 1 and 33% of Tier 2 (TBD)	The substation information has been revised to address the inclusion of Power Generation switchyards through PG&E’s substation inspection program with the number of switchyard inspections in parenthesis.
Page 237, TABLE 5.3-1: Row: D.02 – 7.3.4.15 – Substation HFTD Inspections (substations) Column: Units	# of substations inspected in Tier 3 and Tier 2 HFTD and adjacent Tier 3 and Tier 2 HFTD.	# of electric transmission and distribution substations inspected in Tier 3 and Tier 2 HFTD and adjacent Tier 3 and Tier 2 HFTD. (# of additional Power Generation Switchyards)	The substation information has been revised to address the inclusion of Power Generation switchyards through PG&E’s substation inspection program with the number of switchyard inspections in parenthesis.
Page 237, TABLE 5.3-1: Row: D.02 – 7.3.4.15 – Substation HFTD Inspections (substations) Column: Underlying Assumptions	For WSIP in 2019 we counted the number of inspections, while 2020 and beyond measure the number of substations inspected	For WSIP in 2019 we counted the number of inspections, while 2020 and beyond measure the number of substations inspected	Upon review, this note was determined to be confusing and not accurate and thus has been removed.

Location	Original	Updated (with redline)	Reason for Correction
<p>Page 237, TABLE 5.3-1:</p> <p>Row: D.03 - 7.3.4.2 – Transmission HFTD Inspections (structures)</p> <p>Column: 2020 Performance</p>	<p>100% of Tier 3 & Zone 1 and 33% of Tier 2</p> <p>(26,282)</p>	<p>100% of Tier 3 & Zone 1 and 33% of Tier 2</p> <p>(26,282)</p>	<p>Zone 1 was not a focus area of PG&E’s 2020 inspection program as described in the 2020 WMP, these references to Zone 1 were incorrectly copied into the 2020 column but only the 2021 WMP plan includes reference to Zone 1.</p>
<p>Page 285, TABLE PG&E-7.1-1</p> <p>Row: Asset Management and Inspections (Unique ID D.02)</p> <p>Column: Commitment Description</p>	<p>Complete supplemental ground and aerial inspections of 100 substations: 42 in HFTD Tier 3, 38 in HFTD Tier 2; and 20 in substations adjacent to Tier 2 and 3 HFTD areas.</p>	<p>Complete inspections on all transmission and distribution substations and power generation switchyards in Tier 3 annually and once every three years (~33%) for Tier 2 by July 31</p>	<p>Revised description to align with PG&E’s March 4th letter to the CPUC. The change clarifies the inclusion of Power Generation switchyards in PG&E’s substation inspection program.</p>
<p>Page 293, TABLE PG&E-7.1-2:</p> <p>Row: Asset Inspections</p> <p>Column: 2021 TARGETS*</p>	<p>Substations – 100% of Tier 3 & Zone 1 and ~33% of Tier 2 by July 31</p>	<p>Complete inspections on all transmission and distribution substations and power generation switchyards in Tier 3 annually and once every three years (~33%) for Tier 2 by July 31</p>	<p>Revised description to align with PG&E’s March 4th letter to the CPUC. The change clarifies the inclusion of Power Generation switchyards in PG&E’s substation inspection program.</p>
<p>Page 359, TABLE-7.2-1:</p> <p>Row: D.4 Substation HFTD Inspections (substations)</p> <p>Column: 2020 Commitments</p>	<p>Color Code = BLUE</p>	<p>Color Code = RED</p>	<p>Status has been updated to align with PG&E’s March 4th letter to the CPUC noting that we did not complete full detailed inspections on 100% of Tier 3 and ~33% of Tier 2 power generation switchyards.</p>

Location	Original	Updated (with redline)	Reason for Correction
<p>Page 359, TABLE-7.2-1: Row: D.4 Substation HFTD Inspections (substations) Column: Summary of 2020 Performance</p>	<p>Completed all targeted inspections, 99 substations inspected in 2020</p>	<p>Completed inspections on electric transmission and distribution substations: 100% of Tier 3 & Zone 1 and ~33% of Tier 2; As reflected in the March 4, 2021 letter entitled "PG&E 2019 and 2020 Wildfire Mitigation Plan Update", PG&E did not complete full detailed inspections on 100% of Tier 3 and ~33% of Tier 2 power generation switchyards.</p>	<p>Zone 1 was not a focus area of PG&E's 2020 inspection program as described in the 2020 WMP, these references to Zone 1 were incorrectly copied into the 2020 column but only the 2021 WMP plan includes reference to Zone 1. Status has been updated to align with PG&E's March 4th letter to the CPUC noting that we did not complete full detailed inspections on 100% of Tier 3 and ~33% of Tier 2 power generation switchyards.</p>

Location	Original	Updated (with redline)	Reason for Correction
Page 558	<p>While this 2021 target of 180 miles does represent a drop from the 2020 mileage target, this is as a result of the previously referenced improvement in modeling and significant pivot in targeting. PG&E needed to change course, stop previously selected projects and start different projects that are in alignment with our updated risk model. More importantly, the 180 miles targeted in 2021 represent a greater risk reduction value than if we had continued on the previously planned work plan and executed approximately 300 miles in 2021. Under the new risk model the 301 miles of potential system hardening work originally planned for 2021 equated to 125 risk units in PG&E's multi-attribute value function (MAVF) calculation. The 180 miles now targeted for completion in 2021 are worth 198 risk units, a 58% increase in quantifiable risk reduction even though the mileage number is reduced."</p>	<p>While this 2021 target of 180 miles does represent a drop from the 2020 mileage target, this is as a result of the previously referenced improvement in modeling and significant pivot in targeting. PG&E needed to change course, stop previously selected projects and start different projects that are in alignment with our updated risk model. More importantly, the 180 miles targeted in 2021 represent a greater risk reduction value than if we had continued on the previously planned work plan and executed approximately 300 miles in 2021. Under the new risk model the 301 miles of potential system hardening work originally planned for 2021 equated to 118 risk units in PG&E's multi-attribute value function (MAVF) calculation. The 180 miles now targeted for completion in 2021 are worth 198 risk units, a 68% increase in quantifiable risk reduction even though the mileage number is reduced."</p>	<p>This change was made in response to Data Request TURN_022-Q01</p>

Location	Original	Updated (with redline)	Reason for Correction
Page 585	<p>Selection criteria of assets for each inspection cycle is driven by factors such as location, system operating criticality, public safety concerns, and overall risk modeling. One key component of the 2021 Wildfire Distribution Risk Model are the data inputs from enhanced inspection results from 2019 and/or 2020. Assets that continually show signs of concern can be inspected more frequently. The resulting “1-to-n” prioritization of assets by circuit ranking is then coupled with operational field knowledge and constraints, including restricted physical access periods, to develop an annual schedule for completion. In general, PG&E schedules patrol and inspection activities in Tier 2, Tier 3, and Zone 1 HFTD areas earlier in the year to provide time for necessary repairs prior to peak fire season.</p>	<p>Selection criteria of assets for each inspection cycle is driven by factors such as location, system operating criticality, public safety concerns, and overall risk modeling. One key component of the 2021 Wildfire Distribution Risk Model are the data inputs from enhanced inspection results from 2019 and/or 2020. Assets that continually show signs of concern can be inspected more frequently. The resulting “1-to-n” prioritization of assets by circuit ranking is then coupled with operational field knowledge and constraints, including restricted physical access periods, to develop an annual schedule for completion. In general, PG&E schedules patrol and inspection activities in Tier 2, Tier 3, and Zone 1 HFTD areas earlier in the year to provide time for necessary repairs prior to peak fire season.</p>	<p>In response to a data request CalAdvocates_043-Q09, we reviewed how enhanced inspection results are being used to inform our risk models and determined that inspection results will be an input to the 2022 Wildfire Distribution Risk Model, not the 2021 Wildfire Distribution Risk Model.</p>
Page 586	<p>For 2020 through 2022, PG&E plans to complete enhanced detailed inspections of overhead distribution assets in the following recurrence intervals:</p>	<p>For 2021 through 2022, PG&E plans to complete enhanced detailed inspections of overhead distribution assets in the following recurrence intervals:</p>	<p>This was a typographical error, the preceding paragraph covered 2020, this paragraph addresses 2021 and 2022 plans.</p>

Location	Original	Updated (with redline)	Reason for Correction
Page 622	<p>For 2020, PG&E assessed 192 substations: 42 HFTD Tier 3 substations; 33 HFTD Tier 2 substations; 23 in substations adjacent to Tier 2 and 3 HFTD areas (i.e., in Buffer Zones); and 94 non-HFTD substations via the supplemental ground and aerial inspections.</p> <p>For 2021, PG&E intends to complete supplemental ground and aerial inspections of 100 substations: 42 in HFTD Tier 3, 38 in HFTD Tier 2; and 20 in substations adjacent to Tier 2 and 3 HFTD areas.</p>	<p>For 2020, PG&E assessed 182 transmission and distribution substations: 32 HFTD Tier 3 substations; 33 HFTD Tier 2 substations; 23 in substations adjacent to Tier 2 and 3 HFTD areas (i.e., in Buffer Zones); and 94 non-HFTD substations via the supplemental ground and aerial inspections.</p> <p>For 2021, PG&E intends to complete supplemental ground and aerial inspections on all transmission and distribution substations and power generation switchyards in Tier 3 HFTD areas annually and once every three years (~33%) for Tier 2 HFTD areas. PG&E will also inspect substations in areas adjacent to Tier 2 and Tier 3 HFTD areas (i.e., Buffer Zones).</p>	<p>Revised description to align with PG&E's March 4th letter to the CPUC. The change clarifies the inclusion of Power Generation switchyards in PG&E's substation inspection program.</p> <p>Revised numerical error identified during the review of the substation inspection program.</p>

**Table 2: Summary of Updates to Updated Attachment 1 – All Tables Required by 2021
WMP Guidelines – March 17**

Location	Reason for Correction	Update
Table 2, Item 2.d.ii (cells E19 through M19)	Table 2 transmission inspection volumes were double counted. This formula error was identified through data request CalAdvocates_042-Q09.	Table 2 transmission inspections volumes have been corrected.
Table 4, Items 2.a. and 2.b. (cells I13 and J14)	Table 4 incorrectly stated that there was 1 contractor fatality that occurred related to utility inspection work performed in 2019. There were no contractor fatalities relating to utility inspection work in 2019. However, the 1 contractor fatality was related to vegetation management work performed in Q1 2020. This mistaken categorization was identified through data request CalAdvocates_051-Q01.	Table 4 contractor fatalities due to utility inspections in 2019 have been corrected to 0 and Table 4 contractor fatalities in Q1 2020 due to vegetation management have been corrected to 1.
Table 5, Items 1.a., 2.a., and 2.b. (cells J14, K14, L14, and M14)	<p>Table 5 incorrectly stated that there were 47 OSHA-recordable injuries to contractors due to vegetation management work in 2020. The total number of OSHA-recordable injuries due to vegetation management work in 2020 was 72. The value for cell J14 is 20. The value for cell K14 is 17. The value for cell L14 is 17. And the value for cell M14 is 18.</p> <p>The need for this change was identified in response to CalAdvocates_051-Q02. During our review of the request, we located updated injury information and determined that some OSHA-recordable injuries that occurred during vegetation management activities outside of the Routine VM and EVM programs were not originally included in Table 5.</p>	Table 5 OSHA-recordable injuries to contractors due to vegetation management work in 2020 has been updated to reflect 72 injuries across 4 quarters.

Location	Reason for Correction	Update
Table 5, Item 2.b. (cell I14)	In response to CalAdvocates_051-Q02, we are reviewing our records regarding OSHA - recordable injuries to contractors due to vegetation management work in 2019. We reported 25 such injuries in Table 5 of the 2021 WMP. We have not yet been able to determine if this number needs to be updated. We will further update Table 5 of the 2021 WMP if we determine that this value does need to be changed.	[No change at this time.]
Table 5, Items 1.a. and 2.a. (cells I8 and I13)	Table 5 incorrectly stated that there were 25 contractor injuries related to utility inspection work performed in 2019. PG&E does not have any record of contractor injuries related to utility inspection work in 2019; however, there were 21 OSHA-recordable full-time employee injuries due to utility inspection work in 2019. The need for this change was identified through data request CalAdvocates_051-Q01.	Table 5 full-time employee injuries due to utility inspections have been corrected to 21. Table 5 contractor injuries due to utility inspections have been corrected to 0.
Table 7.1, Items 18.n and 18.o (cells G64 through O65).	<p>The original data included for Item 18.n.(“Transformer failure or damage – Distribution”) utilized outage data where the involved equipment was identified as “Transformer (OH)”, “Transformer (UG)” and “Stepdown” but inadvertently omitted equipment identified as just “Transformer”, which were originally included in row 18.o. (“Other - Distribution”). This revision has moved outages associated with “Transformer” into row 18.n “Transformer failure or damage – Distribution”.</p> <p>Identified through data request CalAdvocates_054-Q01.</p>	Items 18.n. and 18.o. (cells G64 through O65) have been updated.
Table 7.1, Items 18.n and 18.o (cells P64 through W65).	<p>Due to the above noted change in Table 7.1, Items 18.n and 18.o (cells G64 through O65), the cells in the “Projected risk events” columns have been updated as well (cells P64 through W65).</p> <p>Identified through data request CalAdvocates_054-Q01.</p>	Items 18.n. and 18.o. (cells P64 through W65) have been updated.

Location	Reason for Correction	Update
Table 7.1, Items 33.a through 48.a (cells G98 through O149)	As noted to the CPUC in a letter on December 23 rd and described in PG&E's 2021 WMP on page 271, PG&E's Electric Incident Investigation (EII) team is conducting a system of record audit for ignition events. The updated ignition counts in Table 7.1 represent the events known to PG&E at this time (March 17, 2021) but are subject to change as the audit progresses.	Items 33.a through 48.a (cells G98 through O149) have been updated.
Items 33.a through 48.a (cells P98 through W149)	Due to the above noted changes in Table 7.1, Items 33.a through 48.a (cells G98 through O149), the cells in the "Projected risk events" columns have been updated as well (cells P98 through W149).	Items 33.a through 48.a (cells P98 through W149) have been updated.
Table 7.2, Items 1.a through 16.a (cells G8 through AD59)	As noted to the CPUC in a letter on December 23 rd and described in PG&E's 2021 WMP on page 271, PG&E's EII team is conducting a system of record audit for ignition events. The updated ignition counts in Table 7.2 represent the events known to PG&E at this time (March 17, 2021) but are subject to change as the audit progresses.	Items 1.a through 16.a (cells G8 through AD59) have been updated.
Table 7.2, Items 1.a through 16.a (cells AE8 through AL59)	Due to the above noted changes in Table 7.2, Items 1.a through 16.a (cells G8 through AD59), the cells in the "Projected ignitions by HFTD tiers" columns have been updated as well (cells AE8 through AL59).	Items 1.a through 16.a (cells AE8 through AL59) have been updated.

Location	Reason for Correction	Update
<p>Table 11, Items 1.a-2.a., 2.c., 2.e. 3.a-5.c. (cells O8:V11, O13:V13, O15:V15, O17:V21, O22:P22, S22:T22, O23:P23, S23:T23, R24,V24, O25:R25, S25:V25, P26:R26, T26:V26, M17)</p>	<p>To provide more accurate forecast data on the PSPS program PG&E is updating Table 11 to best reflect the most up to date and relevant data available. These updates are largely indicated in the “Comments” column (Column X) of Table 11 and are indicated below as well:</p> <ol style="list-style-type: none"> 1. Removed the whole number rounding for PSPS event forecasts which updated fields reliant on the number of PSPS events per quarter. As the ‘projected data’ is simply the average of the past year’s performance, PG&E has removed whole number rounding to provide more specific data. 2. Corrected a formula error by changing the denominator of past PSPS lookback and event average data from 10 years (an error) to 11 years (the corrected denominator) to reflect the past 11 years of data (10-year lookback plus 2020 actuals) which updated fields reliant on duration, customer impact and scope. 3. Utilized actual PSPS event customer hours for 2020 which updated fields reliant on duration instead of the prior, calculated average duration data which may have overestimated the customer duration forecast data. 4. Changed the basis of the analysis for cancelled PSPS events from the 10-year lookback to a 2-year lookback. Focusing on the past two years of PSPS events is more relevant for understanding cancelled PSPS event. The ten-year backcast did not include data on hypothetical instances where PSPS notification may have been issued but the PSPS event(s) were called off. 5. Corrected the 2020 Q3 data for the Critical Facilities impacted based on updated actual information available. 	<p>Items 1.a-2.a., 2.c., 2.e. 3.a-5.c. (cells O8:V11, O13:V13, O15:V15, O17:V21, O22:P22, S22:T22, O23:P23, S23:T23, R24, V24, O25:R25, S25:V25, P26:R26, T26:V26, M17) have been updated.</p>

Location	Reason for Correction	Update
<p>Table 12, Initiative 7.3.3.11.2, cells S51, V51, Y51</p>	<p><u>Original:</u> Actual CAPEX 2020 (\$ thousands): \$8,552</p> <p>Projected CAPEX 2021 (\$ thousands): \$21,996</p> <p>Projected CAPEX 2022 (\$ thousands): \$32,953</p> <p>As identified through data request CalAdvocates_042-Q10, in the initial 2021 WMP submission we incorrectly included spend on activities that are outside of the scope of initiatives 7.3.3.11.2 and 7.3.3.12.4 as part of those initiatives. Through Subject Matter Expert (SME) input, we have since corrected the scope of the financial spend for those initiatives.</p>	<p><u>Updated spend data:</u> Actual CAPEX 2020 (\$ thousands): \$11,342</p> <p>Projected CAPEX 2021 (\$ thousands): \$2,628</p> <p>Projected CAPEX 2022 (\$ thousands): \$0</p>
<p>Table 12, Initiative 7.3.3.12.4, cells S56, V56</p>	<p><u>Original:</u> Actual CAPEX 2020 (\$ thousands): \$251,129</p> <p>Projected CAPEX 2021 (\$ thousands): \$261,694</p> <p>As identified through data request CalAdvocates_042-Q10, in the initial 2021 WMP submission we incorrectly included spend on activities that are outside of the scope of initiatives 7.3.3.11.2 and 7.3.3.12.4 as part of those initiatives. Through Subject Matter Expert (SME) input, we have since corrected the scope of the financial spend for those initiatives.</p>	<p><u>Updated spend data:</u> Actual CAPEX 2020 (\$ thousands): \$249,938</p> <p>Projected CAPEX 2021 (\$ thousands): \$259,827</p>

Table 3: Summary of Updates to Risk Spend Efficiency (RSE) calculations

RSEs numbers are included in two places: 1) Updated Attachment 1 – All Data Tables Required by 2021 WMP Guidelines-March 17 and 2) 2021WMP_Section7.3_Atch01 (RSE workpapers). Updates to the RSE numbers have been reflected in both places. In addition, in reviewing these files, in places where we use the reference “Tier 1”, this is considered “Non-HFTD.”

Location	Initiative	Original RSE	Updated RSE	Reason for Correction
Updated Attachment 1: Table 12, cells I20:L20 2021WMP_Section7.3_Atch01, ERRATA_7.3.2_RSE Input Template_EO_WLDFR.xlsm, 1-Program Exposure tab: cell: E9	7.3.2.1.5	103.29	113.67	Revised input error by entering program exposure for 2020.
Updated Attachment 1: Table 12, I23:L23, F23:G23, AB23, AI23 2021WMP_Section7.3_Atch01, ERRATA_7.3.2_RSE Input Template_EO_WLDFR.xlsm, Summary of Programs tab: cells F14, J14:K14, N14 3-Eff – Freq Programs: cells G24:I47	7.3.2.2.2	5,732.20	364.24	Effectiveness methodology revised to reflect the benefit of PVD technology more accurately. By alerting PG&E to PV conditions faster, this technology potentially allows for increased response time to ignition events, therefore potentially reducing the likelihood of certain Wildfire outcomes. Please refer to cells I24 – I47 in tab 3-Eff – Freq Programs to view the outcomes specified.
Updated Attachment 1: Table 12, cells I41:L41 2021WMP_Section7.3_Atch01, ERRATA_7.3.3_RSE Input Template_EO_WLDFR, Summary of Programs tab: cell C14, 1-Program Exposure tab: E24:G29, E31, F31	7.3.3.5	3.50	166.68	Changed the program type from Mitigation to a Control since this program deals with regular annual work that has been executed by PG&E in the past and continues to be planned for the future. Revised input error in program exposure formula.

Location	Initiative	Original RSE	Updated RSE	Reason for Correction
Updated Attachment 1: Table 12, cells I42:L42 2021WMP_Section7.3_Atch01, ERRATA_7.3.3_RSE Input Template_EO_WLDFR, Summary of Programs tab: cell C15 1-Program Exposure tab: cells E32:G35	7.3.3.6	.70	93.07	Changed the program type from Mitigation to a Control since this program deals with regular annual work that has been executed by PG&E in the past and continues to be planned for the future. Revised input error in program exposure formula.
Updated Attachment 1: Table 12, cells I49:L49 2021WMP_Section7.3_Atch01, ERRATA_7.3.3_RSE Input Template_EO_WLDFR, cells 1-Program Exposure tab: cells F40, E44:E47	7.3.3.10	931.32	1648.86	Revised input error in program exposure formula.
Updated Attachment 1: Table 12, cells I56:L56 2021WMP_Section7.3_Atch01, ERRATA_7.3.3_RSE Input Template_EO_WLDFR, 1-Program Exposure tab: cells E62:G62	7.3.3.12.4	77.83	79.13	Revised input error in program exposure formula. Revised financial allocation based on SME judgment
Updated Attachment 1: Table 12, cells J61:L61, F61:G61, AB61, AI61 2021WMP_Section7.3_Atch01, ERRATA_7.3.3_RSE Input Template_EO_WLDFR, cells Summary of Programs tab: J34 3-Eff – Freq Programs tab: G27:H60, K27:K60	7.3.3.17.1	6.05	4.08	Aligned risk drivers and effectiveness with M2 System Hardening from the 2020 RAMP filing.

Location	Initiative	Original RSE	Updated RSE	Reason for Correction
<p>Updated Attachment 1: Table 12, cells J64:L64, F64:G64, AB64</p> <p>2021WMP_Section7.3_Atch0 1, ERRATA_7.3.3_RSE Input Template_EO_WLDFR, cells Summary of Programs tab: cell G37</p> <p>1-Program Exposure tab: cells D80:G80</p> <p>2-Program Cost tab: cells E28:N28</p> <p>3-Eff – Freq Programs tab: cells: G62:H79, K62:K79</p>	7.3.3.17.4	0.06	36.35	<p>Revised input error in program exposure.</p> <p>Revised the risk drivers and sub-drivers per SME judgment.</p> <p>Revised financial allocation based on SME judgment.</p> <p>Revised financial allocation based on SME judgement. Cost used for RSE calculation differs from the spend reported for this initiative to more accurately reflect the RSE of the REFCL Program. Cost estimations are still in progress due to the pilot nature of the program.</p>
<p>Updated Attachment 1: Table 12, cells J66:L66, F66:G66, AB66, AI66</p> <p>2021WMP_Section7.3_Atch0 1, ERRATA_7.3.3_RSE Input Template_EO_WLDFR, Summary of Programs tab: J39</p> <p>3-Eff – Freq Programs: G80:G85, K80:K85</p>	7.3.3.17.6	1.25	4.56	<p>Modified the choice of drivers to align with 5.3.3.16 Undergrounding from the 2020 WMP Class B Filing.</p>
<p>Updated Attachment 1: Table 12, cells I67:L67</p> <p>2021WMP_Section7.3_Atch0 1, ERRATA_7.3.4_RSE_Input_Template_EO_WLDFR, 1-Program Exposure tab: cells E11:G11</p>	7.3.4.1	22.78	22.80	<p>Updated Zone 1 exposure to reflect that all of Zone 1 will be inspected in 2021</p>

Location	Initiative	Original RSE	Updated RSE	Reason for Correction
<p>Updated Attachment 1: Table 12, cells I68:L68, AI68</p> <p>2021WMP_Section7.3_Atch01, ERRATA_7.3.4_RSE_Input_Template_EO_WLDFR, Summary of Programs tab: cell J8, 1-Program Exposure tab: cells E15:G15 3-Eff – Freq Programs tab: cell K9 7.3.4.2-Effectiveness tab: cells I4:K8</p>	7.3.4.2	22.02	32.26	<p>Updated Zone 1 exposure to reflect that all of Zone 1 will be inspected in 2021.</p> <p>Corrected the formula error in I4:K8 in the 7.3.4.2-effectiveness tab to reflect the relevant scope for non-HFTD work.</p>
<p>Updated Attachment 1: Table 12, cells J97:L97</p> <p>2021WMP_Section7.3_Atch01, ERRATA_7.3.5_RSE_Input_Template_EO_WLDFR, Summary of Programs tab: cells N21. 2-Program Cost Tab: cells L12:N12</p>	7.3.5.15	14.70	3.95	<p>Financials for RSE calculation adjusted to reflect the overall cost of the EVM Program. Cost used for RSE calculation differs from the spend reported for this initiative.</p>