



**Nicholas Noyer**  
Director, Wildfire Risk  
Community Wildfire Safety  
Program PMO

*Street/Courier Address*  
Mail Code: N10A  
77 Beale Street  
San Francisco, CA 94105

Phone: (925) 244-3480  
Email: Nicholas.Noyer@pge.com

November 1, 2021

Caroline Thomas Jacobs, Director  
Office of Energy Infrastructure Safety  
715 P Street, 20th Floor  
Sacramento, CA 95814

**Re: 2021 Wildfire Mitigation Plan – Change Orders for 2021 Wildfire  
Mitigation Plan (Docket #2021-WMPs)**

Director Thomas Jacobs:

Consistent with the Final Action Statement issued by the Office of Energy Infrastructure Safety (Energy Safety) on September 22, 2021 (Final Action Statement), and Energy Safety's final Change Order instructions issued on October 6, 2021 (October 6<sup>th</sup> Instructions), Pacific Gas and Electric Company (PG&E) respectfully submits the following Change Orders for its revised 2021 Wildfire Mitigation Plan (2021 Revised WMP) submitted on June 3, 2021.

In preparing the attached Change Orders, we utilized the criteria set forth in the Final Action Statement, as modified by the October 6<sup>th</sup> Instructions.<sup>1</sup> Each Change Order is presented in the format specified by Energy Safety.<sup>2</sup>

The October 6<sup>th</sup> Instructions also encouraged the utilities to discuss changes with Energy Safety before submitting Change Orders.<sup>3</sup> PG&E, Southern California Edison Company, and San Diego Gas & Electric Company reached out to Energy Safety in October for clarification on several Change Order related issues. Energy Safety provided clarification on October 21, 2021, which PG&E used to develop the attached Change Orders.

PG&E is submitting Change orders for the following Initiatives:

---

<sup>1</sup> October 6<sup>th</sup> Instructions, pp. 4-5.

<sup>2</sup> October 6<sup>th</sup> Instructions, pp. 5-6.

<sup>3</sup> October 6<sup>th</sup> Instructions, p. 5.

November 1, 2021

Page 2

1. Initiative 7.3.3.6
2. Initiative 7.3.3.8.3
3. Initiative 7.3.3.11.1
4. Initiative 7.3.3.12.4
5. Initiative 7.3.3.15
6. Initiative 7.3.4.1
7. Initiative 7.3.4.2
8. Initiative 7.3.4.5

Finally, the Final Action Statement and the October 6<sup>th</sup> Instructions specify that Change Orders are to be submitted in Docket #2021-WMPs and concurrently served on the Department of Forestry and Fire Prevention as well as the service list for Rulemaking (R.) 18-10-007.

Sincerely,



Nicholas Noyer  
Director, Wildfire Risk Community Wildfire  
Safety Program PMO

cc: California Department of Forestry and Fire Prevention  
([CALFIREUtilityFireMitigationUnit@fire.ca.gov](mailto:CALFIREUtilityFireMitigationUnit@fire.ca.gov))

R.18-10-007 service list

**Change Order: Initiative 7.3.3.6 - Distribution pole replacement and reinforcement, including with composite poles**

**1. The proposed change**

**a. The initiative being altered with reference to where in the WMP the initiative is discussed**

Initiative 7.3.3.6 in the revised 2021 Wildfire Mitigation Plan (2021 Revised WMP) is for the replacement and reinforcement of distribution poles, including the use of composite poles. This Initiative mitigates wildfire, public and employee safety, and reliability risks by replacing and reinforcing electric distribution poles.<sup>4</sup>

Our initiative target for 2021 is:

PG&E works on poles identified for remediation by various inspection programs. Poles that require reinforcement are typically worked the following calendar year. So, poles identified in 2020 will be reinforced in 2021. Through these inspection programs, PG&E identified at least 9,800 poles for replacement and at least 4,100 poles for reinforcement in 2020. Poles identified for reinforcement are in good condition, except for decay around the ground line. By installing a steel truss and banding it to these poles PG&E can restore the strength of the pole to 100 percent.<sup>5</sup>

**b. The planned budget of that initiative, including:**

- i. Planned spend in the 2020 WMP and the 2021 WMP Update of the initiative being altered**
- ii. Of the planned spend identified in i. above, how much has already been spent**
- iii. Planned spend for the remainder of the WMP plan period**
- iv. If spend is being redeployed, how much is being redeployed and to/from which budget**

In Attachment 1, Table 23, Row 53 of the 2020 WMP, PG&E estimated the 2020 forecast for distribution pole replacement and reinforcement to be approximately \$1.6 million in expense and \$211 million in capital. The

---

<sup>4</sup> 2021 Revised WMP, p. 533.

<sup>5</sup> 2021 Revised WMP, p. 534.

2020 actual spending was \$4.8 million in expense and \$238.8 million in capital.<sup>6</sup>

In Attachment 1, Table 12 of the 2021 Revised WMP, PG&E estimated the 2021 forecast for Initiative 7.3.3.6 to be approximately \$3.5 million in expense and \$301.0 million in capital. As of September 30, 2021, the 2021 forecast has been updated to \$3.5 million in expense and \$395.5 million in capital. The actual spend on this Initiative through September 30, 2021, is \$2 million in expense and \$293.8 million in capital.

There are no changes to the 2022 planned spend at this time. Any changes to 2022 planned spend will be updated in the 2022 WMP.

As of September 30, 2021, there have been no formal redeployments of any unspent budget from Initiative 7.3.3.6 to any other initiatives. Moreover, there is often no targeted one to one reallocation of budgets across initiatives, instead, unspent budgets in one or many initiatives are offset by one or many budget overruns in other initiatives.

**c. The type of change being proposed, reported as one of the following:**

**i. Increase in scale**

The increase in capital forecast meets the Change Order criteria of “[a] change that would result in an increase or decrease of more than \$10 million [and] constituting a greater than 20 percent change in an initiative’s planned total expenditure.”<sup>7</sup> Table 1 below provides a summary of the forecasted increase:

**Table 1: Forecasted Increase for Initiative 7.3.3.6 (Millions)**

	2021 Revised WMP	Current Forecast	% Change
<b>Capital</b>	\$301.0	\$395.5	31%

**ii. Decrease in scale**

Not applicable.

<sup>6</sup> 2021 Revised WMP, Attachment 1, Table 12, Row 42.

<sup>7</sup> Change Order Instructions issued by Energy Safety on October 6, 2021, p. 4, as clarified on October 21, 2021 by Energy Safety.

**iii. Change in prioritization**

Not applicable.

**iv. Change in deployment timing**

Not applicable.

**v. Change in work being done**

Not applicable.

**vi. Other change (described)**

Not applicable.

**d. A detailed description of the proposed change**

Capital: The primary driver for the increase in capital forecast is an increase in replacement units. The original 2021 forecast was based on approximately 14,185 units of work (PG&E initially estimated approximately 9,800 replacements and approximately 4,100 reinforcements). Through September 30, 2021, PG&E has replaced approximately 13,500 poles and reinforced 1,900 poles, for a total of approximately 15,400 units. The increase in replacement units reflects evaluations that occurred during the year. The current forecast of units worked in 2021 is 18,185 units. The increased volume of units has increased the forecast by approximately \$88 million.

In addition, actual unit costs are higher than the forecast of approximately \$22,000 per unit. The original unit cost was \$22,000 per unit but the actual cost is closer to \$22,400 per unit. The increased unit costs result in a forecast increase of approximately \$7 million.

**2. Justification for the proposed change**

**a. In what way, if any, does the change address or improve:**

**i. Completeness**

**ii. Technical feasibility of the initiative**

**iii. Effectiveness of the initiative**

**iv. Resource use efficiency over portfolio of WMP initiatives**

This Change Order addresses completeness because it provides a more updated forecast regarding the Initiative. The reason for the change in forecast is described above in Section 1(d) and the demonstration that the change meets Energy Safety's Change order criteria is provided in Section 1(c).

**3. Change in expected outcomes from the proposed change**

- a. What outcomes, including quantitative ignition probability and PSPS risk reduction, was the changed initiative expected to achieve in the 2021 WMP Update?**
- b. What outcomes, including quantitative ignition probability and PSPS risk reduction, will the initiative deliver with the proposed adjustment?**

This Initiative could impact the probability of ignition by replacing or reinforcing additional electric distribution poles so that they do not fail or otherwise create the possibility of an ignition event. The increase in pole replacements and reinforcements being forecasted results in an approximate 18% increase in risk reduction compared to the original forecast in the 2021 Revised WMP. The benefits and outcomes of this Initiative are described in more detail in the 2021 Revised WMP and the WMP attachments.<sup>8</sup>

---

<sup>8</sup> See e.g., 2021 Revised WMP, pp. 533-535.

**Change Order: Initiative 7.3.3.8.3 Distribution Line Motorized Switch Operator (MSO) Pilot (Commitment: C.01 - Assess Motorized Switch Operator switches)**

**1. The proposed change**

**a. The initiative being altered with reference to where in the WMP the initiative is discussed**

Initiative 7.3.3.8.3 in the revised 2021 Wildfire Mitigation Plan (2021 Revised WMP) is for the removal or retrofit of Motorized Switch Operators (MSO). This Initiative mitigates wildfire risks by reducing the probability of ignition caused by an arc flash occurring during MSO operation.<sup>9</sup>

Our initiative target for 2021 was:

During 2021, PG&E will be assessing various alternatives to address the identified risk with MSOs. PG&E plans to explore several pilot options that will help inform which are the best alternatives and select the appropriate corrective action for MSOs for the next WMP update. Specifically, PG&E will explore corrective actions to prevent any potential arc flash including retrofitting the MSO with new vacuum-break technology or replacement with either new automated Line Reclosers or new automated SCADAMATE-SD switches.

**b. The planned budget of that initiative, including:**

- i. Planned spend in the 2020 WMP and the 2021 WMP Update of the initiative being altered**
- ii. Of the planned spend identified in i. above, how much has already been spent**
- iii. Planned spend for the remainder of the WMP plan period**
- iv. If spend is being redeployed, how much is being redeployed and to/from which budget**

There was no forecast for Initiative 7.3.3.8.3 in the 2020 WMP. The 2020 actual spending was \$0.1 million in capital.<sup>10</sup>

---

<sup>9</sup> 2021 Revised WMP, p. 544.

In Attachment 1, Table 12 of the 2021 Revised WMP, PG&E estimated the 2021 forecast for Initiative 7.3.3.8.3 to be approximately \$5.3 million in capital. As of September 30, 2021, the 2021 forecast is \$6.1 million. The actual spend on this Initiative through September 30, 2021, is \$3.7 million in expense.

There are no changes to the 2022 planned spend at this time. Any changes to 2022 planned spend will be updated in the 2022 WMP.

As of September 30, 2021, there have been no formal redeployments of any unspent budget from Initiative 7.3.3.8.3 to any other initiatives. Moreover, there is often no targeted one to one reallocation of budgets across initiatives, instead, unspent budgets in one or many initiatives are offset by one or many budget overruns in other initiatives.

**c. The type of change being proposed, reported as one of the following:**

**i. Increase in scale**

Not applicable.

**ii. Decrease in scale**

Not applicable.

**iii. Change in prioritization**

Not applicable.

**iv. Change in deployment timing**

Not applicable.

**v. Change in work being done**

Not applicable.

**vi. Other change (described)**

Consistent with Energy Safety's direction on October 21, 2021, PG&E is submitting this change order to update the MSO pilot goal by establishing a quantitative target to replace 48 MSO devices by December 31, 2021.

**d. A detailed description of the proposed change**

This change order is being submitted consistent with Energy Safety’s direction on October 21, 2021, to submit change orders for pilot programs where there was no formal target established in the 2021 Revised WMP but subsequently quantitative targets were established for the pilot. Since the 2021 Revised WMP was filed, we have established an MSO pilot target to replace 48 devices. The replacement of these 48 devices will enable the pilot objective of assessing various alternatives to address the identified risk with MSOs.

**2. Justification for the proposed change**

**a. In what way, if any, does the change address or improve:**

- i. Completeness**
- ii. Technical feasibility of the initiative**
- iii. Effectiveness of the initiative**
- iv. Resource use efficiency over portfolio of WMP initiatives**

The proposed change is not intended to address or improve the completeness, technical feasibility, effectiveness, or resource use efficiency over the portfolio of WMP initiatives. As mentioned above, this change order is being submitted consistent with Energy Safety’s direction on October 21, 2021, to submit change orders for pilot programs where there was no formal target established in the 2021 Revised WMP but subsequently quantitative targets were established for the pilot.

**3. Change in expected outcomes from the proposed change**

- a. What outcomes, including quantitative ignition probability and PSPS risk reduction, was the changed initiative expected to achieve in the 2021 WMP Update?**
- b. What outcomes, including quantitative ignition probability and PSPS risk reduction, will the initiative deliver with the proposed adjustment?**

There is no known quantifiable expected change in ignition probability or PSPS risk reduction as a result of establishing a formal quantitative target for this program. However, the results of this pilot in 2021 are intended to

reduce the probability of ignition by replacing MSO switches that could experience an arc flash during the opening (de-energization) operation.

**Change Order: Initiative 7.3.3.11.1 – Mitigation of impact on customers and other residents affected during PSPS event. Generation for PSPS Mitigation.**

**1. The proposed change**

**a. The initiative being altered with reference to where in the WMP the initiative is discussed**

Initiative 7.3.3.11.1 in the revised 2021 Wildfire Mitigation Plan (2021 Revised WMP) is for temporary microgrids which can provide support during Public Safety Power Shutoff (PSPS) events. This Initiative supports the energization of communities during PSPS events and can mitigate PSPS impacts.<sup>11</sup> This Initiative involves generation enablement and deployment, temporary substation microgrids, temporary distribution microgrids, back-up power for individual critical customer facilities, and customer resource centers.<sup>12</sup>

The 2021 target for this Initiative was to “develop at least 5 additional distribution microgrid Pre-installed Interconnection Hubs” and “prepare at least 8 substations to receive temporary generation for 2021 PSPS mitigations.”<sup>13</sup>

**b. The planned budget of that initiative, including:**

- i. Planned spend in the 2020 WMP and the 2021 WMP Update of the initiative being altered**
- ii. Of the planned spend identified in i. above, how much has already been spent**
- iii. Planned spend for the remainder of the WMP plan period**
- iv. If spend is being redeployed, how much is being redeployed and to/from which budget**

In Attachment 1, Table 23, Row 77 of the 2020 WMP, PG&E estimated the 2020 forecast for the mitigation of impact on customers and other residents affected during PSPS event (Generation for PSPS Mitigation) to be approximately \$46.8 million in expense and \$99 million in capital. The

---

<sup>11</sup> 2021 Revised WMP, p. 554.

<sup>12</sup> 2021 Revised WMP, p. 555-565.

<sup>13</sup> 2021 Revised WMP, p. 261.

2020 actual spending was \$138.5 million in expense and \$36 million in capital.<sup>14</sup>

In Attachment 1, Table 12 of the 2021 Revised WMP, PG&E estimated the 2021 forecast for Initiative 7.3.3.11-1 to be approximately \$103.4 million in expense and \$47.5 million in capital. As of September 30, 2021, the 2021 forecast has been updated to \$177.7 million in expense and \$22.7 million in capital. The actual spend on this Initiative through September 30, 2021, is \$98 million in expense and \$14 million in capital.

There are no changes to the 2022 planned spend at this time. Any changes to 2022 planned spend will be updated in the 2022 WMP.

As of September 30, 2021, there have been no formal redeployments of any unspent budget from Initiative 7.3.3.11.1 to any other initiatives. Moreover, there is often no targeted one-to-one reallocation of budgets across initiatives, instead, unspent budgets in one or many initiatives are offset by one or many budget overruns in other initiatives.

**c. The type of change being proposed, reported as one of the following:**

**i. Increase in scale**

The increase in expense forecast meets the Change Order criteria of “[a] change that would result in an increase or decrease of more than \$10 million [and] constituting a greater than 20 percent change in an initiative’s planned total expenditure.”<sup>15</sup> Table 1 below provides a summary of the forecasted increase:

**Table 1: Forecasted Increase for Initiative 7.3.3.11.1 (Millions)**

	<b>2021 Revised WMP</b>	<b>Current Forecast</b>	<b>% Change</b>
<b>Expense</b>	\$103.4	\$177.7	72%

<sup>14</sup> 2021 Revised WMP, Attachment 1, Table 12, Row 50.

<sup>15</sup> Change Order Instructions issued by Energy Safety on October 6, 2021, p. 4, as clarified on October 21, 2021 by Energy Safety.

**ii. Decrease in scale**

The decrease in capital forecast meets the Change Order criteria described above. Table 2 below provides a summary of the forecasted increase:

**Table 2: Forecasted Increase for Initiative 7.3.3.11.1 (Millions)**

	<b>2021 Revised WMP</b>	<b>Current Forecast</b>	<b>% Change</b>
<b>Capital</b>	\$47.5	\$22.7	-52%

**iii. Change in prioritization**

Not applicable.

**iv. Change in deployment timing**

Not applicable.

**v. Change in work being done**

Not applicable

**vi. Other change (described)**

See description in (d) below.

**d. A detailed description of the proposed change**

Expense: The 2021 forecast increase is primarily driven by the extension of 2020 temporary generation rentals into 2021 due to prolonged PSPS and wildfire season, and accrued invoices received in 2021 for 2020 work. PG&E rented approximately 470 megawatts (MW) of temporary generation for use at substations, distribution microgrids, backup power support of critical customers, and community resource centers (CRCs) to support PSPS mitigation efforts during the 2020 wildfire season. Given the length of the 2020 wildfire season, rentals continued into Q1 2021 and additional work was required in 2021 for demobilization. This extended rental period was not included in our initial 2021 Revised WMP forecast.

Capital: The 2021 forecast decrease is primarily driven by updates to the Community Microgrids Enablement Program (CMEP). Given the complexity and nascent nature of CMEP program, the program team believes it will be difficult to do many projects in 2021. The program team

will instead work to spread out the projects over multiple years. PG&E's CMEP program provides incremental technical and financial support to communities seeking resilience for critical facilities and vulnerable customer groups.

## **2. Justification for the proposed change**

### **a. In what way, if any, does the change address or improve:**

- i. Completeness**
- ii. Technical feasibility of the initiative**
- iii. Effectiveness of the initiative**
- iv. Resource use efficiency over portfolio of WMP initiatives**

This Change Order addresses completeness because it provides a more updated forecast regarding the Initiative. The reason for the change in forecast is described above in Section 1(d) and the demonstration that the change meets Energy Safety's Change order criteria is provided in Section 1(c).

## **3. Change in expected outcomes from the proposed change**

- a. What outcomes, including quantitative ignition probability and PSPS risk reduction, was the changed initiative expected to achieve in the 2021 WMP Update?**
- b. What outcomes, including quantitative ignition probability and PSPS risk reduction, will the initiative deliver with the proposed adjustment?**

This Initiative will not impact the probability of ignition but does impact PSPS events. The Initiative does not change the frequency, scope, or duration of PSPS events, but does assist customers during those events by facilitating the ability to connect temporary generation to be used during a PSPS event. The proposed adjustment allows for a more updated forecast for this Initiative but does not change the outcome of the Initiative. The benefits and outcomes of this Initiative are described in more detail in the 2021 Revised WMP and the WMP attachments.<sup>16</sup>

---

<sup>16</sup> See e.g., 2021 Revised WMP, pp. 554-568.

**Change Order: Initiative 7.3.3.12.4 Other corrective action, Maintenance, Distribution**

**1. The proposed change**

**a. The initiative being altered with reference to where in the WMP the initiative is discussed**

Initiative 7.3.3.12.4 in the revised 2021 Wildfire Mitigation Plan (2021 Revised WMP) is for the maintenance of overhead electric distribution facilities. This Initiative mitigates wildfire, public and employee safety, and reliability risks by maintaining and repairing distribution facilities.<sup>17</sup>

Our initiative target for 2021 is to continue to work open tags in a risk-based priority and to evaluate the integration of the results of our maintenance program into the 2021 Wildfire Distribution Risk Model to allow for prioritization of notifications by wildfire risk at the tag location level.<sup>18</sup>

**b. The planned budget of that initiative, including:**

- i. Planned spend in the 2020 WMP and the 2021 WMP Update of the initiative being altered**
- ii. Of the planned spend identified in i. above, how much has already been spent**
- iii. Planned spend for the remainder of the WMP plan period**
- iv. If spend is being redeployed, how much is being redeployed and to/from which budget**

In Attachment 1, Table 23, Row 149 of the 2020 WMP, PG&E estimated the 2020 forecast for Distribution Overhead Maintenance to be approximately \$26.4 million in expense and \$173.4 million in capital. The 2020 actual spending was \$98.5 million in expense and \$251 million in capital.<sup>19</sup>

In Attachment 1, Table 12 of the 2021 Revised WMP, PG&E estimated the 2021 forecast for Initiative 7.3.3.12.4 to be approximately \$62.2 million in

---

<sup>17</sup> 2021 Revised WMP, p. 586.

<sup>18</sup> 2021 Revised WMP, p. 587.

<sup>19</sup> 2021 Revised WMP, Attachment 1, Table 12, Row 56.

expense and \$259.8 million in capital. As of September 30, 2021, the 2021 forecast has been updated to \$92.0 million in expense and \$322.8 million in capital. The actual spend on this Initiative through September 30, 2021, is \$87.8 million in expense and \$262.8 million in capital.

There are no changes to the 2022 planned spend at this time. Any changes to 2022 planned spend will be updated in the 2022 WMP.

As of September 30, 2021, there have been no formal redeployments of any unspent budget from Initiative 7.3.3.12.4 to any other initiatives. Moreover, there is often no targeted one to one reallocation of budgets across initiatives, instead, unspent budgets in one or many initiatives are offset by one or many budget overruns in other initiatives.

**c. The type of change being proposed, reported as one of the following:**

**i. Increase in scale**

The increase in expense forecast meets the Change Order criteria of “[a] change that would result in an increase or decrease of more than \$10 million [and] constituting a greater than 20 percent change in an initiative’s planned total expenditure.”<sup>20</sup> Table 1 below provides a summary of the forecasted increase:

**Table 1: Forecasted Increase for Initiative 7.3.3.12.4 (Millions)**

	2021 Revised WMP	Current Forecast	% Change
<b>Expense</b>	\$62.2	\$92.0	48%
<b>Capital</b>	\$259.8	\$322.8	24%

**ii. Decrease in scale**

Not applicable.

**iii. Change in prioritization**

Not applicable.

---

<sup>20</sup> Change Order Instructions issued by Energy Safety on October 6, 2021, p. 4, as clarified on October 21, 2021 by Energy Safety.

**iv. Change in deployment timing**

Not applicable.

**v. Change in work being done**

Not applicable.

**vi. Other change (described)**

Not applicable.

**d. A detailed description of the proposed change**

Expense: The forecasted increase in expense is primarily driven by a higher volume additional tags (approximately 16,000) causing an approximately \$37 million increase in expense. The maintenance forecast increase was primarily driven by efforts this year to reduce the backlog of high risk repair and replacement tags. This increased the volume (number of tags) executed this year compared to the forecast in 2021 WMP.

Capital: The capital forecast has two components:

- **Maintenance**: The forecasted increase in capital is primarily driven by: (1) higher unit cost (\$789 higher than planned (~8%), an increase of \$20 million); (2) higher volume of additional tags driving \$6.6 million.
- **Emergency**: The forecasted increase in capital is primarily driven by: (1) higher unit cost (\$1.3k higher than planned (~13%), an increase of \$16 million); (2) higher volume of emergency work approximately 2,300 additional tags (approximately 25% higher, an increase of \$23.7 million).

**2. Justification for the proposed change**

**a. In what way, if any, does the change address or improve:**

- i. Completeness**
- ii. Technical feasibility of the initiative**
- iii. Effectiveness of the initiative**
- iv. Resource use efficiency over portfolio of WMP initiatives**

This Change Order addresses completeness because it provides a more updated forecast regarding the Initiative. The reason for the change in forecast is described above in Section 1(d) and the demonstration that the change meets Energy Safety's Change order criteria is provided in Section 1(c).

**3. Change in expected outcomes from the proposed change**

- a. What outcomes, including quantitative ignition probability and PSPS risk reduction, was the changed initiative expected to achieve in the 2021 WMP Update?**
- b. What outcomes, including quantitative ignition probability and PSPS risk reduction, will the initiative deliver with the proposed adjustment?**

This Initiative could impact the probability of ignition by addressing additional tags found during inspections associated with overhead electric distribution facilities so that they do not fail or otherwise create the possibility of an ignition event. The increase in corrective tags being forecasted results in an approximate 57% increase in risk reduction compared to the original forecast in the 2021 Revised WMP. The benefits and outcomes of this Initiative are described in more detail in the 2021 Revised WMP and the WMP attachments.<sup>21</sup>

---

<sup>21</sup> See e.g., 2021 Revised WMP, pp. 586-588.

**Change Order: Initiative 7.3.3.15 Transmission tower maintenance and replacement**

**1. The proposed change**

**a. The initiative being altered with reference to where in the WMP the initiative is discussed**

Initiative 7.3.3.15 in the revised 2021 Wildfire Mitigation Plan (2021 Revised WMP) is for the maintenance, repair, and replacement of electric transmission towers. This Initiative mitigates wildfire, public and employee safety, and reliability risks by maintaining and, where necessary, replacing transmission towers.<sup>22</sup>

Our initiative target for 2021 is:

In 2021, approximately 4,000 tags associated with steel transmission tower repair have been prioritized for completion within HFTD areas, not including any urgent priority tags that may be identified in 2021.

Approximately 500 tags associated with steel structure painting are prioritized for completion in 2021 within HFTD areas. Overall, in 2021, it is expected to complete all ignition-related tags in HFTD areas found before 2020 and all time-dependent ignition-related tags found in 2020 on high potential wildfire spread lines, in addition to any new urgent priority tags identified in 2021.<sup>23</sup>

**b. The planned budget of that initiative, including:**

**i. Planned spend in the 2020 WMP and the 2021 WMP Update of the initiative being altered**

**ii. Of the planned spend identified in i. above, how much has already been spent**

**iii. Planned spend for the remainder of the WMP plan period**

**iv. If spend is being redeployed, how much is being redeployed and to/from which budget**

In Attachment 1, Table 23, Row 167 of the 2020 WMP, PG&E estimated the 2020 forecast for the Transmission Tower Maintenance and

---

<sup>22</sup> 2021 Revised WMP, p. 593.

<sup>23</sup> 2021 Revised WMP, pp. 593-594.

Replacement to be approximately \$66.6 million in expense and \$230.7 million in capital. The 2020 actual spending was \$50.9 million in expense and \$41.2 million in capital.<sup>24</sup>

In Attachment 1, Table 12 of the 2021 Revised WMP, PG&E estimated the 2021 forecast for Initiative 7.3.3.15 to be approximately \$40.4 million in expense and \$55.3 million in capital. As of September 30, 2021, the 2021 forecast has been updated to \$55.3 million in expense and \$69.1 million in capital. The actual spend on this Initiative through September 30, 2021, is \$54.5 million in expense and \$53.9 million in capital.

There are no changes to the 2022 planned spend at this time. Any changes to 2022 planned spend will be updated in the 2022 WMP.

As of September 30, 2021, there have been no formal redeployments of any unspent budget from Initiative 7.3.3.15 to any other initiatives. Moreover, there is often no targeted one to one reallocation of budgets across initiatives, instead, unspent budgets in one or many initiatives are offset by one or many budget overruns in other initiatives.

**c. The type of change being proposed, reported as one of the following:**

**i. Increase in scale**

The increase in expense forecast meets the Change Order criteria of “[a] change that would result in an increase or decrease of more than \$10 million [and] constituting a greater than 20 percent change in an initiative’s planned total expenditure.”<sup>25</sup> Table 1 below provides a summary of the forecasted increase:

**Table 1: Forecasted Increase for Initiative 7.3.3.15 (Millions)**

	2021 Revised WMP	Current Forecast	% Change
Expense	\$55.3	\$55.3	0%
Capital	\$40.4	\$69.1	25%

<sup>24</sup> 2021 Revised WMP, Attachment 1, Table 12, Row 59.

<sup>25</sup> Change Order Instructions issued by Energy Safety on October 6, 2021, p. 4, as clarified on October 21, 2021 by Energy Safety.

**ii. Decrease in scale**

Not applicable.

**iii. Change in prioritization**

Not applicable.

**iv. Change in deployment timing**

Not applicable

**v. Change in work being done**

Not applicable

**vi. Other change (described)**

Not applicable.

**d. A detailed description of the proposed change**

Capital: The forecast increase for 2021 is primarily driven by:

- (1) An increase of \$19.5M to finish the Ignacio-Mare Island 115kV tower replacements. Three Transmission towers were inspected in 2020 that required replacement by July 2021. Work was initially delayed due to discovery of soil samples being contaminated resulting in over 24,000 cubic yard of soil needing to be removed. The forecast increase also covers the urgent nature of towers accelerated design phase and contract development.
- (2) An increase of \$9.5M for eight (8) towers requiring immediate replacement since they were identified as posing a potential high risk of failure. Many of the towers were not suitable to be repaired and identified as needing replacement within one year. Some of the towers had inspection tags were made safe through limited maintenance activities with the plan that the towers would be replaced within a year.

**2. Justification for the proposed change**

**a. In what way, if any, does the change address or improve:**

**i. Completeness**

- ii. **Technical feasibility of the initiative**
- iii. **Effectiveness of the initiative**
- iv. **Resource use efficiency over portfolio of WMP initiatives**

This Change Order addresses completeness because it provides a more updated forecast regarding the Initiative. The reason for the change in forecast is described above in Section 1(d) and the demonstration that the change meets Energy Safety's Change order criteria is provided in Section 1(c).

**3. Change in expected outcomes from the proposed change**

- a. **What outcomes, including quantitative ignition probability and PSPS risk reduction, was the changed initiative expected to achieve in the 2021 WMP Update?**
- b. **What outcomes, including quantitative ignition probability and PSPS risk reduction, will the initiative deliver with the proposed adjustment?**

This Initiative could impact the probability of ignition by maintaining electric transmission towers so that they do not fail or otherwise create the possibility of an ignition event. The proposed adjustment allows for a more updated forecast for this Initiative but does not change the outcome of the Initiative. The benefits and outcomes of this Initiative are described in more detail in the 2021 Revised WMP and the WMP attachments.<sup>26</sup>

---

<sup>26</sup> See e.g., 2021 Revised WMP, pp. 593-594.

**Change Order: Initiative 7.3.4.1 Detailed Inspections of Distribution Electric Lines and Equipment (Commitment: D.01 - Distribution HFTD Inspections)**

**1. The proposed change**

**a. The initiative being altered with reference to where in the WMP the initiative is discussed**

Initiative 7.3.4.1 in the revised 2021 Wildfire Mitigation Plan (2021 Revised WMP) is for Detailed Inspections of Distribution Electric Lines and Equipment. This Initiative seeks to proactively identify and treat pending failures of asset components which could create fire ignition if left unresolved. Proactive identification of Level 2 and Level 3 General Order (GO) 165 concerns also permits PG&E to evaluate potential investments in risk mitigation activities such as system hardening, enhanced vegetation management, reconductoring, among other programmatic tools.<sup>27</sup>

Our initiative target for 2021 is:

For 2021 through 2022, PG&E plans to complete enhanced detailed inspections of overhead distribution assets in the following recurrence intervals: (1) Tier 3 and Zone 1 – annually; and (2) Tier 2 and High Fire Risk Areas (HFRA) within the non-[High Fire Threat District (HFTD)] – every three years. PG&E will schedule these inspections to be completed by July 31, 2021, barring exceptions due to physical conditions or landholder refusals which delay or hinder PG&E access to facilities.<sup>28</sup>

In Table 5.3-1 of the 2021 Revised WMP, PG&E estimated the 2021 targeted number of distribution poles that met the inspection frequency intervals described above as ~402,000.<sup>29</sup>

---

<sup>27</sup> 2021 Revised WMP, p. 635.

<sup>28</sup> 2021 Revised WMP, p. 636.

<sup>29</sup> 2021 Revised WMP, p. 271.

- b. The planned budget of that initiative, including:**
- i. Planned spend in the 2020 WMP and the 2021 WMP Update of the initiative being altered**
  - ii. Of the planned spend identified in i. above, how much has already been spent**
  - iii. Planned spend for the remainder of the WMP plan period**
  - iv. If spend is being redeployed, how much is being redeployed and to/from which budget**

In Attachment 1, Table 24, Row 5 of the 2020 WMP, PG&E estimated the 2020 forecast for the Distribution Enhanced Inspections to be approximately \$88.7 million in expense. The 2020 actual spending was \$132.6 million in expense.

In Attachment 1, Table 12 of the 2021 WMP, PG&E estimated the 2021 forecast for Initiative 7.3.4.1 to be approximately \$95.9 million. As of September 30, 2021, the 2021 forecast has not been updated. The actual spend on this Initiative through September 30, 2021, is \$101.2M.

There are no changes to the 2022 planned spend at this time. Any changes to 2022 planned spend will be updated in the 2022 WMP.

As of September 30, 2021, there have been no formal redeployments of any unspent budget from Initiative 7.3.4.1 to any other initiatives. Moreover, there is often no targeted one to one reallocation of budgets across initiatives, instead, unspent budgets in one or many initiatives are offset by one or many budget overruns in other initiatives.

- c. The type of change being proposed, reported as one of the following:**

- i. Increase in scale**

PG&E is proposing an increase in the number of distribution poles requiring inspections. For a further discussion regarding this change, please see subpart (d) below.

- ii. Decrease in scale**

Not applicable.

**iii. Change in prioritization**

Not applicable.

**iv. Change in deployment timing**

Not applicable.

**v. Change in work being done**

Not applicable.

**vi. Other change (described)**

Not applicable.

**d. A detailed description of the proposed change**

PG&E is proposing an increase in volume (*i.e.*, total number of distribution poles requiring inspection in 2021) as compared to the approximate volume described on page 271, in column “Projected Target by end of 2021”, Table 5.3-1 of the 2021 Revised WMP. This change does not impact the inspections intervals described in Initiative 7.3.4.1. Consistent with Energy Safety’s direction on October 21, 2021, PG&E is submitting this Change Order request to update the 2021 quantitative target based on the workplan known as of October 13, 2021. See Table 1 below for target comparison.

**Table 1: Target Comparison**

<b>Projected Target by end of 2021 (2021 WMP Submitted on 6/3/2021)</b>	<b>Projected Target by end of 2021 (as of 10/13/2021)</b>
~402K	477,309

Please note the 2021 total number of distribution poles requiring inspection has been updated as part workplan validation efforts that arose out of the corrective actions being taken resulting from the *Voluntary Self-Identified Notification: GO 165 and WMP Enhanced Inspections*, submitted May 7, 2021.<sup>30</sup> As the corrective action associated with the GO 165 Self-Identification continues, additional distribution poles may continue to be identified that should have been enhanced inspected by July 31, 2021. As

<sup>30</sup> See link to the Voluntary Self-Identified Notification: GO 165 and WMP Enhanced Inspections below [https://www.pge.com/pge\\_global/common/pdfs/safety/emergency-preparedness/natural-disaster/wildfires/wildfire-mitigation-plan/GO-165-Inspection-Self-Report.pdf](https://www.pge.com/pge_global/common/pdfs/safety/emergency-preparedness/natural-disaster/wildfires/wildfire-mitigation-plan/GO-165-Inspection-Self-Report.pdf)

we identify additional enhanced inspections that are required, we will promptly complete the enhanced inspections and continue to update Energy Safety.

**2. Justification for the proposed change**

**a. In what way, if any, does the change address or improve:**

- i. Completeness**
- ii. Technical feasibility of the initiative**
- iii. Effectiveness of the initiative**
- iv. Resource use efficiency over portfolio of WMP initiatives**

The proposed change is intended to improve the completeness of the initiative by reconciling the estimated quantitative target described in the 2021 Revised WMP to the inspection frequency intervals described in the 2021 Revised WMP. The proposed change is not intended to address or improve the technical feasibility, effectiveness, or resource use efficiency over the portfolio of WMP initiatives.

**3. Change in expected outcomes from the proposed change**

- a. What outcomes, including quantitative ignition probability and PSPS risk reduction, was the changed initiative expected to achieve in the 2021 WMP Update?**
- b. What outcomes, including quantitative ignition probability and PSPS risk reduction, will the initiative deliver with the proposed adjustment?**

As a result of the additional distribution poles being added to the workplan, PG&E's target to complete enhanced inspections on distribution poles in (1) Tier 3 HFTD and Zone 1 annually; and (2) Tier 2 and HFRA within the non-HFTD – every three years by July 31, 2021, barring exceptions due to physical conditions or landholder refusals which delay or hinder PG&E access to facilities, was delayed. Potential outcomes associated with the proposed target increase, including quantitative ignition probability and PSPS risk reduction outcomes, are unknown, as the ability to identify a risk does not change the ignition probability or PSPS risk reduction until the closure of the tags generated. However, the increased number of distribution pole inspections will likely increase PG&E's ability to

proactively identify pending failures of asset components which could create fire ignition if left unresolved.

**Change Order: Initiative 7.3.4.2 Detailed Inspections of Transmission Electric Lines and Equipment (Commitment: D.03 - Transmission HFTD Inspections)**

**1. The proposed change**

**a. The initiative being altered with reference to where in the WMP the initiative is discussed**

Initiative 7.3.4.2 in the revised 2021 Wildfire Mitigation Plan (WMP) is Detailed Inspections of Transmission Electric Lines and Equipment. This Initiative seeks to proactively identify and treat pending failures of asset components which could create fire ignition if left unresolved or allowed to “run to failure.” Proactive identification of Level 2 and Level 3 General Order (GO) 165 concerns also permits PG&E to evaluate potential investments in risk mitigation activities such as system hardening, enhanced vegetation management, reconductoring, among other programmatic tools.<sup>31</sup>

Our initiative target for 2021 is:

In 2021, for [High Fire Threat District (HFTD)] and [High Fire Risk Areas (HFRA)] transmission assets, PG&E plans to continue these protocols and re-inspection intervals consistent with 2020. In 2021, 100 percent of overhead transmission poles in HFTD Tier 3 and Zone 1, roughly one third of poles in HFTD Tier 2 and HFRA will be subjected to detailed enhanced inspections and some form of aerial assessment (helicopter, drone, aerial lift, climbing). PG&E will schedule these inspections to be completed by July 31, 2021, barring exceptions due to physical conditions or landholder refusals which delay or hinder PG&E access to facilities.<sup>32</sup>

In Table 5.3-1 of the 2021 Revised WMP, PG&E estimated the 2021 targeted number of transmission structures that met the inspection frequency intervals described above as 24,092.<sup>33</sup>

**b. The planned budget of that initiative, including:**

---

<sup>31</sup> 2021 Revised WMP, p. 638.

<sup>32</sup> 2021 Revised WMP, p. 639.

<sup>33</sup> 2021 Revised WMP, p. 271.

- i. Planned spend in the 2020 WMP and the 2021 WMP Update of the initiative being altered**
- ii. Of the planned spend identified in i. above, how much has already been spent**
- iii. Planned spend for the remainder of the WMP plan period**
- iv. If spend is being redeployed, how much is being redeployed and to/from which budget**

In Attachment 1, Table 24, Row 11 of the 2020 WMP, PG&E estimated the 2020 forecast for the Transmission Enhanced Inspections to be approximately \$55.4 million in expense. The 2020 actual spending was \$89.9 million in expense.<sup>34</sup>

In Attachment 1, Table 12 of the 2021 WMP, PG&E estimated the 2021 forecast for Initiative 7.3.4.2 to be approximately \$105.1 million. As of September 30, 2021, the 2021 forecast has not changed. The actual spend on this Initiative through September 30, 2021, is \$70.8 million.

There are no changes to the 2022 planned spend at this time. Any changes to 2022 planned spend will be updated in the 2022 WMP.

As of September 30, 2021, there have been no formal redeployments of any unspent budget from Initiative 7.3.4.2 to any other initiatives. Moreover, there is often no targeted one to one reallocation of budgets across initiatives, instead, unspent budgets in one or many initiatives are offset by one or many budget overruns in other initiatives.

**c. The type of change being proposed, reported as one of the following:**

**i. Increase in scale**

PG&E is proposing an increase in the number of transmission structures requiring inspection in 2021. For a further discussion regarding this change, please see subpart (d) below.

**ii. Decrease in scale**

Not applicable.

---

<sup>34</sup> 2021 Revised WMP, Attachment 1, Table 12, Row 68.

**iii. Change in prioritization**

Not applicable.

**iv. Change in deployment timing**

Not applicable.

**v. Change in work being done**

Not applicable

**vi. Other change (described)**

Not applicable.

**d. A detailed description of the proposed change**

PG&E is proposing an increase in scale or volume (*i.e.*, total number of transmission structures requiring inspection in 2021) as compared to the volume described on page 271, in column “Projected Target by end of 2021”, Table 5.3-1 of the 2021 Revised WMP. This change does not impact the inspections intervals described in Initiative 7.3.4.2. PG&E is submitting this change order request to update the 2021 quantitative target based on the workplan known as of October 13, 2021. See Table 1 below for target comparison.

**Table 1: Target Comparison**

<b>Projected Target by end of 2021 (2021 WMP Submitted on 6/3/2021)</b>	<b>Projected Target by end of 2021 (as of 10/13/2021)</b>
24,092	26,810

Please note that the 2021 total number of transmission structures requiring inspection has been updated as part workplan validation efforts that arose out of the corrective actions being taken resulting from the *Voluntary Self-Identified Notification: GO 165 and WMP Enhanced Inspections*, submitted May 7, 2021.<sup>35</sup> As the corrective action associated with the GO165 Self-Identification continues, additional transmission structures may continue to be identified that should have been enhanced inspected by July 31, 2021. As we identify additional enhanced inspections that are required, we will

<sup>35</sup> See link to the Voluntary Self-Identified Notification: GO 165 and WMP Enhanced Inspections below [https://www.pge.com/pge\\_global/common/pdfs/safety/emergency-preparedness/natural-disaster/wildfires/wildfire-mitigation-plan/GO-165-Inspection-Self-Report.pdf](https://www.pge.com/pge_global/common/pdfs/safety/emergency-preparedness/natural-disaster/wildfires/wildfire-mitigation-plan/GO-165-Inspection-Self-Report.pdf)

promptly complete the enhanced inspections and continue to update Energy Safety.

## **2. Justification for the proposed change**

### **a. In what way, if any, does the change address or improve:**

- i. Completeness**
- ii. Technical feasibility of the initiative**
- iii. Effectiveness of the initiative**
- iv. Resource use efficiency over portfolio of WMP initiatives**

The proposed change is intended to improve the completeness of the initiative by reconciling the estimated quantitative target described in the 2021 Revised WMP to the inspection frequency intervals described in the 2021 Revised WMP. The proposed change is not intended to address or improve the technical feasibility, effectiveness, or resource use efficiency over the portfolio of WMP initiatives.

## **3. Change in expected outcomes from the proposed change**

**a. *What outcomes, including quantitative ignition probability and PSPS risk reduction, was the changed initiative expected to achieve in the 2021 WMP Update?***

**b. *What outcomes, including quantitative ignition probability and PSPS risk reduction, will the initiative deliver with the proposed adjustment?***

As a result of the additional Transmission structures being added to the workplan, PG&E's target to complete enhanced detailed inspections and some form of aerial assessment (helicopter, drone, aerial lift, climbing) of overhead transmission structures in the following recurrence intervals: (1) Tier 3 and Zone 1 – annually; and (2) Tier 2 and HFRA within the non-HFTD – every three years by July 31, 2021, barring exceptions due to physical conditions or landholder refusals which delay or hinder PG&E access to facilities was delayed. Potential outcomes associated with the proposed target increase, including quantitative ignition probability and PSPS risk reduction outcomes, are unknown, as the ability to identify a risk does not change the ignition probability or PSPS risk reduction until the closure of the tags generated. However, the increased number of transmission structure inspections will likely increase PG&E's ability to

proactively identify pending failures of asset components which could create fire ignition if left unresolved.

**Change Order: Initiative 7.3.4.5 Infrared Inspections of Transmission Electric Lines and Equipment (Commitment: D.04 - Infrared Inspections of Transmission Electric Lines and Equipment)**

**1. The proposed change**

**a. The initiative being altered with reference to where in the WMP the initiative is discussed**

Initiative 7.3.4.5 in the revised 2021 Wildfire Mitigation Plan (2021 Revised WMP) is for Infrared Inspections of Transmission Electric Lines and Equipment. This Initiative helps identify potentially damaged and/or faulty components that are not detectable by visual inspection methods alone. In addition, infrared assessments can potentially prevent wire down equipment failures and help pinpoint areas for maintenance and equipment replacement.<sup>36</sup>

Our initiative target for 2021 is:

PG&E plans to conduct Infrared inspections on 100 percent of transmission circuits in Tier 3 [High Fire Threat District (HFTD)] areas, 33 percent of transmission circuits in Tier 2 HFTD areas, and 20 percent of transmission circuits in non-HFTD areas. Circuits supporting Diablo Canyon Power Plant (DCPP) and Morro Bay Power Plant, and the tie lines for the Western Electric Coordinating Council (WECC) will be inspected by Infrared. The planned scope of Transmission Infrared Inspections in 2021 is approximately 8,000 miles.<sup>37</sup>

In Table 5.3-1 of the 2021 Revised WMP, PG&E estimated the 2021 targeted number of circuit miles for infrared inspections in HFTD areas and systemwide that met the inspection frequency intervals described above as approximately 2,844 and 7,761 respectively.<sup>38</sup>

**b. The planned budget of that initiative, including:**

**i. Planned spend in the 2020 WMP and the 2021 WMP Update of the initiative being altered**

---

<sup>36</sup> 2021 Revised WMP, p. 649.

<sup>37</sup> 2021 Revised WMP, p. 650.

<sup>38</sup> 2021 Revised WMP, p. 272.

- ii. Of the planned spend identified in i. above, how much has already been spent**
- iii. Planned spend for the remainder of the WMP plan period**
- iv. If spend is being redeployed, how much is being redeployed and to/from which budget**

In Attachment 1, Table 24, Row 29 of the 2020 WMP, PG&E estimated the 2020 forecast for the Transmission Infrared Inspections to be approximately \$0.24 million in expense. The 2020 actual spending was \$1.4 million in expense.<sup>39</sup>

In Attachment 1, Table 12 of the 2021 Revised WMP, PG&E estimated the 2021 forecast for Initiative 7.3.4.5 to be approximately \$2.2 million. As of September 30, 2021, the 2021 forecast has not changed. The actual spend on this Initiative through September 30, 2021, is \$1M.

There are no changes to the 2022 planned spend at this time. Any changes to 2022 planned spend will be updated in the 2022 WMP.

As of September 30, 2021, there have been no formal redeployments of any unspent budget from Initiative 7.3.4.5 to any other initiatives. Moreover, there is often no targeted one to one reallocation of budgets across initiatives, instead, unspent budgets in one or many initiatives are offset by one or many budget overruns in other initiatives.

**c. The type of change being proposed, reported as one of the following:**

**i. Increase in scale**

PG&E is proposing an increase in the number of circuit miles of infrared inspections in HFTD areas. This change is consistent with the inspection intervals in the 2021 Revised WMP. For a further discussion regarding this change, please see subpart (d) below.

**ii. Decrease in scale**

PG&E is proposing a decrease in the number of circuit miles of infrared inspections in HFTD areas and a slight decrease in the number of circuit

---

<sup>39</sup> 2021 Revised WMP, Attachment 1, Table 12, Row 71.

miles of infrared inspections system-wide. For a further discussion regarding this change, please see subpart (d) below.

**iii. Change in prioritization**

Not applicable.

**iv. Change in deployment timing**

Not applicable.

**v. Change in work being done**

Not applicable.

**vi. Other change (described)**

Not applicable.

**d. A detailed description of the proposed change**

PG&E is proposing an increase in scale or volume for circuit miles in HFTD areas requiring infrared inspection in 2021 and a slight decrease in scale or volume for non-HFTD areas requiring infrared inspection in 2021 as compared to the approximate volumes described on page 272, in column “Projected Target by end of 2021”, Table 5.3-1 of the 2021 Revised WMP. This change does not impact the inspections intervals described in Initiative 7.3.4.5. Consistent with Energy Safety’s direction on October 21, 2021, PG&E is submitting this change order request to update the 2021 quantitative target based on the workplan known as of September 30, 2021. See Table 1 below for target comparison.

**Table 1: Target Comparison**

<b>Projected Target by end of 2021 (2021 WMP Submitted on 6/3/2021)</b>	<b>Projected Target by end of 2021 (as of 9/30/2021)</b>
~2,844 HFTD Tier 3, 2 and Zone 1	4,206 HFTD Tier 3, 2 and Zone 1
~7,761 system wide	7,582 system wide

**2. Justification for the proposed change**

**a. In what way, if any, does the change address or improve:**

**i. Completeness**

- ii. Technical feasibility of the initiative**
- iii. Effectiveness of the initiative**
- iv. Resource use efficiency over portfolio of WMP initiatives**

The proposed change is intended to improve the completeness of the initiative by reconciling the approximated quantitative targets described in Table 5.3-1 of the 2021 Revised WMP to the inspection frequency intervals described in the 2021 Revised WMP on page 650.

The proposed change is not intended to address or improve the technical feasibility, effectiveness, or resource use efficiency over the portfolio of WMP initiatives.

**3. Change in expected outcomes from the proposed change**

- a. What outcomes, including quantitative ignition probability and PSPS risk reduction, was the changed initiative expected to achieve in the 2021 WMP Update?**
- b. What outcomes, including quantitative ignition probability and PSPS risk reduction, will the initiative deliver with the proposed adjustment?**

There is no known quantifiable expected change in ignition probability or PSPS risk reduction as a result of the proposed change to 2021 targeted number of circuit miles targeted for infrared inspections in HFTD areas and systemwide. However, the increased number of circuit miles of infrared inspections will likely increase PG&E's ability to identify potentially damaged and/or faulty components that are not detectable by visual inspection methods alone.