

PACIFIC GAS AND ELECTRIC COMPANY
Wildfire Mitigation Plans
Rulemaking 18-10-007
Data Response

PG&E Data Request No.:	WSD_010-Q19		
PG&E File Name:	WildfireMitigationPlans_DR_WSD_010-Q19		
Request Date:	March 15, 2021	Requester DR No.:	WSD to PGE – Data Request – 20210315
Date Sent:	March 18, 2021	Requesting Party:	Wildfire Safety Division
PG&E Witness:		Requester:	Ryan Arba

QUESTION 19

PG&E indicated on a call with WSD staff on 3/10 that the decrease in spend related to Section 7.3.5, Vegetation Management & Inspections, was due to changes in assumptions. The example given was that spend for 7.3.5.20 was moved to 7.3.5.2. PG&E has previously identified some changes in spend due to changing assumptions in its First Quarterly Report filing in response to Guidance-5. It is unclear whether PG&E's assumptions have changed again and subsequently led to a significant decrease in spend across Section 7.3.5 initiatives for the 2020-2022 WMP cycle.

Consider Table 3, comparing spend for Vegetation initiatives as reported in the 2020 WMP and the 2021 WMP:

- a. Explain the assumption(s) that led to the decrease in spend for each initiative in Table 2.
- b. Where in the WMP is the change in spend (Δ) for each initiative in Table 2 accounted for? If the change in spend (Δ) for an initiative is not accounted for in another WMP initiative, where is it accounted for?
 - i. If the change in initiative spend (Δ) is accounted for outside the WMP, why was this change made?
 - ii. If the change in initiative spend (Δ) is accounted for elsewhere in the WMP, why was this change made?
- c. If PG&E has aggregated any of the initiatives in 7.3.5 in the time between the filing of its response to Guidance-5 (in PG&E's First Quarterly Report), which initiatives did it aggregate and why has PG&E made such a choice?

TABLE 1

VM Inspection Initiatives & Targets	2020 Plan Miles	2020 Actual Miles	% of target completed	2021 Plan Miles
7.3.5.2 Detailed inspections of vegetation around distribution electric lines and equipment	25,597	81,004	316%	81,004
7.3.5.3 Detailed inspections of vegetation around transmission electric lines and equipment	5,710	18,161	318%	18,161
7.3.5.9 Other discretionary inspections of vegetation around distribution electric lines and equipment (CEMA,"mid-cycle")	25,597	43,375	169%	81,004

TABLE 2

Initiative	Territory 2020 Cycle Total	Territory 2021 Cycle Total	Δ
7.3.5.10 Other discretionary inspections of vegetation around transmission electric lines and equipment	\$ 267.88	\$ -	-100%
7.3.5.11 Patrol inspections of vegetation around distribution electric lines and equipment	\$ 324,518.67	\$ -	-100%
7.3.5.12 Patrol inspections of vegetation around transmission electric lines and equipment	\$ 109,887.32	\$ -	-100%
7.3.5.16 Removal and remediation of trees with strike potential to electric lines and equipment (2020 WMP says "Transmission")	\$ 45,022.64	\$ -	-100%
7.3.5.20 Vegetation management to achieve clearances around electric lines and equipment	\$ 1,326,981.80	\$ -	-100%
7.3.5.14 Recruiting and training of vegetation management personnel	\$ 5,725.20	\$ 39.37	-99%
7.3.5.9 Other discretionary inspections of vegetation around distribution electric lines and equipment (CEMA)	\$ 37,075.15	\$ 1,318.69	-96%
7.3.5.6 Improvement of inspections	\$ 20,063.61	\$ 3,611.85	-82%
7.3.5.17.1 Substation inspection , Distribution substation	\$ 3,122.66	\$ 911.50	-71%
7.3.5.7 LiDAR inspections of vegetation around distribution electric lines and equipment	\$ 22,115.39	\$ 8,808.12	-60%
7.3.5.17.2 Substation inspection , Transmission substation	\$ 1,512.25	\$ 635.32	-58%
7.3.5.13 Quality assurance / quality control of vegetation inspections	\$ 55,003.47	\$ 32,506.61	-41%
7.3.5.19 Vegetation inventory system	\$ 31,489.14	\$ 23,572.22	-25%
7.3.5.1 Additional efforts to manage community and environmental impacts	\$ 78,514.67	\$ 70,484.21	-10%

TABLE 3

Initiative	Territory 2020 Cycle Total	Territory 2021 Cycle Total	Δ
7.3.5.1 Additional efforts to manage community and environmental impacts	\$ 78,514.67	\$ 70,484.21	-10%
7.3.5.2 Detailed inspections of vegetation around distribution electric lines and equipment	\$ 2,369,909.35	\$ 3,186,152.31	34%
7.3.5.3 Detailed inspections of vegetation around transmission electric lines and equipment	\$ 375,480.70	\$ 483,742.07	29%
7.3.5.4 Emergency response vegetation management due to red flag warning or other urgent conditions	\$ 18,202.75	\$ 17,686.65	-3%
7.3.5.5 Fuel management and reduction of "slash" from vegetation management	\$ 76,890.63	\$ 80,475.21	5%
7.3.5.6 Improvement of inspections	\$ 20,063.61	\$ 3,611.85	-82%
7.3.5.7 LiDAR inspections of vegetation around distribution electric lines and	\$ 22,115.39	\$ 8,808.12	-60%
7.3.5.8 LiDAR inspections of vegetation around transmission electric lines and equipment	\$ 77,085.69	\$ 85,945.08	11%
7.3.5.9 Other discretionary inspections of vegetation around distribution electric	\$ 37,075.15	\$ 1,318.69	-96%
7.3.5.10 Other discretionary inspections of vegetation around transmission electric	\$ 267.88	\$ -	-100%
7.3.5.11 Patrol inspections of vegetation around distribution electric lines and equipment	\$ 324,518.67	\$ -	-100%
7.3.5.12 Patrol inspections of vegetation around transmission electric lines and equipment	\$ 109,887.32	\$ -	-100%
7.3.5.13 Quality assurance / quality control	\$ 55,003.47	\$ 32,506.61	-41%
7.3.5.14 Recruiting and training of vegetation management personnel	\$ 5,725.20	\$ 39.37	-99%
7.3.5.15 Remediation of at-risk species (EVM)	\$ 303,019.32	\$ 394,033.54	30%
7.3.5.16 Removal and remediation of trees with strike potential to electric lines and equipment (2020 WMP says	\$ 45,022.64	\$ -	-100%
7.3.5.17.1 Substation inspection , Distribution substation	\$ 3,122.66	\$ 911.50	-71%
7.3.5.17.2 Substation inspection , Transmission substation	\$ 1,512.25	\$ 635.32	-58%
7.3.5.18.1 Substation vegetation	\$ 2,651.62	\$ 8,584.44	224%
7.3.5.18.2 Substation vegetation management, Maintenance substation transmission	\$ 3,158.43	\$ 10,359.33	228%
7.3.5.19 Vegetation inventory system	\$ 31,489.14	\$ 23,572.22	-25%
7.3.5.20 Vegetation management to achieve clearances around electric lines and equipment	\$ 1,326,981.80	\$ -	-100%
Total	\$ 5,287,698.34	\$ 4,408,866.52	-17%

ANSWER 19

- a. Details have been provided in the attached excel file “WildfireMitigationPlans_DR_WSD_010-Q19_Atch01” which provides a detailed breakdown of how costs from PG&E’s vegetation management programs listed at the top (row 5: Routine Distribution, Routine Transmission, Tree Mortality (sometimes called “CEMA”), and Enhanced Vegetation Management) were mapped to each of the WSD-defined initiatives in the 2020 WMP table 25 submitted as part of PG&E’s first quarterly report on September 9, 2020 and the 2021 WMP Table 12. Columns G – W show how PG&E mapped each vegetation management program to a WSD-defined initiative in the 2020 WMP table and columns AE – AU show how PG&E did so in the 2021 WMP table. The approach for how we mapped PG&E’s vegetation management programs for the 2020 and 2021 WMPs is outlined below:
- In the 2020 WMP Table 25, our methodology was to identify known, specific activity costs (LIDAR, QA / QC, and Fuel Reduction), assign those to the related WSD-defined initiative and then allocate the remainder of the program costs to the most relevant initiative(s) based on an assessment of the 2019 actual spend – this is how the percentages were determined for rows 17-35.
 - Note that in the 2020 WMP Table 25 PG&E only included HFTD spend related to each vegetation management program. Rows 39-57 reflect this data as was submitted for the 2020 WMP Table 25 at the time of the First Quarterly report (9/9/2020). For example, based on SME feedback the Tree Mortality program was estimated to be ~84% focused in HFTD areas. For other programs we leveraged the proportion of systemwide line miles that are in HFTD and applied that to the total veg program forecast (routine distribution: ~32% HFTD, routine transmission ~31% HTFD); EVM is 100% HFTD based on the program definition and scope.
 - For the purposes of comparing the forecast at the time of the 2020 WMP filing to the 2021 WMP we have added rows 60-79 that add to the 2020 WMP Table the non-HFTD spend on Vegetation Management programs.
 - In the 2021 WMP filing, percentages of each vegetation management program forecast were assigned to each initiative based upon an updated assessment of the 2020 actual spend. Note also that the full program spend was incorporated into the 2021 WMP which includes HFTD and Non HFTD spend, so for the 2021 WMP columns (Z-AP) we have only shown financial dollars in rows 60-79, reflecting the total, system-wide spend amounts (and not shown HFTD-only values for the 2021 WMP in rows 39-57)

Note that the attached excel file “WildfireMitigationPlans_DR_WSD_010-Q19Atch01” does NOT include WSD-defined initiatives 7.3.5.17 and 7.3.5.18 as these substation-related vegetation management activities are tracked separately and are therefore not subject to the same need to distribute PG&E’s vegetation management programs across those WSD-defined initiatives. Additionally, the vast majority of vegetation management work is expense (OPEX) and therefore

relatively smaller amount of capital (CAPEX) vegetation management work has not been included in this analysis.

- b. Rows 17 – 35 of the attached excel file “WildfireMitigationPlans_DR_WSD_010-Q19_Atch01” provide the percentage allocation from PG&E’s Vegetation Management programs (titles listed in row 5) assigned to each WSD-defined initiative. Rows 60 – 79 show the Modified 2020 WMP data to show the full system forecast (HFTD and Non HFTD) broken down by initiative and the 2021 WMP full system forecast (HFTD and Non HFTD) broken down by initiative. In summary, looking at the “high level” forecasts across the PG&E vegetation management programs (row 6 & row 79), the 2021 WMP reflects that PG&E is planning to spend ~\$1.4 billion per year across all vegetation management programs, which is generally consistent with what was projected at the time of the 2020 WMP filing (the 2021 WMP forecasts for the high level Vegetation Management program totals shown in row 6 are slightly higher in 2020 and 2021 and slightly lower in 2022 than what was projected as of the 2020 WMP filing).
 - i. Since the non-HFTD vegetation management spend was not incorporated into the 2020 WMP Table 25, the inclusion of non-HFTD spend (that was “outside” the 2020 WMP) into the 2021 WMP is the only change.
 - ii. All vegetation management program costs are allocated within the initiatives of Section 7.3.5; therefore, there is no Vegetation Management spend “accounted for elsewhere in the WMP”.
- c. Since PG&E filed the First Quarterly Report on September 9, 2020, we completed the re-assessment of PG&E’s Vegetation Management programs (row 5 of the attachment) into the WSD-defined initiatives as described in the response to subpart A above. As part of that reassessment our vegetation management Subject Matter Experts (SMEs) determined that it was not accurate to segregate several activities into separate WSD-defined initiatives as the below initiatives are truly managed and tracked as one function or activity. Our forecast for the following activities, which had previously been disaggregated using estimates and assumptions, has been re-aggregated into other, primary initiatives:
 - i. 7.3.5.10 – Other Discretionary Inspection of Vegetation Around Transmission Electric Lines and Equipment, Beyond Inspections Mandated by Rules and Regulations – is not an independent activity performed separately from 7.3.5.8 (LiDAR inspections of vegetation around transmission electric lines and equipment).
 - ii. 7.3.5.11 – Patrol inspections of vegetation around distribution electric lines and equipment – is not an independent activity that is performed separate from 7.3.5.2 (Detailed inspections of vegetation around distribution electric lines and equipment).
 - iii. 7.3.5.12 – Patrol inspections of vegetation around transmission electric lines and equipment – is not an independent activity that is performed separate from 7.3.5.8 (LiDAR inspections of vegetation around transmission electric lines and equipment).

- iv. 7.3.5.16 – Removal and remediation of trees with strike potential to electric lines and equipment– is not an independent activity that is performed separate from 7.3.5.3 (Detailed inspections of vegetation around transmission electric lines and equipment).
- v. 7.3.5.20 – Vegetation management to achieve clearances around electric lines and equipment – is performed in conjunction with and/or at the same time as 7.3.5.2 (Detailed inspections of vegetation around distribution electric lines and equipment) and 7.3.5.3 (Detailed inspections of vegetation around transmission electric lines and equipment).