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Via: Electronic Submission

Koko Tomassian
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Office of Energy Infrastructure Safety
715 P Street, 20th Floor
Sacramento, California 95814

Re: Pacific Gas and Electric Company's Comments on Draft Annual Report on Compliance for the 2020 Wildfire Mitigation Plan, Docket #2020-ARC

Dear Mr. Tomassian:

Pacific Gas and Electric Company (PG&E) is submitting these comments in response to the Draft Annual Report on Compliance (Draft ARC) issued by the Office of Energy Infrastructure Safety (Energy Safety) on December 5, 2022, regarding PG&E's compliance with its 2020 Wildfire Mitigation Plan (WMP).

While PG&E appreciates Energy Safety's review of our compliance with the 2020 WMP, we respectfully and strongly disagree with Energy Safety's conclusion that PG&E "failed to substantially comply with its 2020 WMP during the compliance period, January 1 – December 31, 2020."[1]

[1] Draft ARC, p. 2.

Attached are PG&E's comments addressing the Draft ARC. Based on the evidence and the appropriate standard of review that should be applied by Energy Safety, we urge that the Draft ARC be revised and that PG&E be found to be substantially compliant with its 2020 WMP.

Sincerely,

Vincent Tanguay,
Sr. Director, Electric Regulatory Compliance

Pacific Gas and Electric Company's Comments on the Draft Annual Report on Compliance Regarding the 2020 Wildfire Mitigation Plan

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I. EXECUTIVE SUMMARY

Pacific Gas and Electric Company (PG&E) substantially complied with its 2020 Wildfire Mitigation Plan (WMP). Accordingly, the Office of Energy Infrastructure Safety's (Energy Safety) *Draft Annual Report on Compliance for PG&E's 2020 WMP* (Draft ARC) needs to be revised to reflect our substantial compliance. We appreciate all of the work that Energy Safety has undertaken both in reviewing and approving the 2020 WMP, as well as in reviewing our 2020 WMP compliance. However, we respectfully and strongly disagree with the Draft ARC's conclusion that "PG&E failed to substantially comply with its 2020 WMP."

PG&E shares Energy Safety's goal to eliminate wildfire risk caused by electric utility facilities. In fact, most of the issues cited by the Draft ARC related to PG&E's 2020 WMP compliance have been addressed in subsequent WMPs and in our associated execution of wildfire-related work. We have diligently and transparently responded to and incorporated Energy Safety's findings and recommendations in subsequent filings and reports and will continue to innovate and seek breakthrough solutions to further evolve future WMPs. While we strongly support the continued evolution of wildfire risk reduction efforts, for purposes of compliance, Energy Safety cannot and should not change standards after the fact or apply vague and ambiguous compliance criteria. The Draft ARC applies a new and vague compliance standard to retroactively find PG&E non-compliant with its 2020 WMP. It is not appropriate to apply this hindsight lens to work performed more than two years ago. We urge Energy Safety to reconsider and revise the Draft ARC to address the following fundamental flaws.

First, the Draft ARC announces for the first time -- almost two years after the 2020 WMP compliance period ended -- a new compliance standard. The Draft ARC fails to explain why the compliance standard adopted by the California Public Utilities Commission (CPUC or Commission) in November 2020, during the 2020 WMP compliance period, is not applicable or why it is appropriate to change the standard two

years later and then apply the new standard retroactively. The use of this newly announced compliance standard is inconsistent with California statutory law and CPUC resolutions. We do not oppose Energy Safety proposing new WMP compliance standards as its expertise and knowledge develops. In fact, California law directs the CPUC to adopt WMP compliance standards each year based on Energy Safety proposals. However, California law does not provide that Energy Safety can unilaterally change the CPUC-adopted standard two years after the compliance period ends and apply it retroactively, nor would it be appropriate to do so. The Draft ARC should apply the compliance standard approved by the CPUC in November 2020.

Second, when the appropriate standard is applied (*i.e.*, the 2020 CPUC-approved standard), there is ample evidence demonstrating that PG&E substantially complied with its 2020 WMP.

Third, even if Energy Safety's newly announced compliance standard was appropriate, which it is not, the evidence demonstrates that even under this standard PG&E substantially complied with its 2020 WMP.

Fourth, the Draft ARC's newly announced compliance standard is vague and overly subjective. This is perhaps best seen when comparing PG&E's Draft ARC with the ARCs for other utilities.[1] Because of the Draft ARC's vague and subjective standard, there are significant discrepancies in how Energy Safety evaluated the three utilities leading to inconsistent conclusions and treatment. Examples are provided in our comments below. The purpose of these examples is not to compare the utilities against each other or to critique other utilities. Each utility's compliance with its 2020 WMP must be judged on its own. But as demonstrated throughout these comments, the subjective compliance standard used in the Draft ARC has resulted in disparate evaluations and outcomes. This is not appropriate.

[1] Southern California Edison Company's (SCE) final ARC was issued on December 13, 2022 and San Diego Gas and Electric Company's (SDG&E) draft ARC was issued on November 23, 2022.

Fifth, although performance in 2021 and 2022 is outside the 2020 compliance period, the PG&E, SCE, and SDG&E ARCs reference and acknowledge events which occurred in these years. In many cases, the groundwork PG&E laid in 2020 has led to the successful results achieved in subsequent years. PG&E's performance during these later years bears consideration and further supports a finding of substantial compliance.

To demonstrate our substantial compliance with the 2020 WMP and the Draft ARC flaws, in these comments we first provide the statutory framework for evaluating WMP compliance followed by a discussion of PG&E's 2020 WMP including substantial compliance with the 2020 WMP initiative targets. We then describe material reviewed by Energy Safety as part of the 2020 WMP compliance evaluation, including field inspection results, the Independent Evaluator report on 2020 WMP compliance, audits of our vegetation management programs, and a report from PG&E's Independent Monitor.

With that background information established, we then address why the Draft ARC's newly announced compliance standard should not be used for the 2020 WMP. This is followed by a section demonstrating that under the 2020 CPUC-approved compliance standard, PG&E substantially complied with its 2020 WMP. We follow this with a demonstration that even under the Draft ARC's newly announced standard, we substantially complied. Finally, we conclude with a brief discussion of how in 2021 and 2022 we have addressed the 2020 issues identified in the Draft ARC. In sum, these comments demonstrate that under either standard, PG&E substantially complied with its 2020 WMP and that the Draft ARC must be revised to reflect this demonstration of substantial compliance.

II. STATUTORY FRAMEWORK FOR WMP COMPLIANCE

In 2018, the Legislature established a statutory framework for: (1) the contents of the utilities' WMPs; (2) Energy Safety's review and approval of WMPs; and (3) Energy Safety's evaluation of compliance. California Public Utilities Code Section 8386 includes a comprehensive list of the information and elements to be included in a utility's

WMP.[2] After a utility submits its WMP, Energy Safety is required to review and approve or deny it within three months.[3]

Following approval, Energy Safety oversees compliance in three specific ways. First, Energy Safety "develop[s] a field audit program for wildfire mitigation plan compliance by each electrical corporation."[4] Field audits occur during the year that the WMP is in effect and are a means of evaluating whether the utility's performance is consistent with the WMP.

Second, after the year ends, Energy Safety evaluates compliance by: (1) receiving a utility's annual report on compliance (ARC) three months after the end of the annual compliance period; (2) facilitating a review of the utility's compliance by an Independent Evaluator; and (3) completing a review of compliance within 18 months of the utility's submission of its ARC.[5]

Third, Energy Safety conducts an audit of a utility's vegetation management program to determine whether the utility "substantially compl[ied] with the substantial portion of the vegetation management requirements in the electrical corporation's wildfire mitigation plan" during the compliance period.[6] The vegetation management audit is required to be included in Energy Safety's annual report on compliance.[7]

This statutory framework is the foundation for reviewing PG&E's 2020 WMP compliance.

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[2] Subsequent references in these comments are to the California Public Utilities Code unless otherwise noted.

[3] Cal. Pub. Util. Code § 8386.3(a).

[4] Cal. Pub. Util. Code § 326(a)(3).

[5] Cal. Pub. Util. Code § 8386.3(c).

[6] Cal. Pub. Util. Code § 8386.3(c)(5)(C).

[7] Cal. Pub. Util. Code § 8386.3(c)(5)(C).

III. 2020 WMP BACKGROUND

In this section of our comments, we provide background on a number of events which occurred during or after 2020 related to our 2020 WMP including:

(1) Section A – Submission of the 2020 WMP;

(2) Section B -- Energy Safety's 2020 field inspections;

(3) Section C -- PG&E's reporting on 2020 WMP compliance and the 2020 WMP results;

(4) Section D – PG&E's Self-Reports; and

(5) Section E – Audits related to the 2020 WMP.

A. PG&E's 2020 WMP

PG&E submitted its 2020 WMP on February 28, 2020. The 2020 WMP initially included 113 initiatives, some of which were later disaggregated based on Energy Safety's direction to all utilities, so that ultimately there were 134 initiatives in PG&E's 2020 WMP.[8] The 2020 WMP also included other information such as objectives, lessons learned, performance data, trend information, and financial information. PG&E provided all the information required by Section 8386. After its submission, Energy Safety and other parties conducted extensive discovery regarding the 2020 WMP.

On June 19, 2020, the CPUC issued Resolution WSD-002, which identified global deficiencies in the WMPs submitted by six utilities.[9] The deficiencies were categorized in one of three classes. Class A indicated aspects of the WMP that were lacking or flawed, Class B indicated insufficient detail or justification, and Class C indicated gaps in baseline or historical data.[10] Resolution WSD-002 included 12 deficiencies that were common to the utilities and required further submissions to address each deficiency. In

[8] Draft ARC, pp. 17, 48.

[9] Resolution WSD-002, pp. 1-2. The six utilities were: PG&E, SCE, SDG&E, PacifiCorp, Liberty Utilities and Bear Valley Electric Service.

[10] Resolution WSD-002, p. 17.

addition to the general deficiencies, the Commission also identified utility-specific deficiencies. In Resolution WSD-003, issued the same day as Resolution WSD-002, the Commission conditionally approved PG&E's 2020 WMP but identified 29 additional Class A, B, and C conditions that PG&E needed to address.[11]

As directed by the Commission, PG&E submitted a Remedial Compliance Plan addressing its eight Class A conditions on July 27, 2020. PG&E addressed its 30 Class B conditions in its First Quarterly Report submitted on September 9, 2020.[12]

On December 30, 2020, Energy Safety issued an evaluation of PG&E's Remedial Compliance Plan in which it determined that PG&E's responses to the eight Class A conditions were insufficient.[13] Energy Safety also reviewed the Remedial Compliance Plans for SCE and SDG&E and largely found that their Class A responses were also insufficient, except for a single SCE response.[14] Energy Safety directed that the utilities address insufficient responses in their respective 2021 WMPs through specifically defined "Actions."[15]

On January 8, 2021, Energy Safety issued an evaluation of PG&E's Quarterly Report and determined that PG&E's responses to 23 of the 30 Class B conditions were insufficient.[16] Energy Safety also reviewed the Quarterly Reports for SCE and SDG&E and determined that some Class B of their responses were sufficient and others were insufficient.[17] Similar to the Class A conditions, PG&E and the other utilities were

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[11] Resolution WSD-003, p. 67, Ordering Paragraphs 1 and 2.

[12] PG&E addressed Class C conditions in its 2021 WMP submitted on February 5, 2021.

[13] *Wildfire Safety Division Evaluation of Pacific Gas and Electric Company's Remedial Compliance Plan*, issued December 30, 2020 (Energy Safety Remedial Compliance Plan Evaluation).

[14] SCE ARC, p. 52; SDG&E Draft ARC, pp. 58-59.

[15] Energy Safety Remedial Compliance Plan Evaluation, p. 2.

[16] *Wildfire Safety Division Evaluation of Pacific Gas and Electric Company's First Quarterly Report,* issued January 8, 2021 (Energy Safety Quarterly Report Evaluation).

[17] SCE ARC, pp. 52-53; SDG&E Draft ARC, pp. 58-59.

required to address their insufficient responses in their respective 2021 WMPs through defined Actions.[18]

On February 5, 2021, PG&E submitted its 2021 WMP which included all the Actions identified by Energy Safety.[19] The 2021 WMP also included our responses to the Class C conditions. In its 2021 WMP approval, Energy Safety determined that many of PG&E's Class A and Class B responses that were initially deemed insufficient had been satisfied by information included in the 2021 WMP. Other Class A, B, and C conditions were effectively closed because they were addressed through other actions related to the 2021 WMP.

The Draft ARC notes that PG&E did not meet many of the Class A and B conditions by December 31, 2020.[20] This is true but is due in part to the fact that PG&E did not receive Energy Safety's Class A and B evaluations until December 30, 2020, and January 8, 2021 (respectively), more than six months after the Remedial Compliance Plan was submitted and almost four months after the Quarterly Report was submitted. When PG&E did receive the evaluations, it was able to resolve many of the outstanding concerns by addressing them in the 2021 WMP.

B. Energy Safety's 2020 Field Inspections

During the 2020 WMP compliance period (*i.e.*, January 1, 2020 to December 31, 2020), Energy Safety undertook 1,948 inspection activities in PG&E's service territory and identified 149 defects.[21] As the Draft ARC indicates, 100% of these defects were remediated or resolved.[22] However, this does not tell the entire story. PG&E disputed a number of the 149 defects because the defect involved facilities owned by a third-party

[18] Energy Safety Quarterly Report Evaluation, pp. 2-3.

[19] Actions were intended to remedy insufficient Class A and Class B conditions.

[20] Draft ARC, p. 83.

[21] Draft ARC, pp. 31-32.

[22] Draft ARC, p. 32.

(*i.e.*, PG&E did not own the facilities and thus could not address the defect), the circumstance cited by Energy Safety was not a defect, or the defect had previously been identified by PG&E and was scheduled to be worked within the time period permitted under the CPUC's General Order (GO) 95.[23]

Moreover, most of the 149 defects identified by Energy Safety were either minor or moderate. Table 1 below shows the type of defect (*i.e.*, severity) identified by Energy Safety:

Table 1: Summary of Identified Defects

Defect Type	Number	Percentage
Severe Defects	38	26%
Moderate Defects	44	30%
Minor Defects	60	40%
No Severity Assigned	7	4%
Total	149	100%

As Table 1 demonstrates, 40% of the defects identified by Energy Safety were designated as minor and 70% of the defects were minor or moderate.

With regard to the 38 severe defects, PG&E:

- Agreed with 7 of these defects;
- Disagreed with 17 because there was an existing maintenance tag for the work or it had been previously identified; and
- Disagreed with 14 because the work was in progress, there was a dispute concerning a rule interpretation, or a dispute regarding field verification.

In short, the number of severe defects was substantially less than 149 and a substantial number of the severe defects were disputed.

[23] Pacific Gas and Electric Company Annual Report on Compliance for 2020 Wildfire Mitigation Plan, submitted March 31, 2021 (PG&E 2020 ARC), pp. 9-11 (describing defects).

C. Reporting on PG&E's 2020 WMP Compliance and Results

1. Compliance Reporting

After the 2020 WMP compliance period ended, PG&E submitted three reports addressing compliance. First, consistent with Section 8389(e)(7), PG&E submitted an Advice Letter providing updated information on the implementation of the 2020 WMP through the fourth quarter.[24] This advice letter is generally referred to as the Quarterly Advice Letter or "QAL" because it is filed quarterly by all utilities. The QAL focused on 38 WMP commitments that PG&E tracked as elements of key WMP programs. The 38 commitments were a subset of the 134 initiative targets.[25]

Second, on March 31, 2021, PG&E submitted its ARC for the 2020 WMP (PG&E 2020 ARC). The ARC was in a format prescribed by Energy Safety and responded to specific questions regarding our performance in 2020. The 2020 ARC also focused on the 38 commitments and referred readers to the Quarterly Initiative Update (QIU) for information regarding all 134 initiatives.[26] The PG&E 2020 ARC also referenced the hydroelectric substation self-report we submitted on March 4, 2021, (discussed in Section III.D below) and indicated that, as a result of this self-report, the QAL needed to be corrected.[27] The PG&E 2020 ARC also referred to the self-report regarding pole inspections (discussed in Section III.D below).[28]

Third, on March 31, 2021, the same day that we submitted the PG&E 2020 ARC, we also submitted our QIU. In the QIU, we reported on the status of each of the 134 initiative targets, and indicated whether a target had been completed, substantially completed, or was in progress.

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[24] Advice Letter 6068-E, submitted January 29, 2021 (QAL).

[25] QAL, p. 3.

[26] PG&E 2020 ARC, p. 2.

[27] PG&E 2020 ARC, p. 3.

[28] PG&E 2020 ARC, p. 3.

2. 2020 WMP Results

As the Draft ARC explains, PG&E's 2020 WMP included initiatives with quantitative, qualitative, and quantitative/qualitative targets.[29]

Quantitative Initiative Targets: For the ten initiatives identified in the Draft ARC with quantitative targets, the Draft ARC concludes that PG&E met or exceeded nine of these targets and missed one target by a small percentage, as indicated below in Table 2[30]:

Table 2: 2020 WMP Quantitative Targets and Actual Progress[31]

	Initiative	Target	Actual Progress	Percentage Exceed/Short
1	Weather Stations	400	378[32]	- 5.5%
2	High-Definition Cameras	200	216	+ 8.0%
3	System Hardening Miles	221	342	+ 54.8%
4	Butte County Rebuild Miles	20	21.3	+ 6.5%
5	Non-Exempt Surge Arrester Replacement	8,850	10,263	+ 16%
6	Expulsion Fuse Replacement	625	643	+ 2.9%
7	SCADA Transmission Switching (switches)	23	54	+ 134.8%
8	Distribution sectionalizing (devices installed)	592	603	+ 1.9%
9	Transmission Line Evaluation	552	552	0%

[29] Draft ARC, pp. 48-57.

[30] In a footnote, the Draft ARC mentions that for PG&E's Enhanced Vegetation Management (EVM) initiative target, we did not "start the process with other California utilities to develop a targeted tree species program in 2020." *See* Draft ARC, p. 49, n. 158. However, this was not a part of the EVM initiative target. Instead, it was a statement about PG&E's intent to work with the other utilities in 2020. Moreover, even if this was a part of the EVM initiative target, which it was not, PG&E indicated in its response to the Substantial Vegetation Management audit that SCE had started its own separate study in 2020 and that since 2020 the utilities have been working together to benchmark effective enhanced clearances. *See PG&E Response to SVM Audit Corrective Plan*, dated August 15, 2022, p. 15.

[31] Table based on data in Draft ARC, Table 14.

[32] Number based on June 1, 2021 self-report described in Section III.D.

	Initiative	Target	Actual Progress	Percentage Exceed/Short
10	EVM (line miles)	1,800	1,878	+ 4.3%

Quantitative/Qualitative Initiative Targets: The Draft ARC identifies seven initiatives that include both qualitative and quantitative aspects.[33] PG&E met or exceeded six of these seven initiatives, including several important risk reduction measures such as deploying line sensors, enabling downed conductor detection, and removing legacy 4C controllers. The one quantitative/qualitative initiative target that we did not meet was related to distribution pole inspections in HFTD areas. PG&E initially reported that this initiative target was met, but based on the May 7, 2021, self-report described in Section III.D below, PG&E subsequently concluded that it did not meet this target.

Qualitative Initiative Targets: The Draft ARC indicates that the remaining 117 initiative targets were qualitative.[34] Table 16 in the Draft ARC identifies nine qualitative initiative targets out of the 117 that were not completed. However, two of these targets were subject to Change Orders that were approved by Energy Safety and as indicated later in the Draft ARC, "Energy Safety does not consider initiatives with approved change orders to be missed targets."[35] Of the remaining seven initiative targets, six were partially completed or substantially completed in 2020 and work on these targets continued in 2021. Only one initiative target, hydroelectric substation inspections, was missed, which we address in more detail below in Section III.D.

The Draft ARC concludes that PG&E did not complete 13 out of 134 initiatives or 9.7%,[36] but later notes that two of the qualitative initiatives were subject to change

[33] Draft ARC, p. 50.

[34] Draft ARC, p. 48.

[35] Draft ARC, pp. 22, 87.

[36] Draft ARC, p. 57.

orders and a third qualitative initiative was substantially complete.[37] Thus, at most, PG&E missed 7.4% (10/134) of its initiative targets based on the data in the Draft ARC. And, as explained above, six of these remaining ten missed initiative targets were partially completed or substantially completed in 2020 and work on these targets continued in 2021. It is also notable that the Draft ARC does not discuss the critical initiative targets such as system hardening and replacement of non-exempt equipment that were substantially exceeded.

3. Reporting Discrepancies

The Draft ARC identifies reporting discrepancies for the quantitative, qualitative, and quantitative/qualitative initiative targets. These were minor discrepancies that are readily explained.

Quantitative Targets: The Draft ARC indicates that there were five reporting discrepancies involving the quantitative initiative targets in the QAL, QIU, and PG&E 2020 ARC.[38] First, the Draft ARC points to a single number discrepancy for system hardening miles in the QAL which was submitted in January 2021. The number of system hardening miles was corrected from 369 miles in the QAL to 342 miles in the QIU and PG&E 2020 ARC which were both submitted in March 2021.[39]

Second, the Draft ARC notes that three quantitative targets were not included in the January 2021 QAL but were included in the QIU and PG&E 2020 ARC in March.[40] We strive to accurately report data in all of our submissions, which include thousands of data points over multiple filings. In subsequent reporting, PG&E self-corrected these minor discrepancies, none of which impacted our wildfire programs.

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[37] Draft ARC, p. 87, n. 208.

[38] Draft ARC, p. 47.

[39] Draft ARC, p. 49, Table 14.

[40] Draft ARC, pp. 49, Table 14.

Finally, the Draft ARC identifies weather stations as a reporting discrepancy because PG&E "misreported" its progress on the weather station initiative target in the QAL, QIU, and PG&E 2020 ARC.[41] This is simply a timing issue. The QAL was submitted in January 2021 and the QIU and PG&E 2020 ARC were submitted in March 2021. PG&E did not identify the weather station issue until May 2021 and proactively and transparently reported it on June 1, 2021. Thus, this is not an example of misreporting but rather simply reflects the fact that more information became available after the QAL, QIU and PG&E 2020 ARC were submitted.

Qualitative and Qualitative/Quantitative Targets: The Draft ARC points to several additional reporting discrepancies regarding qualitative and quantitative/qualitative initiative targets that are also readily explained. First, the Draft ARC notes that in the QAL, submitted on January 29, 2021, substation inspections are listed as 100% complete while in the QIU, submitted on March 31, 2021, substation inspections are listed as delayed.[42] The reason for the change is straightforward. When we submitted the QAL in January 2021, we were not aware of the hydroelectric substation issue. When we became aware of the issue, after the QAL was submitted, we transparently notified the CPUC and Energy Safety on March 4, 2021, and, in our QIU, explained that: "PG&E submitted corrective actions in its March 4, 2021, letter to [Energy Safety] and provided a status update in its March 12, 2021, letter to [Energy Safety]."[43] The reason for the change in reporting between the QAL and QIU was because an intervening event occurred (*i.e.*, identification of the hydroelectric substation issue).

Second, the Draft ARC points to the Partial Voltage Detection Program as being reported as "off track" in the QAL while being reported as on track in the QIU and

[41] Draft ARC, p. 48.

[42] Draft ARC, pp. 47, 53.

[43] Q4 2020 QIU, Row 87, Column AB.

PG&E 2020 ARC.[44] The Partial Voltage Detection Program was the subject of a Change Order submitted to Energy Safety on December 11, 2020. Energy Safety's approval of the Change Order was not received until 4:20 p.m. on January 28, 2021, the evening before the QAL was submitted. Because the Change Order approval was not received until just before the QAL was submitted, the progress of the initiative was listed in the QAL as "off track." However, the Change Order approval was reflected in the QIU and PG&E 2020 ARC, which were submitted on March 31, 2021. In the QIU, PG&E correctly indicated that the initiative was in progress based on the approved Change Order.

Overall Reporting Issues: Finally, the Draft ARC concludes that there were 18 reporting discrepancies in the 36 initiatives included in Tables in the Draft ARC (*i.e.*, 50%).[45] However, this conclusion is overstated. Rather than taking a limited number of initiative targets, the 18 discrepancies identified in the Draft ARC should be considered in the context of PG&E's reporting on all 134 initiative targets. In that case, the discrepancy percentage is approximately 13% (18/134), not 50%. But more importantly, the claimed discrepancies were minor or readily explained, as discussed above, and did not impact our wildfire programs.

D. PG&E's 2021 Self-Reports

In Resolution WSD-012, discussed in more detail in Section IV.A below, Energy Safety encouraged utilities to self-report compliance related issues.[46] Self-reporting and implementation of corrective actions is also encouraged by WMP compliance statutes.[47]

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[44] Draft ARC, p. 53.

[45] Draft ARC, p. 57.

[46] Resolution WSD-012, Attachment 1, p. 5.

[47] *See* Cal. Pub. Util. Code § 8386.1(c) (when considering non-compliance with the WMP, the Commission should consider "whether the electrical corporation self-reported the circumstances constating non-compliance.") and subpart (d).

In 2021, consistent with Energy Safety and Legislative direction, and with our corporate values, we self-reported three events that impacted the 2020 WMP.

Hydroelectric Substation Self-Report. On March 4, 2021, we self-reported we had not performed enhanced inspections on hydroelectric substations located in Tier 2 and 3 HFTD areas.[48] In our 2020 WMP, PG&E had committed to inspecting all Tier 3 substations annually and Tier 2 substations every three years. Upon discovering this issue, we completed enhanced inspections on Tier 3 substations within eight days (by March 12, 2021) and completed the required Tier 2 substation inspections within eight more days, by March 20, 2021. We also completed work on all category "A" maintenance tags by March 20 and completed all the category "B" maintenance tags by mid-June.[49] Our March 4 self-report also included a corrective action plan.[50] None of these hydroelectric substations was responsible for a wildfire in 2020. The primary reasons for the missed hydroelectric substation inspections were miscommunications arising from transfers in responsibilities and organizational changes in our wildfire-related organizations.[51] On December 23, 2021, Energy Safety issued a Notice of Violation (NOV) regarding the Hydroelectric Substation Self-Report and indicated that it was a moderate risk.[52] We responded to the NOV on January 24, 2022, confirming that the facilities had been inspected and describing the preventative measures taken to prevent a recurrence.[53]

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[48] *Letter from Debbie Powell to Caroline Thomas Jacobs and Leslie Palmer,* dated March 4, 2021 (Hydroelectric Substation Self-Report); *see also* Draft ARC, pp. 21-22.

[49] *Letter from Debbie Powell to Caroline Thomas Jacobs and Leslie Palmer,* dated May 20, 2021, pp. 1-2.

[50] Hydroelectric Substation Self-Report, p. 4.

[51] *Id*., p. 2.

[52] Energy Safety Notice of Violation, NOV_PGE_QP_20210304-01, p. 2.

[53] *Letter from Lise Jordan to Koko Tomassian,* dated January 24, 2022 re NOV_PGE_QP_20210304-01.

Pole Inspection Self Report. On May 7, 2021, we submitted a self-report that identified two issues related to pole inspections.[54] One of the issues is relevant to the 2020 WMP. In the Pole Inspection Self-Report, we indicated that we were unable to locate 2020 enhanced inspection records for 3,296 poles in Tier 3 areas.[55] We also explained that "[t]hese poles have up-to-date GO 165 records . . .."[56] The Pole Inspection Self-Report included a corrective action plan.[57] As the Draft ARC indicates, PG&E's initiative target for pole inspections in 2020 was 339,728; the missed poles were 1% of the total number of poles inspected.[58] On December 23, 2021, Energy Safety issued an NOV regarding the Pole Inspection Self-Report and indicated that it was a moderate risk.[59] We responded to the NOV on January 24, 2022, confirming that the poles received enhanced inspections in 2021 and describing our short-term and long-term corrective actions and measures to prevent recurrence.[60]

Weather Station Self-Report. On June 1, 2021, we self-reported we had erroneously reported the number of weather stations that were installed in 2020.[61] The number of weather stations reported inadvertently included weather stations installed in 2019 that had exceeded our annual target for that year. As a result, we missed our target of installing 400 weather stations in 2020 by 22 weather stations (*i.e.*, we installed 378 weather stations in 2020). On December 23, 2021, Energy Safety issued an NOV

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[54] *Letter from Debbie Powell to Caroline Thomas Jacobs and Leslie Palmer,* dated May 7, 2021 (Pole Inspection Self-Report); *see also* Draft ARC, pp. 23-24.

[55] *Id*., pp. 2, 4.

[56] *Id*., pp. 2, 4.

[57] *Id.*

[58] Draft ARC, p. 24, n. 69.

[59] Energy Safety Notice of Violation, NOV_PGE_QP_20210507-01, p. 2.

[60] *Letter from Lise Jordan to Koko Tomassian,* dated January 24, 2022 re NOV_PGE_QP_20210507-01.

[61] *Letter from Debbie Powell to Caroline Thomas Jacobs and Leslie Palmer,* dated June 1, 2021 (Weather Station Self-Report); *see also* Draft ARC, p. 24.

regarding the Weather Station Self-Report and indicated that it was a minor risk.[62] We responded to the NOV on January 24, 2022, confirming the number of weather stations installed in 2020 and describing our corrective actions and measures to prevent recurrence.[63]

E. Audits Related to the 2020 WMP

Before the Draft ARC was issued, there were four separate 2020 WMP-related audits or reviews conducted by Energy Safety or at Energy Safety's direction: (1) the EVM Audit; (2) the Independent Evaluator review; (3) Crowe Audit; and (4) the Substantial Vegetation Management Audit. These audits and reviews are described below in chronological order based on when they were issued.

1. Enhanced Vegetation Management Audit (February 8, 2021)

In October 2020, Energy Safety initiated an audit of PG&E's EVM program (EVM Audit). The EVM Audit was issued on February 8, 2021, and included seven findings regarding failures to communicate clearly with Energy Safety, the use of different prioritization models, the prioritization of EVM work, and four EVM defects.[64] One of the primary concerns of the EVM Audit was that PG&E had not prioritized work on the highest risk ranked circuits, including the top 20 risk-ranked circuits.[65] More broadly, the EVM Audit expressed concern about the prioritization of EVM work. The EVM Audit also summarized the results of 306 EVM inspections conducted by Energy Safety, which identified four defects, a defect rate of approximately 1%.[66]

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[62] Energy Safety Notice of Violation, NOV_PGE_QP_20210601-01, p. 2.

[63] *Letter from Lise Jordan to Koko Tomassian,* dated January 24, 2022, re NOV_PGE_QP_20210601-01.

[64] Draft ARC, p. 37.

[65] *Audit of PG&E's Implementation of their Enhanced Vegetation Management Program in 2020*, issued February 8, 2021 (EVM Audit), pp. 12-13.

[66] EVM Audit, p. 16.

As the Draft ARC notes, the EVM Audit ultimately resulted in PG&E being placed into Step 1 of the CPUC's Enhanced Oversight Enforcement Process (EOEP).[67] In response to the EVM Audit and after being placed in Step 1, we submitted a Corrective Action Plan to the CPUC and reported to both the CPUC and Energy Safety every 90 days regarding our EVM progress. We have made substantial progress focusing our EVM work on the highest risk ranked miles. As we reported in our last 90-day Report in the EOEP process, through September 30, 2022, we achieved the following results:

Table 3: EVM Progress in 2021 and 2022

Year	Miles	% of Miles in Top 20% Risk
2021	1,983	98%
2022 (through 9/30)	1,454	99%

As a result of this progress, on December 1, 2022, the CPUC issued Resolution M-4864 authorizing PG&E to exit Step 1 of the EOEP. The CPUC found that PG&E "has demonstrated that in 2021 and 2022 it is prioritizing high-risk distribution lines for EVM, is meeting all of the Step 1 conditions imposed by Resolution M-4852 and is authorized to exit Step 1 of the EOE Process."[68]

In addition to concerns about EVM prioritization, the EVM Audit also expressed concern about communication between Energy Safety and PG&E regarding key WMP programs such as EVM and system hardening. In response to the EVM Audit, PG&E explained that it regularly communicated workplans and other data information to Energy Safety in 2020. PG&E's response to the EVM Audit noted:

[67] Draft ARC, p. 38.

[68] Resolution M-4864, p. 2.

Beginning in April of 2020, at the direction of WSD, PG&E began providing project details for work that was completed, in-progress, and scheduled to be started within two weeks for the EVM, System Hardening, and Distribution Sectionalization (PSPS Impact Mitigation) programs. PG&E provides an updated list every two weeks in response to this request from the WSD.

Over the last 10 months, based on feedback from and in response to updated requests from the WSD, the list of projects has been augmented with additional project information and to include planned projects that are not driven by wildfire risk (projects motivated by other needs such as capacity upgrades) that result in the construction of fire-hardened overhead assets in High Fire-Threat District (HFTD) areas. In just the last two months the request has been further updated by WSD staff and PG&E has begun providing similar project information on our Transmission system, including right-of-way expansion vegetation management work and Transmission Switch installations (for PSPS mitigation). PG&E notes that this list of projects is dynamic in nature, as project work plans are frequently updated to address external circumstances that alter the course of planned work, such as weather, permitting, fire response and rebuild efforts or other considerations. In addition, emergency response and asset repair activities that may be similar to some of the included projects are not pre-planned and cannot be feasibly captured in this list of planned work.

PG&E remains committed to providing the WSD complete project information on the requested project work plans, through the established bi-weekly cadence, or until otherwise directed by the WSD. To the extent WSD staff identifies additional workstreams to be included we will work with WSD staff to understand the request and incorporate them as quickly as is feasible.[69]

2. The Independent Evaluator's Assessment of PG&E's Compliance (June 3, 2021)

In 2021, consistent with California law, an Independent Evaluator, Bureau Veritas North America (BVNA), was retained to review and assess PG&E's compliance with its 2020 WMP. BVNA conducted an extensive evaluation including field inspections, a

[69] *Pacific Gas and Electric Company's Response to Audit of Implementation of Enhanced Vegetation Management Program in 2020*, submitted February 23, 2021 (PG&E Response to EVM Audit), pp. 19-20.

review of PG&E records and data, interviews with PG&E employees, and data requests.[70] BVNA also used a sampling methodology to determine whether PG&E had complied with its 2020 WMP initiative targets.[71] Overall, after this extensive review, BVNA concluded that "[t]he majority of initiative activities appeared to be in compliance with 2020 WMP stated targets."[72] BVNA also noted:

> PG&E's programs are evolving as their understanding of the wildfire threat improves. PG&E has developed working relationships with regulators, communities, other utilities, and industry experts to understand the wildfire problem better and has urgently explored ways to address and limit wildfire risk. In expanding their efforts based on PG&E's work and experience in 2019, PG&E implemented continued VM activities, enhanced inspection practices, more strategic system hardening, increased situational awareness tools, and additional system automation devices in 2020. With continued improvement from lessons learned and input from customers, communities, and governments they serve, PG&E initiatives demonstrated in their 2020 Wildfire Mitigation Plan (WMP) illustrate the effectiveness and impact of these efforts.[73]

With regard to its review of qualitative initiative targets, BNVA noted "PG&E has approached the qualitative goals systematically relying on established processes where appropriate, developing new processes to fill in, monitoring outcomes, and refining the approach to incorporate feedback to be carried forward to future wildfire mitigation efforts."[74] BVNA concluded that PG&E had a 94% completion rate for 2020 WMP initiative targets based on its extensive review.[75]

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[70] *Final Independent Evaluator Annual Report on Compliance*, issued June 30, 2021 by BVNA (Final IE Report), pp. 9-10.

[71] *Id*., pp. 9-11.

[72] *Id*., p. 4.

[73] *Id*., pp. 2-3 (emphasis added).

[74] *Id*., p. 46.

[75] *Id*., p. 109.

As the Draft ARC notes, BVNA identified areas for improvement for five initiatives including: (1) one weather station was non-operational because tree growth obscured its solar panels; (2) one high-definition camera was non-operational due to a failure of the wireless service provider's router; (3) five sectionalizing devices that were in incorrect locations or had equipment issues; (4) discrepancies in pole inspection reports and photos for 25 of 313 locations; and (5) 105 out of 1,381 EVM locations that were inspected and were out of compliance.[76]

PG&E corrected the defects identified by BVNA,[77] but we also disputed some of the findings. With regard to the discrepancies in 25 pole inspection reports (Item 4), PG&E explained:

> We reviewed these 25 locations and partially or generally agree with BVNA's findings. We determined that the most common issue with the forms reviewed by BVNA (in 11 of the 25 locations) was that the field records created by the inspection software (app) contained prepopulated data that was incorrect — and not that the inspectors performed an inadequate or incorrect inspection — but that they failed to correct or update the prepopulated data. We are in the process of correcting the prepopulated data for the locations identified as well as performing any corrective actions that may be needed at the other locations. In addition, the app used by the inspectors on their mobile devices is being updated to provide the inspectors with a more efficient way to correct any inaccurate prepopulated data.[78]

With regard to the 105 EVM defects identified by BVNA (Item 5), PG&E demonstrated that only six were out of compliance.[79] Energy Safety agreed with PG&E's assessment

[76] Draft ARC, pp. 25-26.

[77] Draft ARC, p. 26.

[78] *PG&E Response to Final Independent Evaluator Report Concerning 2020 Wildfire Mitigation Plan Compliance*, submitted August 16, 2021, p. 7.

[79] *PG&E Response to Final Independent Evaluator Report Concerning 2020 Wildfire Mitigation Plan*, submitted August 16, 2021, pp. 4-6.

and thus out of the 1,379 EVM sites evaluated, less than 0.5% were out of compliance with EVM standards.[80]

In short, BVNA generally concluded that PG&E had complied with, and in many cases exceeded, its 2020 WMP initiative targets. Where BVNA identified issues and defects, PG&E promptly addressed them.

3. The Crowe Audit of Financial Spending (October 11, 2021)

On June 29, 2020, Energy Safety engaged Crowe LLC, an accounting firm to conduct an independent audit of wildfire mitigation expenditures associated with the 2019 and 2020 WMPs.[81] Crowe conducted a detailed review of PG&E's records and data request responses and in a report issued on October 11, 2021, did not make any negative findings.[82]

4. Energy Safety's Substantial Vegetation Management Audit (June 14, 2022)

Finally, on June 14, 2022, as required by statute[83], Energy Safety issued its Substantial Vegetation Management (SVM) Audit related to PG&E's 2020 WMP.[84] Energy Safety reviewed PG&E's 2020 WMP vegetation management-related initiatives as well as narrative statements in the 2020 WMP and determined whether PG&E was compliant or non-compliant with these initiatives or statements.[85] In addition to this review, the SVM Audit Report also included 12 corrective actions. PG&E provided a

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[80] Draft ARC, p. 29. The Draft ARC refers to seven sites out of compliance, citing PG&E's response. However PG&E's response referred to six locations that were out of compliance.

[81] Draft ARC, p. 38.

[82] Draft ARC, p. 38.

[83] Cal. Pub. Util. Code §8386.3(c)(5)(A).

[84] *Office of Energy Infrastructure Safety's Audit of PG&E's Substantial Vegetation Management Work in 2020*, issued June 14, 2022 (SVM Audit Report).

[85] Draft ARC, p. 33.

response including the corrective action taken and supporting documentation.[86] Based on its review of PG&E's response, Energy Safety concluded:

> After reviewing PG&E's response to the Corrective Actions, Energy Safety finds that PG&E sufficiently addressed nine of the 12 Corrective Actions. Despite having remaining insufficient Corrective Action responses, Energy Safety finds that PG&E substantially complied with the substantial portion of the vegetation management requirements in its 2020 WMP.[87]

IV. ADDITIONAL ANALYSIS PERFORMED AND INFORMATION REVIEWED BY ENERGY SAFETY

In addition to reviewing the compliance reports submitted by PG&E (*i.e.*, the QAL, QIU, and PG&E 2020 ARC), the results of its inspections, and the audit reports, Energy Safety also included additional data analysis in the Draft ARC and reviewed a report by PG&E's Independent Monitor. In this section of our comments, we review the: (1) Draft ARC risk prioritization analysis; (2) wildfire and risk reduction outcomes; (3) inspection and maintenance results; (4) wildfire outcomes; and (5) the Independent Monitor's Report.

A. Risk Prioritization Analysis

As a part of its 2020 WMP compliance review, Energy Safety reviewed the risk prioritization of PG&E's system hardening and vegetation management work.[88] This analysis is addressed below.

As a preliminary matter, however, we believe there may be an error in the Draft ARC analysis. The analysis in the Draft ARC is based on PG&E data response PG&E-

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[86] Draft ARC, p. 35.

[87] *Office of Energy Infrastructure Safety's Report on PG&E's Substantial Vegetation Management Audit*, issued September 23, 2022, p. 9 (emphasis added).

[88] The Draft ARC refers to "conductor replacement and undergrounding" which we understand to be system hardening. *See* Draft ARC, p. 39.

43895-E-384.[89] While we do not have Energy Safety's underlying analysis, based on our review of the narrative description and the data response, it appears that Energy Safety used the overall risk provided in this data response as a proxy for wildfire risk.[90] The overall risk score includes a number of components such as wildfire scores, reliability scores, PSPS scores and other information.[91] Without having access to Energy Safety's underlying analysis, we cannot fully confirm if there is an error in the Draft ARC methodology, but we believe this may explain some of the questions raised by Energy Safety regarding the risk ranking.[92] We would readily meet with the Energy Safety data analytics team to review the underlying analysis and address any potential errors.

1. System Hardening

Before discussing the Draft ARC's conclusions regarding our system hardening prioritization in 2020, it is important to understand exactly what the 2020 WMP stated with regard to system hardening prioritization. The Draft ARC states that the 2020 WMP indicated that PG&E's risk analysis was used to prioritize system hardening work, citing page 5-51 of the 2020 WMP.[93] This aspect of the Draft ARC requires some clarification and additional information. The language on page 5-51 indicated that wildfire risk ranking was used to "inform [PG&E's] system hardening prioritization approach."[94] A more detailed discussion of PG&E's system hardening prioritization was included on 2020 WMP pages 5-143 and 5-144. There, PG&E described in detail its risk prioritization approach, but also explained that other factors were considered in developing its system hardening plans:

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[89] Draft ARC, p. 40, n. 146 and p. 41, n. 150. This data request was propounded by Energy Safety on March 5, 2020 and responded to by PG&E on March 18, 2020.

[90] Draft ARC, p. 40.

[91] *See* PG&E-43895-E-384, subpart 5 (identifying the five categories included in the overall score).

[92] Draft ARC, p. 42

[93] Draft ARC, p. 39.

[94] PG&E Updated 2020 WMP, p. 5-51.

> Another factor influencing the current prioritization of System Hardening projects is an analysis of the resulting Electric Corrective (EC) tags identified in the course of the WSIP. PG&E has determined that there are locations where a high density of EC tags coincide with areas that also scored highly in the risk ranking described above. To drive efficiency, reduce cost, and reduce resource demands, PG&E decided to create System Hardening projects in these areas, even if they are not the highest scoring areas in the risk ranking.[95]

Thus, as the 2020 WMP made clear, there were other factors considered in developing PG&E's system hardening work plan in addition to risk. Notably, Energy Safety approved the 2020 WMP which included this description of our approach to system hardening prioritization.

The Draft ARC system hardening prioritization analysis concludes that close to 50% of PG&E's system hardening projects were completed in the highest risk areas (referred to in the analysis as "bins").[96] The Draft ARC notes that more total risk "may have been reduced" if PG&E had performed system hardening in lower ranked bins because these risk bins "contained more risk per circuit mile."[97] But the analysis does not undermine the fundamental conclusion that PG&E's 2020 system hardening work was risk informed and addressed high risk areas. Table 4 below underscores this conclusion demonstrating that more than 60% of PG&E's system hardening in 2020 was performed in Tier 3 HFTD areas and 100% of the work was performed in Tiers 2 and 3.

[95] PG&E Updated 2020 WMP, p. 5-144.

[96] Draft ARC, p. 43.

[97] Draft ARC, p. 43.

Table 4: 2020 System Hardening Work by HFTD Tier

Tier	Miles	Percentage
Tier 2	82.18	24.0%
Tier 2 and 3[98]	59.07	17.3%
Tier 3	200.73	58.7%
TOTAL	**341.98**	**100%**

2. Vegetation Management – Inspections

The Draft ARC also includes a prioritization analysis for vegetation management non-routine inspections. The Draft ARC analysis concludes that more than 60% of the non-routine inspections were on the highest risk segments and PG&E completed "90% of its non-routine [inspections] near segments that make up 60% of its distribution risk."[99] Similar to the prioritization of system hardening, the Draft ARC notes that more total risk may have been reduced if PG&E had performed more inspections on lower risk ranked segments because these risk bins contained "more risk per circuit mile."[100] But clearly PG&E's vegetation management inspections were focused on risk. In addition, it is notable that the 2020 WMP sections describing vegetation management inspections do not describe inspections as risk prioritized. While risk prioritization is important, it is not a 2020 WMP compliance issue.[101]

3. Vegetation Management – Projects

Finally, the Draft ARC includes a prioritization analysis of vegetation management projects. Here again, the Draft ARC concludes that "PG&E completed 88% of its non-routine [vegetation management projects] near risk segments making up the top

[98] System hardening projects that included miles in both Tier 2 and Tier 3.

[99] Draft ARC, p. 45.

[100] Draft ARC, p. 45.

[101] *See* PG&E Updated 2020 WMP, pp. 5-182 to p. 5-185 (describing detailed inspections for distribution and transmission), p. 5-190 to p. 5-191 (describing discretionary inspections).

40% of riskiest segments" but also notes that more total risk could have been reduced by working on lower risk ranked segments based on risk per circuit mile.[102] As with the system hardening and vegetation management inspections prioritization analyses, while the Draft ARC notes some areas for potential improvement, it clearly demonstrates that PG&E's vegetation management projects were focused on the highest risk areas.

B. Wildfire and Risk Reduction Outcomes

The Draft ARC includes several different metrics for evaluating wildfire and risk reduction outcomes. As a preliminary matter, it is important to highlight the Draft ARC comment that 2020 represented the "worst fire weather and greatest exposure" over the six-year period from 2015 to 2020.[103]

With regard to the 2020 WMP compliance evaluation, the Draft ARC notes "it is not enough to solely evaluate whether an electric corporation met its targets for implementing specific initiatives if ultimately the electrical corporation did not reduce the risk of catastrophic wildfires."[104] With regard to ignitions, the Draft ARC analysis indicates that normalized ignitions in PG&E's HFTD areas were down overall from 2019 and that while ignitions in Tier 3 areas increased slightly, ignitions in Tier 2 areas decreased more substantially.[105] The Draft ARC notes a "general downward trend in ignitions across PG&E's service territory, as well as in Tier 2 and Tier 3 HFTD areas specifically."[106]

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[102] Draft ARC, p. 46.

[103] Draft ARC, p. 57; *see also* p. 59, Figure 4 (variance in extreme fire weather highlighting 2020).

[104] Draft ARC, p. 57.

[105] Draft ARC, pp. 60-61.

[106] Draft ARC, p. 62.

For comparative purposes, it is helpful to consider ignitions across California. Table 5 summarizes the normalized ignition data presented in the utilities' ARCs which indicated general declines in Tier 2 and varying levels of increase in Tier 3[107]:

Table 5: Normalized Ignitions Based on ARC Analysis[108]

	Tier 2 (2019)	Tier 2 (2020)	Difference	Tier 3 (2019)	Tier 3 (2020)	Difference
PG&E	0.69	0.54	- 22%	0.42	0.43	+ 2%
SCE	0.60	0.46	- 23%	0.40	0.64	+ 60%
SDG&E	0.45	0.30	- 33%	0.24	0.51	+ 113%

The Draft ARC also reviewed wires down events and outage data and, in both of these areas, PG&E showed improvement between 2019 and 2020.[109]

Finally, the Draft ARC reviewed PSPS events in 2020. For all the PSPS metrics (*e.g.*, frequency, scope, duration, and customers impacted), PG&E showed "marked" improvement from 2019 to 2020.[110]

C. Inspections and Maintenance Repairs

The Draft ARC also reviewed the extent of PG&E's inspections in 2020, as well as maintenance tags that were repaired during 2020.[111] The Draft ARC indicates that PG&E fixed more maintenance issues than it found in 2020 for certain levels indicating that PG&E was able to repair outstanding pre-2020 tags.

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[107] PG&E recognizes that SCE and SDG&E may not agree with the normalized ignition data included in their respective ARCs. We did not perform an independent analysis of the normalized ignition data in the utilities' respective ARCs, nor by citing this data is PG&E validating it. Instead, we are citing the other utilities' data from Energy Safety's ARCs solely for context.

[108] Draft ARC, p. 61; SCE ARC, pp. 35-35; SDG&E Draft ARC, pp. 42-43.

[109] Draft ARC, pp. 65-68.

[110] Draft ARC, pp. 68-72.

[111] Draft ARC, pp. 72-74.

D. Wildfire Outcomes

The Draft ARC also included a discussion of wildfire outcomes from 2015 to 2020.[112] For PG&E, from 2019 to 2020, the acreage burned and structures damaged/destroyed decreased, but injuries and fatalities increased.[113]

E. Independent Monitor Findings

Finally, the Draft ARC relies heavily on a November 19, 2021, report prepared by PG&E's Independent Monitor in probation.[114] The Monitor Report addressed a number of different topics, including wildfire mitigation efforts. With regard to wildfire mitigation, the report covered the period from 2019 to 2021, which includes the 2020 compliance period at issue in the Draft ARC as well as periods outside of the compliance period. The Monitor Report discussed improvements that PG&E has made, as well as ongoing gaps in our wildfire mitigation efforts, and provided actionable feedback for PG&E going forward.

The Draft ARC quotes a number of statements from the Monitor Report.[115] Several of these quotes would benefit from some additional context, which is provided below:

- 2020 Audit Related to 41,000 Structures:[116] The Monitor Report references a self-report that we submitted on May 28, 2021, indicating that we were unable to locate pole test and treat records for 41,343 poles. Upon discovering this issue during a 2020 audit, PG&E notified the CPUC and immediately initiated corrective actions. All of the poles were visited by May 2021 and many of the poles were found to have been

[112] Draft ARC, pp. 75-79.

[113] The Draft ARC notes that PG&E's 2021 Q1 QDR did not include an estimate of the value of assets destroyed in 2020. *See* Draft ARC, p. 79. This is because an estimate was not available at that time. PG&E has provided updated estimates of the value of assets destroyed in 2020 in subsequent QDRs including the most recent Q3 2022 QDR.

[114] Draft ARC, pp. 79-82; *PG&E Independent Monitor Report of November 19, 2021*, filed November 23, 2021 (Monitor Report).

[115] Draft ARC, pp. 80-82.

[116] Draft ARC, p. 80.

inspected. We implemented process improvements to prevent recurrence and continue to work on improving our pole test and treat program.[117]

- 2020 Inspection Targets:[118] It is unclear from the Monitor Report which 2020 targets are being referred to. It is likely that these are the inspection targets that were missed as a result of the Hydroelectric Substation and Pole Inspection Self-Reports described in Section III.D above.

- Recordkeeping:[119] While the Monitor did note that it had observed "inconsistent data within PG&E's record systems," in the same section of the Monitor Report it was also explained that "[f]rom the beginning of the Monitor team's review of VM work, we have identified significant recordkeeping issues—which, to be fair, are often the result of decades of issues and conflicting systems, not merely recent developments or lack thereof."[120] The Monitor also noted in response to a specific recordkeeping issue that "PG&E made significant changes to its system in September 2019 . . . PG&E also collected aerial Light Detection and Ranging ("LiDAR") data in early 2020 to improve the location of its electric conductor segments" and "PG&E's technology team often fixes data issues, once identified, quickly."[121]

- Contractor Improvements:[122] The Draft ARC includes 2021 recommendations from the Monitor regarding ways to improve the quality of work performed by vegetation management contractors.[123] PG&E has implemented or is in the process of implementing many of these changes as described in our 2022 WMP.[124] In addition, the same section of the Monitor Report noted PG&E has "significantly expanded its commitment to field monitoring work through in-house Vegetation Management Inspectors (VMIs) and work verifiers. Both programs have generated actionable feedback in 2021 that PG&E used to clarify and materially improve its procedures."

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[117] *Letter from Lise Jordan to Nika Kjensli, Program Manager at the CPUC*, dated May 28, 2021.

[118] Draft ARC, p. 80.

[119] Draft ARC, p. 81.

[120] Monitor Report, p. 27.

[121] *Id.*

[122] Draft ARC, p. 81.

[123] Monitor Report, pp. 28-29.

[124] Revised 2022 WMP, pp. 768-778 (describing Quality Assurance and Quality Verification programs); pp. 779-783 (vegetation management training); pp. 782, 902 (describing new technology tools).

- Maintenance Tags:[125] The Monitor Report recognized that PG&E has "improved in addressing high priority tags" but that there was a high volume of outstanding tags that required a "clear plan" that PG&E would need to "effectively execute."[126] In our 2022 WMP, we have included a plan to address the maintenance backlog and continue driving down our wildfire risk. In addition, as the Draft ARC points out, in 2020, we fixed more of the high and moderate risk tags than we identified during the year, effectively reducing the backlog and reducing overall risk.[127]

V. STANDARD FOR WMP COMPLIANCE EVALUATION

Having reviewed the background of PG&E's 2020 WMP (Section III) and the additional information cited in the Draft ARC (Section IV), we now begin to address the issue of whether PG&E substantially complied with its 2020 WMP. Before addressing the specifics of our 2020 WMP compliance, it is important to understand the standard that should be used for determining compliance. In this section of our comments, we describe the original WMP compliance standard adopted by the CPUC in November 2020, during the compliance period, and the Draft ARC's newly announced compliance standard.

A. The CPUC-Approved Compliance Standard for 2020 WMPs

When PG&E submitted its 2020 WMP on February 28, 2020, there were no adopted compliance standards. Instead, included in the Administrative Law Judge (ALJ) Ruling issued on December 16, 2019, adopting the 2020 WMP templates and related materials were metrics "for evaluation of utility implementation of WMPs."[128] However,

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[125] Draft ARC, p. 82.

[126] Monitor Report, p. 35.

[127] Draft ARC, p. 74, Tables 18 and 19.

[128] *Administrative Law Judge's Ruling on Wildfire Mitigation Plan Templates and Related Material and Allowing Comment,* issued on December 16, 2019 in Rulemaking 18-10-007 (ALJ Ruling), p. 4. The Commission was required by statute to adopt compliance standards by no later than December 31, 2020. *See* Pub. Util. Code §8389(d)(3).

the ALJ Ruling also acknowledged that "[t]he metrics are in development and will continue to evolve . . .."[129]

On November 19, 2020, eight months after PG&E submitted its WMP and less than two months before the end of the 2020 compliance period, the CPUC issued Resolution WSD-012 adopting 2020 WMP compliance standards.[130] Resolution WSD-012 described a two-part compliance process "to oversee electrical corporation compliance with wildfire safety per § 8386.3(c)."[131] First, during 2020, Energy Safety conducted an ongoing compliance assessment to evaluate "electrical corporations' implementation of WMPs through field inspections, audits, Independent Evaluator reports, customer complaints and other regular reporting submissions as requested by [Energy Safety]."[132]

Second, after the 2020 compliance period ended, Energy Safety conducted an Annual Compliance Assessment to "assess an electrical corporation's compliance with its WMP through the review of the electrical corporations' annual compliance reports, review of the Independent Evaluators' annual reports, and assessment of whether each electrical corporation substantially complies with its WMP during the prior compliance period."[133]

In an attachment to Resolution WSD-012, Energy Safety provided a more detailed discussion concerning its approach to compliance. Energy Safety explained:

> [Energy Safety] defines compliance as the successful implementation of the electrical corporation's previously stated narratives, actions, targets, outcome metrics and objectives in the approved WMPs, including supporting documentation. [Energy Safety] aims to ensure WMP

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[129] *Id*.

[130] Resolution WSD-012 issued November 19, 2020.

[131] Resolution WSD-012, p. 6.

[132] *Id.*

[133] *Id*., p. 7.

> implementation through the authorities and requirements outlined in Public Utilities Code §§ 8386 – 8389.
>
> Two objectives for [Energy Safety] include:
>
> - assessing electrical corporations' implementation of initiatives identified in their approved WMPs; and
> - tracking outcomes of the reduction of wildfire risks and Public Safety Power Shutoff (PSPS) events in order to assess the effectiveness of the risk reduction strategies in electrical corporations' approved WMPs to mitigate areas with the highest risk.[134]

In other words, Energy Safety indicated that annual compliance would focus on: (1) implementation of initiatives; and (2) tracking outcomes for the reduction of wildfire risks and PSPS events in order to assess the effectiveness of risk reduction strategies.

To be clear, PG&E and the other utilities have consistently explained in comments to both Energy Safety and the CPUC that "the use of outcome metrics" is not appropriate to assess a utility's compliance with its WMP.[135] The utilities have indicated that compliance with a WMP "is distinct from the question of how observed risk events, annual outcomes, or yearly changes in risk metrics should inform future WMP development and evaluation" and that "[o]utcome metrics should not be used as a vehicle to second guess initiatives already vetted and approved, and upon which the utilities rely to understand their obligations."[136] Thus, PG&E's discussion of outcome metrics in this section and in subsequent sections of these comments should not be interpreted as supporting or endorsing the use of these metrics to evaluate WMP compliance. Instead, our discussion is intended to demonstrate that even under the compliance criteria described in Resolution WSD-012 or in the Draft ARC, which includes in part outcome metrics, PG&E substantially complied with its 2020 WMP.

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[134] *Id*. Attachment 1, p. 3 (footnotes omitted).

[135] *Joint Comments of Southern California Edison Company, San Diego Gas and Electric Company, and Pacific Gas and Electric Company on Draft Resolution SPD-7*, Submitted to the CPUC on December 5, 2022, pp. 2-3.

[136] *Id*., p. 3.

B. Energy Safety's Newly Announced Compliance Standard for 2020 WMPs

The Draft ARC was issued on December 5, 2022, more than two years after the issuance of Resolution WSD-012 (November 19, 2020) and almost two years after the end of the 2020 WMP compliance period (December 31, 2020). Despite the fact that Energy Safety had proposed—and the CPUC adopted—compliance evaluation criteria more than two years earlier, it is notable that Resolution WSD-012 is never discussed in Section 3.0 of the Draft ARC (describing the ARC compliance framework). Instead, the Draft ARC adopts a new evaluation framework based on three questions: (1) did the utility complete its WMP initiatives; (2) did the utility achieve its stated objectives for the compliance period; and (3) did the utility's conduct achieve wildfire risk reduction.[137]

For the first question (whether a utility met its stated initiative targets), Energy Safety evaluates each quantitative and qualitative WMP target with a focus on the quality of initiative implementation, any failure to meet an initiative target, and the rationale for any failure to meet a target. For the 2020 WMP only, Energy Safety also evaluates whether the conditions established for conditional approval were met.[138] The Draft ARC also indicates that Energy Safety looks at "systematic issues that may have caused underperformance" but it is unclear whether these apply only to missed initiative targets or to something else.[139] In addition, what constitutes a "systematic issue" is not defined.

For the second question (whether a utility met its stated objectives), Energy Safety evaluates whether a utility achieved its 2020 WMP objectives. In addition, the Draft ARC again refers to systematic issues that may have caused underperformance.[140]

Finally, for the third question (was utility performance consistent with risk reduction), Energy Safety evaluates outcome metrics using a trend analysis from 2015 to

[137] Draft ARC, p. 7.

[138] Draft ARC, pp. 7-8.

[139] Draft ARC, p. 8.

[140] Draft ARC, p. 8.

2020, normalized for weather and fuel conditions.[141] Energy Safety further evaluates how the utility "prioritized implementation of WMP initiatives" so that initiatives are "deployed in the areas of highest risk to buy down as much risk as possible."[142] And Energy Safety conducts a "holistic evaluation" considering various sources "to bring to light systematic failings of the electrical corporation that may hinder its ability to reduce catastrophic wildfires. Such failings could contribute to increased risk on the system even if WMP targets are achieved."[143]

While the Draft ARC's new evaluation framework has some similarities to the Resolution WSD-012 criteria, there are important differences. First, throughout the Draft ARC criteria there is discussion of "systematic issues" or "systematic failings." Indeed, at the end of the Draft ARC, systematic issues are established as their own criteria for WMP compliance evaluation (*i.e.*, a fourth evaluation criteria).[144] "Systematic issues" and "systematic failings" are terms that were never used in Resolution WSD-012 nor are they found in the relevant statutes. In addition, the terms are never defined, even though one of the concerns parties had when Resolution WSD-012 was adopted was that failure at that time of the compliance criteria to define key terms—a failure the Commission remedied before issuing Resolution WSD-012.[145]

Second, under the new criteria, Energy Safety evaluates prioritization of work in the highest risk areas. However, this may not be the criteria used by a utility for all of its WMP initiatives, and often times for good reason. There may be times when work can be done more efficiently when it is performed concurrently on the same facilities or there can be greater overall risk reduction by performing more work in areas that are not the

[141] Draft ARC, p. 8.

[142] Draft ARC, p. 9.

[143] Draft ARC, p. 9.

[144] Draft ARC, p. 94.

[145] Resolution WSD-012, p. 5.

highest risk ranked areas. This is not to say that risk prioritization is not important because it is. However, there are reasons why initiatives are not solely focused on the highest risk areas. When a utility defines an initiative in its WMP, it can describe its approach to work prioritization, which may consider multiple factors. This is exactly what PG&E did, for example, for system hardening as described above in Section IV.A.1. To the extent a WMP describes a prioritization approach for a specific program, and the WMP is approved by Energy Safety, performance should be measured by on the prioritization approach described. Moreover, prioritization of initiative work based solely on risk ranking was not discussed in Resolution WSD-012.

Finally, the new criteria are subjective. For example, the Draft ARC refers to "conflicting/inconsistent documentation, poor communication practices, or substandard quality control practices."[146] These issues appear to go well beyond what is included in the 2020 WMP and introduce subjective evaluation that may produce inconsistent results. It can also lead, as will be described more in Sections VII and VIII below, to focusing on certain specific instances to demonstrate a "systematic issue" while missing the larger context of circumstances or programs where these types of situations have not occurred. While the Resolution WSD-012 criteria are focused on specific, demonstrable compliance, such as initiative targets and metrics achieved, the Draft ARC's newly announced standard introduces a number of subjective criteria not previously identified.

VI. THE NEWLY ANNOUNCED COMPLIANCE STANDARD SHOULD NOT BE USED FOR THE 2020 WMP

The Draft ARC's newly announced compliance standard should not be applied to determine 2020 WMP compliance. First, the new compliance standard was not announced for PG&E until December 2022, almost two years after the end of the 2020

[146] Draft ARC, p. 8.

compliance period. It is not appropriate to apply a new standard to compliance activities that ended two years earlier.

Second, the newly announced compliance standard was not approved by the CPUC, as required by California law. Section 8389(d)(3) requires the CPUC, after consultation with Energy Safety, to approve a WMP compliance process by December 1, 2020, and annually thereafter. The CPUC adopted Resolution WSD-012 in November 2020. The standards announced in that resolution are applicable to 2020 WMP compliance. There is no citation in the Draft ARC to any subsequent CPUC decision superseding Resolution WSD-012 for the 2020 WMP compliance period, nor did the CPUC review and approve the standards announced in the Draft ARC. The very purpose of annual CPUC approval of the compliance standards is so that if the standards change for future WMPs, those standards are clearly announced and subject to public comment. That is not what occurred for the standard announced in the Draft ARC.

Third, the Draft ARC adds compliance criteria that are well outside the statutory framework. For example, the Draft ARC indicates that "systematic issues" need to be evaluated and adds systematic issues as a criteria for WMP compliance.[147] The WMP statutory framework requires a compliance review with an approved WMP (*i.e.*, did the utility satisfy the stated commitments/targets in its WMP), not a more undefined review of organizational issues.[148] "Systematic issues" that exist within an organization, especially an organization as complex as a utility serving millions of electric and gas customers, have often developed over years or decades and while it is critical to identify and address these issues, it often takes more than a single year to do so. Nowhere in the statutory language did the Legislature specify that a utility must address all systematic issues in its WMP, nor is that a statutory criteria for compliance.

[147] Draft ARC, pp. 7, 94.

[148] Cal. Pub. Útil. Code §8386.3(c)(4).

Fourth, the newly announced compliance standards in the Draft ARC are vague. Section 6 of the Draft ARC includes four elements that Energy Safety considered in making its compliance determination: (1) completion of 2020 initiatives; (2) achieving 2020 WMP objectives; (3) reducing wildfire risk; and (4) systematic issues. The Draft ARC does not give any weighting for these four criteria, nor is it clear how the criteria are considered. Specific criteria are not provided for each of these elements. As indicated above, the term "systematic issues" is vague and it is unclear what kind of issues rise to this level.

Fifth, given this vagueness, the new compliance standard can and has been subjectively applied. For example, in SDG&E's Draft ARC, there is an analysis of whether SDG&E substantively completed certain missed initiative targets.[149] There is a similar, but shorter, analysis in SCE's ARC, but no such analysis appears in PG&E's Draft ARC.[150] Moreover, PG&E's Draft ARC indicates that PG&E missed targets that were of "high consequence – namely inspections."[151] And yet, the Draft ARC never explains how specific types of inspections are determined to be "high consequence.". Notably, the pole inspections missed by PG&E and referenced by the ARC were enhanced inspections, but all the poles at issue had already received inspections that were entirely consistent with the CPUC's GO 165 requirements.[152] It is unclear why PG&E missing a small amount of inspections that were above and beyond GO 165 requirements (similar to other utilities who were found to be compliant) should be the basis for a determination of non-compliance. In Section VII below, we outline in more detail the inconsistency and subjectiveness of the 2020 WMP standard based on the new

[149] SDG&E Draft ARC, pp. 60-61.

[150] SCE Draft ARC, pp. 54-55; Draft ARC, p. 87.

[151] Draft ARC, p. 87.

[152] Pole Inspection Self-Report, p. 4.

compliance criteria. Because the new compliance standard is inherently subjective, it has resulted in inconsistent application.

While we strongly believe that Energy Safety should not use the new compliance standards, in Sections VII and VIII below we apply both the original compliance standard and the newly announced compliance standard to PG&E's 2020 WMP performance and demonstrate that under either standard, PG&E should be found to be in substantial compliance.

VII. PG&E SATISFIED THE 2020 CPUC-APPROVED COMPLIANCE STANDARD

The Resolution WSD-012 compliance standard approved by the CPUC in November 2020 includes two key elements: (1) successful implementation of initiatives in an approved WMP; and (2) outcomes related to the reduction of wildfire risk and PSPS events.[153] These two elements are addressed below.

A. PG&E Substantially Complied with its 2020 WMP Initiative Targets

As explained above in Section III.C.2, PG&E's 2020 WMP included 134 initiative targets, the vast majority of which were met or exceeded, as confirmed by the Independent Evaluator.[154] In some cases, the targets were substantially exceeded, such as transmission sectionalizing devices which facilitate reducing the impact of PSPS events, which was exceeded by 135% and system hardening which was exceeded by 55%. Below, we address each of the initiative targets that was missed and explain why these missed targets "did not materially hinder" PG&E's "ability to mitigate its wildfire risk"[155] and thus we substantially complied with the 2020 WMP.

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[153] Resolution WSD-012, Attachment 1, p. 3. Please also see Section V.A above explaining that PG&E does not endorse outcome-based metrics for determining WMP compliance but is including a discussion of these metrics because the Draft ARC relies upon them.

[154] *See* Section III.E.2 regarding Independent Evaluator assessment.

[155] Substantially or materially hindering the ability to mitigate wildfire risk was the criteria used in the SCE and SDG&E ARCs. *See* SCE ARC, p. 54; SDG&E Draft ARC, p. 62.

Weather Stations: In our 2020 WMP, our initiative target was to install 400 weather stations.[156] As indicated in our Weather Station Self-Report, we achieved 94.5% of our target.[157] Notably, for SDG&E, the Draft ARC indicates that SDG&E's completion "[o]n average" of 96% of certain missed targets, and in one case 89% of a missed target, was substantial completion.[158] Applying this same standard to PG&E, our installation of 94.5% of our targeted weather stations should also be considered substantial competition. Moreover, in 2018 and 2019, we installed 627 weather stations. Combined with the 378 weather stations we installed in 2020, we had more than a thousand weather stations installed by the end of 2020. By 2021, we had a total of more than 1,300 weather stations installed.[159] There is no evidence that the 22 missed weather stations materially hindered PG&E's ability to mitigate wildfire risk or significantly impacted our situational awareness. In addition, our self-report included corrective actions which were subsequently implemented and Energy Safety's NOV indicated that missing this target was a minor risk.

Distribution Pole Inspections: In our 2020 WMP, our initiative target was to perform enhanced distribution pole inspections on 100% of the poles in Tier 3 and 33% of the poles in Tier 2.[160] As indicated in our Pole Inspection Self-Report, in 2020, we missed enhanced inspections on 3,296 poles in Tier 3 HFTD areas. However, we inspected approximately 99% of the poles scheduled for enhanced inspections in 2020 and the missed poles had been subject to the appropriate GO 165 inspections and had up-to-date inspection records.[161] Moreover, all of the missed poles were inspected in 2021.

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[156] Q4 2020 QIU, Row 13; PG&E 2020 WMP, p. 5-68.

[157] Weather Station Self-Report, p. 2 (378/400 = 94.5%).

[158] SDG&E Draft ARC, p. 61.

[159] PG&E Revised 2022 WMP, p. 405

[160] Q4 2020 QIU, Row 71; PG&E 2020 WMP, p. 5-156.

[161] Draft ARC, p. 24; Pole Inspection Self-Report, p. 4.

More importantly, based on our available data, we did not identify any ignitions associated with the missed poles in 2020. Given the relatively small number of poles missed, the fact that the poles had been inspected under GO 165, and that based on our available data the missed poles were not associated with any ignitions in 2020, missing this target by approximately 1% did not materially hinder PG&E's ability to mitigate wildfire risk, similar to SCE and SDG&E, who were both found to be compliant. In addition, our self-report included corrective actions that were subsequently implemented. In its NOV, Energy Safety indicated this was a moderate risk.

Substation Inspections: In our 2020 WMP, our initiative target was to perform enhanced inspections annually on all Tier 3 substations and once every three years for substations in Tier 2.[162] As indicated in our Hydroelectric Substation Self-Report, we missed enhanced inspections on 22 hydroelectric substations in Tier 3 out of a total Tier 3 substation population of 65 (approximately 34%).[163] As soon as this issue was identified, we promptly conducted these substation inspections and completed them by the end of March 2021. We addressed all high priority tags immediately and performed work on the category B maintenance tags by June 2021. There were no wildfires related to these hydroelectric facilities in 2020 and, as indicated in our self-report, we implemented corrective actions. Although these inspections should have been completed earlier, we do not believe that this delay materially hindered PG&E's ability to mitigate wildfire risk. In addition, our self-report included corrective actions which were subsequently implemented. In its NOV, Energy Safety indicated this was a moderate risk.

Capacitor Maintenance and Replacement: In the 2020 WMP, our initiative target was to: (1) test and inspect capacitor banks with any repairs completed by June 1; and (2) start a pilot program to review all outages as a result of fires due to capacitor bank

[162] Q4 2020 QIU, Row 87; PG&E 2020 WMP, p. 5-172.

[163] The final numbers of substation inspections conducted and inspections missed were provided in the *Letter from Debbie Powell to Caroline Thomas Jacobs and Leslie Palmer*, dated May 20, 2021.

failures.[164] We completed the first part of this target by inspecting approximately 11,400 capacitors and performing all repairs before June 1. For the second part of this target, we initiated the pilot program to investigate equipment failures that resulted in ignitions but the associated engineering studies of system capacity needs for this equipment were ongoing at the end of 2020 so this initiative was listed as "in progress." Not completing the pilot study in 2020 did not materially hinder our ability to mitigate wildfire risk.

Pole Loading Assessments: In our 2020 WMP, our initiative target was to perform approximately 230,000 pole loading assessments in Tiers 2 and 3.[165] In 2020, we completed a pole loading analysis on over 160,000 poles, all of which are considered the highest risk poles either due to the pole characteristics or location (i.e., located in an HFTD area). This fell short of the 230,000 annual target as PG&E did not anticipate the huge volume of poles that our internal estimating teams would be analyzing. In addition, we switched vendors and refined quality standards, which slowed down the evaluation process in 2020. We do not believe that falling short of this initiative target materially impacted our ability to mitigate wildfire risk given the significant amount of work we accomplished.

Remote Grids: In our 2020 WMP, our initiative target was to deploy four to eight initial remote grid sites to validate use cases, design standards, deployment processes and commercial arrangements and deliver recommendations for scale-up.[166] The primary objectives of learning through the deployment of actual projects was achieved and five Remote Grid sites were in the advanced stages of deployment as of March 2021 (when the QIU was submitted). The primary delays were a result of permitting constraints associated with sensitive species. We do not believe that falling short of this initiative

[164] Q4 2020 QIU, Row 36; PG&E 2020 WMP, p. 5-114.

[165] Q4 2020 QIU, Row 56; PG&E 2020 WMP, p. 5-135. The initiative target also includes a pole loading assessment rate for 2021-2024.

[166] Q4 2020 QIU, Row 47; PG&E 2020 WMP, p. 5-19.

target materially impacted our ability to mitigate wildfire risk. We also note that SDG&E failed to meet one of its initiative targets related to the Whole House Generator Program by 75% due to permitting delays.[167]

Patrol Inspections – Distribution: In our 2020 WMP, our initiative target included two parts: (1) continue to implement the patrol inspection program; and (2) pilot a paperless digital (mobile) patrol inspections protocols and records.[168] We completed the first part by conducting approximately 1.638 million units of overhead distribution patrols and projects. This represents approximately 445,000 HFTD Tier 2 poles and approximately 1.193 million poles in non-HFTD areas. For the second part of the initiative target, we are actively working on programs to digitize our records, but this process is taking time and cannot be completed in a year.[169]

Patrol Inspections – Transmission: In our 2020 WMP, our initiative target included two parts: (1) continue to implement the patrol inspection program; and (2) pilot a paperless digital (mobile) patrol inspections protocols and records.[170] We completed 150,725 units of overhead transmission patrols. This represents 33 percent of all HFTD Tier 2 poles and 20 percent of all non-HFTD poles. For the second part of the initiative target, we are actively working on programs to digitize our records, but this process is taking time and cannot be completed in a year.[171]

PSPS Service Restoration: In our 2020 WMP, we adopted a goal of conducting safety patrols and restoring service to 98 percent of PSPS-affected customers within 12

[167] SDG&E Draft ARC, p. 61.

[168] Q4 2020 QIU, Row 83; PG&E 2020 WMP, p. 5-167.

[169] *See* 2021 Revised WMP, p. 632.

[170] Q4 2020 QIU, Row 84; PG&E 2020 WMP, p. 5-168.

[171] *See* 2021 Revised WMP, p. 632.

daylight hours of the weather "all-clear" declaration.[172] In the Draft ARC, Energy Safety determined we substantially complied with this initiative target.[173]

Initiative Targets Subject to Change Orders: Two of the initiative targets that PG&E missed – Partial Voltage Detection and Sensor IQ Pilot – were the subjects of approved change orders. "Energy Safety does not consider initiatives with approved change orders to be missed targets."[174]

Items that are Not Initiative Targets: The Draft ARC also mentions two additional items that were not initiative targets. First, the Draft ARC references a statement in PG&E's 2020 WMP regarding working with the other utilities on a targeted tree species program and infers this was a missed initiative target.[175] However, this was not one of PG&E's 2020 WMP initiative targets. Even if it was, PG&E indicated in its response to the 2020 SVM Audit that SCE had started its own separate study in 2020, PG&E started its internal work in 2020, and that since 2020 the utilities have been working together to benchmark effective enhanced clearances.[176] Thus, even if this was an initiative target, which it is not, it should be deemed substantially complete.

Second, the Draft ARC refers to a single sentence in the 2020 WMP describing LiDAR inspections revealing "patterns and risks" and again appears to infer that this was an initiative target.[177] The WMP reference is describing how LiDAR can be used, it is not an initiative target.[178] Because PG&E could not produce evidence that it had used LiDAR to identify patterns in 2020 does not mean that an initiative target was missed.

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[172] Q4 2020 QIU, Row 129; PG&E 2020 WMP, p. 4-1.

[173] Draft ARC, p. 87, n. 208.

[174] Draft ARC, p. 87, n. 208.

[175] Draft ARC, p. 49, n. 158.

[176] *PG&E Response to SVM Audit Corrective Plan*, dated August 15, 2022, p. 15.

[177] Draft ARC, p. 53.

[178] PG&E 2020 WMP, p. 5-188.

More importantly, neither of these two non-initiative issues rise to the level of materially hindering our ability to mitigate wildfire risk.

Finally, it is worth reiterating that all the utilities missed some of their WMP initiative targets. Missing a target does not *per se* mean that a utility failed to substantially comply with its 2020 WMP. Energy Safety determined that SCE and SDG&E substantially complied with their respective 2020 WMPs because the missed targets "did not materially hinder" the utility's "ability to mitigate wildfire risk."[179] The same is true for PG&E, as demonstrated above.

The 2020 WMP was only the second WMP submitted by PG&E and, since it was submitted, we have been on a path toward continuous improvement including risk modeling, planning, and mitigation execution. While there are lessons to learn and areas to improve from the 2020 WMP, PG&E successfully implemented a substantial number of initiatives that demonstrate substantial compliance.

B. The Outcomes Support a Finding of Compliance

PG&E's performance in 2020 demonstrates that we substantially complied with the 2020 WMP. First, as the Draft ARC explains, key metrics related to wildfire risk demonstrated substantial improvement in 2020 as compared to 2019 including:

- Tier 3 normalized ignitions had a slight 2% increase;
- Tier 2 normalized ignitions decreased by approximately 22%;
- Normalized wires down events for distribution and transmission combined decreased by 54%;
- Normalized outage events for distribution and transmission combined decreased by 35%; and,
- Total vegetation contact events for distribution and transmission combined decreased by 63%.[180]

[179] *See e.g.* SDG&E Draft ARC, p. 62.

[180] Draft ARC, pp. 61-68.

These metrics demonstrate the significant risk reduction that occurred in 2020. The PSPS event metrics for 2020 also demonstrate progress:

- Normalized frequency of PSPS events was down approximately 37%;
- Normalized scope of PSPS events was down approximately 88%;
- Normalized duration of PSPS events was down approximately 19%;
- Normalized infrastructure outage customer-hours due to PSPS was down 57%; and,
- Normalized number of customers impacted by PSPS was down 77%.[181]

Finally, as the Draft ARC indicates, other outcomes in 2020 include a decrease in acreage burned and a decrease in damage and destruction to structures. However, there was an increase in injuries and fatalities in 2020 as compared to 2019.[182] To be clear, we are not in any way minimizing the injuries or loss of life that occurred in 2020. Our stand is that catastrophic wildfires shall stop, that no individual ever be injured, and that there be no loss of life as a result of a catastrophic wildfire. We will continue to innovate and improve until our stand is achieved.

When reviewing metrics and outcomes for 2020, there are two additional factors that are critical to keep in mind. First, as the Draft ARC notes, the 2020 wildfire season was the "worst fire weather and greatest exposure" over the six-year period from 2016 to 2020.[183] In the face of this kind of climate-driver weather pattern, the progress we made in 2020 in reduced ignitions, wires down events, outages, vegetation contact, and PSPS events is important.

Second, as Energy Safety noted in the ARCs for SCE, outcomes can often be a matter of chance:

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[181] Draft ARC, pp. 69-71. Please note that these percentages were based on the graphs in the Draft ARC which did not include exact numbers so the percentages are approximations based on the information available in the graphs.

[182] Draft ARC, pp. 76-78.

[183] Draft ARC, p. 57.

> Of the ignitions that did occur, the severity of outcomes was generally reduced in 2020. However, given that the number of ignitions increased, as did the acres burned, improved structural damage and loss of life outcomes could be based on chance more so than any actions taken by SCE. Factoring in the historical and potential future impacts of fluctuations in extreme weather patterns due to climate change, the increase in ignitions underscores the importance of effective wildfire mitigation planning and execution of mitigation efforts.[184]

Energy Safety made a similar comment for SDG&E:

> However, given that the number of normalized ignitions in Tier 3 HFTD areas (i.e., areas of extreme wildfire risk) spiked in 2020, the fact that there was no structural damage or loss of life could be a function of favorable circumstances (i.e., weather, fuels conditions, and location at the time of ignition). Energy Safety notes that it only takes one ignition to occur under adverse conditions to manifest a catastrophic wildfire of significant consequence.[185]

We are committed to reducing wildfire risk on our electrical system, but we also recognize as Energy Safety indicated that there is a chance that any ignition can become a catastrophic wildfire.

VIII. PG&E SATISFIED THE NEWLY ANNOUNCED COMPLIANCE STANDARD

The Draft ARC's newly announced compliance standard includes four elements: (1) completion of 2020 initiatives; (2) achieving 2020 WMP objectives; (3) reducing wildfire risk; and (4) systematic issues. There is some overlap between the CPUC-approved standard discussed in Section VII above and the newly announced standard. For brevity, in this section we will try to reference issues that have been discussed above rather than repeating the discussion. However, there are several new issues that we address below.

[184] SCE ARC, p. 60 (emphasis added).

[185] SDG&E Draft ARC, p. 67 (emphasis added).

A. Completion of 2020 Initiatives

As we explained in Section VII.A above, PG&E substantially complied with its 2020 WMP initiative targets. However, the Draft ARC includes several statements with regard to 2020 WMP initiative completion that require a response.

First, the Draft ARC concludes in a single sentence that "PG&E failed to meet several qualitative and quantitative targets in its 2020 WMP."[186] However, the Draft ARC does not state that a utility must meet every initiative targets to be in compliance. To the contrary, all the utilities missed initiative targets. For example, in SDG&E's Draft ARC, Energy Safety found that SDG&E missed 12% of its targets.[187] However, Energy Safety concluded that certain targets were "substantively completed" and that the targets that were not met "did not materially hinder SDG&E's ability to mitigate its wildfire risks . . .."[188] SCE missed 6% of its initiative targets but Energy Safety concluded that missing these targets did not hinder SCE's ability to mitigate wildfire risk.[189] PG&E missed 6.7% of its initiative targets.[190] As demonstrated in Section VII.A above, these missed targets did not materially hinder PG&E's ability to mitigate wildfire risk.

Second, the Draft ARC states that PG&E had conflicting information across its reports (*i.e.*, QAL, QIU, and PG&E 2020 ARC).[191] These alleged conflicts are addressed above in Sections III.C.3 (reporting discrepancies) and III.D (self-reports). We also note that, based on their ARCs, both SCE and SDG&E had data discrepancies in their 2020 compliance reporting. Some minor reporting discrepancies are likely to occur for all

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[186] Draft ARC, p. 87.

[187] SDG&E Draft ARC, pp. 60-61.

[188] SDG&E Draft ARC, p. 62.

[189] SCE ARC, pp. 54-55.

[190] Based on the nine missed targets described above in Section VII.A (9/134 = 6.7%). This does not include the two initiative targets subject to Change Orders because Energy Safety does not consider these missed. *See* Draft ARC, p. 87, n. 208. This also does not include items described in Section VII.A that were not initiative targets.

[191] Draft ARC, p. 87.

utilities, including SCE[192] and SDG&E[193] who were both found compliant, given the vast amount of WMP data requested by Energy Safety and other stakeholders and that these discrepancies should not be the basis for a determination of non-compliance.

Third, the Draft ARC references the misreported weather stations. This is addressed above in Sections III.D and VI.A demonstrating these did not materially hinder PG&E's ability to mitigate wildfire risk and that PG&E immediately took corrective action to address this situation. Notably, Energy Safety's NOV found this was a minor risk.

Fourth, the Draft ARC refers to PG&E's missed inspection targets as being of "high consequence."[194] The two inspections referenced are the hydroelectric substations and pole inspections. The Draft ARC does not explain why these missed inspections are now considered high consequence when they were designated as "moderate risk" in Energy Safety's NOVs issued in December 2021. While we acknowledge the importance of these inspections, we explain above in Section VII.A why these missed inspections did not materially hinder our ability to mitigate wildfire risk, similar to SCE and SDG&E who were both found compliant. In addition, during the 2020 WMP compliance period we made substantial improvements in our inspections. Our efforts included conducting a secondary review of all field inspection findings by a centralized gatekeeper[195] and verifying our inspectors' work through their supervisors or through representative sampling.[196] In addition, our Internal Audit and Electric Quality Management departments performed further representative sampling, field visits, and interviews to

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[192] SCE ARC, Table 13, p. 31.

[193] SDG&E Draft ARC, Table 12, pp. 35-36.

[194] Draft ARC, p. 87.

[195] PG&E 2020 Updated WMP, p. 5-170.

[196] PG&E 2020 Updated WMP, p. 5-170.

improve the consistency of our inspections.[197] In 2020, we completed approximately 2,500 audits.[198]

Fifth, the Draft ARC refers to the quality and functioning of mitigation work performed by PG&E, citing weather stations, high-definition cameras, and sectionalizing devices as examples. The weather station that was not operating properly was one of 51 inspected by the Independent Evaluator and it was not functioning because tree growth nearby obscured its solar panels.[199] The one high definition camera—out of 32 inspected—was not working "due to failure of the wireless service provider's router."[200] For the five sectionalizing devices out of 100 inspected, two were not located at the exact coordinates indicated in PG&E's records, two had bird guards out of position, and one had other workmanship issues.[201] The five sectionalizing device issues identified were remedied.[202] These are not issues that materially hindered PG&E's ability to reduce wildfire risk.

Sixth, the Draft ARC refers to risk prioritization of EVM in 2020.[203] We acknowledge that our EVM program needed to be more focused on the highest risk-ranked circuits and made significant changes in 2021 and 2022 so that 98% and 99% (through September) of the EVM work performed in those years was on the highest risk ranked circuits.[204] However, even though PG&E's 2020 EVM work was not on the highest risk ranked circuits, the vast majority of EVM work was performed in Tier 2 and

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[197] PG&E 2020 Updated WMP, p. 5-170.

[198] PG&E 2021 WMP, p. 721.

[199] Draft ARC, p. 25.

[200] Draft ARC, p. 25.

[201] Draft ARC, p. 25; Independent Evaluator Report, p. 15.

[202] *PG&E Response to Final Independent Evaluator Report Concerning 2020 Wildfire Mitigation Plan Compliance*, submitted August 16, 2021, p. 8.

[203] Draft ARC, pp. 87-88.

[204] Enhanced Oversight and Enforcement Process, 90-Day Report, submitted October 31, 2022, p. 8.

Tier 3 HFTD areas, similar to SCE and SDG&E, who were both found compliant. As Energy Safety's EVM Audit indicated, work was performed on high risk circuits (although not exclusively the highest risk ranked).[205] More importantly, PG&E explained in its approved 2020 WMP that a number of factors would determine how EVM work was scheduled, not just risk ranking:

> In 2020, PG&E plans to work approximately 1,800 additional circuit miles on both distribution lines in HFTDs, dependent on factors such as resource availability, vegetation density, topography, access and environmental considerations. As PG&E addresses the challenges that come with implementing an evolving and expansive program, the miles to be worked under the EVM program will continue to be re-assessed on a year-by-year basis.[206]

The Draft ARC does not conclude that PG&E failed to comply with this description of EVM in our 2020 WMP.

It is also notable that, based on the Draft ARC prioritization analysis, PG&E's overall vegetation management program, which includes EVM, performed a substantial amount of work on the highest risk circuits. The Draft ARC explains that "PG&E completed over 60% of its [vegetation management project] work in the highest risk bin . . ."[207]

B. Achieving 2020 WMP Objectives

PG&E's 2020 WMP included three objectives before the upcoming 2020 wildfire season:

(1) Continue to reduce wildfire risk through mitigation programs including system hardening and enhanced vegetation management;

(2) Implement PSPS impact mitigation activities to make each 2020 PSPS event affect one-third fewer customers than it would have in 2019 and to

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[205] EVM Audit, p. 14 (analysis of miles completed).

[206] PG&E Updated 2020-WMP, p. 5-196.

[207] Draft ARC, p. 46.

shorten restoration time after high-risk weather clears to 12 daylight hours for nearly all impacted customers; and

(3) Further improve situational awareness and meteorology tools to increase weather forecast granularity and improve targeting of fire risk forecasts and PSPS events.

It also included two objectives to be accomplished before the 2021 WMP:

(4) Continue to modify wildfire mitigation programs by incorporating lessons learned throughout the 2020 wildfire season and in response to new regulations, requirements, guidelines or other changes; and

(5) PG&E will work towards gathering data and performing the analysis necessary to establish modified PSPS criteria for distribution facilities that have been hardened.[208]

The Draft ARC determines that PG&E met Objectives 2 through 5.[209]

With regard to Objective 1, the Draft ARC concludes that PG&E did not risk prioritize EVM and system hardening. We respectfully disagree. The issue of our EVM risk prioritization is discussed above in Section VIII.A. With regard to system hardening, the Draft ARC analysis confirms PG&E's risk prioritization of system hardening in 2020, noting that almost 50% of the system hardening projects were completed in the highest risk areas (referred to in the analysis as "bins").[210] The Draft ARC notes that more total risk "may have been reduced" if PG&E had performed system hardening in lower ranked bins on a risk per circuit mile basis, but the analysis does not undermine the fundamental conclusion that PG&E's 2020 system hardening work was risk informed and risk prioritized. Section IV.A.1 above provides additional information regarding how PG&E's system hardening work addressed and mitigated risk by performing work in Tier 2 and Tier 3 areas, similar to SCE and SDG&E, which were both found compliant.

[208] PG&E Updated 2020 WMP, p. 4-2.

[209] Draft ARC, pp. 90-91.

[210] Draft ARC, p. 43.

Finally, the Draft ARC states that PG&E failed to "meet its overarching goal of reducing the consequence of catastrophic wildfire on its system."[211] To support this statement, the Draft ARC relies on three statements. First, the Draft ARC states that "as repeatedly demonstrated throughout this report, PG&E failed to properly manage its data in a manner that provided for effective implementation of these initiatives."[212] Throughout these comments, PG&E has addressed many of the data governance issues raised in the Draft ARC and demonstrated that these issues were minor and/or did not significantly impact our wildfire mitigation efforts in 2020. In addition, we address data governance issues below in Section VIII.D.1.

The second statement relied on concerns the backlog of maintenance tags. While we share Energy Safety's concern about the need to clear our backlog of high-risk maintenance tags (*i.e.*, Level 1), this is not a basis for finding non-compliance. As a preliminary matter, the Level 1 tags referred to in the Draft ARC appear to have been largely created prior to the compliance period from our Wildfire Safety Inspection Program (WSIP). Prior to the WSIP, we inspected our assets on a five-year schedule, as required by the CPUC's General Orders. After the wildfires in 2017 and 2018, we changed this inspection cadence so that all our HFTD area assets were inspected between 2018 and 2019. As a result of WSIP, we identified approximately 277,000 maintenance tags, or roughly four times the average annual inspection find rate when assets were only inspected on a five-year schedule. Given this quantity of new asset tags, in 2020 we prioritized Level 1 tags, while other, lower risk tags were allowed to exceed the GO repair timelines. More importantly, the Draft ARC analysis in Section 5.6.3 demonstrates the exact opposite of the conclusion reached in Section 6 of the Draft ARC. Section 5.6.3 of the Draft ARC indicates that in 2020, PG&E fixed substantially more Level 1 tags than

[211] Draft ARC, p. 88.

[212] Draft ARC, p. 89.

it found (approximately 1,849% more).[213] This demonstrates that during the 2020 compliance period, PG&E substantially reduced risk by remediating its Level 1 maintenance tags.

The third statement relied on by the Draft ARC to determine that PG&E did not meet its overall objectives concerns the outcomes in 2020 as well as systematic data governance issues.[214] We addressed outcomes above in Section VII.B and data governance issues are addressed through these comments and in Section VIII.D.1 below.

C. Reducing Wildfire Risk

As the Draft ARC initially explains regarding this evaluation criteria "2020 is the first year in a three-year cycle and the benefits of work deployed in 2020 may accrue over time . . .."[215] We agree. While we believe that there was substantial risk reduction that occurred in 2020 from WMP implementation, we also expect these benefits will continue to be realized in future years. For example, the benefits of system hardening, EVM, installation of weather stations and high-definition cameras, and the replacement of non-exempt equipment are just some examples of the initiatives we implemented in 2020 that will accrue benefits well into the future.

The Draft ARC indicates that the 2020 data suggests "PG&E was on a positive trajectory."[216] The Draft ARC notes however the impact on individuals and property of wildfires that occurred in 2020.[217] We addressed this issue above in Section VII.B. The Draft ARC references two additional issues related to reducing wildfire risk.

Level 1 Tags. This section of the Draft ARC also includes a more extensive discussion of the Level 1 tag issue, but it appears to be premised on an incorrect

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[213] Draft ARC, p. 74 (18,640 conditions fixed / 1,008 conditions found = 1849%).

[214] Draft ARC, p. 89.

[215] Draft ARC, p. 92.

[216] Draft ARC, p. 92.

[217] Draft ARC, p. 93.

assumption. The Draft ARC states that "PG&E's asset inspections in 2020 resulted in over 17,000 *more* Level 1 conditions fixed than found on its distribution infrastructure and nearly 200 more Level 1 conditions fixed than found on its transmission infrastructure."[218] As explained above in Section VIII.B, many of the Level 1 tags fixed in 2020 appear to be a result of inspections that occurred prior to the compliance period (*i.e.*, in 2019). Risk was reduced by addressing the Level 1 tags in 2020. In fact, the Draft ARC goes on to acknowledge "that PG&E made significant progress in clearing its backlog of Level 1 conditions in 2020 . . .."[219] The Draft ARC refers to a growth of Level 3 tags in 2020, but as the Draft ARC acknowledges Level 3 tags are for "risk of low potential impact to safety and reliability requiring corrective action with 60 months with some exceptions."[220] In other words, PG&E has up to 5 years to correct many of these Level 3 tags, well outside of the compliance period. We are currently implementing a plan to work down our backlog of Level 3 tags.

Field Safety Re-assessments. The Draft ARC also refers to our Field Safety Re-assessment (FSR) program as "risky at best and one [program] that could have potentially catastrophic consequences at worst."[221] While we disagree with this characterization of the program, we recognize that — as with any inspection — there is the possibility for human error. Therefore, as part of our 2022 WMP, we revised our FSR program to address this concern. Through our FSR program, a trained and qualified inspector annually re-assesses the field condition of open ignition risk tags to confirm that the tag in question poses no immediate safety or reliability risk that would require emergency repair. Thus, the main effect of this program is to visit locations with open tags more frequently than we otherwise would have to determine whether the condition identified in

[218] Draft ARC, p. 93 (italics in original, underlining added).

[219] Draft ARC, p. 93.

[220] Draft ARC, p. 73.

[221] Draft ARC, p. 93.

the tag had degraded and required more immediate remediation. Historically, this program was used to re-prioritize tags to either accelerate or extend the dates for completing the repair. Given that we have taken a risk-based approach to working down our tag backlog, the FSR is an important part of this process because it allows us to obtain an up-to-date understanding of the risk from an asset and to continue to resolve the riskiest conditions first.

Finally, the Draft ARC refers to systemic issues,[222] which are addressed in Section VIII.D below.

D. Systemic Issues

1. Data Governance

The first "systemic issue" identified by the Draft ARC is data governance. The Draft ARC includes a bullet point list of issues, many of which have already been addressed.[223] Statements in the Independent Evaluator Report and Independent Monitor Report are addressed above in Sections III.E.2 and IV.E, respectively. Reporting issues regarding the QIU, QAL, and PG&E 2020 ARC are addressed in Sections III.C.3 and VIII.A above. The Hydroelectric Substation Self-report is addressed above in Section III.D. The Draft ARC also refers to: (1) data submissions to Energy Safety; and (2) the use of six databases for vegetation management. However, neither of these are 2020 WMP initiative targets and the use of multiple databases does not necessarily create substantial data governance issues.

This section of the Draft ARC also refers to the Level 1 tag issue which was addressed above in Section VIII.A.[224] This is not a data governance issue but rather the result of our enhanced inspections.

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[222] Draft ARC, p. 94.

[223] Draft ARC, pp. 94-95.

[224] Draft ARC, p. 96.

It is also important to note that while the Draft ARC discusses data governance, it never references or discusses the sections in the 2020 WMP where data governance is actually addressed. In Section 5.3.7 of the 2020 WMP we described our data governance efforts but also acknowledged the challenges we face. As we indicated:

> In some instances, existing software systems were not designed to be easily accessed or integrated with other systems, but were purpose built to support specific capabilities. For example, customer data, asset data, work management data, GIS data, operations data and event data have traditionally been managed in separate systems, with independent data stores, without being integrated centrally. Data streams from new technologies, such as remote sensing and LiDAR, introduce emerging data needs for storage and processing, while advanced analytics (including Artificial Intelligence and Machine Learning) offer the potential to leverage data to better manage risk and predict events before they happen. PG&E has responded to these challenges by developing strategies for data governance, management, integration, and access. Core to these strategies is an integrated platform for Electric Operations data – the Asset Data Foundation (ADF).

We went on to describe some of our data governance efforts but explained that there is more work to do. The Draft ARC is intended to review PG&E's 2020 WMP compliance. In our WMP, we acknowledged data governance challenges, but also described the substantial efforts we are undertaking to address these issues.

Finally, as we explained earlier, these types of issues are often the result of years or decades of issues within an organization and often cannot be fixed overnight. The Draft ARC appears to want PG&E to have fixed every data governance issue in 2020. We recognize that we have data governance issues, and we are working persistently to address them. For example, in each of the self-report circumstances cited with relation to data governance, we developed a corrective action plan and implemented processes to address and correct the issue. Cultural and complex issues can often take years to change. It is not appropriate to determine non-compliance with a specific WMP simply

because longer-term issues exist within an organization, especially when the organization is making substantial and sustained efforts to change.

2. Communications and Protocols Procedures

The second systemic issue identified in the Draft ARC concerns internal and external communication.[225] With regard to external communication, the Draft ARC cites several instances from the EVM Audit which we addressed above in Section III.E.1. For example, in our response to the EVM Audit we explained how we started meeting with Energy Safety bi-weekly in April 2020 to provide a venue for clear communication and information exchange. The Draft ARC also refers to a misunderstanding regarding EVM specifications. As the Draft ARC indicates, however, once identified PG&E quickly took corrective action to address this issue. Other issues identified in the Draft ARC include the self-reports which are addressed above in Section III.D and differences in reporting addressed in Section III.C.3. While there will always be areas for an organization to improve its internal and external communications, this is not a basis for determining that PG&E failed to comply with its 2020 WMP.

IX. PG&E'S PERFORMANCE IN 2021-2022

We recognize that the ARC process is intended to address performance and outcomes during the compliance period, in this case calendar year 2020. However, in the utilities' respective ARCs, Energy Safety has also noted steps taken by the utilities in subsequent years. For example, SCE's ARC found that while the scope of the assessment was limited to 2020, "Energy Safety acknowledges that SCE also took steps in 2021 and 2022 to address shortcoming identified in the ARC."[226]

In 2021 and 2022, we have continued to substantially improve our wildfire capabilities and have addressed many of the issues in the Draft ARC. For example, in

[225] Draft ARC, pp. 97-98.

[226] SCE ARC, p. 61.

2021, we implemented corrective action plans for each of the self-reports described in Section III.D. We also met or exceeded the quantitative initiative targets in our 2021 WMP.[227] We proactively implemented our Enhanced Powerline Safety Setting (EPSS) program which has reduced ignitions in HFTD areas. In 2021 and 2022, our EVM program focused 98% and 99% of its work on the highest 20% of risk ranked miles, respectively. And we have undertaken an ambitious undergrounding program that will effectively eliminate wildfire ignition risk in areas where overhead lines are moved underground.

In addition, we have continued our culture of transparency and responsiveness. When we identify an issue, we have been transparent to notify Energy Safety and the CPUC and to propose corrective actions. When we receive an inspection report, audit, or substantive review of our performance, we are quick to respond and address concerns and issues raised.[228] As the Draft ARC concludes:

> Energy Safety acknowledges that PG&E self-reported missed initiatives and implemented corrective actions to address findings from other entities, including BVNA, the Independent Monitor, and Energy Safety. Energy Safety supports and encourages this kind of forthright self-reflection and considers PG&E's corrective action responsiveness as essential to its ability to build a culture of continuous improvement.[229]

We also wanted to briefly address our progress in the two "systemic issues" identified in the Draft ARC. First, with regard to data governance, we have continued to improve both during and after 2020. In 2020, we contracted with Palantir Technologies to use their Foundry platform as our centralized data and analytics repository.[230] We also implemented our Asset Data Foundation (ADF) initiative to create a governed assembly

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[227] PG&E Revised 2022 WMP, pp. 4-5 (highlighting the quantitative targets in the 2021 WMP).

[228] Draft ARC, pp. 98-99.

[229] Draft ARC, p. 86.

[230] PG&E Revised 2022 WMP, p. 871.

of data sets to bring together discrete operations data into a single environment.[231] We started this initiative with 20 source systems and 1.3 billion records and have continued to increase these numbers;[232] in 2021, we added over 30 more source systems, bringing the total to over 50.[233] Similarly, in 2020, we improved our data governance practices by beginning the process of creating a specialized team to guide our data governance development.[234] By the end of 2021, we had fully staffed this team, as well as several other related teams to support stability and growth in this area.[235]

With regard to communications, we also made substantial improvements in 2021 and 2022. Internally, we instituted a Lean Operating System to create a more effective operating structure that establishes daily operating reviews with visual management to improve visibility into all facets of our performance, including safety, quality, and work completion for our wildfire risk reduction programs. The Lean Operating System will facilitate rapid response and problem-solving at both the regional and functional levels and help accelerate our WMP implementation in a standardized and coordinated way across the company. Externally, we have continued to schedule recurring and individual meetings with Energy Safety and other external parties to communicate information and address any outstanding or ongoing issues.

X. CONCLUSION

For the reasons described above, PG&E respectfully requests that Energy Safety revise the Draft ARC and conclude that PG&E substantially complied with its 2020 WMP. While we recognize that PG&E, like all the utilities, has areas to improve and

[231] PG&E Updated 2020 WMP, p. 5-215.

[232] PG&E Updated 2020 WMP, p. 5-215.

[233] PG&E Revised 2022 WMP, p. 872.

[234] PG&E Updated 2020 WMP, p. 5-215.

[235] PG&E Revised 2022 WMP, pp. 872-873.

lessons to learn, we believe that the actions we took and the outcomes that we achieved in 2020 clearly demonstrate substantial compliance with the 2020 WMP.