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Via Office of Energy Infrastructure Safety E-Filing

Caroline Thomas Jacobs, Director
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Re: PG&E Comments on Final Independent Evaluator Annual Report on Compliance for PG&E's 2022 Wildfire Mitigation Plan (Docket No. 2023-IE)

Dear Director Thomas Jacobs:

Pacific Gas and Electric Company (PG&E) respectfully submits these comments on the *Final Independent Evaluator Annual Report on Compliance* for PG&E's 2022 Wildfire Mitigation Plan (IE Report) from Bureau Veritas North America, Inc. (BVNA or the IE).

1. Executive Summary

We appreciate the significant effort that BVNA put into preparing this report and assessing the work performed as part of our 2022 Wildfire Mitigation Plan (WMP). In performing its audit, BVNA reviewed publicly available documents, propounded approximately 130 data requests, conducted three interviews with PG&E employees, and completed hundreds of field assessments. BVNA made numerous findings in the IE Report, and we view each of these findings as a chance to continue to improve our wildfire mitigation efforts.

The findings in the IE Report demonstrate our continued progress in the performance of our wildfire mitigation work. We are proud of BVNA's conclusion that our large volume quantifiable initiatives were "met and, in most cases, exceeded"[1] and that most small volume quantifiable initiatives "showed as completed."[2] We are also proud of BVNA's statement that they "observed fewer instances of incomplete work than in prior years,"[3] that we reduced

[1] IE Report (Jun. 30, 2023), p. 5.

[2] *Id.*

[3] *Id.*, p. 43.

"positional inaccuracies" in our data,[4] that we achieved a "significant uptick in vegetation work executed to the established initiative standards," [5] and that we demonstrated a "marked improvement in workmanship across most infrastructure program initiatives." [6]

We continue to develop strong working relationships with regulators, communities, other utilities, and industry experts to better understand wildfire risk and work hard to instill a sense of urgency in all of our wildfire mitigation efforts. We also remain firmly committed to our stand that catastrophic wildfires shall stop.[7] Thus, we appreciate BVNA's observation that we have "developed a broad range of activities that are designed to reduce the likelihood of initiating a wildfire such as infrastructure and vegetation inspections, equipment replacements, and conversions to underground facilities" and that we "also have developed activities to minimize the occurrence and impacts of any Public Safety Power Shutoffs (PSPS) by initiating Enhanced Powerline Safety Settings (EPSS) mitigations, installing remote grids, installing additional Supervisory Control and Data Acquisition (SCADA) equipment, circuit sectionalizing, and other technological improvements."[8] Furthermore, we are pleased with BVNA's observation that "PG&E completed considerable improvements to its wildfire modeling programs, continued to conduct quality assurance inspections for transmission and distribution systems, and enhanced procedures, standards, and overall governance processes for wildfire mitigation."[9]

After conducting a detailed review of our 2022 WMP activities, BVNA found that we met our goals for 52 out of the 54 initiatives in the WMP,[10] consistent with what we reported in our 2022 WMP Annual Report of Compliance (ARC).[11] This included numerous areas where we exceeded our 2022 goals such as:

Program	Section	PG&E Target	PG&E Actual
Weather Stations- Installation and Optimizations	7.3.2.1.3 - B.02	100	111
High-Definition Cameras - Installations	7.3.2.1.4 - B.03	98	100
Expulsion Fuse -Removal	7.3.3.7 - C.01	3,000	3,085

[4] *Id*.

[5] *Id*.

[6] *Id*.

[7] PG&E 2022 Revised WMP (Jul. 26, 2022), p. 2.

[8] IE Report, p. 79.

[9] *Id.*, p. 88.

[10] *Id*., p. 343-395.

[11] PG&E Annual Report on Compliance (ARC) for 2022 WMP (Mar. 31, 2023), p.1.

Program	Section	PG&E Target	PG&E Actual
Distribution Sectionalizing Devices - Install and SCADA commission	7.3.3.8.1 - C.02	100	124
10K Undergrounding	7.3.3.16 - C.10	175 circuit miles	179.7 circuit miles
System Hardening - Distribution	7.3.3.17.1 - C.11	470 circuit miles	483 circuit miles
Surge Arrester - Removals	7.3.3.17.3 - C.13	4,590	4,621
Enhanced Vegetation Management	7.3.5.2 - E.01	1,800 circuit miles	1,923.8 circuit miles
Pole Clearing Program	7.3.5.2 - E.02	7,000	8,356

In the IE Report, BVNA identified two instances of potential non-compliance with our 2022 WMP. We address those two initiatives in Section 2 of this response, below. In addition, BVNA identified areas of concern in several initiatives that BVNA determined did not rise to the level of potential non-compliance. We view these as areas for continued improvement and provide an explanation of the actions we are taking to respond to each of these items in Section 3 of this response. Finally, in Section 4 of this response, we discuss issues relating to the funding of our 2022 WMP that were highlighted in the IE Report.

2. Potential Non-Compliance Issues Raised by BVNA

BVNA identified two initiatives that it considered non-compliant with our 2022 WMP. While we agree that we failed to meet our targets for these initiatives, we do not believe that either of these findings demonstrate non-compliance with our WMP for two reasons: (1) despite not meeting the targets for these initiatives, a substantial amount of critical wildfire mitigation work was performed as part of these initiatives and should not be ignored; and (2) both of these targets were created more than halfway through the 2022 year, as part of our Revision Notice response, leaving little time to reach these targets. Despite this, we appreciate BVNA raising these items and view these initiatives as both lessons learned and areas for us to improve. Below we describe the work performed on these initiatives in 2022 as well as our efforts to remedy each of these issues to prevent their recurrence in the future.

a. D.10 HFTD/HFRA Open Tag Reduction – Distribution – 7.3.4.17

BVNA acknowledged that we self-reported not meeting our 2022 WMP target of closing 55,000 category E maintenance tags by the end of 2022.[12] This target was created to remove higher risk

[12] IE Report, p. 6.

open notifications in 2022. We acknowledge that we were only able to close approximately 46,000 E tags in 2022. However, subsequent to the revised 2022 WMP, we prioritized A and B tags in our Q3 and Q4 2022 work plan. A and B tags are prioritized over E tags because of higher likelihood of failure and risk than E tags. As a result, in Q3 and Q4 2022, we completed over 6,000 A and B tags in lieu of the completion of more E tags.

While we did not meet the specific volume target for E tags, we were able to exceed 55,000 total tags closed in 2022.[13] BVNA examined a sample of 125 Tier 2 closed tags and 375 Tier 3 closed tags and confirmed all sampled tags were properly completed.[14] Despite the work we were able to complete, we understand Energy Safety's concern over our backlog of asset tags and have developed an updated plan in our August 7, 2023 revised WMP to address the backlog of distribution asset repairs in the HFTD/HFRA areas by the end of 2029—addressing more risk while completing the backlog three years sooner than we proposed in our previous WMP submittal and at a lower cost to our customers.[15] We look forward to the implementation of our accelerated approach which will combine a focus on risk and safety with also closing out as many tags as quickly as possible.

b. E.05 Vegetation Management – Quality Assurance (QAVM) and Quality Verification (QVVM)– 7.3.5.13

BVNA also acknowledged that we reported not meeting our 2022 WMP target of a 95% Acceptable Quality Level (AQL) on four out of seven vegetation management programs.[16] As part of the 2022 WMP Revision Notice, Energy Safety directed PG&E to establish a 95% AQL score for audits/reviews for seven vegetation management programs. We noted to Energy Safety in our Revision Notice submission that we may not be able to meet this target given that it was established midway through the year and much of the annual pole clearing work had already been completed.[17] Given this limitation, we were able to achieve an AQL score of above 95% for three of the seven vegetation management programs, which are identified below:

- QAVM Distribution – 99.78%;
- QAVM Pole Clearing – 98.20%; and
- QAVM Transmission – 100%.

However, we were unable to meet the AQL target for the four programs below:[18]

[13] PG&E's 2023 WMP – Final Revision Notice Response (Aug. 7, 2023), p. 14.

[14] IE Report, p. 49.

[15] PG&E's 2023 WMP – Final Revision Notice Response, p. 45.

[16] IE Report, p. 53-54.

[17] PG&E ARC for 2022 WMP, p. 13.

[18] *Id*., p. 32-33.

- QAVM Procedure Audit - 76.00% AQL;
- QVVM Distribution - 91.34% AQL;
- QVVM Pole Clearing - 90.26% AQL; and
- QVVM Transmission - 94.21% AQL.

Despite this, we are committed to continuing to improve our vegetation management program, and our revised 2023-2025 WMP includes additional annual and quarterly targets for vegetation management initiatives stemming from the conclusion of the Enhanced Vegetation Management (EVM) program.[19] Furthermore, we have revised our Vegetation Management Distribution Inspection Procedures (DIP) in their entirety in 2023.[20] As a result, we expect to see continued improvement in the quality of our vegetation management work.

3. Other Issues Raised in the IE Report

The issues below were identified in the IE Report but were determined by BVNA not to rise to the level of non-compliance with our 2022 WMP. Despite these not being compliance issues, we address these issues below because they represent areas for us to continue to improve.

a. Location Inaccuracies in Data Provided

BVNA acknowledged that the vast majority of work locations fell within normal GPS tolerances.[21] However, they identified eleven work locations determined to be 75 or more feet from the GPS coordinates provided. We reviewed the identified work locations and concluded that the locational information we provided was sourced from job packages and other field collection activities that describe the general location of where work was performed. Completed job packages must undergo several processing steps including clerical review, processing, and paperwork scanning. Sometimes complete job packages require additional information from the field or post-estimating work. Until a project is completed, validated, and mapped, detailed information remains in the design systems and paper job packages and therefore can be subject to discrepancies.

b. B.02 Weather Stations – 7.3.2.1.3

BVNA inspected data from all 111 weather stations we installed in 2022 and concluded that six (5.4%) were not operating properly at time of inspection.[22] This is not abnormal as it is expected that weather stations will temporarily go out of service, generally due to the challenging environmental factors to which they are exposed.

[19] PG&E's 2023 WMP – Final Revision Notice Response, p. 83.

[20] *Id*., p. 84.

[21] IE Report, p. 43.

[22] *Id*., p. 18.

Along with our vendor, Western Weather Group, we actively monitor station health throughout the year and resolve issues with our weather stations. We have processes in place to monitor the data from each station in the network and to create trouble tickets when issues are identified. These tickets are then used to dispatch repair crews. In remote areas, these stations can stop reporting for a variety of reasons, but issues occur most frequently due to the battery dropping below a critical voltage point of no return. The battery is needed to power either a cellular modem or L-Band satellite communication device to transmit data. This voltage drop can be due to snow accumulation on the solar panel, multiple days of poor sunlight from cloud cover, or any other potential blockage of sunlight needed to recharge the battery. Working with engineering and our vendor, potential solutions have been identified for repairing and hardening each of these weather stations by installing a larger solar panel and lithium-ion battery at each station.

In the case of the six stations identified, four have already been returned to normal operation, and we are working on restoration efforts for the remaining two. Of these remaining two stations, restoration is delayed on one due to an access issue (road damage) and one station is being moved to a location with better solar accessibility.

In addition to these efforts, we continue to work on improving our visualization of station data and health, to help ensure station issues are identified, tracked, and resolved in a timely manner.

c. B.03 High-Definition Cameras – 7.3.2.1.4

As part of the auditing process, the IE inspected data from all 100 high-definition wildfire cameras that we installed in 2022 and found that one (1%) had an "unconfirmed operational status."[23] As with our weather stations, it is expected that cameras will occasionally go out of service for short periods of time before being repaired due to the extreme environmental conditions to which these cameras are exposed. While we do not maintain the hardware or software for these cameras, we monitor the operational status of the cameras within the service territory and reach out to inquire about offline status. Our external business partners also monitor our cameras daily to identify and repair cameras either remotely or on-site.[24]

Repairs on the camera in question were delayed due to inclement weather conditions and safety risks/inaccessibility resulting from hazardous conditions. However, this camera has been repaired and is back online as of August 25, 2023.

d. C.09 Emergency Back-up Generation - 7.3.3.11.3

In reviewing our documentation for emergency backup generation at 15 sites, BVNA found that four sites did not note generators in their commissioning reports and did not show any generators

[23] *Id*., p. 19.

[24] As part of a consortium, we sponsor the installation and provide the Operation & Maintenance within our respective service territory and share access across other utility companies and fire agencies. PG&E has leveraged an existing and mature platform used by three major California utilities, CAL FIRE, USFS and other local agencies (where cameras are accessible by anyone using the AlertWildfire platform).

in their associated photos. In addition, BVNA found two sites indicated a different number of generators from what was observed in the photos. [25]

For the sites where BVNA noted that there were no generators in commissioning reports, this is because we installed a generator tap box. This setup allows the site to be prepared to accept a portable generator instead of being equipped with a permanent generator. Thus, although no permanent generator was installed at these sites, these four sites still meet our target of having emergency backup generation, allowing the site to have the same amount of functionality on temporary power as if it were being fed from its normal utility power source.

For the two sites with a different number of generators from what was observed in the photos, we can provide updated photos and commissioning reports to support the number of generators installed upon request.

e. C.13 Surge Arrester – Removals – 7.3.3.17.3

The IE verified a sample of 200 surge arrester locations that were to be mitigated or replaced with exempt equipment. The audit concluded that one of the structures (0.5%) was found to have signs of no new construction.[26] This pole was correctly marked as mitigated since, upon inspection, it was determined that the pole had been erroneously designated as needing mitigation by the third-party vendor who performed the review since no non-exempt surge arrester was present.[27]

The original population of surge arresters to be replaced were identified in 2014-2015 by a third party. A location is deemed mitigated under the following circumstances: (1) the unit was already found completed because of regular maintenance or program work in subsequent years (e.g., Pole Replacement, System Hardening, Emergency Maintenance); or (2) the location does not need a surge arrester (incorrectly identified in the original population).

The audit also found, through field verification, another structure (0.5%) which included a non-exempt surge arrester with the top of the pole having severe woodpecker damage.[28] We identified this pole for replacement and performed the replacement on August 2, 2023, at which time the surge arresters were also removed.

f. D.01 Detailed Inspections – Distribution – 7.3.4.1

BVNA reviewed the inspection forms and photos of 200 Tier 2 and 600 Tier 3 detailed distribution inspections and found that 19 of the Tier 2 Overhead (OH) Checklist forms and 126 of the Tier 3 OH Checklist forms were missing barcode numbers, and one form had a different

[25] IE Report, p. 66.

[26] *Id*., p. 27.

[27] 2022 IE Data Request Response - DRU11572.013.

[28] IE Report, p. 27.

barcode number compared to what was provided.[29] We note that in our 2022 Overhead Inspection Job Aid we required inspectors to apply pole number tags (bar codes) and to document the activity within the OH checklist. We have identified the forms that do not have a bar code entered and will determine if our systems need to be updated to add a bar code number for these locations. For structures that do not have a bar code affixed, we will follow our 2023 marking standard and add and record pole numbers when the pole is replaced. Going forward, per our updated 2023 Overhead Assessment Job Aid, there is no requirement that bar codes be installed during inspections. However, our current marking standard will continue to require that a bar code is affixed for any new or replaced poles.

We acknowledge our internal error on the one form that had a different barcode number and have updated our records.

g. D.02 Detailed Inspection Transmission Ground – 7.3.4.2

In its evaluation of 425 pole inspection reports[30], BVNA determined that 10 reports appeared to show possible items in photos not mentioned in the written areas of the report, 37 reports had inadequate photographic documentation of items labeled as abnormal conditions or heavily damaged, and 13 reports appeared to show information duplicated from another report.

In the 10 instances where there were possible items in photos not mentioned in written areas of the report, we reviewed and disagree with the observations for eight of the inspection reports. We reviewed the photos and the observations noted do not appear to pose any significant ignition risk. For one of the inspection reports, we identified an error in condition code entry and for the other report, we have created a Line Corrective (LC) notification to address the missed item.

In the 37 instances where BVNA noted possible action items that did not appear to be supported by additional photo documentation within the inspection report, we note that currently photos are not required to be in the inspection report, only in our SAP database. We will ensure associated photos are provided in future data requests.

In the 13 instances of possible duplicate site information, we note that duplicate photos are by design; in the instance of a multi-pole structure, the same assets will be present in the photos.

The System Inspections Quality Control (QC) team strives to exceed our statistically valid sampling plan that is established at the beginning of the program year for reviewing inspection reports. The QC team monitors and reviews findings tracked in the Quality Control Power BI dashboard. In addition, the QC program creates quarterly Corrective Action Plans (CAPs) for

[29] *Id*., p. 44.

[30] BVNA requested a sample of 450 inspection reports to conduct their evaluation of pole inspection reports. However, in their evaluation, they stated that only 425 inspection reports were made available for review. After investigating the reason for this discrepancy, we determined that we inadvertently failed to share 25 of the 450 reports with BVNA due to a settings issue in the software platform that was used during the IE process.

findings, which provides awareness of our QC trends to management. The CAPs are reviewed and assigned to appropriate teams to determine corrective actions and closure.

h. D.04 Detailed Inspections - Transmission Aerial – 7.3.4.2

BVNA's audit also determined that, of the 500 sampled records, 18 aerial transmission inspection records in Tier 2 and 60 inspections in Tier 3 showed inconsistent evaluation descriptions between the individual components and the overall condition of the structure.[31] We reviewed the findings and believe this is a misunderstanding of the purpose of the forms in question. Our aerial overhead inspection form breaks down structures into two main categories, wood or steel. It then assesses and evaluates damages to the overall structure separately from damage to specific components of a structure. Assessing the structure integrity independently of the components on the structure gives us visibility to identify and prioritize necessary repair or replacement work on the structures. Thus, the evaluation of the "overall condition" of the structure refers to the overall structural integrity of the pole/tower and not the specific components such as anchors and guys, non-steel structures, non-steel framing, conductors and insulators, and switches which have their own sections on the inspection form. Given that these two items are evaluated separately, the forms in question properly correspond to the various conditions of the structures in question.

i. D.06, D.07, D.08 Supplemental Inspections –7.3.4.15 and 7.3.4.16

Targets D.06, D.07, and D.08 in initiatives 7.3.4.15 and 7.3.4.16 address supplemental inspections of distribution substations, transmission substations, and hydroelectric substations/powerhouses, respectively. When reviewing these three targets, BVNA found 24 inspection forms that identified corrective actions but did not have an associated priority code for the issue observed, as well as 13 inspection forms that did not have associated corrective actions.[32] We reviewed the inspection forms provided to BVNA and determined we inadvertently shared an incorrect version of the form in these instances. The priority code and associated corrective actions or cancellations were appropriately documented for each of these inspections but on a different version of the form than the one provided. We will make these forms available upon request and have taken corrective measures to prevent this issue from reoccurring by creating formal job aids to ensure the appropriate version of the forms are provided.

In addition, in reviewing inspection documentation for hydro generation substations and powerhouses in HFTD/HFRA locations, the IE found one file number had a different inspection number on the inspection form. We reviewed this file and determined that the file name was inadvertently renamed prior to being shared with BVNA. We can provide the file with an updated file name upon request.

[31] IE Report, pp. 47-48.

[32] *Id*., pp. 71-73.

Lastly, BVNA found that 15 of the inspection forms for hydro generation substations and powerhouses submitted had no information documented or photos provided. We reviewed the inspection forms and found that we inadvertently provided the incorrect version of the forms to the BVNA. The proper versions of the forms contain all the information sought and are available upon request. Our formal job aid for hydro generation substations and powerhouse will ensure the appropriate version of the forms are provided upon request.

j. D.11 HFTD/HFRA Open Tag Reduction − Transmission – 7.3.4.17

BVNA reviewed 79 Tier 2 and 236 Tier 3 closed transmission tags and found 76 Transmission Overhead (OH) Construction completion standard checklist (CCSC) forms missing.[33] We reviewed these findings and determined that 70 of these 76 tags required no CCSC form since they were cancelled by our Centralized Inspection Review Team (CIRT). Cancellations were for several possible reasons, including: the tags were bundled and worked with other tags, the work was found to be completed upon arrival, or the tag was created in error. Of the remaining six forms, we inadvertently omitted four CCSC forms from our production to the IE and the other two tags were completed by separate functional areas outside of the Transmission Line Maintenance and Construction (M&C) and Tower groups that have a closure process which do not require the completion of CCSC forms. We will make the omitted forms available upon request and will evaluate our processes across teams to enhance the consistency in our closure process.

BVNA also found one OH construction checklist with a missing pole number.[34] We note that the pictures from the Construct submission show pictures of the structure and the tag description on the CCSC form that match the tag details.

Lastly, BVNA found two OH construction checklists that had a different structure pole numbers compared to the number on the photographs. We can provide the updated checklists upon request.

k. E.01 EVM (line miles) – 7.3.5.2

The IE verified 177 circuit miles of our 1,923.8 circuit miles of enhanced vegetation management (EVM) work and found 15 segment locations to have various amounts of residual debris surrounding the remediated trees.[35]

Our Vegetation Management programs define debris as material less than four inches in diameter and large wood as material greater than four inches in diameter. We are required to reduce or adjust live fuels as they are generated from programs developed to comply with Public Resources Code Section 4291, General Order 95, Rule 35, and Public Utilities Code Section

[33] *Id*., p. 50.

[34] *Id*.

[35] *Id*., pp. 28-30.

8386. Debris less than four inches in diameter that is generated during pruning activities are chipped or lopped and scattered on the property in accordance with applicable regulations. Chips are left on site or removed off site based on owner preferences. Typically, we chip debris where access allows, otherwise we lop and scatter. We agree with BVNA's observations for three of the sites identified but disagree with the remaining sites. We can share photos that confirm this position.

l. E.03 LiDAR Ground Inspections – Distribution - 7.3.5.7

BVNA reported a one circuit mile difference between the totals for LiDAR ground inspections completed as reported in the 2022 WMP ARC report and the documentation provided during this audit.[36] We reviewed this finding and determined that the difference of one circuit mile stemmed from two different conversion methods from distance in feet to miles. While we do not find this to be significant, we will prevent this issue from recurring in future IE processes by limiting unit conversion to the final step of our reporting process so that the reported circuit miles are consistent throughout our submissions.

m. E.09 Utility Defensible Space - Distribution – 7.3.5.20

During BVNA's field assessment of distribution structures in HFTD areas cleared in 2022, BVNA identified several issues, including that: (1) three sites had old logs and brush within the 50' buffer area; and (2) eight structures had experienced patterns of moderate regrowth.[37]

For BVNA's finding that three sites had logs/brush in the buffer zone, full application of Utility Defensible Space (UDS) program scope was not achieved and was appropriately documented in our records as a partial modified clearance location (PARTIAL – MODCLR).

Regarding the IE's finding that eight inspected structures experienced moderate regrowth, regrowth is expected at sites where UDS is performed. The goal of the UDS work is to modify fuels and reduce ladder fuels at sites where permission was granted for the work. To minimize adverse environmental impacts, trees were not targeted for removal and, instead, removing limbs from the lower canopy was the targeted risk reduction work. In many cases, this scope of work lends to easier management of grass and other fine fuels by the property owner/controller in their work to conform with city or county weed abatement ordinances.

In 2023, the program has begun to incorporate maintenance of work completed in newly developed Areas of Concern where the work overlaps with the pole clearing program. The UDS Program will also continue to target new populations with annually updated tranches that prioritize the work targeted for execution. This work and maintenance will target both transmission and distribution assets to supplement previously completed work.

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

[37] *Id*., p. 36.

n. E.10 Pole Clearing – per Public Resources Code Section 4292 in State Responsibility Areas - 7.3.5.2

The IE noted that PG&E did not meet its target by 50 poles.[38] We reported this target as completed with 80,208 distribution poles inspected and cleared where clearance was needed. As part of our efforts to improve the data management challenges within the legacy vegetation management system, we reviewed and created a more deliberate administrative boundary and separation of poles in the Local Responsibility Areas and State Responsibility Areas, and this was reflected in initiatives E.02 and E.10, respectively. This resulted in 50 poles from the original target number being reclassified from the State Responsibility Area (target E.10) to the Local Responsibility Area inspection count (target E.02) where they were subsequently inspected and cleared. [39]

The IE verified 514 distribution structures in the State Responsibility Area were cleared in 2022 and found one structure with tree limbs within the area surrounding the pole. We performed a site visit of this structure and determined that there were no tree limbs within the 10 feet clearing requirement of Public Resources Code Section 4292 of the subject pole. We also determined that the debris in the area appeared to have been placed there by the business in the location and did not appear to have come from tree work.

4. WMP Funding

a. Overview

BVNA assessed the funding activity for our 2022 WMP. The IE Report focused on specific areas where BVNA believed the actual amount of funding spent was lower than the forecasted amount. In response to BVNA's requests, we provided additional written detail for specific items and met with BVNA to discuss our cost model. In general, we agree with BVNA's findings, however, we would like to clarify a few specific items raised in the IE Report below. In 2022, we spent approximately $5.3 billion on wildfire mitigation work as part of our WMP, which was less than the approximately $6.0 billion that we forecasted.[40] This 11% decrease from the forecast to the actual spending was the result of several factors.

The IE is directed by statute to "determine whether the electrical corporation failed to fund any activities included in its [wildfire mitigation] plan."[41] Given this foundational directive, we note that we did not "fail to fund" any activities included in the WMP. The analysis performed as part of the IE audit is a variance analysis illustrating how the assumptions around work plan and unit cost drivers made when preparing the 2022 WMP compared to the actual drivers that factored into the 2022 recorded spend. Differences in spend are driven by financial and work

[38] *Id*., p. 37.

[39] PG&E ARC for 2022 WMP, p. 36.

[40] IE Report, p. 90.

[41] Public Utilities Code § 8386.3(c)(2)(B)(i).

plan factors, such as efficiencies in work performance, favorable environmental conditions, timing, strategy, risk assessment, and by unit cost.

As we explained in our 2022 WMP ARC, notable variances in expense spending include over $59 million saved on EPSS patrols due to efficiencies made by our EPSS program, and over $68 million and $72 million saved on PSPS events and PSPS mitigation work due to favorable weather conditions precluding the need for PSPS events and lower costs for temporary generators than anticipated.[42] Additionally, the Vegetation Management Program experienced significant efficiencies in 2022 where the holistic Vegetation Management program came in $144M under the forecast.[43] Routine Distribution, EVM, and Second Patrol Tree Mortality came in under budget. EVM, Transmission Routine and Transmission Right of Way all experienced decreased unit costs. It should also be noted that there were initiatives that required substantially more expense spending than was initially forecast, including our fuel management program which required over $67 million in additional funding due to significantly more customers opting into the program and a higher unit cost to perform the work.[44]

For capital spending, notable variances include $274 million on updates to grid topology (i.e., system hardening) due to favorable unit cost performance on covered conductor installation[45] and changes in the timing of our undergrounding program and $88 million in savings on transmission tower maintenance and replacement due to successful contract negotiations for some projects and necessary deferrals for other projects as a result of permitting and access constraints.[46] Importantly, we completed all our undergrounding and system hardening initiative targets and this variance in actual spending was because we were able to realize lower unit costs for this mitigation work in 2022. Additionally, the Capital Vegetation Management Program Transmission Right of Way experienced significant efficiencies coming in under forecast by $43M.[47]

Overall, we were able to reduce costs for our customers while still accomplishing our critical wildfire mitigation work and meeting or exceeding 52 of our 54 initiative targets.

b. Specific Funding Categories

The largest underspend identified by the IE is from Section 7.3.3 of our WMP, which is comprised of our grid design and system hardening work, and which is noted as having a variance of over $256 million.[48] We achieved cost savings of approximately $92.3M in capital

[42] PG&E ARC for 2022 WMP, p. 16.

[43] IE Report, p. 94

[44] PG&E ARC for 2022 WMP, p. 16.

[45] *Id*.

[46] *Id*.

[47] IE Report, p. 101.

[48] *Id*., pp. 91-92.

for initiative 7.3.3.3 and 7.3.3.7.[49] Delays with the start of various projects and their respective schedules as well as over forecasting with certain initiatives contributed to most of the remaining expenditure variance. The System Hardening Program experienced unit cost efficiencies in both of the Overhead and Underground workstreams leading to significant underspend compared to the initial forecast. Additional information on the areas to which this money was allocated can be found in the IE Report, where we provide variance explanations for our initiative spending.

The second largest underspend identified by BVNA is for Section 7.3.5 of our WMP, which relates to Vegetation Management and Inspections. BVNA notes a variance of over $187 million between the forecast and actual spend for 2022.[50] As noted above, Routine Distribution, Enhanced Vegetation Management, and Second Patrol Tree Mortality came in under budget. EVM, Transmission Routine and Transmission Right of Way all experienced decreased unit costs.

The third largest, and last, category of work identified by the IE as underfunded is Section 7.3.6, which relates to Grid Operations and Protocols, with a variance of over $130 million.[51] The main drivers for this variance were due to favorable weather conditions resulting in no PSPS events and improvements and efficiencies within EPSS specifically the unit cost for patrols.

5. Conclusion

We are pleased that BVNA's overall findings demonstrate our commitment to wildfire mitigation. We take seriously the report's conclusions and have implemented corrective action plans to address the specific items identified above, as well as to make organizational improvements to prevent the recurrence of these issues. We look forward to continuing our work with Energy Safety and the Independent Evaluator to achieve our goal of ending catastrophic wildfires.

Very truly yours,

/s/ Vince Tanguay

Vince Tanguay

[49] *Id*., p. 100.

[50] *Id*., pp. 90, 92.

[51] *Id*., pp. 90, 93.