

December 14, 2023

BY ENERGY SAFETY E-FILING

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

Re: Reply Comments on the Draft Decision Approving Pacific Gas and Electric Company's 2023-2025 Wildfire Mitigation Plan
Docket # 2023-2025-WMPs

Dear Director Thomas Jacobs:

On December 4, 2023, four stakeholders, in addition to Pacific Gas and Electric Company (PG&E), submitted comments on the Draft Decision of the Office of Energy Infrastructure Safety (Energy Safety) approving PG&E's 2023-2025 Wildfire Mitigation Plan (WMP).¹ PG&E respectfully submits these reply comments addressing specific issues raised by these four stakeholders.

COMMENTS ON PG&E'S AREAS FOR CONTINUED IMPROVEMENT (ACIs)

A. ACI PG&E-23-05: Updating Grid Hardening Decision Making and Prioritizing Wildfire Mitigations **ACI PG&E-22-34: Revise Process of Prioritizing Wildfire Mitigations**

Cal Advocates and TURN commented on both ACI PG&E-23-05 and ACI PG&E-22-34. Cal Advocates recommends that Energy Safety amend the Draft Decision to address its concerns related to PG&E's system hardening mitigation alternatives analysis.² TURN comments on the use of cost-benefit metrics.³

Cal Advocates argues that we have not justified our focus on undergrounding as a primary wildfire mitigation and recommends that Energy Safety amend the Draft Decision by adding six additional requirements to ACI PG&E-23-05.⁴ PG&E supports the three recommendations (out of the six) that are related to comparing and selecting mitigations. PG&E will conduct mitigation selection using our Wildfire Benefit Cost Analysis (WBCA) tool when the tool is available in mid-2024.⁵ The WBCA tool compares undergrounding to reasonable combinations of mitigations (recommendation 1) and uses cost estimates based on recent actual costs or reasonable projections (recommendation 2). If PG&E selects undergrounding where the alternatives analysis recommends a different mitigation (recommendation 6), we will provide justification for its selection.

Cal Advocates recommends applying "secondary filters" in a location-specific manner (recommendation 3) and supporting each secondary filter by workpapers (recommendation 4). These secondary filters refer to the three additional factors PG&E used to further evaluate the

system hardening projects selected using the Wildfire Distribution Risk Model.⁶ Currently, PG&E's WBCA tool does not rely on secondary filters, and we are evaluating whether to rely on them going forward. Given that we are still evaluating the use of secondary filters, PG&E suggests that these two Cal Advocates' recommendations not be incorporated into the final decision. We recommend revisiting the use of secondary filters in advance of the 2026-2028 WMP Guidelines.

Cal Advocates' final recommendation (recommendation 5) is that PG&E's mitigation alternatives analysis should account for the residual risks associated with different system hardening project timelines (e.g., the difference in the time required to install covered conductor compared to undergrounding). This recommendation should not be required in the 2025 WMP Update. Given the 50-year life of a system hardening asset, any residual risk on the system stemming from the time required to relocate overhead lines underground is minimal and would not meaningfully impact mitigation selection. In addition, all circuit segments in high-fire risk areas are protected by other mitigations such as Enhanced Powerline Safety Settings (EPSS) before and during undergrounding work.⁷

TURN argues that the Draft Decision should be modified to avoid an endorsement of PG&E's WBCA tool and that the final decision should clarify that PG&E's cost-effectiveness analysis is expected to be based on the methodology adopted in the CPUC's Rulemaking (R.) 20-07-013 proceeding.⁸ PG&E agrees with TURN that the information provided in the 2025 WMP Update should be consistent with the methodology adopted in proceeding R.20-07-013. PG&E recommends reporting both a cost-benefit ratio (CBR) and a net-benefit metric as part of the 2025 WMP Update process—when the WBCA tool becomes available—because the net-benefit metric is also an important measure of the true benefits and costs of a project and should be included in a comprehensive analysis of system hardening mitigations.⁹

Both Cal Advocates and TURN repeat arguments that they made in prior comments, asserting that PG&E failed to address the issues raised in ACI PG&E-22-34 relating to the reasonableness of wildfire mitigation investments. Parties recommend that Energy Safety require PG&E to demonstrate that our proposed investments are just and reasonable¹⁰ and to update our response to ACI PG&E-22-34 in a remedial filing.¹¹ However, Energy Safety's Draft Decision already considered and rejected these arguments, finding that PG&E had sufficiently addressed the required progress for ACI PG&E-22-34.¹² Thus, there is no reason to adopt the parties' recommendations.

B. ACI PG&E-23-07: Deployment of New Technologies

Cal Advocates and MGRA both comment on ACI PG&E-23-07, which is entitled "Deployment of New Technologies." Cal Advocates recommends that Energy Safety amend its Draft Decision to encourage PG&E to adopt new technologies once they prove viable and recommends four additions to ACI PG&E-23-07. Cal Advocates recommends PG&E estimate the cost and wildfire effectiveness of each new technology at scale, provide a workplan for rolling out a new technology, and explain why a new technology is not deployed if it proves successful.¹³ PG&E is amenable to Cal Advocates' recommendations for viable new technologies.

MGRA claims that ACI PG&E-23-07 is not prescriptive enough to result in substantially improved performance by PG&E. They recommend that Energy Safety designate specific targets for new technology pilots and require PG&E to provide a remediation plan for technologies that

are lagging other major investor-owned utilities (IOUs).¹⁴ PG&E strongly disagrees with MGRA’s first recommendation because it is unreasonable to require PG&E to provide targets for pilots and feasibility studies because this type of work—by its very nature—should be flexible and not prescriptive. The elements of a pilot program (e.g. units installed, locations, and pace of work) often change as PG&E collects information from, and makes adjustments to, the pilot. If PG&E had to comply with specific targets for these pilots, we would not have the flexibility to adjust the pilots and could be forced to continue work solely to meet a target even if the results of the pilot suggest the work should be discontinued.

Similarly, MGRA’s second recommendation, that PG&E provide remediation plans for technologies that are lagging behind other major IOUs, should also be disregarded. PG&E should not be required to pilot a new technology simply because the other IOUs are piloting it. Rather, PG&E needs the flexibility to develop new technology pilot strategies that address the wildfire and Public Safety Power Shutoff (PSPS) risks specific to our territory and that align with how we operate and manage our electric systems.

C. ACI PG&E-23-26: Evaluating and Reporting of Safety Impacts Relating to EPSS

Cal Advocates and MGRA also comment on ACI PG&E-23-26 which is related to Enhanced Powerline Safety Shutoff (EPSS) reporting. MGRA recommends that Energy Safety require PG&E to provide more information regarding the conditions (e.g. temperature, relative humidity, wind speed, and fuel moisture) under which an EPSS event occurred.¹⁵ PG&E is not opposed to this recommendation if Energy Safety determines it will aid in assessing our EPSS program.

Cal Advocates recommends that Energy Safety revise ACI PG&E-23-26 to require PG&E to perform a quantitative analysis of the safety impacts of EPSS. The analysis should be performed with regard to vulnerable populations at increased safety risk due to EPSS-related outages, demonstrate that the benefits of EPSS outweigh the safety impacts, and identify the measures PG&E will take to mitigate any EPSS-related safety risks.¹⁶ Here too, PG&E is not adverse to this recommendation and is already working on an analysis similar to the one suggested by Cal Advocates. This analysis will be submitted as part of PG&E’s Risk Assessment Mitigation Phase (RAMP) proceeding in May 2024. Should Energy Safety determine it would be beneficial, PG&E can provide this analysis for interested stakeholders when it is completed.

D. Vegetation Management (VM)

The Shasta County DA commented on the Draft Decision stating that PG&E’s proposed plan does not fix known defects in vegetation inspections. Specifically, the Shasta County DA states: (1) PG&E offers its own undefined standard of “substantial compliance” in relation to vegetation management; (2) PG&E should be required to state that its standards for routine vegetation management inspections will ensure compliance with California Public Resources Code (PRC) Sections 4421 and 4293; and (3) PG&E’s WMP should address risks addressed in the California Power Line Fire Prevention Field Guide.¹⁷ We address these items below.

The Shasta County DA’s claim that PG&E offers its own undefined standard of “substantial compliance” on vegetation management is not correct. To the contrary, PG&E follows the definitions/standards for “substantial compliance” provided by Energy Safety in its Compliance Guidelines for the Substantial Vegetation Management Audit report¹⁸ and its WMP

Compliance Guidelines.¹⁹ These definitions from Energy Safety are the standards against which PG&E is evaluated.

The Shasta County DA states that PG&E should be required to state that our standards for routine vegetation inspections will ensure compliance with PRC Sections 4421 and 4293.²⁰ This separate certification has not been requested by Energy Safety, nor would it contribute to safety. PG&E's WMP describes our efforts to construct, maintain, and operate our electrical lines and equipment in a manner that will minimize the risk of catastrophic wildfire posed by those electrical lines and equipment.²¹ In the plan, we describe how we follow our routine distribution vegetation management standards, which require compliance with applicable regulatory and statutory standards governing vegetation management activities that seek to prevent fires.²² We also describe precautions for PG&E employees and contract partners when performing work near any forest-, brush-, or grass-covered land.²³ Thus, PG&E has already demonstrated in the WMP our dedication to complying with applicable laws and regulations meant to prevent wildfires and our detailed methods for doing so.

Finally, we believe the Shasta County DA is incorrect in asserting that PG&E's WMP fails to address risks identified in the California Power Line Fire Prevention Field Guide (Field Guide). As an initial matter, the Shasta County DA does not identify any risks from the Field Guide not addressed in the WMP. Moreover, as discussed in the WMP, PG&E has updated our VM Distribution Inspection Procedure and Program Standard to align with industry standards, including the Field Guide, which is identified as a reference in both documents.²⁴ The VM Distribution Inspection Procedure specifically relies on the Field Guide to identify trees with defects or conditions that increase the likelihood of tree failures and to identify rotten or diseased portions of otherwise healthy trees that overhang or lean toward a powerline.²⁵ Thus, PG&E's distribution VM program described in the WMP addresses risks identified in the Field Guide.

E. PG&E's Wildfire Distribution Risk Model (WDRM)

MGRA recommends Energy Safety add a new ACI related to PG&E's WDRM and makes three related recommendations. As discussed below, PG&E has already implemented two of these three recommendations and is evaluating the third. Thus, MGRA's recommendation to add an additional ACI is unnecessary.

First, MGRA recommends PG&E provide the full technical details and results of third-party validation for the WDRM version 4 (v4) in the 2025 WMP Update and a comparison of WDRM v4 to prior risk models.²⁶ PG&E agrees with this recommendation and already plans to implement it. PG&E consistently provides a third-party validation report for each model in our WMP filings. The third-party validation offers details on the model improvements, compared to previous model versions, and identifies areas for improvement in the ongoing maturation of wildfire risk models.²⁷

MGRA's second recommendation is for PG&E to provide data showing that our analysis, when running simulating known historical fires, produces consistent results with historical data.²⁸ This recommendation is unnecessary because PG&E's wildfire consequence algorithm already produces consistent results compared to the historical data used as inputs and training data. Wildfire Consequence is developed from fire history, correlated with simulations conducted by Technosylva and the Fire Potential Index values for fire season time-locations along the PG&E electric grid. These are used to determine the predictive-destructive nature of each time-

place. The set of percentage of predictive-destructive days at each location is then aligned with the set of historical fires.²⁹

MGRA's third recommendation is that PG&E should not use average category values for our consequence model but rather use a statistical model that captures tail risk.³⁰ PG&E agrees that ideally a continuous representation of wildfire risk (such as a generalized Pareto distribution) would provide a more complete description of some wildfire outcomes, like acreage, but it would not correlate well with other consequential outcomes like destroyed structures or fatalities. For these other consequential outcomes, historical means adequately capture the spatial distribution of consequences. Therefore, it is not necessary to establish a new ACI in response to this recommendation.

F. Supplemental Response to Energy Safety's Revision Notice

PG&E submitted a Supplemental Revision Notice Response to Energy Safety on September 27, 2023.³¹ TURN argues PG&E's WMP Draft Decision must be modified to remove all findings and conclusions that are influenced by this supplemental information.³²

In approving PG&E's request to submit a supplemental revision notice response, Energy Safety stated that "a supplemental response would assist Energy Safety in its evaluation of PG&E's Base Plan and is *in the interest of mitigating wildfire risk and protecting public safety*."³³ Therefore, it is appropriate for Energy Safety to consider all the information PG&E has provided in this proceeding. To argue otherwise is contrary to the intent of this regulatory proceeding and the interests of public safety.

CONCLUSION

PG&E appreciates this opportunity to provide these reply comments on the Draft Decision and looks forward to updating our base plan with the 2025 WMP update in 2024. If you have any questions, or need any additional information, please do not hesitate to contact the undersigned at jay.leyno@pge.com or Wade Greenacre at wade.greenacre@pge.com.

Very truly yours,

/s/ Jay Leyno

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- ¹ The Public Advocates Office at the California Public Utilities Commission (Cal Advocates); Mussey Grade Road Alliance (MGRA); The Office of the District Attorney, County of Shasta (Shasta County DA); and The Utility Reform Network (TURN).
- ² Cal Advocates Opening Comments, pp. 2-5.
- ³ TURN Opening Comments, pp. 1-4.
- ⁴ Cal Advocates Opening Comments, pp. 2-6. The six recommendations are listed in bullet point form (see pages 5-6). PG&E has added numbers to each bulleted item in this discussion as a means of identification.
- ⁵ As explained in our Opening Comments, PG&E's WBCA tool will not be finalized and ready for use when the 2025 WMP Update is submitted in early 2024. We will begin using the WBCA starting with our May 2024 Risk Assessment and Mitigation Phase (RAMP) submission and in our Senate Bill (SB) 884 plan that we intend to file with Energy Safety in mid-2024. The timing of the SB 884 filing and scope of the final WBCA tool is dependent upon receiving final guidelines from Energy Safety and the CPUC, which have not been issued. *See* PG&E's Opening Comments, pp. 3-4. While PG&E will begin using the WBCA tool to select projects as early as 2024, projects selected by the WBCA tool may not be scheduled for several years after selection.
- ⁶ PG&E's 2023-2025 WMP, R3, pp. 424-431.
- ⁷ PG&E's 2023-2025 WMP, R3, pp. 407-408.
- ⁸ TURN Opening Comments, pp. 1-4.
- ⁹ PG&E notes that R.20-07-013 also states that Utilities are not bound to select its mitigation strategy based solely on Cost Benefit Ratio ranking. D.22-12-027, Findings of Fact, 11, p. 56.
- ¹⁰ Cal Advocates Opening Comments, pp. 2-5.
- ¹¹ TURN Opening Comments, pp. 4-7.
- ¹² Energy Safety Draft Decision, p. 42 and Appendix A, Table A-1.
- ¹³ Cal Advocates Opening Comments, pp. 7-8.
- ¹⁴ MGRA Opening Comments, p. 5.
- ¹⁵ MGRA Opening Comments, pp. 5-6.
- ¹⁶ Cal Advocates Opening Comments, pp. 8-9.
- ¹⁷ Shasta County DA Opening Comments, p. 1.
- ¹⁸ Energy Safety Compliance Guidelines (Sep. 8, 2023), p. 15.
- ¹⁹ Energy Safety Compliance Guidelines (Sep. 8, 2023), p. 16.
- ²⁰ Shasta County DA Opening Comments, p. 1.
- ²¹ PG&E's 2023-2025 WMP, R3, p. 70.
- ²² PG&E's Distribution Vegetation Management Program Standard, Utility Standard TD-7102S, requires compliance with CPUC General Order (GO) 95, Rules 18 and 35, PRC Sections 4293 and 4295.5, and California Code of Regulation (CCR) Title 14, Sections 1250-1258. Utility Standard TD-7102S is included in Appendix E of PG&E's 2023-2025 WMP, R3.
- ²³ *See* Appendix E of PG&E's 2023-2025 WMP, R3.
- ²⁴ PG&E's Distribution Vegetation Management Utility Standard TD-7102S and PG&E's Vegetation Management Distribution Inspection Procedure, Utility Procedure TD-7102P-01 are included in Appendix E of PG&E's 2023-2025 WMP, R3.
- ²⁵ PG&E's Vegetation Management Distribution Inspection Procedure, Utility Procedure TD-7102P-01, Appendix B and Appendix E.
- ²⁶ MGRA Opening Comments, pp. 4-5.
- ²⁷ *See*, for example, Appendix B of PG&E's 2023-2025 WMP, R3.
- ²⁸ MGRA Opening Comments, pp. 4-5.
- ²⁹ PG&E's 2023-2025 WMP, R3, pp. 170-176.
- ³⁰ MGRA Opening Comments, pp. 4-5.
- ³¹ PG&E's 2023-2025 WMP, R3 – Supplemental Revision Notice Response (Sep. 27, 2023).
- ³² TURN Opening Comments, pp. 7-8.
- ³³ Corrected Energy Safety Response to PG&E's Request for Supplemental Response to Revision Notice (Sep. 13, 2023), p. 1 (emphasis added).