August 18, 2023 **Via Electronic Filing**

Caroline Thomas Jacobs, Director
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Subject: **Comments of the Public Advocates Office on Public Advocates Office Comments Guidelines for the 2025 Wildfire Mitigation Plan Updates**
Docket: **2023-2025-WMPs**

Dear Director Thomas Jacobs,

The Public Advocates Office at the California Public Utilities Commission (Cal Advocates) respectfully submits the following comments regarding the Public Workshop on 2025 Wildfire Mitigation Plan Update Guidelines, held July 19, 2023. Please contact Nathaniel Skinner (Nathaniel.Skinner@cpuc.ca.gov) or Henry Burton (Henry.Burton@cpuc.ca.gov) with any questions relating to these comments.

We respectfully urge the Office of Energy Infrastructure Safety to adopt the recommendations discussed herein.

Respectfully submitted,

/s/ Marybelle C. Ang

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I. INTRODUCTION

Pursuant to the Office of Energy Infrastructure Safety's (Energy Safety) workshop notice inviting public comments,[1] the Public Advocates Office at the California Public Utilities Commission (Cal Advocates) submits these comments in response to the Public Workshop on 2025 Wildfire Mitigation Plan Update Guidelines, held July 19, 2023 (2025 Guidelines Workshop), and Energy Safety's *Pre-Workshop Material on Development of the 2025 Wildfire Mitigation Plan Update Guidelines* (Pre-Workshop Material).[2]

II. UPDATE STRUCTURE AND WMP SCHEDULE (Proposals 1 and 3)

A. Cal Advocates supports Energy Safety's proposed structure for the 2025 WMP Updates.

Cal Advocates supports Energy Safety's proposal to require electrical corporations to submit three documents for their 2025 WMP Update: the update, a redline 2023-2025 WMP ("base plan"), and a clean, updated version of the 2023-2025 WMP base plan.[3] Cal Advocates expects that each of the three required documents will serve a useful purpose:

- The narrowly tailored 2025 WMP Update will describe what is new or changed since the 2023 submission.[4] Cal Advocates expects that this will help parties and the public identify and focus on new information.
- Cal Advocates anticipates that the redline version of the base plan[5] will provide visibility on the extent of change in the update versus the base plan and will help ensure that the WMP update is not an entirely new plan.
- The clean, updated version of the 2023-2025 WMP base plan[6] will serve as an accurate and current version of each electrical corporation's efforts to mitigate the impact of wildfires in its service territory.

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[1] Office of Energy Infrastructure Safety, *Notice of 2025 Wildfire Mitigation Plan Update Guidelines Workshop*, June 21, 2023, docket 2023-2025-WMPs. Available at: https://efiling.energysafety.ca.gov/Lists/DocketLog.aspx?docketnumber=2023-2025-WMPs

[2] Office of Energy Infrastructure Safety, *Notice of 2025 Wildfire Mitigation Plan Update Guidelines Workshop: Pre-Workshop Material: Development of the 2025 Wildfire Mitigation Plan Update Guidelines*, June 21, 2023, docket 2023-2025-WMPs (Pre-Workshop Material).

[3] Pre-Workshop Material, Section 1.

[4] Pre-Workshop Material, Section 1.a.

[5] Pre-Workshop Material, Section 1.b.

[6] Pre-Workshop Material, Section 1.c.

Cal Advocates agrees with Energy Safety that the redline and clean versions of the base plan will likely provide a "single source of truth."[7] We also agree with the Green Power Institute that the base plan products are likely to fully and accurately capture the most current status of the electrical corporations' mitigation planning.[8]

Cal Advocates disagrees with comments made by SCE that the redline version of the base plan would create a "slippery slope" or an insurmountable administrative burden. Page numbering does not pose a problem because the redline documents' internal logic will not be affected by page numbering changes. Cal Advocates does agree with SCE that updating tables and charts in a redline version will necessitate a hybrid approach on which parties will need to come to agreement.[9] In the redline version, Cal Advocates proposes that the utility retain the original table or chart while providing a replacement version and clearly labeling both.

Good recordkeeping is not a waste of time. Moreover, an important intention of the legislation governing wildfire mitigation planning was to improve the accountability of electrical corporations for their mitigation spending and ensure that mitigation is conducted in a safe, reliable, efficient, and cost-effective manner.[10]

B. Cal Advocates supports Energy Safety's proposed 2025 WMP Update submission schedule, which includes pre-submissions.

Cal Advocates supports Energy Safety's proposal to require electrical corporations to submit WMPs (base year and Updates) in the year prior to the implementation year.[11] Cal Advocates has previously recommended WMP submissions in the year prior to implementation that would also be approved or denied in the year prior to the start of the implementation year.[12] To facilitate proactive planning, it is essential that the WMP submissions and the regulatory review occur before plan implementation begins.

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[7] Statement during the 2025 Guidelines Workshop by Colin Lang, Senior Environmental Scientist of Energy Safety's Electric Safety Policy Division.

[8] Statement during the 2025 Guidelines Workshop by Zoe Harrold of the Green Power Institute.

[9] Statements during the 2025 Guidelines Workshop by John Rankin, SCE.

[10] Public Utilities Code section 399.2(a); Public Utilities Code section 8386(c), especially parts 1, 4, 5 and 14; Senate floor analysis of Senate Bill 901 at 9; and Senate floor analysis of Assembly Bill 1054.

[11] Pre-Workshop Material, Proposal 3.

[12] *Comments of the Public Advocates Office on the 2023 Wildfire Mitigation Plan Guideline Development Workshop* at 9-12, May 6, 2022 in docket 2023-2025-WMPs. See also *Comments of the Public*

During the 2025 Guidelines Workshop, SCE voiced concern regarding the schedule, because SCE's planning and goal-setting process occurs in the fall. Energy Safety's schedule, in combination with a goal-setting process in the fall, could lead to changes to the WMPs created in the spring for the following year. However, such adjustments can be addressed through the change order process. Although SCE observed that change orders are limited in scope and not appropriate for "fundamental changes in the approach or risk reduction aspect of a program,"[13] such fundamental changes are inappropriate for inclusion in a WMP Update, regardless of the submission timing.

Alternatively, Energy Safety could move WMP submissions to the late summer or fall. Cal Advocates has previously recommended scheduling WMP submissions around September 1st, which could facilitate up-to-date planning. This option is discussed in more detail in our comments dated May 6, 2022.[14]

Cal Advocates also supports Energy Safety's proposal to continue the pre-submission requirement introduced in 2022 for the current base year. Pre-submission should also apply to the Update submissions until more experience indicates its usefulness or lack thereof.
Cal Advocates agrees with SCE that the utilities "have an obligation to submit a complete WMP." However, in practice, as demonstrated in the pre-submission review of the 2023-2025 base year plan, some utilities do not fulfill this obligation. The pre-submission process can help to correct gaps and shortcomings as quickly as possible.

III. RISK MODELS AND RISK MODELING (Proposal 2a)

A. Energy Safety should replace the quantitative criteria model updates with qualitative criteria.

Section 2.a of the proposed 2025 WMP Update Guidelines requires utilities to report and justify changes to their risk models. These changes would be categorized as either significant or insignificant, depending on how a change affects "the top 20% of highest risk

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Advocates Office on the 2021 Wildfire Mitigation Plan Updates of the Large Investor-Owned Utilities, March 29, 2021, section VI.A.

[13] Statement during the 2025 Guidelines Workshop by John Rankin, SCE.

[14] *Comments of the Public Advocates Office on the 2023 Wildfire Mitigation Plan Guideline Development Workshop* at 10-11, May 6, 2022 in docket 2023-2025-WMPs.

circuits/segments/spans when all circuits/segments/spans are ranked individually from highest to lowest."[15]

The proposed categorization may lead to differing responses among utilities. The proposal appears to allow each utility to determine whether to rank circuits, circuit segments, or spans by risk. For example, the top 20 percent of PG&E's risk-ranked *circuit segments* represent approximately 11 percent of PG&E's overhead distribution miles and 80 percent of PG&E's overall wildfire risk.[16] If another utility were to report on the top 20 percent of highest-risk *spans*,[17] that utility's 2025 WMP Update would likely discuss a very different percentage of overhead miles and overall wildfire risk.

Additionally, the utilities apply their risk models in different ways. SCE relies primarily on wildfire consequence to prioritize wildfire mitigation activities and largely ignores the probability of wildfire.[18] As a result of this approach, a "significant" change to the riskiest 20 percent of SCE's circuits may not correspond to a significant shift in the circuits included in SCE's undergrounding workplans. On the other hand, a utility that utilizes both consequence and probability in developing its system hardening workplans would likely see more alignment between the workplans and the riskiest 20 percent of risk-ranked circuits. As a result of these different use-cases of utility risk models, a detailed discussion of the top 20 percent of risk-ranked circuits will have limited relevance.

Cal Advocates supports Energy Safety's proposal to require detailed reporting on risk model updates. However, the proposed definitions for "significance" may not provide the most value to Energy Safety or stakeholders. This results from the fact that the quantitative definitions for "significance" are arbitrary and likely to be applied differently by each utility. Cal Advocates proposes a revised method be used to categorize risk model changes.

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[15] Pre-Workshop Material, Section 2.a.

[16] *Comments of the Public Advocates Office on the 2023 to 2025 Wildfire Mitigation Plans of the Large Investor-Owned Utilities* at 18, May 26, 2023, docket 2023-2025-WMPs. As discussed therein, the top 20 percent of risk-ranked circuit segments represents approximately 9,000 miles, which is about 11 percent of PG&E's 80,000 overhead circuit miles.

[17] A span refers to the distance between adjacent poles on the same circuit. Spans are likely to be more uniform in length than circuit segments, which are defined by the location of sectionalizing equipment.

[18] *Comments of the Public Advocates Office on the 2023 to 2025 Wildfire Mitigation Plans of the Large Investor-Owned Utilities* at 50, May 26, 2023, docket 2023-2025-WMPs.

1. Proposed definitions for significant and insignificant risk model updates.

Section 2.a.ii of the proposed 2025 WMP Update Guidelines defines a significant update as any change that "moves 10% or more of the Ignition Risk and/or PSPS Risk in or out of the top 20% of highest risk circuits/segments/spans."[19] This requirement should be revamped because it may mask important changes to model structure or methodology.

As an example, consider a scenario in which a utility introduces a complex new module to its risk model[20] that, by chance, moves less than 10 percent of the wildfire risk out of the riskiest 20 percent of risk-ranked circuits. In this situation, a major change to the data or methodology behind a risk model would be considered an insignificant change under the current proposal. Such a change would be discussed in a mere three pages,[21] and Energy Safety and stakeholders could be caught unawares if it led to more pronounced changes in wildfire mitigation strategy in future years.[22]

Rather than defining "significance" based on the *output* of the model, Cal Advocates recommends the definition of significance be based on how the model itself works. If a risk model was a car, a *significant* update might be a more rigid chassis or a more powerful engine. Either of these changes could fundamentally alter the performance or even the function of the vehicle, but would not necessarily affect the outward appearance, even to a reasonably informed observer. In a similar manner, fundamental changes to risk model structure may not present obvious changes in model output. In contrast, simply changing the car's oil or giving it a fresh paint job would be insignificant.

In keeping with this analogy, Energy Safety should modify the proposed 2025 WMP Update Guidelines to define a significant change as one that includes any of the following:

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[19] Pre-Workshop Material, Section 2.a.

[20] A likely case would be a utility deciding to include a previously not-modeled ignition driver into its risk models.

[21] Pre-Workshop Material, Section 2.a.

[22] For example, incremental changes to the Boeing 737 Max allowed bypassing significant regulatory review. This ultimately led to a series of aviation disasters driven in part by reliance on a single faulty sensor. See https://www.seattletimes.com/business/boeing-aerospace/final-report-on-boeing-737-max-crash-disputed-agencies-note-pilot-error-as-a-factor/

- Changes to modeling methodology. This could include using a new machine learning algorithm or changing how wildfire consequences are calculated.
- Changes in assumptions (for example, extending the length of fire season in response to the effects of climate change).
- Changes to data sources, such as using a new source of data to measure vegetation moisture content.
- New data types. For example, incorporating additional risk drivers into newer versions of a model.
- Changes in model application or use-case.

In contrast, an insignificant change should include any of the following:

- Updating but not changing input data. For example, incorporating 2023 ignition and outage data to train the model version that will be used in 2025.
- Updating asset data. For example, if a system hardening project has been completed, or assets have otherwise been replaced or removed, the model should be updated to reflect these activities.
- Fixing code errors and cleaning input data.

For changes that do not fit into these categories, utilities should consult with Energy Safety prior to filing their WMP Updates to determine whether or not a change is "significant."

B. Energy Safety should require additional information on risk models.

Section 2.a.i-ii of the proposed 2025 WMP Update Guidelines requires utilities to justify significant changes to risk models and to provide updated scheduling and workplans.[23] These requirements should be augmented in the following ways to ensure Energy Safety and stakeholders have access to enough information to perform a thorough and reasonable analysis of utility risk models.

1. Energy Safety should specify the baseline model from which changes are measured.

The proposed 2025 WMP Update Guidelines require utilities to explain updates to risk models and call for a comparison between updated and old models. However, the guidelines do not specify which model version the updated model should be compared against.[24] If a utility

[23] Pre-Workshop Material, Section 2.a.

[24] Pre-Workshop Material, Section 2.a.

were to make a change to its risk model during 2023, for example, in response to a Revision Notice, it is unclear whether the utility's 2025 WMP Update filing should discuss changes from this mid-2023 update, or from the risk model in use at the beginning of the year.

To enable an apples-to-apples comparison across all utilities, Energy Safety should update the proposed 2025 WMP Update Guidelines to clearly state that all changes discussed in the 2025 WMP Update should be with regard to the risk model discussed and utilized in the 2023-2025 Base WMP filing in early 2023.

2. Energy Safety should require utilities to provide full model outputs.

The proposed 2025 WMP Update Guidelines require utilities to discuss changes to "the top 20% of highest risk circuits/segments/spans when all circuits/segments/spans are ranked individually from highest to lowest."[25] In developing comments on the 2023-2025 Base WMPs, Cal Advocates made extensive use of the full output of the utilities' risk models. Limiting the available data to only the top 20 percent of highest risk circuit segments could impede our analysis.

To facilitate thorough and accurate analyses of risk model outputs, Energy Safety should update the proposed 2025 WMP Update Guidelines to require utilities to include full model outputs in their 2025 WMP Updates. This should include, at a minimum, a tabulated list of all modeled units[26] and their associated risk scores. If a utility's model generates multiple risk scores (such as asset failure risk and vegetation strike risk), all such scores should be included. It may also be useful to request similar data in a GIS-readable format.

For comparison, utilities should also file the full output of their baseline risk models (e.g., the models used in their 2023-2025 Base WMP filings) in a comparable format.

[25] Pre-Workshop Material, Section 2.a.

[26] This may be circuits, circuit segments, spans, or some other measure that represents the most granular level at which the utility aggregates and utilizes risk scores.

3. Energy Safety should require utilities to submit internal risk model documentation as appendices.

The proposed 2025 WMP Update Guidelines limit discussion of risk model updates to 15 pages.[27] This may be sufficient to discuss model updates in broad terms but may not include sufficient detail for stakeholders to understand the assumptions, data, and use-cases of the risk models.

To ensure Energy Safety and stakeholders are able to draft informed comments on these complex models, Energy Safety should update the proposed 2025 WMP Update Guidelines to require utilities to file internal model documentation for both the updated and baseline risk models as appendices to their 2025 WMP Updates.[28] If a utility has retained an external party to review its risk model, any reports or output from such review should also be included in the appendix.

IV. SHIFTS IN STRATEGIC DIRECTION (Proposal 2.b)

A. Energy Safety should clarify the proposed requirement to report on changes in expenditures related to lessons learned.

The proposed guidelines for WMP updates require utilities to provide a summary of lessons learned since its previous WMP submission and give updates on any ongoing improvements to address the existing lessons learned.[29] This includes a utility narrative, status update, and identified areas of improvement since the previous WMP submission. Energy Safety proposes to require the utilities to report each "change in expenditure for an initiative activity of greater than or equal to 10%" as part of the 2025 WMP Update Guidelines.[30]

Requiring the IOUs to explain each change that is equal to or greater than 10% would promote greater transparency for Energy Safety and interested stakeholders and may allow for more thorough analyses. However, Energy Safety should clarify its proposal regarding reporting changes in expenditure, as it is currently unclear if the 10% threshold relates to changes in actual costs or forecasted costs.

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[27] Pre-Workshop Material, Section 2.a. Discussion of insignificant changes is limited to three pages. Discussion of significant changes is limited to 15 pages.

[28] Utilities filed similar documentation in October 2021, following the Wildfire Risk Modeling Coordination public workshop held on October 5 and 6, 2021.

[29] Pre-Workshop Material, Section 2.b.

[30] Pre-Workshop Material, Section 2.b.iii.

Cal Advocates appreciates the inclusion and focused reporting on lessons learned, which can provide important updates on a utility's strategy change during a WMP cycle. It is crucial for these strategy changes to be thoroughly explained, as it allows Energy Safety and interested stakeholders to gain a better understanding of each utility's shift in approach during a WMP cycle. As part of the final 2025 WMP Guidelines, Energy Safety should clarify whether this 10% threshold for changes in expenditure is related to the utility's actuals or forecasts of the initiative spending. Energy Safety should also require the utility to state whether and how the changes in initiative spending will affect the work output targets (units) or spending levels approved in the utility's most recent general rate case.

V. AREAS FOR CONTINUED IMPROVEMENT

A. WMP Process Guidelines: As part of the pre-submission completeness check, Energy Safety should check whether a utility has substantially complied with the requirements of the previous year's Areas for Continued Improvement.

The WMP process guidelines require Energy Safety to perform a completeness check, which serves to ensure that the WMP submissions are complete prior to commencing the substantive evaluations of WMPs.[31] The completeness check that Energy Safety performs consists of five steps that help determine if the WMP filings by the utilities are complete and adequate.[32] Energy Safety should improve the process guidelines to include a sixth step for the completeness check – to address compliance with Areas for Continued Improvement.

The purpose of the additional step would be to ensure the utilities are providing responses that properly and meaningfully address Energy Safety's identified Areas for Continued Improvement. The proposed step would help avoid a situation where a utility provides incomplete responses that do not reasonably address the Areas for Continued Improvement, necessitating a Revision Notice (with the additional work and delays that entails). Cal Advocates has previously pointed out that PG&E has failed to comply with important Areas for Continued Improvement that Energy Safety identified in 2022.[33] Compliance is crucial as the

[31] Office of Energy Infrastructure Safety, 2023 – 2025 Wildfire Mitigation Plan Process and Evaluation Guidelines, December 6, 2022, at 3.

[32] Office of Energy Infrastructure Safety, 2023 – 2025 Wildfire Mitigation Plan Process and Evaluation Guidelines, December 6, 2022, at 4.

[33] *Comments of the Public Advocates Office on the 2023 Wildfire Mitigation Plans of Large IOUs* at 9-15 and 31-34, May 26, 2023, docket 2023-2025-WMPs.

Areas for Continued Improvement relate to important risk mitigation issues, such as analyzing system hardening alternatives, the quality control of inspections performed, and asset maintenance backlogs.[34]

Cal Advocates supports the entire completeness check process, which contributes to a smoother WMP evaluation process. Cal Advocates recommends that the guidelines for Energy Safety's completeness check process be revised to include the following additional language:

> Energy Safety will confirm that the electrical corporation has provided responses to the previous year's identified Areas for Continued Improvement that are reasonably complete and substantially address the requirements thereof. If the responses are incomplete or noncompliant, Energy Safety notes the deficiencies and marks this element "incomplete."

The Areas for Continued Improvement identify known deficiencies or weaknesses in each utility's wildfire mitigation planning. It is important that the utilities' Areas for Continued Improvement be appropriately addressed in a timely manner. The WMP Guidelines should be augmented with this revision, which will allow Energy Safety to ensure that the utilities are focusing on rectifying their Areas for Continued Improvement.

B. WMP Technical Guidelines: Energy Safety should describe an expanded range of options regarding remedies related to Areas for Continued Improvement.

Energy Safety should improve the variety of remedies that are applicable to the utilities' Areas for Continued Improvement. The purpose of the Areas for Continued Improvements in Appendix D of each WMP is to review the utility's progress on specific topics that Energy Safety has previously identified as concerns. It is an important part of the WMP that allows Energy Safety and interested stakeholders to keep track of the utility's performance and improvement from year to year.

However, in some cases, utilities have provided incomplete or noncompliant responses to Areas for Continued Improvement. For example, as Cal Advocates noted in our 2023 WMP

[34] *Comments of the Public Advocates Office on the 2023 Wildfire Mitigation Plans of Large IOUs* at 9-15, 23-25, and 31-34, May 26, 2023, docket 2023-2025-WMPs.

comments, PG&E failed to comply with two important Areas for Continued Improvement that Energy Safety identified in 2022.[35]

Energy Safety lacks a sufficient range of remedies, should a utility inadequately comply with the requirements of an Area for Continued Improvement. The current WMP guidelines do not describe how Energy Safety will hold a utility accountable for non-compliance. Energy Safety should revise the WMP guidelines to articulate enforceable remedies that Energy Safety has at its disposal.

Since the Areas for Continued Improvement cover multiple topics of varying degrees of severity, Energy Safety should also have a wide range of potential remedies. Cal Advocates recommends that Energy Safety revise the WMP guidelines to delineate several enforcement tools for instances when a utility's response to an Area for Continued Improvement is noncompliant. At minimum, the enforcement tools should include the possible remedies listed below:

- Energy Safety can require the utility to submit monthly corrective action reports until the problem is fully resolved;
- Energy Safety can convene monthly or a quarterly public forums where high-ranking utility executives describe their progress and answer questions;
- Energy Safety can conduct supplemental, in-depth field inspections and paperwork audits of the initiatives concerned;
- Energy Safety can retain a third-party auditor to examine the ongoing identified issues at the utility shareholder's expense;[36] and
- Energy Safety may defer action on approving the utility's WMP until the utility has shown sufficient progress in resolving the problem.

The WMP Guidelines should be augmented with these revisions, which will allow Energy Safety the ability to hold the utilities accountable for their performance or lack thereof regarding the Areas for Continued Improvement.

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[35] The Areas for Continued Improvement in question related to resolving asset maintenance backlogs and analyzing system hardening alternatives. *Comments of the Public Advocates Office on the 2023 Wildfire Mitigation Plans of Large IOUs* at 9-15 and 31-34, May 26, 2023, docket 2023-2025-WMPs.

[36] This remedy could be requested in conjunction with the CPUC if Energy Safety believes it currently lacks sufficient authority to require shareholder funding of a third-party auditor.

VI. ADDITIONAL PROPOSALS TO IMPROVE WILDFIRE MITIGATION PLANNING

A. Energy Safety should augment WMP Guidelines with more comprehensive data requirements.

Cal Advocates begins its evaluation of Wildfire Mitigation Plans (WMPs) each year by sending out a series of standard data requests to all the utilities. The purpose of these data requests is to gather additional information that, although not currently required by the WMP guidelines, is essential for a comprehensive and in-depth review of the WMPs.

The discovery phase of WMP review can be challenged by time constraints. Large and complex data requests can impose a significant burden on utilities and stakeholders alike. In particular, utilities must quickly reallocate resources to respond to the data requests, which often results in utilities seeking extensions for data responses. Such delays reduce the amount of time that stakeholders have available to examine the data and develop their recommendations.

Considering these issues, it is reasonable to propose revisions to the WMP guidelines. The proposed revisions would direct utilities to incorporate additional data into their annual WMP submissions and quarterly data reports. While Cal Advocates may still need to issue data requests to fill in gaps and clarify matters, requiring information up front would streamline the discovery process for all.

The proposed changes below underscore the need for utilities to provide data that is more detailed and granular. This includes enriching data tables with elements such as circuit names, geographic coordinates, and HFTD zones. Such detailed data is essential for in-depth analyses on efforts to reduce the risk of catastrophic wildfires. Moreover, when evaluating risk reduction, it is most effective to examine it at the circuit or segment level, as this is where numerous utility decisions and strategies are determined.

By implementing the proposed revisions, Energy Safety could improve the capacity of stakeholders to efficiently receive and analyze crucial information about WMPs, while simultaneously alleviating pressure on utilities resulting from the brief discovery process (which is driven by the statutory requirement to review and approve WMPs within three months).[37] Energy Safety should require the utilities to provide the following information as part of their annual WMP submission and quarterly data reports.

[37] Public Utilities Code section 8386.3(a).

1. WMP Technical Guidelines: Grid Design, Operations, and Maintenance

According to WMP technical guidelines, utilities must present tables that summarize their grid hardening goals and performance targets. However, summary data such as circuit miles or pole counts do not adequately capture the full state of utility assets, past or present.

Instead of a broad system overview, detailed data regarding mitigation efforts on each electric circuit or circuit-segment is needed. More granular data enables stakeholders to analyze where a utility is performing mitigation work and whether the work completed is appropriately prioritized to match the utility's risk-reduction goals.[38] Therefore, Energy Safety should require utilities to provide more comprehensive Excel data tables regarding their assets. Specifically, Cal Advocates recommends that Energy Safety update the WMP technical guidelines to require utilities to provide Excel tables for the following:

- A table showing mitigation work performed on each distribution circuit or isolatable circuit-segment. (This data should be presented at the finest level of granularity that aligns with the utility's risk model outputs and project planning practices.) The table should list (as rows) all distribution circuits (or circuit segments) existing as of January 1 of the WMP submission year. The table should contain the columns specified in Appendix A of these comments.
- A table showing mitigation work performed on each transmission circuit. The table should list (as rows) all transmission circuits existing as of January 1 of the WMP submission year. The table should contain the columns specified in Appendix B of these comments.
- A table showing all distribution circuit-segments that were removed or decommissioned. The table should list (as rows) all distribution circuit-segments existing as of January 1 of the previous calendar year that have since been removed or decommissioned, either partially or entirely. This includes permanent removal, removal of overhead lines that were moved underground, or overhead lines that were decommissioned but not physically removed. The table should contain the columns specified in Appendix C of these comments.
- A table showing all transmission circuit-segments that were removed or decommissioned. This table would be identical to the previous one, except for transmission. The table should contain the columns specified in Appendix C of these comments.

[38] Cal Advocates uses this data to examine whether utility mitigation efforts align with the areas that utilities identify as high risk.

The detailed information will enhance the quality of analysis that is possible. For example, Cal Advocates, in past comments, used granular circuit-segment data to gauge a utility's priorities in grid-hardening. Based on detailed information obtained from discovery, our results indicated that the utility did not sufficiently target high-risk areas for mitigation.

In summary, to provide clearer insights into utility mitigation actions and priorities, Energy Safety should incorporate these tables into WMP submissions. Simply using overall system data does not fully capture the past or present condition of utility assets.

2. WMP Technical Guidelines: Quality Assurance and Quality Control

The WMP technical guidelines require utilities to describe their quality assurance and quality control (QA/QC) activities. This includes providing information on documented procedures, sampling methods, auditor qualifications, incorporation of audit findings into practices, and updates since the last WMP submission.

However, the WMP technical guidelines do not direct the utilities to provide their QA/QC records for either internal or external audits. Reviewing QA/QC records from the previous year is important as they provide a detailed historical perspective on the types of problems or concerns identified in past audits. These records are thus essential in verifying the efficacy of WMP initiatives and the utility's ability to consistently meet performance goals.

Including the previous year's QA/QC records in the annual WMP submission would be highly useful. This proactive move would promote immediate data accessibility, streamlining the WMP review and decision-making process. It also avoids potential delays associated with data request responses, while fostering transparency and accountability from the start.

Cal Advocates recommends that Energy Safety revise the WMP technical guidelines to require utilities to provide the following records related to QA/QC activities that were completed since January 1 of the previous calendar year:

- All reports or results of QA/QC activities conducted by internal entities that examined any programs, initiatives, or strategies described in the previous year's WMP submittal.
- All reports or results of QA/QC activities conducted by external entities that examined any programs, initiatives, or strategies described in the previous year's WMP submittal.

In conclusion, the WMP technical guidelines currently lack a provision for utilities to provide QA/QC audit records. Such records are essential to evaluate the success of mitigation

strategies and maintaining steady performance. As an illustration, Cal Advocates used QA/QC records in past comments to identify a utility's shortcomings in its own audit procedures. Including these records in yearly submissions would bolster transparency and simplify the review process. Consequently, Cal Advocates recommends that Energy Safety incorporate this requirement into upcoming WMP guidelines.

3. WMP Technical Guidelines: Notices of Violation and Defect

The WMP technical guidelines require utilities to disclose all ongoing violations and defects as of January 1 of the year they submit their WMP. An example table (for the reporting of data such as infraction type, severity, notification date, descriptions, and completion dates) is provided in the WMP technical guidelines. However, this table omits key details and does not enable a reasonable review of each utility's performance and progress.

The current table format fails to deliver a comprehensive snapshot of a utility's compliance performance. The table lacks essential details that stakeholders need to comprehensively evaluate the issues. It does not provide information like the circuit name, priority level, and geographic coordinates. Moreover, the current table only lists "open" violations and defects, thereby omitting past incidents (which could be serious, even if they have since been resolved). Including past issues is crucial for understanding trends.

Therefore, Cal Advocates recommends that Energy Safety revise the WMP guidelines. Utilities should be required to document all violations and defects discovered in the previous calendar year by Energy Safety's Compliance Branch in an Excel table, ensuring that these specific details are listed in separate columns.

- Associated circuit name;
- WMP initiative (from previous year's WMP update) associated with defect/violation;
- Date defect/violation was identified;
- Date defect/violation was corrected;
- If the defect/violation has not yet been corrected as of the issuance date of this data request, a brief explanation;
- Priority level of corresponding corrective tag;
- Geographic latitude of defect/violation in decimal degrees, truncated to seven decimal places; and

- Geographic longitude of defect/violation in decimal degrees, truncated to seven decimal places.

4. WMP Data Guidelines: Open Asset Work Orders

Cal Advocates appreciates that Energy Safety has incorporated open asset work orders as a significant part of the latest quarterly data reports.[39] The inclusion of this new table ensures transparency and increases the understanding of each utility's asset maintenance process. Although this is a considerable improvement, Cal Advocates recommends further enhancements in the form of additional data fields in Table 13. These additional fields would provide a more comprehensive data set that would allow stakeholders to delve deeper into the analysis of open asset work orders, thereby strengthening their understanding of the overall state of asset management. This deeper analysis will help stakeholders make more informed decisions and potentially identify areas that need to be urgently addressed. To facilitate better understanding of asset work orders and utilities' maintenance practices, Cal Advocates recommends that Energy Safety require utilities to supplement Table 13 with the following information listed in separate columns:

- Name of associated circuit;
- ID number of associated circuit;
- Geographic latitude in decimal degrees, truncated to seven decimal places;
- Geographic longitude in decimal degrees, truncated to seven decimal places;
- Priority of the original notification (using the utility's internal priority system, if different from the General Order 95 priority levels); and
- Object/damage code or other internal description of defect.

In summary, updating Table 13 is crucial for understanding a utility's approach to corrective actions. By integrating details like priority, geographic locations, and damage codes, stakeholders gain a more transparent view of the utility's strategy. The improved Table 13 will help stakeholders identify trends in corrective notifications. Therefore, Cal Advocates suggests that Energy Safety instruct utilities to include this comprehensive information in Table 13 of all future quarterly data reports.

[39] This information is presented in Table 13 of the quarterly data reports.

B. WMP Technical Guidelines: Energy Safety should develop WMP guidelines for fast-trip programs similar to its guidelines for PSPS.

In its comments on the 2023 WMPs of the Large IOUs, Cal Advocates recommended that Energy Safety develop guidelines for fast-trip programs that parallel the existing requirements for Public Safety Power Shutoff (PSPS) events.[40] Each of the large utilities uses fast-trip settings to mitigate wildfire risk, although the utilities deploy these settings at different scales and frequencies.[41] Cal Advocates' recommendations are based on the fact that outages on fast-trip enabled lines are similar to PSPS de-energizations because they both cause loss of power to a utility's customers in order to protect against fire ignition, and both have the potential to be extended outages that can harm those who rely the most on electricity to stay alive and healthy. For example, in 2022, PG&E had 42 fast-trip outages that lasted more than one day, affecting 41,160 customer accounts including 2,357 medical baseline customers and 1,590 Life Support customers.[42, 43] Because of their potential harm, fast-trip programs should be considered more similar to PSPS than any other wildfire mitigation tool such as grid hardening or the disabling of reclosers.

As such, Energy Safety should update its WMP Guidelines for 2024 and beyond to include a section requiring further information about the utility's use of fast-trip settings and the resulting impact on customers. These guidelines should be implemented similarly to Energy Safety's existing guidance regarding PSPS and should encompass:

- Key fast-trip statistics (e.g., outage duration, number and type of customers affected);
- Identification of frequently de-energized circuits;
- Objectives for reducing the scale, scope, and frequency of fast-trip de-energizations;
- Performance metrics identified by the electrical corporation;
- Protocols on enabling fast-trip settings;

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[40] *Comments of the Public Advocates Office on the 2023 to 2025 Wildfire Mitigation Plans of the Large Investor-Owned Utilities*, at 84-88, filed May 26, 2023 in docket 2023-2025-WMPs.

[41] PG&E refers to fast trip as Enhanced Powerline Safety Settings (EPSS), SCE refers to it as Fast Curve, and SDG&E refers to it as Sensitive Relay Profile (SRP) settings.

[42] One outage lasted 14,133 minutes or approximately 10 days.

[43] PG&E's CPUC EPSS Monthly Outages Report, dated January 17, 2023.

- Customer communication strategy for enabling fast-trip settings;
- Identification of key personnel, qualifications and training for fast trip;
- Planning and allocation of resources for service restoration for outages on lines with fast-trip settings enabled.

The addition of the above guidelines will improve Energy Safety's and stakeholders' ability to assess how the IOUs are implementing their respective fast-trip programs. Energy Safety should move expeditiously to include these items in the WMP Guidelines, as the number of customer accounts affected by fast-trip outages has already surpassed the number of customer accounts that experienced the peak of PSPS events in Fall 2019.[44], [45]

C. WMP Technical Guidelines: Energy Safety should require each utility's WMP Update to describe how the utility is using resilience resources to mitigate the impact of fast-trip outages.

When conducting PSPS events, the IOUs are required to activate numerous customer resilience resources to mitigate the impact of wildfire safety outages on customers.[46] These resources include Community Resource Centers where customers can go to charge devices, get ice for refrigeration, and speak to utility representatives in person for more information. Some areas have temporary or community microgrids enabled to keep customers energized during PSPS events.[47] Other resources that the IOUs provide before or during PSPS events include free backup battery programs, generator rebate programs, partnerships with the 211 phone service to help customers find available resources, and food bank partnerships to help customers replace food that spoils. The IOUs currently provide none of the above to support customers experiencing fast-trip outages. This is because the IOUs have chosen to treat fast-trip outages like ordinary outages, rather than those that have been caused by a utility's choices.

As fast-trip settings are deployed across greater numbers of circuits, it is becoming increasingly important that customers have access to programs that can reduce the harms of

[44] PG&E Monthly Reports to SED, January 2023 attachment, Summary worksheet. Available at: https://www.cpuc.ca.gov/industries-and-topics/wildfires/protective-equipment-device-settings

[45] 2019 PG&E PSPS Post Event Reports. Available at: https://www.cpuc.ca.gov/consumer-support/psps/utility-company-psps-reports-post-event-and-post-season/archived-psps-post-event-reports-2017-2020

[46] D.21-06-034 at A1-A3, A10.

[47] For example, see PG&E 2021 PSPS Post-Season Report at 26-27. 1,721 customers were able to remain energized in PG&E's August 17, 2021 PSPS event due to temporary microgrids.

outages, especially during times of high fire risk, which tend to be when fast-trip settings are enabled.[48] To track how well the IOUs are supporting their customers during periods of elevated risk of outages, Energy Safety should develop WMP guidelines that require each utility's WMP to describe how the utility uses resilience resources to mitigate the impact of fast-trip outages. Given the unpredictable nature of fast-trip outages, these guidelines should be more focused on "passive" resilience measures (as opposed to active measures, such as deploying a Community Resource Center in response to a planned outage like a PSPS Event). For example:

- Energy Safety should issue a new guideline that requires the utilities to describe how the utility is providing additional support to food banks in areas that are more likely to experience outages during hazardous weather conditions when fast-trip settings are enabled.
- Similar guidelines should be crafted to include reporting on how temporary and community microgrids intended to address PSPS outages are being modified to keep customers energized during fast-trip or other outage types.
- Utilities should consider offering backup battery programs and generator rebate programs to customers on the circuits that are most frequently affected by fast-trip outages. Energy Safety should require utilities to describe their approach in future WMPs.

Together, these new WMP guidelines will allow Energy Safety and stakeholders to track each utility's efforts to reduce the impact of wildfire safety outages (both PSPS and fast trip) on customers.

D. WMP Technical Guidelines: Energy Safety should require electrical corporations to classify vegetation management work orders that are past due additionally by risk level.

In Section 8.2.6 of Energy Safety's 2023-2025 WMP Technical Guidelines, Energy Safety directs each electrical corporation to provide an overview of the procedure it uses to manage its open work orders resulting from vegetation management inspections that prescribe vegetation management activities.[49] Within this overview, the electrical corporation must include a description of how work orders are prioritized based on risk. Additionally, Energy

[48] For example, see PG&E's 2022 PSPS Post-Season Report at 29: "EPSS focuses on engineering and enabling safety settings on certain line devices/equipment in the event conditions indicate an increased potential for wildfires."

[49] 2023-2025 WMP Technical Guidelines, at 110-111.

Safety requires each electrical corporation to provide an aging report, which shows the number of past due vegetation management work orders categorized by age.[50]

As an example, Liberty's 2023 WMP describes how its vegetation management work orders are prioritized based on risk for potential tree or limb failures according to four levels of priorities.[51]

- Priority 1 conditions denotes imminent failure and requires attention within 24 hours.
- Priority 2 conditions denote likelihood of imminent failure (possibly within 6 months) and require attention within 30 days.
- Priority 3 conditions denote likelihood of failure within 2 years and require attention within 9 months.
- Priority 4 conditions is any other open work order.

Unfortunately, the WMP guidelines' current requirement, to provide an aging report for past due work orders does not accurately reflect an electrical corporation's efforts to tackle work orders that are past due. For example, in Liberty's 2023 WMP, Table 8-31 showed that Liberty had 2,588 past due vegetation management work orders in HFTD Tier 2 areas with an age greater than 181 days.[52] However, in response to discovery, Liberty stated that of its 2,588 substantially overdue vegetation management work orders, only 210 remained open as of June 9th, 2023.[53] While Liberty has managed to resolve a large number of open work orders in a short period of time, it is unclear what priority levels were assigned to the completed work orders or how Liberty was able to resolve a large number of work orders quickly.

Priority level is a crucial piece of information because it conveys the seriousness and urgency of the work order. For greater clarity in future WMPs, Cal Advocates recommends that Energy Safety require utilities to provide data regarding past due vegetation management work orders not only classified by age and HFTD area, but also by the priority level. Classifying open work orders by their priority levels will allow for greater understanding of the levels of

[50] 2023-2025 WMP Technical Guidelines, at 110-111.

[51] Liberty's 2023-2025 WMP, at 240-241.

[52] Liberty's 2023-2025 WMP, at 243.

[53] Liberty's response to data request CalAdvocates-Liberty-2023WMP-12, Question 5.

unattended risk that each utility is carrying. This will give Energy Safety and all stakeholders a more accurate representation of open work orders.

VII. CONCLUSION

Cal Advocates respectfully requests that Energy Safety adopt the recommendations discussed in these comments.

Respectfully submitted,

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VIII. APPENDIX A

MITIGATION DATA FOR ELECTRIC DISTRIBUTION CIRCUITS OR ISOLATABLE CIRCUIT-SEGMENTS

COLUMN HEADERS

- Circuit name
- Circuit ID number
- Circuit-segment name
- Circuit-segment ID number
- Total circuit miles
- Overhead circuit miles in Non-HFTD Areas
- Overhead circuit miles in Other HFTD
- Overhead circuit miles in HFTD Tier 2
- Overhead circuit miles in HFTD Tier 3
- Underground circuit miles in Non-HFTD Areas
- Underground circuit miles in Other HFTD
- Underground circuit miles in HFTD Tier 2
- Underground circuit miles in HFTD Tier 3
- Circuit voltage

For each of the previous three calendar years, provide:

- Circuit SAIDI (System Average Interruption Duration Index)
- Circuit SAIFI (System Average Interruption Frequency Index)
- Circuit MAIFI (Momentary Average Interruption Frequency Index)
- Total customer-minutes of de-energization on the circuit due to PSPS events (sum of customer-minutes across all PSPS events).
- Total customer-minutes of de-energization on the circuit due to fast-trip settings
- Miles of covered conductor installed in Non-HFTD
- Miles of covered conductor installed in Other HFTD
- Miles of covered conductor installed in HFTD Tier 2
- Miles of covered conductor installed in HFTD Tier 3
- Number of poles replaced in Non-HFTD
- Number of poles replaced in Other HFTD
- Number of poles replaced in HFTD Tier 2
- Number of poles replaced in HFTD Tier 3
- Miles of underground conductor installation in Non-HFTD
- Miles of underground conductor installation in Other HFTD

- Miles of underground conductor installation in HFTD Tier 2
- Miles of underground conductor installation in HFTD Tier 3
- Miles of LiDAR inspection in Non-HFTD
- Miles of LiDAR inspection in Other HFTD
- Miles of LiDAR inspection in HFTD Tier 2
- Miles of LiDAR inspection in HFTD Tier 3
- Number of detailed overhead inspections in Non-HFTD
- Number of detailed overhead inspections in Other HFTD
- Number of detailed overhead inspections in HFTD Tier 2
- Number of detailed overhead inspections in HFTD Tier 3
- Number of sectionalization devices installed in Non-HFTD
- Number of sectionalization devices installed in Other HFTD
- Number of sectionalization devices installed in HFTD Tier 2
- Number of sectionalization devices installed in HFTD Tier 3

IX. APPENDIX B

MITIGATION DATA FOR ELECTRIC TRANSMISSION CIRCUITS

COLUMN HEADERS

- Circuit name
- Circuit ID number
- Total circuit miles
- Circuit miles in Non-HFTD Areas
- Circuit miles in Other HFTD
- Circuit miles in HFTD Tier 2
- Circuit miles in HFTD Tier 3
- Circuit voltage

For each of the previous three calendar years, provide:

- Total customer-minutes of de-energization on the circuit due to PSPS events (sum of customer-minutes across all PSPS events).
- Total customer-minutes of de-energization on the circuit due to PSPS events (sum of customer-minutes across all PSPS events).
- Total customer-minutes of de-energization on the circuit due to fast-trip settings .
- Total customer-minutes of de-energization on the circuit due to fast-trip settings .
- Number of support structures replaced in Non-HFTD
- Number of support structures replaced in Other HFTD
- Number of support structures replaced in HFTD Tier 2
- Number of support structures replaced in HFTD Tier 3
- Miles of LiDAR inspection in Non-HFTD
- Miles of LiDAR inspection in Other HFTD
- Miles of LiDAR inspection in HFTD Tier 2
- Miles of LiDAR inspection in HFTD Tier 3
- Number of detailed aerial inspections in Non-HFTD
- Number of detailed aerial inspections in Other HFTD
- Number of detailed aerial inspections in HFTD Tier 2
- Number of detailed aerial inspections in HFTD Tier 3
- Number of detailed climbing inspections in Non-HFTD
- Number of detailed climbing inspections in Other HFTD
- Number of detailed climbing inspections in HFTD Tier 2
- Number of detailed climbing inspections in HFTD Tier 3
- Number of detailed ground inspections in Non-HFTD

- Number of detailed ground inspections in Other HFTD
- Number of detailed ground inspections in HFTD Tier 2
- Number of detailed ground inspections in HFTD Tier 3
- Number of sectionalization devices installed in Non-HFTD
- Number of sectionalization devices installed in Other HFTD
- Number of sectionalization devices installed in HFTD Tier 2
- Number of sectionalization devices installed in HFTD Tier 3
- Miles of transmission ROW expansion performed in Non-HFTD
- Miles of transmission ROW expansion performed in Other HFTD
- Miles of transmission ROW expansion performed in HFTD Tier 2
- Miles of transmission ROW expansion performed in HFTD Tier 3

X. APPENDIX C

DECOMMISSIONED CIRCUIT-SEGMENTS

COLUMN HEADERS

For the previous calendar year, provide:

- Circuit name
- Circuit ID number
- Circuit-segment ID number
- Circuit miles removed or decommissioned in non-HFTD Areas
- Circuit miles removed or decommissioned in Other HFTD Areas
- Circuit miles removed or decommissioned in HFTD Tier 2
- Circuit miles removed or decommissioned in HFTD Tier 3
- Reason(s) for removal or decommissioning