



California Wildfire Safety
Advisory Board

Advisory Opinion for the 2024 Wildfire Mitigation Plans of Electric Publicly Owned Utilities and Rural Electric Cooperatives



Adopted on December 4, 2023



California Wildfire Safety Advisory Board

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Background

Following recent catastrophic wildfires in California, Senate Bill (SB) 901 (2018) established requirements that utilities file Wildfire Mitigation Plans (WMPs) with the California Public Utilities Commission (CPUC). Assembly Bill (AB) 1054 (2019) and AB 111 (2019) established the Wildfire Safety Advisory Board (WSAB), which consists of seven members appointed by the Governor, Speaker of the Assembly, and Senate Committee on Rules, and established the Office of Energy Infrastructure Safety (Energy Safety) as a department under the California Natural Resources Agency (CNRA).¹

To meet its AB 1054 mandate, the WSAB provides independent analysis and expert guidance to Energy Safety on wildfire safety issues. The WSAB acts in an advisory role on wildfire mitigation plans and related issues to Energy Safety, as well as to publicly owned utilities in the State. Each member of the WSAB brings a unique perspective and expertise to their review of WMP requirements and performance metrics. Additional information about the WSAB and its members can be found on its website: <https://energysafety.ca.gov/what-we-do/wildfire-safety-advisory-board/>.²

The current WSAB members are:

- Jessica Block, Chair
- Chris Porter, Vice Chair
- Ralph Armstrong
- Diane Fellman
- Timothy Haines
- John Mader
- Alexandra Syphard

Introduction

The WSAB is responsible for reviewing the WMPs of the State's Electric Publicly Owned Utilities and Cooperatives (together, POUs) and providing advisory guidance about improvements to those WMPs. Public Utilities Code Section 326.2(c) states that the WSAB shall “... ***review and provide comments and advisory opinions to each local publicly owned electric utility and electrical cooperative regarding the content and sufficiency of its wildfire mitigation plan and recommendations on how to mitigate wildfire risk.***”

¹ Formerly known as the Wildfire Safety Division at the CPUC.

² The WSAB approves the recommendations found here but individual recommendations may not reflect the views of individual WSAB member.



This Advisory Opinion (Opinion) fulfills that responsibility and represents the WSAB review of the POU's' 2023 WMPs and provides guidance for development of the POU's' 2024 WMPs updates and future comprehensive WMPs. The WSAB expresses our appreciation for the contribution and cooperation from the POU's through their representative organizations: California Municipal Utilities Association, Southern California Public Power Authority, Northern California Power Agency, and the Golden State Power Cooperative.

The WSAB appreciates the input of the POU's and the Joint Associations,³ which helped the WSAB better shape this Opinion. The WSAB views continued participation by these organizations as essential to allow the WSAB to meet its statutory responsibilities while being comprehensive, efficient, and respectful of the POU community's unique status as public power providers that are not subject to CPUC or WSAB regulation.

The WSAB received and reviewed the 2023 WMPs submitted by the 50 POU's as listed in Table 1 below, along with supplemental information that some, but not all POU's, filed. The supplemental information provided WMP adoption information, Independent Evaluation reports, and responses to previous WSAB recommendations.

Table 1: List of Publicly Owned Utilities Submitted 2023 WMPs

Alameda Municipal Power	Lassen Municipal Utility District	Redding Electric Utility
Anaheim Public Utilities	Lathrop Irrigation District	Riverside Public Utilities
Anza Electric Cooperative	Lodi Electric Utility	Roseville Electric Utility
Azusa Light and Water	City of Lompoc	Sacramento Municipal Utility District
City of Banning	Los Angeles Department of Water and Power	San Francisco Public Utilities Commission
City of Biggs	Merced Irrigation District	City of Shasta Lake
Burbank Water and Power	Modesto Irrigation District	Silicon Valley Power (Santa Clara)
Cerritos Electric Utility	Moreno Valley Utility	Port of Stockton Utility
City of Colton Electric Department	City of Needles	Surprise Valley Electrification Corporation
City of Corona	Northern California Power Agency	Transmission Agency of Northern California
Eastside Power Authority	Port of Oakland	Trinity Public Utility District
Glendale Water and Power	Palo Alto Utilities	Truckee Donner Public Utility District
City of Gridley	Pasadena Water and Power Department	Turlock Irrigation District

³ These Joint Associations consist of the California Municipal Utilities Association (CMUA), the Golden State Power Cooperative, the Northern California Power Association (NCPA), the Southern California Power Pool Association (SCPPA).



Healdsburg Electric Department	Pittsburg Power Company	City of Ukiah
Imperial Irrigation District	Plumas-Sierra Rural Electric Cooperative	City of Vernon
City of Industry Public Utilities	Power and Water Resource Pooling Authority	City of Victorville
Kirkwood Meadows Public Utility District	Rancho Cucamonga Municipal Utility	

Statutory Background

To minimize future devastating occurrences through risk-driven wildfire prevention, Senate Bill (SB) 901 required electric utilities, including POU to each annually prepare and adopt a WMP. The WMPs must include several mitigation and response elements in each utility's strategies, protocols, and programs. Table 2 below lists the expected elements for the POU WMPs per Public Utilities Code Section 8387(b)(2), as enumerated in AB 1054. The WSAB reviews WMPs in the context of these elements to identify exemplary practices and to recommend essential additional information requested for future POU WMP submittals. The WSAB has thrice previously fulfilled that statutory obligation in providing opinions on POU WMPs.⁴

Table 2: List of Statutorily Required Contents for the WMPs Pursuant to Public Utilities Code Section 8387(b)(2)

A	Staff responsibilities	G	Community notification	L	Identify enterprise-wide risk
B	General objectives	H	Vegetation management	M	Restoration of service
C	Program descriptions	I	Infrastructure inspections	N(i)	Monitoring & auditing of WMPs
D	Evaluation metrics	J(i)	Grid design, construction & operation risks	N(ii)	Identifying and correcting deficiencies
E	Lessons learned, metrics application	J(ii)	Vegetation, topographic, & climate risks	N(iii)	Monitoring asset inspections

⁴ The WSAB provided advisory opinions for the 2021 POU WMPs on December 09, 2020 through the document entitled: Guidance Advisory Opinion on the 2021 Wildfire Mitigation Plans of Electric Publicly Owned Utilities and Cooperatives (<https://energysafety.ca.gov/wp-content/uploads/docs/misc/wsd/wsab-pou-guidance-advisory-opinion-approved-12.9.2020.pdf>). Subsequently, the WSAB provided advisory opinions for the 2022 WMPs on February 23, 2022 through the document entitled: Guidance Advisory Opinion on the 2022 Wildfire Mitigation Plans of Electric Publicly Owned Utilities and Cooperatives (<https://energysafety.ca.gov/wp-content/uploads/docs/misc/wsab/pou-and-coop-wmps/wsab-2022-wmp-pou-guidance-advisory-opinion.pdf>), and the WSAB adopted "WSAB 2023 POU WMP Guidance Advisory Opinion" on November 16, 2022 (<https://energysafety.ca.gov/wp-content/uploads/wsab-wmp-pou-guidance-advisory-opinion-adopted.pdf>).



F	Protocols for reclosers, de-energization, and PSPS mitigation	K	Identification and expansion of higher wildfire threat areas		
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In 2019, AB 1054 was signed into law, modifying the requirements for POU WMPs. AB 1054 aims to mitigate the intensity of wildfire impacts through several initiatives separate from those actions required of electric utilities. P.U.C Section 8387(b)(2) requires POUs to submit their WMPs by July 1 of each year to the WSAB which reviews them and issues recommendations. Further, P.U.C Section 8387(b)(2) requires POUs to comprehensively update their WMPs at least every three years. The WSAB acknowledges the progress that many of the POUs have made in developing their WMPs and associated programs since 2019.

Evolution of the POU WMPs

In the course of the WSAB's development of its first opinion on POU WMP, the Joint Associations provided input to the WSAB that helped expand the WSAB's knowledge of the diversity among utilities in terms of wildfire risk, and public utility decision making, with their comments on November 30, 2020.⁵ The WSAB issued its first opinion on POU WMPs with this diversity in mind on December 2020.⁶ The opinion provided POUs with guidance on the WSAB's approach and review process in general, rather than commenting on individual WMPs. To better shape the structure and content of the 2021 POU WMPs, the WSAB requested that the POUs incorporate the various recommendations, as appropriate, contained within the 2021 Advisory Opinion in its submittal. The WSAB's goal was for the POUs to develop and deliver the most consequential information about their wildfire risk mitigation actions and planning processes. The recommendations sought to create a more uniform of WMP structure and content.⁷

The WSAB completed its review of the 2021 POU WMPs with its February 2022 Advisory Opinion.⁸ The WSAB acknowledged that it continues to develop insight into the variety of characteristics of POU

⁵ Comments of the Joint Associations on the Draft Advisory Opinion for the 2021 Wildfire Mitigation Plans of Publicly Owned Electric Utilities and Electrical Cooperatives (<https://energysafety.ca.gov/wp-content/uploads/docs/misc/wsab/public-comments/joint-association-comments-on-wsab-draft-guidance-advisory-opinion-20201130.pdf>)

⁶ Guidance Advisory Opinion on the 2021 Wildfire Mitigation Plans of Electric Publicly Owned Utilities and Cooperatives (<https://energysafety.ca.gov/wp-content/uploads/docs/misc/wsd/wsab-pou-guidance-advisory-opinion-approved-12.9.2020.pdf>).

⁷ The WSAB recommendations in the 2021 opinion are outlined as follows. (1) Plan Structure: future WMPs should be organized to introduce utility risk profile upfront and increase information accessibility, bearing in mind federal infrastructure protection protocols. (2) Plan Structure: include information about approval process, measuring success of the plan, and funding mechanisms. (3) Customer Impacts: describe how Investor-Owned Utility (IOU) Public Safety Power Shutoffs (PSPS) impact the POU. (4) Customer Impacts: describe communication plans alerting customers about IOU PSPS, or other wildfire related service interruptions. (5) The Grid: highlight specific system hardening and grid design improvements. (6) The Grid: highlight specific infrastructure inspection plans for regular and post-incident inspections. (7) The Grid: discovering previously unidentified risks. (8) Risk Assessment: highlight specific wildfire risks associated with system design and construction. (9) Risk Assessment: situational awareness technology and data sharing partnerships. (10) Vegetation Management: describe utility requirements for vegetation above and below electrical lines. (11) Vegetation Management: personnel qualifications related to vegetation evaluation and safety compliance. (12) Vegetation Management: innovative approaches to vegetation management.

⁸ Advisory Opinion on the 2022 Wildfire Mitigation Plans of Electric Publicly Owned Utilities and Cooperatives (<https://energysafety.ca.gov/wp-content/uploads/docs/misc/wsab/pou-and-coop-wmps/wsab-2022-wmp-pou-guidance-advisory-opinion.pdf>)



service areas that affect risk profiles. Those differences, in turn, affect the WSAB’s efforts to standardize POU WMPs and the comments and advice the WSAB issues. Significantly, the WSAB noted that approximately half of the POUs have a relatively low likelihood of seeing or causing catastrophic wildfires in their service areas. That insight led the WSAB to express its intent to engage with the POUs, associations, and other stakeholders to tailor future WMP filings to be more appropriate considering the likelihood of wildfires in those areas, particularly for those POUs with lower probability. The 2021 opinion continued the Board’s efforts to achieve uniform WMP structure and content, to the extent practical, and provided comments on specific POU WMPs

While the majority of POU 2022 WMPs were filed with the WSAB by July 1, 2022, some POUs submitted their WMPs after the due date.⁹ The POU Joint Associations provided the WSAB with clarifying comments on July 7, 2022.¹⁰ The Joint Associations informed the WSAB that some utilities have been updating their WMPs every year and incorporating all appropriate recommendations. However, those utilities’ comprehensive revision WMPs are not significantly different than their previously submitted WMPs given the limited number of year-to-year program changes. Importantly, the Joint Associations informed the WSAB that through CMUA’s long-standing working group devoted to wildfire issues (called the “Wildfire Preparedness, Response, and Recovery Working Group”), the POUs and electric cooperatives have formed various sub-working groups to consider and develop potential approaches to specific WMP topics.¹¹

Through the “Joint Association Comments on 2022 WMPs,” the WSAB learned that these sub-working groups would meet over the next several months and share their conclusions with the larger CMUA working group later that winter. Each POU and electric cooperative would then have this collective information available when preparing their comprehensive WMP updates. The extent to which a utility may incorporate this information into its 2023 WMP would depend on each individual POU or electric cooperative based on their unique risk profiles, size, geographies, operations, and community preferences. Due to this ongoing process, many POUs and electric cooperatives may have limited responses in their 2022 WMPs relating to these or similar topics.

On November 4, 2022, the Joint Associations commented on the WSAB Draft Advisory Opinion for the 2023 POU WMPs.¹² The Joint Associations stated that while state requirements had recently been put in place, the POUs had the necessary inspection, maintenance, and other programs in place to provide effective mitigation against wildfires ignited by utility infrastructure.

⁹ This occurred again in 2023 with over one quarter of the POUs submitting late filings, most of which without any advance notice or justification submitted to the docket.

¹⁰ Joint Association Comments on 2022 WMPs, July 07, 2022 (<https://efiling.energysafety.ca.gov/Search.aspx?docket=2022-WSAB-POU-WMP>)

¹¹ The sub-working groups are devoted to the following topics: (1) developing and refining metrics for tracking the performance of mitigation measures in the WMPs; (2) describing vegetation management practices in more detail and identifying data management solutions; (3) evaluating asset management programs and identifying facilities in high fire risk areas, including equipment that pre-dates or is otherwise exempt from General Order 95; (4) describing grid design and system hardening programs; (5) exploring cost-effective risk modeling tools; and (6) developing plans to incorporate climate change data into risk assessments and the decision-making process.

¹² Joint Association Comments on the WSAB Advisory Opinion on November 04, 2022 (<https://efiling.energysafety.ca.gov/Search.aspx?docket=2022-WSAB-POU-WMP>)



The WSAB applied this additional context provided by the Joint Associations when it adopted its third Advisory Opinion on November 16, 2022.¹³ The WSAB proposed a comprehensive revision template for the 2023 WMPs, recommended reporting on metrics into the WMPs, and invited the POU representative organizations to work with the WSAB and develop an approach to streamline the WMP requirements for POUs with a low likelihood of wildfires. Additionally, the WSAB provided recommendations for specific topics with the intent of further enhancing the reporting of programs and metrics in the WMPs and the independent evaluation reports.¹⁴

Opportunities for Improvement to the Current Advisory Approach

The WSAB recognizes that there are limitations with the current approach of primarily one-way communication with the POUs through advisory opinions and aims to more effectively engage with the POUs and the POU Joint Associations. To that end, the WSAB has reevaluated past comments from the POUs and Joint Associations and discussed additional opportunities for collaboration, working through various WMP content issues, and identifying useful programs and practices that may be suitable for wider use among California's utilities. Based on these factors, the WSAB has envisioned a new approach which is described in the Recommendations section below.

¹³ WSAB 2023 POU WMP Advisory Opinion, November 16, 2022 (<https://energysafety.ca.gov/wp-content/uploads/wsab-wmp-pou-guidance-advisory-opinion-adopted.pdf>).

¹⁴ The WSAB in its 2023 POU WMP Opinion included recommendations which can be summarized as follows: (1) Metric Development and Evaluation - individual POUs adopt thoughtful, relevant metrics that appropriately reflect the significant variation in circumstances among POUs, including size, location, and asset situation or type. (2) Independent Evaluations – independent evaluations should provide an analysis 2023 comprehensive revision WMPs that goes beyond simply documenting compliance with the statute to recommend wildfire mitigation changes or improvements that will improve the wildfire risk profile of the utility, if applicable. (3) Grid Assets, Operations, and Inspections – the POUs should consider pre-staging utility personnel at clearing points during de-energization events to allow for a quick assessment and mitigation of any potential ignitions to prevent them from turning into catastrophic wildfire incidents. (4) Risk Assessment and Climate Change - the WSAB believes it is best to proactively prepare for changes such as in wind speeds, average temperatures, precipitation patterns and moisture content, vegetation types and other climatological factors rather than reacting to them as they happen. (5) Vegetation Management - recommend that the POU working group explore the risks of invasive annual grasses that extend across the State and focus on ecologically relevant replanting as opposed to the short-run simple practice of relying on greater clearances. (6) Community Communication and Outreach - include information in WMPs about how they and their customers and community minimize wildfire impacts through backup power resources.



Recommendations

Based on WSAB's evaluation of the POU's 2023 WMPs, the WSAB's advisory opinion, to each publicly owned utility, is to embark on a collaborative approach as set forth below to improve POU reporting on its wildfire prevention efforts and WSAB's ability to comprehend and advise on those reports. The recommended approach will allow the WSAB to continue to meet its statutory obligations while creating a framework that allows POUs to develop comprehensive WMP reports customized to each unique POU.

The WSAB recommends that POUs and the Joint Associations participate in meetings or workshops as requested by the WSAB to engage with the WSAB and to exchange information and ideas through discussions on topics including:

1. POU progress and achievements by including more detailed information for each project in the following WMPs;
2. Performance metrics;
3. QA/QC program;
4. Independent Evaluator (IE) reports;
5. Executive summaries;
6. Late WMP submissions;
7. Revision log;
8. Digital accessibility; and
9. Other items that come up during discussions.

Conclusion

The WSAB thanks the Electric Publicly Owned Utilities and Rural Electric Cooperatives for developing and filing their 2023 Wildfire Mitigation Plans pursuant to the direction provided by AB 1054. The WSAB also greatly appreciates the engagement from the Joint Associations to date and looks forward to continued collaboration with the POUs to further develop detailed recommendations through upcoming workshops, meetings, communications, and the 2024 WMP updates.



Approval

The California Wildfire Safety Advisory Board’s Advisory Opinion for the 2024 Wildfire Mitigation Plans of Electric Publicly Owned Utilities and Rural Electrical Cooperatives was approved on December 4, 2023, and are hereby executed.

Jessica Block, Chair

Christopher Porter, Vice Chair

Ralph M. Armstrong Jr., Board Member

Diane Fellman, Board Member

Timothy Haines, Board Member

John Mader, Board Member

Alexandra Syphard, Board Member