



OFFICE OF ENERGY INFRASTRUCTURE SAFETY  
**WILDFIRE SAFETY ADVISORY BOARD**

**DRAFT ADVISORY OPINIONS TO  
PUBLICLY OWNED ELECTRIC  
UTILITIES AND ELECTRICAL  
COOPERATIVES**

OCTOBER 2025

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# 1. EXECUTIVE SUMMARY

Publicly owned utilities (POUs) and electrical cooperatives (co-ops) are required to submit wildfire mitigation plans (WMPs) to the Wildfire Safety Advisory Board (WSAB or the Board). WSAB must provide comments, advisory opinions, and recommendations to the POUs and co-ops. WSAB has published annual advisory opinions; its approach to developing these has changed over time. In this advisory opinion, WSAB clarifies the scope of its review, and describes previous years' review and this year's approach.

WSAB applied two perspectives in this year's review of WMPs. One was to look for whether the WMP answered key questions about specific decision points: what intelligence is needed? How is the decision made? What is the utility's ability to act on that decision? The second perspective was to look for increasing maturity and development in WMPs. The iterative nature of the WMP requirements sets an expectation for continuous revision and improvement. WSAB spent more review time on WMPs from twelve utilities with overhead lines in the High Fire Threat District (HFTD), and less review time on the other WMPs.

For all WMPs, WSAB focused on two areas: risk identification and preemptive de-energization. Identifying and understanding risk are the foundation of managing it, both in real time and in making longer-term plans. Risk identification can start with comparing maps of a utility's assets with existing maps, e.g., of the HFTD, to focus attention. A second step is a more detailed characterization of assets and their context, including vegetation, terrain, and an inventory of exempt or non-exempt equipment. Further iterations provide additional spatial, time, and risk category detail.

Preemptive de-energization, also known as public safety power shutoff (PSPS), is an important tool available to electric utilities to reduce wildfire risk. When fire risk is high, utilities may temporarily shut off power to parts of the grid to protect lives, property, and the environment. Though potentially disruptive, especially for vulnerable populations, preemptive de-energization has proven to be effective. Utilities with substantial wildfire risk should thoroughly analyze preemptive de-energization. A good preemptive de-energization program is built on a plan that includes risk evaluation, communication, preparation to make the de-energization as targeted and short as possible, and testing the plan.

WSAB provides specific advice on increasing WMP maturity to all 51 POUs and co-ops, including the six that had not submitted a WMP by September 19, 2025.



## 2. INTRODUCTION

Publicly owned utilities (POUs) and electrical co-operatives (co-ops) are required by Public Utilities Code (PUC) 8387 to “prepare a wildfire mitigation plan and submit the plan to the California Wildfire Safety Advisory Board...” Until September 2025, the requirement was to prepare a WMP annually and submit it to the board by July 1 of each year. Senate Bill (SB) 254 (2025)<sup>1</sup> amended the timing to “at least once every four years on a schedule determined by the California Wildfire Safety Advisory Board.” WSAB is required by PUC section 326.2(c) to “Review and provide comments and advisory opinions to local publicly owned electric utilities and electrical cooperatives regarding the content and sufficiency of its wildfire mitigation plan and recommendations on how to mitigate wildfire risk.” Until the enactment of SB 254, this was a requirement to provide comments and advisory opinions *to each* POU and co-op. This document was largely prepared before SB 254 changed the requirement, and contains WSAB’s comments, advisory opinions, and recommendations to each POU and co-op.

PUC section 326.1 established WSAB, a seven-member body of wildfire and utility policy experts appointed by the Governor, Speaker of the Assembly, and Senate Committee on Rules. In addition to providing comments, advisory opinions, and recommendations to POUs and co-ops, WSAB is required by PUC section 326.2 to provide other advice and recommendations related to wildfire safety as requested by Energy Safety.

Each member of the Board brings a unique perspective and their own expertise. Additional information about the Board, its members, and its prior advisory opinions, recommendations, and meetings, can be found on the Board website.<sup>2</sup>

The current members of the Wildfire Safety Advisory Board are:

- Ralph Armstrong
- Marybel Batjer
- Jessica Block, Chair
- Timothy Haines
- John Mader
- Chris Porter, Vice Chair
- Dr. Alexandra Syphard

### 2.1 Approach to Wildfire Mitigation Plan Review

WSAB’s approach to reviewing POUs’ and co-ops’ WMPs continues to evolve. This section includes a discussion of the scope of review, a summary of approaches in previous years, and a description of the approach used this year.

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<sup>1</sup> California Senate Bill (SB) 254.

<sup>2</sup> California Wildfire Safety Advisory Board website.

### 2.1.1 Scope of Review: Wildfire Mitigation

Some of the most destructive fires in California began in wildlands and progressed into developed areas, becoming urban conflagrations. Urban conflagrations are fires that spread from structure to structure, rather than through vegetation. The suspected starting points of the January 2025 Palisades and Eaton fires were close to cities. The fires traveled a short distance in wildland before affecting houses.

The Board takes two reminders from the rapid evolution of these two fires. The first is that calculating the *relative* wildfire risk a utility has—the fraction of its territory that is higher risk, or whether it has more or less risk than another utility—is less important than identifying and addressing a utility’s specific risk. A high priority in this year’s review is examining how each utility identifies and addresses its specific risk.

The second reminder is that urban conflagration is a potential outcome of wildfires, and the division between wildfire and urban fire is not always clear. However, wildfire mitigation plans and Board review are not intended to extend to utilities’ urban fire risk. To be clear about delimiting the scope of WMP review, staff looked for definitions of wildfire.

The National Wildfire Coordinating Group defines terms in its Glossary of Wildland Fire.<sup>3</sup> The definitions include: “Wildland fire: any non-structure fire that occurs in vegetation or natural fuels. Includes wildfires and prescribed fires,” and “Wildfire: A wildland fire originating from an unplanned ignition, such as lightning, volcanos, unauthorized and accidental human caused fires, and prescribed fires that are declared wildfires.” Combining these, WSAB will use the definition that a wildfire is “Any non-structure fire that occurs in vegetation or natural fuels, originating from an unplanned ignition.” “Vegetation or natural fuels” include those on agricultural land. Wildfires can consume structures and propagate into urban areas, but must start in wildland vegetation or natural fuels.

### 2.1.2 Previous Years’ Review

PUC 8387 required POU and co-ops to develop WMPs by January 1, 2020. After that, POU and co-ops were required to prepare WMPs and submit them to WSAB by July 1 of each year, starting July 1, 2020. WSAB reviewed the plans submitted in mid-2020, and on December 9, 2020, adopted an advisory opinion with 14 recommendations to the POU and co-ops for their 2021 WMPs.<sup>4</sup>

On February 23, 2022, WSAB adopted an advisory opinion<sup>5</sup> for the 2022 WMPs. It included comments in five general areas and specific comments to each POU and co-op. The Board adopted an advisory opinion with guidance<sup>6</sup> for 2023 WMPs on November 16, 2022. PUC 8387

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<sup>3</sup> Glossary of Wildland Fire.

<sup>4</sup> 2021 Advisory Opinion.

<sup>5</sup> 2022 Advisory Opinion.

<sup>6</sup> 2023 Advisory Opinion.

requires that, “At least once every three years, the [WMP] submission shall be a comprehensive revision of the plan.” In anticipation of comprehensive revisions in 2023, WSAB proposed a WMP template as well as six “specific topic” recommendations to all POU and co-ops. The Board also included recommendations to each POU and co-op.

For the 2024 WMPs, WSAB’s advisory opinion,<sup>7</sup> adopted December 4, 2023, “recognize[d] 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.” The advisory opinion has a single recommendation, that utilities and their representative organizations “participate in meetings or workshops as requested by the WSAB to engage with the WSAB and to exchange information and ideas through discussions” on identified topics. The WSAB–POU and Co-op Working Group met six times in the spring of 2024. The discussions at these meetings led to 11 recommendations to POUs and co-ops in an advisory opinion<sup>8</sup> adopted December 4, 2024.

### 2.1.3 Review This Year

Reviewing up to 51 POU and co-op WMPs each year, as required until September 2025, challenged the Board and staff. The amount of time available for review was constrained by the requirement to provide comments to each POU and co-op on plans submitted annually; by the desire to provide input to POUs and co-ops in time to influence their subsequent submissions; time needed for the Board’s other duties; and the limits of a volunteer board with a small staff. The quantity of material and heterogeneity of POUs and co-ops add to the challenge.

To make best use of limited resources, WSAB’s POU Committee and Board staff chose to spend more time and effort on 12 utilities and two focus areas, described more in Section 3.

The 12 utilities selected for greater attention are among those with overhead facilities in the High Fire Threat District. As described in more detail in Section 3.1, several organizations have developed maps and analysis to demarcate higher and lower wildfire risk. The California Public Utilities Commission (CPUC) worked with utilities and other interested organizations to develop a statewide High Fire Threat District (HFTD) map.<sup>9</sup> Areas designated Tier 2 and Tier 3 have “elevated” and “extreme” wildfire threat. WSAB assumes the HFTD map is useful, though not infallible. WSAB also recognizes that underground electrical facilities generally pose little wildfire risk. The overlap of overhead facilities and the HFTD is the same criterion used for an “Alternative Reporting for POUs Without Overhead Electric Supply Facilities in the High Fire Threat District” in the Advisory Opinion for the 2025 Wildfire Mitigation Plans of Publicly Owned Utilities and Electrical Co-operatives.<sup>8</sup>

The 12 utilities are Anza Electric Cooperative, Glendale Water & Power, Lassen Municipal Utility District, Los Angeles Department of Water and Power, Redding Electric Utility, Surprise

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<sup>7</sup> 2024 Advisory Opinion.

<sup>8</sup> 2025 Advisory Opinion.

<sup>9</sup> Fire-Threat Maps and Fire-Safety Rulemaking website.



Valley Electrification Corporation, Sacramento Municipal Utility District, San Francisco Public Utilities Commission, Transmission Agency of Northern California, Trinity Public Utility District, Truckee Donner Public Utility District, and Turlock Irrigation District.

WSAB applied two perspectives to the ways in which POU's and co-ops addressed their risk. One was to look at specific decision points: What intelligence is needed? How is the decision made? What is the utility's ability to act on that decision? For example, for preemptive de-energization, are weather data the primary inputs into the decision? What are the sources of those data? Is the decision made by setting thresholds for specific inputs, or a judgment call? How would a decision to preemptively de-energize be executed—through supervisory control and data acquisition (SCADA) or by manual action?

The second perspective was to look for increasing maturity and development in WMPs. The iterative nature of the WMP requirements, including periodic submissions and provisions to monitor and audit WMPs, encourages and sets an expectation for continuous revision and improvement. In the last few years, technologies have advanced, additional resources have become available, and there are lessons learned from utilities around the state. Utilities with wildfire risk should be regularly reassessing their risk with the latest information, and in light of their own mitigation actions; evaluating the tools available to address it; and making decisions about specific mitigations. WMPs are not designed to be static, but to promote continual advancement and maturation. Many of the Board's recommendations promote maturation.

### **3. FOCUS AREAS**

WSAB chose two areas to focus on this year: risk identification and preemptive de-energization. The sections below summarize approaches utilities can use in each of these areas.

#### **3.1 Risk Identification**

Identifying and understanding wildfire risk is the foundation of managing it. Risk identification underlies both operations decision-making and longer-term planning. Operationally, utilities rely on data available in real- to near-real time to use tools such as disabling reclosers, using protective equipment and device settings, or implementing preemptive de-energization, to reduce ignition risk under dangerous fire weather conditions. Longer term, risk identification informs planning decisions that reduce wildfire risk over time, such as grid hardening, vegetation management, and improving operational tools like SCADA or installing additional sectionalizing devices. By distinguishing between these timelines, utilities can build strategies that both address immediate safety concerns and strengthen resilience for the future.

Risk identification is a continuous process, evolving as new data, technologies, and lessons learned become available. As utilities increase the sophistication of their programs, they can strengthen their ability to identify, understand, and reduce wildfire risk.

Wildfire risk is the product of the *likelihood* that a fire could start, and the *consequence* if it does. The likelihood of an ignition may be influenced by weather conditions, equipment type and age, vegetation proximity, or potential for objects to contact power lines. Consequence depends on topographical and environmental features, such as slope, wind, and fuel type and moisture content, that determine how quickly fire may spread once ignited. Consequence also depends on what is in the path of a potential fire, such as homes, schools, medical facilities or other critical infrastructure, as well as the community's ability to evacuate.

An early step in risk identification is to map specifically where and what utility infrastructure is in areas of higher fire threat. There are many existing resources POU and co-ops can, and should, use to identify risk. Some are free and publicly available, while others are available for a fee. A majority of POUs solely rely on CPUC's HFTD boundaries, which were adopted January 19, 2018, and had minor revisions in 2021.<sup>10</sup> WSAB views these as useful but not infallible. WSAB has used them, for example, to recommend an "Alternative for POUs Without Overhead Electric Supply Facilities in the High Fire Threat District,"<sup>11</sup> and to guide its evaluation of the content and sufficiency of POU and co-op WMPs. However, the boundaries are always going to be somewhat arbitrary, and wildfire risk is not necessarily zero outside the HFTD. Each utility is ultimately responsible for identifying and managing its own wildfire risk. Maps and tools beyond the HFTD map can improve a utility's understanding.

CAL FIRE developed Fire Hazard Severity Zone classifications that were updated and adopted on January 31, 2024, for the State Responsibility Areas and March 10, 2025, for the final phase of the Local Responsibility Areas.<sup>12</sup> These zones are mapped for both the State Responsibility Areas and Local Responsibility Areas. CAL FIRE has also developed the Wildfire Forecast and Threat Intelligence Integration Center, which hosts numerous public data sources for active events and near-, mid-, and long-term conditions.<sup>13</sup> The USDA Forest Service put together the "Wildfire Risk to Communities" tools to assist in building an understanding of risk and how to

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<sup>10</sup> High Fire-Threat District Map.

<sup>11</sup> 2024 Advisory Opinion.

<sup>12</sup> Fire Hazard Severity Zones website.

<sup>13</sup> Wildfire Forecast & Threat Intelligence Integration Center (WFTIIC) website.

reduce it.<sup>14</sup> The Electric Power Research Institute published a summary and comparison of available Wildfire Risk Tools that can assist a utility in finding an appropriate tool.<sup>15</sup>

Further, POU and co-ops are closely tied to the communities they serve, which provides opportunities for collaboration in assessing wildfire risk. Local knowledge from fire departments, emergency responders, or community members can add important context where quantitative data may be limited or incomplete. For example, several POUs have considered ingress/egress in extending HFTD-equivalent designation to neighborhoods they serve. When combined with utility-specific tools such as line patrols, field inspections, and equipment inventories, this local insight helps create a more complete picture of risk. These partnerships not only strengthen the utility's ability to identify hazards but also improve transparency. By integrating technical assessments with local experience, POUs and co-ops can align their risk identification practices with the realities of the communities they protect.

POUs and co-ops benefit from improving the detail in their characterization of risk drivers, especially for circuits in areas of higher mapped risk. This can include by inventorying equipment (CAL FIRE exempt and non-exempt) and characterizing vegetation, topography, localized weather, and other factors.

As risk programs mature, utilities can enhance their operational decision-making by adopting more advanced tools. Geographic information systems (GIS), real-time weather monitoring and strategically deployed weather stations, and remote sensing technologies provide dynamic views of risk conditions. Vegetation management and equipment inspection can be supported through aerial imagery or light detection and ranging (LiDAR) scans from helicopters or drones. Field crews equipped with mobile devices can report hazards immediately, creating a faster and more responsive system.

Some POUs and co-ops have developed internal dashboards to visualize risk by gathering real-time analytics on grid behavior, weather patterns, and vegetation conditions. Using localized, high-resolution data gives utilities a circuit-level picture of where wildfire risk, or ignition likelihood, is highest. This can guide operational choices such as pre-positioning of crews, temporary reconfiguration of protective devices, or preemptive de-energization. Sharing operational risk insights with emergency management agencies and the public strengthens coordination and improves readiness for fire weather events. Utilities can also use scenario planning or tabletop exercises to test readiness under different fire season conditions.

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<sup>14</sup> Wildfire Risk to Communities website.

<sup>15</sup> Wildfire Tool Inventory and Evaluation website.

Risk identification supports planning decisions that reduce exposure and vulnerability over longer timelines. POU and co-ops that utilize long-term data, such as historic weather patterns, vegetation growth cycles, and climate projections, can better inform where investments will most effectively reduce risk. This process can be refined by integrating data into a model that ranks risk at a circuit level. This ranking can guide vegetation work, grid hardening, or placement of sectionalizing equipment. Planning systems like this allow POU and co-ops to track risk reduction over time.

## 3.2 Preemptive De-energization

Preemptive de-energization, also known as public safety power shutoff (PSPS), is an important tool electric utilities have available to reduce wildfire risk. When fire risk is high, utilities may temporarily shut off power to parts of the grid to protect lives, property, and the environment. Though potentially disruptive, especially for vulnerable populations, preemptive de-energization has proven to be effective. Stanford researchers compared wildfire mitigation efforts across investor-owned utilities, using an operational PSPS plan as a key marker of utility maturity.<sup>16</sup> For California's POU and co-ops, building a strong preemptive de-energization program includes building a plan, testing and reviewing that plan, and revising it over time.

Risk identification may help a utility determine if a preemptive de-energization program is necessary. For example, POU and co-ops that have overhead power lines in the HFTD, FHSZs or locally defined high fire risk areas should thoroughly analyze preemptive de-energization. If a POU or co-op decides a preemptive de-energization program is necessary, it is essential for it to establish a plan to ensure any impacts to the community are minimized.

Every utility that may preemptively de-energize should start with a preemptive de-energization plan.<sup>17</sup> A preemptive de-energization plan explains how a utility will prepare for, carry out, and end a preemptive de-energization event under clearly defined "high wildfire conditions."<sup>18</sup> It includes evaluating electrical and community assets, building out communication pathways, understanding downstream impacts to customers, identifying real-time decision-making tools, and determining protocols for re-energizing.

A strong preemptive de-energization plan involves clear evaluation of electrical assets that shape de-energization decisions. POU and co-ops should assess the construction standards of their facilities, including whether poles, lines and equipment are designed to withstand high winds. This evaluation should also determine the likelihood that wind events could exceed those thresholds. To confidently make those decisions POU and co-ops must identify reliable sources of information, such as National Weather Service, local weather stations, or pole-mounted weather stations, and ensure the data is accurate, timely and geographically

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<sup>16</sup> Updated Look at Utility Risk.

<sup>17</sup> A Review of Public Safety Power Shutoffs (PSPS) for Wildfire Mitigation, pages 187–197.

<sup>18</sup> Public Safety Power Shutoff: Policies and Procedures.

specific.<sup>19</sup> Decisions on whether to de-energize should also consider the reliability impact on customers.

POUs and co-ops should determine what services or buildings the community is reliant on during an emergency event. Critical infrastructure may include hospitals, fire stations, emergency communications, water and wastewater facilities, schools, or other key community resource centers. Once identified, POUs and co-ops should evaluate whether the circuits that serve those resources could be excluded from a de-energization or if alternative reliability strategies are necessary. Alternative reliability strategies could include the use of onsite generators, battery storage systems, solar-to-storage microgrids; redundant feeds or looped circuits; or the installation of sectionalizing devices.<sup>20</sup> By systematically evaluating facility standards, wind thresholds, data quality and critical infrastructure, a preemptive de-energization plan can balance wildfire prevention with the protection of public safety and essential services.

Clear and timely communication is essential to a successful preemptive de-energization. As such, communication pathways should be identified and outlined in a preemptive de-energization plan. Customers, emergency responders, public safety partners, community-based organizations and local officials need to know in advance when a shutoff might happen, when it's expected to start, and when the power will come back. POUs and co-ops should give advance notice—ideally 48 hours before a shutoff for customers, and 72 hours before for public safety partners—and use multiple ways to reach people: text alerts, radio, signs, and even door-to-door visits.<sup>21</sup> Messages should be shared in the most common languages spoken in each area. To ensure no one is left out, contact information for all customers—especially for emergency services, critical facilities, and medical baseline households—must be accurate and up to date. Utilities can collaborate with community-based organizations and public safety partners to assist with communication protocols and operations.

A preemptive de-energization plan describes real-time decision-making tools, including intelligence sources for conditions to be monitored, such as strong winds, low humidity, dry vegetation, and fire weather warning (e.g., Red Flag Warning Days). It clearly explains what tools and data are used to track conditions, under what conditions (or beyond what thresholds) personnel would make a real-time decision whether to de-energize, and what steps the utility takes as conditions shift. It states who is responsible for each step, how decisions move up the chain of command, and how utilities coordinate with fire agencies, emergency services, and local government officials to keep everyone coordinated.

A preemptive de-energization plan explains how the utility will prepare its system and crews to make the shutoff as targeted and short as possible. This should include protocols for prepositioning crews for rapid inspection and repair. The plan should outline how inspections

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<sup>19</sup> Final Decision for SCE 2022 WMP Update, pages 126-127.

<sup>20</sup> Power Distribution Planning Reference Book, pages 505-550.

<sup>21</sup> Policy Opportunity Brief: Public Safety Power Shutoffs.



are performed after a shutoff to ensure safety measures are in place prior to re-energization. The plan should also outline the prioritization and procedures for the re-energization for critical infrastructure. Utilities can set up, or coordinate with community partner to set up, community resource centers (CRCs) during shutoffs, where people can charge phones and medical devices, get supplies, and stay safe.<sup>22</sup> The plan may identify specific building locations, contracts or memorandums of understanding in place for CRCs. This would allow the utility, or community partner, to quickly activate a CRC in the likelihood of a preemptive de-energization event.

POUs and co-ops should minimize the impact on medically vulnerable customers, and those reliant on electricity to maintain necessary life functions, by pairing clear identification with practical support. This process starts with surveying customers to understand medical needs and map where those customers are located within the system. Surveys should be easy to complete, offered in multiple languages, written in plain language and offered through multiple platforms to reach as many households as possible. By including questions about reliance on life supporting equipment, POUs and co-ops can prioritize those most at risk. Once identified, POUs and co-ops may work with these customers to identify additional measures, such as battery backup or portable generators, to reduce the impacts of de-energization. The California Joint Investor-Owned Utilities (IOUs) and Access and Functional Need Collaborative Council put together a framework POUs and co-ops can use as a resource to reduce risk and ensure safety for these customers.<sup>23</sup>

Preemptive de-energization plans should be tested through regular drills that simulate real shutoff events, helping agencies stay ready and work smoothly with local partners. This would ensure that everything outlined in the plan is correct and communication pathways are up to date. Utilities could work with their local emergency operations centers to establish annual exercises.

POUs and co-ops can build public support by involving the community.<sup>24</sup> POUs and co-ops can use community events or local forums to discuss the importance of preemptive de-energization as a tool to reduce wildfire risk. Involving the community in preemptive de-energization exercises would give them greater understanding and awareness of what is considered and how decisions are made. Involving the public in the process can give them a sense of ownership and accountability for the safety of their community.

Once a preemptive de-energization plan is developed and procedures are in place, a utility can start gathering information and lessons learned to improve the preemptive de-energization program. A POU or co-op could improve its weather forecasting by using detailed fire weather models and real-time field reports from crews and fire officials.<sup>25</sup> Better forecasts mean better decisions. Installing sectionalizing devices can also help, allowing

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<sup>22</sup> A Review of Public Safety Power Shutoffs (PSPS) for Wildfire Mitigation, pages 187–197.

<sup>23</sup> 2025 Framework for AFN Support.

<sup>24</sup> Decision Adopting Revised and Additional Guidelines and Rules for Public Safety Power Shutoffs.

<sup>25</sup> Evaluation of SDG&E 2022 WMP Update, page 112.

power to stay on in some areas while smaller and higher risk sections are safely turned off. POU's or co-ops may educate the public about preemptive de-energization, support backup power options like battery rebates, and use tools such as drones or aerial inspections to restore power faster.<sup>26</sup>

After each event, a preemptive de-energization plan should outline a review process to evaluate what happened. The review may include data such as when de-energization began, how long it lasted, how many people were affected, and how notices were delivered. It should document the weather conditions that led to the decision to de-energize, such as wind, temperature, and humidity. CPUC provides a standard preemptive de-energization Post Event Report Template that can serve as an example to structure this review and outline specific data to collect.<sup>27</sup> Section 4 of the template provides information and guidance on what data to collect on damages and hazards to overhead facilities that occurred during the de-energization event. POU's and co-ops can use this or similar information to evaluate the effectiveness of de-energization as the damage and hazards to a live line have the potential to ignite a wildfire. Annual customer surveys are another tool. They can help measure how preemptive de-energization events affect different communities and guide adjustments to improve fairness and accessibility. Standard templates and reporting procedures outlined in the preemptive de-energization plan ensure consistency throughout events and years.

For POU's and co-ops, adopting and improving preemptive de-energization practices can be an effective short-term wildfire risk mitigation. Managing preemptive de-energization events well requires balancing wildfire safety with the impacts of power outages. By continuously improving forecasting, communication, and post-event analysis, POU's and co-ops can protect their communities more effectively while maintaining trust and transparency.

## **4. ADVISORY OPINIONS**

WSAB members and staff reviewed WMPs and developed advisory opinions for each POU and co-op. This section contains the advisory opinions.

### **4.1 Alameda Municipal Power**

Alameda Municipal Power's (AMP) territory is classified as 100% urban, and no part is in or near the HFTD. The Board commends AMP's customer notification protocols outlined in the WMP, including using Alameda County's "AC Alert" system when appropriate, and appreciates AMP's description of utility governance and wildfire risk. Given AMP's identification of its wildfire risk, WSAB has no additional recommendations at this time.

### **4.2 Anaheim Public Utilities**

Anaheim Public Utilities (APU) serves approximately 127,250 customer accounts across a primarily urban territory about 51 square miles. Much of the system is underground; there are

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<sup>26</sup> Final Decision for PG&E 2022 WMP Update, pages 178–79.

<sup>27</sup> Template for Public Safety Power Shutoff.

3.14 miles of overhead line across eight segments in the HFTD. Seven of the eight segments are set to be undergrounded. APU recently added the eighth and is assessing the best mitigation approach.

WSAB commends APU for its awareness and ability to outline and prioritize risk across its service territory. A particular highlight in APU's WMP is its mapping and analysis. APU is effectively leveraging technology to monitor and evaluate risk across its territory through the use of GPS, GIS mapping, Power BI and dashboard development. Key examples of APU's use of technology outlined in the WMP include species specific tree inventories and identifying the ten species most responsible for fires; shot hole borer beetle and gold spotted oak borer surveys; real-time fire threat and weather station dashboards; and artificial intelligence-enabled wildfire cameras for smoke detection.

WSAB recommends that APU:

- Establish and visualize operational thresholds during fire weather events. The dashboard example on page 35 shows weather conditions in Gypsum Canyon on May 1, 2025. By highlighting known fire weather conditions and operational thresholds in a dashboard (i.e., average humidity below 20%, average wind speed above 60 mph, total rainfall in period below 10 inches, etc.) staff monitoring events can more effectively translate intelligence to operational decisions.

## **4.3 Anza Electric Cooperative**

Anza Electric Cooperative (AEC) serves about 4,900 customer accounts over 550 square miles. AEC defines its territory as 70% HTFD Tier 2 and 30% Tier 3. "[W]ildfire has been identified as one of the greatest weather-related risks to AEC due to the region's complex topography, lack of summer and early fall rains, and susceptibility to dry Santa Ana winds that can accelerate fire growth."<sup>28</sup> AEC states it will operate a preemptive de-energization on a case-by-case basis with many considerations, although it has not de-energized to date.

WSAB recommends that AEC:

- For AEC's decision to preemptively de-energize lines in extraordinary circumstances, 1) describe the data and data sources used to make that decision; 2) describe the procedures to collect data and verify those data are accurate and up to date; 3) identify parties responsible for making a decision and the criteria used; 4) describe the necessary actions to implement a de-energization and the parties responsible for executing them; and 5) define the conditions under which it would make a real-time decision whether to de-energize.
- Provide annual data for the metrics for plan performance outlined in Section X, "Evaluating of the Plan," and provide additional metrics AEC uses to evaluate its wildfire mitigation program. AEC's WMP currently uses California Municipal Utilities Association template language to outline fire ignitions and wire down events without reporting annual figures.

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<sup>28</sup> Anza Electric Cooperative 2025 WMP, page 18.

## 4.4 Azusa Light & Water

Azusa Light & Water's (ALW) facilities within HFTD Tiers 2 and 3 are fully underground. However, ALW has overhead facilities that, if not technically within the HFTD, are right on the border of Tier 2. ALW has taken mitigation actions at some of these facilities. For example, ALW replaced expulsion fuses with fault tamers, replaced two spans of bare copper wires with insulated wires and trims trees along this line annually. ALW also replaced overhead conductor traveling into the HFTD Tier 2 with insulated low voltage cables.

WSAB recognizes ALW's proactive mitigation. HFTD designations are useful, but not exact. Therefore, WSAB recommends that ALW:

- Continue to recognize, assess, and mitigate risk from its overhead facilities, especially those near the border of HFTD Tier 2, and report these plans and actions in its WMPs.

## 4.5 City of Banning Electric Utility

The City of Banning Electric Utility (BEU) owns approximately 4.8 miles of overhead distribution line and 1.4 miles of overhead transmission line in HFTD Tier 2 and Tier 3. WSAB appreciates the descriptive action plan for assets in HFTD Tiers 2 and 3 that include hardening and undergrounding assets in Tier 2 and planning for hardening circuits and assets in Tier 3. The Board notes the challenges of effectively participating in joint efforts with Southern California Edison (SCE) and awaiting grant funding, and de-energizing water distribution infrastructure. WSAB encourages continued coordination and communication with SCE on grid hardening in Banning Canyon and preemptive de-energization planning in Mias Canyon.

Notably, at present "BEU does not intend to preemptively de-energize lines," but will exercise that authority "in extraordinary circumstances."<sup>29</sup> Additionally, while BEU "does not currently have any in-field distribution circuit reclosers installed in its distribution system..., BEU does plan to provide circuit reclosers on its circuit that supplies power to both Banning Canyon and Mias Canyon due to extreme (Tier 3) fire risk that this particular area is exposed to."<sup>30</sup>

WSAB recommends that BEU:

- Establish a clear timeline to harden critical circuits in Banning and Mias Canyons and include discussion of use (e.g., reclosing and sectionalizing) in the next WMP.
- For BEU's decision to preemptively de-energize lines in extraordinary circumstances, 1) add detail to its description of the data and data sources used to make that decision; 2) describe the procedures to collect data and verify those data are accurate and up to date; 3) identify parties responsible for making a decision and the criteria used; 4) describe the necessary actions to implement a de-energization and the parties responsible for executing them; and 5) define the "extraordinary

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<sup>29</sup> City of Banning Electric Utility 2025 WMP, page 35.

<sup>30</sup> City of Banning Electric Utility 2025 WMP, page 34.

circumstances” under which it would make a real-time decision whether to de-energize.

- Develop appropriate mitigation strategies for potential SCE PSPS events.

## **4.6 City of Biggs**

As of September 19, 2025, the City of Biggs had not submitted a WMP. WSAB recommends the City of Biggs meet its statutory obligation to file a plan on time.

## **4.7 Burbank Water and Power**

Burbank Water and Power (BWP) owns and operates approximately 11 miles of overhead distribution lines in HFTD Tier 2. WSAB commends BWP on its WMP, including the breakdown of assets and risk drivers in HFTD, prioritization of mitigation efforts within the HFTD, and discussion of operational practices during Red Flag Warnings. The Board appreciates BWP's efforts to enhance situational awareness, including the use of fire-monitoring cameras and reviewing available products from the Wildfire Forecast & Threat Intelligence Integration Center (WFTIIC). WSAB also appreciates BWP's extensive set of metrics for evaluating its WMP and its assessment of industry best practices to consider when identifying additional mitigation measures.

WSAB acknowledges that “while BWP does not plan to implement a PSPS in its service territory, BWP does have a protocol for de-energizing portions of its electrical system.”<sup>31</sup> WSAB recommends that BWP:

- For BWP’s decision to preemptively de-energize lines, 1) describe the data and data sources used to make that decision; 2) describe the procedures to collect data and verify those data are accurate and up to date; 3) identify parties responsible for making a decision and the criteria used; 4) describe the necessary actions to implement a de-energization and the parties responsible for executing them; and 5) define the circumstances under which it would make a real-time decision whether to de-energize.

## **4.8 Cerritos Electric Utility**

As of September 19, 2025, the Cerritos Electric Utility had not submitted a WMP. WSAB recommends the Cerritos Electric Utility meet its statutory obligation to file a plan on time.

## **4.9 Colton Electric Utility**

The City of Colton Electric Utility (CEU) owns and operates approximately 15 miles of Tier 2 and Tier 3 overhead transmission and distribution lines. WSAB appreciates CEU's use of an additional metric, number of vegetation contacts with equipment, to support the evaluation of its WMP performance.

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<sup>31</sup> Burbank Water and Power 2025 WMP, page 40.



Notably, at present, “CEU does not plan to initiate the de-energization of its electrical system as a preventative measure”<sup>32</sup> because “public safety impacts outweigh the risk reduction gained by de-energizing the system.”<sup>33</sup> WSAB recommends that CEU:

- Finalize its “protocols for inspecting and re-energizing SCE lines that have been de-energized during extreme weather and red-flag events.”<sup>34</sup>
- Describe the analysis used to determine the risk reduction benefits and public safety impacts of de-energization.

## **4.10 City of Corona**

The City of Corona’s Utilities Department (Corona) serves fewer than 2,000 customer accounts. Although about 47% of its territory is in HFTD Tier 2 or Tier 3, almost all of its system is underground. WSAB appreciates the clear descriptions and photos in Corona’s WMP. Given Corona’s identification of its wildfire risk, WSAB has no additional recommendations at this time.

## **4.11 Eastside Power Authority**

Eastside Power Authority (EPA) is a California joint powers authority and local regulatory authority comprised of five irrigation and water districts. No part of its service territory is in or near the identified HFTD. WSAB appreciates EPA’s WMP. Given EPA’s identification of its wildfire risk, WSAB has no additional recommendations at this time.

## **4.12 Glendale Water & Power**

Glendale Water and Power (GWP) provides service to about 90,000 customer accounts over around 31 square miles.

GWP relies on the City of Glendale’s Fire Department’s (GFD) Vegetation Management Program, which requires homeowners “to clear or manage hazardous vegetation within 100 feet of structures.” GWP noted in response to questions on this point that GFD leads outreach events related to defensible space and brush abatement and that approximately 2,000 of the around 8,900 inspections, or 22.5%, resulted in non-compliance. GWP notes in its WMP “[b]y applying this risk-based approach of focusing wildfire mitigation resources on GWP’s overhead resources in unmitigated areas, only 0.47% of the City’s Tier 2 and Tier 3 land area contains GWP assets that require additional mitigation.”<sup>35</sup> WSAB recommends GWP describe why, given the non-compliance rate, GWP believes GFD’s review is adequately reliable in managing GWP’s risk of ignition or wildfire.

GWP has developed a protocol to de-energize its Bel Aire-Montrose Transmission line during Red Flag Warnings issued by the National Weather Service, without cutting off power to any

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<sup>32</sup> City of Colton Electric Utility 2025 WMP, page 25.

<sup>33</sup> City of Colton Electric Utility 2025 WMP, page 20.

<sup>34</sup> City of Colton Electric Utility 2025 WMP, page 25.

<sup>35</sup> Glendale Water & Power 2025 WMP, page 39.

customers. WSAB appreciates the outline of de-energization protocols and roles and responsibilities during an event. WSAB also commends GWP for its comprehensive set of metrics and feedback system to ensure the goals of the plan are achieved. Scoring each metric (i.e. “Metric Not Met”, “Metric Significantly Exceeded”, “New or Obsolete Metrics”, and “Adjustments Based Upon Metrics”) facilitates implementing lessons learned each year.

WSAB recommends that GWP:

- For GWP’s decision to preemptively de-energize lines in “extreme weather event,”<sup>36</sup> 1) describe the data and data sources used to make that decision; 2) describe the procedures to collect data and verify those data are accurate and up to date; 3) identify parties responsible for making a decision and the criteria used; 4) describe the necessary actions to implement a de-energization and the parties responsible for executing them; and 5) define the “extreme weather event” under which it would make a real-time decision whether to de-energize.

### **4.13 City of Gridley**

As of September 19, 2025, the City of Gridley had not submitted a WMP. WSAB recommends the City of Gridley meet its statutory obligation to file a plan on time.

### **4.14 Healdsburg Electric Department**

The Healdsburg Electric Department (HED) has roughly 7 miles of overhead distribution lines in HFTD Tier 2 and 3. HED has done great work to use many resources to identify and prioritize risk as well as build up preventative strategy programs to mitigate those risks. The layout of HED’s WMP is clear, concise, and easily understood. WSAB appreciates the level of detail throughout the WMP, and within the “Overview of Preventative Strategies” and “Wildfire Risk” sections. HED’s section on “Key Performance Metrics” and “Previous metrics related to wildfire” are great examples of the depth WSAB is looking for related to metrics. HED lists the previous metrics and explains how they were matured and improved to form the current metrics. WSAB has no additional recommendations at this time.

### **4.15 Imperial Irrigation District**

The Imperial Irrigation District (IID) is “a vertically integrated load balancing electric utility” that has no overhead distribution or transmission lines in the HFTD.<sup>37</sup> The Board commends IID’s incorporation of projected climate change and historic wildfire data to inform its risk assessment. Notably, IID does not disable reclosers due to anticipated wildfires or have a formal preemptive de-energization procedure established.

WSAB recommends that IID:

- Continue pursuing strategies outlined in the independent evaluator’s report (e.g., system hardening, maintain tracking of equipment inspections).

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<sup>36</sup> Glendale Water & Power 2025 WMP, page 32.

<sup>37</sup> Imperial Irrigation District, 2023–2025 WMP, pages 13–21.

## 4.16 Industry Public Utilities

The City of Industry Public Utilities' (IPU) territory is classified as 100% urban, and no part is in or near the HFTD. The Board appreciates IPU's succinct discussion of its wildfire risk and its risk mitigation strategies and commends its improvement of its system situational awareness with the recent installation of automated metering infrastructure. Given IPU's identification of its wildfire risk, WSAB has no additional recommendations at this time.

## 4.17 Kirkwood Meadows Public Utility District

Kirkwood Meadows Public Utility District (KPMUD) owns and operates approximately 1.7 miles of overhead transmission line in HFTD Tier 2.<sup>38</sup> WSAB appreciates KPMUD's discussion of climate change and wildfire risk and commends its reclosing and de-energization protocols, including available backup generation that mitigates public safety concerns associated with de-energization.

WSAB recommends that KPMUD:

- Inventory any non-exempt equipment along its 1.7 miles of overhead transmission line to provide greater insight into if or when overhead facilities require replacement or upgrade.

## 4.18 Lassen Municipal Utility District

Lassen Municipal Utility District (LMUD) provides service to approximately 10,500 customers in a service territory of 1,933 square miles. LMUD owns and operates approximately 168 overhead distribution line miles and 41 overhead transmission line miles in HFTD Tier 2. WSAB commends LMUD's use of remote sensing—aerial drones with visual and infrared capabilities—to support patrolling surveys in certain areas of its service territory. The Board appreciates LMUD's "landscape-level fuel reduction activities"<sup>39</sup> and identification of an additional metric, number of service interruptions related to wildfires, to measure the effectiveness of its WMP.

Notably, LMUD "would consider the option to pre-emptively shut off electricity during extraordinary conditions"<sup>40</sup> and "intends to utilize the strategies described [in its WMP]... to avoid the need to preemptively shut off power... due to fire-threat conditions" because of the associated potential "public safety implications."<sup>41</sup> The Board acknowledges LMUD's description of potential impacts from a PSPS (e.g., emergency communications, critical water services, public health, fueling stations) and its "islanding" agreement with the Honey Lake biomass plant that allows continued service during PG&E PSPS events.

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<sup>38</sup> Kirkwood Meadows Public Utility District 2025 WMP, pages 4–6 and 13–14.

<sup>39</sup> Lassen Municipal Utility District 2025 WMP, page 21.

<sup>40</sup> Lassen Municipal Utility District 2025 WMP, pages 4–6.

<sup>41</sup> Lassen Municipal Utility District 2025 WMP, page 23.

WSAB recommends that LMUD:

- Characterize the specific wildfire risks on its facilities in the HFTD, at a level of detail at least as fine as individual circuits, including vegetation, terrain, climate conditions, and inventory of exempt and non-exempt equipment.
- For LMUD's decision to preemptively de-energize lines in extraordinary circumstances, 1) describe the data and data sources used to make that decision; 2) describe the procedures to collect data and verify those data are accurate and up to date; 3) identify parties responsible for making a decision and the criteria used; 4) describe the necessary actions to implement a de-energization and the parties responsible for executing them; and 5) define the "extraordinary circumstances" under which it would make a real-time decision whether to de-energize.

## **4.19 Lathrop Irrigation District**

Lathrop Irrigation District's (LID) territory is classified as 95% urban (and 5% barren), and no part is in or near the identified HFTD.<sup>42</sup> WSAB commends the identification of relevant performance metrics to help evaluate its inspection and maintenance programs, such as completion percentages of vegetation clearing activities, wood pole intrusive tests, and patrols of transmission structures. WSAB also appreciates the explanation for why a PG&E-initiated PSPS would be rare and LID's use of an internal risk management framework to assess enterprise-wide wildfire risk. Given LID's identification of its wildfire risk, WSAB has no additional recommendations at this time.

## **4.20 Lodi Electric Utility**

Lodi Electric Utility's (LEU) territory is classified as 100% urban, and no part is in or near the HFTD. The Board commends LEU for engaging in a variety of wildfire mitigation strategies despite having a low likelihood of catastrophic wildfire, such as establishing preemptive de-energization protocols that include procedures for mitigating negative impacts to vulnerable individuals. WSAB appreciates LEU's succinct discussion of its wildfire risk and mitigation strategies, such as owning emergency standby generators, identifying additional metrics—inspection-cycle completion and vegetation management targets—to measure the success of its WMP, and including summaries of PSPS protocols from select other utilities. Given LEU's identification of its wildfire risk, WSAB has no additional recommendations at this time.

## **4.21 City of Lompoc**

The City of Lompoc Electric Utility Division (Lompoc Electric) has a service territory of 11.7 square miles with the ability to "reach nearly every asset within a 10-minute drive from its headquarters." Lompoc Electric has 1%, or approximately 5 miles, of overhead lines in HFTD Tier 2 and has modified its inspection schedules to ensure completion by May 15<sup>th</sup> each year. It has only had two Red Flag Warning days since 2004. It also presents as metrics that it has not had a fire ignition, wire down, or outage since the adoption of a Wildfire Mitigation Plan in

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<sup>42</sup> Lathrop Irrigation District 2025 WMP, pages 2–3.

2019. WSAB appreciates that Lompoc Electric has outlined each of WSAB’s recommendations and how they were implemented or considered. WSAB has no additional recommendations at this time.

## **4.22 Los Angeles Department of Water and Power**

Los Angeles Department of Water and Power (LADWP) serves approximately 4 million people through its 1.6 million customer accounts. Its service territory covers 478 square miles within Los Angeles and 1,839 square miles in Owens Valley. Within the service territory, approximately 990 miles of overhead distribution are in Tier 2, with approximately 40 miles in Tier 3.

LADWP states that after careful assessment it “has determined that the adverse impact on public safety, including impacts to emergency responders, outweighs the perceived benefits derived from preemptive power shut-offs.”

WSAB recommends that LADWP:

- Characterize the specific wildfire risks on its facilities in the HFTD, at a level of detail at least as fine as individual circuits, including vegetation, terrain, climate conditions, and inventory of exempt and non-exempt equipment.
- Make clear the conditions under which reclosers will be blocked.
- Describe in more detail its assessment of the impacts and benefits of preemptive de-energization, including which factors or assumptions have the largest effect on the decision not to use preemptive de-energization, and the most likely changes to those factors or assumptions that could change LADWP’s decision.
- Provide greater clarity in metrics reporting. Using whole numbers instead of percentages will improve transparency, and investigating the causes of outages currently classified as “unknown” will help LADWP refine its risk assessments.
- Include utility-caused ignition metrics in future WMPs to provide a more complete picture of wildfire risk.

## **4.23 Merced Irrigation District**

Merced Irrigation District (MEID) has “no facilities in or abutting the HFTD” and “approximately 85 percent of [its] electric distribution system is of underground construction.” While there are no facilities within the HFTD, MEID does have some territory overlap with “moderate” risk identified by CAL FIRE’s FHSZ. WSAB recommends that MEID identify any overhead assets located within the FHSZ, and if there are any, characterize its risk and plans to address it.

## **4.24 Modesto Irrigation District**

Modesto Irrigation District’s (MID) service territory is primarily agricultural and does not include any HFTD Tier 2 or Tier 3. Outside its service territory, MID operates generation at New Hogan Dam and 1.6 miles of 60kV transmission line connecting the generation to the PG&E transmission grid. The New Hogan Line shares poles with PG&E distribution. MID inspects the



line five times per year. The New Hogan Line does not have any fuses. “MID has no formal PSPS program due to no load-serving assets located in or through the HFTD nor are any MID customers impacted by a neighboring utility’s PSPS.”<sup>43</sup>

WSAB appreciates the enhanced inspection cycle for the New Hogan Line. WSAB recommends that MID:

- Inventory and report any non-exempt equipment on the New Hogan Line.
- Further explain its decision not to consider PSPS on the New Hogan Line during critical fire weather conditions, in light of its description of the minimal role this line plays in reliability for its customers.

## **4.25 Moreno Valley Utility**

Forty percent of Moreno Valley Utility’s (MVU) territory is in HFTD Tier 2 or Tier 3. However, MVU’s “entire electric supply system is located underground in conduit and vaults.”<sup>44</sup> Given MVU’s identification of its wildfire risk, WSAB has no additional recommendations at this time.

## **4.26 City of Needles**

Needles Public Utility Authority (NPUA) is a 110 square mile system located well outside of the CPUC’s HFTD. Given NPUA’s identification of its wildfire risk, WSAB has no additional recommendations at this time.

## **4.27 Northern California Power Agency**

Northern California Power Agency (NCPA) is a Joint Powers Agency with electrical infrastructure that consists of two generation facilities with approximately 41 miles of overhead lines in HFTD Tier 2 and Tier 3. WSAB appreciates NCPA’s inventory of facilities in high fire threat zones and detailed discussion of preventative strategies and programs. In particular, WSAB commends NCPA on its fire spotter camera installations, aerial inspections by drone or helicopter, and helicopter dip tank installations for wildfire helicopter operations.

Notably, NCPA “has the authority to preemptively shut off power due to fire-threat conditions; however, this option will only be used in extraordinary circumstances”; NCPA also “is currently updating their existing... PSPS plans for their 230-kV line.”<sup>45</sup> WSAB looks forward to reviewing NCPA’s updated PSPS plans. WSAB recommends that NCPA:

- For NCPA’s decision to preemptively de-energize lines in extraordinary circumstances, 1) describe the data and data sources used to make that decision; 2) describe the procedures to collect data and verify those data are accurate and up to date; 3) identify parties responsible for making a decision and the criteria used; 4) describe the necessary actions to implement a de-energization and the parties responsible for

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<sup>43</sup> Modesto Irrigation District 2023–2025 WMP, page 41.

<sup>44</sup> Moreno Valley Utility 2025 WMP, page 7.

<sup>45</sup> Northern California Power Agency 2025 WMP, page 21.

executing them; and 5) define the “extraordinary circumstances” under which it would make a real-time decision whether to de-energize.

- Review the 2021 version of the *California Power Line Fire Prevention Field Guide*<sup>46</sup> for relevant updates.

## 4.28 Port of Oakland

The Port of Oakland (Oakland) is “an independent department of the City of Oakland ... that owns and operates the Oakland International Airport (OAK), owns and leases facilities in the Oakland Seaport, and owns and leases commercial real estate holdings located along the San Francisco Bay between the Oakland Seaport and OAK.” Oakland’s territory is classified as 100% urban with “less than 3 miles of overhead lines ... located in a flat, paved area”<sup>47</sup> of the Seaport, and no part is in or near the HFTD. WSAB appreciates Oakland’s succinct description of its potential risks. Given Oakland’s identification of its wildfire risk, WSAB has no additional recommendations at this time.

## 4.29 City of Palo Alto

WSAB commends the City of Palo Alto Utilities (CPAU) for substantially reducing its wildfire risk by undergrounding its overhead lines in the HFTD Tier 2. The undergrounding is scheduled for completion this year (2025). WSAB commends CPAU for its contributions to an innovative gas monitoring network for early detection of wildfire. To the best of WSAB members’ and staff’s knowledge, this technology is not widely used by either POU or IOUs. WSAB recommends that CPAU:

- Report on the status of its underground project in its next WMP, and its efforts to reduce risk from remaining infrastructure, e.g., clearing distances for pad-mounted transformers, whether it is using lower-flammability oils, dead-front equipment, etc.
- Report the results, benefits, and challenges of deploying gas monitoring technology, to inform broader adoption decisions in the utility community.

## 4.30 Pasadena Water and Power Department

Pasadena Water and Power (PWP) owns and operates approximately 30 miles of overhead lines in HFTD Tier 2 and Tier 3. WSAB commends PWP’s risk identification efforts, especially its coordination with Pasadena Fire Department to self-designate a part of its service territory as equivalent to CPUC HFTD Tier 2 because of the terrain, vegetation, and ingress/egress considerations. The Board also appreciates the associated identification of feeders in the HFTD that help inform operational responses. WSAB acknowledges PWP’s efforts to catalog and summarize key initiatives and mitigation projects.

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<sup>46</sup> 2021 California Power Line Fire Prevention Field Guide.

<sup>47</sup> Port of Oakland 2024 WMP, page 3.

Notably, while “PWP has the authority to preemptively shut off power due to fire-threat conditions..., this option will be used only in extraordinary circumstances.”<sup>48</sup> WSAB recommends that PWP:

- For PWP’s decision to preemptively de-energize lines in extraordinary circumstances, 1) describe the data and data sources used to make that decision; 2) describe the procedures to collect data and verify those data are accurate and up to date; 3) identify parties responsible for making a decision and the criteria used; 4) describe the necessary actions to implement a de-energization and the parties responsible for executing them; and 5) define the “extraordinary circumstances” under which it would make a real-time decision whether to de-energize.

### **4.31 Pittsburg Power Company**

Pittsburg Power Company submitted its WMP too late for an advisory opinion in this document.

### **4.32 Plumas-Sierra Rural Electric Cooperative**

Plumas-Sierra Rural Electric Cooperative (PSREC) owns and operates approximately 106 miles of overhead transmission lines and 702 miles of overhead distribution lines in HFTD Tier 2 and Tier 3. PSREC notes it is “divided into distinct 'North' and 'South' service territories, and each present unique challenges and wildfire potential.”<sup>49</sup> And while PSREC references “the potential negative impacts to fire response, water supply, public safety, and emergency communications” associated with preemptive de-energization, WSAB appreciates the quantitative thresholds PSREC has identified for conducting a potential PSPS.<sup>50</sup>

The Board notes PSREC's continued practice of sharing costs if customers desire to underground service to its premises and replacing legacy tree attachments with free poles at customer request. WSAB commends PSREC's use of drones to facilitate inspections in remote and rugged areas and its transition to digital inspection archives that will make tracking and querying easier.

WSAB recommends:

- For PSREC’s decision to preemptively de-energize lines in extraordinary circumstances, 1) describe the data and data sources used to make that decision; 2) describe the procedures to collect data and verify those data are accurate and up to date; 3) identify parties responsible for making a decision and the criteria used; 4) describe the necessary parties responsible for executing them; and 5) define the “extraordinary circumstances” under which it would make a real-time decision whether to de-energize.

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<sup>48</sup> Pasadena Water & Power 2025 WMP, page 18.

<sup>49</sup> Plumas-Sierra Rural Electric Cooperative 2025 WMP, page 15.

<sup>50</sup> Plumas-Sierra Rural Electric Cooperative 2025 WMP, page 22.

- Review the latest CAL FIRE FHSZ mapping<sup>51</sup> and 2021 version of the *California Power Line Fire Prevention Field Guide*.
- Characterize the specific wildfire risks on its facilities in the HFTD, at a level of detail at least as fine as individual circuits, including vegetation, terrain, climate conditions, and inventory of exempt and non-exempt equipment.

### **4.33 Power and Water Resource Pooling Authority**

The Power and Water Resources Pooling Authority (PWRPA) is the retail service provider for 15 public water-related customers within the PG&E service territory. It does not have any overhead facilities in or near the HFTD. Recognizing PWRPA electrical infrastructure comprises nine specific geographic locations, WSAB appreciates the efforts to identify appropriate preemptive de-energization protocols depending upon the PWRPA participant. Given PWRPA's identification of its wildfire risk, WSAB has no additional recommendations at this time.

### **4.34 Rancho Cucamonga Municipal Utility**

Rancho Cucamonga Municipal Utility's (RCMU) territory is classified as 99% urban with 100% underground electric distribution, and no part of its facilities appear in or near the identified HFTD. WSAB commends RCMU for engaging in a variety of wildfire mitigation strategies despite having a low likelihood of catastrophic wildfire, such as coordinating with the Rancho Cucamonga Fire District to install fire monitoring sensor cameras along the city's northern border that face the HFTD in the foothills area. The Board appreciates RCMU for adjusting the metrics it tracks—adding number of inspections of above-ground distribution components and removed number of wires down—to measure the success of its WMP. Given RCMU's identification of its wildfire risk, WSAB has no additional recommendations at this time.

### **4.35 Redding Electric Utility**

Redding Electric Utility (REU) serves roughly 47,000 customer accounts across a 61 square mile service territory. REU owns approximately 120 miles of overhead powerlines in the HFTD. REU notes that “[d]aily temperatures during fire season are usually above 90° Fahrenheit with a relative humidity of less than 30%.” REU's WMP showcases coordination with local partners, particularly in risk identification and emergency response protocols. WSAB appreciates the detail within the “Wildfire Prevention Strategies and Programs” section paying particular attention to the roles and responsibilities of various partners.

Appendix D states “[t]hrough the application of technology, REU will be able to more effectively protect and reduce threats to the electric utility infrastructure and the customers who rely upon it.” WSAB appreciates REU's forward-thinking approach to technology. REU provided a high degree of specificity within the WMP.

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<sup>51</sup> Fire Hazard Severity Zones website.

REU states it will “continue to shut off power when requested by Redding Fire, Police, CAL FIRE, or other emergency responding agencies. In addition to temporary shut-off requests from the above entities, the use of a Public Safety Power Shutoff (PSPS) may be utilized to prevent igniting a fire during extreme fire weather events and other events with additional high-fire threat conditions. The Reclosing and De-Energization program is documented in SOP-35.”<sup>52</sup> The Board appreciates the table on pages 53–54 outlining achievements over the previous year and goals for the next. This helps highlight the amount of work REU is undertaking to reduce risk and gives some accountability for continuing to improve processes. WSAB recommends that REU:

- For REU’s potential use PSPS during extreme fire weather events and other events with additional high-fire threat conditions, 1) describe the data and data sources used to make that decision; 2) describe the procedures to collect data and verify those data are accurate and up to date; 3) identify parties responsible for making a decision and the criteria used; 4) describe the necessary actions to implement a de-energization and the parties responsible for executing them; and 5) define the “extreme fire event” under which it would make a real-time decision whether to de-energize.

#### **4.36 Riverside Public Utilities Department**

Riverside Public Utilities (RPU) owns and operates approximately 53.5 miles of overhead transmission and distribution lines in the HFTD. WSAB appreciates RPU's identification of an additional metric, number of unplanned electric outages, to support the evaluation of its WMP and commends RPU on its community outreach and communications efforts. The Board notes RPU's identification of a wind speed threshold to inform its reclosing policy and appreciates on-going efforts to improve its situational awareness and operational practices.

Noting that RPU “has the authority to preemptively shut off power due to fire-threat conditions at their discretion,”<sup>53</sup> WSAB recommends that RPU:

- For RPU’s decision to preemptively de-energize lines, 1) describe the data and data sources used to make that decision; 2) describe the procedures to collect data and verify those data are accurate and up to date; and 3) define the “fire-threat conditions” under which it would make a real-time decision whether to de-energize.
- Characterize the specific wildfire risks on its facilities in the HFTD, at a level of detail at least as fine as individual circuits, including vegetation, terrain, climate conditions, and inventory of exempt and non-exempt equipment.

#### **4.37 Roseville Electric Utility**

Roseville Electric Utility’s territory is classified as 100% urban with 85% underground electric distribution, and no part is in or near the HFTD. The Board commends Roseville Electric Utility for its WMP, including background on its electric system, discussion of wildfire risks and

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<sup>52</sup> Redding Electric Utility 2025 WMP, page 23.

<sup>53</sup> City of Riverside Public Utilities 2025 WMP, page 24.



drivers, and comparison of risk characterization between CPUC HFTD and CAL FIRE FHSZ maps.

WSAB appreciates Roseville Electric Utility for its mitigation efforts including grid hardening and self-designating an area within its service territory as the “City Wildfire Reduction Zone,” which includes “increased precautionary measures for electric utility inspections and fire-prevention maintenance actions.”<sup>54</sup> Given Roseville Electric Utility’s identification of its wildfire risk, WSAB has no additional recommendations at this time.

#### **4.38 Sacramento Municipal Utility District**

While Sacramento Municipal Utility District (SMUD) owns no overhead facilities in the HFTD within its service territory, SMUD owns and operates approximately 144 miles of overhead transmission lines in HFTD Tier 2 and Tier 3 as part of its Upper American River Project. WSAB commends SMUD's use of remote sensing—aircraft and aerial drones with visual and infrared capabilities, LiDAR, ortho and oblique imagery—and x-ray sensing to support its vegetation management and equipment inspections. In particular, the Board appreciates SMUD's thorough description of its infrastructure inspections and integrated vegetation management plans around its facilities. WSAB also acknowledges SMUD's description of its enterprise risk assessment process, commends SMUD's extensive array of weather stations and set of metrics for evaluating its WMP, and appreciates SMUD's consistent tracking of enhancement and mitigation projects.

WSAB recommends that SMUD:

- Incorporate CAL FIRE's recent update to its FHSZ map to help identify and prioritize future risk mitigation activities in its high fire threat areas.

#### **4.39 San Francisco Public Utilities Commission**

San Francisco Public Utilities Commission (SFPUC) owns and operates approximately 141 miles of overhead distribution and transmission lines in HFTD Tier 2 and Tier 3. WSAB commends SFPUC's descriptions of its wildfire prevention plans and strategies, including vegetation management practices, inspection protocols and relevant QA/QC, situational awareness, and system hardening status and upcoming projects. The Board appreciates SFPUC's collaboration with PG&E to inform development of its risk indices using Technosylva's Wildfire Analyst application and PG&E Fire Potential Index. WSAB commends SFPUC's development of preemptive de-energization protocols.

WSAB recommends that SFPUC:

- Incorporate CAL FIRE's recent update to its FHSZ map to refine relevant wildfire risk mitigation activities in its high fire threat areas.

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<sup>54</sup> City of Roseville Public Utilities 2025 WMP, page 29.

## 4.40 City of Shasta Lake

The City of Shasta Lake (Shasta Lake) Electric Department owns and operates approximately 75 miles of overhead distribution and transmission lines inside a territory that is approximately 77% wildland-urban interface. WSAB appreciates edits made to this year's WMP that differentiate it from Shasta Lake's previous plan, including documenting safety briefings on “Extreme” weather days, acknowledging that Shasta Lake “has and will continue to proactively deenergize portions of its electric system to reduce wildfire ignition risk,”<sup>55</sup> and commenting on how the CPUC HFTD and CAL FIRE FHSZ maps incorporate and project different aspects of wildfire risk. The Board notes Shasta Lake’s observation that certain restrictions “challenge the City’s ability to manage vegetation effectively near overhead electric assets,” including the prohibition of herbicide use on Federal lands.<sup>56</sup>

WSAB recommends that Shasta Lake:

- Characterize the specific wildfire risks on its facilities in the HFTD, at a level of detail at least as fine as individual circuits, including vegetation, terrain, climate conditions, and inventory of exempt and non-exempt equipment.
- For Shasta Lake’s decision to preemptively de-energize lines, 1) describe the data and data sources used to make that decision; 2) describe the procedures to collect data and verify those data are accurate and up to date; 3) identify parties responsible for making a decision and the criteria used; 4) describe the necessary actions to implement a de-energization and the parties responsible for executing them; and 5) define the circumstances under which it would make a real-time decision whether to de-energize.
- Develop appropriate alternative vegetation management measures that mitigate some of the challenges discussed in this year's WMP, including managing vegetation adjacent to overhead lines that traverse across several jurisdictional (and regulatory) boundaries.
- Report out the metrics identified in this year's WMP.

## 4.41 Silicon Valley Power

Silicon Valley Power’s (SVP) territory is classified as 100% urban, and it owns and is responsible for remote transmission assets with approximately 1 mile of overhead transmission line in HFTD Tier 2. The Board continues to appreciate SVP's treatment of its tie lines and associated weather-related wildfire risk and commends SVP for acknowledging its authority to preemptively isolate its tie lines due to fire-threat conditions.

WSAB recommends that SVP:

- For SVP’s decision to preemptively de-energize lines when triggering conditions are present, 1) describe the data and data sources used to make that decision; 2) describe the procedures to collect data and verify those data are accurate and up to date; 3)

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<sup>55</sup> City of Shasta Lake 2025 WMP, page 21.

<sup>56</sup> City of Shasta Lake 2025 WMP, pages 10–11.

identify parties responsible for making a decision and the criteria used; 4) describe the necessary actions to implement a de-energization and the parties responsible for executing them; and 5) define the “triggering conditions” under which it would make a real-time decision whether to de-energize.

## **4.42 Port of Stockton**

As of September 19, 2025, the Port of Stockton had not submitted a WMP. WSAB recommends the Port of Stockton meet its statutory obligation to file a plan on time.

## **4.43 Surprise Valley Electrification Corporation**

Surprise Valley Electrification Corporation (SVEC) serves fewer than 7,000 customer accounts in a service territory of 7,650 square miles covering parts of 3 states. SVEC owns and operates approximately 377 overhead distribution line miles and 58 overhead transmission line miles in HFTD Tier 2. WSAB appreciates SVEC’s detailed WMP, including the series of maps that outline the wildfire risk across its multi-state service territory. The Board commends SVEC on its discussion of vegetation management, for having developed protocols for preemptive de-energization, and for identifying 7 additional metrics by which to measure the performance of its WMP (e.g., ignitions on circuits in HFTD, non-expulsion type fuse trip event with fire reference, bare line contact with vegetation).

Notably, while “SVEC has the authority to preemptively shut off power due to fire-threat conditions, ... this option will be used only in extraordinary circumstances as a last resort.”<sup>57</sup> Also, “SVEC is looking into an intrusive pole inspection program to implement”<sup>58</sup> on its lower-voltage segments.

WSAB recommends that SVEC:

- Characterize the specific wildfire risks on its facilities in the HFTD, at a level of detail at least as fine as individual circuits, including vegetation, terrain, climate conditions, and inventory of exempt and non-exempt equipment.
- For SVEC’s decision to preemptively de-energize lines in extraordinary circumstances, 1) describe the data and data sources used to make that decision; 2) describe the procedures to collect data and verify those data are accurate and up to date; 3) identify parties responsible for making a decision and the criteria used; 4) describe the necessary actions to implement a de-energization and the parties responsible for executing them; and 5) define the “extraordinary circumstances” under which it would make a real-time decision whether to de-energize.
- Describe its assessment of the risk reduction from disabling reclosers in the next WMP.

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<sup>57</sup> Surprise Valley Electrification Corporation 2025 WMP, page 39.

<sup>58</sup> Surprise Valley Electrification Corporation 2025 WMP, page 26.

- Review the latest CAL FIRE FHSZ mapping<sup>59</sup> and 2021 version of the *California Power Line Fire Prevention Field Guide*.
- Implement intrusive pole inspections on lower-voltage portions of its system in the HFTD.

#### 4.44 Transmission Agency of Northern California

The Transmission Agency of Northern California (TANC) delivers power to its 15 joint power authority members through its 340-mile 500kV transmission lines. WSAB appreciates the thought and approach that has gone into TANC's risk identification throughout this territory. TANC uses seven publicly available spatial datasets to create a robust Fire Damage Potential Assessment. TANC's maps and level of detail regarding specific data inputs provided a clear picture of risk. Given TANC's identification of its wildfire risk and mitigation strategies, WSAB has no additional recommendations at this time.

#### 4.45 Trinity Public Utility District

Trinity Public Utility District (TPUD) serves approximately 7,300 customer accounts across 2,200 square miles with 100% of its overhead lines in the HFTD. TPUD is actively seeking grants to fund wildfire mitigation activities.

By 2019, TPUD had replaced around 25% of expulsion fuses. By 2025 that had increased to around 40%.

TPUD states that the “while initiation of a public safety power shut-off is regarded as a last resort, there may be situations where it may be the safety approach if the risk of a wildfire starting and spreading is severe.”<sup>60</sup>

WSAB appreciates the reporting of programmatic metrics with clear annual targets and progress. The Board believes this is critical in informing utility improvements and lessons learned.

WSAB recommends that TPUD:

- Set specific and timely dates for the completion of equipment replacement program in the WMP, specifically for expulsion fuses.
- For TPUD's decision to initiate a public safety power shutoff, 1) describe the data and data sources used to make that decision; 2) describe the procedures to collect data and verify those data are accurate and up to date; 3) identify parties responsible for making a decision and the criteria used; 4) describe the necessary actions to implement a de-energization and the parties responsible for executing them; 5) define the situation under which it would make a real-time decision whether to de-energize.
- Develop a preemptive de-energization implementation plan for use in case of a PG&E-initiated transmission PSPS, as well as a TPUD-initiated de-energization.

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<sup>59</sup> Fire Hazard Severity Zones website.

<sup>60</sup> Trinity Public Utility District 2025 WMP, pages 33–35.

- Provide an assessment of target goals that were not met, explain the reasons, and identify corrective actions to improve future outcomes.

#### **4.46 Truckee Donner Public Utility District**

Truckee-Donner Public Utility District (TDPUD) owns and operates approximately 121 miles of overhead distribution lines in HFTD Tier 2 and Tier 3, and less than a tenth of a mile of overhead transmission line in HFTD Tier 2. WSAB appreciates TDPUD's decision to treat its entire service territory as HFTD Tier 3, its installation of a weather station, and the depth of discussion for replacing equipment (e.g., pole replacement, expulsion fuses with non-expulsion current limiting fuses) and managing vegetation. The Board commends TDPUD's commitment to “implement a formal preemptive de-energization program aimed at mitigating wildfire risks” that will leverage existing expertise and working relationships with partner utilities<sup>61</sup> and identification of additional metrics—number of recorded outages, safety hazards, vegetation management targets, and external risks—to support the evaluation of its WMP.

WSAB recommends that TDPUD:

- For TDPUD’s preemptive de-energization plan, 1) describe the data and data sources used to make that decision; 2) describe the procedures to collect data and verify those data are accurate and up to date; 3) identify parties responsible for making a decision and the criteria used; 4) describe the necessary actions to implement a de-energization and the parties responsible for executing them; and 5) define the “extraordinary circumstances” under which it would make a real-time decision whether to de-energize.
- Characterize the specific wildfire risks on its facilities in the HFTD, at a level of detail at least as fine as individual circuits, including vegetation and inventory of exempt and non-exempt equipment.

#### **4.47 Turlock Irrigation District**

Turlock Irrigation District (TID) owns and operates approximately 83 overhead distribution line miles and 77 overhead transmission line miles in either HFTD Tier 2 or CAL FIRE State Responsibility Area (SRA). WSAB appreciates TID's use of remote sensing—aerial drones with infrared capability—to support inspection of critical equipment in certain areas of its service territory. The Board commends TID's mapping efforts to locate all non-exempt structures in either SRA or HFTD Tier 2, deployment of a weather station in the Diablo Grande region, and development of public communications protocols (e.g., TID Alerts). WSAB continues to appreciate TID's efforts to identify appropriate metrics to assess the effectiveness of its WMP, including external risk, performance, and outcome metrics, and looks forward to reviewing how it will inform operations and mitigation activities as the collection history becomes more extensive.

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<sup>61</sup> Truckee Donner Public Utilities District 2025 WMP, pages 28–29.



Notably, TID recognizes its “authority to preemptively shut off power due to fire-threat conditions ... in extraordinary circumstances .... [and] has identified switches that can be operated to shut off power ... if the situation were to warrant it.”<sup>62</sup> The Board appreciates the list of considerations that might indicate for preemptive de-energization including forecasted wind gusts in excess of 56 miles per hour.

WSAB recommends:

- For TID’s decision to preemptively de-energize lines in extraordinary circumstances, 1) describe the data and data sources used to make that decision; 2) describe the procedures to collect data and verify those data are accurate and up to date; 3) identify parties responsible for making a decision and the criteria used; 4) describe the necessary actions to implement a de-energization and the parties responsible for executing them; and 5) define the “extraordinary circumstances” under which it would make a real-time decision whether to de-energize.

## **4.48 Ukiah Electric Utility**

Ukiah Electric Utility (UEU) owns and operates approximately 4 miles of overhead distribution lines in HFTD Tier 2. WSAB commends UEU self-designation of additional areas within its service territory as equivalent to HFTD Tier 2 for operational consistency. The Board appreciates UEU's development of specific metrics for evaluating its WMP and the use of drones to enhance inspection efforts using visual and infrared data. Notably, while UEU “may proactively de-energize all or portions of the City’s electric distribution system,” it plans to “use system hardening, situational awareness, vegetation management and other strategies to avoid” preemptive de-energization.<sup>63</sup>

WSAB recommends that UEU:

- Characterize the specific wildfire risks on its facilities in the HFTD, at a level of detail at least as fine as individual circuits, including vegetation, climate conditions, and inventory of exempt and non-exempt equipment.
- For UEU’s decision to preemptively de-energize lines, 1) describe the data and data sources used to make that decision; 2) describe the procedures to collect data and verify those data are accurate and up to date; 3) identify parties responsible for making a decision and the criteria used; 4) describe the necessary actions to implement a de-energization and the parties responsible for executing them; and 5) define any triggering conditions under which it would make a real-time decision whether to de-energize.

## **4.49 Valley Electric Association**

Valley Electric Association emailed Board staff that it is working on a late submission.

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<sup>62</sup> Turlock Irrigation District 2025 WMP, pages 44–45.

<sup>63</sup> Ukiah Electric Utility 2025 WMP, page 20.

## **4.50 Vernon Public Utility**

Vernon Public Utilities' (VPU) territory is classified as 100% urban, and no part is in or near the HFTD. WSAB commends VPU's identification of an additional metric—number of distribution outages caused by trees—to help measure the performance of its WMP and appreciates the description of its wildfire risks and mitigating activities. Given VPU's identification of its wildfire risk, WSAB has no additional recommendations at this time.

## **4.51 Victorville Municipal Utility Services**

Victorville Municipal Utility Services (VMUS) serves a territory that is classified as 100% desert or urban with 99.8% underground electric distribution, and no part is in or near the HFTD. Given VMUS' identification of its wildfire risk, WSAB has no additional recommendations at this time.

DRAFT

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