



**Prepared for:**

Roseville Electric Utility

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# Roseville Electric Utility 2024 Wildfire Mitigation Plan Inde- pendent Evaluation

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Table of contents

Executive Summary..... 1

1. Introduction / Utility Overview ..... 1

2. Methodology and Approach ..... 1

3. Independent Evaluator Review of Adherence ..... 2

    3.1. Requirement Overview ..... 2

    3.2. Review of WMP Elements ..... 3

4. Wildfire Mitigation Plan Comprehensiveness: Review of Wildfire Mitigation Strategies  
    Error! Bookmark not defined.

5. Cal Fire 2025 Local Responsibility Area Fire Hazard Severity Maps ..... 7

6. Conclusion ..... 7

## Executive Summary

Roseville Electric Utility (REU) contracted with Charles River Associates (CRA) to conduct an independent evaluation of their 2024 Wildfire Mitigation Plan (WMP). The following Report describes the review of REU's WMP for adherence to California Public Utilities Code (PUC) §8387(b)(2) for publicly owned electric utilities, and §8387(c) which requires an independent evaluator (IE) review and assess the comprehensiveness of a POU's WMP and issue a summary report.

### 1. Introduction / Utility Overview

Roseville Electric Utility (REU), under the supervision of Roseville City Council, provides electric power to the City of Roseville. REU serves approximately 67,500 customers across approximately 43 square miles in Placer County. REU does not operate within any of the California Public Utilities Commission (CPUC) Tier 2 or Tier 3 Hire Fire Threat Districts (HFTD). Despite this, REU has taken steps to ensure that they are prepared for any potential wildfire impacts. The terrain within the REU's service territory is primarily flat and it is mostly comprised of urban and suburban developed areas. There is very little service territory with continuous flammable vegetation, adding to REU's low wildfire risk.

REU maintains two generation plants, two 230kV substations, and approximately 978 miles distribution lines, 85% (834 miles) of which are underground (as reported in the 2024 WMP). Roseville Electric Utility is a member of the Balancing Authority of Northern California (BANC). BANC is responsible for matching generation to load and coordinating system operations with neighboring balancing authorities. BANC contracts with the Western Area Power Administration (WAPA) for bulk electricity and supplies REU with electrical power purchased through BANC and transmitted to BANC transmission lines that enter the city at the two REU 230 kV substations.

REU's service territory experiences the typical fire season for the Central Valley. Weather conditions conducive to the rapid spread of a wildfire on average begin in April; however, vegetation typically is not dry enough to ignite readily until May. Conditions conducive to wildfire spread continue from May until October, with August through October having the driest conditions. The Sacramento Valley experiences an atmospheric circulation pattern in the summer known as the "northers" that can occur throughout the year. However, it has a pronounced effect on wildfire risk during the fire season.

### 2. Methodology and Approach

This Report is the product of the IE's assessments of REU's WMP and data request responses as well as discussions with REU staff. The Report scope includes an assessment of the completeness of Roseville's WMP and its adherence to PUC §8387. To perform this assessment, the IE adopted the following approach:

- **Review the WMP:** The IE reviewed Roseville's WMP and other relevant publicly released or submitted documents.
- **Submit Data Request:** Data requests focused on any additional internal documents or SOPs to further illustrate safety and wildfire practices that may not be publicly available due to security reasons.
- **Interpret documents and compare against PUC §8387:** Utilizing the WMP and supporting material, the IE assessed planning and prepared against the intended goal of PUC §8387 to determine if Roseville's plan met the baseline requirements.

Additionally, recommendations for improvement or best practices were provided, regardless of code language.

### 3. Independent Evaluator Review of Adherence

#### 3.1. Requirement Overview

PUC §8387(b)(2) lists the statutory requirements for WMPs. These are the specific elements that the independent evaluator must review to make its determination for this report. Table 1 summarizes these elements and provides the IE's findings for each. Section 3.2 provides additional detail and full assessment.

The findings for REU fall into two categories: Complete and Complete with Recommendations. A finding of complete indicates that the WMP adhered to the statutory requirement in the PUC. A finding of recommendations provides detail on industry best practices or other suggestions toward continuous improvement of the plan.

The IE provides recommendations for consideration only and does not make claims that these changes would further reduce risk, nor does it imply that not implementing these recommendations would expose REU to additional risk.

**Table 1 - Overview of PUC §8387 Elements**

Element	Definition	Finding
(A) Staff Responsibilities	An accounting of the responsibilities of persons responsible for executing the plan.	Complete
(B) Plan Objectives	The objectives of the wildfire mitigation plan.	Complete – recommendations
(C) Wildfire Risk Reduction Strategy Description	A description of the preventive strategies and programs to be adopted by the local publicly owned electric utility or electrical cooperative to minimize the risk of its electrical lines and equipment causing catastrophic wildfires, including consideration of dynamic climate change risks.	Complete
(D) Evaluation Metrics	A description of the metrics the local publicly owned electric utility or electrical cooperative plans to use to evaluate the wildfire mitigation plan's performance and the assumptions that underlie the use of those metrics.	Complete – recommendations
(E) Application of Metrics to Evaluate Plan	A discussion of how the application of previously identified metrics to previous wildfire mitigation plan performances has informed the wildfire mitigation plan.	Complete
(F) Recloser and Deenergization Protocols	Protocols for disabling reclosers and deenergizing portions of the electrical distribution system that consider the associated impacts on public safety, as well as protocols related to mitigating the public safety impacts of those protocols, including impacts on critical first responders and on health and communication infrastructure.	Complete – recommendations
(G) Deenergization Customer Notification Procedure	Appropriate and feasible procedures for notifying a customer who may be impacted by the deenergizing of electrical lines. The procedures shall direct notification to all public safety offices, critical first responders, health care facilities, and operators of telecommunications infrastructure with premises within the footprint of potential deenergization for a given event.	Complete

(H) Vegetation Management	Plans for vegetation management.	Complete
(I) Asset Inspections	Plans for inspections of the local publicly owned electric utility's or electrical cooperative's electrical infrastructure.	Complete
(J) Wildfire Risks and Drivers	<p>A list that identifies, describes, and prioritizes all wildfire risks, and drivers for those risks, throughout the local publicly owned electric utility's or electrical cooperative's service territory. The list shall include, but not be limited to, both of the following:</p> <ul style="list-style-type: none"> <li>(i) Risks and risk drivers associated with design, construction, operation, and maintenance of the local publicly owned electric utility's or electrical cooperative's equipment and facilities.</li> <li>(ii) Particular risks and risk drivers associated with topographic and climatological risk factors throughout the different parts of the local publicly owned electric utility's or electrical cooperative's service territory.</li> </ul>	Complete – recommendations
(K) Geographic Risk Identification	Identification of any geographic area in Roseville's service territory that is a higher wildfire threat than is identified in a commission fire threat map, and identification of where the commission should expand a high fire-threat district based on new information or changes to the environment.	Complete
(L) Enterprise-wide Risk Identification	A methodology for identifying and presenting enterprise-wide safety risk and wildfire-related risk.	Complete – recommendations
(M) Service Restoration	A statement of how the local publicly owned electric utility or electrical cooperative will restore service after a wildfire.	Complete
(N) Monitoring, Correcting, and Updating the WMP	<p>A description of the processes and procedures the local publicly owned electric utility or electrical cooperative shall use to do all of the following:</p> <ul style="list-style-type: none"> <li>(i) Monitor and audit the implementation of the wildfire mitigation plan.</li> <li>(ii) Identify any deficiencies in the wildfire mitigation plan or its implementation, and correct those deficiencies.</li> <li>(iii) Monitor and audit the effectiveness of electrical line and equipment inspections, including inspections performed by contractors, that are carried out under the plan, other applicable statutes, or commission rules.</li> </ul>	Complete – recommendations

### 3.2. Review of WMP Elements

The IE found that REU's WMP meets the statutory requirements of comprehensiveness per PUC §8387(c). Below is a detailed overview of the IE assessment, including relevant WMP detail and any recommendations, as applicable.

#### Staff Responsibilities

Finding: Complete. Roles and Responsibilities for executing the WMP are covered in Section 5 of the Plan. Additional roles and responsibilities for individual processes are described throughout.

No additional recommendations.

## **Plan Objectives**

Finding: Complete. Information on Objectives of the plan are covered in Section 3.

Recommendation: CRA recommends including a regular fire risk evaluation to the objective of minimizing sources of ignition. While Roseville territory is considered low risk based on current assessment information, the landscape is changing rapidly and ensuring as few ignitions and as much preparation as possible. Regularly assessing the service territory for evolving or increased risks or potential risks beyond what is identified in CPUC's HFTD maps is recommended.

## **Wildfire Risk Reduction Strategy Description**

Finding: Complete. Risk reduction strategies are described in Section 7. Wildfire Mitigation strategies described include Vegetation Management, Grid Hardening, Design and Construction Standards, Asset Inspections, and Undergrounding.

No additional recommendations.

## **Evaluation Metrics**

Finding: Complete. Metrics for evaluating the plan are covered in Section 9. REU uses two outcome-based metrics – Fire Ignitions and Wire Down. It is noted that REU has never had a wildfire requiring tracking of these metrics.

Recommendation: See the Overall WMP Recommendations below for recommendations from the WSAB Advisory Opinion on tracking metrics.

## **Application of Metrics to Evaluate Plan**

Finding: Complete. Plan Evaluation Metrics are covered in Section 9. The metrics track information from 2020. The REU notes that there have been no instances of either metric but will review effectiveness of metrics if/when a fire occurs.

No additional recommendations.

## **Recloser and Deenergization Protocols**

Finding: Complete. Recloser and Deenergization policy information is cover in Section 7. Per the WMP, REU does not have any distribution recloser equipment installed; therefore, a policy is not needed. REU does report that any reclosing operations needed would be performed by feeder breakers located in substations. It is noted that REU has not had to preemptively deenergize any lines to date.

Recommendation: Consider developing a Public Safety Power Shutoff (PSPS) procedure. Despite REU's relatively low wildfire risk, having a PSPS plan in place is recommended to ensure a process and roles for activating and communicating a PSPS are developed ahead of the need for activating a PSPS, if one is needed. Developing a plan will also identify the parameters and threshold for enacting a PSPS.

*Note: if a PSPS plan is developed, the WSAB has provided a context setting table template.*

## **Deenergization Customer Notification Procedure**

Finding: Complete. Customer notification procedures are covered in Section 7.

No additional recommendations

## **Vegetation Management**

Finding: Complete. Vegetation Management details are covered in Section 7. The REU WMP describes adherence to Public Resources Codes (PRC) 4292 and 4293 as well as GO 95 Rule 35 and Appendix E Guidelines to Rule 35. It is noted that these guidelines are recommended for utilities operating in HFTD Tiers 2 and 3; therefore, REU practices are

above and beyond minimum requirements for Vegetation Management and practices would not need to change if risk levels change for the REU territory.

No additional recommendations.

### **Asset Inspections**

Finding: Complete. Asset Inspections are detailed in Section 7 of the WMP. This section describes inspections as meeting CPUC GO 165 and CPUC GO 95 Rule 18. As with VM practices, these standards apply to utilities operating in HFTD Tiers 2 and 3; therefore, REU practices are currently above and beyond minimum requirements and would not need to update should risk maps and risk areas change.

No additional recommendations.

### **Wildfire Risks and Drivers**

Finding: Complete (all sub-sections included). Wildfire risks and drivers are outlined in Section 6. This section describes all identified risk drivers; however, there is no mention of prioritization of these drivers. It is assumed that all drivers carry equal weight given the risk profile of the service territory.

Recommendation: CRA recommends including detail about prioritization of risks and risk drivers (if applicable) or detail that all risks are treated equally.

### **Geographic Risk Identification**

Finding: Complete. Geographic risks are described in Section 6.

No additional recommendations.

### **Enterprise-wide Risk Identification**

Finding: Complete. Enterprise-wide risks are described in Section 6. This section describes the risk analysis process and REU's ranking system.

Recommendation: The methodology for identifying enterprise-wide risks, as required by the Standard, is not fully addressed in this section. CRA recommends REU provide detail on how its enterprise-wide risk framework is applied and process for identifying new risks.

### **Service Restoration**

Finding: Complete. Service restoration procedures are described in Section 8 and further described in SOP 6.01 *Electric Outage Restoration Procedures*. These two documents demonstrate adherence.

No additional recommendations.

### **Monitoring, Correcting, and Updating the WMP**

Finding: Complete (includes all subsections). Detail on processes to monitor, correct, and update the WMP is described in Section 9. This Section also includes a notification procedure for electric dispatch. The plan is reviewed annually, at a minimum. It is during this review that any deficiencies or updates are considered and corrected, as needed.

Recommendation: Section 9 describes the process for "Monitoring the Effectiveness of Inspections" (Standard N iii), which includes that "field staff routinely inspect assets (typically based on an interval process) within the electric service territory." CRA recommends including spot checks as to review work completed – randomly selecting assets to inspect and compare against work notes helps to ensure that the asset inspection program is working as intended.

### **Overall WMP**

Finding: The Plan contains all elements applicable to REU for the 2024 year, several going above and beyond minimum standards for the utility make up, location, and risk profile.



The Office of Energy Infrastructure Safety released the Wildfire Safety Advisory Board (WSAB) Advisory Opinion for the 2025 WMPs of Publicly Owned Electric Utilities and Electrical Cooperatives<sup>1</sup> in December of 2024 with several recommendations that REU may want to incorporate into the 2025 WMP.

WSAB Recommendations:

**Section 1** of the Advisory Opinion recommends including a summary of any key wildfire mitigation activities should be added to the WMP. The summary should include “completion targets, year, and cost estimates for the reporting period, categorized by program (e.g., grid design and system hardening, community outreach and engagement), along with accomplishments from the prior reporting period.” A template for this summary can be found in Appendix 1 of the WSAB Advisory Opinion.

**Section 9** of the Advisory Opinion recommends developing a Quality Assurance/Quality Control program to assess work completed on any wildfire mitigation activities, but especially those conducted by third parties. This is in alignment with the CRA recommendation to conduct spot checks on asset inspections.

**Section 10** of the Advisory Opinion recommends utilizing the developed metrics template as a starting point to developing tracked metrics. The recommendation is that REU will adapt these and use what makes sense for the service territory.

CRA recommends using the 2025 annual review of the WMP to ensure all components accurately reflect the current state of the organization. Several of the details mentioned throughout the WMP seem to reference outdated status. For example, references to supply chain issues resulting in work delays may no longer be the case and expansions to the City Wildfire Reduction Zone can be cited.

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#### **4. Cal Fire 2025 Local Responsibility Area Fire Hazard Severity Maps**

A review of the recommended 2025 updates to CalFire's Fire Hazard Severity Zone map shows small sections of the western part of REU's territory reaching "Moderate" severity (on a scale of "Moderate, High, and Very High"). Additionally, a very small section of the northeast part of the city near Rocklin and Granite Bay reaches a "High" severity. Due to the developed nature of these areas, REU's VM practices, and Roseville's City Wildfire Reduction Zone initiatives, there is no suggestion that these changes add increased risk that require significant changes to REU's wildfire mitigation activities.

CRA recommends REU continue to monitor changing maps and wildfire threat landscapes to ensure appropriate measures are taken if or when major changes occur.

#### **5. Conclusion**

REU has prepared a comprehensive Wildfire Mitigation Plan for 2024. The plan meets the statutory requirements outlined in PUC 8387 (b)(2) for a publicly owned utility. Roseville Electric Utility has also considered the recommendations of the Wildfire Safety Advisory Board and revised its WMP appropriately. The REUWMP describes a wildfire mitigation program that accurately assesses the risks and risk drivers in their service territory. It also implements preventative strategies focusing on vegetation management and equipment inspections on its overhead assets and undergrounding new lines. These strategies follow known best practices for reducing the wildfire risk of these drivers.

Based on the wildfire prevention programs described in the WMP, associated SOPs and EOPs, and the REU's progress in its wildfire prevention programs, the REU WMP takes the risk of wildfire in its service territory seriously. It is actively working to reduce the risk that its equipment starts or aids in the spread of a wildfire.

Looking ahead, there are several actions that REU can consider as part of a continuous improvement approach to wildfire mitigation planning. These include engagement in local and regional wildfire mitigation activities, proactively monitoring changes to wildfire risk maps that may impact REU service territories, developing prioritization strategies for risk and mitigation efforts, and creating a PSPS plan and policy. All of these will help ensure REU is prepared for an ever-changing wildfire landscape and reactive measures will be minimal.