**[POU]**

**Wildfire**

**Mitigation**

**Plan**

Version 1.0

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# Overview

## Policy Statement

[POU’s] overarching goal is to provide safe, reliable, and economic electric service to its local community. In order to meet this goal, [POU] constructs, maintains, and operates its electrical lines and equipment in a manner that minimizes the risk of catastrophic wildfire posed by its electrical lines and equipment.

## Purpose of the Wildfire Mitigation Plan

This Wildfire Mitigation Plan describes in detail the range of activities that [POU] is taking to mitigate the threat of power-line ignited wildfires, including its various programs, policies, and procedures. This plan is subject to direct supervision by the [POU Governing Board] and is implemented by the [POU executive]. This plan complies with the requirements of Public Utilities Code section 8387 for publicly owned electric utilities to prepare a wildfire mitigation plan by January 1, 2020, and annually thereafter.

[Option 1 - Municipal POU]: [POU] is a department within the City of [\_\_\_\_\_\_\_\_]. [Describe how POU’s fire prevention efforts fit into the general plan and other safety planning documents. Describe how POU coordinates with fire and other safety departments.]

[Option 2 – Non-municipal POU]: [POU] closely coordinates with local fire and safety officials ……

## Organization of the Wildfire Mitigation Plan

This Wildfire Mitigation Plan included the following elements:

* Objectives of the plan;
* Roles and responsibilities for carrying out the plan;
* Identification of key wildfire risks and risk drivers;
* Description of Wildfire Prevention Strategies;
* Metrics for measuring the performance of the plan and identifying areas for improvement;
* Community outreach and education.

# Objectives of the Wildfire Mitigation Plan

## Minimizing sources of ignition

The primary goal of this Wildfire Mitigation Plan is to minimize the probability that [POU’s] transmission and distribution system may be an original or contributing source for the ignition of a fire. [POU] has evaluated the prudent and cost-effective improvements to its physical assets, operations, and training that can help to meet this objective. [POU] has implemented those changes consistent with this evaluation.

## Resiliancy of the electric grid

The secondary goal of this Wildfire Mitigation Plan is to improve the resiliency of the electric grid. As part of the development of this plan, [POU] assesses new industry practices and technologies that will reduce the likelihood of a disruption in service and improve the restoration of service.

## Minimizing unnecessary or ineffective Actions

The final goal for this Wildfire Mitigation Plan is to measure the effectiveness of specific wildfire mitigation strategies. Where a particular action, program, or protocol is determined to be unnecessary or ineffective, [POU] will assess whether a modification or replacement is merited. This plan will also help determine if more cost-effective measures would produce the same or better results.

**Optional “As Necessary” Language**

This language to be Inserted for any element that the POU determines that a particular element otherwise required by Pub. Util. Code § 8387(b):

*“Pursuant to Public Utilities Code section 8387(b)(2), [POU] has determined that it is not necessary to describe \_\_\_\_\_\_\_\_\_\_\_\_\_ in this Wildfire Mitigation Plan because of the unique characteristics of the service territory and operations of [POU], including \_\_\_\_\_\_\_\_\_\_\_.*

# Roles and Responsibilities

## [POU] roles and Responsibilities

 **[Optional Org Chart Template]**

[Describe POU organizational structure]

[Describe relevant lines of communication during emergencies]

[POU] utility staff have the following responsibilities regarding fire prevention, response and investigation:

* Conduct work in a manner that will minimize potential fire dangers.
* Take all reasonable and practicable actions to prevent and suppress fires resulting from [POU] electric facilities.
* Coordinate with federal, state, and local fire management personnel to ensure that appropriate preventative measures are in place.
* Immediately report fires, pursuant to specified procedures.
* Take corrective action when observing or having been notified that fire protection measures have not been properly installed or maintained.
* Ensure compliance with relevant federal, state, and industry standard requirements.
* Ensure that wildfire data is appropriately collected.
* Maintain adequate training programs for all relevant employees.

## Coordination with water utilities/department

[Option 1 – Municipal Utility]: [Describe coordination with water department, including during wildfires and other emergencies.]

[Option 2 – Non-municipal POU]: [identify relevant water utilities within POU’s service territory, and describe lines of coordination and communication.]

## Coordination with communication infrastructure providers

[Describe coordination and communication with Communication infrastructure providers].

## Standardized emergency management system

As a local governmental agency,[[1]](#footnote-1) [POU] has planning, communication, and coordination obligations pursuant to the California Office of Emergency Services’ Standardized Emergency Management System (“SEMS”) Regulations,[[2]](#footnote-2) adopted in accordance with Government Code section 8607. The SEMS Regulations specify roles, responsibilities, and structures of communications at five different levels: field response, local government, operational area, regional, and state.[[3]](#footnote-3) Pursuant to this structure, [POU] regularly coordinates and communicates with the relevant safety agencies as well as other relevant local and state agencies. [Describe POU’s role within the local and operational level].

[Describe SEMS structure during red flag conditions and during wildfires]

Under the SEMS structure, a significant amount of preparation is done through advanced planning at the county level, including the coordination of effort of public, private, and nonprofit organizations. [County] serves as the Operational Area and is guided by the [\_\_\_\_\_\_\_\_\_] County Disaster Council that is made up of representatives of [\_\_\_\_\_\_\_\_\_\_\_\_\_]. The Operational Area includes local and regional organizations that bring relevant expertise to the wildfire prevention and recovery planning process. These participants include [provide a detailed list of relevant school districts, utilities, Fire Districts, non-profits (such as the United Way and/or the American Red Cross), Hospitals, special districts, communications providers, and other similar organizations].

Pursuant to the SEMS structure, [POU] participates in [monthly/quarterly/annual] training exercises. [Describe relevant training exercises generally, and any specific examples relating to wildfires.]

[POU] is a member of the California Utility Emergency Association, which plays a key role in ensuring communications between utilities during emergencies. [POU] also participate in the Western Energy Institute’s Western Region Mutual Assistance Agreement, which is a mutual assistance agreement covering utilities across a number of western states.

# Wildfire Risks and Drivers associated with design, construction, operation, and maintenance

## Particular risks and risk drivers associated with topographic and climatological risk factors

Within [POU]’s service territory and the surrounding areas, the primary risk drivers for wildfire are the following:

* Extended drought;
* Vegetation type;
* High winds;
* Steep terrain;
* Lack of early fall rains;

## Enterprisewide Safety Risks

[Describe enterprisewide safety risks].

## Changes to CPUC Fire Threat Map

[Note any needed expansion of the borders of the High Fire Threat District].

# Wildfire Preventative Strategies

## High fire threat district

[POU] directly participated in the development of the California Public Utilities Commission’ s (CPUC) Fire-Threat Map,[[4]](#footnote-4) which designates a High-Fire Threat District. In the map development process, [POU] served as a territory lead, and worked with utility staff and local fire officials to identify the areas of [POU’s] service territory that are at an elevated or extreme risk of power line ignited wildfire. [POU] has incorporated the High Fire Threat District into its construction, inspection, maintenance, repair, and clearance practices.

## Weather Monitoring

[POU] monitors current and forecasted weather data from a variety of sources including:

* United States National Weather Service
* United States Forest Service Wildland Fire Assessment System
* National Fire Danger Rating System
* National Interagency Fire Center – Predictive Services for Northern and Southern California.
* [Other sources]

Each day, [POU] assigns one of four operating conditions based on the relevant weather data and knowledge of local conditions:

1. **Normal:** During normal conditions, no changes are made to operations or work policy.
2. **Elevated:** During elevated fire-risk conditions, [describe policy].
3. **Extreme:** During extreme fire-risk conditions, [describe policy].
4. **Red Flag:** If the National Weather Service declares a Red Flag Warning for any portion of [POU]’s service territory, then [describe policy].

## design and Construction Standards

[POU]’s electric facilities are designed and constructed to meet or exceed the relevant federal, state, or industry standard. [POU] treats CPUC General Order (GO) 95 as a key industry standard for design and construction standards for overhead electrical facilities. [POU] meets or exceeds all standards in GO 95. Additionally, [POU] monitors and follows as appropriate the National Electric Safety Code.

## Vegetation Management

[POU] meets or exceeds the minimum industry standard vegetation management practices. For transmission-level facilities, [POU] complies with NERC FAC-003-4. For both transmission and distribution level facilities, [POU] meets: (1) Public Resources Code section 4292; (2) Public Resources Code section 4293; (3) GO 95 Rule 35; and (4) the GO 95 Appendix E Guidelines to Rule 35. These standards require significantly increased clearances in the High Fire Threat District. The time-of-trim guidelines do not establish a mandatory standard, but instead provide useful guidance to utilities. [POU] will use specific knowledge of growing conditions and tree species to determine the appropriate time of trim clearance in each circumstance.

Within the High Fire Threat District, [POU] performs an evaluation of every tree that has the potential to strike overhead facilities it if were to fail. [POU] performs more frequent and detailed inspections of any such trees, and in severe cases will work with the land owner to remove the tree.

[Describe an relevant State Responsibility Area requirements applicable to POU].

## Inspections

[POU] meets or exceeds the minimum inspection requirements provided in CPUC GO 165 and CPUC GO 95, Rule 18. Pursuant to these rules, [POU] inspects electric facilities in the Hight Fire Threat District more frequently that the other areas of its service territory. Additionally, [POU] staff uses their knowledge of the specific environmental and geographical conditions to determine when areas outside of the High Fire Threat District require more frequent inspections.

[POU] also uses light detection and ranging (LiDAR) surveys in certain areas of its service territory to provide three dimensional depictions of [POU] facilities, terrain, vegetation and other obstacles. This tools helps prioritize obstacles that need to be cleared to maintain safety and reliability.

If [POU] staff discovers a facility in need of repair that is owned by an entity other than [POU], [POU] will issue a notice to repair to the facility owner and work to ensure that an necessary repairs are completed promptly.

[POU] works to ensure that all inspections to be performed within the High Fire Threat District are completed before the beginning of the historic fire season, typically September 1. [POU] monitors drought conditions and other relevant factors throughout the year to determine if inspections should be completed on a shorter timeframe.

## Workforce training

[POU] has implemented work rules and complementary training programs for its workforce to help reduce the likelihood of the ignition of wildfires. [Describe specific work rules and training programs.]

## Recloser Policy

[Describe POU recloser policy including the use of pulse reclosers and other SCADA controlled reclosers. Additionally, describe if the POU changes the relay settings during certain conditions.]

## Deenergization

[POU] has the authority to preemptively shut off power due to fire-threat conditions, however, this option will only be used in extraordinary circumstances. [POU] will make a case-by-case decision to shut off power based on the following considerations:

* Red Flag Warnings issued by the National Weather Service for fire weather zones that contain [POU] circuits;
* [POU] staff assessments of local conditions, including wind speed (sustained and gust), humidity and temperature, fuel moisture, fuel loading and data from weather stations;
* Real-time information from staff located in areas identified as at risk of being subject to extreme weather conditions;
* Input from [POU] fire experts and vegetation experts;
* Input from local and state fire authorities regarding the potential consequences of wildfires in select locations;
* Alternative ways to reroute power to affected areas;
* Awareness of mandatory or voluntary evacuation orders in place;
* Expected impact of de-energizing circuits on essential services;
* Other operational considerations to minimize potential wildfire ignitions, including the blocking of reclosers on the identified circuit(s);
* On-going fire activity throughout [POU] territory and California;
* Ability to notify customers;
* Notifications to local governments and public officials; and
* Potential impacts to communities and customers

### Impacts to public safety

[Describe special considerations of the public safety impact of shutting off power].

### Customer Notification Protocols

[Describe customer notification protocols].

# Community Outreach and Public Awareness

[Describe POU outreach, including any engagement with Fire Safe Councils, customer groups, or other similar organizations.]

[Describe any meetings hosted or attended by POU].

[Describe any public service announcements relating to wildfire safety.]

# Restoration of Service

[Describe POU’s process for restoring service after an outage].

# Evaluating of the Plan

## Metrics and Assumptions for Measuring Plan Performance

[POU] will track two metrics to measure the performance of this Wildfire Mitigation Plan: (1) number of fire ignitions; and (2) wires down within the service territory.

### Metric 1: Fire Ignitions

For purposes of this metric, a fire ignition is defined as follows:

* [POU] facility was associated with the fire;
* The fire was self-propagating and of a material other than electrical and/or communication facilities;
* The resulting fire traveled greater than one linear meter from the ignition point; and
* [POU] has knowledge that the fire occurred.

In future Wildfire Mitigation Plans, [POU] will provide the number of fires that occurred that were less than 10 acres in size. Any fires greater than 10 acres will be individually described.

### Metric 2: Wires Down

The second metric is the number of distribution and transmission wires downed within [POU’s] service territory. For purposes of this metric, a wires down event includes any instance where an electric transmission or primary distribution conductor falls to the ground or on to a foreign object. [POU] will divide the wires down metric between wires down inside and outside of the High Fire Threat District.

[POU] will not normalize this metric by excluding unusual events, such as severe storms. Instead, [POU] will supplement this metric with a qualitative description of any such unusual events.

## Impact of Metrics on Plan

[POU] anticipates that there will be relatively limited data gathered through these metrics, particularly in the initial years. Therefore, it will be difficult to drawn meaningful conclusions based on this data. [POU] will evaluate modifying these metrics or adding additional metrics in future years.

## Monitoring and Auditing the Plan

This Wildfire Mitigation Plan is subject to review by [POU Governing Board]. [POU] will present this plan to [POU Governing Board] on an annual basis. Additionally, a qualified independent evaluator will present a report on this plan to the [POU Governing Board].

## Identifying and correcting Deficiencies in the Plan

[Describe process for correcting deficiencies in the plan.]

## Monitoring the effectiveness of inspections,

[Describe POU process for monitoring the effectiveness of its inspections, including inspections performed by contractors. ]

# Independent Auditor

Public Utilities Code section 8387(c) requires [POU] to contract with a qualified independent evaluator with experience in assessing the safe operation of electrical infrastructure to review and assess the comprehensiveness of this Wildfire Mitigation Plan. The independent evaluator must issue a report that is posted to [POU’s] website. This report must also be presented to [POU Governing Board] at a public meeting.

[Describe process for selecting qualified independent evaluator].

[Describe timing and process for the report].

1. As defined in Cal. Gov. Code § 8680.2. [↑](#footnote-ref-1)
2. 19 CCR § 2407. [↑](#footnote-ref-2)
3. Cal. Gov. Code § 2403(b):

(1) “Field response level” commands emergency response personnel and resources to carry out tactical decisions and activities in direct response to an incident or threat.

(2) “Local government level” manages and coordinates the overall emergency response and recovery activities within their jurisdiction.

(3) “Operational area level” manages and/or coordinates information, resources, and priorities among local governments within the operational area and serves as the coordination and communication link between the local government level and the regional level.

(4) “Regional level” manages and coordinates information and resources among operational areas within the mutual aid region designated pursuant to Government Code §8600 and between the operational areas and the state level. This level along with the state level coordinates overall state agency support for emergency response activities.

(5) “State level” manages state resources in response to the emergency needs of the other levels, manages and coordinates mutual aid among the mutual aid regions and between the regional level and state level, and serves as the coordination and communication link with the federal disaster response system. [↑](#footnote-ref-3)
4. Adopted by CPUC Decision 17-12-024. [↑](#footnote-ref-4)