

**LASSEN MUNICIPAL UTILITY DISTRICT**

# **2023 WILDFIRE**

# **MITIGATION**

# **PLAN**

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*June 2023*

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## II. UTILITY OVERVIEW AND CONTEXT

### A. UTILITY DESCRIPTION AND CONTEXT-SETTING INFORMATION

Lassen Municipal Utility District (LMUD) is a locally governed utility overseen by an elected Board of Directors. This plan has been coordinated with the city, county and state agencies that have responsibilities during an emergency. LMUD serves the City of Susanville, and many communities throughout Lassen County. The LMUD service territory covers 1,900 square miles and serves approximately 10,500 meters. Voters created LMUD in November 1986. Prior to this vote, the Lassen District received electric service from CP National Corporation (CPN). On May 10, 1988, LMUD acquired electrical facilities from CPN.

“The mission of Lassen Municipal Utility District is to serve our community. We strive to provide **reliable service** at the **most reasonable cost** with a focus on **safety and sustainability**. We continue to work toward being an integral part of the community we serve, while maintaining a **skilled and valued workforce**.”

**Table 1: Context-Setting Information**

Utility Name	LMUD	
Service Territory Size	1,933 square miles	
Owned Assets	<input checked="" type="checkbox"/> Transmission <input checked="" type="checkbox"/> Distribution <input type="checkbox"/> Generation	
Number of Customers Served	Approx. 10,500 customer accounts	
Population Within Service Territory	Approx. 15,000 people	
Customer Class Makeup	<i>Number of Accounts</i>	<i>Share of Total Load (MWh)+</i>
	86% Residential; 1% Agricultural; 12% Small/Medium Business; 1% Commercial/Industrial	70% Residential; 6 % Agricultural; 22 % Small/Medium Business; 2 % Commercial/Industrial

<b>Service Territory Location/Topography<sup>1</sup></b>	4% Agriculture 1% Barren/Other 35% Conifer Forest 1% Conifer Woodland 1% Desert 0% Hardwood Forest 0% Hardwood Woodland 2% Herbaceous 49% Shrub 0% Urban 5% Water
<b>Service Territory Wildland Urban Interface<sup>2</sup> (based on total area)</b>	3% Wildland Urban Interface; 5% Wildland Urban Intermix;
<b>Percent of Service Territory in CPUC High Fire Threat Districts (based on total area)</b>	<input checked="" type="checkbox"/> Includes maps <a href="https://files.cpuc.ca.gov/safety/fire-threat_map/2021/CPUC%20Fire%20Threat%20Map_v.3_08.19.2021.Letter%20Size.pdf">https://files.cpuc.ca.gov/safety/fire-threat_map/2021/CPUC%20Fire%20Threat%20Map_v.3_08.19.2021.Letter%20Size.pdf</a> Tier 3: 0% Tier 2: 85% Tier 1: 15% (High Elevation Meadows, Deserts, and water features)
<b>Prevailing Wind Directions &amp; Speeds by Season</b>	The LMUD service territory experiences wind patterns normal of the eastern escarpment of the Sierra Nevada characterized by seasonal wind patterns exceeding 10 mph with gusts of 30 mph being common. The prevailing wind pattern is from the southwest, with winter winds averaging 6-8 mph, spring winds 8-20mph, summer winds 7-15 mph, and fall winds 6-10 mph.
<b>Miles of Owned Lines Underground and/or Overhead</b>	Overhead Dist.: 350 line miles Overhead Trans.: 80 line miles Underground Dist.: 75 line miles Underground Trans.: 0 miles

<sup>1</sup> This data shall be based on the California Department of Forestry and Fire Protection, California Multi-Source Vegetation Layer Map, depicting WHR13 Types (Wildlife Habitat Relationship classes grouped into 13 major land cover types) *available at:*

<https://www.arcgis.com/home/item.html?id=b7ec5d68d8114b1fb2bfbf4665989eb3>.

<sup>2</sup> This data shall be based on the definitions and maps maintained by the United States Department of Agriculture, as most recently assembled in *The 2010 Wildland-Urban Interface of the Conterminous United States*, *available at* [https://www.fs.fed.us/nrs/pubs/rmap/rmap\\_nrs8.pdf](https://www.fs.fed.us/nrs/pubs/rmap/rmap_nrs8.pdf).

<b>Percent of Owned Lines in CPUC High Fire Threat Districts</b>	<i>Overhead Distribution Lines as % of Total Distribution System (Inside and Outside Service Territory)</i>
	Tier 2:48% Tier 3: 0%
	<i>Overhead Transmission Lines as % of Total Transmission System (Inside and Outside Service Territory)</i>
	Tier 2: 51% Tier 3: 0%
<b>Customers have ever lost service due to an IOU PSPS event?</b>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <p>Though LMUD is susceptible to PSPS, LMUD can provide power to all circuits through the islanding process with Honey Lake Power (HLP), whereby LMUD customers will be directly serviced by HLP during an emergency event that affects power supply.</p>
<b>Customers have ever been notified of a potential loss of service to due to a forecasted IOU PSPS event?</b>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<b>Has developed protocols to pre-emptively shut off electricity in response to elevated wildfire risks?</b>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <p>LMUD would consider the option to pre-emptively shut off electricity during extraordinary conditions.</p>
<b>Has previously pre-emptively shut off electricity in response to elevated wildfire risk?</b>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <p>During periods of elevated fire risk, LMUD places key systems on non- reclosed settings.</p>

B. STATUTORY CROSS-REFERENCE TABLE

Requirement	Statutory Language	Location in WMP
<b>Persons Responsible</b>	<b>PUC Section 8387(b)(2)(A):</b> An accounting of the <b>responsibilities of persons</b> responsible for executing the plan.	Section IV
<b>Objectives of the Plan</b>	<b>PUC Section 8387(b)(2)(B):</b> The <b>objectives</b> of the wildfire mitigation plan.	Section III
<b>Preventive Strategies</b>	<b>PUC Section 8387(b)(2)(C):</b> A description of the <b>preventive strategies and programs to be adopted by the local publicly owned electric utility</b> or electrical cooperative to minimize the risk of its electrical lines and equipment causing catastrophic wildfires, including consideration of dynamic climate change risks.	Section VI
<b>Evaluation Metrics</b>	<b>PUC Section 8387(b)(2)(D):</b> A description of the <b>metrics the local publicly owned electric utility or electrical cooperative plans to use to evaluate the wildfire mitigation plan’s performance</b> and the assumptions that underlie the use of those metrics.	Section IX (A)
<b>Impact of Metrics</b>	<b>PUC Section 8387(b)(2)(E):</b> A discussion of how the <b>application of previously identified metrics</b> to previous wildfire mitigation plan performances has informed the wildfire mitigation plan.	Section IX (B)
<b>De-energization Protocols</b>	<b>PUC Section 8387(b)(2)(F):</b> <b>Protocols for disabling reclosers and de-energizing portions of the electrical distribution system</b> that consider the associated impacts on public safety and protocols related to mitigating the public safety impacts of those protocols, including impacts on critical first responders and on health and communication infrastructure.	Section VI (H)

Requirement	Statutory Language	Location in WMP
<b>Customer Notification Procedures</b>	<b>PUC Section 8387(b)(2)(G):</b> Appropriate and feasible <b>procedures for notifying a customer</b> who may be impacted by the de-energizing of electrical lines. The procedures shall consider the need to notify, as a priority, critical first responders, health care facilities, and operators of telecommunications infrastructure.	Section VI (H)
<b>Vegetation Management</b>	<b>PUC Section 8387(b)(2)(H):</b> Plans for vegetation management.	Section VI (D)
<b>Inspections</b>	<b>PUC Section 8387(b)(2)(I): Plans for inspections</b> of the local publicly owned electric utility’s or electrical cooperative’s electrical infrastructure.	Section VI (E)
<b>Prioritization of Wildfire Risks</b>	<b>PUC Section 8387(b)(2)(J):</b> A list that <b>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.</b> The list shall include, but not be limited to, both of the following: <b>(i)</b> 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. <b>(ii)</b> Particular risks and <b>risk drivers</b> associated with topographical and climatological risk factors throughout the different parts of the local publicly owned electric utility’s or electrical cooperative’s service territory.	Section VI
<b>CPUC Fire Threat Map Adjustments</b>	<b>PUC Section 8387(b)(2)(K):</b> Identification of any <b>geographic area in the local publicly owned electric utility’s or electrical cooperative’s service territory</b>	Section VI (A)



Requirement	Statutory Language	Location in WMP
	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 for TDPUD based on new information or changes to the environment.	
<b>Enterprise-wide Risks</b>	<b>PUC Section 8387(b)(2)(L):</b> A methodology for identifying and presenting <b>enterprise-wide</b> safety risk and wildfire-related risk.	Section V (B)
<b>Restoration of Service</b>	<b>PUC Section 8387(b)(2)(M):</b> A statement of how the local publicly owned electric utility or electrical cooperative will <b>restore service after a wildfire</b> .	Section VIII
<b>Monitor and Audit</b>	<b>PUC Section 8387(b)(2)(N):</b> A description of the processes and procedures the local publicly owned electric utility or electrical cooperative shall use to do all of the following: (i) <b>Monitor and audit</b> the implementation of the wildfire mitigation plan. (ii) <b>Identify any deficiencies</b> in the wildfire mitigation plan or its implementation, and correct those deficiencies. (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.	Section IX (C)
<b>Qualified Independent Evaluator</b>	<b>PUC Section 8387(c):</b> The local publicly owned electric utility or electrical cooperative shall contract with a qualified independent evaluator with experience in assessing the safe operation of electrical infrastructure to review and assess the comprehensiveness of its wildfire mitigation plan. The	Section X

Requirement	Statutory Language	Location in WMP
	independent evaluator shall issue a report that shall be made available on the Internet website of the local publicly owned electric utility or electrical cooperative and shall present the report at a public meeting of the local publicly owned electric utility's or electrical cooperative's governing board.	

**C. PROCESS FOR UTILITY ADOPTION AND SUBMITTAL OF ANNUAL WMP AND OPPORTUNITIES FOR PUBLIC COMMENT**

The LMUD Board of Directors are provided the Wildfire Mitigation Plan on an annual basis to review and adopt the Plan. After annual staff updates and revisions, the revised WMP is then presented to the Board at a noticed public meeting, with an opportunity for public comment,

**D. POLICY STATEMENT**

LMUD's overarching goal is to provide safe, reliable, and economic electric service to its local community. System safety is paramount to LMUD's operations. With recent wildfire events in Northern California and around the state, measures have been put in place that require Utilities to develop and maintain wildfire mitigation plans. These plans are intended to prepare procedures to minimize the chance of electrically caused wildfires, and to establish communications with the public, emergency responders, and operators of critical systems such as hospitals and emergency communications centers. In order to meet these goals, LMUD 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. This includes extensive tree trimming programs to maintain clearance between trees and bare electrical conductors, and pole brushing (clearing around every pole with electrical installed devices such as switches, fuses, reclosers). Many other measures involving equipment selection and settings are also part of our ongoing efforts.

LMUD's objective is to provide safe, reliable, and economic service to our customers. LMUD operates its electrical system in a manner that minimizes the risk of wildfire posed by electrical lines and equipment.

**E. LOCATION OF WMP INFORMATION ON LMUD WEBSITE**

The LMUD WMP is available upon request through its website to promote public awareness and public comment. The Independent Evaluator Report (IE) will be provided on the LMUD website.

**F. PURPOSE OF THE WILDFIRE MITIGATION PLAN**

This Wildfire Mitigation Plan describes the range of activities that LMUD is taking to mitigate the threat of utility equipment ignited wildfires, including its various programs, policies, and procedures. This plan is subject to direct supervision by the LMUD Board of Directors and is implemented by the General Manager and the staff of LMUD. This plan complies with the requirements of California Public Utilities Code section 8387 for publicly owned electric utilities to prepare a wildfire mitigation plan by January 1, 2020, and annually thereafter.

LMUD communicates with our customers, communities, and local and state fire agencies by attending public meetings, preparing publications in both print and on social media, and presentations at official meetings of city, and county organizations along with the Lassen County Fire Safe Committee, and the California Office of Emergency Services local representatives. LMUD has sought and incorporated input from stakeholders on this plan and will annually review the plan to update and adjust as necessary.

After development of the draft plan in consultation with stakeholders in the community and throughout the service territory we presented the plan to the LMUD Board of Directors for approval.

## G. ORGANIZATION OF THE WILDFIRE MITIGATION PLAN

This Wildfire Mitigation Plan includes the following elements:

- Utility overview and context;
- Objectives of the plan;
- Roles and responsibilities for carrying out the plan;
- Identification of key wildfire risks and risk drivers;
- Description of wildfire prevention, mitigation, and response strategies and programs;
- Metrics for evaluating the performance of the plan and identifying areas for improvement;
- Community outreach and education;
- Review and validation of the plan; and
- Timelines.

## III. OBJECTIVES OF THE WILDFIRE MITIGATION PLAN

### A. MINIMIZING SOURCES OF IGNITION

The primary goal of this Wildfire Mitigation Plan is to minimize the probability that LMUD's transmission and distribution system acts as the origin or as a contributing factor for the ignition of a fire. LMUD has evaluated the prudent and cost-effective improvements to its physical assets, operations, and training that can help to meet this objective. LMUD has implemented those changes consistent with this evaluation.

### B. RESILIENCY 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, LMUD assessed new industry practices and technologies to reduce the likelihood of an interruption (frequency) in service and improve the restoration (duration) of service.

Other efforts include establishing a demonstration project in cooperation with W.M. Beatty & Associates land that includes an LMUD right of way on a small portion of our transmission line from Westwood to Susanville. In 2021, the Dixie fire interrupted this effort, and, post Dixie Fire, LMUD began working on a Federal Emergency Management Agency (FEMA) / California Governor's Office of Emergency Services (Cal OES) Hazard Mitigation Grant Application and received preliminary approval in early 2022. This Grant, which is still pending as of May 2023, would fund all planning and physical work for the widening of 25 miles of existing transmission right of ways between Susanville and Westwood.

## C. MINIMIZING UNNECESSARY OR INEFFECTIVE ACTIONS

The final objective of this Plan is to measure the effectiveness of specific mitigation strategies as they apply to LMUD. Where a particular action, program, initiative, or protocol is determined to be unnecessary or ineffective, LMUD will assess whether modification, replacement, or discontinuation is appropriate. This approach will also help determine if more cost-effective measures would produce the same or better results. This is particularly true for the implementation of new technologies and practices where an evaluation from prototype to pilot installation to full implementation is often prudent to maximize performance and minimize unintended consequences.

## D. WILDFIRE PREVENTION STRATEGIES AND PROGRAMS

### 1. Strategies

Approaches and strategies for reducing wildfire risk includes the following and are described in more detail in Section VI.

- **Vegetation Management**

Tree trimming and pole brushing programs are fundamental to reduction of fire potential around LMUD facilities, equipment and overhead transmission and distribution lines.

- **Enhanced Inspections**

LMUD conducts complete system inspections (patrolling) on an annual cycle, with high-risk areas patrolled twice per year, once before fire season and once before winter begins. The current enhanced inspection program ensures that equipment is in good operating condition and line clearances are adequate. A systematic tree trimming program and schedule ensures that all overhead lines and equipment are maintain with proper clearances.

- **Improved Awareness of Electric System and Weather Conditions**

Current Weather monitoring and conditions on the ground utilize existing patrolling crews and weather resources using NWS weather stations, USFS, CalFire local cameras as available and CalTrans publicly available camera locations.

- **Operational Practices**

These day-to-day operational practices in connection with monitoring and weather awareness help to manage and minimize wildfire risks. This involves equipment control settings such as recloser/breaker functions.

- **System Hardening and Resiliency**

These actions consist of system, equipment, and structure design and upgrades. Hardening refers to changes that make transmission or distribution lines and equipment more resistant to fire such as steel poles compared to wood poles, covered conductor, and underground construction. These potential actions will be evaluated for use at various points in our system based on their estimated effectiveness and costs.

- **Public Safety and Notification**

Communications to our customers and local agencies is very important in coordinating preparations and plans for minimization of wildfire risk and increasing awareness of necessary actions that many involved public agencies and emergency response agencies may have to implement. Our first level of communication is a text alert system that our customers sign up for that allows up to the minute information to be provided to customers in our service territory. Additionally, LMUD has a contact procedure with PG&E and critical emergency response agencies if conditions lead to notification of a possible Public Safety Power Shutoff (PSPS) or activation of a PSPS by PG&E occurs due to high fire danger weather conditions.

- **Reclosing and Circuit Shut-off**

This refers to how reclosers (breakers) for individual circuits are managed. The recloser is an automated electrical current / load breaking device that may be set to function in several ways. During high fire danger conditions, we may set the reclosers to non-reclose meaning that once they detect a fault they will not attempt to close again until they are manually checked, the lines patrolled, and then they are re-closed.

- **Wildfire Response and Recovery**

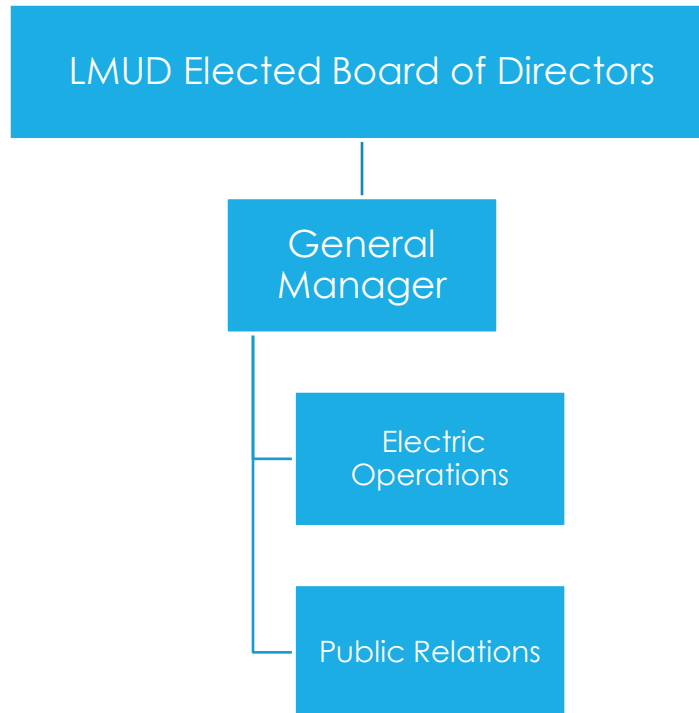
These are procedures meant to respond and react to a wildfire or the effects of a wildfire on our system. The second part of this is recovery, which consists of actions that are performed to ensure safe restoration of power, re-occupancy of neighborhoods, and/or communication after an event. LMUD has an Emergency Manual. LMUD sought to be annexed into the Lassen County HMP, and the County confirmed that LMUD was in fact annexed into the County HMP. LMUD participates and has a member on the Steering Committee of the County Hazard Mitigation Committee.

- **Assess Mitigation Effectiveness**

The final goal for this Wildfire Mitigation Plan is to measure the effectiveness of specific wildfire mitigation strategies. Where a particular action, program component, or protocol is determined to be unnecessary or ineffective, LMUD 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 improved results.

## IV. ROLES AND RESPONSIBILITIES

### A. UTILITY GOVERNANCE STRUCTURE FOR WILDFIRE MITIGATION PLAN



LMUD is governed as a California Municipal Utility pursuant to the Municipal Utility Act of the State of California.

- The Utility is governed by a 5-member Board of Directors who are directly elected to represent Districts within the Utility Service Territory.
- Management of LMUD, its facilities, personnel and finances are overseen by the General Manager who supervises implementation of the Wildfire Mitigation Plan. Measurement of effectiveness, reporting, and review of measures is also overseen by the General Manager.
- The Electric Operations Manager provides guidance to staff regarding vegetation management, selection of equipment, and development of procedures to minimize the potential of ignitions and fires within the LMUD service territory. The Electric Operations Manager directs actions taken by field employees during periods of wildfire threat or actual wildfire events.
- The Public Relations Manager manages communications regarding public safety and other vital information regarding the status of the power system, expected or possible events, or actual events.

LMUD conducts all of its meetings in strict compliance with the Brown Act (CA Gov. Code Sections 54950 through 54963) governing the conduct of local agency meetings. This includes all applicable updates are included in those agendas for consideration by the LMUD Board of Directors that include opportunities for

public participation. LMUD’s website prominently notes that “Board meetings are open to the public, and the public is always given the opportunity to comment on district business.

More specifically, public participation includes opportunities for general audience comments and comments specific to items included on the agenda. LMUD includes an attachment to each Regular Meeting agenda titled “Fundamental Robert’s Rules of Order as Modified by California Law Presented as a Courtesy to those Unfamiliar with Parliamentary Procedure” that is intended to assist members of the public in taking full advantage of the opportunities for effective participation. The LMUD Board of Directors meets on the fourth Tuesday of each month at 5:30 pm in the LMUD Board Room located at 65 S. Roop Street in Susanville California.

The LMUD Board of Directors are provided the Wildfire Mitigation Plan on an annual basis to review and adopt the Plan after staff updates and revisions.

## B. WILDFIRE PREVENTION

LMUD’s Staking and Operations staff is responsible for maintaining electric facility design, maintenance is conducted by the Operations Dept, and vegetation management is conducted by a contractor who follows guidelines and work assigned by the Operations Dept. LMUD staff and contractors continuously strive to:

- Operate the system in a manner that will minimize potential wildfire risks.
- Take all reasonable and practicable actions to minimize the risk of a catastrophic wildfire caused by LMUD electric facilities.
- Coordinate with federal, state, and local fire management personnel as necessary or appropriate to implement the LMUD WMP.
- Immediately report fires to 911 dispatch, pursuant to existing LMUD practices and the requirements of this WMP ensuring OES County Representatives awareness.
- Take corrective action when staff witnesses or is notified that fire protection measures have not been properly installed or maintained.
- Comply with relevant federal, state, and industry standard requirements, including the General Orders established by the California Public Utilities Commission.
- Collect and maintain wildfire data necessary for the implementation of this WMP.
- Provide regular training programs for all employees having obligations for implementation of this WMP.

## C. WILDFIRE RESPONSE AND RECOVERY

During high fire risk periods or during actual wildfire events LMUD will be in communication with the PG&E Control Center in Vacaville to determine system status. In the event of a PG&E Public Safety Power Shutoff (PSPS) due to high wildfire threat conditions, LMUD will coordinate with a local power generator, Honey Lake Power (HLP), that own and operate a 30 MW Biomass Energy Plant).

An agreement between our two companies (known as an Islanding Agreement) allows for direct servicing of our LMUD customer load by HLP during an emergency. Islanding refers to supplying power to LMUD customers from a local power generator when PG&E electric supply into our service territory is turned off or interrupted by an emergency event. This islanding process is initiated with notice from PG&E that power supply through the Caribou Transmission line could be shut off. LMUD and HLP then coordinate

the timing and load considerations for islanding to take place. This process has been used many times in the past for periods of up to 27 days. The procedures for islanding are well developed and work well, except during periods when the HLP plant is on a major maintenance outage.<sup>3</sup>

LMUD utility staff have the following obligations regarding fire prevention, response, and investigation:

- Take all reasonable and practicable actions to prevent and suppress fires resulting from LMUD electric facilities. This includes continuous inspection and review of equipment and lines for condition, and evaluation of equipment that could reduce the chance of ignitions or wildfires caused by sparking or arcing at various points in the LMUD system such as fuse and cutout locations, recloser locations, and various types of connections to distribution lines.
- Follow LMUD protocols during Red Flag Warnings such as evaluating conditions along individual circuits in LMUD territory and making determinations as to the effectiveness of changing recloser function to “non-reclose”. Evaluation of equipment protective relay settings is also an ongoing effort, including the need to set its fast trip settings to one-shot during high-risk periods. Opportunities to set equipment so that lower potential for spark or ignition may be determined to be useful or effective.

#### D. COORDINATION WITH WATER UTILITIES/DEPARTMENT

Prior to, during, and after high wildfire threat conditions or an actual wildfire event, LMUD engages in communication with all major and critical water infrastructure customers as well as all residential customers. Communications will be provided to LMUD customers if LMUD must take actions which affect certain circuits within its service territory. In most cases LMUD will have the ability to provide power to all circuits through the “islanding” process with HLP. Exceptions to this would include an active wildfire of unknown origin burning towards or growing to envelop an LMUD system, substation, customer facility, LMUD transmission or LMUD distribution line.

#### E. COORDINATION WITH COMMUNICATION INFRASTRUCTURE PROVIDERS

Prior to, during, and after HFTD conditions or an actual wildfire event, LMUD engages in communication with all major and critical communication infrastructure customers as well as all residential customers. We will coordinate with OES, CalFire, Lassen County Administration, City of Susanville Administration, County Office of Education, Sheriff’s Dept, CHP, Banner Lassen Hospital, and Water Supply Districts (Susanville, Westwood, Lake Levitt, Spalding, Lake Forest). We will also communicate with commercial and residential customers if LMUD must take actions which affect certain circuits. In most cases, LMUD will have the ability to provide power to all circuits through the “islanding” process with HL Power. Exceptions to this may include an active wildfire of unknown origin burning towards or growing to envelop an LMUD system, substation, customer facility, LMUD transmission or LMUD distribution line.

#### F. STANDARDIZED EMERGENCY MANAGEMENT SYSTEM

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<sup>3</sup> A major maintenance event is a period when major systems such as the boiler, generator, or steam turbine are disassembled and repairs performed.



As a local governmental agency,<sup>4</sup> LMUD has and executes its planning, communication, and coordination obligations pursuant to the California Office of Emergency Services' Standardized Emergency Management System ("SEMS") Regulations,<sup>5</sup> 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.<sup>6</sup> Pursuant to this structure, LMUD annually coordinates and communicates with the relevant safety agencies as well as other relevant local and state agencies. LMUD participates in the hazard and emergency planning review program overseen by CalOES local emergency response officials. Key contacts and procedures for notifications and communications during emergencies, including wildfires are developed. The type of emergency caused by wildfire and / or loss of power has been anticipated and plans discussed in the OES and County Emergency Operation Plan. LMUD is responsible for notifying OES, county and city officials and agencies in the event of a wildfire or a loss of electric power due to fire damaged equipment or equipment that could be affected in the path of a wildfire.

Under the SEMS structure, a significant amount of preparation is done through advanced planning at the county level, including the coordination of the efforts of public, private, and nonprofit organizations. These participants include OES, CalFire, Lassen County Administration, City of Susanville Administration, County Dept of Education, Sheriff's Dept, CHP, Banner Lassen Hospital, Water Supply Districts (Susanville, Westwood, Lake Levitt, Spalding, Lake Forest), Susanville gas utility, Fire Districts, and non-profits (such as the churches for emergency shelters or the American Red Cross).

Pursuant to the SEMS structure, LMUD coordinates closely with local, State and Federal emergency response agencies. LMUD is always available and is included in any emergency involving any electric infrastructure or areas where power management is required.

LMUD is a member of the California Utility Emergency Association, which plays a key role in ensuring communications between utilities during emergencies. LMUD also participates 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.

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<sup>4</sup> As defined in Cal. Gov. Code § 8680.2.

<sup>5</sup> 19 CCR § 2407.

<sup>6</sup> 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.

LMUD has an Emergency Manual. LMUD sought to be annexed into the Lassen County HMP, and the County confirmed that LMUD was in fact annexed into the County HMP. LMUD participates and has a member on the Steering Committee of the County Hazard Mitigation Committee.

## V. WILDFIRE RISKS AND DRIVERS ASSOCIATED WITH DESIGN, CONSTRUCTION, OPERATION, AND MAINTENANCE

### A. PARTICULAR RISKS AND RISK DRIVERS ASSOCIATED WITH TOPOGRAPHIC AND CLIMATOLOGICAL RISK FACTORS

Within LMUD's service territory and the surrounding areas, the primary risk drivers for wildfire are the following:

- Extended drought, low humidity;
- Vegetation type;
- Vegetation density;
- Weather, including high winds and lightning;
- Human activities including campfires, shooting, towing, or machinery (sparks and friction);
- Terrain, many diverse areas canyons, volcanic outcrops, steep or thickly treed areas;
- Changing weather patterns (climate change);
- Communities in close proximity to WUI (Wildland Urban Interface) at risk; and
- Fire history.

### B. ENTERPRISEWIDE SAFETY RISKS

The LMUD service territory is diverse geographically and includes grasslands, sagebrush desert, lakes and shorelines, thickly forested areas and urban towns and communities that are heavily treed. The total service territory for LMUD includes 1,900 square miles and significant distances are traveled by employees to maintain, improve, and restore service and address enterprise-wide risks on an ongoing basis

Climate change is a multi-year, long-term enterprise-wide risk factor that continuously influences our inspection, maintenance, and vegetation management programs. LMUD recognizes the importance of accounting for climate change considerations on an ongoing basis. While climate change is recognized as a long-term risk, we make all reasonable efforts to account for it through the implementation of the WMP including our routine facilities inspection and vegetation management programs that occur on a more frequent and shorter-term basis. We understand that the highest fire danger occurs under weather conditions with very low humidity and strong winds. High temperatures, fuel loading, fuel type, and dead- and live-fuel moisture content are also important factors. Enterprise-wide climatological risk drivers that may affect the climatic loading and associated stressors on the LMUD transmission and distribution facilities may include:

- Higher temperature fluctuations and wind speed impacts;
- Changing seasonal weather patterns associated with long-term climate change; and
- Extended drought that may accelerate wear and tear on LMUD facilities and equipment.

Our wildfire risk reduction inspection, maintenance, vegetation management, and related programs are directed towards maintaining transmission and distribution systems reliability without interruption. Inspections, maintenance, and vegetation encroachment detection activities are intended to respond to the results of these climatological factors to target corrective actions and eliminate or minimize potential sources of wildfire ignitions. Climatological factors and climate change risks therefore have direct effects on the frequency and locations of inspections, maintenance, and vegetation management activities.

LMUD has not experienced any utility caused wildfires to any serious extent (all small and easily contained, largest less than several acres). LMUD has, however, experienced wildfires of unknown origin, human (non-LMUD) caused, or weather-related types. In 2018, we sustained a fire in the area west of Eagle Lake known as the Whaleback Fire. This fire consumed 18,000 acres and narrowly missed the community of Spalding. No homes were lost; no injuries were sustained, and no cause was determined. The damage to electrical infrastructure was significant and resulted in a 60-day outage to the community of Spalding due to loss of 6.5 miles of a wooden pole distribution line. A generator was brought in for a 60-day period during a rebuild of the line. Due to the location of the line that was lost, in lava beds very rocky and steep terrain, it was more cost effective to rebuild the line underground along the side of the County Road A-1. No additional non-LMUD caused wildfires of these types were noted from 2020 through 2022.

### C. CHANGES TO CPUC FIRE THREAT MAP

There have been no changes to the CPUC Fire Threat Map as of June of 2019. LMUD participated in the review of maps in and around the service territory. All of the surrounding areas and areas within our service territory are classified as Tier 2 fire risk. LMUD does not recommend any changes to the CPUC Fire Threat Map designations of High Fire Threat Districts across the LMUD territory.

## VI. WILDFIRE PREVENTATIVE STRATEGIES

### A. HIGH FIRE THREAT DISTRICT

LMUD directly participated in the development of the California Public Utilities Commission's (CPUC) Fire-Threat Map,<sup>7</sup> which designates High-Fire Threat Districts across the state of California. In the map development process, LMUD served as a territory lead, and worked with utility staff and local fire & government officials to identify the areas of LMUD's service territory that are at an elevated (Tier 2) or extreme risk (Tier 3) of power line ignited wildfire. LMUD has incorporated the High Fire Threat District mapping into its construction, inspection, maintenance, repair, and clearance practices, where applicable.

### B. WEATHER MONITORING

LMUD 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;

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<sup>7</sup> Adopted by CPUC Decision 17-12-024.

- National Interagency Fire Center – Predictive Services for Northern and Southern California; and
- Local OES / County Fire District Warnings.

LMUD assigns one of four operating conditions based on the relevant weather data and knowledge of local conditions and notifies management staff of all elevated, extreme or Red Flag conditions:

- (1) **Normal:** During normal conditions, no changes are made to operations or work policy.
- (2) **Elevated:** During elevated fire-risk conditions, [July through October and winds above 20 and below 30 MPH].
- (3) **Extreme:** During extreme fire-risk conditions, [July through October and High winds of 30 MPH and Higher].
- (4) **Red Flag:** If the National Weather Service declares a Red Flag Warning for any portion of LMUD’s service territory, then LMUD will place appropriate circuits on “non-reclose” and additional patrols will be authorized during the Red Flag event.

### C. DESIGN AND CONSTRUCTION STANDARDS

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

### D. VEGETATION MANAGEMENT

LMUD meets or exceeds the minimum industry standard vegetation management practices. For both transmission and distribution level facilities, LMUD 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 recommended time-of-trim guidelines do not establish a mandatory standard, but instead provide useful guidance to utilities. LMUD’s vegetation management is contracted to certified line clearance tree trimming contractor. This contracted service is continuous 12 months per year. LMUD will use specific knowledge of growing conditions and tree species to determine the appropriate time of trim clearance in each circumstance.

GO 95, Rule 35, Table 1					
Case	Type of Clearance	Trolley Contact, Feeder and Span Wires, 0-5kv	Supply Conductors and Supply Cables, 750 - 22,500 Volts	Supply Conductors and Supply Cables, 22.5 - 300 kV	Supply Conductors and Supply Cables, 300 - 550 kV (mm)

13	Radial clearance of bare line conductors from tree branches or foliage	18 inches	18 inches	¼ Pin Spacing	½ Pin Spacing
14	Radial clearance of bare line conductors from vegetation in the Fire-Threat District	18 inches	48 inches	48 inches	120 inches

### Appendix E Guidelines to Rule 35

The radial clearances shown below are recommended minimum clearances that should be established, at time of trimming, between the vegetation and the energized conductors and associated live parts where practicable. Reasonable vegetation management practices may make it advantageous for the purposes of public safety or service reliability to obtain greater clearances than those listed below to ensure compliance until the next scheduled maintenance. Each utility may determine and apply additional appropriate clearances beyond clearances listed below, which take into consideration various factors, including: line operating voltage, length of span, line sag, planned maintenance cycles, location of vegetation within the span, species type, experience with particular species, vegetation growth rate and characteristics, vegetation management standards and best practices, local climate, elevation, fire risk, and vegetation trimming requirements that are applicable to State Responsibility Area lands pursuant to Public Resource Code Sections 4102 and 4293.

Voltage of Lines	Case 13	Case 14
Radial clearances for any conductor of a line operating at 2,400 or more volts, but less than 72,000 volts	4 feet	12 feet
Radial clearances for any conductor of a line operating at 72,000 or more volts, but less than 110,000 volts	6 feet	20 feet
Radial clearances for any conductor of a line operating at 110,000 or more volts, but less than 300,000 volts	10 feet	30 feet
Radial clearances for any conductor of a line operating at 300,000 or more volts	15 feet	30 feet

Within the areas LMUD has designated as higher risk, primarily those areas through heavily forested areas, LMUD performs an evaluation of every tree that has the potential to strike overhead facilities if it were to fail on an annual basis. LMUD performs more frequent and detailed inspections of any such trees, and in cases where “hazard trees” (Dead, Dying, Diseased or leaning) could strike the facilities, LMUD works with the landowner to remove the tree or portion of the tree that poses a risk.

LMUD will continue to promote and support forest thinning operations in areas adjacent to its transmission and distribution corridors by working with landowners (private, Forest Service, BLM), and local entities capable of obtaining and managing available grant funding to conduct forest thinning work. These include entities such as the Lassen County Resource Conservation District and the Lassen County Fire Safe Council. Additionally, LMUD will continue its support of the Lassen County Community Wildfire

Protection Plan (CWPP). The CWPP is a Lassen County approved plan put together by numerous local, state and federal agencies, as well as local private stakeholders and non-profits. The CWPP is focused on landscape-level fuel reduction activities throughout LMUD's service territory. Rankings of projects within the CWPP are extremely important in maximizing the probability of obtaining grant funding for future fuel reduction projects.

## E. INSPECTIONS

LMUD meets or exceeds the minimum inspection requirements provided in CPUC GO 165 and CPUC GO 95, Rule 18. Pursuant to these rules, LMUD inspects electric facilities in the high-risk areas more frequently than the other areas of its service territory. Additionally, LMUD staff uses their knowledge of the specific environmental and geographical conditions to determine when the 15% of its service territory in Tier 1 require more frequent inspections. LMUD conducts complete patrol inspections on an annual cycle, with high-risk areas patrolled twice per year, once before fire season and once before winter begins. The current enhanced inspection program ensures that equipment is in good operating condition and line clearances are adequate. A systematic tree trimming program and schedule ensures that all overhead lines and equipment are maintain with proper clearances.

LMUD implemented the use of aerial drones in 2019-2020 for patrolling surveys in certain areas of its service territory to provide infrared and visual depictions of LMUD facilities, terrain, vegetation, and other obstacles. The drone has been used to identify trees that may contact lines or pose a risk during high wind events. Drones have also been used to patrol lines in remote parts of our transmission and distribution system particularly the transmission corridor between Susanville and Westwood. Additionally, damage assessment and recovery efforts have been supported by drone flights and photography after the Hog, Sheep, and Dixie Fires. This tool helps prioritize potential repairs or potential tree contact on our lines in order to maintain safety and reliability.

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

LMUD works to ensure that all inspections to be performed within the higher risk areas are completed before the beginning of the historic fire season, typically September 1. LMUD monitors drought conditions and other relevant factors throughout the year to determine if inspections should be completed on a shorter timeframe.

## F. WORKFORCE TRAINING

LMUD implemented work rules and complementary training programs for its workforce to help reduce the likelihood of the ignition of wildfires. Monthly safety briefings include our new responsibilities to prepare wildfire mitigation plans and accompanying measures including meetings with neighboring utilities to discuss wildfire response and strategy, as well as mutual aid. LMUD has sent one to two crews a year to work with neighboring entities on emergency responses, typically wildfire related. LMUD will continue to update and include briefings on these requirements as new or updated measures and procedures are developed.

## G. RECLOSING POLICY

During Red Flag fire danger conditions, LMUD sets the reclosers to non-reclose (aka single shot) meaning that once they detect a fault they will not attempt to close again until manually checked / lines patrolled, and then re-closed.

Relay settings may also be modified as determined necessary to reduce the fault current or time and duration of a fault or short circuit event such as fast-trip settings during fire season. This will be evaluated on a circuit-by-circuit basis.

## H. DEENERGIZATION

LMUD intends to utilize the strategies described here including vegetation management, proper equipment patrolling and maintenance and awareness of conditions to avoid the need to preemptively shut off power (known as de-energization or Public Safety Power Shutoff) due to fire-threat conditions. De-energization has substantial public safety implications including lack of power for water pumping, support of health care devices, traffic safety, and much more.

LMUD will make a case-by-case decision to change recloser function or relay settings based on the following considerations:

- Red Flag Warnings issued by the National Weather Service for areas that contain LMUD circuits;
- Extraordinary conditions such as, Wind events with significant impacts on timber/wildlands, or infrastructure (e.g. hurricane force winds);
- LMUD staff assessments of local conditions, including potential for infrastructure damage, 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 LMUD fire experts and vegetation experts;
- Input from local and state fire authorities regarding the potential consequences of wildfires in select locations;
- On-going fire activity throughout LMUD territory and California;
- Ability to notify customers;
- Notifications to local governments and public officials; and
- Potential impacts to communities and customers.

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## DE-ENERGIZATION IMPACTS TO PUBLIC SAFETY

Communications antenna sites located on mountain peaks are very important to both emergency communications and routine telephone and radio communications in Lassen County. These facilities have electric generators, but these are generally a short-term power solution used during a fire emergency. Accessibility to re-fuel these generators could be limited because of fire travel or growth. Well water and municipal water systems depend on electricity to operate. Water pressure for fire suppression can be severely impacted by loss of electric power. The ability to produce water to slow or stop the spread of fire by homeowners or businesses is critical. Hospital operations, Sheriff and Police

departments, CHP and fire and emergency response personnel depend on the ability to communicate and use vehicles fueled by gasoline or diesel. If power is lost to fueling stations this emergency response capability can be severely limited. People who depend on oxygen generators or other medical devices that are electrically powered along with their ability to communicate can be severely impacted. For these reasons de-energization in an extremely large utility service territory poses severe risk to life and property that should be avoided.

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## CUSTOMER NOTIFICATION PROTOCOLS

Communications to our customers and local agencies is very important in coordinating preparations and plans for minimization of wildfire risk and increasing awareness of necessary actions that many involved public agencies and emergency response agencies may have to implement. Our first level of communication is a text alert system that our customers sign up for that allows up to the minute information to be provided to customers in our service territory. Additionally, LMUD has a contact procedure with contacts and roles for PG&E and critical emergency response agencies in the event that Public Safety Power Shutoffs by PG&E become possible due to high fire danger weather conditions.

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## EQUIPMENT CHANGES AND MODIFICATIONS

LMUD operates many circuits protected by reclosers and fused cutouts. The system is designed with several services on each circuit all the way up to several hundred services and are located normally at accessible locations such as along roadways or intersections where line trucks can easily access them. Breakers are for controlling larger major portions of our load and are located at each of our 7 substations.

Newer equipment called trip saver fuses (in effect a recloser that can be programmed) are now available, and LMUD is considering procuring for certain locations to prevent blown fuses that would normally occur on these fused circuits. Elimination of a fuse eliminates a source of ignition even though we clear brush to bare earth in a 20-foot diameter circle around all poles with fuses or other equipment. These further limits the potential for a fire to begin at this pole located equipment. Additionally, non-expulsion type fuses contain the shower of sparks and metal that normally vent from a distribution voltage fuse. We have evaluated locations for the installation of some of these fuses. LMUD intends to purchase and install in the next budget year for evaluation of functionality, feasibility, and availability. This will allow the testing for reliability and function at specific locations where they may be of benefit in reducing the potential for fires at these pole top equipment locations.

LMUD recently completed an upgrade of a SCADA monitoring system to a fully functional SCADA system with integrated controls for substations and reclosers. This will allow LMUD to respond to changing circumstances more quickly without needing to send personnel into the field.

## VII. COMMUNITY OUTREACH AND PUBLIC AWARENESS

LMUD communicates with our customers, communities, and local and state fire agencies by attending public meetings, preparing publications in both print and on social media, and delivering presentations at official meetings of City, and County organizations along with the Lassen County Fire Safe Committee, and Office of Emergency Services Local Representatives. LMUD has sought and incorporated input from stakeholders on this plan and we will annually review the plan to update and adjust as necessary.



LMUD attends officially noticed meetings of the Susanville City Council, Lassen County Fire Safe Council, Westwood Community Council, and makes presentations to these groups about wildfire concerns and LMUD planning obligations and requirements. Input from these stakeholders is sought and, where appropriate, incorporated into this plan.

LMUD issues a public newsmagazine to customers on a monthly basis. LMUD has prepared two wildfire safety stories for publication in this customer magazine. One article was "Wildfires and Safety are Constant Concerns", "Wildfire Crisis Communications", and "Public Safety Power Shutoffs". These articles are intended to inform the public about wildfires and current concerns that we all share.

## VIII. RESTORATION OF SERVICE

In the event of a wildfire or other emergency event, LMUD will coordinate activities to restore service. LMUD will restore power following an event in cooperation with County Administration, County Sheriff, City officials as well as OES and Cal Fire, Susanville Fire, Susanville Police, and Public Works Departments, OES or another named Incident Commander.

LMUD management will oversee restoration and response activities. In the event additional staff is needed, LMUD may leverage mutual aid agencies, other adjacent utilities, and local aid organizations. The utility may also engage contractors on an as-needed basis.

The following describes the steps to be taken to begin the restoration process following a wildfire:

1. **Assessment** - LMUD crews must patrol each line segment to determine the extent of damage that has occurred. The patrol involves assessing equipment access issues, any cleanup/debris removal issues and determining personal protective equipment requirements for the crews. LMUD works with the local agency in charge of the fire to access impacted areas as soon as the area is deemed safe by fire officials.
2. **Planning** - After initial assessment, LMUD supervisors, managers and engineers meet to plan the needed work. The team will work with system operations to prioritize the restoration efforts, targeting the circuits that serve the most critical infrastructure needs.
3. **Mobilize** - Based on the size and complexity of the rebuild/restoration efforts, LMUD will coordinate the crews and material needs internally, if possible. Mutual aid and contractors may be used on an "as needed" basis to provide additional support. The necessary materials and labor could be in shortage and may delay work during instances of widespread catastrophic damage.
4. **Rebuild** - The rebuild effort lead by LMUD will commence as soon as areas become safe and accessible. The initial efforts will be to get the lines up and restore the damaged circuits. Depending on the extent of damage, demolition may be performed concurrently or after crews start installing new facilities. LMUD will incorporate new materials and technologies as indicated and available.
5. **Restore** - LMUD, mutual aid, or contract crews will restore electric services to homes and businesses as soon as possible after the wildfire. Depending on the extent of damages, residential and business customers may have to perform repairs on their facilities and pass inspections by local agencies prior to having full electric service restored.

In most cases, the following restoration priorities will be followed depending on the specific incident and available resources:

- Public safety in the affected areas;
- Worker safety in performing the restoration work;
- Life-support or critical customers;
- Critical infrastructure (key city & county facilities and accounts; Sheriff's Department and jail, city police and fire departments, other key utility facilities (e.g., water, sewage, gas, citywide communications), Incident Command Site or Base Camp, Incident Evacuation Centers, local broadcast and radio stations, etc.);
- Major commercial activities/accounts critical to continuity of community services (e.g., gas stations, food stores, home supply stores, repair shops, eateries and lodging facilities, financial institutions, etc.);
- To reduce the total number of customers affected; and
- To reduce the length of time customers have been without power.

In directing restoration efforts to best achieve the above priorities, LMUD Operations personnel will generally find it most efficient to dedicate restoration resources to the following types of facilities in the following order of priority to optimally restore electric services:

1. HLP Power Plant;
2. Other energy supply resources (to ensure power can be delivered/received via Western Area Power Administration, the PG&E transmission system);
3. Substations;
4. Distribution circuits (14.4 kV, 12 kV and 7200 V);
5. Distribution feeders;
6. Distribution transformers; and
7. Service lines.

## IX. EVALUATION OF THE PLAN

### A. METRICS AND ASSUMPTIONS FOR MEASURING PLAN PERFORMANCE

LMUD will track the following metrics to measure risks and 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:

- LMUD 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
- LMUD has knowledge that the fire occurred.

1. On Sept 11, 2022, an ignition occurred in Wendel, CA where a wire down caused a grass and brush fire of less than 5 acres. Fire was extinguished and all customers back in power in less than 3 hours.

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## METRIC 2: WIRES DOWN

The second metric is the number of distribution and transmission wires downed within LMUD'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. LMUD will divide the wires down metric between wires down inside and outside of the High Fire Threat District.

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

LMUD experienced 3 instances of wires down during January 2021.

Primary wires down due to snow and ice loading in winter months does not present the same level of fire danger that exists during the dry season.

<b>Metric type</b>	<b>External Risk Event</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>Unit(s)</b>	<b>Comments</b>
Fire Ignitions	Ignitions from operation of LMUD equipment			1				# Fires	On Sept 11, 2022, an ignition occurred in Wendel, CA where a wire down caused a grass and brush fire of less than 5 acres. Fire was extinguished and all customers back in power in less than 3 hours.
Outage Type	Wire Down		3					# of Wire Down	Electrical Transmission or Primary Distribution wire falls to ground or onto foreign object due to heavy snow loading and low fire conditions.
Outages	Instances where LMUD Customers experienced an interruption in service	N/A	N/A	N/A <sup>8</sup>				# of Outages	

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<sup>8</sup> LMUD will begin recording the following metrics in 2023.

## B. IMPACT OF METRICS ON PLAN

LMUD will use the data gathered to better understand the risks posed to its system and the effectiveness of its mitigations. Additionally, LMUD should be able to identify areas of its operations and service territory that are disproportionately impacted. LMUD will then evaluate potential improvements to the plan.

## C. MONITORING AND AUDITING THE PLAN

This Wildfire Mitigation Plan will be presented to the LMUD Board of Directors (the Board). LMUD will present this plan to the Board on an annual basis.

## D. IDENTIFYING AND CORRECTING DEFICIENCIES IN THE PLAN

LMUD staff and qualified external stakeholders are encouraged to identify WMP deficiencies or potential deficiencies to the Electric Operations Manager as soon as possible when observed. The Electric Operations Manager shall evaluate each reported deficiency and, if the deficiency is determined to be a valid plan deficiency, it shall be entered into a log with the following information:

1. Date the deficiency was discovered;
2. Description of the deficiency;
3. Source identifying the deficiency (e.g., Internal Audit);
4. Priority based on deficiency severity;
5. Assigned corrective action including the date when it must be completed by;
6. Assigned staff responsible for completing the corrective action; and
7. Date corrective action completed.

The Electric Operations Manager will go over the log at regularly scheduled Leadership and Supervisor Meetings.

## E. MONITORING THE EFFECTIVENESS OF INSPECTIONS

LMUD will perform review of inspections on either a 5-year schedule or based on GO 95 or fire mitigation recommendations. Any areas found that need Improvement or appear hazardous will be documented with a work order, given a priority, and the work order will be tracked. When completed the work order will have a close date.

The Electric Operations Manager will assign qualified internal staff or engage a third party to review and audit the equipment and line inspection programs called out in the WMP. The assigned auditor will:

1. Review records for the inspection programs;
2. Interview staff performing inspections to assess their knowledge of the inspection programs;
3. Monitor staff performing inspection activities;
4. Review deficiencies noted in the programs;
5. Identify systemic issues or problems;
6. Note the timeliness of corrective actions;
7. Pick a random sample of some completed corrective actions and verify the effectiveness of the corrective actions; and
8. Issue a written report of findings.

The Electric Operations Manager will review the audit findings and assign corrective action as applicable. A copy of the audit report will be routed to the General Manager.

## 8. INDEPENDENT EVALUATOR

Public Utilities Code section 8387(c) requires LMUD to contract with a qualified independent evaluator with experience in assessing the safe operation of electrical infrastructure of Public Utilities to review and assess the comprehensiveness of this Wildfire Mitigation Plan.

LMUD had the Plan reviewed by an independent evaluator by LMUD staff following the initial approval of the LMUD Board of Directors. Additionally, LMUD will seek review by a qualified independent evaluator every three years.

The report from the independent evaluator will be available on LMUD's website. The auditor will present the report and findings to the LMUD Board at an officially noticed public meeting.