

# WILDFIRE MITIGATION PLAN 2025

**VERSION 6.0** 

(SIXTH ANNUAL UPDATE)

June 4, 2025

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## **ACRONYMS AND ABBREVIATIONS**

Acronym/Abbreviation	Definition
AGM	Assistant General Manager
AMI	advanced metering infrastructure
CAL FIRE	California Department of Forestry and Fire Protection
CPUC	California Public Utilities Commission
ELF	Energy Limiting Fuse
GIS	geographic information system
GO	General Order
HFTD	High Fire Threat District
kV	kilovolt
NCJPA	Northern California Joint Pole Association
NISC	National Information Solutions Cooperative
OMS	Outage Management System
PIO	Public Information Officer
PSOM	Public Safety Outage Management
PSPS	Public Safety Power Shutdown
RFW	Red Flag Warning
SCADA	Supervisory Control and Data Acquisition
SEMS	Standardized Emergency Management System
TDPUD	Truckee Donner Public Utility District
VMP	Vegetation Management Plan
WMP (or Plan)	Wildfire Mitigation Plan

### UTILITY OVERVIEW AND CONTEXT

### A. UTILITY DESCRIPTION AND CONTEXT SETTING TABLE

The Truckee Donner Public Utility District (TDPUD) is a special district of the State of California engaged in the distribution, sale, and delivery of electric power and water. TDPUD provides retail electric service to 14,838 customer accounts as of December 31, 2024, and the region has a large transient population driven by second homeowners and destination tourism which can increase population by two to three plus times. TDPUD's local primary transmission system is connected to NV Energy transmission system and is located high on the eastern slope of the Sierra Nevada. TDPUD's electric service territory comprises approximately 44 square miles in eastern Nevada County and approximately 1.5 square miles in adjacent Placer County. The electric system includes approximately 225 miles total with 135 miles of 12.47 kilovolt (kV) and 14.4 kV overhead distribution lines, and about 0.5 miles of 60 kV overhead transmission lines. In total, TDPUD has about 5,500 poles in its service territory (Figure 1).

Summary of Changes to the TDPUD 2025 WMP:

This plan has been updated as part of the regular annual review process to include current data and information. Key changes to the 2025 WMP include:

- This Summary of Changes to the TDPUD 2025 WMP has been included to help draw attention to changes to the WMP and new information;
- TDPUD has updated the metrics information including the four new metrics new metrics added in 2024 for outcomes (Safety Hazards and Vegetation Management) and External Risks (Red Flag Warnings and High Wind Days);
- Under Weather Monitoring, TDPUD has added our first weather station to augment the
  existing stations available through NOAA in our service territory;
- TDPUD has updated information regarding to our Design and Construction standards related to our Pole Replacement Program, Covered Primary Jumper Wire, and Non-Expulsion Current Limiting Fuses. For pole replacements, this section has been updated to include the additional use of intrusive pole inspections to prioritize pole replacements. For Covered Primary Jumper Wire, TDPUD has expanded this to primary overhead wire and is pursuing a pilot project in a high wildfire area to use steel poles, composite/fiberglass cross arms, and covered conductor. For Non-Expulsion Current Limiting Fuses, TDPUD has completed a multi-year project that replaced all existing fuses with the exception of a very small portion of our overhead distribution system (14.4 kV) where the existing replacement technology will not work and we continue to explore solutions.

- TDPUD has been exploring a pre-emptive safety de-energization program and plans to start implementation before this wildfire season.
- TDPUD continues to invest in Supervisory Control and Data Acquisition (SCADA), Graphic Information Systems (GIS), and Outage Management Systems (OMS) to enhance situational awareness, operational responses, and communications.
- California's strict liability standards (Inverse Condemnation), civil liability exposure, and the lack of affordable wildfire insurance remain a major threat to electric utilities.

Utility Name	Truckee Donner Public Utility District (TDPUD)		
Service Territory Size	45.5 square miles		
Owned Assets	☐ Transmission ☐ Distribution ☐ Generation		
Number of Customers Served	14,838 customer accounts		
Population Within Service Territory	16,778 people (full-time population as reported by Town of Truckee using data from Census)  34,825 people (actual population using people per dwelling unit data from the Census)		
	Number of Accounts	Share of Total Load (MWh)	
Customer Class Makeup	89% Residential 2% Government 0% Agricultural 8.9% Small/Medium Business 0.1% Commercial/Industrial	56% Residential 18% Government 0% Agricultural 21% Small/Medium Business 5% Commercial/Industrial	

Truckee Donner Public Utility District (TDPUD)
<1% Agriculture
<3% Barren/Other
~55% Conifer Forest
0% Conifer Woodland
0% Desert
<.75% Hardwood Forest
0% Hardwood
Woodland ~3%
Herbaceous
<30% Shrub
~8% Urban
<5% Water
30% Wildland Urban Interface
20% Wildland Urban Intermix

Utility Name	Truckee Donner Public Utility District (TDPUD)
Urban Interface <sup>1</sup> (based on total area)	
Percent of Service Territory in CPUC High Fire Threat Districts (based on total area)	<ul><li>☑ Includes maps (Appendix A)</li><li>Tier 2: 55%</li><li>Tier 3: 27%</li></ul>
Prevailing Wind Directions and Speeds by Season	☐ Includes maps (Appendix B)  Prevailing winds were taken from both the Global Winds Atlas and Wind Rose data from archived records and assembled by Iowa State University. Gradient winds are generally out of the south/southwest shifting to west/southwest in the spring and summer months. The average wind speed is 4.4 mph with frequent gust in excess of 20 mph throughout the year. TDPUD's extreme weather and wind events occur in winter months when wildfire threat is typically low. These events are caused by atmospheric rivers and can bring winds in excess of 100 mph. These atmospheric river events and heavy snow falls are the reason TDPUD builds to a heavy loading standard and is able to withstand extreme weather events.  Source: https://globalwindatlas.info; https://mesonet.agron.iastate.edu/sites/windrose.phtml?network=CA_ASOS &station=TRK

Based on the Wildland Urban Interface Maps available from the U.S. Geological Survey website titled "Wildland-urban interface maps for the conterminous U.S. based on 125 million building locations" (Carlson et al. 2022).

Utility Name	Truckee Donner Public Utility District (TDPUD)
Miles of Owned Lines Underground and/or Overhead	Overhead Dist.: 135 miles  Overhead Trans.: <0.5 miles  Underground Dist.: ~100  miles  Underground Trans.: 0 miles  Explanatory Note 1 - Methodology for Measuring "Miles": [e.g., circuit miles,
	Explanatory Note 2 – Description of Unique Ownership Circumstances: N/A  Explanatory Note 3 – Additional Relevant Context: [e.g., percentage of lines located outside service territory] N/A
	Overhead Distribution Lines as % of Total Distribution System  (Inside and Outside Service Territory)
Percent of Owned Lines in CPUC High Fire Threat Districts	Tier 2: 23%
	Tier 3: 64%

Utility Name	Truckee Donner Public Utility District (TDPUD)	
	Overhead Transmission Lines as % of Total Transmission System (Inside and Outside Service Territory)	
	Tier 2: < 1%	
	Tier 3: 0%	
	<b>Explanatory Note 4</b> – Additional Relevant Context: [e.g., explain any difference from data reported in WMP due to different numerator used for this form]	
Customers have ever lost service due to an IOU PSPS event?	□ Yes ⊠ No	
Customers have ever been notified of a potential loss of service to due to a forecasted IOU PSPS event?	X Yes □ No	
Has developed protocols to pre-emptively shut off electricity in response to elevated wildfire risks?	☐ Yes ☒ No  TDPUD is currently developing protocols to preemptively shut off electricity in response to elevated wildfire risk and plans to present an initial plan to the Board of Directors during the 2025 fire season.	

Utility Name	Truckee Donner Public Utility District (TDPUD)
Has previously preemptively shut off electricity in response to elevated wildfire risk?	☐ Yes ☒ No  If yes, then provide the following data for calendar year 2024:  Number of shut-off events: N/A  Customer Accounts that lost service for >10 minutes: N/A
	For prior response, average duration before service restored: N/A

**Notes**: TDPUD = Truckee Donner Public Utility District; CPUC = California Public Utilities Commission; GIS = geographic information system; N/A = not applicable; IOU = Investor-Owned Utilities; PSPS = Public Safety Power Shutdown.

### B. STATUTORY CROSS REFERENCE TABLE

Requirement	Statutory Language	Location in TDPUD's WMP
Persons Responsible	PUC Section 8387(b)(2)(A): An accounting of the responsibilities of persons responsible for executing the plan.	Section: 3 Pages: 14-15
Objectives of the Plan	PUC Section 8387(b)(2)(B): The objectives of the wildfire mitigation plan.	Section: 2 Page: 13-14
Preventive Strategies	PUC Section 8387(b)(2)(C): A description of the preventive strategies and programs to be adopted by the local publicly owned electric utility or	Section: 5 Pages: 21-30

Requirement	Statutory Language	Location in TDPUD's WMP
	electrical cooperative to minimize the risk of its electrical lines and equipment causing catastrophic wildfires, including consideration of dynamic climate change risks.	
Evaluation Metrics	PUC Section 8387(b)(2)(D): 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.	Section: 8 Page: 33-37
Impact of Metrics	<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: 8 Page: 37
De-energization Protocols	PUC Section 8387(b)(2)(F): Protocols for disabling reclosers and de-energizing portions of the electrical distribution system 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: 5 Page: 28-30
Customer Notification Procedures	<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: 5 Page: 30
Vegetation Management	PUC Section 8387(b)(2)(H): Plans for vegetation management.	Section: 5 Pages: 26-27

Requirement	Statutory Language	Location in TDPUD's WMP
Inspections	PUC Section 8387(b)(2)(I): Plans for inspections of the local publicly owned electric utility's or electrical cooperative's electrical infrastructure.	Section: 5 Page: 27
Prioritization of Wildfire Risks	PUC Section 8387(b)(2)(J): 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:  (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.  (ii) Particular risks and risk drivers 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: 4 Pages: 18-20
CPUC Fire Threat Map Adjustments	PUC Section 8387(b)(2)(K): Identification of any geographic area in the local publicly owned electric utility's or electrical cooperative'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 for TDPUD based on new information or changes to the environment.	Section: Appendix A Page: Attached Section: 4 Page: 20-21
Enterprise-wide Risks	<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: 4 Page: 20

Requirement	Statutory Language	Location in TDPUD's WMP
Restoration of Service	PUC Section 8387(b)(2)(M): A statement of how the local publicly owned electric utility or electrical cooperative will restore service after a wildfire.	Section: 7 Pages: 32
Monitor and Audit	PUC Section 8387(b)(2)(N): 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) Monitor and audit the implementation of the wildfire mitigation plan.  (ii) Identify any deficiencies 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: 8 Page: 37-38
Qualified Independent Evaluator	PUC Section 8387(c): 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 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.	Section: 9 Page: 39

**Notes**: TDPUD = Truckee Donner Public Utility District; WMP = Wildfire Mitigation Plan; PUC = Public Utilities Code.

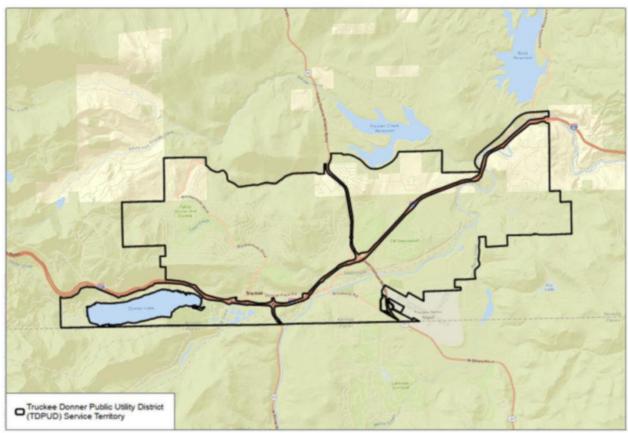


Figure 1 TDPUD Electric Service Territory

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

The TDPUD Wildfire Mitigation Plan (WMP or Plan) is adopted by the TDPUD Board of Directors (Board) during a public meeting. TDPUD staff present the final version of the annual WMP to the Board for review. Included with the Plan is an agenda packet with a summary of the background and the contents of the current WMP. The agenda packet also includes a description of major changes from the previous year's WMP.

During the Board meeting, consideration for the adoption of the current WMP is presented as an action item. TDPUD staff present an overview of the WMP, accomplishments, and changes to the Board members and the general public. After the conclusion of the presentation, Board members allow a period for public comment. After the public comment period has ended, Board members consider adoption of the WMP as presented by TDPUD staff.

Board meeting documents, including meeting minutes, agendas, and presentations, as well as the meeting minutes and the agenda for the adoption of the 2024 WMP, are available online at the TDPUD website: https://www.tdpud.org/departments/board-of-directors/board-meetings.

### D. DESCRIPTION OF WHERE WMP INFORMATION CAN BE FOUND ON UTILITY WEBSITE

The current version of TDPUD's WMP is published on the utility website on the page dedicated to wildfire mitigation, safety, and emergency preparedness. The webpage contains information about TDPUD's wildfire prevention mitigation efforts, links to sign up for emergency notification by the utility, and links to the WMP from 2024 and previous WMPs and independent evaluator reports.

This page is easily accessible from the menu on TDPUD's home page and can be found by using the search tool found on every page on the utility's website. The link to the website is: <a href="https://www.tdpud.org/departments/wildfire-emergency-preparedness">https://www.tdpud.org/departments/wildfire-emergency-preparedness</a>.

### E. PURPOSE OF THE WMP

This WMP describes the range of activities and strategies TDPUD is taking to mitigate the threat of overhead power line- and equipment-ignited wildfires, including its various programs, policies, and procedures. It addresses the unique features of TDPUD's service area such as topography, weather, infrastructure, grid configuration, and potential wildfire risks.

This Plan is subject to direct approval by TDPUD's Board of Directors and is implemented by the General Manager. This Plan meets or exceeds the requirements of Public Utilities Code Section 8387 for publicly owned electric utilities to prepare a WMP by January 1, 2020, and to evaluate and update annually thereafter.

### F. ORGANIZATION OF THE WMP

This WMP includes the following elements:

- Utility overview and context
- Objectives of the Plan
- Roles and responsibilities for executing the Plan
- Identification of key wildfire risks and risk drivers
- Description of wildfire prevention strategies
- Metrics for measuring performance of the Plan and identifying areas for improvement
- Annual and historical results for metrics
- Description of community outreach and education, covering communication about wildfire prevention, utility mitigation efforts and strategies, and potential de-energization and re-energization practices
- List of references cited
- Appendices

### II. OBJECTIVES OF THE WMP

### A. MINIMIZING SOURCES OF IGNITION

The primary objective of this Plan is to establish and implement actionable measures that enhance the reliability and safety of TDPUD's electric distribution system while reducing the likelihood that TDPUD's infrastructure may serve as an origin or contributing factor in the ignition of a wildfire. TDPUD has conducted a thorough evaluation of prudent and cost-effective enhancements to its physical assets, operational procedures, and workforce training to support this objective. In addition, TDPUD is updating its operational practices to reflect a continued commitment to responsible system management and will actively pursue additional opportunities to improve the effectiveness of this Plan. The Plan encompasses programs focused on safety, prevention, mitigation, and recovery, in alignment with applicable California State laws.

### B. RESILIENCY OF THE ELECTRIC GRID

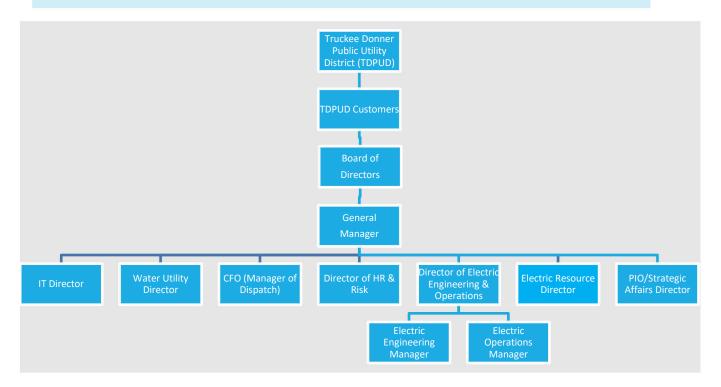
The secondary objective of this Plan is to ensure and improve, where practicable, system resiliency. System resiliency is defined by the National Infrastructure Advisory Council as the ability to reduce the magnitude and/or duration of disruptive events. As part of the development of this Plan, TDPUD assesses new industry practices and technologies that will reduce the likelihood of a disruption in service and improve the timeline for restoration of service.

### C. MINIMIZING UNNECESSARY OR INEFFECTIVE ACTIONS

The final objective of this Plan is to evaluate the effectiveness of specific mitigation strategies as they pertain to TDPUD's operations. In instances where an action, program component, or protocol is determined to be unnecessary or ineffective, TDPUD will assess the appropriateness of modifying or replacing the measure in question. This evaluative approach will also support the identification of more cost-effective alternatives that may yield equal or superior outcomes. This is especially relevant in the adoption of new technologies and operational practices, where a phased approach—from prototype development to pilot deployment to full-scale implementation—is often warranted to optimize performance and minimize the risk of unintended consequences.

### III. ROLES AND RESPONSIBILITIES

### A. TDPUD ROLES AND RESPONSIBILITIES



TDPUD utilizes a Public-Owned Utility Board/General Manager reporting hierarchy.

Board members are elected at large by registered voters within to staggered 4-year terms, representing constituents across TDPUD's service territory. The Board President and Vice President positions are nominated and appointed by the Board annually. The Board is responsible for adoption and oversight of all policies and delegates the operational implementation of policies to the General Manager.

The General Manager has full operational authority of TDPUD and operates as the Chief Executive, reporting directly to the Board. The General Manager provides direction and management to all TDPUD staff while implementing Board-adopted policy.

The Public Information Officer (PIO)/Strategic Affairs Director serves as TDPUD's public liaison to customers and outside agencies, responds to requests for information, and proactively promulgates public awareness outreach or emergency information.

The Director of Electric Engineering and Operations holds overall functional responsibility for the electric department and provides oversight of its operations. In fulfilling these duties, the Director relies on the Electric Operations Manager and the Electric Engineering Manager to support the effective management and oversight of their respective divisions, including responsibilities related to vegetation management.

The Electric Operations Manager is responsible for overseeing electric operations, including construction, maintenance, and associated daily activities. The Manager maintains functional oversight of assigned divisions within the electric department and reports directly to the Director of Electric Engineering and Operations. The Electric Engineering Manager is responsible for overseeing the design and engineering activities related to modifications of the electric distribution system, as well as the development and maintenance of material specifications. The Manager maintains functional oversight of electric engineering and related functions within the electric department, and reports directly to the Director of Electric Engineering and Operations. The Chief Financial Officer (CFO) oversees the customer service, call center, and dispatch duties.

The Director of Human Resources and Risk Management provides oversight for the development of the TDPUD's Emergency Operations Plan (EOP). TDPUD 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 TDPUD 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 are appropriately collected
- Practice adaptive management by reviewing past performance and data to inform and improve future plans
- Maintain adequate training programs for all relevant employees

### B. COORDINATION WITH WATER UTILITIES/DEPARTMENT

TDPUD owns and operates a water utility within its service territory, providing retail service to approximately 13,700 customers. When electric operations could or are known to impact the water utility, TDPUD electric and water staff will coordinate to mitigate or, where practicable, eliminate impact to electric and/or water service continuity. TDPUD Electric and Water Operations maintain direct coordination to ensure timely communication related to planned and unplanned power outages that may impact one or both enterprises. This emergency notification will be extended to the local public safety partners as needed.

### C. COORDINATION WITH COMMUNICATION INFRASTRUCTURE PROVIDERS

TDPUD has been a member of the Northern California Joint Pole Association (NCJPA) since 2014. Members of NCJPA participate voluntarily to share expenses for the installation and maintenance of new and existing utility pole structures, as well as relinquishment or removal of those structures based on interest. TDPUD typically acts as the coordinating agency within its service territory because many of the structures were installed as solely owned TDPUD poles prior to joining NCJPA. The exception would be existing, solely owned communication poles within the service territory that TDPUD does not currently attach to. AT&T is the only other NCJPA member within TDPUD's service territory and is responsible for the reserved communication space on utility poles. AT&T manages the attachment of other communication providers within the communication space on joint poles.

TDPUD has also created a list of local agencies and key safety partners which does include key operational and management contacts from the communication providers, Truckee Fire Protection District, and the Town of Truckee. TDPUD also has regular communication protocols through our customer account notification, outage management system, and our website.

### D. STANDARDIZED EMERGENCY MANAGEMENT SYSTEM

TDPUD has planning, communication, and coordination obligations pursuant to the California Governor's Office of Emergency Services' Standardized Emergency Management System (SEMS) Regulations,<sup>2</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>3</sup> Pursuant to this structure,

<sup>&</sup>lt;sup>2</sup> 19 California Code of Regulations Section 2407.

<sup>&</sup>lt;sup>3</sup> Cal. Gov. Code Section 2403(b):

<sup>(1) &</sup>quot;Field response level" commands emergency response personnel and resources to carry out tactical decisions and activities in direct response to an incident or threat.

<sup>(2) &</sup>quot;Local government level" manages and coordinates the overall emergency response and recovery activities within their jurisdiction.

TDPUD regularly coordinates and communicates with the relevant safety agencies and other relevant local and state agencies.

TDPUD understands the role of SEMS in emergency communications and follows the Town of Truckee, Nevada County, and Placer County, which are the local leads for emergency operations and disaster response. Due to emerging needs the TDPUD added a risk and compliance position. More formally implementing SEMS was a priority for 2024 through the development, adoption, and implementation of TDPUD's Emergency Operations Plan (EOP).

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. Generally, the majority of TDPUD's service territory resides in Nevada County. Nevada County serves as the operational area, which is guided by the Operational Area Emergency Service Council (Nevada County) and is headed by the Chairman of the Board of Supervisors (or designee). The operational area includes local and regional organizations that bring relevant expertise to the wildfire prevention and recovery planning process. These participants include:

- Office of Emergency Services Program Manager, Nevada County, Paul Cummings (paul.cummings@co.nevada.ca.us, 530.265.1515)
- City of Nevada City (or designee)
- City of Grass Valley (or designee)
- Town of Truckee (or designee)
- Nevada Irrigation District (or designee)
- Nevada County Fire Chief's Association (or designee)
- Nevada County Sheriff (or designee)
- American Red Cross (or designee)
- Tahoe National Forest (or designee)
- California Department of Forestry and Fire Protection (CAL FIRE; or designee)
- Tahoe Forest Hospital District (or designee)
- Pacific Gas and Electric Company (or designee)
- Nevada County Public Health Administrator (or designee)
- Placer County Public Health Administrator (or designee)

<sup>(3) &</sup>quot;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.

<sup>(4) &</sup>quot;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.

<sup>(5) &</sup>quot;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.

• Others that the Operational Area Emergency Service Council requests be in attendance

Additionally, a small portion of TDPUD's service territory resides in Placer County, overseen by the Placer County Office of Emergency Services' Operational area includes local and regional organizations that bring relevant expertise to the wildfire prevention and recovery planning process. TDPUD staff play a formal role in emergency response through the local lead agency (either Town of Truckee, Nevada County, or Placer County). Dependent upon the severity and scope of the incident, TDPUD may activate its own Emergency Operations Center (EOC), and/or participate in an operational area EOC upon request, representing the Utilities Unit of the EOC (note: the Truckee area is serviced by multiple electric utilities). TDPUD also works directly with its public safety partners daily in responding to outages, fire, accidents, and a wide variety of emergencies. The Town of Truckee has an adopted Emergency Operations Plan that is periodically updated and can be found at this link: https://www.townoftruckee.com/DocumentCenter/View/2020/2024-Town-of-Truckee-Evacuation-Plan-Draft-Document-PDF.

TDPUD is a member of the California Utilities Emergency Association (CUEA), which plays a key role as a statewide Incident Management Team (IMT), ensuring critical communications between utilities and County or State OES. TDPUD 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. In addition to those agreements, TDPUD is also signatory to the American Public Power Association mutual aid agreement, providing nationwide access to resources for system restoration and support after a major event that exhausts TDPUD resources.

It should be noted that TDPUD's service territory is largely within the Town of Truckee boundaries but does include unincorporated areas of Placer and Nevada Counties. The Town of Truckee did not formally incorporate until the 1990s, leaving more than a dozen local governmental agencies covering utilities, fire, and other critical local functions. Each local agency, when it comes to emergency response, is aware of their role and responsibility with overall management and communication strictly controlled by the appropriate town/county/state/federal emergency response agency through the Emergency Operations Center.

### IV. WILDFIRE RISKS AND DRIVERS

A. PARTICULAR RISKS AND DRIVERS ASSOCIATED WITH DESIGN, CONSTRUCTION, OPERATION, AND MAINTENANCE

TDPUD designs and constructs its electric facilities in accordance with all applicable federal, state, and industry standards. The District recognizes California Public Utilities Commission (CPUC) General Order 95 as a principal industry standard governing the design and construction of overhead electrical facilities and ensures full compliance with the requirements set forth therein.

In addition, TDPUD monitors and adheres, as appropriate, to the provisions of the National Electrical Safety Code to support the safety and reliability of its electric system.

Risk drivers associated with design, construction, operations, and maintenance within TDPUD's 45-square-mile service territory include:

- TDPUD has replaced the expulsion fuses on the entire 12kV system over the last few years.
  However, TDPUD currently continues to utilize expulsion fuses in portions of its 14.4kV
  distribution system due to the lack of a suitable replacement. While these devices remain
  in use within certain areas of the service territory, TDPUD continues to evaluate
  alternatives that align with safety and operational objectives and addressing utility poles
  reaching the end of the service life.
- Combustible poles in the High Fire Threat District (HFTD)
- Limited staff and equipment
- 135 miles of bare overhead distribution wires; 64% of overhead wires are in a HFTD
- Overhead circuits in areas with poor road access

# B. PARTICULAR RISKS AND RISK DRIVERS ASSOCIATED WITH TOPOGRAPHICAL AND CLIMATOLOGICAL RISK FACTORS

The TDPUD service territory is located between 6,000 and 8,000 feet elevation on the eastern slope of the Sierra Nevada Mountain Chain near Lake Tahoe. The TDPUD service territory experiences the most severe weather during the winter where severe storms can bring damaging levels of snow and/or rain and extreme winds (80++ mph). During the fire season, the Truckee area experiences fast-moving, low-pressure systems that bring high winds and dry lightning to the TDPUD service territory.

Within the TDPUD service territory and the surrounding areas, the primary risk drivers associated with topographical or climatological for wildfires include:

- Overhead circuits traverse mountainous areas of mixed conifer forests with continuous surface fuels, including annual grasses, herbaceous vegetation, and patches of woody shrubs.
- Overhead circuits traverse areas of steep slopes. Several circuits are on slopes or in canyons aligned with the prevailing winds (Interstate 80 corridor).
- Summertime precipitation in the area occurs in the form of afternoon thunderstorms; along with these storms may come dry lightning with very little precipitation.
- Prevailing winds align with the Interstate 80 corridor resulting in strong winds through the center of the TDPUD service territory.

### **CLIMATE CHANGE**

Truckee has warmed an average of 2.0°F over the last 80 years when comparing the historical 30-year period (1937–1966) and the recent 30-year period (1987–2016). There are now eight fewer days per year below freezing, and the number of days above 90°F has increased by 10

days per year. Average snowfall has declined by 15%. All these changes have occurred from a 2.0°F temperature increase. If greenhouse gas emissions continue at current levels globally, then Truckee's average temperatures are expected to warm by 5–7°F by the 2050s and 8–11°F by the 2080s. By the 2080s, April snowpack could be reduced by 84% to 96%. However, if emissions are significantly reduced in the near term, then warming could level off in the 2050s (Town of Truckee Planning Division 2020).

It is expected that by mid-century the TDPUD service territory will experience:

- A 55%–68% reduction of days below freezing per year
- A 68%–71% reduction of April snowpack
- A 31%–51% increase in drought stress
- Up to 31 more days above 90°F
- Up to 61% more acres burned per year by wildfire

### C. FNTFRPRISF-WIDE SAFFTY RISKS

TDPUD employs a methodical approach to identify, assess, and mitigate enterprise safety risks. This approach integrates formal risk assessment methodologies with comprehensive knowledge of the District's operational practices. Risk assessment serves as a critical tool in identifying potential threats that may disrupt core business functions, compromise business continuity, or hinder recovery efforts. It is used to evaluate a range of safety-related risks, including but not limited to:

- Wildfire risk and threat to TDPUD's electric infrastructure and service territory
- Unavailability of NV Energy transmission due to outages or planned Public Safety Outage Management (PSOM) de-energization events related to wildfire risk
- Interconnection and distribution system vulnerabilities, particularly in the Glenshire area
- Unavailability of the California Pacific Electric Company/Liberty Utilities alternate distribution feed (Glenshire)
- Loss of internet connectivity
- Loss of radio communications
- Loss of cellular communications
- Impacts associated with system de-energization
- Roadway disruptions that could restrict the movement of personnel and equipment

To support this effort, TDPUD has retained the services of an experienced electric utility consultant to assist in evaluating system risks, identifying infrastructure vulnerabilities, and informing the development of effective risk mitigation strategies.

### D. CHANGES TO THE CPUC FIRE THREAT MAP

In preparation for the development of the 2025 Wildfire Mitigation Plan (WMP), TDPUD conducted a review of the conditions within its service territory, including the current boundaries

of the High Fire-Threat Districts (HFTD) as defined by the California Public Utilities Commission (CPUC). Based on this review, TDPUD does not propose any modifications to the CPUC statewide Fire Threat Map at this time. Additionally, TDPUD has conducted a preliminary assessment of the updated CAL FIRE Fire Hazard Severity Zone maps, released in early 2025, and is continuing to evaluate their potential implications for this Plan.

### V. WILDFIRE PREVENTATIVE STRATEGIES

### A. HIGH FIRE THREAT MAP FOR TDPUD

TDPUD participated in the development of the CPUC Fire Threat Map,<sup>4</sup> which designates the HFTDs across California. In the map development process, TDPUD served as a territory lead and worked with CAL FIRE, CPUC staff, and local fire officials to identify areas of the TDPUD service territory that are at an elevated or extreme risk of power line-ignited wildfire.

TDPUD incorporated the HFTD mapping into its construction, inspection, operation, maintenance, repair, and vegetation management practices. The fire threat areas, as designated by both CAL FIRE and CPUC, have been incorporated into the TDPUD geographic information system (GIS) to overlay with TDPUD water and electric facilities and identify any infrastructure within areas of high fire threat.

For the purpose of the WMP and to retain consistency, TDPDU had treated its entire service territory as tier 3 high fire threat.

### B WEATHER MONITORING

The TDPUD service territory covers a relatively small section (~4 miles by ~10 miles) of the Truckee watershed. Local, state, and national sources provide accurate and comprehensive weather information for the TDPUD service territory. Variations in weather due to terrain or microclimates are often well known by TDPUD staff. TDPUD monitors current and forecasted weather data from a variety of sources including:

- U.S. National Weather Service—Truckee Donner Remote Automatic Weather Station (TADC1) and the Truckee Airport in addition to other on-line weather stations and resources
- U.S. Forest Service Wildland Fire Assessment System
- Northern California Geographic Area Coordination Center–Predictive Services Fire Weather/Fire Danger Outlooks for Region NC07 (Northern Sierras)
- Internal knowledge of local conditions
- Local weather data from NV Energy and Liberty Utilities owned automated weather stations

<sup>&</sup>lt;sup>4</sup> Adopted by CPUC Decision 17-12-024.

• TDPUD added one weather station in 2024 located centrally in our service territory and continue to explore additional fire modeling/risk tools including California's Wildfire Forecast and Threat Intelligence Integration Center (WFTIIC).

Each day, TDPUD will assign 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 procedures.
- (2) Elevated: During elevated fire-risk conditions, TDPUD staff will perform normal work with an elevated level of observation for environmental factors that could lead to an ignition.
- (3) Extreme: During extreme fire-risk conditions, TDPUD may delay routine work on energized primary lines (12kV and 14.4kV). TDPUD may perform necessary work to preserve facilities or property. Extreme weather is defined as weather phenomena that are at the extremes of the historical distribution and are rare for a particular place and/or time, especially severe or unseasonal weather. Such extremes include severe thunderstorms, severe snowstorms, ice storms, blizzards, flooding, high winds, or heat waves.
- (4) Red Flag: The National Weather Service issues Red Flag Warnings (RFWs) and Fire Weather Watches to alert fire departments of the onset, or possible onset, of critical weather and dry conditions that could lead to rapid or dramatic increases in wildfire activity. An RFW is issued for weather events that may result in extreme fire behavior that will occur within 24 hours. An RFW is the highest alert. While an RFW is in effect, TDPUD's crews limit hot-work, such as welding, grinding, and cutting, and TDPUD will delay all routine work on energized primary lines (12.kV and 14.4kV). TDPUD may perform necessary work to preserve facilities or property. Vegetation management and line crews have on-site fire suppression equipment and conduct tailboard meetings to confirm the location and readiness of the fire suppression equipment.

### C. DESIGN AND CONSTRUCTION STANDARDS

TDPUD electric facilities are designed and constructed to meet relevant federal, state, and industry standards. TDPUD treats GO 95 as a guiding standard for design and construction of overhead electrical facilities. TDPUD complies with design standards in GO 95 and constructs its facilities consistent with the "heavy-loading" district as defined by the CPUC. TDPUD's overhead electric system is designed to withstand winter storms, including high wind and snow events. Winds during severe winter storms generally exceed the wind speeds that the TDPUD service territory experiences during RFWs. As a result of this approach, TDPUD's system has remained resilient to extreme weather events such as high winds and heavy snow loads.

As stated above, TDPUD's electric facilities are designed to meet GO 95 for design, construction, and maintenance. While TDPUD may choose to exceed the standard based on local conditions and/or knowledge, the minimum requirement is to meet the standard over the duration of the

http://www.fire.ca.gov/programs/communications/red-flag-warnings-fire-weather-watches/

action. Where review/inspection shows that the minimum standard is not sufficient to maintain compliance, TDPUD adapts accordingly.

In addition to meeting the GO 95 standards, TDPUD is making the following upgrades to its facilities and equipment to reduce the risk that its equipment will start a wildfire.

### POLE REPLACEMENT PROGRAM

TDPUD maintains an ongoing pole replacement program designed to prioritize the replacement of utility poles based on structural condition and the potential impact of pole failure on safety, system reliability, and regulatory compliance. As part of this program, all poles are subject to regular inspections and are evaluated using a scoring methodology that incorporates these key factors. The resulting scores are documented in TDPUD's Geographic Information System (GIS), and poles with the highest scores are prioritized for replacement. In 2024, TDPUD replaced more than 100 utility poles as part of this proactive effort to maintain infrastructure integrity and service reliability.

Pole condition assessments are informed by intrusive testing, which allows for a comprehensive evaluation of each pole's structural integrity. Poles exhibiting deterioration that compromises structural strength are scheduled for replacement in accordance with established safety and reliability standards.

### NON-EXPULSION CURRENT LIMITING FUSES

TDPUD has been replacing expulsion fuses with non-expulsion current limiting fuses for the last few year and, as communicated above in Wildfire Risks and Drivers, has completed the 12kV system but has not yet found a technical solution to the 14.4kV system but continues to investigate.

### FR3 INSULATING FLUID

This project has been completed.

### COVERED PRIMARY JUMPER WIRE AND CONDUCTORS

TDPUD is actively working to enhance the resilience and safety of its overhead distribution system by implementing the use of covered (i.e., tree wire) primary jumper wire in place of traditional bare wire. Primary jumpers are used to connect transformers, underground risers, and fuse cutouts to main overhead circuit conductors. The use of covered primary jumper wire helps reduce the risk of unintentional contact with wildlife and windblown debris, thereby supporting wildfire mitigation and system reliability. In addition to this effort, TDPUD is piloting the broader use of covered conductor on segments of its primary distribution system to further evaluate its effectiveness in high-risk areas and guide future system hardening initiatives.

### PROPOSED SERVICE REQUIREMENTS

Since 1995, TDPUD code has required all new or reconstructed developments to take service from TDPUD via an underground system; however, limited exceptions exist in current TDPUD code for some single-family residences. TDPUD seeks to minimize the installation of overhead power lines where practicable and will, therefore, recommend an underground requirement for all electric services and considers the following:

- All new commercial installations will be required to take service from an underground source.
- Like-for-like commercial panel replacements will be required to convert to underground service.
- Upgraded commercial panel replacements will be required to convert to underground service.
- TDPUD will not install any new service, secondary, or primary conductors attached to trees.
- T
- Customer(s) receiving service via legacy tree attachment(s) will be required to comply with Section 5.36, Tree Attachments.

### TREE ATTACHMENTS (LEGACY ATTACHMENTS)

Existing tree attachment service drops are tracked within the GIS to identify locations where trees and branches may be a potential hazard to electric infrastructure and to provide TDPUD crews with location information for inspecting tree attachments. Legacy tree attachments are no longer allowed. When an existing tree attachment fails or is damaged, a new utility pole is installed and used for securing all secondary attachments.

Pursuant to Title 14 of the California Code of Regulations Section 1257, and annually starting in 2020, contract tree crews are trimming the area of the attachments and performing an inspection. Any hazard found is immediately reported to TDPUD staff for mitigation.

TDPUD monitors trends in materials, technology, and work methods to evaluate prudent operational changes to enhance the efficacy of wildfire mitigation. These evaluations include:

- Engineering pole-ranking tools
- Intrusive pole inspections
- New construction methods/materials
- Undergrounding new construction and tree wire (covered wire) use, where applicable

### ADVANCED METERING INFRASTRUCTURE

TDPUD has invested in and deployed advanced metering infrastructure (AMI) across the entire service territory. AMI is an integrated system of smart meters, communications networks, and

data management systems that enable two-way communication between utilities and customers. The system provides several important functions that were not previously possible or had to be performed manually, such as the ability to automatically send an outage notification to TDPUD's OMS, automatically and remotely measure electricity use, connect and disconnect services, detect tampering, identify and isolate outages, and monitor voltages.

In 2021, TDPUD implemented the National Information Solutions Cooperative (NISC) Operational Analytics module for the electric utility. The Operational Analytics module is an enhancement to the existing Meter Data Management System used by TDPUD to gather interval data across all AMI meters. The Operational Analytics module has improved TDPUD's operational efficiencies and grid reliability through advanced data analysis. The implementation included integrations with TDPUD's AMI, Esri GIS, and Supervisory Control and Data Acquisition (SCADA) systems that are now used to proactively locate and replace critically overloaded or underloaded transformers, reduce feeder losses, and reduce catastrophic transformer failure reducing ignition risk.

### OUTAGE MANAGEMENT SYSTEM (OMS)

Since 2007, TDPUD has utilized an OMS for tracking and responding to electric outages and system hazards. The OMS captures outage information in real time from the electric meters and captures incoming phone calls from the public and TDPUD customers. In 2019, TDPUD extended categorizing incidents to include fires, hazard trees, or branches in proximity of electric lines.

In addition to tracking active hazards to the system, all calls entered into the OMS can later be used for reporting based on outage cause, duration, system device, and number of customers affected. This information is used by TDPUD engineers to plan electric system upgrades and device replacements. Events recorded and stored in the OMS archives are available for engineering and operations staff upon request and made available to public agencies as part of yearly CPUC reporting requirements on reliability indices.

In 2021, TDPUD's Board of Directors authorized a contract for a new OMS available through NISC. TDPUD utilizes NISC software as the base enterprise planning resource software that manages TDPUD's accounting, payroll, and customer information systems. TDPUD has standardized this software for the past 18 years due to in-house expertise with the product, the advanced leadership of NISC with other public power utilities, and its compatibility with other TDPUD products including the AMI, Esri GIS, and SCADA systems.

The NISC OMS informs TDPUD on how to best resolve an outage while automatically communicating with customers that they are experiencing an outage and providing information on how the outage is being resolved. The OMS also includes an interactive map with active locations of crews in the field responding to an incident and allows TDPUD customers to customize outage alerts through the MyAccount/SmartHub customer engagement tool.

### SUPERVISORY CONTROL AND DATA ACQUISITION

TDPUD has invested in a fiber-based Supervisory Control and Data Acquisition (SCADA) system that provides staff with real-time visibility into the distribution network, supporting system monitoring, issue diagnosis, and forecasting under all operating conditions.

The District is currently evaluating potential upgrades to the SCADA system to enable supervisory control of all critical field reclosers—a capability that is not presently available. The implementation of this functionality would allow TDPUD personnel to remotely modify recloser settings, including placing reclosers in non-reclose (i.e., one-shot) mode on an annual basis or as needed, to reduce the risk of fire ignition resulting from arcing or fault conditions. In addition, the upgraded SCADA system would provide the ability to remotely apply fast curve settings to reclosers, further enhancing wildfire mitigation efforts by reducing fault energy during high-risk periods.

### D. VEGETATION MANAGEMENT

TDPUD has a developed a comprehensive vegetation management program for maintaining vegetation near its facilities and circuits. TDPUD's vegetation management program is described in detail in its Vegetation Management Plan (VMP) that is attached to this WMP in Appendix C. In addition to maintaining the statutory requirements for clearance around high voltage wires, TDPUD's VMP prescribes a treatment for a 20-foot right-of-way on all sides of its utility poles. Within this easement, all dead vegetation, including dead trees and shrubs, is removed and surface vegetation is maintained to minimize the accumulation of surface fuels. TDPUD vegetation management staff identify standing dead trees within 200 feet of high-voltage wires regardless of ownership and will seek permission to remove any dead tree within this area that has the potential to strike TDPUD infrastructure.

In the current version of the VMP, TDPUD's tree-trimming program is on a 5-year tree-trimming cycle because the majority of the trees near TDPUD lines are mature conifers with compact crowns compared to hardwood trees. These trees have relatively low growth rates and do not respond with rapid shoot growth. Dead vegetation in the right-of-way and dead trees that threaten the wires are treated on an as-needed basis.

As part of TDPUD's VMP, contractors and internal TDPUD staff are equipped with TDPUD-provided mobile devices to record the location and dates of vegetation management-related activities. Vegetation management generally consists of removing, cutting, trimming, and clearing away of trees, tops, limbs, branches, bushes, vines, and foliage, and the removal of hazard trees and inspection of legacy tree attachments in proximity to TDPUD electrical lines, stations, and property within public utility easements. All tree-trimming inspection records are stored in TDPUD's GIS and are used for recording yearly tree-trimming progress, planning future tree-trimming routes and locations, and prioritizing the most critical areas.

In addition to planned tree trimming, the TDPUD customer information system also records customer calls regarding concern for potential tree hazards in proximity to electric lines. Service orders are created for crews to respond to and correct hazard tree reports, as well as record the

outcome of the hazard. This information can also be used for reporting the number of customer calls regarding hazard trees, number of hazard tree removals, and number of occurrences by location. This program began in 2005 and, continuing for 2025, TDPUD will be on a 5-year cutting cycle and will adjust as needed.

It should be noted that TDPUD removes dead or dying vegetation within the vegetation management area. Given the high mountain environment and relatively short growing season, TDPUD has not had problems with treatment areas being replaced with fast-growing grasses or invasive species. TDPUD uses minimal or no herbicides while conducting vegetation management.

### E. INSPECTIONS

TDPUD uses the minimum inspection requirements provided in CPUC GO 165, Table 1 and CPUC GO 95, Rule 18. Patrols consist of visual assessments intended to identify obvious structural or safety concerns, while inspections involve a more thorough evaluation of facility condition and system integrity. By performing both activities on an annual basis, TDPUD will meet and surpass the inspection frequency standards outlined in GO 165, Table 1, and GO 95, Rule 18. While these regulatory requirements serve as a foundational baseline, TDPUD conducts more frequent inspections in areas designated as High Fire-Threat Districts (HFTDs). Furthermore, the District utilizes the field expertise and local environmental knowledge of its personnel to determine when conditions warrant increased inspection frequency or targeted mitigation efforts.

TDPUD's inspection program maintains comprehensive records of all patrols and inspections conducted under this framework. Field crews are equipped with mobile devices that provide real-time access to the District's centralized data systems, allowing for efficient documentation of findings and immediate reporting of any observed deficiencies or hazards. This information is reviewed by engineering staff and used to inform the planning and prioritization of system repairs, upgrades, and other corrective actions necessary to maintain safe and reliable electric service.

TDPUD is committed to ensuring that all patrols and inspections are completed in a timely and effective manner. The District continuously monitors drought conditions and other relevant environmental risk factors throughout the year and may adjust patrol or inspection schedules accordingly to maintain system safety and operational reliability.

If TDPUD personnel identify infrastructure in need of repair that is owned by another utility or agency, the District will promptly notify the responsible entity or jurisdiction to ensure that appropriate corrective actions are taken.

### F. WORKFORCE TRAINING

TDPUD has developed rules and complementary training programs for its workforce to reduce the likelihood of an ignition. All field staff are trained annually in the following areas: in the content of the WMP; in proper use and storage of fire extinguishers; in required pre-job briefings to discuss the potential(s) for ignition and environmental conditions (current and forecasted weather that coincides with the duration of work for the day); and in identifying the closest fire extinguisher.

TDPUD staff are also active in electric utility joint-action groups, such as the California Municipal Utilities Association, Northern California Power Agency, Utah Associated Municipal Power Systems, and the American Public Power Association, to leverage the industries' collective experience and to take advantage of training and other workforce development activities.

### G. RECLOSER POLICY

During fire season, TDPUD disables the automatic reclosing function on all automatic circuit reclosers (ACRs or reclosers) throughout its system, placing them in one-shot operation mode. This operational change ensures that no automatic circuit reclosing occurs during periods of heightened wildfire risk. Fire season is generally defined as June 1st through October 31st; however, this timeframe may be adjusted based on actual fire danger, weather conditions, and broader environmental impacts associated with climate change.

TDPUD is also actively assessing the implementation of fast curve settings on its reclosers as an additional wildfire mitigation measure. The use of fast curve settings would reduce fault duration and energy release during fault events, thereby decreasing the potential for ignition in fire-prone areas.

Operational requirements may be adjusted in response to unusual weather conditions within TDPUD's service territory. For example, in the event of an extended or early winter, the Director of Electric Engineering and Operations, or their designee, may temporarily suspend one-shot operation and return reclosers to standard automatic settings to support system reliability. Conversely, if winter precipitation is significantly below average—resulting in dry conditions due to climate change—reclosers may be placed into one-shot mode earlier than the typical fire season to proactively reduce wildfire risk

### H. DF-FNFRGI7ATION

In 2025, the Truckee Donner Public Utility District (TDPUD) will implement a formal preemptive deenergization program aimed at mitigating wildfire risks. This initiative is being developed in collaboration with other Publicly Owned Utilities (POUs), TDPUD's water utility staff, and key local agencies. The program will establish clear criteria and protocols for proactively shutting off power during periods of elevated wildfire threat, with the objective of enhancing public safety while minimizing disruptions to essential services. The development of this program involved a comprehensive evaluation of several critical factors:

- TDPUD's infrastructure is built to heavy-loading construction standards, designed to withstand high winds, snow loads, and ice formation
- Seasonal offset between severe winter storms and red-flag wildfire conditions, typically occurring in late summer and fall
- Potential adverse impacts on fire response, water supply, public safety, and emergency communications during a de-energization event
- Risk of losing firefighting water supply due to de-energization of wells and pumping facilities
- Disruption to emergency response and public safety from internet and cellular service loss during prolonged outages
- Operational and community impacts of extended outages
- Weather conditions conducive to wildfire ignition or spread
- Threats to TDPUD infrastructure from active wildfires
- Insurance and liability considerations related to preemptive de-energization

Historically, TDPUD has considered de-energizing portions of its system on a case-by-case basis in response to public safety threats or at the request of emergency management agencies. These actions have been, and will continue to be, coordinated with TDPUD's water utility and local partners. While TDPUD has not previously implemented a formal preemptive shutoff program, the District will present and implement its formal Preemptive De-Energization Plan in 2025 following approval by its Board of Directors.

As a transmission-dependent utility, TDPUD receives power from NV Energy, which operates a Public Safety Outage Management (PSOM) program approved by the Public Utilities Commission of Nevada. This program includes provisions for de-energizing transmission lines that serve the Truckee-North Tahoe region. Consequently, there is a higher likelihood of a preemptive outage initiated by NV Energy than by TDPUD itself. To address this, TDPUD holds annual coordination meetings with NV Energy and key stakeholders to understand the conditions under which NV Energy may de-energize transmission infrastructure and to establish communication protocols to ensure timely notifications to local agencies and customers. These efforts will continue in 2025 and have expanded to include scenarios where NV Energy proactively de-energizes due to encroaching wildfire activity near transmission lines.

### IMPACTS TO PUBLIC SAFETY

The TDPUD service territory includes seven Truckee Fire Protection District stations, a CAL FIRE facility at the Truckee Tahoe Airport, one hospital, and three police stations. TDPUD does not generate electricity locally and its sole source of power comes from NV Energy transmission. In the event of a power outage or a NV Energy-initiated wildfire de-energization (PSOM), first responders would be reliant on backup generators for power. The seven fire stations, CAL FIRE

facility, three police stations, and the hospital all have backup generators that can supply electricity to their facilities in the event of power shutdown. Truckee residents in general are accustomed to adverse conditions including extreme weather that shuts down public transportation and services. Many of TDPUD's customers have backup generators installed at their properties and TDPUD encourages customers to be prepared for preemptive shutoff events with several informational postings on its website, including generator safety and the installation of permanently installed backup generators.

### CUSTOMER NOTIFICATION PROTOCOLS

TDPUD has developed a list of critical agencies/emergency responders with a commitment to make direct contact should the surrounding utilities announce a potential preemptive shutoff event. If TDPUD gets notified of a pending event, then TDPUD staff will contact local emergency responders and the hospital by phone, text, and/or email using all channels until contact and message receipt are confirmed.

Customers are notified of wildfire alerts, related outages, potential preemptive shutoff outages, relay setting outages, and re-energizations using contact information in their customer accounts and by signing up for individual alerts through the customer engagement tool (MyAccount/SmartHub). Customer notification is achieved through several channels including text alerts and email alerts. The methods for customer notification are based on the extent of the outage with customer alerts through the OMS and the website outage map in real-time. During limited outages, TDPUD may only use its website and automated customer notifications through the OMS. For more significant outages, TDPUD will use social media and the website emergency banner to notify customers of an outage and provide updates when available. Major transmission and system-wide outages would also include Nixle alerts and coordination with Code Red posts.

Non-customers can sign up for NIXLE alerts for major outages, including preemptive shutoff outages, by texting "TDPUD" to 333111. TDPUD also posts information regarding emergencies on its website and on several social media outlets. An online outage map is available for more information about emergencies and outages in TDPUD. The website also includes information and links to sign up for email and text alerts.

To help TDPUD's customers and community be aware and prepared for wildfire safety power outages, TDPUD has spent significant time and resources to communicate both the timing of an outage along with the expected start of restoration. Should TDPUD implement a wildfire preemptive de-energization program, the communication efforts and customer notifications and protocols would be similar.

### VI. COMMUNITY OUTREACH AND PUBLIC AWARENESS

TDPUD has extensive relationships across all organizations in the community. These relationships include direct interactions with the agencies directly responsible for fighting fires (Truckee Fire

Protection District and CAL FIRE), agencies leading emergency response efforts (Town of Truckee, Nevada County, and Placer County), and key public and private landowners (U.S. Forest Service, Tahoe National Forest, California State Parks, Tahoe Donner Association, Tahoe-Truckee Airport District, etc.). TDPUD staff regularly provide information to these agencies including updates on fire, vegetation management requirements, and TDPUD programs.

TDPUD also works closely with our partners and considers key planning and other documents in implementing this WMP. This includes the Truckee Fire Protection District's Community Wildfire Protection plan and the Town of Truckee's Right of Way clearing program and other emergency response activities.

As the local electric and water utility, TDPUD has robust community outreach and marketing programs to effectively communicate with its customers and community. The agendas for all TDPUD Board meetings are publicly available and the meetings are open for the public to attend. The regularly scheduled Board meetings are also broadcast locally from TDPUD's website (www.tdpud.org) and archived on TDPUD's website for access after the meeting.

TDPUD is active in the community, typically attending dozens of community events each year, including Truckee Day, Truckee Thursdays, Tahoe Truckee Earth Day, Tahoe Donner Expo, Town of Truckee annual fire meeting, and Big Truck Day. TDPUD staffs booths, has staff available to interact with the community, and delivers energy, water, and customer programs directly to its customers. TDPUD provides information on its Vegetation Management Program, performs free de-energizing of customers' overhead service connections to allow them to clear defensible space while working safely, and educates the community on TDPUD's overall efforts to respond to catastrophic wildfires. TDPUD intends to continue this effective engagement in the future.

TDPUD also has robust marketing and communication efforts leveraging its website (www.tdpud.org), social media (Facebook/Twitter/Instagram), print ads, and digital marketing. TDPUD is a regular advertiser in the Sierra Sun, Moonshine Ink, Truckee Chamber of Commerce, Tahoe Donner News, and The Shire, as well as on KTKE 101.5 local radio. In addition, TDPUD has an informative customer lobby with ready access to customer service representatives, extensive digital media to educate customers, and engaging displays.

Specific to wildfire-related community outreach, TDPUD has been very active promoting the wildfire mitigation plan and vegetation management program, including past regulatory changes increasing the vegetation clearances and vegetation management practices. TDPUD also engages in direct communication with property owners for quick resolution of any concerns or disputes. TDPUD has information on the website, social media, digital media, print advertising, and radio. TDPUD has worked with Tahoe Donner Association, which is in a tier 3 area and has almost half of TDPUD's residential connections, to include an extensive article in the monthly Tahoe Donner News information regarding fire, vegetation management, and everyone doing their part.

#### VII. RESTORATION OF SERVICE

TDPUD will implement a formal Preemptive Shutoff Policy in 2025 as part of its broader wildfire mitigation strategy. While a formal policy is not currently in place, TDPUD has historically retained the operational discretion to de-energize portions or the entirety of its overhead electric system under specific conditions, including:

- At the request of an external emergency management or emergency response agency
- When TDPUD determines that extreme weather or other safety considerations necessitate de-energization
- In response to a preemptive shutoff event or transmission outage initiated by NV Energy or another upstream provider

In the event of an outage during wildfire season, TDPUD will conduct patrols of the affected portions of the system prior to re-energization. Any equipment or distribution lines that cannot be safely inspected will remain de-energized until a full assessment can be completed. In parallel, system performance will be actively monitored using TDPUD's Supervisory Control and Data Acquisition (SCADA) system, as well as its Advanced Metering Infrastructure (AMI) and Outage Management System (OMS).

TDPUD actively participates in statewide emergency coordination efforts through its engagement with the California Governor's Office of Emergency Services (Cal OES) and the California Utilities Emergency Association (CUEA). Cal OES is responsible for overseeing and coordinating emergency preparedness, response, recovery, and homeland security activities across the state. CUEA serves as a critical liaison between utility operators and Cal OES, facilitating timely communication and coordination during emergency events and supporting planning, mitigation, training, and response activities.

As a transmission-dependent utility, TDPUD receives power from NV Energy, which operates a Public Safety Outage Management (PSOM) program approved by the Public Utilities Commission of Nevada. NV Energy has committed to providing TDPUD with advance notifications of PSOM events, including estimated times of restoration, to support proactive communication with local agencies and the public.

In preparation for potential system-wide wildfire-related outages, TDPUD will continue to developed and test a re-energization protocol aligned with NV Energy's PSOM transmission deenergization framework. Once TDPUD's Preemptive Shutoff Policy is implemented in 2025, the process for restoring service following a District-initiated de-energization event will follow a similar structure, ensuring safe and coordinated re-energization practices.

## VIII. EVALUATING THE PLAN

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

TDPUD has historically tracked two metrics to measure the performance of the WMP over the entire year. Starting in 2022, TDPUD added a third metric and is only tracking these metrics during fire season (historically June through October unless conditions warrant extension) since winter outages occur when there is no wildfire danger:

- 1. Number of fire ignitions
- 2. Wire-down events within the service territory
- 3. Outage Causes

#### Metric 1: Fire Ignitions

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

- TDPUD's electrical infrastructure was associated with the fire.
- The fire was self-propagating and of a material other than electrical.
- The resulting fire traveled greater than one linear meter from the ignition point.
- TDPUD has knowledge that the fire occurred.

To evaluate this metric, TDPUD reports the number of fires that occurred that were less than 10 acres in size. Any fires greater than 10 acres will be individually described. New fire ignitions will be reported to management and firefighting agencies.

In the 2024 wildfire season, TDPUD recorded zero new fire ignitions caused by TDPUD's electrical facilities or equipment.

#### Metric 2: Wire-Down Events

The second metric is the number of wire-down events within TDPUD's service territory. For purposes of this metric, a wire-down event includes any instance where a primary distribution conductor falls to the ground or onto a foreign object, which is defined as any object not specifically an asset of TDPUD (i.e., phone, cable, trees, etc.).

TDPUD will not normalize this metric by excluding unusual events (i.e., severe storms, car versus pole incidents, or snow unloading). However, TDPUD will supplement this metric with a qualitative description of any such unusual events.

In the 2024 wildfire season, TDPUD recorded zero wire down events.

#### Metric 3: Outage Causes

The third metric used is the number of outages recorded by the month the outage occurred and categorized by cause. This was a new metric for 2022 and was enabled by TDPUD's

new OMS. Outage information is collected from the data recorded and stored by the OMS. For the purpose of this metric, TDPUD is defining an outage as an event when a transmission line or electrical equipment is out of service and the event is recorded in the OMS as an outage.

In 2024 from June through October, TDPUD's outage report data can be seen in the below table. It should be noted TDPUD's OMS is still being optimized for more granular data related to outages specifically during wildfire season.

2024 Wildfire Season Outage Report		
OMS Description	Quantity	
Animal other	1	
Cause unknown	20	
Conductor sag or inadequate clearance	0	
Construction	2	
Customer-caused	17	
Decay/age of material/equipment	5	
Fire (Not a TDPUD Ignition)	45	
Large animal	0	
Lightning	50	
Material or equipment fault/failure	6	
Miscoordination of protection devices	3	
Motor vehicle	22	
No Selection Made	3	
Other	3	
Other equipment installation/design	0	
Overload	0	
PSOM - PSOM/PSPS	0	
Primary Conductor Down	0	
Public cuts tree	1	
Public other	0	
Secondary Conductor Down	0	
Small animal/bird	3	
Switching error or caused by construction or maintenance	0	
Transmission Level Event	377	
Tree failure from overhang or dead tree without ice/snow	0	
Tree growth	20	

Trees with ice/snow	0
Unknown-will determine later	12
Vandalism	0
Vegetation	0
Wind not trees	0
Total	590

Starting in 2024, TDPUD is modified and/or added the following metrics to the plan. These metrics are based on a collaborative effort between the California Municipal Utilities Association and the Wildfire Safety Advisory Board and represented an initial step to implement additional metrics that TDPUD can reasonably monitor with the staff/capacity that we have, and which provide useful information. TDPUD will continue to evaluate the efficacy of other metrics for future plans.

#### Metric 1: Outcomes - Fire Ignitions (Updated)

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

- TDPUD's electrical infrastructure was associated with the fire.
- The fire was self-propagating and of a material other than electrical.
- The resulting fire traveled greater than one linear meter from the ignition point.
- TDPUD has knowledge that the fire occurred.

To evaluate this metric, TDPUD reports the number of fires that occurred that were less than 10 acres in size. Any fires greater than 10 acres will be individually described. New fire ignitions will be reported to management and firefighting agencies.

Starting in 2024, TDPUD will collect information on ignitions separately for the Distribution and Transmission systems and will distinguish between vegetation, other, and unknown causes. In 2024, the number of Fire Ignitions on the Distribution system was zero and the number of Fire Ignitions on the Transmission system was zero.

#### Metric 3: Outcomes - Outages and Hazards (Updated)

The third existing metric, Outage Causes, is being updated and expanded. This metric will report the number of outages recorded during wildfire season by the month the outage occurred. Starting in 2024, TDPUD worked to collect information related to outages separately for the Distribution and Transmission systems and will now categorize by cause being vegetation, other, or unknown. For the purpose of this metric, TDPUD is defining an outage as an event when a transmission line or electrical equipment is out of service and the event is recorded in the OMS as an outage. In 2024, the Outages and Hazards for Distribution and Transmission are presented below:

2024 Outages and Hazards for T&D						
Category		Number of Outages				
Distribution	June		July	August	September	October
Vegetation		0	1	6	6	8
Other		71	12	57	7	10
Cause unknown		7	13	4	6	5
	'					
Category		Number of Outages				
Transmission	June		July	August	September	October
Vegetation		0	0	0	0	0
Other		0	0	0	0	0
Cause unknown		2	365	0	2	8

#### Metric 4: Outcomes – Safety Hazards

Starting in 2024, TDPUD undertook and effort to monitor the number of Safety Hazards that are reported and verified. However, due to a lack of clarity on the definition of a safety hazard and how best to track and report this metric, this new metric was not fully implemented in 2024 to be able to report a useful number. TDPUD will continue to investigate this metric in 2025.

#### Metric 5: Outcomes - Vegetation Management

Starting in 2024, TDPUD started reporting on the number miles and/or poles that were treated per TDPUD's Vegetation Management Program. TDPUD will report separately for the Distribution and Transmission system. For 2024, the number of miles and/or poles that were treated per TDPUD's Vegetation Management Program were:

- 13.07 Distribution Miles Trimmed
- 142 Distribution Poles cleared per PRC. 4292
- 3 Transmission Poles cleared per PRC. 4292

#### Metric 6: External Risks, Red Flag Warnings

The fourth metric is Red Flag Warnings that are issued by the National Weather Service, National Oceanic and Atmospheric Administration, Reno NV Office. This metric will be reported as the number of days the warning covered or partially covered. For the 2024 wildfire season, the number of Red Flag Warnings was four.

#### Metric 7: External Risks, High Wind Warning Days

The fifth metric is High Wind Warning Days that are issued by the National Weather Service, National Oceanic and Atmospheric Administration, Reno NV Office or are measured on a valid weather station in TDPUD's service territory. This metric will be reported as the number of days the warning or actual measurement covered or partially covered. For the 2024 wildfire season, the number of High Wind Warning Days was zero.

#### B. IMPACTS OF METRICS ON THE PLAN

As part of the annual WMP review process, TDPUD reviews the data collected for each metric and continues to update the WMP annually. The original metrics have proven to be useful for informing the effectiveness of the WMP particularly when complemented by additional data such as location for new fire ignitions and data from the OMS (location, customers impacted, etc.) for wire-down events.

TDPUD uses the data obtained from the metrics with the additional data to pinpoint locations where additional wildfire prevention is needed, including where additional vegetation management treatments are necessary and where TDPUD needs to install more animal deterrents.

#### C. MONITORING AND AUDITING THE PLAN

Internally, the wildfire prevention strategies and programs described in the WMP are evaluated on an ongoing basis. TDPUD staff tracks the utility's progress in completing wildfire prevention program goals. The progress data and data regarding the metrics plus outage information are reviewed by the Electric Engineering and Operations Director. The Electric Engineering and Operations Director, or designee, will, at least on a semi-annual basis, update the General Manager regarding the Plan's implementation, identified deficiencies, or recommendations for updating. Any critical or immediate concerns will be brought to TDPUD's Board of Directors.

In addition to the ongoing internal review, TDPUD presents the current WMP to its Board of Directors for review on an annual basis in a public setting with agendized materials. Development of the Plan, along with the updates, is done collaboratively with the local emergency response and fire agency.

#### D. IDENTIFYING AND CORRECTING DEFICIENCIES IN THE PLAN

TDPUD staff have the role of vetting current procedures and recommending changes or enhancements to build upon non-optimized strategies in the Plan. TDPUD staff utilizes the data (e.g., progress in completing prevention tasks) obtained during the ongoing review of its wildfire prevention programs to identify areas where additional work is needed, such as increasing clearance between wires and adjacent vegetation or removing dead trees, or areas where system upgrades need to be prioritized, such as pole replacement or the installation of animal deterrents.

The Electric Engineering and Operations Director, or their designee, will be responsible for spearheading discussions on correcting deficiencies when updating the Plan for its annual presentation to the Board. This is done in collaboration with sister utilities and joint-action groups such as the California Municipal Utilities Association, Northern California Power Agency, and Southern California Public Power Authority. All stakeholders are empowered to suggest improvement opportunities, including, but not limited to, field crews, management, auditors, fire safety professionals, and members of the public.

#### E. MONITORING THE EFFECTIVENESS OF INSPECTIONS

TDPUD utilizes California Public Utilities Commission (CPUC) General Orders 95 and 165 as the foundational standards for inspecting and maintaining its electric system. Beginning in 2025, TDPUD will exceed the minimum inspection requirements outlined in GO 165 by conducting comprehensive annual inspections and patrols of all overhead and underground electric facilities. In doing so, TDPUD will ensure its facilities not only meet but are maintained in accordance with the design, construction, and maintenance standards set forth in GO 95.

Field personnel routinely patrol the service territory and address deficiencies as they are identified. Corrective actions completed upon discovery are documented within TDPUD's Geographic Information System (GIS) in a manner consistent with GO 95 and GO 165 requirements. Deficiencies that cannot be resolved immediately in the field are reviewed by the Electric Operations Manager and assigned a priority level based on safety, system reliability, and operational risk.

TDPUD is currently developing a more formalized and structured process for tracking and prioritizing deficiencies identified during inspections. Under this process, repairs will be classified as Level 1 (highest priority), Level 2 (moderate priority), or Level 3 (lowest priority) in accordance with the definitions established in GO 95, Rule 18. The discovery, required corrective actions, and all associated documentation will be logged in TDPUD's GIS system, ensuring a systematic approach to managing field findings and repair timelines.

Effectiveness of the inspection program will be evaluated through continuous data tracking and annual reviews of inspection findings, including the number and nature of deficiencies identified, the timeliness of corrective actions, and the overall condition of system assets.

Oversight of the inspection process—including the Vegetation Management Program (VMP), field patrols, and equipment inspections—is the responsibility of the Electric Operations Manager or their designee.

Insights gained from ongoing inspections and repairs will inform future wildfire mitigation strategies. These strategies will be incorporated into subsequent updates of TDPUD's Wildfire Mitigation Plan, with the objective of reducing the likelihood and impact of utility-related wildfire events across the service territory.

#### F. INDEPENDENT AUDITOR

Public Utilities Code Section 8387(c) requires TDPUD 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 Plan. The independent evaluator must issue a report to be posted on TDPUD's website. This report must also be presented to TDPUD's Board at a public meeting. Navigant Consulting conducted the independent audit of TDPUD's WMP in 2019 and Guidehouse conducted the independent audit in 2023. Both independent audits concluded that:

- 1. TDPUD's WMP aligns appropriately with Public Utilities Code Section 8387 and includes all required elements.
- 2. TDPUD's Plan is determined to be comprehensive.

TDPUD's WMP satisfied the requirements of Senate Bill 901 and the 2024 WMP considers the previous recommendations of the two audits. It should be noted that TDPUD, in order to maximize the benefit of direct investments in wildfire prevention, only intends to use the independent auditor when there is value, which is currently anticipated to be during comprehensive revisions of the WMP every 3 years or if major changes are made in between. The need for an Independent Auditor report was not deemed necessary for the 2024 annual WMP update.

#### IX. WMP ADOPTION PROCESS

Annually, TDPUD presents WMP revisions to the Board for approval before the end of June of each year prior to submitting the WMP to the Wildfire Safety Advisory Board by July 1st of the same year. Board meetings are typically held on the first Wednesday of the month and the meetings are open to the public except for closed sessions. Members of the public can attend the Board meeting in person. Board meeting agendas included an attached agenda report, such as the one that presents the WMP to the Board and are available online on the TDPUD website (www.tdpud.org).

Board members receive the WMP prior to the meeting date as part of the public Board packet. During the meeting, TDPUD staff presents the WMP to the Board as action item and Board members provide comments when the presentation ends. Board member comments are followed by a period of public comment where the Board opens the meeting for public comment on the WMP. The WMP is either adopted by vote by the Board or returned to TDPUD for revision if there are comments that cannot be resolved during the meeting.

The final adoption of the 2024 WMP by the Board was done on June 5, 2024. A similar schedule is anticipated for 2025 adoption.

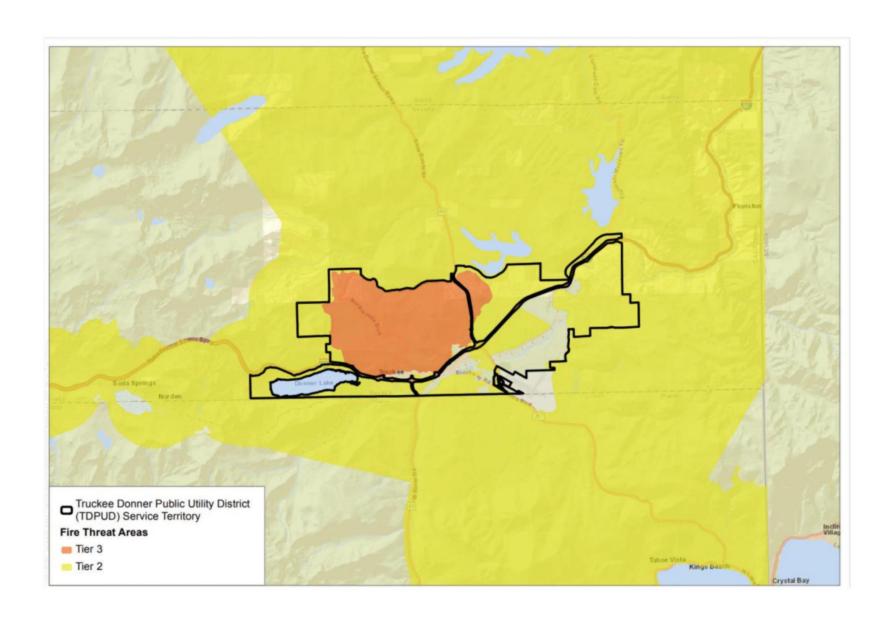
# X. REFERENCES

Carlson, A.R., D.P. Helmers, T.J. Hawbaker, M.H. Mockrin, and V.C. Radeloff. 2022. "Wildland-urban interface maps for the conterminous U.S. based on 125 million building locations." Retrieved from USGS ScienceBase Catalog: https://www.sciencebase.gov/catalog/item/617bfb43d34ea58c3c70038f.

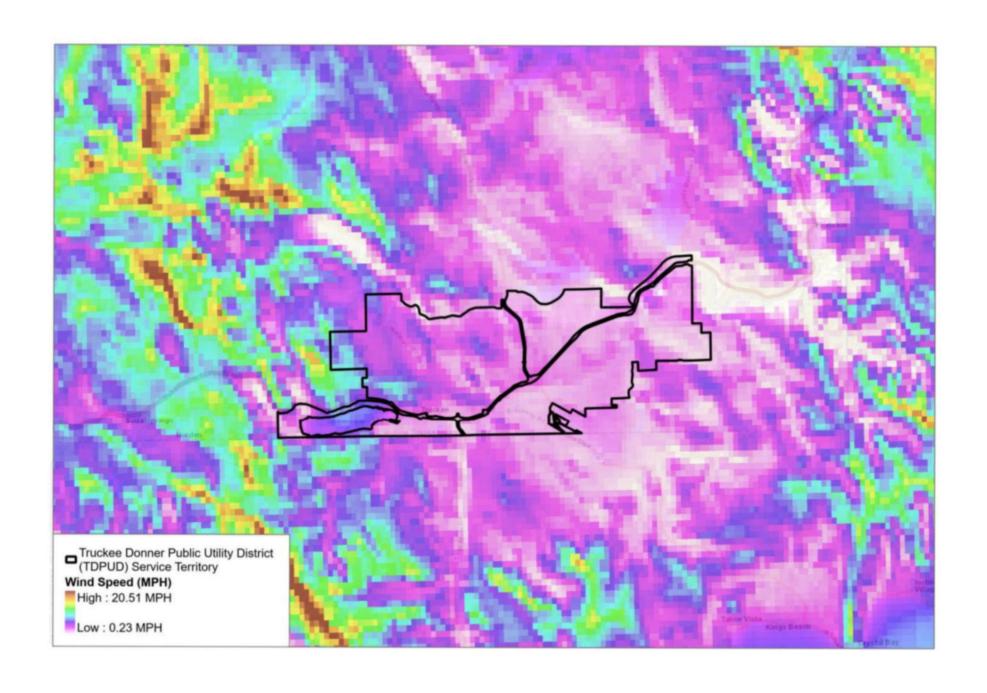
Town of Truckee Planning Division. 2020. Climate Ready Truckee: A Climate Change Adaptation Plan. Truckee, California: Town of Truckee Planning Division. July 2020.

# APPENDIX A

# CPUC HIGH FIRE THREAT DISTRICT MAP FOR THE TRUCKEE DONNER PUBLIC UTILITY



# APPENDIX B PREVAILING WIND MAP



# APPENDIX C

# VEGETATION MANAGEMENT PROGRAM



# Vegetation Management Plan

Revised: April 22, 2025

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#### VEGETATION MANAGEMENT PLAN

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

#### Mission Statement - District Code, Title 1, Section 1.05.010

The Mission of Truckee Donner Public Utility District is to provide reliable, high quality utility and customer services while managing the District's resources in a safe, open, responsible, and environmentally sound manner at the lowest practical cost.

#### Introduction

The Truckee Donner Public Utility District (the District) has a responsibility to maintain vegetation so as not to threaten the safety and integrity of electric facilities. The District's Vegetation Management Plan (the Plan) is an important part of the District's effort to deliver safe, reliable and cost-effective electric service to customers. The goals of the Vegetation Management Plan include: (1) ensuring the safety of District Personnel and the public, (2) reduction of fire risks due to tree contacts or electrical sparks igniting vegetation (3) the prevention of customer outages due to tree contacts, and (4) aesthetics. The Plan is designed to meet the goals and objectives of the District, as well as State and Federal requirements, as they relate to maintenance of electric facilities in Public Utility Easements (PUE).

#### **Service Area**

The District is a Public Utility District of the State of California engaged in the distribution, sale and delivery of electric power and energy. The District is a transmission-dependent utility connected to NV Energy's transmission system and is located high on the eastern slope of the Sierra Nevada. The District is not interconnected with any other utility. The District's electric service territory is comprised of approximately 44 square miles in eastern Nevada County and approximately 1.5 square miles in adjacent Placer County. The electric system includes approximately 135 miles of 12.47 kV and 14.4 kV overhead distribution lines, and about one-half mile of 60kV overhead transmission lines. The District has approximately 5,490 poles in its service territory, making the tree trimming budget one of the largest annual operational expenses for the District.

#### **Plan Description**

The District is required by State and Federal laws and regulations to prune or remove vegetation close to energized electrical facilities for public safety and electric system reliability. The District adheres to all applicable vegetation clearance requirements and performs regular vegetation managment in accordance with State and Federal requirements, industry standards, and other procedures that help to prevent outages and fires due to tree contact.

District staff are responsible for preparing work plans for annual vegetation management operations. In addition, staff routinely performs quality control (QC) audits for ongoing work for adherance to clearance requirements and to track progress throughout the year. Circuits are patrolled and maintained on an ongoing basis, enabling the District to cover all overhead electiric lines on a rotating five-year cycle.

While conducting routine vegetation management operations, the District removes any identified high-risk fuel source vegetation, as required. The District also performs inspections of vegetation concerns for customers or when vegetation management contractors identify at-risk vegetation while performing day-to-day operations. Staff is constently evaluating methods to improve and enhance inspection procedures and vegetation operations. Vegetation management generally consists of removing, cutting, trimming, and clearing away of trees, tree limbs, branches, bushes, vines, foliage, the removal of hazard trees, and inspection of legacy tree attachments in proximity to electrical lines, substations, and other District property within the PUE.

Vegetation removal is performed by mechanical trimming in and around transmission and distribution circuits, from the substations to the end of the each feeder circuit. An emphasis is placed on the removal of tree branches and trees that are located within clearance limits, ground-level clearing around poles, vegetation clearance within the PUE, plus the removal of hazard trees that may be located inside or outside of the PUE. The District does not perform vegetation removal operations in the following areas:

#### 1. Supply Service Drops

Supply service drops, or service wires, are defined as the overhead conductor from the District's distribution pole line to the customers' service entrance or meter base equipment. These overhead supply lines are generally energized at 240 volts. The District does not perform vegetation management operaions along customer supply service drops. Tree triming and maintaining the health of trees on private property is the customer's or property owner's responsibility. The customer or property owner shall maintain a 4 foot clearance at time of trim and a minimum 2 foot clearance from supply service drops to trees and other vegetation at all times. Upon request, and during normal business hours, the District will temporarily de-energize or remove the customer's overhead secondary service line at no charge to the customer, thereby allowing for tree trimming or maintenance work to be performed safely.

#### 2. Padmounted Equipment

In areas served by underground electric facilities, padmounted equipment, including transformers and switchgear, are placed at customer locations or select intervals along main electric lines near streets and roads. Per District

code, employees must be able to access this equipment at any time for routine maintenance, troubleshooting, or emergency repairs. This equipment must be visually and physically accessable to District crews at all times. A clear working area must be maintained on all sides of padmounted equipment. The door side shall have a 10 foor minimum clear working area. The non-door sides shall have 3 foot minimum clear working area. Clear working area shall mean no fences, shrubs, trees, landscape rocks or other obstructions. The customer or property owner shall maintain these clear working areas for District access.

#### Plan Personnel

District crews consisting of licensed Journeymen Linemen perform tree trimming operations on an as-needed basis. The majority of the Plan work is performed by licensed tree contractors specializing in vegetation management operations for electric utilities. Contracts for Vegetation Management are signed for one year, with up to three, one year extensions. The District has very strict requirements for selecting a tree contractor following the public procurement process. The contractor's field supervisor must be a certified arborist with the International Society of Arboriculture. The Contractor must employ only qualified line clearance tree trimming personnel meeting the requirements of OSHA 29 CFR 1910.269, ANSI Standard Z133.1, and California Code of Regulation Title 8 Article 38 standards and requirements. In addition, the contractor must have a category D-49 Tree Service Contractor license issued by the California Contractors State License Board and be a State of California issued Licensed Timber Operator (LTO).

## **Plan Operation Elements**

#### 1. General

Vegetation management operations are performed by mechanical trimming or removal of trees and other vegetation along distribution and transmission line circuits. These operations are performed in a manner which creates minimum disturbance to the surrounding natural vegetation and landscape not directly involved in the work. Ingress and egress to work areas are via existing roads, driveways, access roads, etc. The work is performed so as to cause the least possible obstruction and inconvenience to public traffic. Public vehicular and pedestrian traffic is allowed to travel through the work area with a minimum of interruption or impedance unless otherwise required for safety concerns. All traffic control and related devices conform to requirements set forth by the Town of Truckee.

# 2. Scheduled Maintaince Cycle

3.

Trees and vegetation are cleared from District facilities on a scheduled maintenance cycle. The District's maintenance cycle goal is 5 years for all facilities. This means that trimming operations are performed on the same portion of a distribution or

transmission line typically once every 5 years. The intent of the scheduled maintenance cycle is to perform trimming necessary to obtain clearance that will last for the duration of the cycle. Other benefits include improved access to electric facilities and reduced future maintenance costs. Facilities are worked in a systematic approach. Operations are recorded by staff on the District's Geographical Information Systems (GIS) mapping database to track maintenance cycle goals.

## 3. Public Utility Easement (PUE) Clearing

The District has the right of access to PUEs and other dedicated electric service easements for purposes related to vegetation management including pole clearing, tree trimming, tree removal, and easement clearing. In the event a recorded easement does not exist, easements by prescription, also called prescriptive easements under California Law, give the District the same rights as recorded easements for access to District facilities. Any tree regardless of size, that's located in the PUE may be removed due to present or future conflicts with electrical facilities as determined by District staff. PUE maintenance includes pole clearing, cutting and trimming of all trees and shrubs to the extent necessary to keep electric facilities clear of vegetation and to provide access for electric system operations and maintenance. Refer to Exhibits for a graphical depiction of clearance requirements and PUE clearing activities.

# 4. Notification of Customers and/or Property Owners

Customers and/or property owners are notified a minimum of twenty-four hours prior to any scheduled vegetation management operations adjacent to private property. The notification includes the type of work to be performed, including the trimming or removal of trees and the disposal of logs and/or brush. This is typically done by placing "door hangers" or using other communication methods to notify customers of impending work.

The work may also require temporary power interuptions or planned outages to be performed safely. This work shall be reviewed and authorized by the Electric Operations Manager or their designee prior to the commencment of work. The customer notification contains information such as contractor name, address, contact name, phone number, approximate time and duration of planned outage, and District contact information.

#### 5. Types of Trimming

Natural pruning techniques are performed as recommended by the International Society of Arboriculture and ANSI Standard A300. Operations avoid practices that can cause damage or injury to the tree while achieving the required clearance objectives. Wherever possible, natural pruning cuts are made to direct future growth and sprouting away from electric facilities.

- a. Pruning: Tree pruning is performed so as to maintain the minimum clearance requirements from electric conductors as shown in the Clearances section of this document. Dead branches overhanging conductors are removed. Portions of dead or decaying trees or portions of trees weakened by decay or disease that may contact conductors from the side or by falling are pruned to eliminate the hazard.
- b. **Crown Reduction:** Trees directly under conductors are pruned and shaped. The tree crown is typically reduced and rounded into a symmetrical appearance as much as possible. Conifers are pruned in a natural manner that allows them to retain as much of their natural shape as possible.
- c. Side Prunes: Where line clearance tree pruning adversely alters the shape of a tree, additional pruning is performed to give such trees a better shape and appearance.

#### 6. Tree Removal

Tree removal is performed for all trees that do not meet the clearance requirement from the tree trunk to energized conductors and also for hazard trees. Hazard trees are trees with the potential to fail and threaten the reliability of the District's overhead electric facilities. Hazard trees may be located inside or outside of the PUE. The District will notify and obtain approval from property owners when tree removal work is outside of the PUE. Hazard trees are defined as any tree or portion of a tree that is dead, split, rotten, decayed or diseased and which may fall into or onto electric facilities or trees leaning towards lines. Tree removal includes the falling of the entire tree or crane removal. It also consists of the removal and disposal of trunks, limbs and branches. Following best forest management practices, trees are cut off at ground level to leave a stump height of no more then 3 inches to promote natural decay. The District is not responsible for the removal of stumps.

#### 7. Pole Clearing

The pole clearing program is an annual requirement to clear vegetation around poles that contain electric apparatus in addition to wires in compliance with California Public Resources Code Section 4292. This Code applies to a majority of District poles. The District will notify and obtain approval from property owners when vegetation removal work is outside of the PUE.

In addition, ground level vegetation clearance and removal is performed to provide the required firebreaks and to minimize new spring growth which are essential steps in reducing impacts to the electrical distribution system due to wildland fires. Refer to Exhibits for a graphical depiction of clearance requirements and PUE clearing activities.

## 8. Tree Attachments (Legacy Attachments)

The District has legacy attachments to trees that consist of: service drop(s); secondary conductor(s); or, security lighting. Although these installations are permitted pursuant to California Code 14CCR § 1257, the District does not engage in this practice for new installations.

In order to ensure the integrity of these attachments, the District performs the following:

- Inspect legacy tree attachments and correct any hazardous condition found such as tree growth around conductors, physical signs of damage, etc;
- Remove tree limbs on trees used as an attachment point(s) consistent with 14CCR § 1257;
- Accurately record attachment point(s) on GIS mapping database for audit purposes.

#### 9. Control of Material and Clean Up

Tree branches and other vegetation less than 5 inches in diameter are chipped and removed from the work area. Wood larger than 5 inches in diameter is cut into lengths for safe lifting purposes. Wood larger than 5 inches in diameter is made available to District customers before removal by the contractor. Customers on whose property a tree or trees have been removed or who are adjacent to such work will have the first opportunity to use the wood collected from such trees before removal by the contractor. The work is performed in an environmentally responsible manner with regards to any and all material generated by the work.

The District may store timber logs temporaraly at the work site while efforts are made to arrange for removal and transport to the mill or final storage facility. Upon completion of the work, the area is cleaned to a condition at least equal to that which existed prior to the commencement of the work. During winter storm restorations, these logs may be left for an extended period of time due to heavy snow fall making them inaccesable to load after power restoration efforts are complete. In these situations the District or its contractors will do their best to minimize impacts to customers by stacking material off of the roadyway or other accessible public walkways.

#### **Clearance Requirements**

The following table reflects the District's current minimum clearances required between conductors and vegetation:

# **Clearance of Conductors to Vegetation**

	Trimmed	Minimum
Type of	Clearance	Clearance

Conductor	Voltage		
Secondary Supply Conductors	0 to 750v	4 ft.	2 ft.
Primary Supply Conductors	750v to 22,500v	<b>12 ft.</b> (1, 3)	<b>4 ft.</b> (2,3,4&5)
Primary Supply Conductors	22.5kV to 72.5kV	<b>12 ft.</b> (1, 3)	<b>4 ft.</b> (2,3& 4)

#### Notes:

- 1. GO 95 Appendix E, Guidelines to Rule 35, Case 14, High Fire Threats
- 2. GO 95 Rule 35, Vegetation Management; Table 1, Case 14, High Fire Threats
- 3. CPUC Fire Threat Map: The CPUC has identified the District's service territory as a Tier 2 High Fire Threat District (HFTD), with the Tahoe Donner Subdivision identified as a Tier 3, HFTD. Therefore, greater clearance requirements apply as compared to being in a non-fire threat area.
- 4. California PRC Section 4293
- 5. The minimum clearance may be reduced to 6 inches for tree trunks and major limbs "of sufficient strength and rigidity to prevent the trunk or limb from encroaching upon the 6 inch minimum clearance under reasonable foreseeable wind and weather conditions"; GO 95 Rule 35, Tree Trimming, Exception No. 4.

#### **Regulatory Requirements**

The District performs vegetation managment in accordance with State and Federal requirements. In addition, the District follows industry standards, and other procedures that help to prevent outages and fires due to tree contact. These requirements, standards, and procedures include:

- California General Order No. 95, Rule 35 Vegetation Management
  This rule specifies the minimum radial clearance that must be maintained at
  all times from energized conductors to vegetation.
- California General Order No. 95, Appendix E Guidelines to Rule 35
   This rule specifies the minimum radial clearance that must be maintained from energized conductors to vegetation <u>at time of trimming</u>.

- California General Order No. 95, Rule 21.2 D High Fire Threat District This rule specifies the use of California Public Utility Commission (CPUC) Fire Threat Map to identify fire threat level zones.
- California General Order No. 95 Rule 35, Vegetation Management; Table 1, Case 13, Radial Clearance requirments

Radial clearance of bare line conductors from tree branches or foliage.

 California General Order No. 95 Rule 35, Vegetation Management; Table 1, Case 14, High Fire Threats

Radial clearance of bare line conductors from vegetation in Extreme and Very High Fire Threat Zones.

- California Public Utility Commission (CPUC) Fire Threat Map
  This is the CPUC's statewide Fire Threat Map identifing areas of the state at
  an elevated (Tier 2) or extreme (Tier 3) risk of power line ignitied wildfire.
- California Public Resources Code Section 4292
   This law is administered by the California Department of Forestry and Fire

  Protection (CALFIRE) The law requires the project and a 40 feet rediction.

Protection (CALFIRE). The law requires the maintenance of a 10 foot radial firebreak around electric utility poles that contain switches, fuses, transformers, or other electric equipment.

California Public Resources Code Section 4293

This law is administered by CALFIRE. The law specifies the minimum clearance between energized conductors and vegetation. It also requires the removal of dead, deseased, or dying trees, or trees that could fall into electric lines. Such trees may be located inside or outside of the right-of-way or easement areas.

 California Administrative Code, Title 8, Article 37 - Proximity to Overhead Lines

This code specifies minimum clearances between personnel and equipment working in close proximity to overhear electric facilities.

 California Administrative Code, Title 8, Article 38 - Line Clearance Tree Trimming Operations

This code specifies requirements for personnel performing line clearance tree trimming operations.

 California General Order No. 165 – Inspection Requirements for Electric Distribution and Transmission Facilities

This rule specifies the minimum cycle times for inspection of electric distribution and transmission lines.

ANSI A300.1 – Tree Care Operations - Pruning

This national standard addresses pruning practices for tree trimming operations.

# ANSI Z133 - Standard for Safety Requirements in Arboricultural Operations

This national standard addresses arboriculture safety requirements for pruning, repairing, maintaining and removing trees, and for using equipment in such operations.

## OSHA 29 CFR 1910.269 - Electric Power Generation, Transmission, and Distribution

This federal standard specifies requirements for worker safety in the electric power industry.

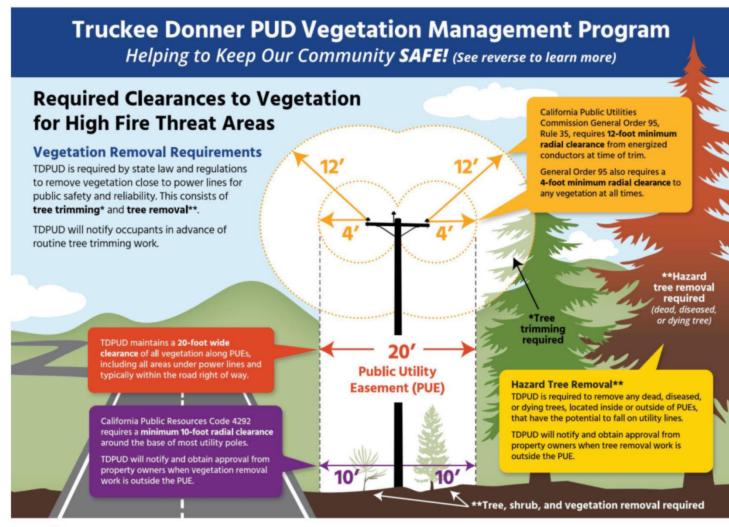
## • ISA Best Management Practices – Vegetation Managment

The International Society of Arboriculture (ISA) developed this BMP for the selection and application of methods and techniques for vegetation control for electric rights-of-way.

District and other standards as referenced in this document.

#### **Exhibits**

### **Vegetation Management Handouts**





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# ARE YOU PREPARED FOR



#### Ongoing vegetation management work

Truckee Donner PUD's dedicated staff and contractors are busy conducting vegetation management, including tree trimming, removal of hazard trees around power lines, and maintaining defensible space on properties owned by TDPUD.

Please do your part to protect your home or business and our community. Visit tdpud.org/wildfire-safety for information and links to resources.

#### Sign up for emergency alerts and notifications

Does TDPUD have your updated customer contact information?

Do you want to be notified during wildfire safety outages (PSOM) and emergency situations? TDPUD customerscan customize email and text notifications by visiting tdpud.org and clicking on the My Account button.

For people who aren't customers but still want to receive TDPUD emergency alerts, TDPUD has partnered with Nixie to provide text alerts to the public. Anyone can sign up for TDPUD Nixie emergency alerts by texting TDPUD to 333111.

#### Are you prepared for power outages?

TDPUD has taken steps to make our electrical system safer during wildfire season, but the result is more frquent and longer power outages.

Go to tdpud.org/wildfire-safety to learn more.



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