Independent Evaluation of Truckee Donner Public Utility District's 2023 Wildfire Mitigation Plan

Prepared for:

Truckee Donner Public Utility District

Submitted by:

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Executive Summary

Truckee Donner Public Utility District (TDPUD) contracted with Guidehouse Inc. (Guidehouse) to engage in an independent evaluation of its Wildfire Mitigation Plan (Plan or WMP). This independent evaluation report (Report) describes the technical review and evaluation provided by Guidehouse. Guidehouse performed this evaluation in May of 2023 and finalized the Report on May 25, 2023. Guidehouse's project team reviewed detailed information related to the Plan and assessed TDPUD's procedures related to the Plan.

The Plan was prepared as a response to Senate Bill (SB) 901. SB 901 included a number of provisions and directives, among which includes the requirement for electric utilities to prepare and adopt WMPs and revise and update the Plan annually thereafter. These requirements are codified in the California Public Utilities Code (PUC) Section 8387 for publicly owned utilities (POUs).

Guidehouse evaluated the Plan based on the statutory requirements of PUC Section 8387 as it relates to POUs. This PUC Section was amended in 2019 with the signing of California's Assembly Bill (AB) 1054 into law. The POUs are now subject to the guidance provided by the California Wildfire Safety Advisory Board and mandatory cyclical reviews, including a comprehensive update every three years. The required elements for a WMP have not been modified by this new legislation. This Report is consistent with the requirements under PUC Section 8387(c), regarding an independent evaluation of TDPUD's WMP. The Report was also developed to satisfy the statutory requirement for public review. This Report underlies the required presentation at a public meeting of the TDPUD Board on June 7, 2023, for approval. The Report includes the following:

- Background of the legislative history requiring WMPs and their independent evaluations
- Approach and methodology evaluating the WMP's comprehensiveness
- TDPUD's WMP elements and their compliance with SB 901 and PUC Section 8387 WMP elements and directives
- An evaluation of the WMP's presented metrics to assess the effectiveness of the overall WMP
- Determinations and results

Based on relevant experience in grid hardening and resiliency, natural disaster response, prior experience in WMP development, and active tracking of wildfire legislative and regulatory proceedings Guidehouse has concluded that TDPUD's WMP is comprehensive in accordance with PUC section 8387.

1. Background

In recent years, California has seen numerous utility equipment-involved, catastrophic wildfires. The unique geographic profile of California and the impacts of climate change, including prolonged drought, high winds, and elevated temperatures, have led to elongated fire seasons. The state also has historically high levels of past fire suppression efforts. This increasingly abundant dry vegetation is the leading driver of wildfires. These fuel-rich environments, coupled with intensified climatological conditions with high wind gusts and inherent electrical infrastructure risks, produce the conditions conducive to potential wildfire ignition. The three attributes that provide optimal conditions for a fire ignition are illustrated through the graphic in Figure 1-1.

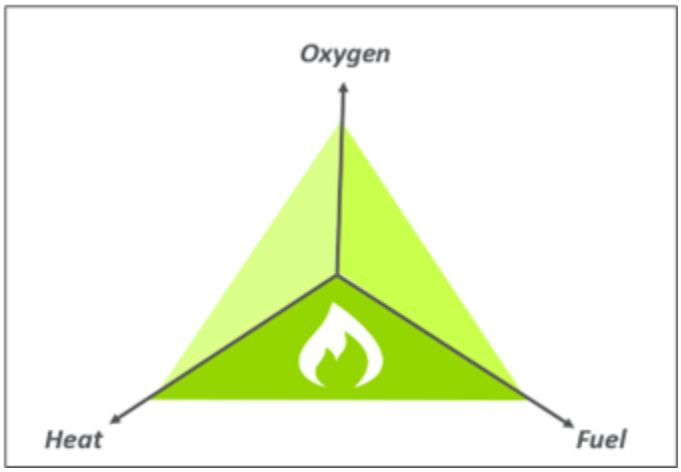

Figure 1-1 – Fire Triangle

Disastrous wildfire threat is a well-known and shared priority among electric utilities in California. Disastrous utility-involved wildfire incidents and the significant financial and livelihood impacts associated with them led California legislators and regulators to formalize requirements to ensure safe operations of electric utility equipment and greater investment in wildfire mitigation efforts. Specifically, the state has approved legislation that strengthens governmental and regulatory oversight of wildfire prevention implementation activities, utility wildfire mitigation plans, and proper dispersal of state funds to wildfire victims. In an effort to minimize future devastating occurrences through risk-driven wildfire prevention, electric utilities, including cooperatives, were mandated, by SB 901 (Senator Bill Dodd, 2018), to prepare and annually adopt a wildfire mitigation plan. This effort is foundational to the state's prioritized goal of minimizing the potential of devastating fires in future years.

1.1 Wildfire Mitigation Plans

1.1.1 SB 901

In an effort to minimize future devastating occurrences through risk-driven wildfire prevention, electric utilities, including publicly owned utilities (POUs), were mandated, by Senate Bill (SB) 901 to prepare and annually adopt a WMP. The WMPs must Include several mitigation and response elements in each utility's strategies, protocols, and programs. The requirements for POUs are codified in Public Utilities Code (PUC) Section 8387. Details relating to POU requirements are discussed in Section 2 of this WMP evaluation report (Report).

1.1.2 AB 1054 Statutory Modifications

In 2019, Assembly Bill (AB) 1054 was signed into law, modifying the requirements for POU WMPs. AB 1054 aims to mitigate the intensity of wildfire impacts through several initiatives separate from those actions required of electric utilities. AB 1054 includes directives to establish the Wildfire Safety Division[1] at the California Public Utilities Commission and the state's Wildfire Safety Advisory Board (WSAB). AB 1054 requires POUs submit their WMPs by July 1 of each year for review by and recommendations from WSAB and requires POUs to comprehensively update their WMPs at least every three years. The most recent *Guidance Advisory Opinion for 2022 POU WMPs* was published on March 2, 2022.

1.2 Truckee Donner Public Utility District Plan Preparation

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 about 14,648 customers as of December 31, 2022. TDPUD is a transmission-dependent utility connected to NV Energy's transmission system and is located high on the eastern slope of the Sierra Nevada. TDPUD is not directly interconnected with the California transmission system nor to any California utility in a meaningful way.

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 5,490 poles in its service territory.

The TDPUD Wildfire Mitigation Plan (WMP or Plan) is adopted by the TDPUD Board (the 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.

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 is prepared and maintained in accordance with 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.

Independent Evaluation Services

PUC Section 8387(c) directs POUs to procure an independent evaluation (IE) of the comprehensiveness of the WMP which TDPUD completed with the first WMP in 2019. The provisions of PUC Section 8387 state that the "qualified independent evaluator" shall be

[1] Oversight and responsibility for the Wildfire Safety Division was transferred from the California Public Utilities Commission to the California Natural Resources Agency on July 1, 2021 and is now known as the Office of Energy Infrastructure Safety.

experienced in "assessing the safe operation of electrical infrastructure" and will perform an assessment to determine the comprehensiveness of the WMP.

TDPUD sought IE services to assess the comprehensiveness of its WMP consistent with PUC Section 8387(c). TDPUD selected Guidehouse to perform this assessment based on Guidehouse's prior experience with assessing the safe operation of electrical infrastructure, including grid-hardening and WMPs, with an emphasis on electrical equipment, public, and personnel safety. Guidehouse has conducted over 12 independent evaluations of POUs across California and is a California Office of Energy Infrastructure Safety ("Energy Safety") designated qualified independent evaluator for the last two years, and as such has conducted six independent evaluations of three CA IOUs.

This Report presents the results of Guidehouse's WMP IE.

2. Evaluation Scope and Approach

Guidehouse completed this evaluation based on industry standard practices, our experience performing independent evaluations of WMPs, our active tracking of wildfire regulatory proceedings, WSAB guidance, and, most importantly, a comparison of the specific criteria in PUC Section 8387(b)(2) to the specific wildfire-related plans outlined in TDPUD's WMP.

2.1 Evaluation Parameters

2.1.1 WMP Requirements

Table 2-1 lists the requirements for the statutory requirements for POUs to address in their WMPs.

Table 2-1 – POU Requirements

PUC Section 8387
(a) Each local publicly owned electric utility and electrical cooperative shall construct, maintain, and operate its electrical lines and equipment in a manner that will minimize the risk of wildfire posed by those electrical lines and equipment.
(b) (1) The local publicly owned electric utility or electrical cooperative shall, before January 1, 2020, prepare a wildfire mitigation plan. After January 1, 2020, a local publicly owned electric utility or electrical cooperative shall prepare a wildfire mitigation plan annually and shall submit the plan to the California Wildfire Safety Advisory Board on or before July 1 of that calendar year. Each local publicly owned electric utility and electrical cooperative shall update its plan annually and submit the update to the California Wildfire Safety Advisory Board by July 1 of each year. At least once every three years, the submission shall be a comprehensive revision of the plan.
(2) The wildfire mitigation plan shall consider as necessary, at minimum, all of the following:
(A) An accounting of the responsibilities of persons responsible for executing the plan.
(B) The objectives of the wildfire mitigation plan.
(C) A description of the preventive strategies and programs to be adopted by the local publicly owned electric utility or electrical cooperative to minimize the risk of its electrical lines and equipment causing catastrophic wildfires, including consideration of dynamic climate change risks.
(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.
(E) A discussion of how the application of previously identified metrics to previous wildfire mitigation plan performances has informed the wildfire mitigation plan.
(F) Protocols for disabling reclosers and deenergizing portions of the electrical distribution system that consider the associated impacts on public safety, as well as protocols related to mitigating the public safety impacts of those protocols, including impacts on critical first responders and on health and communication infrastructure.
(G) Appropriate and feasible procedures for notifying a customer who may be impacted by the deenergizing 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.
(H) Plans for vegetation management.
(I) Plans for inspections of the local publicly owned electric utility's or electrical cooperative's electrical infrastructure.

(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 topographic and climatological risk factors throughout the different parts of the local publicly owned electric utility's or electrical cooperative's service territory.
(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 district based on new information or changes to the environment.
(L) A methodology for identifying and presenting enterprise wide safety risk and wildfire-related risk.
(M) A statement of how the local publicly owned electric utility or electrical cooperative will restore service after a wildfire.
(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.
(3) The local publicly owned electric utility or electrical cooperative shall, on or before January 1, 2020, and not less than annually thereafter, present its wildfire mitigation plan in an appropriately noticed public meeting. The local publicly owned electric utility or electrical cooperative shall accept comments on its wildfire mitigation plan from the public, other local and state agencies, and interested parties, and shall verify that the wildfire mitigation plan complies with all applicable rules, regulations, and standards, as appropriate.
(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.

2.1.2 Industry Knowledge and Regulatory Proceedings

The state's priority towards abating future catastrophic wildfire events is demonstrated through aggressive measures, directing utilities to enhance their protocols for fire prevention, public communications, and response. That collection of information is presented in a comprehensive WMP. Guidehouse tracks state proceedings and routinely advises, assesses, and guides utility wildfire mitigation efforts. Accordingly, we reviewed TDPUD's WMP against the provisions in PUC § 8387 and relative to its risk profile which includes, but is not limited to, its topography, climate, assets, and structure.

2.2 Evaluation Approach

Guidehouse assessed the comprehensiveness of the plan against the applicable regulations to determine whether TDPUD meets the standard set forth in PUC § 8387(c).

2.2.1 Statutory Compliance

Guidehouse sought to determine compliance with the provisional requirements laid out in SB901 as codified in PUC Section 8387. The WMP's alignment with the statutory requirement is presented in Appendix A. TDPUD's mitigation measures are not required to exceed the statutory requirements.

2.2.2 Industry Wildfire Mitigation Practices Comparison

Guidehouse's understanding of an effective WMP draws on comparisons from existing WMPs and industry practices, WSAB guidance, risk profile, and mitigation strategy. This mitigation strategy analysis is visually summarized in Figure 2-1.

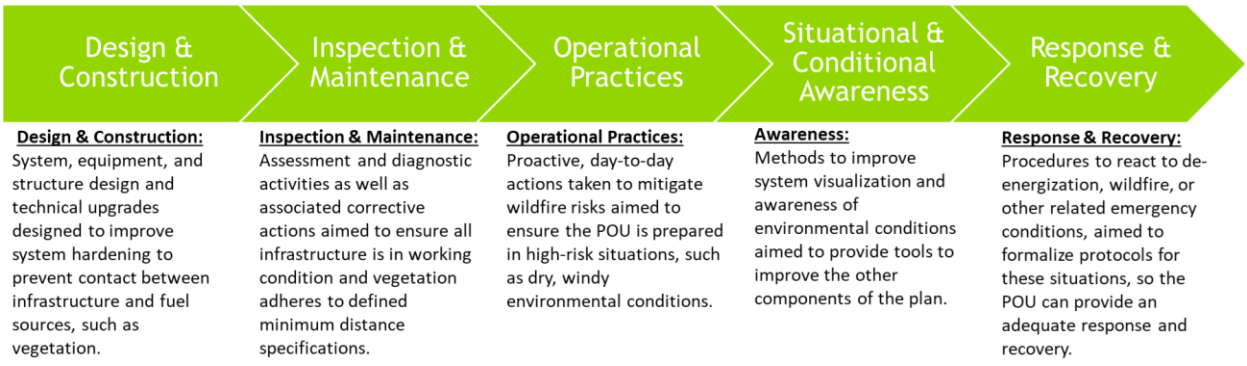

Figure 2-1 – Mitigation Strategy Overview

These critical elements are evaluated as part of Guidehouse's review of the comprehensiveness of TDPUD's WMP. This evaluation includes a consideration that not all of these strategies are necessarily present in or applicable to TDPUD's WMP, due to TDPUD's inherent risk, size, location, and operational characteristics.

3. TDPUD WMP Elements

Guidehouse reviewed the WMP elements to determine whether the activities achieve the objective of WMP "comprehensiveness" of PUC Section 8387. This determination incorporates individual elements as well as underlying data sources that further describe data collection methodologies and implementation procedures to ensure measures are carried out and tracked.

In this section, we review the WMP's elements and their purpose relative to the development and successful execution of the WMP. A table comparing each subsection of PUC Section 8387 to the significant sections of the WMP can be found in Appendix A.

3.1 Responsibilities of Persons Responsible for Executing the Plan[2]

TDPUD utilizes a special district Board/General Manager reporting hierarchy. The Board is responsible for the 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. The General Manager operates as the chief executive and provides direction and management to all TDPUD staff. In addition to the General Manager TDPUD has an Electric Utility Director/Assistant General Manager, a Public Information Officer/Strategic Affairs Director, an Electrical Operations Manager, and an Electric Engineering Manager.

The Public Information Officer/Strategic Affairs Director serves as the liaison to customers and outside agencies. The Electrical Utility Director/Assistant General Manager has overall functional management of the electric utility and provides day-to-day oversight of the electric utility. The Electric Operations Manager oversees the daily electric utility operations, including construction, maintenance, energy control, fleet, vegetation management, and other ancillary daily duties. Finally, the Electrical Engineering Manager oversees the design/engineering tasks associated with distribution system modifications and development/maintenance of material specifications. This level of assignment is appropriate for a utility the size of TDPUD.

3.2 Objectives of the Plan[3]

The objectives of TDPUD's WMP are described in Section II and include:

- Minimizing Sources of Ignition – Primary
- Resiliency of the Electrical Grid – Secondary
- Minimizing Unnecessary or Ineffective Actions – Tertiary

TDPUD provides more detail to each of these objectives in the subsections within Section 2 associated with each objective.

3.3 Wildfire Prevention Strategies[4]

Section V provides an overview of TDPUD's preventative strategies and programs for preventing wildfire. These programs include, weather monitoring, design and construction

[2] PUC Section 8387(2)(A)
[3] PUC Section 8387(2)(B)
[4] PUC Section 8387(2)(C)

standards, vegetation management, inspections, workforce training, recloser policy, and de-energization.

Section V.C, Design and Construction Standards, addresses of all the system hardening programs that TDPUD is currently undergoing to reduce the risk of utility ignited wildfire in its service territory. These programs include:

- Pole Replacement – An ongoing program that prioritizes poles for replacement based on three factors of inspection (age, condition, impact). All pole scores are recorded in TDPUD's GIS system.

- Non-expulsion Current Limiting Fuses – An ongoing program to install non-expulsion or current limiting fuses in high fire risk areas.

- FR3 Insulating Fluid – In 2008 TDPUD switch exclusively to FR3 dielectric fluid, and it is now a requirement for all new oil-insulated equipment. FR3 has an extremely high flash point that is more than two times that of its traditional mineral oil counterparts.

- Covered Primary Jumper Wire – TDPUD is implementing the use of covered (i.e., tree wire) primary jumpers wire in place of bare wire. The covered primary jumper wire helps to minimize unintentional contact with wildlife and windblown debris, reducing wildfire risk.

- Proposed Service Requirements – Since 1995 TDPUD has required all new or reconstructed developments take service via an underground system. TDPUD has also outlined considerations in Section V.C Proposed Service Requirements that provide more detail to the requirement based upon project or instillation.

- Tree Attachment (Legacy Attachments) – TDPUD does not allow new tree attachment in its system. When a legacy tree attachment fails or is damaged a new utility pole is installed and used for securing the secondary attachment. TDPUD's contract tree crew clear tree attachment areas and perform an inspection as part of the clearing process. They then notify TDPUD staff of any hazard for immediate mitigation.

- Advance Metering Infrastructure (AMI) – TDPUD has invested in AMI across the entire service territory. AMI is an integrated system that enables two-way communication between utilities and customers. It also allows TDPUD to automatically send outage notifications to OMS, and to identify and isolate outages.

- Outage Management System (OMS) – TDPUD has invested in a new OMS system in 2022. TDPUD's OMS automatically captures outage information in real time and allows TDPUD to respond to electrical outages and system hazards in a timely manner.

- Supervisory Control and Data Acquisition – TDPUD has invested in a robust fiber-based SCADA system that allows staff to operate the substation reclosures remotely. TDPUD is investing an upgrade that would allow for SCADA control of all critical field reclosures.

Overall TDPUD has a very detailed and robust preventative strategies, and programs in place for preventing wildfires that align with industry best practices.

3.4 Metrics[5]

In section VIII.A, TDPUD describes how it tracks three metrics to measure the performance of its WMP. These metrics are:

- Fire Ignitions
- Wire-Down Events
- Outage Causes

For each of these metrics TDPUD provides detail to how it evaluates the metric and outlines the reporting requirements associated with each. TDPUD also provides for Fire Ignitions and Outage Causes the 2022 metric totals, noting zero fires ignitions caused by TDPUD occurred and 309 outages were recorded.

3.5 Disabling Reclosers[6]

TDPUD disables all automatic reclosing function for all automatic circuit reclosures (ACRs or reclosers) on its system during fire season. Fire season is typically defined as June 1 through October 31 but may be modified due to weather conditions and fire danger. With the reclosers disabled (one-shot operation), there will be no reclosings of circuits during fire season which greatly reduces the risk of vegetation ignition.

TDPUD notes it will not allow reclosing of a line during fire season until the cause of the trip is identified and cleared, or the line has been fully visually inspected and found clear.

3.6 De-Energizing Protocols[7]

Section V.H discusses TDPUD's evaluation of the efficacy of a PSPS type of de-energization program. This evaluation included coordination with sister POUs, TDPUD water utility staff and in communication with local public agencies and involved a list of major considerations that can be found in the section.

Based on the evaluation, TDPUD determined that the risks of implementing a PSPS-type program outweigh the chances that TDPUD's electric overhead distribution system would cause a catastrophic wildfire. However, TDPUD discusses that, on a case-by-case basis, it will continue to consider de-energizing a portion of its system in response to a known public safety issue or in response to a request from an outside emergency agency.

TDPUD also provides detail regarding its dependence on NV Energy as its transmission provider. NV Energy has its own pre-emptive de-energization program called Public Safety Outage Management (PSOM) and has included TDPUD's service territory in its program. NV Energy and TDPUD have held a series of meetings to fully understand the conditions in which NV Energy would de-energize transmission assets and develop communication protocol. These protocols outline NV Energy notification to TDPUD as well as TDPUDs notification to key agencies and customers. These meetings will continue in 2023.

[5] PUC Section 8387(2)(D) and PUC Section 8387(2)(E)
[6] PUC Section 8387(2)(F)
[7] PUC Section 8387(2)(F)

3.7 Event Communication[8]

Section V.H Customer Notification Protocol describes TDPUD's development and maintenance of a list of critical agencies/emergency responders and its commitment to make direct communications, should NV Energy announce a potential PSOM event. Following receipt of notification of possible PSOM TDPUD staff will contact the list via phone, text, and/or email using all channels until contact and message receipt are confirmed.

TDPUD also details how all customers are notified of wildfire alerts, related outages, potential PSOM outages, relay setting outages, and re-energization using the contact information in their customer accounts as well as through individual alerts via a TDPUD's customer engagement tool (MyAccount/SmartHub). Customer notification can occur via a variety of channels included text and email. TDPUD also makes available outage information via its website and real time outage maps, and in significant outage events social media. Nixle posts will occur in instances of major transmission and system wide outages.

3.8 Vegetation Management[9]

Section V.D and Appendix D describing how TDPUD's vegetation management program meets (1) Public Resources Code section 4292; (2) Public Resources Code section 4293; (3) GO 95 Rule 35; and (4) the GO 95 Appendix E Guidelines to Rule 35. TDPUD's vegetation management program currently on a 5-year tree trimming cycle and is well designed to reduce wildfire hazards.

TDPUD also details in Section V.D how all contractors and internal staff are equipped with mobile devices to record location and dates of vegetation management activities. These activities along with tree trimming are recorded in TDPUD's GIS and are used for reporting yearly progress and planning future routes and locations. TDPUD also records customer calls regarding concerns for potential tree hazards and can generate service orders for crews to respond, evaluate and record the outcome of the reported hazard.

3.9 Infrastructure Inspections[10]

Section V.E describes TDPUD's Inspection program, including that it meets the minimum inspections requirements and cycles included in CPUC GO 165, Table 1 and CPUC GO 95 Rule 18. TDPUD additionally inspects its HFTD facilities on a more frequent basis that its non-HTFD facilities.

TDPUD's GIS contains records for inspections performed on the electrical system as part of its GO Inspection Program. The TDPUD staff performing the inspections are equipped with mobile devices that allow them to document the inspection as well as report any potential issues needing correction. TDPUD has also moved to using GIS to capture potential tree hazard associated with electrical lines and equipment.

[8] PUC Section 8387(2)(G)
[9] PUC Section 8387(2)(H)
[10] PUC Section 8387(2)(I)

TDPUD set's a goal annually to perform all inspections prior to June 1, the historical beginning of fire season for its service territory, but it will adjust the timeline if conditions, such as drought, require it.

3.10 Risk Assessment and Drivers[11]

Section IV describes TDPUD's risks and drivers associated with Design, Construction Operation and Maintenance (IV.A), Topographical and Climatological Risk Factors (IV.B), and Enterprise-Wide Safety Risk (IV.C). These three categories are summarized in detail below.

Design, Construction, Operation, and Maintenance

TDPUD states that it designs and constructs its electrical facilities to meet or exceed the relevant federal, state, or industry standards. TDPUD also identifies the following risk drivers within its service territory:

- Expulsion fuses still in use in portions of the TDPUD service territory
- Utility poles reaching the end of the service life
- Combustible poles in the High Fire Threat District (HFTD)
- Limited staff and equipment
- 134.7 miles of overhead distribution wires; 64% of overhead wires are in a HFTD
- Overhead circuits in areas with poor road access

Topographical and Climatological

TDPUD's service territory is located between 6,000 and 8,000 feet of elevation on the eastern slope of the Sierra Nevada Mountain Chain near Lake Tahoe. TDPUD experiences the most severe weather during the winter months where severe storms can bring damaging levels of snow or rain and extreme winds sometimes exceeding 80 mph. During fire season, TDPUD experiences fast-moving, low-pressure systems that may bring high winds and dry lighting. TDPUD also provides climate change data that highlights changes over the last 80 years as well as the projected future weather changes by 2050 and 2080 based off current state analysis. TDPUD also identifies the following risk drivers:

- 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; 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.

Enterprise-Wide Safety Risk

[11] PUC Section 8387(2)(J)(i); PUC Section 8387(2)(J)(ii); PUC Section 8387(2)(L)

TDPUD states that it uses a methodical approach to address/mitigate enterprise-wide safety risk. According to TDPUD, "this approach uses both risk assessment and intimate knowledge of its operational practices" to analyze the safety risks. TDPUD evaluates the following as part of its risk assessment:

- Pole Replacement Ranking Tool (Exhibit C)
- Unavailability of NV Energy's transmission because of an outage or planned PSOM de-energization event due to existing wildfire
- Interconnection and distribution interconnection
- Unavailability of California Pacific Electric Company/Liberty Utilities' alternate distribution feed
- Loss of internet connectivity
- Loss of radio communications
- Loss of cellular communications
- Impacts of system de-energization
- Impacted roadways limiting movement of personnel and equipment

3.11 Asset Overview and Service Territory[12]

Section I of the WMP describes in detail the make-up of TDPUD's service territory. TDPUD is a transmission-dependent utility connected to NV Energy's transmission system and is located high on the eastern slope of the Sierra Nevada. TDPUD is not directly interconnected with the California transmission system nor to any California utility in a meaningful way. 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 5,490 poles in its service territory. TDPUD also completed the following table which provides numerical details of its service territory and the assets within it.

Table 3-1 – Truckee Donner Context Setting Table

Utility Name	Truckee Donner Public Utility District (TDPUD)	
Service Territory Size	45.5 square miles	
Owned Assets	☒ Transmission ☒ Distribution ☐ Generation	
Number of CustomersServed	14,648 customer accounts	
Population Within ServiceTerritory	17,131 people	
Customer Class Makeup	*Number of Accounts*	*Share of Total Load (MWh)*

[12] PUC Section 8387(2)(K)

	88.65% Residential 2.07% Government 0% Agricultural 9.23% Small/Medium Business .05% Commercial/Industrial	59.96% Residential 16.64% Government 0% Agricultural 20.11% Small/Medium Business 3.29% Commercial/Industrial
Service Territory	.039% Agriculture 2.641% Barren/Other 54.95% Conifer Forest 0% Conifer Woodland	
Location/Topography[1]	0% Desert .75% Hardwood Forest 0% Hardwood Woodland 2.99% Herbaceous 26.92% Shrub 7.66% Urban 4.11% Water	
Service Territory Wildland Urban Interface[13] **(based on total area)**	29.56% Wildland Urban Interface19.90% Wildland Urban Intermix	
Percent of Service Territory in CPUC High FireThreat Districts (based on total area)	☒ Includes maps (Appendix A) Tier 2: 55.07% Tier 3: 27.15%	
Prevailing Wind Directionsand Speeds by Season	☒ Includes maps (Appendix B) Prevailing winds were taken from both the Global Winds Atlas and Wind Rosedata from archived records and assembled by Iowa State University. Gradientwinds are generally out of the south/southwest shifting to west/southwest inthe 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	

[13] 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).

	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
Miles of Owned Lines Underground and/or Overhead	Overhead Dist.: 134.7 miles Overhead Trans.: 0.3 miles Underground Dist.: 97.6 miles Underground Trans.: 0 miles
	Explanatory Note 1 - *Methodology for Measuring "Miles":* [e.g., circuit miles, line miles.] Data from GIS system
	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
Percent of Owned Lines inCPUC High Fire Threat Districts	*Overhead Distribution Lines as % of Total Distribution System(Inside and Outside Service Territory)*
	Tier 2: 23.02% Tier 3: 40.59%

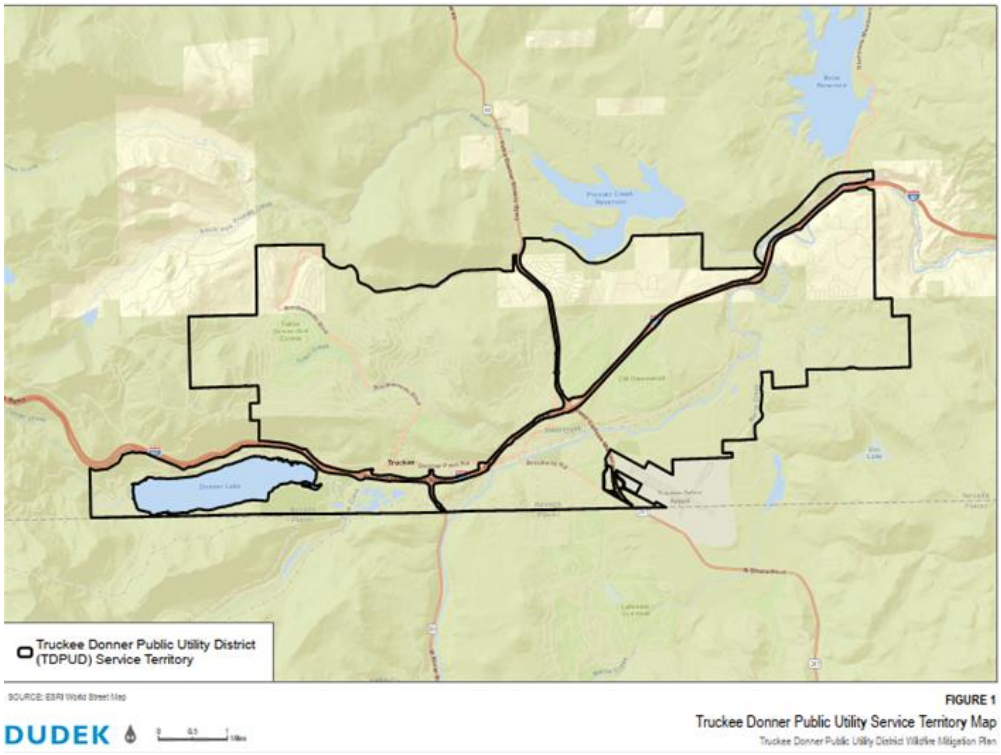

Figure 3-1 – Service Territory Map

3.12 Restoration[14]

Section VII Restoration of Service, details how TDPUD does not have a PSPS-type operational practice but it may de-energize a portion or all of its overhead circuit system for three specific situations. Those situations are:

- If an outage emergency management / emergency response agency requests a power shutdown.
- If TDPUD elects to de-energize segments of its system due to extreme weather or other safety considerations.
- As a result of a NV Energy PSOM event or transmission outage.

TDPUD also noted that following an outage during wildfire season, staff will patrol the affected portion of the system before the system is re-energized, including following a trip of a recloser that is set to one-shot mode for the fire season.

While TDPUD does not have a PSPS-type operational practice they do participate with California Emergency Management, and California Utilities Emergency Association. Additionally, with NV Energy being the primary provider of power to the TDPUD system, TDPUD staff have worked in close collaboration with NV Energy staff to develop a re-energization protocol as well as communication protocol and general best practice inspection and re-energizations practices.

[14] PUC Section 8387(2)(M)

Both TDPUD and NV Energy are committed to restoring power to its customers as quickly and safely as possible.

3.13 Monitoring and Auditing the Plan[15]

Section VIII.C describes how the WMP is monitored and audited. Specifically, the WMP states that TDPUD evaluated the programs described in its WMP on an ongoing basis. The progress data and data regarding the metrics plus outage information are reviewed by the Electrical Utility Director. On a semi-annual basis the Electrical Utility Director will 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. TDPUD also presents the WMP to its Board of Directors for review on an annual basis.

3.14 Annual Review[16]

Section VIII.D also describes TDPUD's process to annually review and update the WMP following the identification of deficiencies or recommendations.

[15] PUC Section 8387(2)(N)(i) and PUC Section 8387(2)(N)(ii)
[16] PUC Section 8387(2)(N)(iii)

4. Fire Industry Practices Comparison

In consideration of industry-accepted and demonstrated mitigation measures, Guidehouse is providing a comparison against approved California utility WMPs, where comparable to TDPUD by service territory, risk profile, and equipment within the HFTD. This comparison is separate and additional to the regulatory evaluation required by PUC Section 8387(c). The complete comparison matrix with supporting information is provided in Table 4-1 – Industry Practice Strategy Comparison Matrix. Five areas have been highlighted for detailed discussion of the applicability and efficacy of the proposed WMP strategy.

4.1 Best Practice Comparison

The following describes the scoring determinations of the benchmarking practice. Guidehouse weighed strategies that have been demonstrated globally as well as from those proposed by state utilities. As expressed in Figure 4-1, this benchmarking practice supports efforts to determine the Plan's comprehensiveness when investigating the mitigation measures proposed in TDPUD's WMP. This assessment is designed to confirm prudent measures as proposed by TDPUD and did not result in any material findings that would result in non-compliance or lack of comprehensive WMP elements.

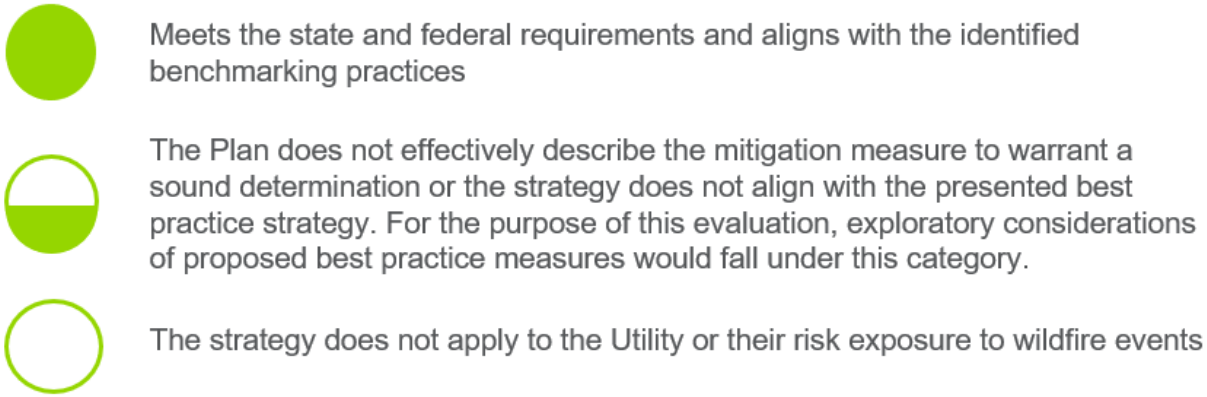

Figure 4-1 – Determinations for Benchmarking

The selected strategies represented in Table 4-1 include both statutory requirements that exist as industry standards for POUs as well as accepted industry practices within the state.

Table 4-1 – Industry Practice Strategy Comparison Matrix

Situational Awareness / Weather Conditions					
Identified Practice Strategy	**Mitigation Rationale**	**TDPUD Applicability**	**Plan Elements**	**Determination**	
Real-time situational awareness of conditions that lead to high risk of wildfires requires a multi-faceted approach including but not limited to coordination with local public agencies, weather monitoring, strategically placed high visibility cameras and other early warning systems.	Having access to internal and external mechanisms to track fire conditions (high wind, dry conditions, high heat), will aid in responding to and preventing potential fires by enacting related protocols during fire watch conditions	Especially in the HFTD, weather stations and cameras would allow TDPUD personnel to have access to real-time monitoring of these areas	TDPUD monitors current and forecasted weather data from a variety of sources including: US National Weather Service, US Forest Service Wildland Fire Assessment System, Northern California Geographic Area Coordination Center, and Local weather data from NV Energy and Liberty Utilities		TDPUD may also want to consider following the National Fire Danger Rating System (NFDRS) as an additional tool to monitor fuel conditions.
Cameras with night vision mode capability atop of electrical structures	Visual inspections can be enhanced using cameras with high definition and night vision capabilities. This measure improves response times in addressing risk incidents and de-energization	Remote cameras, especially those with infrared can help TDPUD and public safety partners quickly identify ignitions before they become unmanageable wildfires.	TDPUD does not use or have future plans for remote cameras that may include infrared capabilities.		TDPUD's plan does not include other means of tracking such as leveraging the AlertCA (formerly AlertWildfire) camera network, which already maintains cameras in the Lake Tahoe/Donner regions..

System Hardening / Design & Construction / Operational Practices					
Identified Practice Strategy	**Mitigation Rationale**	**TDPUD Applicability**	**Plan Elements**	**Determination**	
Selective undergrounding of distribution facilities within Tier 2,3.	Selective undergrounding is an effective option for hardening electric facilities for wildfires. The selection criteria can include areas of high tree density, circuits that may be impacted by de-energization, and areas with limited ingress and egress. Often, areas with mountainous terrain are not good candidates for undergrounding of OH lines due rights of way and construction complications	Poles and overhead wires within known areas of high fire severity zones or past wildfires, should be considered for selective undergrounding	TDPUD has 134.7 miles of overhead distribution and 97.6 miles of underground distribution in its service territory. 40.59% of the total distribution assets are overhead lines in Tier 3 with an additional 23.02% in Tier 2. 42.01% of TDPUD's distribution system is underground. TDPUD also continues to recommend underground new or reconstruction developments in its service territory.		TDPUD has an established undergrounding program and has undergrounded a large portion of its distribution system

Replacing bare wires with covered conductors	Covered wire is a well-demonstrated prevention method to sparks / ignitions during severe weather conditions. Several utilities are employing pilot programs of covered wire replacement of distribution lines, prioritizing HFTDs for implementation.	TDPUD has overhead distribution lines in Tier 2 and Tier 3. This area may benefit from additional hardening such as covered wire replacement for existing legacy bare wire.	TDPUD is implementing the use of covered (i.e., tree wire) primary jumper wire in place of 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 wires helps to minimize unintentional contact with wildlife and windblown debris.		TDPUD should continue its program to install covered conductor in high-risk areas, especially those not fit for undergrounding.
New or planned electrical lines (distribution and transmission) that are designed to withstand working loads under the stress above design standards to address high wind speeds	As new capital infrastructure plans are developed, it would be prudent to consider resilient design standards that can withstand sustained winds and gusts that occur during Red Flag Warning periods.	Construction of distribution facilities meet or exceed GO 95 standards. Specifically, TDPUD increases pole strength requirements to meet the GO 95 safety factors.	TDPUD states it meets or exceeds the heavy loading standards of GO 95 due to its elevation. Accordingly, TDPUD has implemented construction standards that are designed to withstand sustained heavy winds.		TDPUD practices align with industry best practices.

Steel or composite poles swapped out for wood poles, at minimum, within HFTDs or fireproofing wooden poles (fire resistant material coating)	When considering pole replacement strategies, when applicable, composite or steel poles can reduce the risk that wood poles present. At minimum, fire retardant material can be coated to temporarily enhance the ability to prevent fire spread or impact the stability of the structure under fire threat.	Poles within known areas of high fire severity zones or past wildfires, should be considered for replacement with more fire resilient materials.	TDPUD's District's construction standards described in the WMP do not include consideration of steel pole or fire-retardant wood poles for construction within Tier 2,3.		As part of its pole replacement program, TDPUD should consider the use of steel or composite poles.
Pole loading assessment, pole intrusive inspection and testing	Carry out programs that address pole loading issues and inspections that would result in remediation to infrastructure.	GO 165 is considered a "best practice" by many public owned utilities. GO 165 Section III A (5) defines "Intrusive" inspection as one involving movement of soil, taking samples for analysis, and/or using more sophisticated diagnostic tools beyond visual inspections or instrument reading.	TDPUD uses its Pole Replacement Ranking tool in addition to performing inspections in accordance with GOs 95 and 165.		TDPUD's pole replacement program uses a mix of factors 1. age, 2. condition, and 3. critical asset to evaluate when a pole should be replaced along with its normal inspections. However, TDPUD replaced only 14 poles identified as high priority replacements in 2022 (92 total poles were replaced including winter storm damage and other work) and the Ranking Tool

					procedure suggests TDPUD should replace 100-180 poles per year to stay current.
Expulsion fuse device change out to current-limiting (non-expulsive) fuses	Traditional fuses pose a fire risk due to the ignited material that can be expelled. Best practices for mitigating this risk is to change out these fuses with non-expulsive fuses. A protective device coordination study achieves an optimum balance between equipment protection and selective isolation that is consistent with the operating requirements of power systems.	HFTDs would benefit from the replacement of traditional fuses with ones that minimize sparks and arcs Electrical systems use fuses and circuit breakers to protect electrical equipment. Equipment failures and other anomalies may cause a short circuit. Risks are reduced within HFTDs when a short circuit impacts only that portion of the system where the failure occurs.	TDPUD evaluated the uses of non-expulsive fuses from 2019-202. Following that period, TDPUD embarked on a program to replace all of its overhead fuses in three years. TDPUD selected Eaton's Cooper Power Systems full-range, current-limiting, dropout Energy Limiting Fuse (ELF) for the pilot project. The ELF fuse has been granted permanent exemption by CAL FIRE from pole		TDPUD's plan to replace all overhead fuses and track their actions through its OMS aligns with industry best practices.

			clearance requirements. However, due to a recall in 2021, and supply chain issues, this program has been delayed and likely will not be complete in 2024. TDPUD expects to resume this effort in 2023.		
Tree attachment removals	This practice involves the removal of electrical infrastructure fastened to trees for infrastructural support but can be a source of ignition. The removal of these legacy devices may reduce electrical spark risk.	TDPUD has numerous legacy tree attachments in its territory.	TDPUD has legacy tree attachment hazard mitigation strategy. All tree attachments are tracked on GIS, all attachments are inspected, trimming is performed around the attachment, and when an existing attachment fails or is damaged, a new pole is installed and used for securing all secondary attachments.		TDPUD's practice of mitigating risks from tree attachments aligns with industry best practice.

Disabling reclosers through blocking reclosing operations (distribution level) in HFTDs during the fire season and/or during Red Flag Warnings issued by the National Weather Service (or as fire risk potential designates)	Disabling reclosing reduces the number of potential ignition events during a fault condition	Reclosing operations should be defined within the Plan as per statute PUC 8387 (b)(2)(F) Operational best practices align with having settings that align with fire potential weather conditions to prevent potential ignition	TDPUD disables reclosers during the fire season (typically June 1 through October 31 but may be extended or shortened due to conditions). During this time, all reclosers are set to one-shot operation. Reclosers that trip during this period will not be closed until the cause of the trip is identified or the line is visually inspected and found clear.		TDPUD's recloser practices during fire season align with utility best practice.
Ground patrol as well as aerial inspection practices	Routine ground patrols are implicit practices in equipment and vegetation inspection protocols. Increasing the frequency, especially in the HFTD, represents an effective preventative measure and ensures the integrity of electrical equipment. Aerial inspections, by way of helicopters, will lead to greater coverage of the service territory and areas	Ground patrols are a required strategy in ensuring safe and reliable delivery of electricity. When access concerns arise, aerial inspections provide better coverage in surveying and inspecting electrical equipment throughout the utility service territory	TDPUD conducts ground patrols as part of its inspection program.		TDPUD's actions are consistent with utility best practices for ground patrols and inspection practices

	adjacent to required clearances				
Wildfire Infrastructure Protection Teams	An internal team to help coordinate efforts to ensure the Plan is being followed as well as coordinating efforts to enhance the Plan's strategies and quality check that activities are being performed and tracked aligning with the Plan	An internal team to prepare and protect physical aspects of the electric system as well as ensure effective mitigation measures are carried out would be a prudent activity to pursue	While TDPUD does not maintain "Wildfire Infrastructure Protection Teams," TDPUD trains all its staff annually on the following: the content of the WMP, proper use and storage of fire extinguishers, required pre-job briefings to discuss ignition potential and environmental conditions, and to identify the closest fire extinguisher.		TDPUD's actions to respond to ignitions are consistent with industry best practices for a utility the size of TDPUD.
Operational activities limitations during the fire season and/or during Red Flag Warnings issued by the National Weather Service (or as fire risk	Establishment of procedures and routine operational practices that limit or curtain operational activities during periods of increased risk within fire threat districts. These procedures and practices provide employee and contractors specific information and instructions	Limiting operational practices may reduce the probability of inadvertent ignitions by utility workers and utility contractors	TDPUD's WMP imposes additional responsibilities and limits certain activities during extreme fire-risk conditions or during Red Flag Warning (RFW) events.		Section V.B Weather Monitoring describes the fire weather conditions from normal to RFW days and the operational measures TDPUD takes to ensure

potential designates)	to improve the reliable and safe operations of electric facilities and mitigate the threat of utility caused inadvertent ignitions.				safety during such conditions.

Vegetation Management					
Identified Practice Strategy	**Mitigation Rationale**	**TDPUD Applicability**	**Plan Elements**	**Determination**	
Routine vegetation management & inspections in accordance with: Public Resources Code (PRC) 4292 & 4393, General Order (GO) 95 Rule 35 and Appendix E, and ANSI A300	State and federal compliance for vegetation management and inspection, as well as California Public Utilities Commission GO 95, which is accepted as industry standard amongst all utilities. (Community and investor owned).	PRC sections 4292 and 4293; GO 95 is required by the CPUC for investor-owned utilities. Public Owned Utilities (POUs) generally follow these guidelines.	TDPUD's WMP and Vegetation Management Program state that they meet or exceed minimum industry standards for PRC 4292, PRC 4293, GO 95 Rule 35 and Guidelines to Rule 35. TDPUD maintains a five-year to a vegetation management cycle but will remove any vegetation hazard spotted by its crews,		TDPUD's actions are consistent with utility best practices for routine vegetation management inspections.

			contractors, or customers as quickly as possible. TDPUD maintains a standalone comprehensive vegetation management plan (last revised May 2022) that complies with these statutes. Guidehouse reviewed the Vegetation Management Plan. All vegetation management activities are recorded on mobile devices and tracked in GIS. TDPUD tracks all vegetation activities including trees trimmed or removed.		
Hazardous tree/vegetation identification and removal protocols and programs	Recording and tagging trees that pose risks to adjacent electrical equipment or are dead/dying are considered prudent efforts for vegetation management practices	Within the HFTD, danger trees could pose a greater potential to catch on fire or contribute to fire spread. Addressing, though identification and surveying, as well as implementing remediation activities will result in further wildfire risk reduction	TDPUD identifies and tracks hazard trees through its inspection program and their removals are tracked in GIS. Customer calls regarding hazard trees are tracked. Hazard trees are removed as quickly as possible. Additionally, TDPUD will seek to remove any dead tree within 200 feet of any HV line will be removed, regardless of ownership.		TDPUD's actions are consistent with utility best practices for hazard tree identification and removal.

Off-Cycle / Call-in vegetation removal or corrective work, especially during the fire season	Off-cycle practices of vegetation inspection and management	Within TDPUD's HFTD, impact trees could pose a greater potential to catch on fire or contribute to fire spread. Addressing, though identification and surveying, as well as implementing remediation activities will result in further wildfire risk reduction	TDPUD identifies and tracks hazard trees through its inspection program and hazard trees and their removals are tracked in GIS. Customer calls regarding hazard trees are tracked and service orders are created for crews to respond to. Hazard trees are removed as quickly as possible.		TDPUD's off-cycle / call-in vegetation removal or corrective work aligns with industry practice

Emergency Response & Recovery				
Identified Practice Strategy	**Mitigation Rationale**	**TDPUD Applicability**	**Plan Elements**	**Determination**

Notify critical facilities and public safety partners, which may include first responders, incident origin law enforcement, acute health care facilities, essential service providers, related governing local and state agencies, adjacent jurisdictions, vulnerable populations, and the Independent System Operator (ISO) (for transmission level de-energization)	Following a sequence of events in contacting public safety partners and impacted community facilities will enable quicker response in reacting to an emergency event (such as a wildfire or de-energization). Utilities should describe their processes to notify critical facilities as it applies to their service territory and impacted communities as well as grid operators.	Notification practices targeting key stakeholders are crucial during emergency events such as storms and wildfires.	TDPUD maintains customer notification protocols to alert customers in case of emergencies, which includes the possibility of NV Energy cutting transmission deliveries through a Public Safety Outage Management (PSOM) activation. This is detailed in Section V.H of the WMP. TDPUD also conducts significant stakeholder outreach which is described in Section VI of the WMP.		TDPUD emergency notification protocols align with utility best practices.
Incident Command Team / Emergency Operations frameworks in the event a de-energization event or wildfire incident occurs	Using the State Emergency Management System (SEMS) framework, which is determined on the Federal Emergency Management Agency (FEMA) structure for incident command protocols will ensure prepared and adequately trained staff to respond in effective communication manners as well as respond to risk events in a	Establishment of Emergency Action Plans between the Electric Department, the City Emergency Operations Center and other City departments assures effective identification, assignment and training for emergency management roles.	TDPUD leverages the California Governor's Office of Emergency Services' Standardized Emergency Management System (SEMS) framework in designing emergency response protocols. A designated team or group of individuals have the ability to relay information to important stakeholders, partners, and customers and make informed decisions during emergency response events. During such events, the Town of Truckee, Nevada County, and Placer		TDPUD follows an emergency operations framework that utilizes utility best practices.

	sequence of effective procedures.		County will lead emergency operations and disaster responses, TDPUD will contribute to these efforts and establish its own Emergency Operations Center.		

5. Results and Discussion

Guidehouse finalized this assessment on May 25, 2023. Over the course of reviewing TDPUD's WMP, discussions with TDPUD staff, and review of supporting documentation, Guidehouse captured takeaways and findings that align the WMP with state laws and effective wildfire measure demonstration for a utility of TDPUD's size and risk profile. TDPUD's WMP appropriately responds to each of the required elements of PUC Section 8387, which is detailed in Appendix A. The following describes the assessment and resulting findings of the WMP's proposed and established mitigation measures as it applies to safe, reliable operation of all electric infrastructure and wildfire prevention and response.

Report Conclusions

After internal review of the latest version of the WMP and associated data collection products, Guidehouse concludes this Report with the following:

- TDPUD's WMP aligns appropriately with PUC Section 8387 and includes all required elements.[17]

- TDPUD's WMP is comprehensive as described through this Report in accordance with PUC Section 8387.

[17] Following acceptance of this Report, TDPUD will post the Report and results online for public view. The Report is scheduled for presentation to the City Council at a public meeting in June 2023. Accomplishing these follow-up tasks will meet all required statutory provisions up until presenting the final WMP to the City Council.

Appendix A. Statutory Compliance Matrix

Required Statutory Element	Plan Section Reference(s)	TDPUD Plan Elements *(Summarized)*	Meets Section Elements *(Determination)*
(a) Each local publicly owned electric utility and electrical cooperative shall construct, maintain, and operate its electrical lines and equipment in a manner that will minimize the risk of wildfire posed by those electrical lines and equipment.			
(b) (1) The local publicly owned electric utility or electrical cooperative shall, before January 1, 2020, prepare a wildfire mitigation plan. After January 1, 2020, a local publicly owned electric utility or electrical cooperative shall prepare a wildfire mitigation plan annually and shall submit the plan to the California Wildfire Safety Advisory Board on or before July 1 of that calendar year. Each local publicly owned electric utility and electrical cooperative shall update its plan annually and submit the update to the California Wildfire Safety Advisory Board by July 1 of each year. At least once every three years, the submission shall be a comprehensive revision of the plan.			
(2) The wildfire mitigation plan shall consider as necessary, at minimum, all of the following:			
(A) An accounting of the responsibilities of persons responsible for executing the plan.	**Section III.A**	TDPUD has a Roles and Responsibilities section in its plan with descriptions of the roles of the General Manager (Chief Executive), Public Information Officer, Electric Utility Director/Assistant General Manager, Electrical Operations Manager, and the Electrical Engineering Manager.	**Yes**

(B) The objectives of the wildfire mitigation plan.	**Section II**	TDPUD has clearly stated objectives in its plan. 1) Minimize Sources of Ignitions; 2) Resiliency of the Electric Grid; 3) Minimizing Unnecessary or Ineffective Action.	**Yes**
(C) A description of the preventive strategies and programs to be adopted by the local publicly owned electric utility or electrical cooperative to minimize the risk of its electrical lines and equipment causing catastrophic wildfires, including consideration of dynamic climate change risks.	**Section V**	Section 5 provides a detailed description of TDPUD's preventative strategies with specific subsections on weather monitoring, design and construction, vegetation management, inspections, workforce training, recloser policies, and de-energization.	**Yes**
(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 VIII.A**	TDPUD tracks three metrics that serve as leading indicators of wildfire and associated risks. These metrics are used by TDPUD to provide insight into TDPUD's performance and dynamic conditions across TDPUD's service area.	**Yes**
(E) A discussion of how the application of previously identified metrics to previous wildfire mitigation plan performances has informed the wildfire mitigation plan.	**Section VIII.B & VIII.D**	TDPUD discusses in detail how the application of previously identified metrics to previous wildfire mitigation plan performances has informed the wildfire mitigation plan. As well as monitoring and correcting deficiencies that may be identified.	**Yes**
(F) Protocols for disabling reclosers and deenergizing portions of the electrical distribution system that consider the associated impacts on public safety, as well as protocols related to mitigating the public safety impacts of those protocols, including impacts on critical first responders and on health and communication infrastructure.	**Section V.G & V.H**	TDPUD discusses how its disables automatic reclosing function during fire season. TDPUD discusses de-energization in section 5.8. TDPUD has evaluated in coordination with neighboring POUs, TDPUD water staff, and in communication with local agencies, the efficacy of a PSPS program. TDPUD does not have a PSPS plan but will continue to consider de-energization in response to know public safety issue. TDPUD attends NV Energy meetings to understand instances when NVE would implement PSOM and how they will go about contacting TDPUD, and TDPUD will proceed with notifying their appropriate agencies.	**Yes**

(G) Appropriate and feasible procedures for notifying a customer who may be impacted by the deenergizing 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 V.H Customer Notification Protocols**	TDPUD has developed a list of critical agencies/emergency responders should NV Energy announce a PSOM.	**Yes**
(H) Plans for vegetation management.	**Section V.D**	TDPUD details its vegetation management program in its WMP. This program includes right of way clearing to 20 feet on all sides of utility poles, removal of any dead trees within 200 feet of HV lines, and hazard tree removal. TDPUD records all trimming activity in its GIS and trims all vegetation on a 5-year cycle	**Yes**
(I) Plans for inspections of the local publicly owned electric utility's or electrical cooperative's electrical infrastructure.	**Section V.E**	TDPUD's WMP states that it meets or exceeds the inspection cycles and requirements provided in GO 95 and 165.	**Yes**
(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:	**Section IV**	TDPUD's WMP includes a assessment of risk and risk drivers and addresses the topics of design, operation, and construction, as well as topographic and climatological risk factors.	**Yes**
(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.	**Section IV.A**	TDPUD identifies seven risk drivers associated with Design, Construction, Operation, and Maintenance.	**Yes**
(ii) Particular risks and risk drivers associated with topographic and climatological risk factors throughout the different parts of the local publicly owned electric utility's or electrical cooperative's service territory.	**Section IV.B**	TDPUD discusses the risks and risk drivers associated with its climate/weather, topography, and vegetation and applies those to a detailed analysis of its service territory.	**Yes**

(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 district based on new information or changes to the environment.	**Section IV.D & V.A**	TDPUD does not recommend changes to the CPUC state-wide Fire Threat Map. TDPUD, for the purpose of its WMP, treats its entire service territory as HFTD Tier 3 (Extreme Fire Risk).	**Yes**
(L) A methodology for identifying and presenting enterprise wide safety risk and wildfire-related risk.	**Section IV.C**	TDPUD uses a methodical approach to address/mitigate enterprise safety risk that utilizes both risk assessment and intimate knowledge of its operational practices.	**Yes**
(M) A statement of how the local publicly owned electric utility or electrical cooperative will restore service after a wildfire.	**Section VII**	TDPUD's WMP provides a statement of how it plans to restore service after a de-energization, including a discussion of efforts to inspect the condition of the system prior to energization during wildfire season.	**Yes**
(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.	**Section VIII.C, VIII.F**	TDPUD states it evaluates its WMP on an ongoing basis. The Electrical Utility Director will semi-annually update the General Manager regarding implementation efforts. Board of Director review of the WMP occurs annual in a public setting with agenda material.	**Yes**
(ii) Identify any deficiencies in the wildfire mitigation plan or its implementation, and correct those deficiencies.	**Section VIII.D**	TDPUD has stated the Electric Utility Director is responsible for spearheading deficiency efforts.	**Yes**
(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 VIII.E**	TDPUD states it conduct ongoing tracking and annual review of inspection findings. Electrical Operations Manager is responsible for the VMP.	**Yes**

(3) The local publicly owned electric utility or electrical cooperative shall, on or before January 1, 2020, and not less than annually thereafter, present its wildfire mitigation plan in an appropriately noticed public meeting. The local publicly owned electric utility or electrical cooperative shall accept comments on its wildfire mitigation plan from the public, other local and state agencies, and interested parties, and shall verify that the wildfire mitigation plan complies with all applicable rules, regulations, and standards, as appropriate.	**Section I.D & IX**	TDPUD will presents its WMP to the Board at an annual meeting that are open to the public. The TDPUD WMP is either adopted by vote following a period for public comment or is returned to TDPUD for revision. The final adoption of the 2023 WMP by the Board is anticipated on June 7, 2023.	**Yes**
(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 VIII.F**	TDPUD contracted with Guidehouse Consulting, Inc. to perform an independent evaluation of its WMP. Qualifications are described in Section 1.	**Yes**