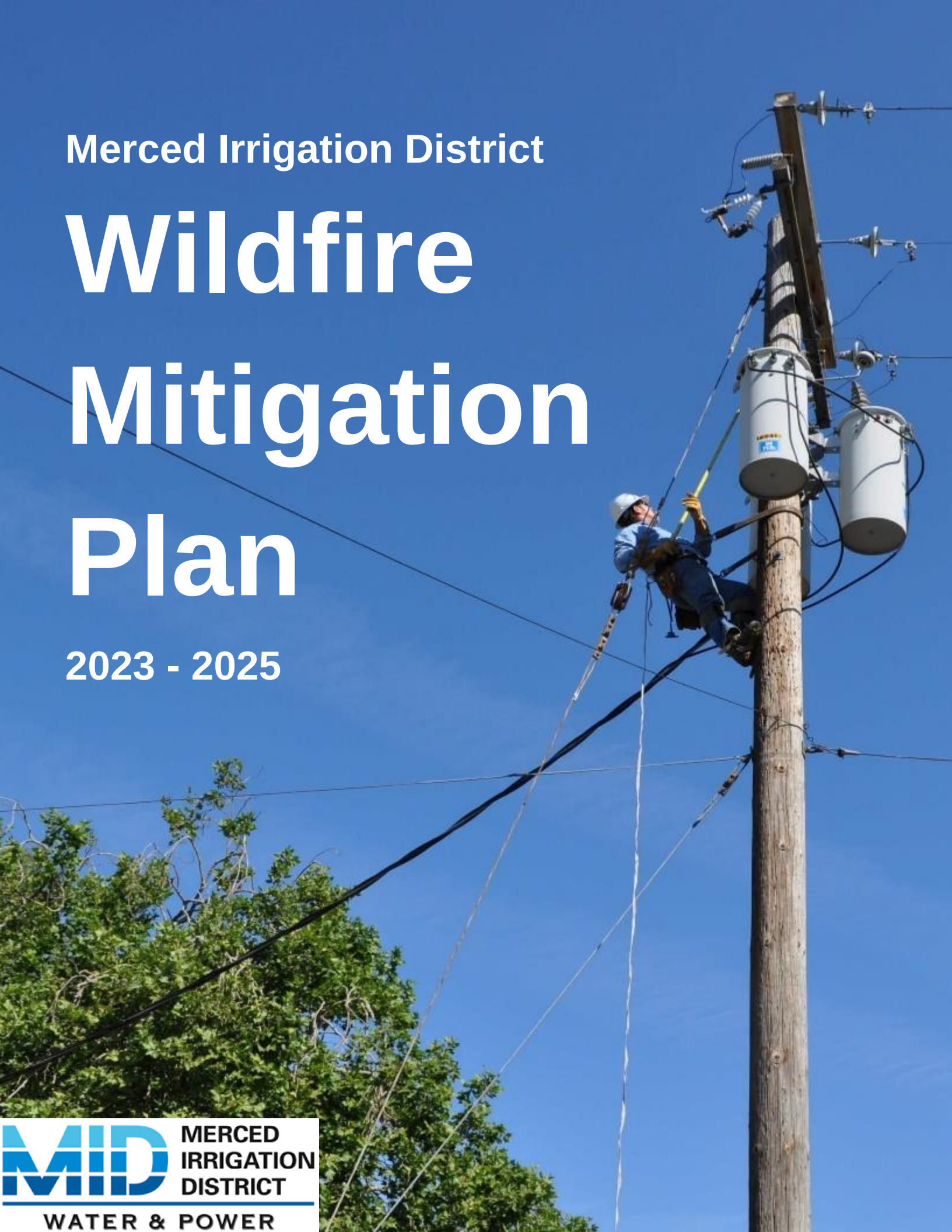
Merced Irrigation District

Wildfire Mitigation Plan

2023 - 2025



MERCED IRRIGATION DISTRICT
WATER & POWER

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1. INTRODUCTION

The Merced Irrigation District's (MEID) overarching goal is to provide its local community with safe, reliable, and economical electric service. To meet this goal and in compliance with California Public Utilities Code (PUC) § 8387(a), MEID constructs, maintains, and operates its electrical lines and equipment in a manner that will minimize the risk of wildfire posed by those electrical lines and equipment and improve resiliency and reliability of the overall MEID electrical system. This goal is supported throughout all levels of the MEID organization.

In accordance with PUC § 8387(b)(1), MEID hereby submits its 2023-2025 comprehensive Wildfire Mitigation Plan (WMP or Plan) whose primary purpose is to describe MEID's programs and initiatives aimed on reducing the risk of utility owned and operated facilities being the origin or contributing source for a catastrophic wildfire. As detailed in Table 1, Context Setting Table, MEID does not own or operate any facilities, transmission nor distribution, within or abutting the California Public Utilities Commission (CPUC) defined High Fire Threat District (HFTD), and the majority of the MEID distribution system is of underground construction. The HFTD is described in Section 5.4.

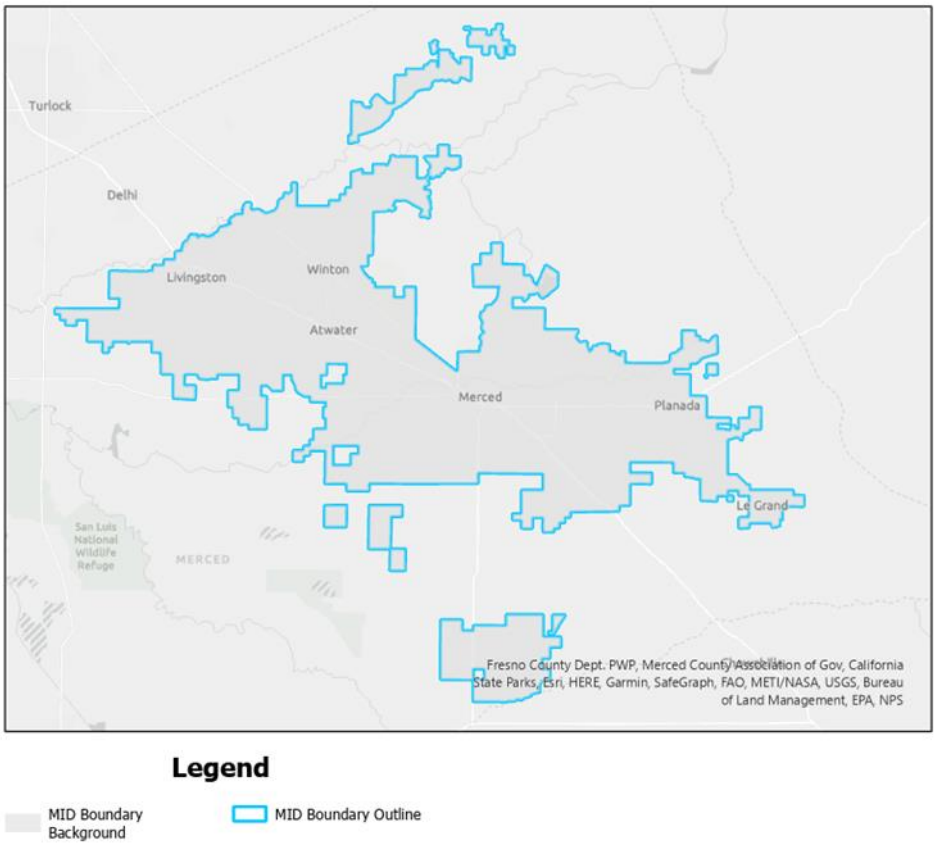
MEID is committed to building, maintaining, and operating a safe, reliable, and more resilient electrical grid. MEID's 2023 WMP establishes a new baseline for its Plan, in that MEID has no facilities in or abutting the HFTD and therefore pose no risk of their facilities being the origin or contributing source for a catastrophic wildfire originating in the HFTD. Additionally, no MEID customers are at risk of an interruption from a MEID-initiated preemptive de-energization[1] or one initiated by a neighboring utility. MEID complies with all federal, state, and regional regulations as they relate to the construction, operation, and maintenance of its system-wide transmission, distribution, and substation assets.

[1] Also commonly referred to as Public Safety Power Shutoff (PSPS) events

2. UTILITY OVERVIEW AND CONTEXT SETTING TABLE

Established in 1919, MEID is one of only four irrigation districts in California that also provides retail electric energy to homes, farms, and businesses. MEID's service territory is located within California's San Joaquin Valley in Merced County.

Figure 1: MEID Service Territory Map



MEID is a Publicly Owned Utility (POU), governed as a special district by a locally elected five-member board of directors under the provisions of the California Water Code. Between 1919 and 1996, Merced Irrigation District expanded its water storage and delivery infrastructure, developed hydroelectric power generation capabilities, and implemented various conservation and water management initiatives to support agricultural and community needs. MEID started selling retail electric power to its first customer in 1996 and has now grown to provide safe and reliable electric power to approximately 13,000 customer accounts (about 185,000 people) in the communities of Merced, Livingston, Winton, and Atwater.

MEID owns and operates transmission lines, distribution lines, substations, and hydro generation assets. All MEID electrical facilities are located outside the HFTD designated in the CPUC Fire Threat Map as shown in Figure 3, CPUC High Fire-Threat District Map. Additionally, all the MEID electrical assets are located within a Local Responsibility Area (LRA) which are areas of the state in which the financial responsibility of preventing and suppressing fires is the primary responsibility of a city, county, city and county, or district.

All MEID's service territory is designated as "non-fuel" or "moderate" in the California Department of Forestry and Fire Protection's (CAL FIRE) Fire and Resource Assessment Program (FRAP) Fire Threat Map. Based on a review of local fire risk drivers and historical fires within the MEID service territory, MEID has determined that its electrical lines and equipment do not pose a risk of being the origin or contributing source for the ignition of a catastrophic wildfire. Most of MEID's service territory consists of agricultural, urban, and herbaceous topography, as detailed in Table 1, Context Setting Table.

In its role as a utility, MEID meets or exceeds all design, construction, operation, and maintenance standards that reduce risks associated with its system. Although MEID has no assets in the HFTD this WMP describes the safety-related measures MEID follows to reduce its overall risk and provide safe and reliable service to its customers. In its public agency role, MEID coordinates with local safety and emergency response agencies to help protect against fires and respond to emergencies anywhere within their service territory.

Table 1: Context Setting Table

Utility Name	Merced Irrigation District – Water & Power All line lengths are defined as circuit miles
Service Territory Size	258 square miles
Owned Assets	☒ Transmission ☒ Distribution ☒ Generation
Number of Customers Served	~13,000 customer accounts

Utility Name	Merced Irrigation District – Water & Power All line lengths are defined as circuit miles	
Population Within Service Territory	~185,000 people	
Customer Class Makeup	**Number of Accounts**	**Share of Total Load (MWh)**
	86.8% Residential 1.6% Government 0.7% Agricultural 10.8% Commercial 0.1% Industrial	14.79% Residential 10.91% Government 0.82% Agricultural 33.26% Commercial 40.22% Industrial
Service Territory Location/Topography[2]	75.01% Agriculture 0.02% Barren/Other 0.15% Hardwood Woodland	12.05% Herbaceous 12.09% Urban 0.68% Water
Service Territory Wildland Urban Interface[3] (based on total area)	4% Wildland Urban Interface 1% Wildland Urban Intermix	
Prevailing Wind Directions & Speeds by Season	Year 2020: Spring 6.31, Summer 7.23, Fall 4.20, Winter 3.89 (mph); source: www.wunderground.com	
Miles of Owned Lines Underground and/or Overhead	Overhead Distribution: 70 miles Underground Distribution: 465 miles Total Distribution: 535 miles	
	Overhead Transmission: 35.6 miles Underground Transmission: 0 miles Total Transmission: 35.6 miles	

[2] This data is based on the California Department of Forestry and Fire Protection, California Multi-Source Vegetation Layer Map, depicting WHR13 Types (Wildlife Habitat Relationship classes grouped into 13 major land cover types) available at: https://www.arcgis.com/home/item.html?id=b7ec5d68d8114b1fb2bfbf4665989eb3.

[3] This data is based on the definitions and maps maintained by the United States Department of Agriculture, as most recently assembled in The 2010 Wildland-Urban Interface of the Conterminous United States, available at https://www.fs.usda.gov/nrs/pubs/rmap/rmap_nrs8.pdf.

Utility Name	Merced Irrigation District – Water & Power All line lengths are defined as circuit miles
Percent of Owned Lines in CPUC High Fire Threat Districts (percentages are based on line length).	**Overhead Distribution Lines as % of Total Distribution System (Inside and Outside Service Territory)**
	0%
	Overhead Transmission Lines as % of Total Transmission System (Inside and Outside Service Territory)
	0%
Substations	In HFTD – 0 Outside HFTD - 3
Generation Assets	In HFTD – 0 Outside HFTD - 3
Customers have ever lost service due to an IOU Public Safety Power Shutoff Event (PSPS)?	N/A
Customers have ever been notified of a potential loss of service to due to a forecasted IOU PSPS event?	N/A
Has developed protocols to pre-emptively shut off electricity in response to elevated wildfire risks?	N/A
Has previously preemptively shut off electricity in response to elevated wildfire risk?	N/A

2.1. Statutory Cross-Reference Table

MEID's 2023-2025 comprehensive WMP complies with the PUC § 8387 statutory requirements outlined below in Table 2. MEID also provides a reference to where in the WMP each requirement is described in the Plan.

Table 2: PUC § 8387 Statutory Requirements Checklist

PUC 8387 Code	Compliance Requirements and Corresponding Plan Sections	Plan Section
(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.	2.5
(b)(1)	The local publicly owned electric utility or electrical cooperative shall, before January 1, 2020, and annually thereafter, 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.	2.2
(b)(2)	The wildfire mitigation plan shall consider as necessary, at minimum, all of the following:	
(b)(2)(A)	An accounting of the responsibilities of persons responsible for executing the plan.	4.1
(b)(2)(B)	The objectives of the wildfire mitigation plan.	3.
(b)(2)(C)	A description of the preventative strategies and programs to be adopted by the local publicly owned electric utility or electrical	6.

PUC 8387 Code	Compliance Requirements and Corresponding Plan Sections	Plan Section
	cooperative to minimize the risk of its electrical lines and equipment causing catastrophic wildfires, including consideration of dynamic climate change risks.	
(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.	8.1
(b)(2)(E)	A discussion of how the application of previously identified metrics to previous wildfire mitigation plan performances has informed the wildfire mitigation plan.	8.2
(b)(2)(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.	6.5
(b)(2)(G)	Appropriate and feasible procedures for notifying a customer who may be impacted by the de-energizing of electrical lines. The procedures shall direct notification to all public safety offices, critical first responders, health care facilities, and operators of telecommunications infrastructure with premises within the footprint of potential de-energization for a given event.	6.7
(b)(2)(H)	Plans for vegetation management.	6.3
(b)(2)(I)	Plans for inspections of the local publicly owned electric utility's or electrical cooperative's electrical infrastructure.	6.4
(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:	5.

PUC 8387 Code	Compliance Requirements and Corresponding Plan Sections	Plan Section
(b)(2)(J)(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.	5.3
(b)(2)(J)(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.	5.6 and 5.7
(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 district based on new information or changes to the environment.	5.4
(b)(2)(L)	A methodology for identifying and presenting enterprise wide safety risk and wildfire-related risk.	5.1
(b)(2)(M)	A statement of how the local publicly owned electric utility or electrical cooperative will restore service after a wildfire.	6.8
(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:	
(b)(2)(N)(i)	Monitor and audit the implementation of the wildfire mitigation plan.	8.3
(b)(2)(N)(ii)	Identify any deficiencies in the wildfire mitigation plan or its implementation and correct those deficiencies.	8
(b)(2)(N)(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.	8.4
(3)	The local publicly owned electric utility or electrical cooperative shall, on or before January 1, 2020, and not less than annually	2.2

PUC 8387 Code	Compliance Requirements and Corresponding Plan Sections	Plan Section
	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 will all applicable rules, regulations, and standards, as appropriate.	
(3)(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.	9.

2.2. Process for Utility Adoption and Submittal of Annual WMP and Opportunities for Public Comment

The MEID WMP goes through a thorough review and approval process as described below:

- A draft WMP is presented to MEID leadership for review and approval.
- The WMP is posted on the MEID website and open for public comment which can be accessed at http://mercedid.org/index.cfm/power/wildfire-mitigation-plan/.
- The MEID leadership approved WMP is presented to the MEID Board of Directors at an appropriately notified public meeting.
- Public comments on the WMP are considered for adoption.
- The WMP is voted on by the Board of Directors and adopted by way of a resolution at the public meeting.

- The final WMP will be submitted to the Wildfire Safety Advisory Board (WSAB) no later than July 1 of each year and posted to the MEID website.

In 2022 MEID considered adding a public information session to allow the public an opportunity to comment on the draft WMP prior to board approval. MEID has elected to continue making the WMP available for public comment as described above.

2.3. Description of Where the WMP Can Be Found on MEID's Website

The MEID WMP is posted on the MEID website and open for public comment prior to Board approval. The final approved WMP, previous years WMPs, and all Independent Evaluator (IE) reports can be accessed at http://mercedid.org/index.cfm/power/wildfire-mitigation-plan/.

2.4. Wildfire Mitigation Funding

MEID has taken a proactive step by allocating a dedicated annual budget to facilitate the review and continuous development of the WMP. A WMP budget allocation has been approved for procuring the services of an IE to review the Plan. All construction and maintenance work are funded under capital or operations budgets which are reviewed and approved each fiscal year.

2.5. Purpose of the Wildfire Mitigation Plan

Over the past several years, California has experienced numerous catastrophic wildfires resulting in loss of human life and destruction and damage to personal property. The effects of climate change, such as hotter temperatures, more intense winds, and drier fuels/vegetation, are some of the contributing factors that fuel these fast-moving and destructive fires. Electrical facilities of investor-owned utilities have been determined to be the ignition source for some of these tragic incidents.

California Senate Bill (SB) 901 amended Public Utilities Code (PUC) § 8387. Section 8387(c) states, "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. They will prepare a wildfire mitigation plan…."

MEID does not own or operate any electrical facilities within or abutting the HFTD. Over 85 percent of our distribution assets are of underground construction and pose no risk of being the origin or contributing source for a catastrophic wildfire. For the 2023-2025 WMP cycle MEID will focus their WMP on the recommendations of the WSAB's advisory opinions relevant to MEID, however most of the WMP requirements are not applicable to MEID being that they do not own nor operate any assets within or abutting the HFTD.

This plan meets or exceeds the requirements of PUC § 8387 for publicly owned electric utilities. The specific elements of PUC § 8387 are listed in Table 2, PUC § 8387 Statutory Requirements Checklist, above. Additionally, the corresponding WMP sections are listed in the table that direct you to where the MEID describes its processes or programs to comply with the relevant requirements of PUC § 8387.

2.6. Organization of the Wildfire Mitigation Plan

All MEID's electrical facilities are located outside the CPUC HFTD and pose no risk of being the origin or contributing source for the ignition of a catastrophic wildfire. However, MEID has developed this WMP, which includes the following elements and may be applicable, as noted, to facilities outside the HFTD:

- Section 1 – Executive Summary / Introduction;
- Section 2 – Utility Overview and Context Setting Table;
- Section 3 – Objectives of the Wildfire Mitigation Plan;
- Section 4 – Roles and responsibilities;
- Section 5 – Wildfire Risk and Risk Drivers;
- Section 6 – Wildfire Preventative Strategies;
- Section 7 – Community Outreach and Stakeholder Engagement;
- Section 8 – Evaluating Performance of the Plan; and
- Section 9 – Independent Evaluator.

3. OBJECTIVES OF THE WILDFIRE MITIGATION PLAN

The primary objective of MEID's WMP is to meet MEID's statutory obligation as required by PUC § 8387. MEID constructs, maintains, and operates its overall electrical grid in compliance with federal, state, and local standards, and industry best practices. The MEID 2023-2025 WMP will be focused on describing specific wildfire mitigation initiatives that may be applicable to MEID, however they do not own or operate any electrical assets in the HFTD. MEID regularly evaluates the prudent and cost-effective improvements to its overall physical assets, operations, and training that can help reduce the risk of equipment-related fires. Additionally, MEID is constantly assessing new industry practices and technologies that will improve overall system resiliency and reliability.

4. ROLES AND RESPONSIBILITIES

This section identifies MEID's governance for the development, approval, and implementation of this WMP.

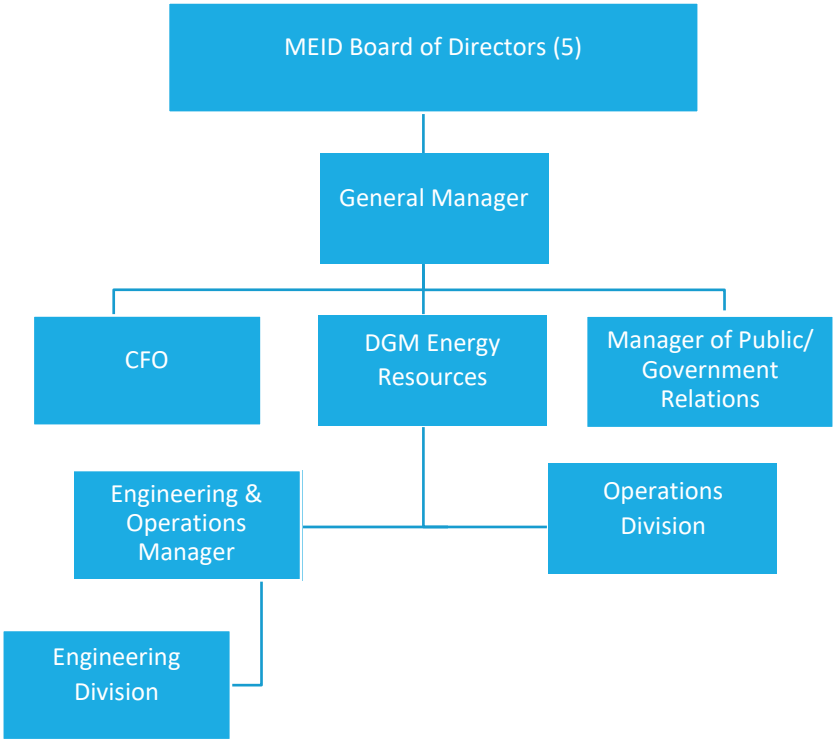
4.1. MEID Organizational Chart and Specific Responsibilities

The following is a summary of key personnel and their responsibilities concerning this WMP.

Table 3: Summary of Key Personnel

Activity	Responsible Person / Title
Review and approval of WMP	Board of Directors
Accountability for development and implementation of the WMP	General Manager
Development of WMP; Vegetation Management program; Transmission, Distribution, and Substation construction, maintenance, inspections, and operations.	Deputy General Manager of Energy Resources
Budget for development of the WMP	Chief Financial Officer
Customer and stakeholder communications	Public / Government Relations Manager

Figure 2: Excerpt from MEID Organizational Chart Relevant to the WMP



4.2. Coordination with Critical Infrastructure Providers

The US Cybersecurity & Infrastructure Security Agency states "There are 16 critical infrastructure sectors whose assets, systems, and networks, whether physical or virtual, are considered so vital to the United States that their incapacitation or destruction would have a debilitating effect on security, national economic security, national public health or safety, or any combination thereof."[4]

MEID has no facilities in the HFTD, nor does it have any lines subject to preemptive de-energizations that could impact critical infrastructure. For other MEID system emergencies MEID adheres to the MEID communication protocols. MEID considers all critical infrastructure (i.e., water and wastewater systems, telecommunications, and healthcare) sectors within the MEID service territory of critical importance to the safety and health of its customers.

[4] https://www.cisa.gov/critical-infrastructure-sectors

4.3. MEID Emergency Response

MEID is available for emergency response 24 hours per day, 365 days per year. After business hours, Turlock Irrigation District's (TID) system operations control room is responsible for contacting MEID on-call resources to respond to outage incidents or other emergencies. Merced County Emergency Services also has open communication with MEID resources if a fire is located near the vicinity of MEID's electrical facilities.

Although the MEID service area is outside the CPUC designated HFTD, MEID makes every effort to mitigate electrical ignitions from MEID equipment anywhere within its service territory. MEID utility staff have the following obligations regarding fire emergency response and investigation:

- Take all safe, reasonable, and practical actions to suppress fires resulting from MEID electric facilities,
- Mitigate electrical hazards for first responders entering the vicinity of MEID electric facilities,
- Communicate and coordinate, as necessary, with local emergency response personnel; city, county, and state government officials; critical infrastructure providers, such as hospitals, telecommunications providers, water providers, etc.
- If ignition is caused by or suspected to have been caused by MEID electrical facilities, MEID will collect and maintain data regarding the incident in order to determine areas and actions to reduce future fire ignition risks.
- During wildfire emergency response, Merced County emergency services have direct access and open lines of communication with MEID personnel on-site.

In the event of a potential or actual emergency MEID will contact the Merced County Office of Emergency Services for use of their mass notification system to send alerts and notifications to impacted jurisdictions. The benefit of using the County's notification system is it decreases the possible spread of contradictory information due to use of multiple messaging platforms. MEID may also directly notify its customers by email, text, and/or phone calls as required. MEID will use its website and other social media platforms to send alerts and notifications, as needed.

Table 4: Emergency Contacts for Wildfire Response

Wildfire Emergency Contacts	Phone Number
Merced County Emergency Services	911
Merced County Fire Department	209-385-7344
Atwater Fire Department	209-357-6352
Merced Fire Department	209-385-6891
Livingston Fire Department	209-394-7919

4.4. Mutual Assistance Agreements

MEID is a member of the California Utilities Emergency Association (CUEA), which plays a crucial role in ensuring communications between utilities and the CA Office of Emergency Services during larger scale emergencies. MEID also participates in the Western Energy Institute's Western Region Mutual Assistance Agreement between utilities across several western states.

5. WILDFIRE RISKS AND RISK DRIVERS

The Office of Energy Infrastructure Safety[5] (OEIS) defines risk as "a measure of the anticipated adverse effects from a hazard considering the consequences and frequency of the hazard occurring."

5.1. Enterprise-Wide Safety Risks

Wildland fire risk due to extended drought, high winds, and hot temperatures are very low within MEID's service territory. MEID's entire service territory is located outside the HFTD and does not have a history of electric facility caused wildfires. Approximately 85 percent of MEID's electric distribution system is of underground construction, further reducing the risk of an electrical related fire ignition. An overlay of MEID's service territory and the CPUC Fire Threat Map is shown in Figure 3, CPUC High Fire-Threat District Map.

MEID considers its greatest risk to be the disruption or damage to its main 115kV transmission lines. Whether caused by severe weather events like storms, earthquakes, or human caused damage, this can severely impact the district's ability to provide reliable electric services to its customers. MEID recognizes the importance of maintaining and protecting its transmission lines to mitigate potential risks and ensure uninterrupted operations.

5.2. Risks and Risk Drivers Associated with Topographic and Climatological Risk Factors

The Office of Energy Infrastructure Safety (OEIS) defines risk as "A measure of the anticipated adverse effects from a hazard considering the consequences and frequency of the hazard occurring."

[5] https://energysafety.ca.gov/

MEID does not have any assets within the HFTD, however they do consider other risks that could impact their electrical system. Within MEID's service territory and the surrounding areas, the primary climatological risk drivers are:

- Extended drought
- Hotter temperatures
- High winds, although infrequent

5.3. Risks and Risk Drivers Associated with Design, Construction, Operations and Maintenance

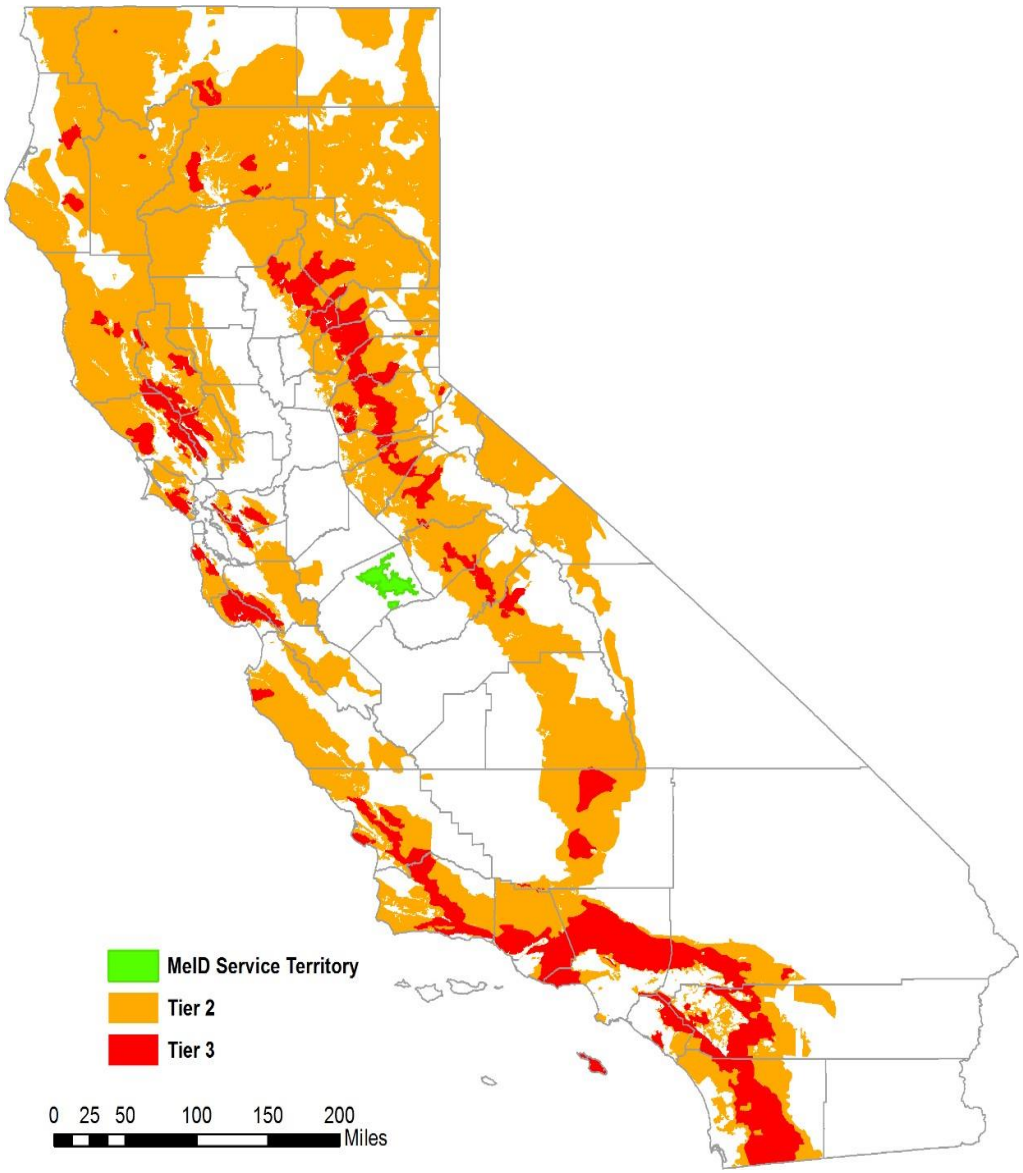
It is industry standard to run overhead transmission and distribution electrical lines to transfer electricity to the end customer, which comes with inherent risk. Within MEID's service territory, which is entirely outside of the HFTD, the primary risk drivers for a risk event identified by MEID are:

- Wire down
- Vegetation to electrical line contact

5.4. High Fire Threat District

The OEIS describes the HFTD, as shown in Figure 3, CPUC High Fire-Threat District Map, as "Areas of the state designated by the CPUC as having elevated wildfire risk, where each utility must take additional action (per GO 95, GO 165, and GO 166) to mitigate wildfire risk. The HFTD is comprised of a High Hazard Zone and two High Fire-Threat Areas where there is an increased risk for utility-associated wildfires.

Figure 3: CPUC High Fire-Threat District Map

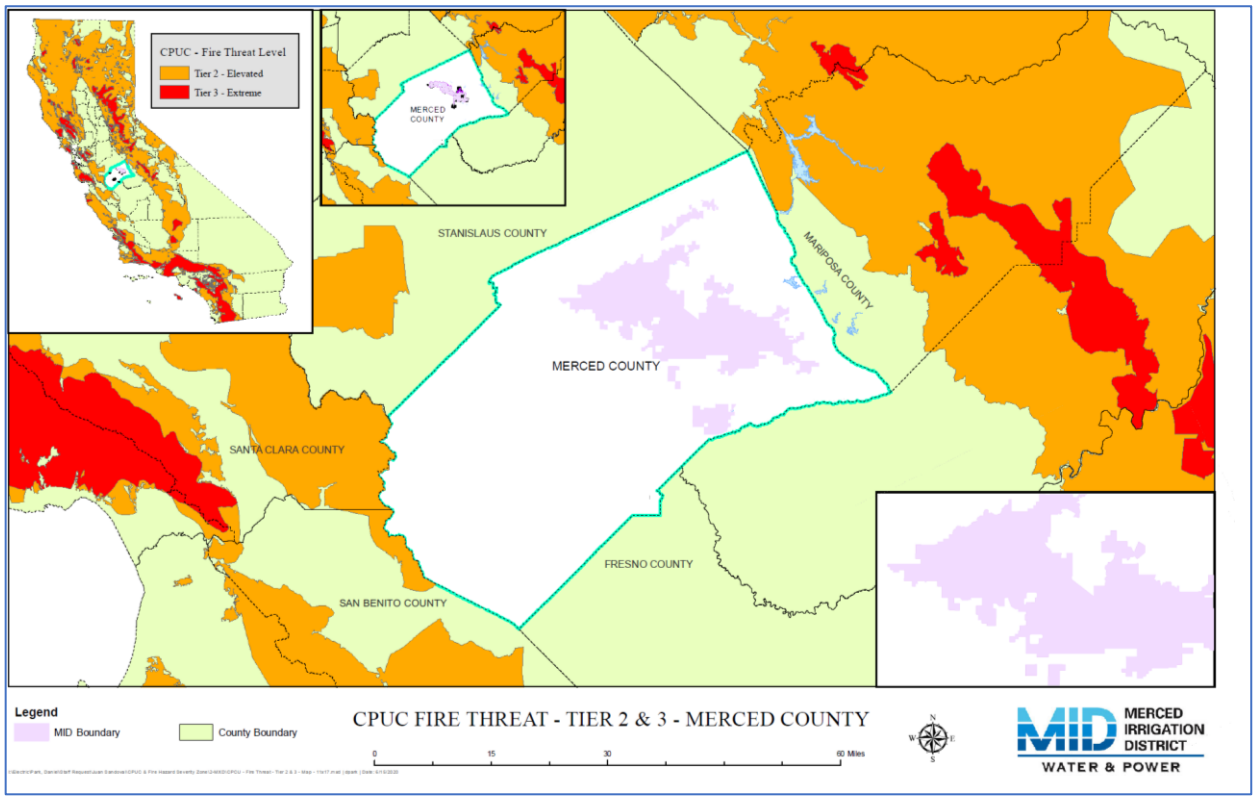


5.5. Changes to CPUC Fire Threat Map

MEID participated in the development of the CPUC's Fire Threat Map. In the map development process, MEID reviewed the proposed boundaries of the HFTD and agreed that, based on local conditions and historical fire data, all MEID's service territory was properly excluded from the HFTD.

For the 2023-2025 WMP cycle MEID concurs with the existing HFTD boundaries and does not recommend changes to the HFTD boundaries as currently established.

Figure 4: CPUC High Fire-Threat District Map



5.6. Climate / Weather Risks

Although MEID has no electric facilities in the HFTD they analyze climate impacts to their electric grid. The MEID electric grid is in the San Joaquin Valley of California which experiences hot temperatures during the summer and occasional wind events. To date, MEID has not experienced any adverse operational impacts due to these types of weather conditions.

5.7. Climate Change

MEID recognizes that climate change is forecasted to increase the frequency and severity of catastrophic wildfires in California. Accordingly, MEID has reviewed

relevant sources of data showing wildfire-related climate change impacts in California and specifically in Merced County through the Cal-Adapt enterprise collaboration. This review included data on forecasted acres burned and wildfire probability,[6] as well as extreme heat days,[7] and extended drought.[8] As described below, MEID has determined that MEID's service territory will remain a low risk for wildfires even when considering changes associated with wildfire risk. Further, no part of MEID's service territory will be disproportionately impacted by wildfire risks associated with climate change in comparison to the other areas of MEID's service territory. Therefore, MEID will continue to monitor these risks as new information becomes available.

[6] The CalAdapt Wildfire Tool is available at https://cal-adapt.org/tools/wildfire.
[7] The CalAdapt Extreme Heat Days Tool is available at https://cal-adapt.org/tools/extreme-heat.
[8] The CalAdapt Extended Drought Tool is available at https://cal-adapt.org/tools/extended-drought.

6. WILDFIRE PREVENTATIVE STRATEGIES

Although MEID does not own or operate any electrical facilities within the CPUC HFTD, they adhere to the following principles, goals, and objectives relative to all activities regarding electric facility design, construction, maintenance, inspections, operations, and vegetation management:

- Construct, maintain, and operate the transmission and distribution system to support their goal of providing safe and reliable power to its customers.
- Coordinate with federal, state, county, and local fire management personnel as necessary or appropriate to implement the MEID WMP.
- Immediately report fires caused by MEID electrical facilities, according to existing MEID procedures and the requirements of this WMP.
- Take corrective action when the staff witnesses or is notified that fire protection measures have not been properly installed or maintained.
- Comply with relevant federal, state, and industry-standard requirements, including the industry standards established by the CPUC and/or fire Agencies Having Jurisdiction (AHJ).

6.1. Situational Awareness

MEID conducts situational awareness through continuous coordination and partnership with the Merced County Office of Emergency Services. Additionally, MEID monitors weather information received from various weather reporting services and updates provided through the National Weather Service[9].

6.2. Design and Construction Standards

MEID designs, constructs, maintains, and inspects its electric transmission,

[9] https://www.weather.gov/

distribution, and substation facilities, in accordance with CPUC GO 95[10], Rules for Overhead Electric Line Construction, and the National Electric Safety Code.

6.2.1. Overhead to Underground Conversion

MEID is seeing significant growth particularly in the City of Merced. To support the city's new development, MEID is actively expanding its underground electric infrastructure.

6.3. Vegetation Management

MEID meets or exceeds the minimum industry standards for vegetation management (VM). For both transmission and distribution facilities, MEID meets or exceeds the requirements of: (1) Public Resources Code (PRC) § 4292; (2) PRC § 4293; (3) GO 95 Rule 35, Table 1; and (4) the GO 95 Appendix E Guidelines to Rule 35. These standards require significantly increased clearances in the HFTD, but as previously mentioned, MEID does not own or operate any electrical facilities within the HFTD. The recommended time-of-trim guidelines do not establish a mandatory standard, but instead provide useful guidance to utilities. MEID draws upon specific knowledge of tree species and growth rates to determine the appropriate time of trim in each circumstance.

Within MEID's transmission and distribution VM inspection and maintenance program, vegetation maintenance is performed by MEID personnel[11] along with annual patrols intended to identify any non-conformance trees. Vegetation trimming is done on an as-needed basis to establish minimum clearances as per GO 95. The results of these patrols and corrective actions are recorded and managed in MEID's Cityworks Asset Management System (AMS). As a result, current practices and processes have effectively mitigated tree contacts and related risk events.

[10] https://ia.cpuc.ca.gov/gos/originalgo95/OriginalGO95_Start_page.htm
[11] MEID does not use contract tree trim services. All VM work is performed by MEID trained and qualified personnel.

6.4. Asset Inspections

MEID meets or exceeds the local, state, or federal inspection requirements for their system-wide electric transmission, distribution, and substation facilities. As previously described, MEID does not have any electrical facilities within the CPUC's HFTD. MEID personnel perform the maintenance and inspections on all MEID electric facilities as required per CPUC GO 95, 165 & 174.

If MEID staff discover an electric facility in need of maintenance or repair that is owned by another entity MEID will issue a notice for repair to the facility owner, and track to ensure that necessary repairs are completed promptly.

6.4.1. Powerhouse/Substation/Switchyard Inspections

MEID meets or exceeds the requirements of GO 174 for substation inspections.

6.5. Workforce Training

MEID has no assets in the HFTD and do not conduct additional training, for MEID personnel, beyond what is currently required.

6.6. Recloser Policy

MEID substation breakers and line reclosers can be set to a non-reclosing mode when desired. This is typically done when needed for personnel safety. These electric protective devices' settings and coordination were based on previous years' best practices and event reports. If deemed necessary, MEID can change the reclosing settings during adverse conditions and make those decisions based on real-time or forecasted needs. However, since MEID does not own or operate any electrical facilities within the HFTD, they do not have nor currently anticipate developing a formal reclosing policy for implementation during critical fire weather conditions.

6.7. Operational Response Procedure

MEID is available for emergency response 24 hours per day, 365 days per year. After business hours, TID's system operations control room is responsible for contacting MEID on-call resources to respond to outage incidents or other emergencies in the MEID service area. Merced County Emergency Services also has open communication with MEID resources if a fire is in the vicinity of MEID's electrical facilities.

Although the MEID service area is outside the CPUC-designated HFTD, MEID makes every effort to mitigate electrical ignitions from MEID equipment anywhere within their service territory. MEID utility staff have the following obligations regarding fire emergency response and investigation:

- Take all reasonable and practical actions to suppress fires resulting from MEID electric facilities,
- Mitigate electrical hazards for first responders entering the vicinity of MEID electric facilities,
- Communicate and coordinate, as necessary, with local emergency response personnel; city, county, and state government officials; critical infrastructure providers, such as hospitals, telecommunications providers, water providers, etc.
- If ignition is caused by or suspected to have been caused by MEID electrical facilities, MEID will collect and maintain data regarding the incident in order to determine areas and actions to reduce future risk events.

During an emergency response requiring MEID assistance, Merced County Emergency Services have direct access and open lines of communication with MEID personnel on-site.

6.8. Preemptive De-energization for Public Safety

MEID has no electrical assets in the HFTD and has not identified any circuits that could be subject to a preemptive de-energization. Additionally, there are no MEID customers served by a neighboring utility nor at risk of losing power due to a neighboring utilities' preemptive de-energization.

MEID has not adopted a formal preemptive de-energization plan, however we will continue to re-evaluate this determination in future updates to the WMP.

MEID is a customer of TID and is fed by two of TID's 115kV transmission lines. The TID service area that abuts MEID does not present the combination of criteria that may necessitate using a preemptive de-energization. The two TID transmission lines that serve the MEID load are not subject to a TID preemptive de-energization. MEID customers have never lost service due to another utility's PSPS event, neither have they been notified of potential loss of service due to forecasted utility's preemptive de-energization.

For any risk event resulting in MEID customers experiencing a loss of power, we will execute our established protocols for communicating system emergencies to customers, emergency response personnel, city, county and state government officials, and critical infrastructure providers such as hospitals, telecommunications providers, water providers, etc.

6.9. Restoration of Service

The steps to restore service after a wildfire, or any other risk event impacting MEID customers, are consistent with utility best practices. These steps could include receiving confirmation from the AHJ that the damaged area is safe to access, communicating estimated restoration time with customers, circuit assessment (patrol), repair, and restoration.

MEID field personnel begin troubleshooting the interrupted or damaged circuit at the

electrical protective device that operated to the end of the line to determine if the condition that caused the interruption is still in place. If the risk event resulted in an unsafe condition, the condition must be made safe before further work to restore power resumes. Once the condition has been resolved and the equipment repaired, the system may be deemed safe and re-energized.

6.10. Utility Innovations and Updates

MEID continues to monitor utility best practices and innovations, to evaluate how they can be applied at MEID in their continuous efforts to provide safe, reliable, and affordable power to its customers.

MEID has made significant progress in its advanced metering infrastructure deployment, with approximately 50 percent of the system already deployed. This deployment will provide MEID with enhanced visibility into the utility system and field transformers, allowing for better monitoring and analysis of their performance. To maximize the benefits of this infrastructure, MEID is actively exploring various analysis software options that can efficiently process the gathered data and provide valuable insights for improved decision-making and proactive maintenance.

7. COMMUNITY OUTREACH AND STAKEHOLDER ENGAGEMENT

7.1. Community Outreach

With no electrical assets in the HFTD and no customers at risk of losing power due to a preemptive de-energization MEID does not provide specific wildfire mitigation communications as part of their community outreach. All customer outreach and communications are consistent with utility best practices.

7.2. Stakeholder Engagement

MEID is a member of the CMUA which serves as a strong advocate, representing the interests of member utilities and assisting with compliance to regulations. Additionally, membership provides access to educational programs, resources, and opportunities for collaboration, enabling MEID to improve operations, make informed decisions, and deliver reliable services to our community.

MEID participates in the California Municipal Utilities Association (CMUA) workgroup discussions addressing the topics of:

- Asset Management
- Climate Change
- Grid Design and System Hardening
- Metrics
- Risk Modeling
- Vegetation Management

8. EVALUATING PERFORMANCE OF THE PLAN

MEID is committed to making this Plan effective and robust. MEID is also aware that identifying gaps and deficiencies in the Plan is a continuous process learned through experience. MEID will use the metrics identified in this plan as inputs and information for improving the Plan.

8.1. Metrics and Assumptions for Measuring Plan Performance

MEID will track two metrics to measure the performance of this WMP: (1) the number of vegetation contacts; and (2) wires down within the service territory. Although MEID has no facilities within the HFTD, tracking these metrics will support improving overall system safety, reliability, and resiliency.

8.1.1. Metric 1: Vegetation Contact

This metric will track the number of vegetation contacts to transmission or distribution facilities that result in an interruption of service. In addition, this metric will inform MEID personnel of any program enhancements needed to reduce the number of vegetation contacts on the MEID electric system.

8.1.2. Metric 2: Wires Down

This metric is the number of distribution and transmission wires downed within the MEID service territory, which result in an interruption of service. For this metric, a wire down event includes any instance where an electric transmission or primary distribution conductor falls to the ground or onto a foreign object.

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

Table 5: WMP Metric Tracking

Monitored Metric	2020		2021		2022		2023		2024		2025	
	Transmission	Distribution	Transmission	Distribution	Transmission	Distribution	Transmission	Distribution	Transmission	Distribution	Transmission	Distribution
Vegetation Contact	0	0	0	0	0	0	0	0				
Wires Down	0	0	0	0	0	0	0	0				

8.2. Impact of Metrics on Plan

During the 2020-2022 WMP cycle MEID experienced no events which has resulted in limited data gathered through these metrics. However, as the data collection history becomes more robust, MEID will be able to identify areas of its operations and service territory that are disproportionately impacted to evaluate potential improvements to its Plan.

8.3. Monitoring and Auditing the Plan

MEID staff will continuously monitor projects and metrics outlined in this WMP. Data collected will be used to inform MEID staff of system improvements or areas that need additional attention. Additionally, MEID will leverage employee experience and knowledge of the MEID system to provide recommendations for system improvements. MEID staff are committed to providing safe and reliable power to the region and reducing the risk that MEID facilities could be the origin or contributing source for the ignition for a fire anywhere within their service territory.

8.4. Monitoring the Effectiveness of the Plan

Although MEID has no facilities in the HFTD they strive for continuous improvement

in its goal to reduce the risk of MEID facilities being the origin or contributing source of any fire. MEID will continuously monitor and evaluate the wildfire mitigation efforts described in this WMP and pursue improvements in their ongoing goal of providing safe and reliable power to the region. MEID will continue to monitor the two metrics and re-evaluate each year if other metrics can supplement the plan's effectiveness.

9. INDEPENDENT EVALUATOR

PUC § 8387(c) requires MEID to contract with a qualified independent evaluator (IE) with experience in assessing the safe operation of electrical infrastructure to review and evaluate the comprehensiveness of this WMP. The IE must issue a report that will be posted to the MEID website. This report will also be presented to the Board of Directors at a public meeting.

MEID has retained the services of GridSME to perform the independent evaluation of its 2023 WMP. The GridSME IE team has over 100 years of combined experience working at investor-owned utilities and brings the required expertise and experience to perform the work of an IE.