

MERCED IRRIGATION DISTRICT WILDFIRE MITIGATION PLAN

VERSION 1.0

September 1, 2020 (Revised)



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I. OVERVIEW

A. POLICY STATEMENT

Merced Irrigation District's (MeID) overarching goal is to provide safe, reliable, and economic electric service to its local community. In order to meet this goal, MeID constructs, maintains and operates its electrical lines and equipment in a manner that minimizes the risk of catastrophic wildfire posed by those electrical lines and equipment.

MeID does NOT own or operate any electrical facilities within the Tier 2 or Tier 3 High Fire Threat Areas as identified within the California Public Utilities Commission (CPUC) High Fire Threat District (HFTD). Based on a review of local fire risk conditions and historical fires within the MeID service territory, MeID has determined that its electrical lines and equipment do not pose a significant risk of being the origin or contributing source of ignition for a catastrophic wildfire¹. However, the programs described herein this Wildfire Mitigation Plan (WMP or Plan) may apply to all MeID's electric facilities throughout its service territory.

B. 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, 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 source of ignition of some of these tragic incidents.

California Senate Bill (SB) 901, amended Public Utilities Code (PUC) § 8387. Section 8387(c) states that "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

¹ Adopted by MeID resolution 2018-28

plan before January 1, 2020 and 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 (IE) 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."

This Plan describes the numerous programs that the MeID has in place to construct, maintain and operate their electrical facilities in order to minimize the risk that their equipment could be the origin or contributing source for a wildfire. This Plan is subject to approval by the MeID Board of Directors and is implemented by the MeID's Deputy General Manager, Energy Resources.

This plan meets or exceeds the requirements of PUC § 8387 for publicly owned electric utilities. MeID prepared its WMP and its Board of Directors approved the WMP on 11/05/2019. MeID filed their first WMP with the Wildfire Safety Advisory Board ("WSAB") on April 3, 2020. MeID will have their Plan reviewed by an Independent Evaluator (IE) and will file their revised WMP with the WSAB no later than October 15th, 2020. MeID will prepare and file a revised plan annually thereafter.

The specific elements of PUC § 8387 are listed in Table 1 below with the corresponding WMP sections listed that direct you to where the MeID describes their processes or programs to comply with the relevant requirements of PUC § 8387.

Table 1 – PUC § 8387 Compliance Requirements

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.	All
(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.	<u>LB</u>
(2)	The wildfire mitigation plan shall consider as necessary, at minimum, all of the following:	
(2)(A)	An accounting of the responsibilities of persons responsible for executing the plan.	<u>III.A</u>
(2)(B)	The objectives of the wildfire mitigation plan.	<u>II</u>
(2)(C)	A description of the preventative 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.	<u>V.B</u> <u>V.C</u> <u>V.D</u>
(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.	<u>VII.A</u>
(2)(E)	A discussion of how the application of previously identified metrics to previous wildfire mitigation plan performances has informed the wildfire mitigation plan.	<u>VII.B</u>
(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.	<u>V.E</u> AND <u>V.F</u>
(2)(G)	Appropriate and feasible procedures for notifying a customer who may be impacted by the deenergizing 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 deenergization for a given event.	<u>VI</u>
(2)(H)	Plans for vegetation management.	<u>V.C</u>
(2)(I)	Plans for inspections of the local publicly owned electric utility’s or electrical cooperative’s electrical infrastructure.	<u>V.D</u>

PUC 8387 Code	Compliance Requirements and Corresponding Plan Sections	Plan Section
(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:	
(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.	<u>IV.A</u>
(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.	<u>IV.B</u>
(2)(K)	(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.	<u>V.A</u>
(2)(L)	A methodology for identifying and presenting enterprise wide safety risk and wildfire-related risk.	<u>IV.C</u> AND <u>VII.C</u>
(2)(M)	A statement of how the local publicly owned electric utility or electrical cooperative will restore service after a wildfire.	<u>VI</u>
(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:	
(2)(N)(i)	Monitor and audit the implementation of the wildfire mitigation plan.	<u>VII.C</u>
(2)(N)(ii)	Identify any deficiencies in the wildfire mitigation plan or its implementation and correct those deficiencies.	<u>VII.D</u>
(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.	<u>V.D</u> AND <u>VII.E</u>
(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 will all applicable rules, regulations, and standards, as appropriate.	

PUC 8387 Code	Compliance Requirements and Corresponding Plan Sections	Plan Section
(3)(c)	(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.	

C. MEID PROFILE

Established in 1919, MeID is one of only four irrigation districts in California today that also provides electric retail energy to homes, farms, and businesses. 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. MeID’s service territory is located within California’s San Joaquin Valley in Merced County. MeID started selling retail electric power to its first customer in 1996 and has now grown to provide safe and reliable retail electric power to over 10,600 customers in the communities of Merced, Livingston, Winton, and Atwater.

MeID owns, maintains, and operates three hydro generating stations, approximately 34 miles of 115 kV transmission lines, and distributes power over approximately 265 miles of 21 and 12 kV distribution lines. All MeID electrical facilities are located outside the HFTD designated in the CPUC Fire Threat Map (see figure 1). 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. The three areas are:

- Tier 1, High Hazard Zone – Zones which are in direct proximity to communities, roads, and utility lines, and are a direct threat to public safety.
- Tier 2, Fire-Threat Area - Depicts areas where there is an **elevated risk** (including likelihood and potential impacts on people and property) from utility associated wildfires.

- Tier 3, Fire-Threat Area - Depicts areas where there is an **extreme risk** (including likelihood and potential impacts on people and property) from utility associated wildfires.

All of MeID’s service territory is designated as “non-fuel” or “moderate” in the California Department of Forestry and Fire Protection’s (CALFIRE) Fire and Resource Assessment Program (FRAP) Fire Threat Map². Based on a review of local fire risk conditions and historical fires within the MeID service territory, MeID has determined that its electrical lines and equipment do not pose a significant risk of being the origin or contributing source of ignition for a catastrophic wildfire³.

Despite this low fire risk, MeID takes appropriate actions to help its region prevent and respond to the increasing risk of wildfires. In its role as a public agency, MeID closely coordinates with other local safety and emergency agencies to help protect against fires and respond to emergencies anywhere within their service territory. In its role as a utility, MeID meets or exceeds all design, construction, operation, and maintenance standards that reduce safety risks associated with its system. This WMP describes the safety-related measures that MeID follows to reduce its risk of being the origin or contributing source of ignition for a catastrophic wildfire.

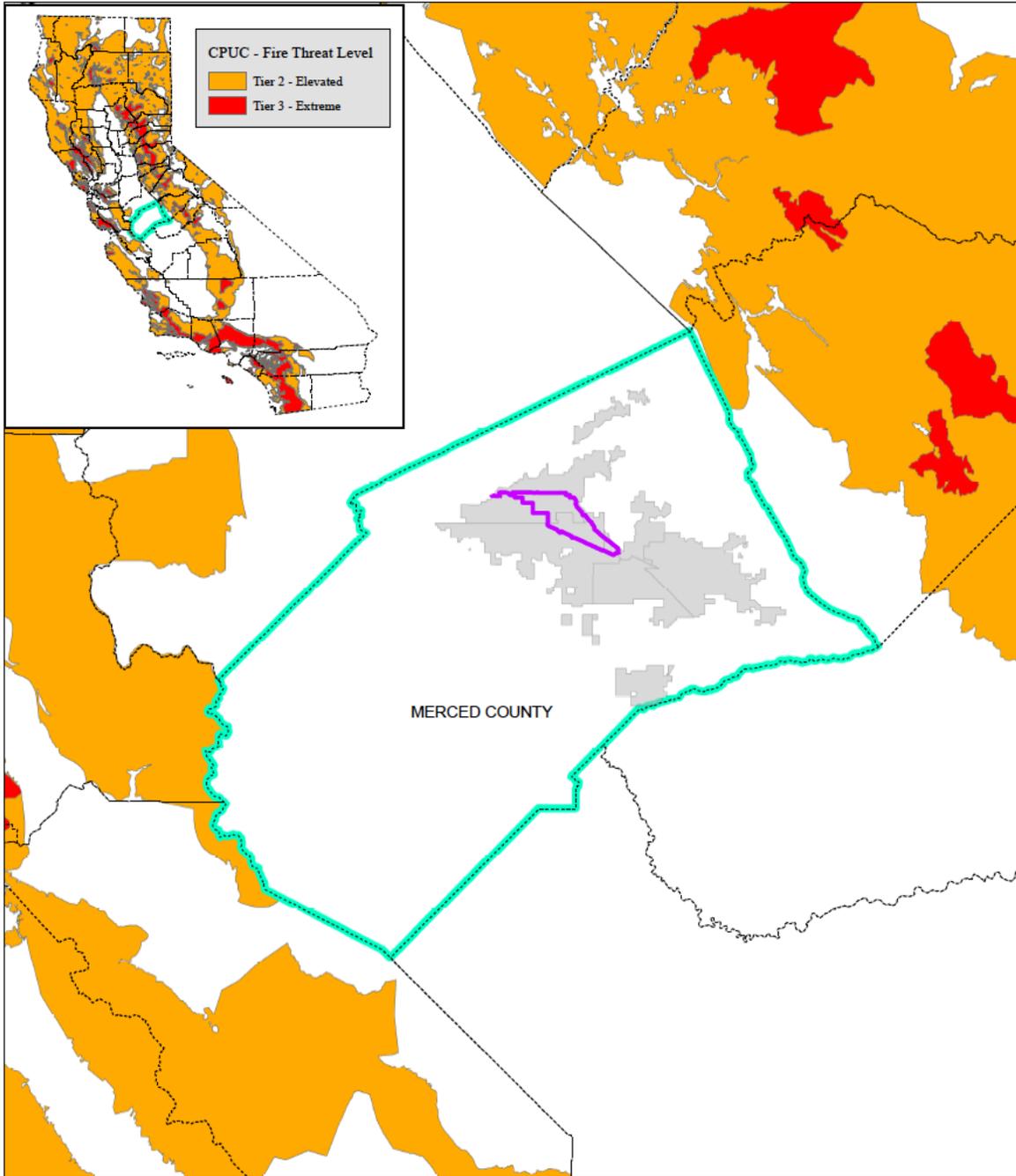
² FTHREAT_MAP, FRAP Fire Threat v05_1, October 20,2005

<https://www.cpuc.ca.gov/FireThreatMaps/>

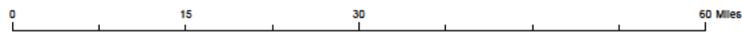
<https://frap.fire.ca.gov/mapping/maps/>

³ Adopted by MeID resolution 2018-28

Figure 1. MeID's Service Area and CPUC HFTD



CPUC FIRE THREAT - TIER 2 & 3 - MERCED COUNTY



Legend

-  MID Owned 115 kV Transmission Line
-  MID Service Territory



D. ORGANIZATION OF THE WILDFIRE MITIGATION PLAN

All of MeID's electrical facilities are outside the CPUC HFTD and pose minimal risk for 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:

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

II. OBJECTIVES OF THE WILDFIRE MITIGATION PLAN

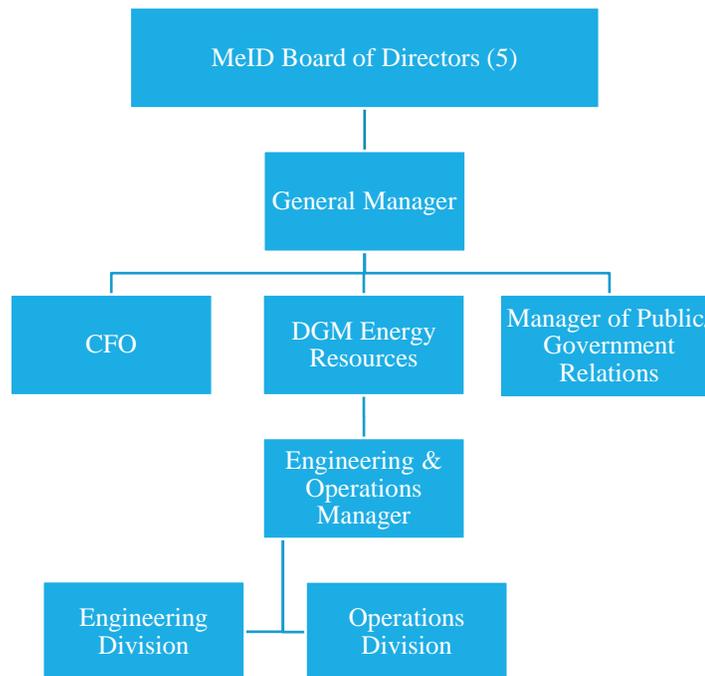
The primary goals and objectives of this WMP are to describe MeID's existing programs, practices, and measures that effectively reduce the probability that MeID's electrical facilities could be the origin or contributing source for the ignition of a wildfire, and to improve the reliability and resiliency of the electric grid. To support this goal, MeID regularly evaluates the prudent and cost-effective improvements to its 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 reduce the likelihood of an interruption (frequency) in service and improve the restoration (duration) of service.

III. MEID ROLES AND RESPONSIBILITIES

A. UTILITY GOVERNANCE STRUCTURE

This section identifies MeID’s governance for development, approval, and implementation of this WMP.

Figure 2. Excerpt from MeID Organizational Chart relevant to the WMP



MeID is governed by a five member locally elected Board of Directors (The Board). The following is a summary of key personnel and their responsibilities with regard to this WMP.

- The Board of Directors are responsible for the review and approval of the MeID WMP.
- The General Manager has overall accountability for the development and implementation of the WMP.

- The Deputy General Manager of Energy Resources has responsibility for:
 - a. Development of the WMP in compliance with PUC § 8387.
 - b. Vegetation management program,
 - c. Transmission, Distribution, and Substation construction, maintenance, inspections, and operations.
- The Chief Financial Officer has responsibility for the allocation of funds to effectively execute the WMP.
- The Manager of Public / Government Relations has responsibility for communicating MeID’s WMP programs, reporting MeID system emergency response activities, and communicating preparations for potential wildfire incidents to all stakeholders.

B. WILDFIRE PREVENTION

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 in a manner that will minimize the risk of its facilities being the origin or contributing source of ignition for a wildfire.
- 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 (if known), pursuant to existing POU practices 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).

Approximately 15% of MeID’s electric distribution system is of overhead construction while the other 85% is underground construction and all facilities are outside the CPUC HFTD. MeID’s electrical facility design is to continue undergrounding new and existing electrical services to support MeID’s goal of providing safe, reliable, and economical power to its customers and reduce the risk of its facilities being the origin or contributing source of ignition for a wildfire.

C. WILDFIRE RESPONSE AND RECOVERY

MeID is available for emergency response 24 hours per day, 7 days per week, and 365 days per year. After business hours, Turlock Irrigation District’s (TID) system operations control room has the responsibility to contact 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. 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 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 an 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 wildfire ignition risk.

During wildfire emergency response, Merced County emergency services have direct access and open lines of communication with MeID personnel on site.

Table 2. 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

D. STANDARDIZED EMERGENCY MANAGEMENT SYSTEM

As a local governmental agency,⁴ MeID has planning, communication, and coordination obligations pursuant to the California Office of Emergency Services’ Standardized Emergency Management System (“SEMS”) Regulations,⁵ adopted in accordance with Government Code section 8607. The SEMS Regulations specify roles, responsibilities, and structure of communications at five different levels described below in Table #3: field response, local government, operational area, regional, and state.⁶ Pursuant to this structure, MeID annually coordinates and communicates with the relevant safety agencies as well as other relevant local and state agencies.

⁴ As defined in Cal. Gov. Code § 8680.2.

⁵ 19 CCR § 2407.

⁶ Cal. Gov. Code § 2403(b):

Table 3. Response Levels under SEMS

Levels of Response Using SEMS ⁶	
Field response level	Commands emergency response personnel and resources to carry out tactical decisions and activities in direct response to an incident or threat.
Local government level	Manages and coordinates the overall emergency response and recovery activities within their jurisdiction.
Operational area level	Manages and/or coordinates information, resources, and priorities among local governments within the operational area and serves as the coordination and communication link between the local government level and the regional level.
Regional level	Manages and coordinates information and resources among operational areas within the mutual aid region designated pursuant to Government Code §8600 and between the operational areas and the state level. This level along with the state level coordinates overall state agency support for emergency response activities.
State level	Manages state resources in response to the emergency needs of the other levels, manages and coordinates mutual aid among the mutual aid regions and between the regional level and state level, and serves as the coordination and communication link with the federal disaster response system.

Under the SEMS structure, a significant amount of preparation is done through advanced planning at the county level, including the coordination of effort of public, private, and nonprofit organizations. Merced County serves as the Operational Area and is guided by the Merced County Disaster Council that is made up of representatives of Merced County. The Operational Area includes local and regional organizations that bring relevant expertise to the wildfire prevention and recovery planning process.

Pursuant to the SEMS structure, MeID participates in regular meetings (typically monthly) and various monthly/quarterly/annual training exercises.

MeID is a member of the California Utilities Emergency Association, which plays a key role in ensuring communications between utilities and the CA Office of Emergency Services during larger scale emergencies. MeID also is a participant in the Western Energy Institute's Western Region Mutual Assistance Agreement between utilities across a number of western states.

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

A. PARTICULAR RISKS AND RISK DRIVERS ASSOCIATED WITH DESIGN, CONSTRUCTION, OPERATION, AND MAINTENANCE OF ELECTRIC UTILITY EQUIPMENT AND FACILITIES

It is industry standard to run overhead transmission and distribution electrical lines to transfer electricity to the end customer and this comes with inherent risk. Within MeID's service territory and the surrounding areas, the primary risk drivers, albeit very low, for a wildfire caused by electrical equipment or facilities are the following:

- Wire down near vegetation
- Vegetation to electrical line contact

B. PARTICULAR RISKS AND RISK DRIVERS ASSOCIATED WITH TOPOGRAPHIC AND CLIMATOLOGICAL RISK FACTORS

The University of California at Davis defines climate change as “significant changes in global temperature, precipitation, wind patterns and other measures of climate that occur over several decades or longer.”⁷ California is already experiencing the impacts of climate change including extended drought conditions, hotter temperatures, and drier fuel sources, among others.

Within MeID’s service territory and the surrounding areas, the primary climatological risk drivers for wildfire are the following:

- Extended drought
- Hotter temperatures
- High winds

C. CHANGING WEATHER PATTERNS (CLIMATE CHANGE) ENTERPRISEWIDE SAFETY RISKS

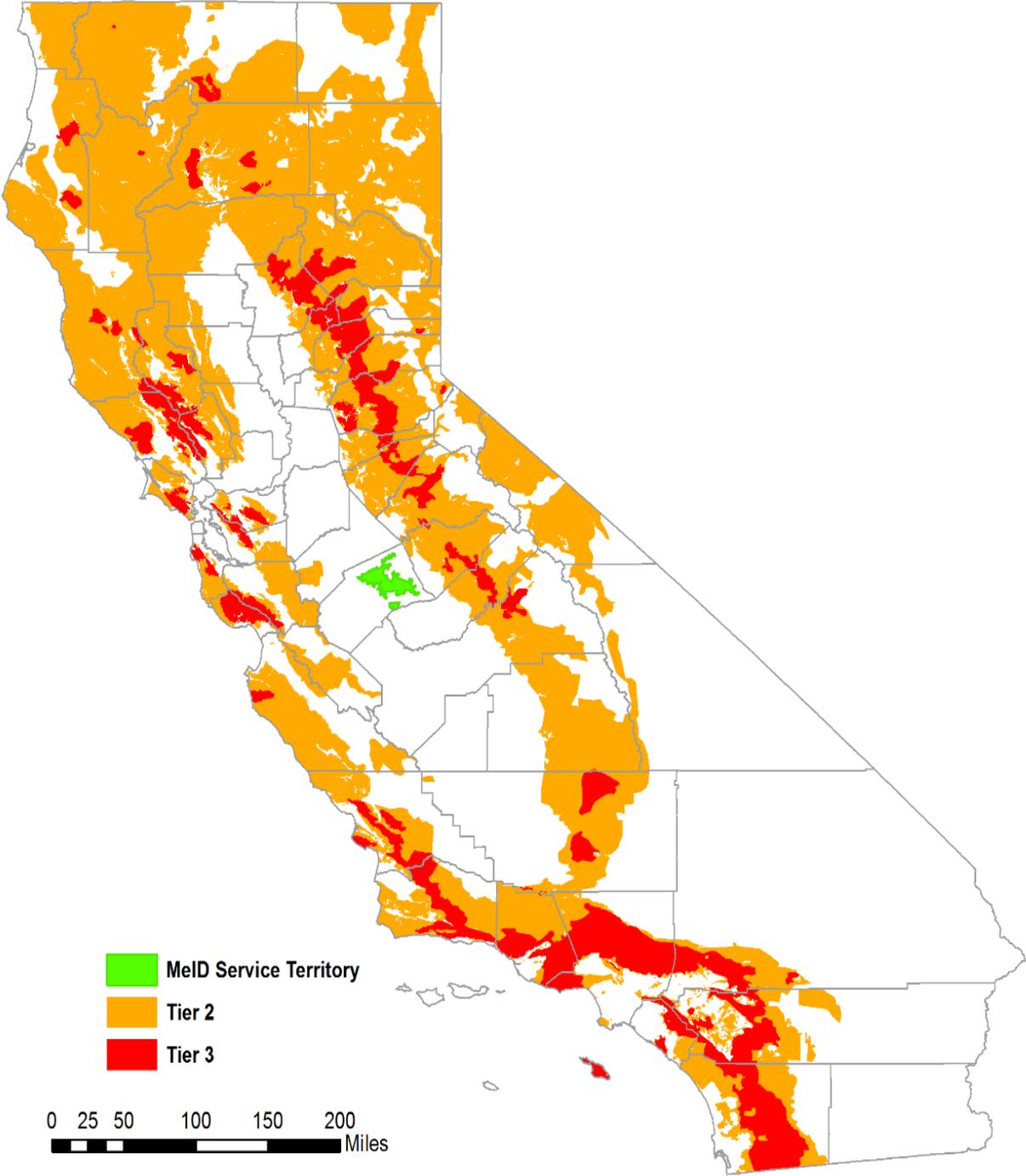
Fire risks due to extended drought and high winds are very low within MeID’s service territory. MeID has approximately 85% of its electric distribution system underground, further reducing the risk of an electrical related wildfire ignition. An overlay of MeID’s service territory and the CPUC Fire Threat Map is shown in Figure 3. MeID’s entire service territory is located outside the HFTD and does not have a history of electric facility caused wildfires. Table 4 describes the tiers in the CPUC Fire Threat Map along with number of electrical facilities within each zone.

⁷ “Climate Change Terms and Definitions.” Science and Climate, climatechange.ucdavis.edu/science/climate-change-definitions/.

Table 4. Description of the CPUC tiered fire threat zones & MeID territory

Zone	Description	Facilities	Quantity
Tier 3	Tier 3 fire-threat areas depict areas where there is an extreme risk (including likelihood and potential impacts on people and property) from utility associated wildfires.	Transmission lines:	0 miles
		Distribution lines:	0 miles
		Substations:	0
		Hydro Plants:	0
Tier 2	Tier 2 fire-threat areas depict areas where there is an elevated risk (including likelihood and potential impacts on people and property) from utility associated wildfires.	Transmission lines:	0 miles
		Distribution lines:	0 miles
		Substations:	0
		Hydro Plants:	0
Tier 1	Tier 1 High Hazard Zones are zones in direct proximity to communities, roads, and utility lines, and are a direct threat to public safety.	Transmission lines:	0 miles
		Distribution lines:	0 miles
		Substations:	0
		Hydro Plants:	0
Non-HFTD	Areas outside the of designated HFTD	Transmission lines:	34 miles
		Distribution lines:	265 miles
		Substations:	3
		Hydro Plants:	3*
* Note	All hydro plants are also located outside of MeID service area.		

Figure 3. CPUC Fire Threat Map with MID Territory Overlay



V. WILDFIRE PREVENTATIVE STRATEGIES

A. HIGH FIRE THREAT DISTRICT

MeID directly participated in the development of the CPUC's Fire-Threat Map,⁸ which designates the HFTD.

In the map development process, MeID reviewed the proposed boundaries of the HFTD and agrees that, based on local conditions and historical fire data, all of MeID's service territory was properly excluded from the HFTD. MeID has incorporated the HFTD into its construction, inspection, maintenance, repair, and clearance practices, where applicable.

B. DESIGN AND CONSTRUCTION STANDARDS

MeID meets or exceeds local, state, federal, and industry standards applicable to design, construction, maintenance, and inspections of the electric transmission, distribution, and substation facilities. Additionally, MeID monitors and adheres to, as appropriate, the National Electric Safety Code.

C. VEGETATION MANAGEMENT

MeID meets or exceeds the minimum industry standards for vegetation management (VM). For 115 kV transmission-level facilities, MeID complies with NERC FAC-003-4, Transmission Vegetation Management, where applicable. For both transmission and distribution level facilities, MeID meets or exceeds: (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 (Table 1, column Case 14), but as previously mentioned, MeID does not own or operate any electrical facilities within the HFTD.

⁸ Adopted by CPUC Decision 17-12-024.

The recommended time-of-trim guidelines do not establish a mandatory standard, but instead provide useful guidance to utilities. MeID will use specific knowledge of growing conditions and tree species to determine the appropriate time of trim clearance in each circumstance.

Within MeID's transmission and distribution VM inspection and maintenance program, vegetation maintenance is performed by MeID personnel along with annual patrols which identify and correct potential problems. 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).

Table 5. GO 95 Rule 35 Table 1

GO 95, Rule 35, Table 1					
Case	Type of Clearance	Trolley Contact, Feeder and Span Wires, 0-5kv	Supply Conductors and Supply Cables, 750 - 22,500 Volts	Supply Conductors and Supply Cables, 22.5 - 300 kV	Supply Conductors and Supply Cables, 300 - 550 kV (mm)
13	Radial clearance of bare line conductors from tree branches or foliage	18 inches	18 inches	¼ Pin Spacing	½ Pin Spacing
14	Radial clearance of bare line conductors from vegetation in the Fire-Threat District	18 inches	48 inches	48 inches	120 inches

Table 6. Guidelines to Rule 35 of GO 95

Appendix E Guidelines to Rule 35		
<p>The radial clearances shown below are recommended minimum clearances that should be established, at time of trimming, between the vegetation and the energized conductors and associated live parts where practicable. Reasonable vegetation management practices may make it advantageous for the purposes of public safety or service reliability to obtain greater clearances than those listed below to ensure compliance until the next scheduled maintenance. Each utility may determine and apply additional appropriate clearances beyond clearances listed below, which take into consideration various factors, including: line operating voltage, length of span, line sag, planned maintenance cycles, location of vegetation within the span, species type, experience with particular species, vegetation growth rate and characteristics, vegetation management standards and best practices, local climate, elevation, fire risk, and vegetation trimming requirements that are applicable to State Responsibility Area lands pursuant to Public Resource Code Sections 4102 and 4293.</p>		
Voltage of Lines	Case 13	Case 14
Radial clearances for any conductor of a line operating at 2,400 or more volts, but less than 72,000 volts	4 feet	12 feet
Radial clearances for any conductor of a line operating at 72,000 or more volts, but less than 110,000 volts	6 feet	20 feet
Radial clearances for any conductor of a line operating at 110,000 or more volts, but less than 300,000 volts	10 feet	30 feet
Radial clearances for any conductor of a line operating at 300,000 or more volts	15 feet	30 feet

D. FACILITY INSPECTIONS

MeID meets or exceeds the minimum inspection requirements for electric transmission, distribution, and substation facilities. Pursuant to these requirements, utilities inspect electric facilities in the HFTD more frequently than the other areas of its service territory. MeID personnel perform the maintenance and inspections on all MeID electric facilities as required per CPUC GO 165 & 174. As previously described, MeID currently does not have any electrical facilities located within the CPUC's HFTD however all inspection programs are also applicable to facilities outside the HFTD.

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

E. RECLOSING 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. The settings and coordination of these electric protective devices were based on best practices and event reports from previous years. If deemed necessary, MeID has the capability to change the reclosing settings during adverse conditions and will make those decisions based on real-time or forecasted conditions. However, since MeID does not own or operate any electrical facilities within the HFTD they do not, nor do they anticipate, developing a formal reclosing policy for implementation during critical fire weather conditions.

F. DE-ENERGIZATION

MeID has the authority and capability to preemptively shut off power due to fire-threat conditions, however, this option will only be used in extraordinary circumstances. MeID personnel will monitor the National Weather Service for information regarding a Red Flag Warning that may impact the MeID service area. Due to the minimal risk of MeID's electrical supply facilities being the origin or contributing source for a wildfire, MeID is not adopting a formal Public Safety Power Shutoff (PSPS) program or other specific protocols for de-energizing any portions of its electric distribution system during critical fire weather conditions. MeID will re-evaluate this determination in future updates to this WMP.

In the event that any of MeID's electric facilities and customers are affected by a PSPS originating from actions taken by another utility MeID will execute their 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.

VI. RESTORATION OF SERVICE

The steps to restore service after a wildfire are similar to the process of restoring service anywhere in MeID's electric system following a service interruption. These steps include receiving confirmation from the AHJ that the damage area is safe to access, customer communications, circuit patrolling, repair, and restoration.

MeID field personnel begin troubleshooting the interrupted or damaged circuit at the electrical protective device that operated, to the end of line in order to determine if the condition that caused the interruption is still in place. If incident (outage) resulted in an unsafe condition, then the condition must be made safe prior to further work to restore power resumes. Once the condition has been resolved and the equipment repaired, the system may then be deemed safe and re-energized.

VII. EVALUATING OF THE PLAN

A. METRICS AND ASSUMPTIONS FOR MEASURING PLAN PERFORMANCE

MeID will track two metrics to measure the performance of this WMP: (1) 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.

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. This metric will inform MeID personnel of any program enhancements needed to reduce the number of vegetation contacts on the MeID electric system.

In future WMPs, MeID will provide the number of vegetation contacts that have occurred and have resulted in an interruption of service.

METRIC 2: WIRES DOWN

The second metric is the number of distribution and transmission wires downed within MeID service territory which resulted in an interruption of service. For purposes of this metric, a wire down event includes any instance where an electric transmission or primary distribution conductor falls to the ground or on to a foreign object. MeID will track all wire down events even though they do not own or maintain any electrical facilities within the HFTD.

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

B. IMPACT OF METRICS ON PLAN

In the initial years, MeID anticipates that there will be relatively 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 and inform MeID on potential improvements to their Plan.

C. MONITORING AND AUDITING THE PLAN

MeID staff will continuously monitor projects and metrics outlined in this WMP. It is anticipated that data collected will 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 also reduce the risk that MeID facilities could be the origin or contributing source of ignition for a wildfire anywhere within their service territory.

This initial WMP will be presented to the MeID Board of Directors for approval and MeID will present updates to this plan on an annual basis. Additionally, MeID will contract a qualified independent evaluator to evaluate and issue a report on this Plan, and the report will be presented to the MeID Board of Directors at a publicly noticed meeting.

D. IDENTIFYING AND CORRECTING DEFICIENCIES IN 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, which is learned through experience. Once identified, any gaps or deficiencies will be corrected.

E. MONITORING THE EFFECTIVENESS OF THE PLAN

MeID strives for continuous improvement in their goal to reduce the risk of MeID facilities being the origin or contributing source for a catastrophic wildfire. 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.

VIII. INDEPENDENT AUDITOR

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

IX. TIMELINE

This WMP will be presented to the MeID Board of Directors in at least one noticed public meeting before January 1, 2020. The WMP will be reviewed and, if necessary, revised and approved by the MeID Board of Directors not less than annually thereafter. On or before July 1, 2020 MeID will submit the WMP to the WSAB. The WSAB will review and provide comments to MeID regarding the content and sufficiency of the WMP. MeID will consider all comments received in future revisions of the plan.