City Council Agenda Item #2
Staff Report

X	Regular
	Special
	Closed
	Emergency

Date: May 16, 2022

To: Mayor and City Council

From: Danny Howard, Electric Utility Director

Subject: Gridley Electric Utility Wildfire Mitigation Plan for FY 22-23

Recommendation
Staff respectfully requests the City Council to approve the Gridley Electric Utility Wildfire Mitigation Plan for FY 22-23.

Background
Over the last few years, California has experienced several catastrophic wildfires that has resulted in the State Legislature passing SB 901 in September 2018. The law requires California utilities to annually prepare a Wildfire Mitigation Plan (WMP). The City Council adopted our initial WMP in December 2019 for the FY 19-20. SB 901 also requires that a qualified independent evaluator, who shall issue a report to the governing body of each utility, evaluate the WMP. Power Engineers has completed their evaluation of Gridley's WMP and the necessary recommendations have been updated to the WMP.

Gridley Electric's WMP (Attached) describes the range of actions that our Electric Utility is taking or considering to minimize the sources of ignition and improve the resiliency of the City's electric grid. The WMP complies with the requirements of the Public Utilities Code section 8387 for publicly owned electric utilities to prepare a wildfire mitigation plan. The plan will be iterative, promote continuous improvement year after year, and implement industry best practices in a prudent and reasonable manner.

The Wildfire Safety Advisory Board (WSAB) has joined the California Natural Resources Agency on July 1, 2021, as the Office of Energy Infrastructure Safety (Energy Safety). The WSAB has an electronic, online e-filing system to receive and distribute document filings and provide easy access to information. The CPUC request we update our WMP every year and be submitted to the e-filing system before July 1 deadline.

Fiscal Impact
None

Compliance with the City Council Strategic Plan
This recommendation is consistent with our ongoing efforts to provide safe and reliable electrical services.

Attachments
Wildfire Mitigation Plan – Powers Engineers
Wildfire Mitigation Plan Review

April 2022

CITY OF GRIDLEY

Wildfire Mitigation Plan Review

Gridley Wildfire Mitigation Plan

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177399

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POWER ENGINEERS

Wildfire Mitigation Plan Review

PREPARED FOR: *CITY OF GRIDLEY*
PREPARED BY: *POWER ENGINEERS, INC.*
AUSTIN, TEXAS

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ACRONYMS AND ABBREVIATIONS

City	City of Gridley, California
CPUC	California Public Utilities Commission
POWER	POWER Engineers, Inc.
WMP	Wildfire Mitigation Plan

1.0 BACKGROUND

The City of Gridley, California (City) contracted with POWER Engineers, Inc. (POWER) to review the City's Wildfire Mitigation Plan (WMP), dated July 2021, for compliance with California Public Utilities Code (CPUC), Division 4.1 Provisions Applicable to Privately Owned and Publicly Owned Public Utilities, Chapter 6 Wildfire Mitigation, Section 8387 (PUC Code § 8387 or Code) and make recommendations for revisions that might be necessary. The Code requires that each local publicly owned electric utility and/or electrical cooperative prepare and submit a WMP to the California Wildfire Safety Advisory Board and lists specific topics that the WMP shall consider.

2.0 GENERAL FINDINGS

The analysis conducted for the City's WMP compared the requirements of each section of the Code with the WMP and found a few areas where more information should be provided to address existing regulatory requirements. The analysis also identified several sections of the WMP that could be strengthened.

The analysis established the following high-level findings:

- PUC Code § 8387(b)(2) contains 14 lettered topics that each WMP shall consider, some of which contain subheadings.
- The lettered topics in PUC Code § 8387 were separated into 17 topics for this review.
- The City's WMP addresses 16 of the 17 topics identified for this review.
- Overall, the City's WMP is in line with plans submitted by other utilities.
- Discussions in five sections of the WMP should be revised to ensure compliance with the Code.
- Discussion for several topics provides limited information and could be expanded to better address the intent of the Code.
- Recommendations for other sections are provided for the City's consideration.

3.0 RECOMMENDATIONS FOR SECTIONS THAT SHOULD BE REVISED

It is recommended that each of the following WMP sections are revised to ensure complete compliance with the Code requirements. For each section, the topic from the Code is shown along with the relevant section number from the City's WMP. The comments explain the weakness of the WMP section and recommendations for revisions. The recommended revisions should be relatively easy to implement.

Note that the Code text here may vary slightly from the actual text in the Code, and that the term *utility* has been substituted for *local publicly owned electric utility and/or electrical cooperatives*. The reader should refer to the PUC Code § 8387 as published by the California Public Utilities Commission for the exact text.

Code (2)(C) *A description of the preventative strategies and programs to be adopted by the utility to minimize the risk of its electrical lines and equipment causing catastrophic wildfires, including consideration of dynamic climate change risks.*

City WMP § V – Comment: Climate change risks are not described. Climate change is listed in WMP § IV as a wildfire risk but there is no discussion of how the City's preventative strategies and programs consider it. The WMP should include a brief discussion of dynamic climate change risks and any preventative strategies applicable to the City.

Code (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.*

City WMP § V.H – Comment: Protocols related to mitigating the public safety impacts of deenergization are not described. The WMP should include a brief description of any mitigation that can be implemented to lessen the impacts of deenergization on critical first responders and health and communication infrastructure.

Code (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.*

City WMP § V.H.2 – Comment: This section does not discuss direct notification procedures for critical facilities. The WMP should include a brief discussion about how the City will notify such critical facilities as first responders and hospitals when a deenergization event is planned or imminent. Sections III.D and III.E of the WMP say the City will coordinate with the Public Works Department regarding water delivery and with communication infrastructure providers, but these sections should be moved to Section V.H.2 and enhanced to include the methods of communication.

Code (2)(J) *A list that identifies, describes, and prioritizes all wildfire risks, and drivers for those risks, throughout the service territory. The list shall include, but not be limited to, both of the following:*

i. Risks and drivers associated with design, construction, operation, and maintenance of the utility's equipment and facilities.

ii. Particular risks and risk drivers associated with topographic and climatological risk factors through the different parts of the utility's service territory.

City WMP § IV – Comment: This section provides a lengthy list for both categories but does not describe or prioritize the risks. This section should be expanded to prioritize the risks and include a brief description of each. The responses to this Code in some other WMPs also include mitigation measures the utility is implementing or will implement for each risk. Although not a requirement, it may be helpful to add mitigation measures where applicable.

Code (2)(L) *A methodology for identifying and presenting enterprise-wide safety risk and wildfire-related risk.*

City WMP § IV – Comment: This section presents a list of wildfire risks but does not provide a methodology for identification of these risks. This section should include a description of how City staff determined which risks apply to its territory. Some methods other utilities have used to assess the risk of wildfire within their territories include a review and analysis of historic outages and historic fires.

4.0 ADDITIONAL RECOMMENDATIONS FOR SPECIFIC SECTIONS

The following comments and recommendations are offered as ways to strengthen the WMP.

City WMP § IV.A – Comment: This section lists wildfire risks and drivers. Suggestions for additional risk drivers include vegetation health (e.g., dry and stressed vegetation, susceptibility to bark beetle infestations, and tree mortality due to extended drought conditions) and wood pole deterioration or damage (e.g., woodpecker damage).

City WMP § IV.C – Comment: This section is in response to Code (2)(K), which refers to whether any areas within the City's territory have become a higher threat level since the fire-threat maps were issued. The City should consider evaluating changes to its territory with the potential to change the threat level over time, such as a bark beetle infestation, which results in clusters of high tree mortality.

City WMP § V.A – Comment: This section provides information on the City's participation in the development of the CPUC's fire-threat map. While not required, it would be helpful to describe the City's service territory, including how much area is within a high fire threat zone. The inclusion of a map in the WMP would also be beneficial to orient the reader.

City WMP § V.C – Comment: This section discusses wildfire preventative strategies related to design and construction standards. The City states that it meets or exceeds all relevant industry standards and regulations. It would be beneficial to include these standards as an appendix to the WMP or reference relevant City procedural documents. Additionally, the City may consider adding a description of its verification process, such as post-construction inspections and documentation/record keeping, to ensure the design and construction meets the standards. This process may also be included as an appendix to the WMP.

City WMP § V.D – Comment: This section describes the City's vegetation management practices and states that evaluations of trees occur annually, and more frequently in the case of "hazard trees." It would be helpful to describe the City's existing process and timeframe for maintenance activities, as well as describe the prioritization of maintenance activities and the documentation process. Additionally, this section discusses tree management but does not mention ground vegetation.

City WMP § V.E – Comment: This section outlines plans for inspection of the City's electrical infrastructure. The City may consider providing more detail, including the type and frequency of inspections, the City's process for generating and completing work orders, and the documentation and audit processes used to ensure the work is completed satisfactorily and within the scheduled timeframe.

City WMP § V.F – Comment: This section refers to the City's wildfire-related workforce training. It would be helpful to describe the criteria for the four daily operations conditions. A statement may be added regarding who receives the safety training program and in what context. Additionally, the City may consider adding training for specific tasks with the potential to ignite wildfires, including hot work or other ignition-source work such as mowing with bladed equipment. The City may include its procedures for such tasks by reference or as an appendix to the WMP.

City WMP § V.G – Comment: This section describes the City's reclosing policy during red flag warnings. A statement should be added to clarify whether the reclosing policy is to place line reclosers and relays in the non-reclosing setting in areas that serve high fire threat areas or if the policy applies to the City's entire system regardless of fire-threat zone.

City WMP § V.H.2 – Comment: This section lists the customer notification methods for advance notice of planned deenergization events. In the event of a wildfire, power shutoffs may be required without advance notice. It is suggested that methods for real-time notice are included. Real-time notice methods the City may consider include automated alerts and phone calls, and social media posts.

City WMP § VI – Comment: This section refers to community outreach and public awareness. It would be beneficial to briefly describe the City's existing community outreach efforts related to wildfire planning. This section may also be moved to become a subsection under wildfire preventative strategies.

City WMP § VII – Comment: This section provides a statement regarding restoration of service following a deenergization event. The statement is sufficient to comply with the Code. The City may consider including the City's process for restoring of service, such as communications and equipment inspections.

City WMP § VIII.A – Comment: This section describes two metrics the City will use to measure the performance of the WMP. It may be useful to add additional measurable metrics such as tracking of equipment inspection records and maintenance, tracking of vegetation inspection records and maintenance, number of overhead equipment failures, and outage response time. If the City has data pertaining to previous fires or wires down, it should be included as an appendix. If there is no previous data, a statement should be added that there is no data for a specific reporting period.

City WMP § VIII.B – Comment: This section states that data collection will become more robust in time. It would be beneficial to include a statement that because this is the first version of the plan there are no previous metrics to evaluate. Additionally, a statement should be added explaining how the data collection will be tracked (e.g., database, Excel spreadsheet).

City WMP § VIII.E – Comment: This section should describe how the City monitors the effectiveness of electrical line and equipment inspections. The City's WMP states this section will be developed at a later time. This section should expand upon City WMP § V.E, which should discuss the City's plans for the inspection of electrical infrastructure. The City should consider describing the auditing process for work orders to ensure any maintenance identified during the inspections is completed in a timely manner.

5.0 GENERAL RECOMMENDATIONS

The City of Gridley is within a Local Responsibility Area. Maps are very useful to illustrate how the City's service territory relates to the CPUC's fire threat zone and how events in the zone but outside the City's territory could impact the City's service.

The City may consider reorganizing the WMP to utilize the Code requirements as headings. This would help the reader quickly locate each section within the WMP.

Documentation and record keeping is necessary for several processes, including post-construction inspections, inspection of vegetation and electrical infrastructure, maintenance work orders, and auditing of completed work orders. The City may consider adding descriptions of its record keeping and documentation processes. This can be either incorporated by reference or included as appendices to the WMP.

The WMP should be used in part as a tool to help the City reduce financial liability should a fire occur. The City may consider whether the radial clearance of bare line accounts for wind-induced conductor blowout. The City may also consider whether equipment inspections evaluate pole conditions and deterioration, including biological hazards, such as damage from insects and woodpeckers.

CITY OF GRIDLEY WILDFIRE MITIGATION PLAN

JULY 1, 2022

I. OVERVIEW

A. POLICY STATEMENT

The Gridley Electric Department's overarching goal is to provide safe, reliable, and economic electric service to our residents and business community. In order to meet this goal, Gridley constructs, maintains, and operates its electrical lines and equipment in a manner that minimizes the risk of catastrophic wildfire posed by its electrical lines and equipment.

B. PURPOSE OF THE WILDFIRE MITIGATION PLAN

This Wildfire Mitigation Plan describes the range of actions that Gridley is taking to mitigate the threat of power-line ignited wildfires, including its various programs, policies, and procedures. This plan is subject to direct supervision by the City Administrator and is implemented by the Electrical Superintendent. This plan complies with the requirements of Public Utilities Code section 8387 for publicly owned electric utilities to prepare a wildfire mitigation plan by January 1, 2020, and annually thereafter. Gridley Electrical is a department within the City of Gridley.

Organization of the Wildfire Mitigation Plan

This Wildfire Mitigation Plan includes the following elements:

- 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;
- Community outreach and education;
- 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

A. MINIMIZING SOURCES OF IGNITION

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

B. RESILIENCY OF THE ELECTRIC GRID

The secondary goal of this Wildfire Mitigation Plan is to improve the resiliency of the electric grid. As part of the development of this plan, Gridley assesses new industry practices and technologies that will reduce the likelihood of an interruption (frequency) in service and improve the restoration (duration) of service.

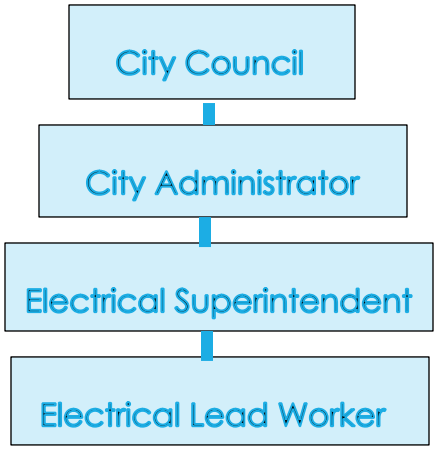
C. MINIMIZING UNNECESSARY OR INEFFECTIVE ACTIONS

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

unnecessary or ineffective, Gridley will assess whether a modification or replacement is merited. This plan will also help determine if more cost-effective measures would produce the same or improved results.

III. ROLES AND RESPONSIBILITIES

A. UTILITY GOVERNANCE STRUCTURE



City Council - to debate, consider and adopt any policies, regulations or ordinances recommended by the City Administrator and Electrical Department Superintendent as to the safe operations of the City of Gridley's Electrical System in accordance with the Wildfire Mitigation plan.

City Administrator - to work with the Electrical Department Superintendent in the implementation of the Wildfire Mitigation Plan and to be a liaison to the City of Gridley Council and Gridley Electrical Department during wildfire events. To be the liaison between the City of Gridley and any outside Governmental agencies in procurement of any needed resources to aid in a Wildfire Event. To be the public relations contact for the City of Gridley during a Wildfire Event.

Electrical Department Superintendent - to oversee the operation of the City of Gridley's Electrical Department. To implement the City of Gridley's Wildfire Mitigation Plan as adopted by the City of Gridley Council. To be the liaison between the Gridley Electrical Department and the City of Gridley Administrator during wildfire events. To be the liaison between City of Gridley Departments in providing aid during Wildfire Events. To provide training to Electrical Department staff in the prevention of Wildfire events caused by Electrical Distribution Systems.

Electrical Lead Worker - to oversee the day to day operations of the City of Gridley's Electrical Distribution System. To implement the City of Gridley's Wildfire Mitigation Plan as adopted by the City of Gridley's Council. To be the liaison between the Gridley Electrical Crew and the Gridley Electrical Department Superintendent during Wildfire Events. To report and correct any adverse conditions on the Electrical Distribution that may cause a Wildfire event.

B. WILDFIRE PREVENTION

City of Gridley's staff roles and responsibilities for (1) electric facility design, maintenance, and inspection; and (2) vegetation management.

- Operate system in a manner that will minimize potential wildfire risks.
- Take all reasonable and practicable actions to minimize the risk of a catastrophic wildfire caused by Gridley electric facilities.
- Coordinate with federal, state, and local fire management personnel as necessary or appropriate to implement Gridley's Wildfire Mitigation Plan.
- Immediately report fires, pursuant to existing Gridley Electrical practices and the requirements of this Wildfire Mitigation Plan.
- 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 California Public Utilities Commission.
- Collect and maintain wildfire data necessary for the implementation of this Wildfire Mitigation Plan.
- Provide regular training programs for all employees having obligations for implementation of this Wildfire Mitigation Plan.
- Perform annual inspections of distribution system for tree clearances.
- Perform annual tree trimming to maintain a 12-foot clearance around primary lines.

C. WILDFIRE RESPONSE AND RECOVERY

During a wildfire event the Gridley Electrical Superintendent, and or, the Lead line worker will keep in direct contact and provide regular updates as to the event status with the following Departments and organizations:

- City of Gridley Administrator
- Gridley Police Department
- CalFire
- Gridley Public Works Department

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

- Take all reasonable and practicable actions to prevent and suppress fires resulting from Gridley's electric facilities.
- Follow Gridley Electrical Department's protocols during Red Flag Warnings.

D. COORDINATION WITH WATER UTILITIES/DEPARTMENT

Gridley Electrical Department will coordinate with the City of Gridley Public Works Department to ensure the reliable delivery of water during any Red Flag or wildfire event, and as needed enlist the help of Public Works personnel to combat any wildfires caused by City of Gridley Electrical Equipment or to aid in any repairs of Gridley's electrical equipment that may cause a wildfire condition.

E. COORDINATION WITH COMMUNICATION INFRASTRUCTURE PROVIDERS

During a wild fire event that involves equipment of an outside agency's Communication equipment, the City of Gridley will contact the involved agencies as soon as it is feasibly possible.

F. STANDARDIZED EMERGENCY MANAGEMENT SYSTEM

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

Under the SEMS structure, a significant amount of preparation is done through advanced planning at the county level, including the coordination of efforts of public, private, and nonprofit organizations. Butte County serves as the Operational Area and is guided by the Butte County Disaster Council that is made up of representatives of Butte. The Operational Area includes local and regional organizations that bring relevant expertise to the wildfire prevention and recovery planning process. These participants include school districts, utilities, Fire Districts, non-profits, Hospitals, special districts, communications providers, and other similar organizations.

Pursuant to the SEMS structure, the City of Gridley participates in annual training exercises. Gridley is also a member of the California Utility Emergency Association, which plays a key role in ensuring communications between utilities during emergencies. Gridley also participates in the Western Energy Institute's Western Region Mutual Assistance Agreement, which is a mutual assistance agreement covering utilities across a number of western states.

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

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

Below is a list of wildfire risk drivers that is prioritized and Gridley's Mitigation measures to prevent each risk within Gridley's service territory and the surrounding areas. The primary risk drivers for wildfire are the following:

1. Extended drought – Annual Tree Trimming Program mitigates fires due to overgrown/rotting trees
2. High Winds – Annual GO 95 Inspections and maintenance mitigate fires caused from electrical lines
3. Weather – Annual GO 95 Inspections and maintenance mitigate weather related outages/fires
4. Bark Beetles – Annual Tree Trimming Program allows us to visualize any tree damages related to bark beetle and can be removed before causing any damage
5. Vegetation Health – Annual Tree Trimming Program allows to remove any overgrown or rotten vegetation before causing any damage
6. Changing Weather Patterns (Climate Change) – Annual GO95/128 inspections prevents outages/fires due to hotter, dryer conditions.
7. Fire History – Gives us the information that is needed where extensive measures need to be taken to prevent any reoccurring fires.

8. Terrain – Annual Inspections ensures that we have all access needed in case of any fire threats

B. ENTERPRISEWIDE SAFETY RISKS

Within Gridley's Distribution system the primary risk drivers for wildfire are the following:

- Electrical system equipment failure
- Falling trees
- Animal contacting energized equipment
- Human error

C. CHANGES TO CPUC FIRE THREAT MAP

Attached is a copy of the CPUC Fire Threat Map that shows all Tier 1, Tier 2 and Tier 3 fire threat areas in California. The City of Gridley is outside of all three tiers for any high-level threat wildfire areas. Also attached is the website for the CPUC Fire Threat Map website. CPUC FireMap (sig-gis.com)

V. WILDFIRE PREVENTATIVE STRATEGIES

A. HIGH FIRE THREAT DISTRICT

With Gridley not being directly in a High Fire Threat District, we still take the necessary protocols to prevent any possible fires related to our electrical system. Gridley has worked with local fire & government officials to identify the areas of Gridley's service territory that are at an elevated risk of power line ignited fires. Gridley has incorporated the High Fire Threat District map into its construction, inspection, maintenance, repair, and clearance practices, where applicable.

B. WEATHER MONITORING

Gridley monitors current and forecasted weather data from a variety of sources including:

- United States National Weather Service
- CalFire
- Weather Channel
- Radio news
- Local news outlets

Gridley assigns one of four operating conditions based on the relevant weather data and knowledge of local conditions:

(1) Normal: During normal conditions, no changes are made to operations or work policy.

(2) Elevated: During elevated fire-risk conditions, Electrical crews are asked to report any areas of concern on or around Gridley's electrical system for potential Wildfire conditions, and to address these concerns during the pre-job tail board discussion

(3) Extreme: During extreme fire-risk conditions, and when working in an area at risk to wildfire conditions crews are to prioritize projects, should it be necessary to proceed with the project, crews are asked to report any areas of concern on or around Gridley's electrical system for potential Wildfire conditions, and to address these concerns during the pre-job tail board discussion and if possible to de-energize the lines during the project. Ensure the job site has adequate fire suppression equipment.

(4) Red Flag: If the National Weather Service declares a Red Flag Warning for any portion of Gridley service territory, any work performed in a wildfire prone area is postponed unless it is deemed an emergency priority. Should it be deemed an emergency condition, crews are asked to report any areas of concern on or around Gridley's electrical system for potential Wildfire conditions, and to address these concerns during the pre-job tail board discussion and if possible, to de-energize the lines during the project. Ensure the job site has adequate fire suppression equipment. Extra personnel and equipment will be enlisted to monitor the project from ground for potential fire, and to suppress any fire caused by the project. If deemed necessary, CalFire will be contacted to stand-by during the project.

C. DESIGN AND CONSTRUCTION STANDARDS

Gridley's electric facilities are designed and constructed to meet or exceed the relevant federal, state, or industry standard. Gridley treats CPUC General Order (GO) 95 as a key industry standard for design and

construction standards for overhead electrical facilities. Gridley meets or exceeds all standards in GO 95. Additionally, Gridley monitors and follows as appropriate the National Electric Safety Code.

D. VEGETATION MANAGEMENT

Gridley meets or exceeds the minimum industry standard vegetation management practices. For transmission-level facilities, Gridley complies with NERC FAC-003-4, where applicable. For both transmission and distribution level facilities, Gridley meets: (1) Public Resources Code section 4292; (2) Public Resources Code section 4293; (3) GO 95 Rule 35; and (4) the GO 95 Appendix E Guidelines to Rule 35. These standards require significantly increased clearances in the High Fire Threat District. The recommended time-of-trim guidelines do not establish a mandatory standard, but instead provide useful guidance to utilities. Gridley will use specific knowledge of growing conditions and tree species to determine the appropriate time of trim clearance and ground vegitation in each circumstance.

GO 95, Rule 35, Table 1

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

Appendix E
Guidelines to Rule 35

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

Voltage of Lines	**Case 13**	**Case 14**

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

Within the High Fire Threat District, Gridley performs on an annual basis an evaluation of every tree that has the potential to strike overhead facilities if it were to fall. Gridley performs more frequent and detailed inspections of any such trees, and in cases where "hazard trees" (dead, dying, diseased or leaning) could strike the facilities, will work with the land owner to remove the tree or portion of the tree that poses a risk.

E. INSPECTIONS

Gridley meets or exceeds the minimum inspection requirements provided in CPUC GO 165 and CPUC GO 95, Rule 18. Pursuant to these rules, Gridley inspects electric facilities in the Hight Fire Threat District more frequently than the other areas of its service territory. Additionally, Gridley staff uses their knowledge of the specific environmental and geographical conditions to determine when areas outside of the High Fire Threat District require more frequent inspections.

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

Gridley works to ensure that all inspections to be performed within the High Fire Threat District are completed before the beginning of the historic fire season, [typically September 1]. Gridley monitors drought conditions and other relevant factors throughout the year to determine if inspections should be completed on a shorter timeframe. Below is a list of our inspections and frequency.

- Go 165 OH Visual Inspections – Yearly
- Go 95 OH Detailed Inspections – 5 Years
- Go 128 UG Inspections – 3 Years
- Intrusive Pole Test – 15 Years
- Tree Trimming - Yearly

F. WORKFORCE TRAINING

Gridley has implemented work rules and complementary training programs for its workforce to help reduce the likelihood of the ignition of wildfires.

Gridley has implemented into its daily operations 4 conditions based on current weather conditions.

- Normal
- Elevated

- Extreme
- Red Flag

Gridley has added a Wildfire Mitigation Plan and fire safety training to it safety training program. Gridley Electric Employees receive training from local CalFire stations in proper fire extinguisher use for certain situations.

G. RECLOSING POLICY

During Red Flag Warnings:

Line Reclosers- will be put in a non-reclosing setting for areas that serve as a high fire threat. Should a Line Recloser open during this period, the Line reclosing device shall not be closed until the distribution line it serves has been inspected for the cause of the equipment's operation. When the equipment and distribution line is re-energized, the distribution line will be inspected for safe operation.

Substation Circuit Breaker- relays will be put in a non-reclosing setting. Should a relay operate during this period, the relay device will not be closed until the distribution line being served by the affected relay is inspected for the cause of the operation. When the substation breaker is closed the distribution line being served by the breaker will be inspected for safe operation.

H. DEENERGIZATION

Gridley has the authority to preemptively shut off power due to fire-threat conditions; however, this option will only be used in extraordinary circumstances. Gridley's mitigation efforts include an annual tree trimming program, maintenance inspections program, pole replacement program and installation of generators to lessen the impacts of de-energization on critical first responders and health and communication infrastructure. Gridley will make a case-by-case decision to shut off power based on the following considerations:

- Red Flag Warnings issued by the National Weather Service for fire weather zones that contain Gridley circuits
- Gridley staff assessments of local conditions, including wind speed (sustained and gust), humidity and temperature, fuel moisture, fuel loading and data from weather stations
- Real-time information from staff located in areas identified as at risk of being subject to extreme weather conditions
- Input from Gridley fire experts and vegetation experts
- Input from local and state fire authorities regarding the potential consequences of wildfires in select locations
- Alternative ways to reroute power to affected areas
- Awareness of mandatory or voluntary evacuation orders in place
- Expected impact of de-energizing circuits on essential services
- Other operational considerations to minimize potential wildfire ignitions, including the blocking of reclosers on the identified circuit(s)
- On-going fire activity throughout Gridley's territory and California
- Ability to notify customers
- Notifications to local governments and public officials
- Potential impacts to communities and customers

1. IMPACTS TO PUBLIC SAFETY

The following conditions may occur during a fire threat power shut-down:

- Residential areas will lose power
- Schools will lose power
- Hospital will be on back-up generation power
- Stores will lose power
- Gas stations will lose power
- Traffic signals will be on battery back-up power
- Street lights will not work
- Water supply will be on back-up generation power
- Sewer will be on back-up generation power
- City Hall and Police departments will be on back-up generator power

2. CUSTOMER NOTIFICATION PROTOCOLS

Gridley will make every attempt to give advance notice to its customers of any planned wildfire prevention power shut downs. Should a wildfire prevention power shut down be planned, Gridley will notify all public safety offices, critical first responders, health care facilities, operators of telecommunications infrastructure and its customers in the following ways:

- Signage at City Hall
- Phone calls
- Social media post
- Automated phone calls and text
- Local news paper
- Monthly Bill mailings
- Hwy 99 messaging sign

All critical facilities such as Orchard Hospital, Police Dept., Fire Dept., City Hall, and all city wells have back- up generators in case of any sudden power loss or possible de-energization due to a fire threat. Gridley Electrical Department will coordinate with the City of Gridley Public Works Department with direct contact to PW Director or Supervisor to ensure the reliable delivery of water during any Red Flag or wildfire event and as needed enlist the help of Public Works personnel to combat any wildfires caused by City of Gridley Electrical Equipment or to aid in any repairs of Gridley's electrical equipment that may cause a wildfire condition.

VI. COMMUNITY OUTREACH AND PUBLIC AWARENESS

The City will annually evaluate its community outreach and public awareness communications efforts.

VII. RESTORATION OF SERVICE

Gridley will make every attempt to restore power to residents as soon as possible. Once all equipment inspections that is needed, priority power restoration will be given to critical circuits such as Hospital, CalFire, Police facilities, Senior Facilities and Schools.

VIII. EVALUATING OF THE PLAN

A. METRICS AND ASSUMPTIONS FOR MEASURING PLAN PERFORMANCE

Gridley will track two metrics to measure the performance of this Wildfire Mitigation Plan: (1) number of fire ignitions; and (2) wires down within the service territory.

METRIC 1: FIRE IGNITIONS

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

- Gridley facility was associated with the fire;
- The fire was self-propagating and of a material other than electrical and/or communication facilities;
- The resulting fire traveled greater than one linear meter from the ignition point; and
- Gridley has knowledge that the fire occurred.

In future Wildfire Mitigation Plans, Gridley will provide the number of fires that occurred that were less than 10 acres in size. Any fires greater than 10 acres will be individually described.

METRIC 2: WIRES DOWN

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

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

B. IMPACT OF METRICS ON PLAN

In the initial years, Gridley anticipates that there will be relatively limited data gathered through these metrics. However, as the data collection history becomes more robust, Gridley will be able to identify areas of its operations and service territory that are disproportionately impacted. Gridley will then evaluate potential improvements to the plan.

C. MONITORING AND AUDITING THE PLAN

This Wildfire Mitigation Plan will be presented to Gridley City Council. Gridley will present this plan to the Gridley Council on an annual basis.

D. IDENTIFYING AND CORRECTING DEFICIENCIES IN THE PLAN
E. MONITORING THE EFFECTIVENESS OF INSPECTIONS

The Cities Electrical inspections will be done in a timely manner, with repairs being prioritized from a high threat level to a lesser threat level to prevent any fires or possible damages.

IX. FINDEPENDENT AUDITOR

Public Utilities Code section 8387(c) requires the City of Gridley 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 Wildfire Mitigation Plan. The independent evaluator must issue a report that is posted to the City's website. This report must also be presented to the City Council at a public meeting.