



WILDFIRE MITIGATION PLAN

Pittsburg Power Company

A

California Joint Powers Agency

20 JUNE 2022

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- EXHIBIT D PPC Metrics FY 2021 – 2022
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Table 1: Revision Log:

Date:	Revision:	Section:
March 2021	Updated Exhibit B. Added “Everbridge” notification implementation	Exhibit B III.C
May 2022	Added Table 2: Cross References to Statutory Requirements	Table 2
May 2022	Added ‘Introduction’	I.A
May 2022	Updated Weather Monitoring section, added wind map	V.A, B
May 2022	Modified Public Hearing timing	IX.C
May 2022	Updated Independent Evaluator Section	X
May 2022	Added ‘Grid Hardening’ Section	V.D
May 2022	Expanded Plan Review Process Description	VI.J
May 2022	Added Exhibit C – PPC Pole Segments Description	Exhibit C
May 2022	Added Exhibit D – PPC Metrics FY 2021 – 2022	Exhibit D
May 2022	Changed CPUC Public Utilities Code 8387 to Exhibit E	Exhibit E
May 2022	‘Everbridge’ references updated to indicate system is in-place and operational	Multiple
May 2022	Replaced the terms ‘catastrophic wildfire’ and ‘wildfire’ to “ignition”, given that the terms ‘catastrophic wildfire’ and ‘wildfire’ do not appear to be CPUC defined terms. “Fire” and “ignition” are common and generally accepted colloquial terms	Multiple
May 2022	Grammatical and sentence structure corrections	Multiple
May 2022	Added Plan Contact Information	TOC
May 2022	Added Brush Area Description	I.A

Table 2: Cross References to Statutory Requirements

Requirement	Statutory Language	Location in WMP
Persons Responsible	PUC § 8387(b)(2)(A): An accounting of the responsibilities of persons responsible for executing the plan.	Section III
Objectives of the Plan	PUC § 8387(b)(2)(B): The objectives of the wildfire mitigation plan.	Section II.
Preventive Strategies	PUC § 8387(b)(2)(C): A description of the preventive strategies and programs to be adopted by the local publicly owned electric utility or electrical cooperative to minimize the risk of its electrical lines and equipment causing catastrophic wildfires, including consideration of dynamic climate change risks.	Section VI
Evaluation Metrics	PUC § 8387(b)(2)(D): A description of the metrics the local publicly owned electric utility or electrical cooperative plans to use to evaluate the wildfire mitigation plan’s performance and the assumptions that underlie the use of those metrics.	Section IX
Impact of Metrics	PUC § 8387(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.	Section IX.D
De-energization Protocols	PUC § 8387(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.	Section VI.H
Customer Notification Procedures	PUC § 8387(b)(2)(G): Appropriate and feasible procedures for notifying a customer who may be impacted by the deenergizing of electrical lines. The procedures shall consider the need to notify, as a priority, critical first responders, health care facilities, and operators of telecommunications infrastructure.	Section VI.K
Vegetation Management	PUC § 8387(b)(2)(H): Plans for vegetation management.	Section VI.E
Inspections	PUC § 8387(b)(2)(I): Plans for inspections of the local publicly owned electric utility’s or electrical cooperative’s electrical infrastructure.	Section V.F
Prioritization of Wildfire Risks	<p>PUC § 8387(b)(2)(J): A list that identifies, describes, and prioritizes all wildfire risks, and drivers for those risks, throughout the local publicly owned electric utility’s or electrical cooperative’s service territory. The list shall include, but not be limited to, both of the following:</p> <p>(30) 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.</p> <p>(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.</p>	Section V

<p>CPUC Fire Threat Map Adjustments</p>	<p>PUC § 8387(b)(2)(K): Identification of any geographic area in the local publicly owned electric utility’s or electrical cooperative’s service territory that is a higher wildfire threat than is identified in a commission fire threat map, and identification of where the commission should expand a high fire threat district based on new information or changes to the environment.</p>	<p>V.C Exhibit A</p>
<p>Enterprise-wide Risks</p>	<p>PUC § 8387(b)(2)(L): A methodology for identifying and presenting enterprise-wide safety risk and wildfire-related risk.</p>	<p>Section V.B</p>
<p>Restoration of Service</p>	<p>PUC § 8387(b)(2)(M): A statement of how the local publicly owned electric utility or electrical cooperative will restore service after a wildfire.</p>	<p>Section VIII</p>
<p>Monitor and Audit</p>	<p>PUC § 8387(b)(2)(N): A description of the processes and procedures the local publicly owned electric utility or electrical cooperative shall use to do all of the following</p> <p style="padding-left: 40px;">(30) Monitor and audit the implementation of the wildfire mitigation plan.</p> <p style="padding-left: 40px;">(ii) Identify any deficiencies in the wildfire mitigation plan or its implementation, and correct those deficiencies.</p> <p style="padding-left: 40px;">(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.</p>	<p>Section IX.C</p>
<p>Qualified Independent Evaluator</p>	<p>PUC § 8387I: 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 Web site 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.</p>	<p>Section X</p>

I. Overview

A. Introduction

Pittsburg Power Company (“PPC”) is a joint powers agency of the City of Pittsburg, California. PPC operates a municipal electric and gas utility distribution system on Mare Island Vallejo using the name “Island Energy”.

PPC does not own, operate, or maintain transmission facilities (21kV and higher).

PPC’s service territory is limited to Mare Island, Vallejo and is bordered to the east by the Napa River, to the south and west by San Pablo Bay and to the north by wetlands and Highway 37. Please refer to the map in Section V.B.

PPC is primarily an underground utility but does have some overhead distribution segments with a total of 59 low and medium voltage distribution system wood poles. Areas of trees, dense brush and tall grasses comprise a total of approximately 280 acres. Please refer to Exhibit C – PPC Pole Segments for a description of the three (3) overhead electrical distribution system segments.

PPC’s utility operations on Mare Island, Vallejo are not within any identified California Public Utilities Commission (“CPUC”) High-Fire Threat Districts. Please refer to Exhibit A.

Mare Island, Vallejo



B. Policy Statement

PPC's goal is to provide safe, reliable, and economic electric service to its Mare Island customers. To meet this goal, PPC constructs, maintains, and operates its electrical lines and equipment in a manner that minimizes the risk of ignition posed by its electrical lines and equipment.

C. Pittsburg Power Company Utility Overview

The electric utility component of PPC serves approximately 500 electric meters, with a combination of residential, commercial, and industrial customers. Approximately 90% of the load served on Mare Island is to commercial and industrial customers. The electric distribution system operates at 12kV, while taking power at 115kV from PG&E at PPC's Station H substation.

The PPC Mare Island utility service territory is outside of California Public Utility Commission ("CPUC") Tier 2 (Elevated) and Tier 3 (Extreme) fire threat zones as defined by the "CPUC Fire Threat Map" adopted by the CPUC on January 18, 2019. Please refer to Exhibit A.

The PPC electric distribution system is an almost exclusively underground system. However, PPC does have approximately 10,480 ft of energized, overhead, 12kV and 2.4kV distribution lines, with a total of 59 wood poles.

A. Purpose of the Wildfire Mitigation Plan

This Wildfire Mitigation Plan describes the range of activities that PPC is taking to mitigate the threat of powerline caused ignitions, including its various programs, policies, and procedures. This plan is subject to direct supervision by the PPC Executive Director and its Board of Directors and is implemented by the PPC Power Company Manager.

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. Please refer to Exhibit E.

In general, PPC's fire prevention and safety efforts conform to the intent of Vallejo's ("City") General Plan and other safety planning efforts and programs implemented by the City. PPC participates in and coordinates directly with the City on such programs.

Mare Island is within the City of Vallejo City limits and is under the jurisdiction of the City's municipal departments. PPC coordinates with the City of Vallejo Public

Works, Police and Fire departments on matters related to utility operations, safety, and emergency response on Mare Island, including fire response.

D. 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 ignition risks and risk drivers;
- Description of ignition 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

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 PPC's distribution system may be the origin or contributing source for the ignition of a fire. PPC has evaluated the prudent and cost-effective improvements to its physical assets, operations, and training that can help to meet this objective. PPC 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, PPC assesses new industry practices and technologies that will reduce the likelihood of an interruption in service and improve the time frames for restoration of service.

B. Identifying Unnecessary or Ineffective Actions

The final goal for this Wildfire Mitigation Plan is to measure the effectiveness of specific ignition mitigation strategies. Where a particular action, program component, or protocol is determined to be unnecessary or ineffective, PPC will assess whether a facility 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

Board of Directors: PPC is governed by a “Pittsburg Power Company Board of Directors”. The Board of Directors is comprised of five (5) members, who also serve as the City Council for the City of Pittsburg.

Executive Director: The currently sitting City Manager serves as the Pittsburg Power Company Executive Director.

Director of Community Services: The Director of Community Services serves as PPC’s Department Head.

Power Company Manager: The Power Company Manager is a direct-hire City employee managing the day-to-day activities of the utility.

C. Ignition Prevention

The utility has a staff of four (4) Utility Technicians – three (3) dedicated to electric operations, one (1) to gas operations. In addition to the Utility Technicians, there is a Lineworker position that supports both electric and gas operations.

And in addition to the Power Company Manager, there are Administrative Officer and Administrative Assistant positions.

The Power Company Manager has the responsibility for the operation of the utility and the effective implementation and management of the Wildfire Mitigation Plan.

Utility staff perform all forms of distribution system operations and maintenance, including phase checking, switching, system repairs, minor upgrades, metering, system safety inspections assessments and related work.

Vegetation management is supervised by a Utility Technician and performed by the Lineworker position, other available staff, and contractors as may be required.

Typical vegetation management includes tree trimming per CPUC GO 95, manual and mechanical clearing of brush and grass from around wood poles and rights-of-way, and the limited application of herbicides to prevent recurrence of grasses around wood power poles.

System inspection for hazards or ignition risk occurs in the normal course of staff business activities. System-wide vegetation reduction and management is performed annually.

Further and in addition to the preceding, PPC will:

- Operate the system in a manner that will minimize potential ignition risks.
- Take all reasonable and practicable actions to minimize the risk of ignition caused by PPC electric facilities.
- Coordinate with federal, state, and local fire management personnel as necessary or appropriate to implement PPC's Wildfire Mitigation Plan.
- Immediately report fires, pursuant to existing Publicly Owned Utility (POU) standard 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 implemented 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 service territory and other relevant POU ignition data necessary for the implementation of this Wildfire Mitigation Plan.
- Provide regular training programs for employees having obligations for implementation of this Wildfire Mitigation Plan.

IV. Ignition Response And Recovery

A. PPC staff has the following obligations regarding ignition prevention, response, and investigation:

- Take all reasonable and practicable actions to prevent and suppress fires resulting from PPC electric facilities.
- Communicate potential risks and expected utility actions during Red Flag or other emergency warnings.
- The utility will provide an immediate response to any event causing or having the potential to cause an ignition or other safety situation.
- The utility will immediately communicate to City of Vallejo Fire and Police of an event requiring a response by public safety.

- The utility will further communicate with City of Vallejo Public Works or other City staff as may be necessary.

B. Public Communication

Presently, public communication occurs primarily through the PPC website, the “Everbridge” alert system and social media outlets such as Facebook and Mare Island Next Door.

The Everbridge email, phone and text notification system facilitates immediate communication with the public during a fire and other emergencies.

C. Coordination with Water Utilities / Department

PPC is in regular communication with the City of Vallejo Water Department in its normal course of business.

During an emergency, PPC staff would work with the water department to de-energize electrical circuits as may be necessary and provide other general assistance as may be required. The City of Vallejo does not have electric pumping facilities within the PPC service territory.

D. Coordination With Communication Infrastructure Providers

Coordination with communication infrastructure providers would be through incident first responders and through the City of Vallejo Communications Center (911 Call Center).

D. Standardized Emergency Management System

PPC participates in planning, communication, and coordination obligations pursuant to the California Office of Emergency Services’ Standardized Emergency Management System (“SEMS”) Regulations,¹ 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.² Pursuant to this structure, PPC

¹ 19 CCR § 2407.

² Cal. Gov. Code § 2403(b):

(1) “Field response level” commands emergency response personnel and resources to carry out tactical decisions and activities in direct response to an incident or threat.

coordinates and communicates with the relevant safety agencies as well as other relevant local and state agencies.

Under the SEMS structure, planning and preparation is done at the County level, including the coordination of efforts of public and private organizations. Solano County serves as the Operational Area and is guided by the Solano County Office of Emergency Services. Pursuant to the SEMS structure, PPC participates in periodic information, planning and training exercises with both Solano County and the City of Vallejo.

PPC is a member of the California Utility Emergency Association (“CUEA”), which plays a key role in ensuring communications between utilities and the Office of Emergency Services (“OES”) during emergencies.

V. Ignition Risks and Drivers Associated with Design, Construction, Operation, and Maintenance

A. Particular Risks and Risk Drivers Associated With Topographic and Climatological Risk Factors

Within PPC’s service territory and the surrounding areas, the primary risk drivers for an ignition are the following:

- Extended drought

(2) “Local government level” manages and coordinates the overall emergency response and recovery activities within their jurisdiction.

(3) “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.

(4) “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.

(5) “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.

- Vegetation type
- Vegetation Density
- Weather
- High winds
- Terrain
- Changing Weather Patterns (Climate Change)
- Communities or Facilities at Risk
- Fire History

B. Enterprisewide Fire Safety Risks

Enterprise-wide safety risks are almost exclusively limited to the energized overhead PPC distribution system (Exhibit B). Within the overhead distribution system, sections of circuits to the south of the service territory are in areas of light grasses, moderate to heavy brush and some trees (“South Island”). Overhead circuits in the center of the service territory are in areas of some trees (“Club Drive”). Circuits on the north end of the service territory have light grasses and similar vegetation (“North Island”). Refer to Exhibit C.

The underground portion of the distribution system poses low risk of ignition, as the underground system is in developed commercial, industrial, and residential areas. Events in these areas tend to be highly localized and absent vegetation.

C. Changes to CPUC Fire Threat Map

PPC does not propose nor believe there to be a need to alter or expand the CPUC Fire Threat Map as it relates to the PPC’s Service Territory on Mare Island, Vallejo. Please refer to Exhibit A.

D. Grid Hardening

The North Island, as shown in Exhibit B has few active facilities, contains 26 wood poles, and is slated for full mixed-use development (residential, commercial). At the time of development, any remaining overhead lines and poles will be removed, and all electrical facilities will be undergrounded. Circuit maintenance and vegetation management will continue until such time.

The two other overhead circuits – Club Drive and South Island – will be undergrounded at such time the poles and related appurtenances are no longer serviceable. Vegetation management will continue until that time. All other above-ground facilities, such as substations, are fenced, have security lighting and are subject to annual vegetation management.

VI. Ignition Preventative Strategies

A. CPUC High Fire Threat District

PPC was not a participant in the development of the CPUC Fire-Threat Map,³ which designates a High-Fire Threat District.

PPC's utility operations are not within any CPUC identified High-Fire Threat District.

PPC self-performed identifying any areas of PPC's service territory that are at an elevated risk of power line caused ignitions. PPC has incorporated the elements of this plan and prudent utility practice into its construction, inspection, maintenance, repair, and clearance practices, where applicable.

B. Weather Monitoring

PPC monitors current and forecasted regional weather data from several sources:

- www.Weather.com
- www.Windfinder.com
- Local Fire District Warnings
- United States National Weather Service Alerts

PPC utilizes commercially available internet services to monitor local and regional weather conditions. For temperature and humidity and related current local and forecast conditions including alerts, we refer to www.Weather.com

For current and forecast wind conditions, PPC -Island Energy utilizes www.Windfinder.com to monitor prevailing winds within our service territory and the surrounding region. Windfinder has eight (8) monitoring stations in Vallejo

³ Adopted by CPUC Decision 17-12-024.
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and nearby, providing an overall view of prevailing winds at any given time. The greater San Francisco Bay Area has several dozens of Windfinder monitoring points.

Please refer to the regional Windfinder Figure that follows and the Windfinder website.

C. Fire Watch, Red Flag and other Alerts

PPC receives Fire Watch, Red Flag and related alerts, such as San Pablo Bay and Napa River small craft advisories, from the National Weather Service (NWS) directly to our computer task bars where we then implement system watch activities such as vehicle patrols of the systems 59 poles. PPC operates its utility in NWS weather zone 018 (CAZ018).

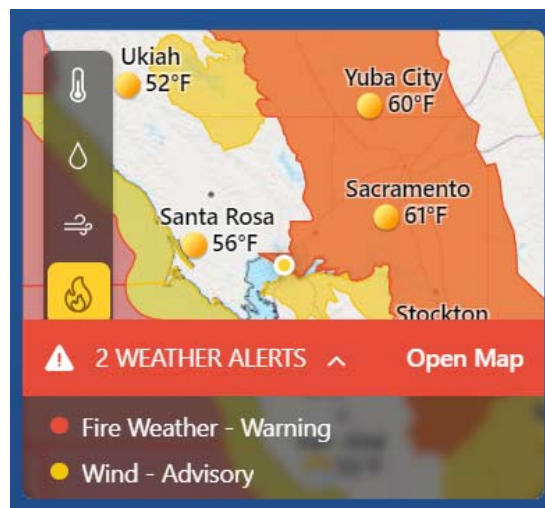
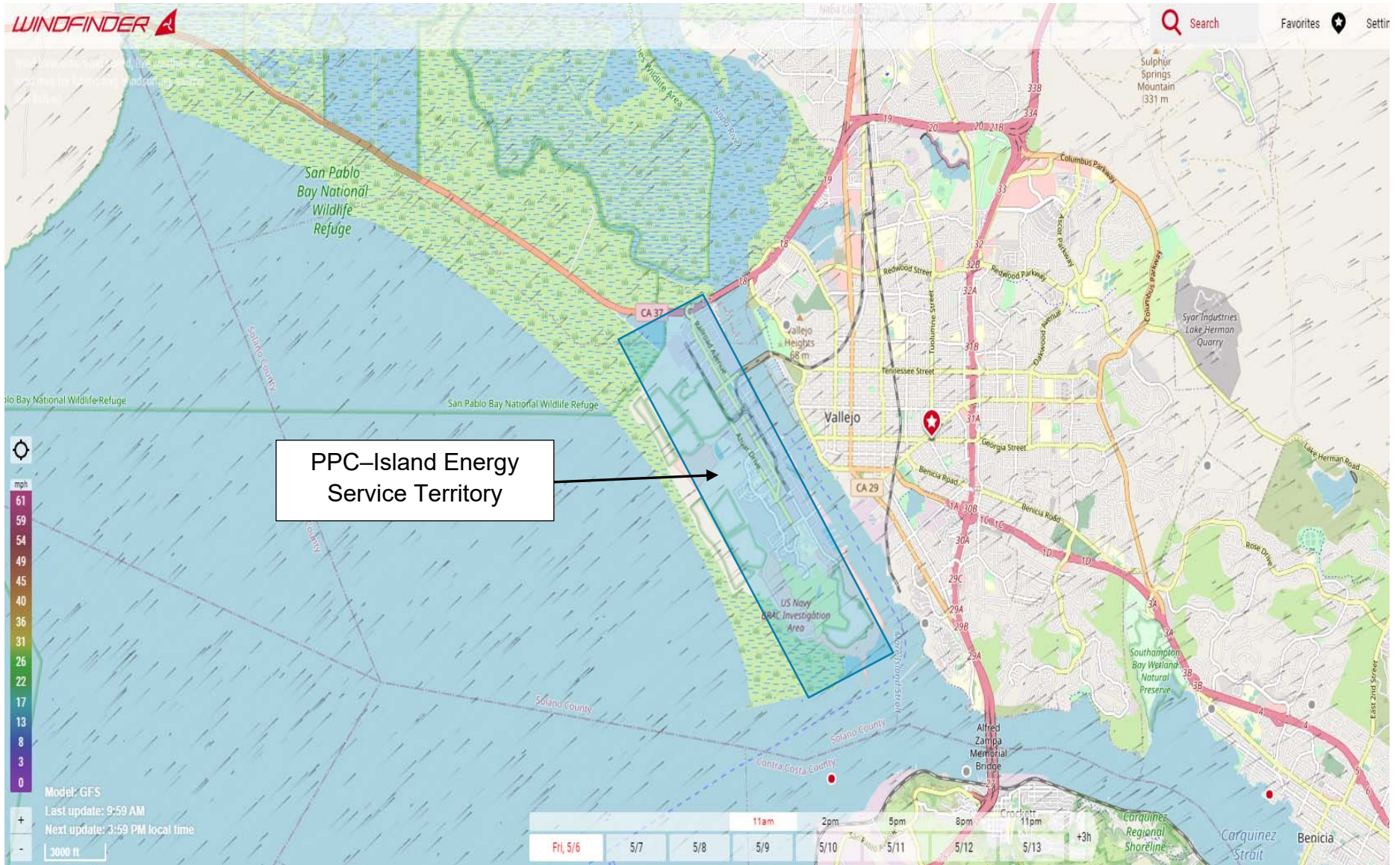


Figure: Windfinder Regional Wind Map



PPC 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 ignition conditions, PPC will periodically monitor both electrical system and weather conditions.
- (3) Extreme:** During extreme ignition conditions, PPC will perform mobile patrols and inspections of the distribution system within areas of high vegetation and ignition risk.
- (4) Red Flag:** If the National Weather Service declares a Red Flag Warning for any portion of PPC's service territory, PPC may selectively de-energize portions of its overhead distribution system.

D. Design and Construction Standards

PPC's electric facilities are designed and constructed to meet or exceed the relevant federal, state, or industry standard. PPC treats CPUC General Order (GO) 95 as a key industry standard for design and construction standards for overhead electrical facilities. PPC meets or exceeds all standards in GO 95. Additionally, PPC monitors and follows as appropriate the National Electric Safety Code.

E. Vegetation Management

PPC meets or exceeds the minimum industry standard for vegetation management practices. The recommended time-of-trim guidelines do not establish a mandatory standard, but instead provide useful guidance to utilities. PPC will use specific knowledge of growing conditions and tree species to determine the appropriate time of trim clearance in each circumstance. Please refer to Exhibit D, PPC Metrics FY 2021 – 2022 .

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		
<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

Within higher fire threat areas, PPC performs an evaluation of every tree that has the potential to strike overhead facilities if it were to fail on an estimated annual basis. PPC 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 City of Vallejo (or property owner) to remove the tree or portion of the tree that poses a risk. Please refer to Exhibit C – PPC Pole Segments

F. Inspections

PPC meets or exceeds the minimum inspection requirements provided in CPUC GO 165 and CPUC GO 95, Rule 18. Pursuant to these rules, PPC inspects electric facilities in areas of high fire threat more frequently than the other areas of its service territory.

Additionally, PPC staff uses their knowledge of the specific environmental and geographical conditions to determine when areas outside of a higher fire threat area require more frequent inspections.

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

PPC works to ensure that all inspections to be performed within its service territory are completed generally in late spring, with mitigation performed not later than September 1st.

PPC monitors drought conditions and other relevant factors throughout the year to determine if inspections should be completed on a shorter timeframe.

G. Workforce Training

PPC has implemented work rules and complementary training programs for its workforce to help reduce the likelihood of a PPC related ignition.

Specific training includes safety monitoring of system distribution facilities, identification of circuit disconnect / isolation points and right-of-way brush management and removal.

H. Reclosing Policy

“Reclosers” are electrical fault detection devices that trip-open when detecting an electrical fault, but then “reclose” the circuit to test if the fault was temporary.

PPC does not currently employ the use of ‘reclosers’ within its service territory and does not have plans to add such devices in the future.

I. De-energization

PPC has the authority to preemptively shut off power due to ignition-threat conditions; however, this option will only be used in extraordinary circumstances. PPC 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 PPC circuits;
- PPC staff assessments of local conditions, including wind speed (sustained and gust), humidity and temperature, fuel moisture, fuel loading and data from area weather stations;
- Real-time information from staff located in areas identified as at risk of being subject to extreme weather conditions;
- Input from PPC, fire experts and vegetation experts;
- Input from local and state fire authorities regarding the potential consequences of ignitions 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 ignitions, including the blocking of reclosers on the identified circuit(s);
- On-going fire activity throughout PPC territory and California;
- Ability to notify customers;
- Notifications to local governments and public officials; and
- Potential impacts to communities and customers

J. Impacts to Public Safety

In the event of the need to shut off power within the service territory, or when PG&E's supply of power to PPC is shutoff, the following may be impacted:

- Customers with special medical devices requiring power and not having backup.
- City of Vallejo streetlights and traffic signals are out
- US Coast Guard ship traffic radar station is out
- Vallejo G Street Causeway Bridge inoperable

Note that many critical facilities within the utility service territory have back-up generation, including the VA Medical Clinic, US Coast Guard communications facility and WETA Bay Ferry terminal.

There are no water treatment, wastewater treatment of primary police or fire facilities within the utility service territory.

K. Customer Notification Protocols

The basic protocols for customer notification remain telephone, email, the utility website and social media.

Customers will be notified in advance of a planned shutdown, whether by PPC or by PG&E – to the extent PPC is made aware of or can anticipate a grid-wide shutdown event by PG&E.

Future customer and public notification schemes include 'Everbridge' email, phone and text notifications.

VII. Community Outreach and Public Awareness

PPC has performed community outreach regarding potential ignitions and power outage risk in three ways:

1. PPC had previously drafted and issued a statement regarding the potential for power interruptions on Mare Island due to PG&E PSPS an ignition risk. PPC has posted the Wildfire Mitigation Plan on its website under “Regulations and Rates”. PPC also uses social media and the Everbridge communications platform for public outreach.
2. Responding to individual customer inquiries regarding the potential for power interruptions.
3. Fiscal Year Public Rate Hearings on Mare Island

Going forward, other public meetings and tools such as ‘Everbridge’ will be employed. PPC will also continue to use social media to communicate important public and customer information.

VIII. Restoration of Service

Restoration of electric distribution services will be per PPC utility operation procedures. Such procedures include, but are not limited to:

1. Inspect involved facilities and any related facilities for damage and/or operability. Perform repairs or replacement as may be necessary.
2. Check relay protections and circuit breaker status for correct setting / position.
3. Confirm circuit phasing.
4. Perform circuit switching per switching protocol.
5. Confirm restoration and normal operation of system.
6. Perform final safety check.

IX. Evaluation of the Plan

A. Metrics and Assumptions for Measuring Plan Performance

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

1. Metric: PPC Ignitions

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

- A PPC 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
- PPC has knowledge that the fire occurred.

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

2. Metric: Wires Down

The second metric is the number of distribution and/or transmission wires downed within PPC's service territory. For purposes of this metric, a "wires down" event includes any instance where an electric transmission (PPC does not own, operate or maintain transmission facilities) or primary distribution conductor falls to the ground or on to a foreign object.

PPC does not have any facilities within a defined High Fire Threat District

PPC will not normalize this metric by excluding unusual events, such as severe storms or vandalism – such as attempted copper theft and poles that have been vandalized in the past. Instead, PPC will supplement this metric with a qualitative description of any such unusual events.

B. Impact of Metrics on Plan

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

C. Monitoring and Auditing the Plan

This Wildfire Mitigation Plan is developed by the utility Power Company Manager with initial review by his retained executive management professional. The plan is then forwarded to the PPC Director for review, who also serves as the City of Pittsburg Deputy City Manager.

The PPC Director may seek additional review from the Planning Department and the City Attorney's office. Upon completion of the internal review and all comments have been incorporated, a Staff Report is drafted along with a Resolution for adoption by the PPC Board of Directors.

The updated plan, along with the Staff Report and Resolution are presented to the PPC Board annually. The PPC Board will conduct a Public Hearing on the plan every three years, which will be noticed directly to customers and interested parties within the PPC service territory along with local media outlets and social media.

L. Identifying and Correcting Deficiencies in the Plan

Deficiencies in the plan will be identified by ongoing distribution system safety reviews, field operations, and identified 'lessons learned' from other POU's.

Responsibility for correcting deficiencies within the plan and implementing corrective actions or plans will be the responsibility of the Power Company Manager.

D. Monitoring the Effectiveness of Inspections

PPC will monitor the effectiveness of its inspections through written reports and periodic field verification by others, including the Power Company Manager.

X. Independent Evaluator

Public Utilities Code section 8387© requires PPC to engage 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 PPC's website. This report must also be presented to PPC Board of Directors at a public hearing.

Going forward, PPC will utilize the City of Vallejo Fire Marshall as the qualified independent evaluator with experience in assessing the safe operation of electrical distribution infrastructure and related facilities on Mare Island Vallejo.

The Fire Marshal independent evaluator is physically located on Mare Island Vallejo and is familiar with the PPC service territory, utility operations and has worked with PPC on specific potential ignition hazards previously.




EXHIBIT A

CPUC Fire-Threat Map

Adopted by CPUC January 19, 2018

The data portrayed in the CPUC Fire-Threat Map were developed under Rulemaking 15-05-006, following procedures in Decision (D.) 17-01-009, revised by D.17-06-024, which adopted a work plan for the development of a utility High Fire-Threat District (HFTD) for application of enhanced fire safety regulations. The aforementioned decisions ordered that the HFTD be comprised of two individual map products. One of those map products is this CPUC Fire-Threat Map. The CPUC Fire-Threat Map depicts areas where enhanced fire safety regulations found in Decision 17-12-024 will apply. The final CPUC Fire-Threat Map was submitted to the Commission via a Tier 1 Advice Letter that was adopted by the Commission's Safety and Enforcement Division (SED) with a disposition letter on January 19, 2018. All data and information portrayed on the CPUC Fire-Threat Map are for the expressed use called out in D.17-12-024, and any other use of this map are not the responsibility or endorsed by the Commission or its supporting Independent Review Team.

Fire-Threat Areas

-  Tier 2 - Elevated
-  Tier 3 - Extreme
-  Counties

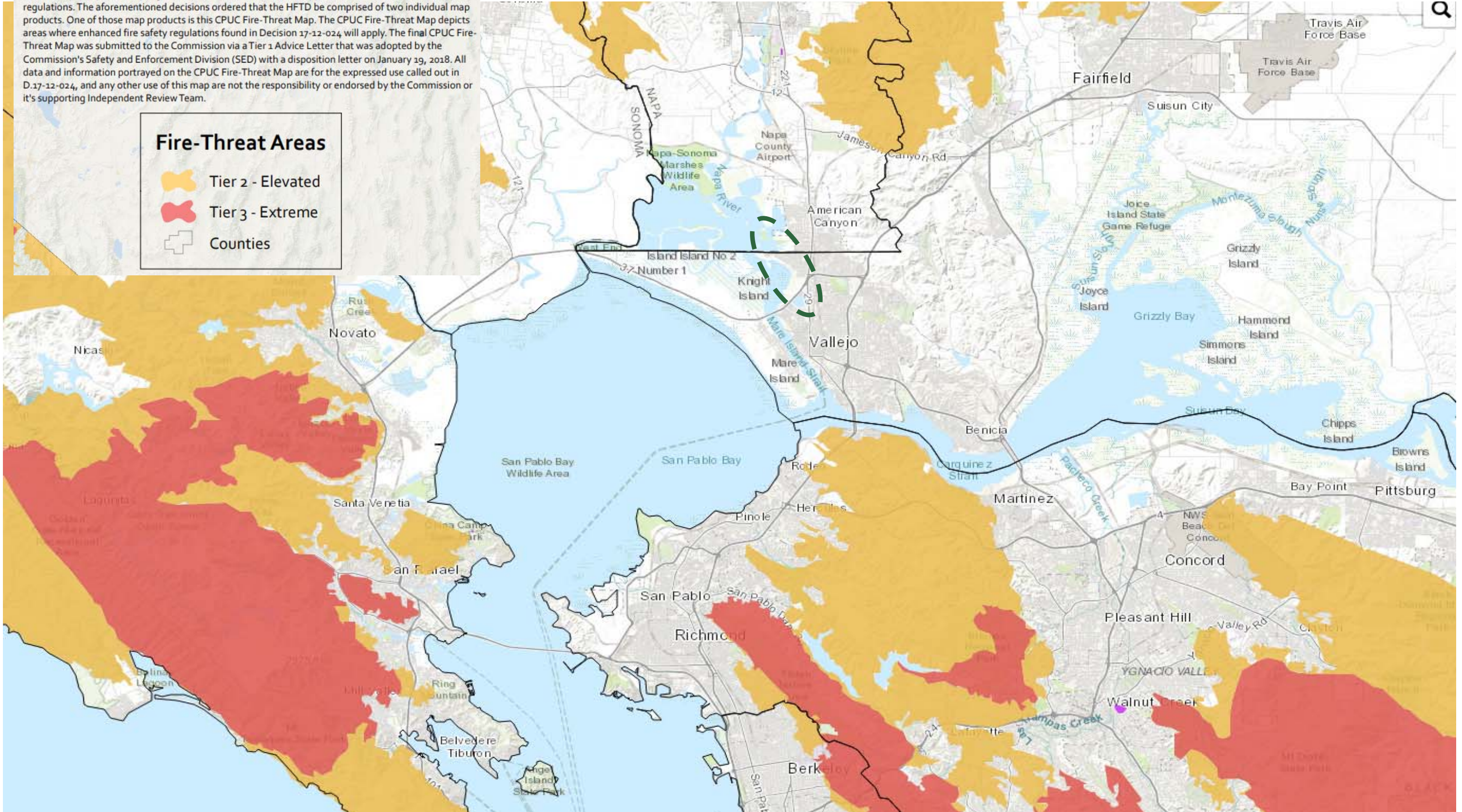


EXHIBIT B



EXHIBIT C

PPC WOOD POLE SEGMENTS DESCRIPTION

SOUTH ISLAND

The 12vV overhead distribution line on South Island is a combination of underground conduit and overhead wood poles and serves US Coast Guard telecommunications and ship traffic radar facilities. There is a total of twenty-four (24) poles in this circuit.

Of the 24 poles, 20 are in areas of light grasses or gravel. Four (4) poles are located adjacent to areas of light vegetation, brush and trees.



CLUB DRIVE

The 12kV overhead distribution line on Club Drive originates in an underground vault at Touro University and travels south to serve the USDA Forest Service office building and street lighting. There are a total of nine (9) wood poles on this circuit.

There are trees encroaching on the right-of way, and periodic tree maintenance is performed to prevent branches from impacting the overhead lines. Please refer to Exhibit D – PPC Metrics FY 2021 – 2022.



NORTH ISLAND

The North Island overhead is a 2.4kV circuit serving street lighting and a flood control district pump. There are a total of twenty-six (26) wood poles on this circuit.

The poles are in light to moderate grasses, shrubs and in proximity to several trees. The area is regularly maintained by the Mare Island Master Developer including mowing and weed / grasses abatement. Three (3) poles are located near trees, which are regularly inspected and maintained as necessary.



EXHIBIT D
PPC Metrics FY 2021 – 2022

#	Metric:	No.	Date:	Explanation:
1	PPC Ignitions	0		
2	Downed Wires	0		
3	Non-PPC Ignitions	0		
4	Vandalism	0		Vandalism to overhead distribution lines and wood poles, or other facilities with the potential for ignitions.
	Inspections:			
5	Fall	1	10/1/2022	Grasses acceptable – defer tree abatement until spring.
6	Spring	1	2/14/2022	Tree Trimming required on Club Drive, pole base grasses removal.
	Abatement:			
7	Tree Trimming	1	2/18/2022	Tree branches, brush removal and ROW clearing on Club Drive.
8	Grasses, Brush Removal	1	5/25/2022	Around all wood poles per GO 95 – 2 weeks duration.

EXHIBIT E

PUBLIC UTILITIES CODE - CPUC

DIVISION 4.1. PROVISIONS APPLICABLE TO PRIVATELY OWNED AND PUBLICLY OWNED PUBLIC UTILITIES [8301 - 8390] (Heading of Division 4.1 amended by Stats. 1988, Ch. 1560, Sec. 2.)

CHAPTER 6. Wildfire Mitigation [8385 - 8389] (Chapter 6 added by Stats. 2016, Ch. 598, Sec. 1.)

8387.

(a) Each local publicly owned electric Utility and electrical cooperative shall construct, maintain, and operate its electrical lines and equipment in a manner that will minimize the risk of ignition posed by those electrical lines and equipment.

(b) (1) The local publicly owned electric Utility or electrical cooperative shall, before January 1, 2020, prepare a Wildfire Mitigation Plan. After January 1, 2020, a local publicly owned electric Utility or electrical cooperative shall prepare a Wildfire Mitigation Plan annually and shall submit the plan to the California Wildfire Safety Advisory Board on or before July 1 of that calendar year. Each local publicly owned electric Utility and electrical cooperative shall update its plan annually and submit the update to the California Wildfire Safety Advisory Board by July 1 of each year. At least once every three years, the submission shall be a comprehensive revision of the plan.

(2) The Wildfire Mitigation Plan shall consider as necessary, at minimum, all of the following:

(A) An accounting of the responsibilities of persons responsible for executing the plan.

(B) The objectives of the Wildfire Mitigation Plan.

(C) A description of the preventive strategies and programs to be adopted by the local publicly owned electric Utility or electrical cooperative to minimize the risk of its electrical lines and equipment causing ignitions, including consideration of dynamic climate change risks.

(D) A description of the metrics the local publicly owned electric Utility or electrical cooperative plans to use to evaluate the Wildfire Mitigation Plan's performance and the assumptions that underlie the use of those metrics.

(E) A discussion of how the application of previously identified metrics to previous Wildfire Mitigation Plan performances has informed the Wildfire Mitigation Plan.

(F) Protocols for disabling reclosers and deenergizing portions of the electrical distribution system that consider the associated impacts on public safety, as well as protocols related to mitigating the public safety impacts of those protocols, including impacts on critical first responders and on health and communication infrastructure.

(G) Appropriate and feasible procedures for notifying a customer who may be impacted by the deenergizing of electrical lines. The procedures shall consider the need to notify, as a priority, critical first responders, health care facilities, and operators of telecommunications infrastructure.

(H) Plans for vegetation management.

(I) Plans for inspections of the local publicly owned electric Utility's or electrical cooperatives electrical infrastructure.

(J) A list that identifies, describes, and prioritizes all wildfire risks, and drivers for those risks, throughout the local publicly owned electric Utility's or electrical cooperative's service territory. The list shall include, but not be limited to, both of the following:

(i) Risks and risk drivers associated with design, construction, operation, and maintenance of the local publicly owned electric Utility's or electrical cooperative's equipment and facilities.

(ii) Particular risks and risk drivers associated with topographic and climatological risk factors throughout the different parts of the local publicly owned electric Utility's or electrical cooperative's service territory.

(K) Identification of any geographic area in the local publicly owned electric Utility's or electrical cooperative's service territory that is a higher wildfire threat than is identified in a commission fire threat map, and identification of where the commission should expand a high fire-threat district based on new information or changes to the environment.

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

(M) A statement of how the local publicly owned electric Utility or electrical cooperative will restore service after a wildfire.

(N) A description of the processes and procedures the local publicly owned electric Utility or electrical cooperative shall use to do all of the following:

(i) Monitor and audit the implementation of the Wildfire Mitigation Plan.

(ii) Identify any deficiencies in the Wildfire Mitigation Plan or its implementation and correct those deficiencies.

(iii) Monitor and audit the effectiveness of electrical line and equipment inspections, including inspections performed by contractors that are carried out under the plan, other applicable statutes, or commission rules.

(3) The local publicly owned electric Utility or electrical cooperative shall, on or before January 1, 2020, and not less than annually thereafter, present its Wildfire Mitigation Plan in an appropriately noticed public meeting. The local publicly owned electric Utility or electrical cooperative shall accept comments on its Wildfire Mitigation Plan from the public, other local and state agencies, and interested parties, and shall verify that the Wildfire Mitigation Plan complies with all applicable rules, regulations, and standards, as appropriate.

(c) The local publicly owned electric Utility or electrical cooperative shall contract with a qualified independent evaluator with experience in assessing the safe operation of electrical infrastructure to review and assess the comprehensiveness of its Wildfire Mitigation Plan. The independent evaluator shall issue a report that shall be made available on the internet website of the local publicly owned electric Utility or electrical cooperative and shall present the report at a public meeting of the local publicly owned electric Utility's or electrical cooperative's governing board.

(Amended by Stats. 2019, Ch. 79, Sec. 20. (AB 1054) Effective July 12, 2019.)