



# Wildfire Mitigation Plan



CITY OF VERNON PUBLIC UTILITIES  
4305 S SANTA FE AVE.  
VERNON, CALIFORNIA 90058

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# Reference Guide

Vernon Public Utilities (VPU) is dedicated to providing safe, reliable electric services to the residents and businesses in City of Vernon at competitive prices.

While VPU’s service territory and operations do not include or abut high wildfire threat areas, VPU remains committed to evaluating hazards that may affect the reliability and safety of the City of Vernon. This WMP describes the activities that VPU is taking to mitigate the threat of power-line ignited wildfires, including its various programs, policies and procedures. This plan will be reviewed and evaluated by its City Council on an annual basis.

## Utility Overview and Context

The California Wildfire Safety Advisory Board (WSAB) issued the Guidance Advisory Opinion for the 2023 Wildfire Mitigation Plans of Electric Publicly Owned Utilities and Rural Electric Cooperatives (“2023 WSAB Guidance Advisory Opinion”) on November 16, 2022. VPU provides this document to the WSAB in order to respond to the recommendations included in the 2023 WSAB Guidance Advisory Opinion. VPU will provide a narrative response and/or a cross reference to the location in VPU’s Wildfire Mitigation Plan (WMP) where the topic is addressed. Where the recommendation is not applicable to VPU, the response will provide a brief description supporting this conclusion.

**Table 1: Context-Setting Information**

Utility Name	Vernon Public Utilities (VPU)	
Service Territory Size	5.2 square miles	
Owned Assets	<input type="checkbox"/> Transmission <input checked="" type="checkbox"/> Distribution <input checked="" type="checkbox"/> Generation	
Number of Customers Served	2,000 customer accounts	
Population Within Service Territory	150 people	
Customer Class Makeup	<i>Number of Accounts</i>	<i>Share of Total Load (MWh)</i>
	4% Residential; 5% Government; 0% Agricultural; 64% Small/Medium Business, Commercial; 26% Industrial	3% Residential; 5% Government; 0% Agricultural; 64% Small/Medium Business, Commercial; 28% Industrial
Service Territory	0% Agriculture 0% Barren/Other	

<b>Location/Topography<sup>1</sup></b>	0% Conifer Forest 0% Conifer Woodland 0% Desert 0% Hardwood Forest 0% Hardwood Woodland 0% Herbaceous 0% Shrub 100% Urban 0% Water
<b>Service Territory Wildland Urban Interface<sup>2</sup> (based on total area)</b>	0% Wildland Urban Interface; 0% Wildland Urban Intermix;
<b>Percent of Service Territory in CPUC High Fire Threat Districts (based on total area)</b>	Tier 2: 0% Tier 3: 0%
<b>Prevailing Wind Directions &amp; Speeds by Season</b>	The windier part of the year lasts for 6 months, from November to May, with average wind speeds of more than 6.9 miles per hour. The windiest day of the year is December 31, with an average hourly wind speed of 8.6 miles per hour. The calmer time of year lasts for 6 months, from May to November. The calmest day of the year is August 10, with an average hourly wind speed of 5.3 miles per hour. The wind is most often from the west for 5 months, from February to July, with a peak percentage of 47% on May 23. The wind is most often from the north for 4 months, from October to February, with a peak percentage of 36% on January 1.
<b>Miles of Owned Lines Underground and/or Overhead</b>	Overhead Dist.: 95 miles Overhead Trans.: 0 miles Underground Dist.: 24 miles Underground Trans.: 0 miles <b>Explanatory Note 1 - Methodology for Measuring "Miles":</b> measured in line miles
<b>Percent of Owned Lines in CPUC High Fire Threat Districts</b>	<i>Overhead Distribution Lines as % of Total Distribution System (Inside and Outside Service Territory)</i>
	Tier 2: 0% Tier 3: 0%
	<i>Overhead Transmission Lines as % of Total Transmission System (Inside and Outside Service Territory)</i>
	Tier 2: 0% Tier 3: 0%

<sup>1</sup> This data shall be based on the California Department of Forestry and Fire Protection, California Multi-Source Vegetation Layer Map, depicting WHR13 Types (Wildlife Habitat Relationship classes grouped into 13 major land cover types) available at: <https://www.arcgis.com/home/item.html?id=b7ec5d68d8114b1fb2bfbf4665989eb3>.

<sup>2</sup> This data shall be based on the definitions and maps maintained by the United States Department of Agriculture, as most recently assembled in *The 2010 Wildland-Urban Interface of the Conterminous United States*, available at [https://www.fs.fed.us/nrs/pubs/rmap/rmap\\_nrs8.pdf](https://www.fs.fed.us/nrs/pubs/rmap/rmap_nrs8.pdf).

Customers have ever lost service due to an IOU PSPS event?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Customers have ever been notified of a potential loss of service to due to a forecasted IOU PSPS event?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Has developed protocols to pre-emptively shut off electricity in response to elevated wildfire risks?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Has previously pre-emptively shut off electricity in response to elevated wildfire risk?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

I. Cross Reference to Statutory requirements

WSAB requested that POU provide a clear roadmap as to where each statutory requirement is addressed within the POU WMP.

**Table 2: Cross References to Statutory Requirements**

Requirement	Statutory Language	Location in WMP
Persons Responsible	PUC § 8387(b)(2)(A): An accounting of the <b>responsibilities of persons</b> responsible for executing the plan.	Section 4
Objectives of the Plan	PUC § 8387(b)(2)(B): The <b>objectives</b> of the wildfire mitigation plan.	Section 3
Preventive Strategies	PUC § 8387(b)(2)(C): A description of the <b>preventive strategies and programs to be adopted by the local publicly owned electric utility</b> or electrical cooperative to minimize the risk of its electrical lines and equipment causing catastrophic wildfires, including consideration of dynamic climate change risks.	Section 7
Evaluation Metrics	PUC § 8387(b)(2)(D): A description of the <b>metrics the local publicly owned electric utility or electrical cooperative plans to use to evaluate the wildfire mitigation plan’s performance</b> and the assumptions that underlie the use of those metrics.	Section 13
Impact of Metrics	PUC § 8387(b)(2)(E): A discussion of how the <b>application of previously identified metrics</b> to previous wildfire mitigation plan performances has informed the wildfire mitigation plan.	Section 14
Deenergization Protocols	PUC § 8387(b)(2)(F): <b>Protocols for disabling reclosers and deenergizing portions of the electrical distribution system</b> that consider the associated impacts on public safety, as well as protocols related to mitigating the public safety impacts of	Section 10

	those protocols, including impacts on critical first responders and on health and communication infrastructure.	
<b>Customer Notification Procedures</b>	<b>PUC § 8387(b)(2)(G):</b> Appropriate and feasible <b>procedures for notifying a customer</b> 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 11
<b>Vegetation Management</b>	<b>PUC § 8387(b)(2)(H):</b> Plans for vegetation management.	Section 8
<b>Inspections</b>	<b>PUC § 8387(b)(2)(I):</b> <b>Plans for inspections</b> of the local publicly owned electric utility's or electrical cooperative's electrical infrastructure.	Section 9
<b>Prioritization of Wildfire Risks</b>	<p><b>PUC § 8387(b)(2)(J):</b> A list that <b>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.</b> The list shall include, but not be limited to, both of the following:</p> <p>(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.</p> <p>(ii) Particular risks and <b>risk drivers</b> 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 5
<b>CPUC Fire Threat Map Adjustments</b>	<b>PUC § 8387(b)(2)(K):</b> Identification of any <b>geographic area in the local publicly owned electric utility's or electrical cooperative's service territory</b> that is a higher wildfire threat than is identified in a commission fire threat map, and identification of where the commission should expand a high fire threat district based on new information or changes to the environment.	Section 2.3 Section 2.6
<b>Enterprisewide Risks</b>	<b>PUC § 8387(b)(2)(L):</b> A methodology for identifying and presenting <b>enterprisewide</b> safety risk and wildfire-related risk.	Section 6
<b>Restoration of Service</b>	<b>PUC § 8387(b)(2)(M):</b> A statement of how the local publicly owned electric utility or electrical cooperative will <b>restore service after a wildfire.</b>	Section 12
<b>Monitor and Audit</b>	<p><b>PUC § 8387(b)(2)(N):</b> 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>(i) <b>Monitor and audit</b> the implementation of the wildfire mitigation plan.</p> <p>(ii) <b>Identify any deficiencies</b> in the wildfire mitigation plan or its implementation, and correct those deficiencies.</p>	Section 15

	(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.	
<b>Qualified Independent Evaluator</b>	<b>PUC § 8387(c):</b> 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.	Section 16

## II. WSAB Guidance Advisory Opinion Recommendations

### **Process for Utility Adoption and Submittal of Annual WMP and Opportunities for Public Comment:**

VPU is governed by the Vernon City Council. Accordingly, the 2021 Vernon Public Utilities Wildfire Mitigation Plan was presented to the Vernon City Council on May 18, 2021, and was adopted in Resolution No. 2021-12. Subsequent annual updates and triennial comprehensive revisions shall be publicly presented and approved by minute order of the City Council.

### **Description of Where WMP Information Can be Found on Utility Website**

The Vernon Public Utilities Wildfire Mitigation Plan and the independent evaluator’s report will be posted to the City of Vernon’s website under regulatory reports<sup>3</sup> and has been presented to Vernon’s City Council at a noticed public meeting.

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<sup>3</sup> <https://www.cityofvernon.org/government/public-utilities/regulatory-reports>



# 1. Executive Summary

- 1.1. The Vernon Public Utilities Wildfire Mitigation Plan meets applicable California Senate Bill 901, Assembly Bill 1054, and Assembly Bill 111 requirements.
- 1.2. The City of Vernon is an industrial city of 5.2 square miles, adjacent to Downtown Los Angeles. Wildfire ignition risks are low due to the sparsity of vegetation and fuel sources in Vernon's industrial environment.
- 1.3. Vernon is located more than 10 miles from the nearest California Public Utilities Commission (CPUC) High Fire-Threat District Elevated risk area.
- 1.4. Vernon Public Utilities (VPU) does not own or operate transmission, distribution, or generation facilities in CPUC High Fire-Threat District.
- 1.5. VPU does not own or operate transmission, distribution, or generation facilities in California Department of Forestry and Fire Protection's (CAL FIRE) Fire and Resource Assessment Program (FRAP) Fire Threat Map's designated High or Extreme Wildfire Hazard areas.
- 1.6. VPU's Wildfire Mitigation Plan includes required program components such as performance metrics, continuous improvement, and responsible parties.
- 1.7. VPU will make annual Wildfire Mitigation Plan progress updates to the Vernon City Council and the California Wildfire Safety Advisory Board.

## 2. Introduction

Over the last few years, California has seen some of its most devastating and destructive wildfires. Climate Change is recognized as a contributing factor (long hot spells, low moisture, etc.). In response, Senate Bill (SB) 901 authored by Senator Dodd, was enacted in 2018. SB 901 requires every electric utility to prepare a wildfire mitigation plan (WMP) and annually present the plan to its governing body. SB 901 amended Public Utilities Code (PUC) section 8387. Section 8387 generally requires every publicly owned utility to construct, maintain, and operate its electrical facilities to minimize the risk of wildfire posed by those facilities. As further required by Assembly Bill (AB) 1054 enacted in 2019, the WMP shall be submitted to the California Wildfire Safety Advisory Board for review and advisory opinion by July 1, 2023. At least once every three years, the submittal must be a comprehensive revision of the WMP.

This document outlines Vernon Public Utilities' activities in accordance with these requirements.

## 2.1. Policy Statement

Vernon Public Utilities' overarching goal is to provide safe, reliable, and economic electric service to its local community. In order to meet this goal, VPU 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.

## 2.2. Organization of the Wildfire Mitigation Plan

This Wildfire Mitigation Plan includes the following elements:

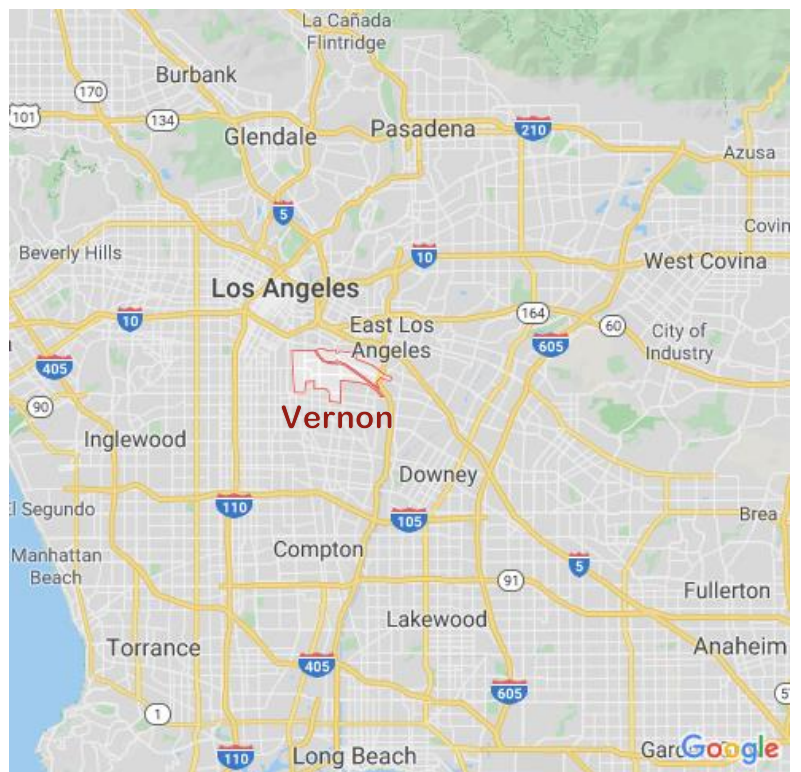
- Objectives of the plan;
- Roles and responsibilities for carrying out the plan;
- Identification of key wildfire risks and risk drivers;
- Description of wildfire prevention, mitigation, and response strategies and programs;
- Metrics for evaluating the performance of the plan and identifying areas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

## 2.3. City of Vernon

The City of Vernon is an industrial city of 5.2 square miles located several miles to the southeast of Downtown Los Angeles in Southern California. The City's business-friendly environment, low-cost utilities, and proximity to ports, trucking and rail transport make Vernon an ideal location for industrial uses.

The City of Vernon is located in a region of Los Angeles County with low wildfire risk. No part of VPU's service territory is located in or near the High Fire-Threat District, designed in the California Public Utilities Commission's (CPUC) Fire Threat Map. Further, all of VPU's service territory is excluded from the High, Very High, and Extreme

Threat areas of the California Department of Forestry and Fire Protection's (CAL FIRE) Fire and Resource Assessment Program (FRAP) Fire Threat Map. Based on a review of local



conditions and historical fires, the Vernon Fire Department has determined that VPU's electrical lines and equipment do not pose a significant risk of wildfire.

Despite this low risk, VPU takes appropriate actions to help its region prevent and respond to the increasing risk of wildfires. In its role as a public agency, VPU closely coordinates with other local safety and emergency officials to help protect against fires and respond to emergencies. In its role as a utility, VPU follows all applicable design, construction, operation, and maintenance requirements that reduce safety risks associated with its system. This Wildfire Mitigation Plan describes the safety-related measures that Vernon Public Utilities follows to reduce its risk of causing wildfires.

## 2.4. Vernon Public Utilities Profile

Formerly known as Vernon Light and Power and Vernon Gas & Electric, the City of Vernon has consolidated all utility services within the VPU. VPU provides electric, water, natural gas, and fiber optic services.

VPU serves about 2,000 mainly commercial and industrial electric customers with electric sales of approximately 1,128 GWh annually, and peak loads of approximately 184 MW in the summer and 174 MW in the winter.

## 2.5. Generation and Distribution Facilities

VPU's electric system includes generation and distribution facilities that are completely located within VPU's electric service territory in the LA Basin. VPU does not own or operate any transmission facilities. VPU has two generation facilities that are located within VPU service territory. Malburg Generating Station (MGS), a 134 MW combined-cycle natural gas-fired plant and two H. Gonzales units, a combined 10 MW natural gas plant. VPU has 119 miles of distribution lines and 27 miles of 66 kV subtransmission lines. No overhead distribution lines span over naturally vegetated open space areas. Therefore, there is no potential for electrical equipment igniting a wildfire. The generation and distribution facilities are located entirely within the CAISO balancing area and are connected to the CAISO through the Southern California Edison (SCE) 220-66 kV Laguna Bell Substation. The Vernon load is supplied and supported by five 66 kV source lines that exit the SCE Laguna Bell 220/66 kV Substation. With the support of Vernon's local generation, the VPU electric system reliability will most likely not be compromised under a double contingency (N-2) situation, where two 66 kV transmission lines are out of service.

## 2.6. Wildfire Risk Assessment

In 2018, Vernon Fire Department conducted a risk assessment of wildfires caused by VPU's overhead electrical lines and equipment, in compliance with Senate Bill 1028 (Hill, 2016). VPU provides electric service to the City of Vernon within the greater Los Angeles

basin. Specifically, VPU's service area is not within or near any wildland-urban interface zones and more than ten miles from the nearest wildland-urban interface area. The assessment includes information from the US Forest Service's Fire Modeling Institute, and the CAL FIRE Office of the State Fire Marshal. Also considered were Vernon's historical fire data, geographical location, and local conditions. Based on this information, the determination was made that VPU's electric equipment and operations do not pose a risk of igniting a fire that could cause any significant wildfire condition.

## 3. Objectives

The primary objectives of this Wildfire Mitigation Plan are to:

1. Describe VPU's existing programs, practices, and measures that effectively reduce the probability that VPU's electric supply system could be the origin or contributing source for the ignition of a wildfire.

To support this goal, VPU 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.

2. The secondary objective of this Wildfire Mitigation Plan is to improve the resiliency of the electric grid. As part of the development of this plan, VPU assesses new industry practices and technologies that will reduce the likelihood of an interruption (frequency) in service and improve the restoration (duration) of service.
3. Create a WMP that is consistent with state law and objectives.

## 4. Roles and Responsibilities

### 4.1. Wildfire Prevention

VPU staff that have responsibility for wildfire prevention are:

**General Manager:** Assumes overall responsibility for VPU's planning and mitigation activities, including maintaining compliance with state and federal safety and operating requirements.

**Assistant General Manager:** Responsible for emergency preparedness, emergency response, and coordinating recovery after a fire.

**Utilities Operations Manager:** Responsible for the reliable operation of VPU's electric distribution system and safety protocols, including the evaluation and installation of new protective equipment to reduce fire risk. Maintain compliance with federal, state and

local fire management personnel to ensure that appropriate preventive measures are in place.

Electric Operations Supervisor: Is primarily responsible for ensuring inspections of electric lines, poles, and equipment, in addition to the performance of operations and maintenance (O&M).

While other individuals, such as linemen, have the responsibility to inspect and report any faulty operations of equipment, the primary responsibility for preventing electrical-ignited fires and coordinating recovery is the Utilities Operations Manager and Assistant General Manager.

## 4.2. Wildfire Response and Recovery

VPU is a member of the California Utility Emergency Association, which plays a key role in ensuring communications between utilities and with California Office of Emergency Services (CAL-OES) during emergencies. VPU also participates in the American Public Power Association (APPA) Mutual Assistance Agreement, which is a mutual assistance agreement covering municipal utilities across the United States.

## 4.3. Standardized Emergency Management System

As a local governmental agency,<sup>4</sup> VPU has planning, communication, and coordination obligations pursuant to the California Office of Emergency Services' Standardized Emergency Management System (SEMS) Regulations,<sup>5</sup> 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.<sup>6</sup> Pursuant to this structure, VPU annually coordinates and communicates with the relevant safety agencies as well as other relevant

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<sup>4</sup> As defined in Cal. Gov. Code § 8680.2.

<sup>5</sup> 19 CCR § 2407.

<sup>6</sup> 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.

(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.

local and state agencies. Pursuant to the SEMS structure, VPU participates in annual training exercises with the Vernon Disaster Council. The Council meets quarterly to discuss emergency management protocols, FEMA and SEMS procedures, and lessons learned from disasters around the world. On an annual basis, the City's Emergency Operating Center is exercised by the Disaster Council as part of an Emergency Drill.

## 5. Wildfire Risks and Drivers

Pursuant to Public Utilities Code section 8387(b)(2), VPU has determined that it is not necessary to describe Wildfire Risks and Drivers in this Wildfire Mitigation Plan because of the unique characteristics of the service territory and operations of VPU, including lack of wildfire fuel sources, and distance from any designated elevated fire-threat areas.

### 5.1. Design, Construction, Operation, and Maintenance

Due to the minimal risk of VPU's electrical supply facilities igniting a wildfire, VPU is not adopting wildfire specific protocols for Wildfire Risks and Drivers Associated with Design, Construction, Operation, and Maintenance. However, VPU meets or exceeds the minimum design and construction requirements provided in CPUC GO 95, which specifies that electric supply systems shall be designed, constructed, and maintained for their intended use with regard given to the conditions under which they are to be operated to enable the furnishing of safe, proper, and adequate service.

### 5.2. Topographic and Climatological Risk Factors

Due to the minimal risk of VPU's electrical supply facilities igniting a wildfire, VPU is not adopting wildfire specific protocols for Wildfire Risks and Drivers Associated with Topographic and Climatological Risk Factors.

## 6. Enterprise-wide Safety Risks

Pursuant to Public Utilities Code section 8387(b)(2), VPU has determined that it is not necessary to describe Enterprise-wide Safety Risks in this Wildfire Mitigation Plan because of the unique characteristics of the service territory and operations of VPU, including lack of wildfire fuel sources, and distance from any designated elevated fire-threat areas.

# 7. Wildfire Preventative Strategies

Pursuant to Public Utilities Code section 8387(b)(2), VPU has determined that it is not necessary to describe Wildfire Preventative Strategies in this Wildfire Mitigation Plan because of the unique characteristics of the service territory and operations of VPU, including lack of wildfire fuel sources, and distance from any designated elevated fire-threat areas.

## High Fire-Threat District

In coordination with the California Municipal Utilities Association, VPU participated in the development of the CPUC's Fire-Threat Map,<sup>7</sup> which defines a statewide High Fire-Threat District (HFTD).

In the map development process, VPU reviewed the proposed boundaries of the High Fire-Threat District and confirmed that, based on local conditions and historical fire data, all of VPU's service territory was properly excluded.

## Design and Construction Standards

VPU's electric facilities are designed and constructed to meet or exceed the relevant federal, state, or industry standard. VPU treats CPUC General Orders (GO) 95 and 128 as a key industry standard for design and construction standards for overhead and underground electrical facilities. VPU meets or exceeds all standards in GO 95 and GO 128. Additionally, VPU monitors and follows, as appropriate, the National Electric Safety Code.

# 8. Vegetation Management

Due to the industrial nature of the City of Vernon, there is very little risk of vegetation igniting a wildfire, or impeding Vernon Public Utilities' services. VPU's service territory neither contains nor is adjacent to any wildlands or elevated fire-threat areas and thus, there is no risk of igniting wildfires.

- 8.1. City of Vernon Urban Forest is comprised of approximately 1300 trees, which are maintained and are pruned annually by a contracted Urban Forest Management

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<sup>7</sup> Adopted by CPUC Decision 17-12-024.

Service company. Tree conditions are managed regularly in an asset management system, and routine maintenance occurs on an annual basis.

8.2. Substations require bare ground for the safe operation of high voltage equipment. Electric Operators monitor substations, switchyards, and other electric facilities on a daily basis and remove invasive weeds and other vegetation as necessary. This may be accomplished by pulling the vegetation, pruning, or spraying with an herbicide such as glyphosate.

8.3. VPU meets or exceeds the minimum industry standard vegetation management practices. For distribution level facilities, VPU 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.

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

## 9. Inspections

VPU meets or exceeds the minimum inspection requirements provided in CPUC GO 165 and CPUC GO 95, Rule 18. Pursuant to these rules, utilities inspect electric facilities in the High Fire-Threat District more frequently than the other areas of its service territory. As described above, VPU currently does not have any overhead powerlines located within, or near the High Fire-Threat District within the CPUC’s Fire-Threat Map but still maintains compliance with the inspection requirements as a best business practice. VPU performs intrusive pole inspections and has a pole replacement priority and schedule program to remove potential pole failure hazards, even though there is no significant native vegetation below VPU’s overhead distribution lines.

VPU staff uses their knowledge of the specific environmental and geographical conditions of VPU’s service territory to determine if any particular areas require more frequent inspections.

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

In accordance with CPUC GO165, VPU annually reports and publicly posts its inspection data to its website under regulatory reports.<sup>8</sup> Publicly posted information includes the number of patrols, detailed overhead and underground inspections, and intrusive inspections.

## 10. De-energization Protocols

### 10.1. Reclosing Policy

Due to the low wildfire threat in VPU's service territory, VPU does not disable re-closers due to anticipated wildfires. VPU does not have a formal procedure identified for disabling re-closers. VPU will continue to assess the wildfire threat and will develop a procedure as needed.

### 10.2. De-energization

Electrical outages can adversely affect electrical system equipment, customer production and equipment, devices vital to public health and safety such as lighting, traffic signals, wells and chlorinators and can cause disruption to critical communication networks.

Due to Vernon's low wildfire risk profile, VPU is not adopting wildfire specific protocols for de-energizing any portions of its electric distribution system. VPU will re-evaluate the need to pre-emptively shut off power due to fire-threat conditions in future updates to this Wildfire Mitigation Plan.

## 11. Customer Notification Procedure

While VPU has a low risk of igniting a wildfire, VPU and its customers may be subject to a wildfire threat to a major shared transmission line(s) that impacts the statewide grid or parts of it- creating a resource shortage for the utilities that rely on the resources the line(s) provides.

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<sup>8</sup> <https://www.cityofvernon.org/government/public-utilities/regulatory-reports>

VPU proactively communicates to customers and key stakeholders through multiple channels about preparing for potential curtailments, and the power restoration process. VPU recognizes that many entities and individuals are particularly vulnerable during extended power outages and makes every effort to provide up-to-date information to these populations prior to, during, and after an event.

VPU's Customer Service Center, Key Accounts staff, social media and CityofVernon.org will provide ongoing and available resources for communication and education for the overall customer base.

Key stakeholders, federal, state, and local elected officials, City and County executive staff and first responders are also contacted via a variety of channels and personnel.

VPU has specific personnel assigned to elected officials and agencies, and to critical customers including water and telecommunications utilities, potentially affected by an outage to a major shared transmission line.

Any communications by VPU during an active emergency, such as wildfire, will be in accordance with California's Standardized Emergency Management System (SEMS) and will be at the direction of the entity responsible for disseminating information about the emergency.

## 12. Restoration of Service

Due to Vernon's low wildfire risk profile, VPU is not adopting wildfire specific protocols for restoration of service after de-energizing its electric distribution system.

### **General Steps to Restoration of Service are:**

**Patrol.** VPU crews patrol the line to look for vegetation in lines and any obvious damage that may prevent safe energization.

**Repair.** During patrol, crews look for potential damage to the lines and poles. Where equipment damage is found, additional crews are dispatched with new materials to repair or replace damaged equipment.

**Test.** Once the lines and poles are safe to operate, crews test the infrastructure by closing the fuse or breaker to re-energize the line segment.

**Restore.** Power is restored, and the outage communication system provides notification of power restoration to customers.

# 13. Evaluation Metrics

This section provides the metrics used to measure the performance of the Plan and outlined programs.

## 13.1. Metrics and Assumptions for Measuring Plan Performance

VPU will track three metrics to measure the performance of this Wildfire Mitigation Plan: (1) number of fire ignitions; (2) wires down within the service territory; and (3) outage caused by trees.

### Metric 1: Fire Ignitions

For purposes of this metric, a Fire Ignition is defined as follows:

- VPU 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
- VPU has knowledge that the fire occurred.

In future Wildfire Mitigation Plans, VPU will provide the number of Fire Ignitions that occurred that were less than 5 acres in size. Any fires greater than 5 acres will be individually described.

YEAR	Number of Fire Ignitions
2019	0
2020	0
2021	0
2022	0

### Metric 2: Wires Down

The second metric is the number of distribution wires downed within VPU’s service territory. (VPU does not own or operate any transmission lines.) For purposes of this metric, a Wires Down event includes any instance where an electric primary distribution conductor falls to the ground, or on to a foreign object. As VPU does not own or operate any transmission lines or own/operate distribution lines in the High Fire-Threat District,

reporting of Wires Down is limited to local distribution outside of the High Fire-Threat District.

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

YEAR	Number of Wires Down
2019	0
2020	0
2021	0
2022	0

### Metric 3: Outage Caused by Trees

The third metric is the number of distribution outages caused by trees within VPU's service territory. (VPU does not own or operate any transmission lines.) For purposes of this metric, a tree-related outage event includes any instance where service on an electric primary distribution circuit is interrupted by contact with a tree or vegetation. As VPU does not own or operate any transmission lines or own/operate distribution lines in the High Fire-Threat District, reporting of tree-related outages is limited to local distribution outside of the High Fire-Threat District.

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

YEAR	Number of Tree Outages
2019	0
2020	0
2021	1
2022	0

## 14. Impact of Metrics on Plan

Due to VPU's extremely-low risk wildfire circumstances, VPU anticipates that there will be relatively limited data gathered through these metrics. However, as the data collection history increases, VPU will be able to identify if any areas of its operations and service

territory are disproportionately impacted. VPU will then evaluate potential improvements in future updates to this Plan including the use of additional metrics.

## 15. Monitoring and Auditing the Plan

This Wildfire Mitigation Plan will be reviewed annually and will include an assessment of the Plan programs and performance. Annual updates and triennial comprehensive revisions shall be publicly presented and approved by minute order of the City Council and adopted by resolution.

### 15.1. Identifying and Correcting Deficiencies in the Plan

At any point in time, when deficiencies are identified, the Utilities Operations Manager or his/her delegates are responsible for correcting the deficiencies.

### 15.2. Monitoring the Effectiveness of Inspections

VPU's Utilities Operations Manager will be responsible for monitoring and auditing the targets specified in the Plan to confirm that the objectives of the Plan are met.

## 16. Independent Evaluator

Public Utilities Code section 8387(c) requires VPU 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 of Vernon's website. This report must also be presented to the Vernon City Council at a public meeting.

VPU participated in a public request for proposals, to identify the best qualified independent evaluator to assess the comprehensiveness of VPU's Wildfire Mitigation Plan. VPU contracted with Dudek & Associates, a qualified independent evaluator with experience in assessing the safe operation of electrical infrastructure. Dudek's Independent Evaluation is attached in Appendix A of this Plan.

The independent evaluator's report is posted to the City of Vernon's website and has been presented to Vernon's City Council at a noticed public meeting.

# 17. Acronym Glossary

AB (Assembly Bill)  
CAISO (California Independent System Operation)  
CAL FIRE (California Department of Forestry and Fire Protection)  
CPUC (California Public Utilities Commission)  
CUEA (California Utilities Emergency Association)  
ERM (Enterprise Risk Management)  
FRAP (Fire Resource and Assessment Program)  
GHG (Greenhouse gas)  
GIS (Geographic Information System)  
GO (General Order)  
KV (Kilovolt)  
KWH (Kilowatt Hours)  
MW (Mega Watts)  
O&M (Operations & Maintenance)  
EOC (Emergency Operations Centers)  
OES (Office of Emergency Services)  
PUC (Public Utilities Code)  
SB (Senate Bill)  
SEMS (Standardized Emergency Management System)  
SME (Subject Matter Expert)  
T&D (Transmission and Distribution)  
WMP (Wildfire Mitigation Plan)

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**Subject: Independent Evaluator's Report of Vernon Public Utilities' 2023 Wildfire Mitigation Plan**

# 1 Introduction

Vernon Public Utilities (VPU) contracted with Dudek to engage in an independent evaluation of its 2023 Wildfire Mitigation Plan (WMP). This independent evaluation report describes the technical review and evaluation of the WMP prepared by the VPU. The WMP requirements are codified in California Public Utilities Code (PUC) Section 8387(b)(2) for local publicly owned electric utilities (POUs). PUC Section 8387(c) requires that an independent evaluator review and assess the comprehensiveness of a POU's WMP and issue a summary report. The year 2023 is important for POUs because they are required by PUC Section 8387(b)(1) to comprehensively revise their WMPs "at least once every three years.". The VPU's last independent evaluator's report was prepared for the review of the VPU's 2020 WMP.

Dudek conducted a review of VPU 's 2023 WMP from May 17 to May 31, 2023. The focus of the evaluation was to determine the comprehensiveness of WMP and ensure it included all elements required under PUC Section 8387(b)(2).

In addition to evaluating the elements required by the PUC, Dudek reviewed the Wildfire Safety Advisory Board's (WSAB's) specific guidance for the VPU published in their Guidance Advisory Opinion for the 2023 Wildfire Mitigation Plans of Electric Publicly Owned Utilities and Rural Electrical Cooperatives (WSAB 2022).

This Independent Evaluator's report contains the following elements: (1) an overview of the VPU , (2) A review of the statutory requirements in PUC Section 8387(b)(2) for local POUs, (3) A review of the specific recommendations published by the WSAB for the VPU 2022 WMP, (4) 2022 wildfire mitigation and prevention accomplishments of the VPU , (5) an overview of the metrics used the VPU 's WMP, and (6) a comparison of wildfire risk reduction strategies used by the VPU with those used by similar utilities and municipal utility industry standards.



## 2 An Overview of Vernon Public Utilities

Vernon Public Utilities is a municipal utility provider that provides electric service to customers within the city limits of Vernon. The VPU's service territory covers 5.2 square miles and is located approximately 4 miles southeast of downtown Los Angeles in the heavily urbanized east Los Angeles area. The City and the VPU's entire service territory is located in the relatively level Los Angeles basin and lacks any hills, canyons, or other topographic features. The City and the VPU's entire service territory is urban, mostly commercial, and industrial structures, with no areas of natural vegetation or open space. The communities surrounding the VPU's service territory are also composed of urban, fully developed areas. Vegetation is sparse throughout the VPU's service territory and is limited to islands of landscaping or street trees widely separated by large areas of non-combustible pavement or development.

The VPU's asset portfolio consists of distribution lines and generation equipment. The VPU's lines are primarily aboveground (%80) with some underground (%20). The VPU has 66kV sub-transmission lines but does not have any transmission assets. Southern California Edison (SCE) has a transmission line that runs along the north side of the service territory along the Los Angeles River/canal.

As described above, the City of Vernon and the VPU's service territory including all facilities, equipment, and service lines are in a highly urban area near downtown area Los Angeles and there is no natural vegetation or open space. No portion of the VPU's service territory lies within a high fire threat district nor does any area adjacent to the VPU's service territory lie within a high fire threat district. Since the city is fully urbanized there is insufficient vegetation to sustain a wildfire and no portion of their service territory is classified as Wildland Urban Interface (WUI)( Radeloff, V.C., 2022). No areas adjacent to the City limits are classified as WUI.

The VPU 's service territory and the Los Angeles basin experiences a fire season that lasts from April to November during a typical year. Early fall, September-October, are considered the most critical period due to the combination of Santa Ana winds and low fuel moistures. While weather conditions in the Los Angeles area in the summer and fall may be conducive to wildfire there is a very low risk that the city will experience a wildfire. This is evident in the lack of a recorded wildfire in the VPU's service territory and adjacent areas since CAL FIRE began recording fire data in the early part of the 20<sup>th</sup> century. Given that the VPU's service territory is entirely developed it is unlikely that there will ever be increase in wildfire risk within their service territory.

### 3 Summary of Statutory Requirements for Wildfire Mitigation Plans

PUC Section 8387(b)(2) lists the statutory requirements for WMPs. These are the specific elements that the independent evaluator must review to make its determination for this report. The specific elements that must be addressed in VPU 's WMP are summarized here for reference.

- Staff responsibilities
- General objectives
- Wildfire risk reduction program descriptions
- The metrics used to evaluate the WMP's performance.
- How the application of previously identified metrics has informed the WMP.
- Protocols for reclosers, de-energization, and public safety power shut-off.
- Procedures for community notification and outreach
- Vegetation management plans
- Electrical equipment and infrastructure inspection plans
- Description of wildfire risks and drivers for those risks throughout the service territory, including design, construction, operation, and maintenance of equipment and facilities and topographic and climatological risk factors
- Identification of any geographic area in the service territory that is a higher wildfire threat than is identified in a commission fire threat map.
- Identification of enterprise-wide safety risk and wildfire-related risks
- How the service will be restored after a wildfire
- The processes and procedures used to monitor and audit the implementation of the WMP and identify any deficiencies, and the effectiveness of electrical line and equipment inspections.

## 4 Review of the Comprehensiveness of the WMP in Meeting Statutory Requirements

Dudek found that VPU 's WMP meets the statutory requirements of comprehensiveness per PUC Section 8387. The review of the WMP's elements is summarized relative to the application of the WMP. Dudek's assessment is in **bold text** beneath the description of the requirement.

### Minimizing Wildfire Risks

PUC Section 8387(a) requires the following: "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."

**The VPU 's WMP describes the safety-related measures and the regulatory standards that the VPU utilizes to reduce the risk of its electrical equipment causing wildfires. Dudek has determined that VPU complies with this requirement through the design of its system, its operations, and the implementation of wildfire risk reduction and wildfire response strategies. Dudek also recognizes that the VPU is aware of the inherently low wildfire risk in their territory and has selected wildfire prevention programs appropriate for their equipment and the conditions within their service territory.**

### Evaluation of WMP Elements

Below is a summary of the WMP elements as required by PUC Section 8387, including restating sections of the WMP where applicable.

8387(b)(2)(A): Responsibilities of Persons Responsible for Executing the Plan.

**Section 4.1 of the VPU WMP comprehensively describes staff responsibilities and functions in the implementation of their WMP including which staff positions are responsible for the wildfire prevention programs described in the WMP.**

8387(b)(2)(B): Objectives of the Wildfire Mitigation Plan

**Section 3 of the VPU WMP describes the utility's WMP three objectives. The objectives are brief but aptly describe the objectives of the VPU's WMP.**

8387(b)(2)(C): Prevention Strategies and Programs

**Section 7, 8, and 9 in the VPU's WMP describe the wildfire prevention programs the VPU utilizes to ensure wildfire risk remains low in their service territory.**

8387(b)(2)(D): Metrics and Assumptions for Measuring WMP Performance

**Section 13.1 contains a description of the metrics used by the WMP. The VPU tracks three metrics; fire ignitions, wires down, and outages caused by trees.**

8387(b)(2)(E): Impact of Previous Metrics on WMP

Section 14 provides a general statement about the impact of previous metrics on the current version the WMP. Section 13 contains metric data collected since the 2020 version of the WMP. It is recommended that part of this section be rewritten since the intent of the statutory requirement is to have the utility state why the metrics in the WMP are useful for describing the effectiveness of the WMP and the prevention strategies described within. The statement *“Due to VPU’s extremely-low risk wildfire circumstances, VPU anticipates that there will be relatively limited data gathered through these metrics. However, as the data collection history increases, VPU will be able to identify if any areas of its operations and service territory are disproportionately impacted.”* suggests that these metrics are not useful for the WMP since the events these metrics are tracking are unlikely to occur.

8387(b)(2)(F): Reclosing Protocols

Section 10.1 in the VPU’s WMP describes the utility’s reclosing policy. The VPU utilizes automatic reclosing schemes and does not modify or disable automatic reclosing. Modifying or disabling reclosing schemes is not necessary in the VPU’s service territory due to the lack of continuous vegetation near their electrical equipment. An automatic reclosing scheme does not increase the risk that the VPU’s equipment will start a wildfire.

8387(b)(2)(G): De-energization Notification Procedures

Section 10.2 in the VPU WMP states that the VPU does not have a wildfire specific notification protocol due to the low risk of wildfire in their service territory. While not required (because the VPU does not have a de-energization policy), I recommend briefly adding a description of how the VPU generally notifies customers of outages or other utility related issues since the City does have a system in place i.e., the City’s Emergency Alerts program.

8387(b)(2)(H): Vegetation Management

Section 8 of the VPU’s WMP describes the utility’s vegetation management program. The VPU uses the states GO rules as its guidelines for treatment levels.

8387(b)(2)(I): Inspections

Section 9 of the VPU’s WMP describes the utility’s inspection program. The VPU uses the states GO rules as its guidelines for inspection frequencies and type.

8387(b)(2)(J)(i): Risks and Risk Drivers Associated with Design and Construction Standards

Section 5.1 in the VPU’s WMP describes risk drivers related to design, construction, operation, and maintenance. This section identifies that the VPU meets all regulatory requirements related to the design, construction, operation, and maintenance of their electrical equipment. In addition, this section identifies that the due to the conditions within their service territory the VPU does not have the risks/risk drivers associated with design, construction, operation, and maintenance that are present in POU’s with service territories that extend over open space or into remote areas.

8387(b)(2)(J)(ii): Risks and Risk Drivers Associated with Topographic and Climatological Risk Factors

**Section 5.2 in the VPU's WMP correctly identifies that the VPU's service territory lacks the conditions to sustain the spread of a wildfire and does not have any identifiable risks or risk drivers associated with topography or climate.**

8387(b)(2)(K): Geographical Area of Higher Wildfire Threat

**Section 7 in the VPU states that the utility has examined the High Fire Threat District maps for the VPU and sees no areas where it needs to be expanded.**

8387(b)(2)(L): Enterprise-wide Safety Risks

**Section 6 in the VPU's WMP states *“VPU has determined that it is not necessary to describe Enterprise-wide Safety Risks in this Wildfire Mitigation Plan because of the unique characteristics of the service territory and operations of VPU, including lack of wildfire fuel sources, and distance from any designated elevated fire-threat areas.”* While it is true that there is very low risk of wildfire within their service territory, the VPU's WMP should include a description of how the VPU identifies utility wide risk or if the VPU uses the risk assessment process in the City's LHMP.**

8387(b)(2)(M): Restoration of Service

**Section 12 of the VPU's WMP describes the utility's general process for restoring service.**

8387(b)(2)(N)(i): Monitoring and Auditing WMP Implementation, 8387(b)(2)(N)(ii): Identifying and correcting WMP deficiencies, 8387(b)(2)(N)(iii): Monitoring and Auditing the effectiveness of inspections.

**Section 15 in the VPU's WMP describes their monitoring and auditing programs for the WMP. Section 15.1 identifies the utilities process for identifying and correction deficiencies (on an as needed basis). Section 15.2 states the Utilities Operations Manager evaluates inspection results and determines if the inspection results confirm the inspection results are accurate and measure the effectiveness of the WMP.**

## 5 Wildfire Safety Advisory Board Guidance Advisory Opinions

In November 2022, the WSAB published a report with a description of general recommendations for improving the WMPs for POUs and rural electrical cooperatives. At the end of the report the WSAB provided specific recommendations for each utility that submitted a WMP for review by the board. Dudek reviewed the WSAB's report, and the section below contains a summary of each recommendation the WSAB had for the VPU 's 2022 WMP and whether the 2023 WMP has addressed the WSAB's recommendation (WSAB 2022). The materials published by the WSAB and the recommendations within are for guidance and are not statutory requirements.

In their 2021 WMP the VPU addressed or answered several general questions and recommendations made by the WSAB for WMPs prepared by POUs. It is worth noting that in the WSAB's 2022 guidance document that the WSAB

TO: LISA UMEDA

SUBJECT: INDEPENDENT EVALUATOR'S REPORT OF VERNON PUBLIC UTILITIES 2023 WILDFIRE MITIGATION PLAN

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had only one VPU specific recommendation for a change to their WMP. The other two recommendations were related to posting WMP material on the City's website. The WSAB's single recommendations for the VPU WMP is:

"The WSAB appreciates that Vernon provided tracking results information for their "number of ignitions" metric and "wires down" metric for 2019-2021. The WSAB encourages Vernon to develop performance metrics that aim to provide relevant information about how mitigation activities themselves are progressing (inspections accomplished per goal, etc.)." (Wildfire Safety Advisory Board 2022).

**For the 2023 the VPU added a third metric to the WMP, outages caused by trees. Outages caused by trees is an outcome based metric but the addition of the new metric does provide more information to the VPU on the effectiveness of their vegetation management program and presumably will provide useful information about locations or specific tree/vegetation related issues that increase the risk of an outage. Dudek agrees with the WSAB recommendation to consider changing the existing metrics or adding new performance based metrics WMP. It would be more effective to track the accomplishments of the two main wildfire prevention strategies employed by the VPU in their WMP (vegetation management and inspections).**

## 6 Vernon Public Utilities 2022 Progress in Implementing Wildfire Mitigation Plan Wildfire Prevention Strategies

This section describes the VPU's accomplishments in 2022 for the wildfire prevention program and strategies described in the WMP.

### Vegetation Management

- Vegetation/Line Clearance Completed: 304 trees trimmed.

### Inspections<sup>1</sup>

- Overhead line visual patrols: 49.
- Overhead lines detailed inspections: 1000.
- Substation Inspections: 36

### System Hardening

- Pole replacement program accomplishments: 107 poles replaced.

## 7 Wildfire Mitigation Plan Metric Overview

Metrics help POU's determine if their wildfire prevention strategies are effective for reducing the risk of a wildfire ignited by their electrical equipment.

The VPU has adopted three metrics: Fire Ignitions and Wires Down were adopted in the first version of the WMP in 2020 and have been used in the subsequent versions of the WMP. For the 2023 the VPU adopted an additional metric for their WMP, outages caused by trees. The VPU records the three metrics on an event occurrence basis. For the metrics Fire Ignitions and Wires Down the VPU recorded the zero events from 2019 to 2021. For Outages Caused By Trees, the VPU recorded one event in 2021 and zero events in 2019, 2020, and 2022.

These three metrics are appropriate given the type of assets the VPU has, and that most of their wires (80%) are aboveground. However, because the VPU's service territory has low wildfire risk performance based metrics would be more useful to the VPU for understanding the effectiveness of their WMP and their wildfire prevention strategies. It is recommended that the VPU replace the Fire Ignitions metric with one or two metrics that track the progress of their wildfire prevention strategies such as the number of circuit miles visually inspected or trees trimmed annually. As an alternative the Fire Ignitions can be kept but some additional Fire Ignition data should be collected to complement the number of Fire Ignitions. For example, a comparison of the total number of fires the Los Angeles

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<sup>1</sup> The VPU posts inspection data on the City's website from 2014 to 2022.

County Fire Department responds to in the Vernon city limits to the number of fires attributable to the VPU's equipment.

## 8 Comparison of Industry Standards and Similar Utility Wildfire Prevention Strategies

As part of this review of the VPU 's 2023 WMP, Dudek compared the wildfire prevention strategies described in the WMP to the strategies being implemented by POUs and accepted electrical industry practices for reducing wildfire risk. While City of Vernon shares many similarities with its immediate in terms of wildfire risk (topography, vegetation, and weather) its neighbors are served by SCE or Los Angeles Department of Water and Power, utilities that are very different from the VPU. For this independent evaluator's report Alameda Municipal Power (AMP) was selected to compare the VPU's WMP and wildfire prevention strategies to. The AMP is larger than the VPU in terms of service territory size and number of customers, but they share a similar low wildfire risk exposure that comes from being located in urban areas with no portion of their service territory in a high fire threat district, have a very low risk of wildfire due to the lack of continuous flammable vegetation, and have adopted similar wildfire prevention strategies.

### 8.1 Vegetation Management

Both utilities implement vegetation management programs that meet GO 95 requirements including tree trimming around their poles and wires and surface vegetation management at their substations. Because they have no overhead lines or equipment in the high fire threat district the VPU and AMP vegetation management programs are primarily tree trimming programs.

### 8.2 System Hardening

#### Pole Replacement Program

The VPU has an ongoing on pole replacement priority and schedule program that replaces on average 106 aging poles each year. The AMP's WMP does not describe a dedicated pole replacement program, but the AMP replaces pole on an as needed basis when the pole fails an inspection or intrusive testing.

### 8.3 Situational Awareness

#### Patrols and Visual Inspections

Both utilities perform inspection cycles in accordance with GO 165. Problems that are identified during inspection are prioritized for correction. Inspection findings are examined to identify trends and recurring problems. Routine ground patrols and visual inspections of overhead lines and equipment are electrical industry standard practices and particularly useful for these two utilities where equipment inspection and vegetation management are the main wildfire prevention strategies.



## 9 Conclusion

The VPU has prepared a comprehensive WMP for 2023. The plan meets the statutory requirements described in PUC Section 8387(b)(2) for a POU. In their most recent guidance document, The Wildfire Safety Advisory Board had one recommended revision that applied to the VPU's WMP which the VPU adopted by adding an additional metric. The VPU 's WMP describes a wildfire mitigation program that accurately assesses the risks and risk drivers present in their service territory and is correct in identifying the low risk of wildfire present within the City limits.

Based on the information available in the WMP and information collected in the preparation of this report, the VPU is aware of the wildfire risk present in its service territory, operates and maintains its electrical system in a safe and efficient manner, and takes the necessary steps to reduce the risk that their equipment is the source of fire ignition.

Sincerely,



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Jeremy Cawn  
Fire Protection Planner

## 10      References

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