





Rancho Cucamonga Municipal Utility WILDFIRE MITIGATION PLAN

Risk Category: Low | VERSION 1.2 Attachment 1

TABLE OF CONTENTS

I.	UTILITY OVERVIEW AND CONTEXT	4
	_A. UTILITY DESCRIPTION AND CONTEXT SETTING TABLE	4
	_B. STATUTORY CROSS-REFERENCE TABLE	6
	C. PROCESS FOR UTILITY ADOPTION AND SUBMITTAL OF WMP & OPPORTUNITIES FOR PUBLIC COMMENT	8
	_D. DESCRIPTION OF WHERE WMP INFO CAN BE FOUND ON UTILITY WEBSITE	8
	_E. PURPOSE OF THE WILDFIRE MITIGATION PLAN	8
	_F. ORGANIZATION OF THE WILDFIRE MITIGATION PLAN	9
II.	OBJECTIVES OF THE WILDFIRE MITIGATION PLAN	9
	_A. MINIMIZING SOURCES OF IGNITION	9
	B. RESILIENCY OF THE ELECTRIC GRID	. 10
	_C. MINIMIZING UNNECESSARY OR INEFFECTIVE ACTIONS	. 10
III.	ROLES AND RESPONSIBILITIES	. 10
	_A. RCMU ROLES AND RESPONSIBILITIES- UTILITY GOVERNANCE STRUCTURE	. 10
	_B. COORDINATION WITH WATER UTILITIES	11
	_C. COORDINATION WITH COMMUNICATION INFRASTRUCTURE PROVIDERS	
	_D. STANDARDIZED EMERGENCY MANAGEMENT SYSTEM	12
IV. OPI	WILDFIRE RISKS AND DRIVERS ASSOCIATED WITH DESIGN CONSTRUCTION ERATION AND MAINTENANCE	13
	A. PARTICULAR RISKS AND RISK DRIVERS ASSOCIATED WITH TOPOGRAPHIC AND CLIMATOLOGICAL RISK FACTORS	13
	_B. ENTERPRISE SAFETY RISKS	13
	_C. CHANGES TO THE CPUC FIRE THREAT MAP	. 14
V.	WILDFIRE PREVENTATIVE STRATEGIES	15
	_A. HIGH FIRE THREAT DISTRICT	15
	_B. WEATHER MONITORING	16
	_C. DESIGN AND CONSTRUCTION STANDARDS	16
	_D. VEGETATION MANAGEMENT	. 18
	_E. INSPECTIONS	. 18
	_F. RECLOSER POLICY	. 18
	_G. DEENERGIZATION	. 18
VI. C	COMMUNITY OUTREACH AND PUBLIC AWARENESS	. 18
VII.	RESTORATION OF SERVICE	19
VIII.	EVALUATING THE PLAN	.20
	_A. METRICS AND ASSUMPTIONS FOR MEASURING PLAN PERFORMANCE	.20

	_B. IMPACT OF METRICS ON PLAN	20
	_C.MONITORING AND AUDITING OF THE PLAN	21
	_D. IDENTIFYING AND CORRECTING DEFICIENCIES IN THE PLAN MONITORING	21
	_E. MONITORING THE EFFECTIVENESS OF INSPECTIONS	21
IX.	INDEPENDENT AUDITOR	21
Х.	WSAB GUIDANCE ADVISORY OPINION RECOMMENDATIONS (2023 UPDATE)	21

I. UTILITY OVERVIEW AND CONTEXT

A. UTILITY DESCRIPTION AND CONTEXT SETTING TABLE

Utility Name City of Rancho Cucamonga			
Service Territory Size	4 square miles		
Owned Assets	38 circuit miles of Underground Electric Distribution 42 miles of Underground Fiber Optics		
Number of Customers Served	3,592 electric customer accounts		
Population Within Service Territory	7,400 people (est.)		
Customer Class Makeup	Number of Accounts	Share of Total Load (MWh)	
	61% Residential 38% Small/Medium Business 1% Commercial/Industrial	6% Residential 59% Small/Medium Business 35% Commercial/Industrial	
Service Territory Location/Topography ¹	99% Urban 1% Shrub		
Service Territory Wildland Urban Interface ² (Based on total area)	0% Wildland Urban Interface 0% Wildland Urban Intermix		
Percent of Service Territory in CPUC High Fire Threat Districts (Based on total area)	[X] Includes maps Tier 2: 0% Tier 3: 0%		
Prevailing Wind Directions & Speeds by Season	The Santa Ana winds typically peaks in October and concludes in the Spring. Wind speed varies, but the wind directions are typically aligned in a northeast to southwest direction.		
Miles of Owned Lines Underground and/or Overhead	Overhead Dist.: 0 miles Overhead Trans.: 0 miles Underground Dist.: 38 miles Underground Trans.: 0 miles		
	Explanatory Note 1 - Methodology for measuring miles is based on RCMU's final as-built distribution circuit maps.		
Percent of Owned Lines in CPUC High Fire Threat Districts	Overhead Distribution Lines as % of Total Distribution System (Inside and Outside Service Territory)		
	Tier 2: 0% Tier 3: 0%		
	Explanatory Note 1 – RCMU does not own any overhead lines inside or outside its service territory.		

¹ 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: <u>https://www.arcgis.com/home/item.html?id=b7ec5d68d8114b1fb2bfbf4665989eb3</u>.

² This data shall be based on the definitions and maps maintained by the United States Department of Agriculture, as most recently assembled in the 2020 Wildland-Urban Interface of the Conterminous United States, available at https://data-usfs.hub.arcgis.com/documents/usfs::wildland-urban-interface-2020-map-service/explore

Customers have ever lost service due to an IOU PSPS event?	□ Yes [X] No If yes, then provide the following data for calendar year []: Number of shut-off events: [] Customer Accounts that lost service for >10 minutes: [] For prior response, average duration before service restored: []
Customers have ever been notified of a potential loss of service to due to a forecasted IOU PSPS event?	□ Yes [X] No
Has developed protocols to pre- emptively shut off electricity in response to elevated wildfire risks?	□ Yes [X] No
Has previously pre- emptively shut off electricity in response to elevated wildfire risk?	□ Yes [X] No If yes, then provide the following data for calendar year 2023: Number of shut-off events: 0 Customer Accounts that lost service for >10 minutes: 0 For prior response, average duration before service restored: N/A



Map 1: <u>RCMU Service Territory – Updated</u>



B. STATUTORY CROSS-REFERENCE TABLE

Table 1: 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.A
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 III.A
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 VIII.A
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 II.C Section VIII.B Section X

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,	Section V.F
	including impacts on critical first responders and on health and communication infrastructure.	
Customer Notification Procedures	Notification Impacted by the deenergizing of electrical lines. The	
Vegetation Management	PUC § 8387(b)(2)(H): Plans for vegetation management.	Section V.D
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.E Section VIII.A Section VIII.B
Prioritization of Wildfire Risks	 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: (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 electric utility's or electric utility's or electric utility's or electric utility's and risk factors throughout the different parts of the local publicly owned electric utility's or electric utility's or electric utility's or electric 	Section IV.A Section V.C
CPUC Fire Threat Map Adjustments	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.	Section V.A
Enterprise wide Risks	PUC § 8387(b)(2)(L): A methodology for identifying and presenting enterprise wide safety risk and wildfire-related risk.	Section IV.B
Restoration of Service	PUC § 8387(b)(2)(M): A statement of how the local publicly owned electric utility or electrical cooperative will restore service after a wildfire .	Section VII
Monitor and Audit	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:	Section VIII.C

	(i) Monitor and audit the implementation of the wildfire mitigation plan.	
	 (ii) Identify any deficiencies in the wildfire mitigation plan or in 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.	
Qualified Independent Evaluator	PUC § 8387(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 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 IX

C. PROCESS FOR UTILITY ADOPTION AND SUBMITTAL OF WMP & OPPORTUNITIES FOR PUBLIC COMMENT

The Rancho Cucamonga Municipal Utility (RCMU), a Publicly Owned Utility (POU), prepares the Wildfire Mitigation Plan (WMP). It is then placed on the City of Rancho Cucamonga Council agenda. This agenda is posted three days before the meeting, so members of the public are aware that the WMP is being recommended by staff to be approved. It is typically placed on the Consent Calendar and can be pulled for discussion by any of the Council members or requested for discussion by members of the public.

D. DESCRIPTION OF WHERE WMP INFO CAN BE FOUND ON UTILITY WEBSITE

The WMP, updates, and any associated approvals will be made available for public review on the City Council's agenda located on the City's website, as well as the City's Council agenda posting located for viewing at Rancho Cucamonga City Hall. RCMU's most recent Independent Evaluation (IE) Report and existing WMPs and updates are included on RCMU's website located at https://www.cityofrc.us/rcmu. No discussion has occurred on whether any enhancements to future IE reports will be needed.

E. PURPOSE OF THE WILDFIRE MITIGATION PLAN

RCMU's entire electric supply system is located underground in conduit and vaults. Historically, undergrounded electric lines have not been associated with catastrophic wildfires. The undergrounding of electric lines serves as an effective mitigation measure to reduce the potential of power-line ignited wildfires. Based on a review of local conditions and historical fires, RCMU has determined that its electrical lines and equipment do not pose a significant risk of catastrophic wildfire. Despite this low risk, RCMU has taken appropriate actions to help its region prevent and respond to the increasing risk of devastating wildfires. In its role as a public agency, the Rancho Cucamonga Fire Protection District (Fire District) closely coordinates with other local safety and emergency officials to help protect against fires and respond to emergencies. In its role as a utility, RCMU follows all applicable design, construction, operation, and maintenance requirements that reduce safety risks associated with its electric system. This Wildfire Mitigation Plan describes the safety-related measures that RCMU follows to reduce its risk of causing wildfires.

F. ORGANIZATION OF THE WILDFIRE MITIGATION PLAN

This Wildfire Mitigation Plan included the following elements:

- Utility Overview and Context;
- Objectives of the Plan;
- Roles and responsibilities for carrying out the Plan;
- Identification of key wildfire risks and risk drivers;
- Description of Wildfire Mitigation Strategies;
- Metrics for measuring the performance of the plan and identifying areas for improvement;
- Historical results for metrics;
- Description of community outreach and education

II. OBJECTIVES OF THE WILDFIRE MITIGATION PLAN



A primary goal of this Wildfire Mitigation Plan is to describe RCMU's existing programs, practices, and measures that effectively reduce the probability that RCMU's electric supply system could be the origin or contributing source for the ignition of a wildfire. To support this goal, RCMU 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.

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, RCMU assesses new industry practices and technologies that will reduce the likelihood of an interruption (frequency) in service and improve the restoration (duration) of service.

A. MINIMIZING SOURCES OF IGNITION

Another primary goal of this Wildfire Mitigation Plan is to minimize the probability that RCMU's transmission and distribution system may be an original or contributing source for the ignition of a wildfire. RCMU has evaluated the prudent and cost-effective improvements to its physical assets, operations, and training that can help to meet this objective. RCMU had previously implemented those changes consistent with this evaluation as follows:

• RCMU's entire electric supply system is located underground in conduit and vaults. Historically, undergrounded electric lines have not been associated with catastrophic wildfires. The undergrounding of electric lines serves as an effective mitigation measure to reduce the potential of power-line ignited wildfires. Based on a review of local conditions and historical fires, RCMU has determined that its electrical lines and equipment do not pose a significant risk of catastrophic wildfire.

- RCMU monitors wildfires in RCMU Service Area
- RCMU monitors wildfires in City boundaries NOT in RCMU Service Area that are within a 10-acre area
- RCMU monitors wildfires in City boundaries NOT in RCMU Service Area that are beyond the 10-acre area

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, RCMU assesses new industry practices and technologies that will reduce the likelihood of a disruption in service and improve the restoration of service. RCMU implemented changes consistent with this evaluation and adjusted our 2023 WMP and added the following performance metrics "Number of Inspections for Distribution Step-Down Transformers" and "Number of Inspections Completed for Distribution Lines". In addition, RCMU is taking steps towards projects and programs to improve electrical outage response and establish equipment replacement.

C. MINIMIZING UNNECESSARY OR INEFFECTIVE ACTIONS

The final goal of this Wildfire Mitigation Plan is to measure the effectiveness of specific wildfire mitigation strategies. Where a particular action, program, or protocol is determined to be unnecessary or ineffective, RCMU will assess whether a modification or replacement is merited. This plan will also help determine if more cost-effective measures would produce the same or better results. RCMU implemented those changes consistent with this evaluation and adjusted our 2023 WMP by deleting the metric "Wires Down" as RCMU's entire electric supply is located underground in conduit and vaults.

D. EFFECTIVENESS OF WMP

This WMP provides methodologies to measure the effectiveness of specific wildfire mitigation strategies and how those strategies measurably reduce the risk of catastrophic wildfire. Where a particular action, program component or protocol is determined to be unnecessary or ineffective, RCMU will assess whether a modification or replacement is merited. This plan will also help determine if more cost-effective measures would produce the same or improved results.

III. ROLES AND RESPONSIBILITIES

pilot three (3) fire monitoring sensor cameras attached to RCMU's street light poles along the City's foothill area which includes the Tier 2 and 3 fire threat zones. Based on this pilot, RCMU and the Fire District are expanding this project to capture additional significant data for future performance metrics and improve situational awareness for fire response.

C. STANDARDIZED EMERGENCY MANAGEMENT SYSTEM

As a local governmental agency,³ the City of Rancho Cucamonga has planning, communication, and coordination obligations pursuant to the California Office of Emergency Services' Standardized Emergency Management System ("SEMS") Regulations,⁴ adopted in accordance with Government Code section 8607. The SEMS Regulations specify roles, responsibilities, and structures of communications at five distinct levels: field response, local government, operational area, regional, and state.⁵ Pursuant to this structure, the City of Rancho Cucamonga coordinates and communicates with the relevant safety agencies as well as other relevant local and state agencies. During emergencies, RCMU has a key role in ensuring utility operations at the field, local government, and operational area levels.

Under the SEMS structure, a significant amount of preparation is done through advanced planning at the local level, including the coordination of efforts of public, private, and nonprofit organizations. San Bernardino serves as the Operational Area and is guided by the San Bernardino County Operational Area Coordinating Council which is made up of representatives of all 24 Cities and Towns. The Operational Area includes local and regional organizations that bring relevant expertise to the wildfire prevention and recovery planning process. These participants include local school districts, utilities, first responder agencies, non-profits (such as the United Way and the American Red Cross), all regional Hospitals, special districts, communications providers, and other similar organizations.

Pursuant to the SEMS structure, the City of Rancho Cucamonga also participates in emergency training exercises where the Fire District hosts a tabletop exercise with all City Department Directors including RCMU on a wildfire drill in our wildland-urban interface fire area. At a minimum, exercises will be provided by either the Rancho Cucamonga Fire Protection District or by invitation from another supporting agency such as the County Operational Area. RCMU is a member of the California Utility Emergency Association, which is a State agency that plays a key role in ensuring communication and mutual aid between utilities during emergencies.

³ As defined in Cal. Gov. Code § 8680.2.

^₄ 19 CCR § 2407.

⁵Cal. Gov. Code § 2403(b):

^{(1) &}quot;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) &}quot;Local government level" manages and coordinates the overall emergency response and recovery activities within their jurisdiction.

^{(3) &}quot;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) &}quot;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) &}quot;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.

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

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

Within RCMU's service territory and the surrounding areas, the primary risk drivers for wildfire are the following:

- High Temperature
- Low Humidity
- Hillside Terrain
- Fire Weather Conditions
- Prolonged Drought
- Climate Change
- Fire History

B. ENTERPRISE SAFETY RISKS

Fire risks due to topographical and climatological factors are determined to be "Low" [Tier 1 (i.e. low risk)] within RCMU's service area. The description of tiered fire threat zones is shown in Table 2 below.

Zone	Category	Description
Tier 3	Extreme	Wildland areas where exposure to overhead power lines, the availability of water resources, and emergency responder circulation routes affect response times to combat wildland fires.
Tier 2	Elevated	Elevated risk due to vegetation, high voltage regional transmission lines crossing the area, and adjacency to Tier 3 fire threat zones.
Tier 1	Low	Well developed areas, typically with underground high voltage circuitry.

Table 2: Description of Tiered Fire Threat Zones

On September 19, 2018, the Rancho Cucamonga City Council adopted Resolution No. 18-103 which made a determination that RCMU's current service area is not located in an area that is considered an elevated or extreme risk of electric line wildfires; has 0 percent overhead electric lines and equipment and does not pose a significant risk of causing wildfires.

RCMU continues to be actively involved in the California Municipal Utilities Association's (CMUA's) Wildfire Preparedness and Response Working Group to help identify any

unidentified risks. In May 2022, the Working Group focused on risk drivers for powerline caused catastrophic wildfires and innovative mitigation options. CMUA invited a broad range of utility staff, state agency staff including the Wildfire Safety Advisory Board (WSAB), industry experts, and academics to participate in this discussion. The Working Group will continue to discuss unidentified wildfire risk drivers and mitigation measures that could address these risks. Based on the input provided during this meeting, CMUA will produce a publicly available, postmeeting report that summarizes the group's conclusions and recommendations. RCMU's staff participated in CMUA's meeting and discussed any changes that RCMU has made to its operations in response to the conclusions and recommendations of the Working Group in a future WMP.

In a continuous effort to review and improve on any wildfire risks in March 2022, the Fire District and RCMU partnered with a company called Lindsey FireSense for fire monitoring sensor cameras attached to RCMU's street light poles along the City's foothill area which includes the Tier 2 and 3 fire threat zones. The Rancho Cucamonga Fire District is expanding this program as funding for this project was approved in October 2022 and received in April 2023. This includes the installation of a 30-camera unit, an early wildfire detection system along the City's northern boundary. The system will provide rapid detection, reporting, and response to wildfires. As the RCMU territory continues to grow, we may need to expand our metrics based on this monitoring system.

C. CHANGES TO THE CPUC FIRE THREAT MAP

There were no changes to the CPUC Fire Threat Map during this period.

V. WILDFIRE PREVENTATIVE STRATEGIES

A. HIGH FIRE THREAT DISTRICT

RCMU, as a member of the California Municipal Utilities Association participated in the development of the CPUC's Fire-Threat Map,⁶ which designates a High-Fire Threat District. In the CPUC Fire-Threat map development process, RCMU coordinated with SCE and determined that because RCMU's system is entirely undergrounded, that SCE would serve as territory lead for the region served by RCMU. RCMU has incorporated the High Fire Threat District into its construction, inspection, maintenance, repair, and clearance practices, where applicable.

⁶ Adopted by CPUC Decision 17-12-024.

Map 2: High Fire Threat District Map



Additionally, the Rancho Cucamonga City Council, acting as the Board of Directors of the Fire District also adopted a Wildland Urban Interface Fire Area Map for the City (see the map below), referring to the zone where undeveloped, wildland vegetation transitions to developed land such as residential neighborhoods which are at risk of wildfires.

Rancho Cucamonga Fire District's Wildland Urban Interface



Map 3: Fire Area Map with RCMU Electrical Circuits- Updated

B. WEATHER MONITORING

RCMU does not have any real-time wind direction and weather condition technology equipment installed that can track wind and weather conditions by season. The lack of funds and budget to sustain staffing and qualified professionals to monitor this data is challenging in that neither the utility nor other City Departments have the additional time or resources to track and monitor this information. However, the Emergency Management Division within the Rancho Cucamonga Fire District does receive consistent briefing reports from the National Weather Service (NWS) San Diego Office, which covers our City and County. This briefing provides an overview of significant weather that may impact our area. These reports allow our team to increase our awareness and preparedness for upcoming events. If an event has the potential for severe implications including wind and weather conditions, NWS – San Diego will host conference calls leading up to the event so the affected jurisdictions can gather additional data in order to make critical decisions on how to manage any potential damage and disruption in services. Emergency Management will coordinate this information with our internal city stakeholders such as RCMU so collectively decisions can be made to preserve safety for our residents, especially during the high Santa Ana wind season.

C. DESIGN AND CONSTRUCTION STANDARDS

RCMU's electric facilities are designed and constructed to meet or exceed the relevant federal, state, or industry standard. RCMU treats CPUC General Orders (GO) 128 as a key industry standard for design and construction standards for underground electrical facilities. Since RCMU has a 100% underground system, the CPUC's G.O. 95 overhead construction standards

do not apply. Additionally, RCMU monitors and follows, as appropriate, the National Electric Safety Code.

RCMU's approach to grid hardening is discussed in this subsection and the other subsections below. RCMU's 100% underground design and construction standards and field inspections of critical electrical equipment are some of its key grid hardening programs. Historically, undergrounded electric lines have not been associated with catastrophic wildfires. The undergrounding of electric lines serves as an effective grid hardening measure that reduces the potential of power-line ignited wildfires. The goal of RCMU's program is prevention and mitigation response versus reaction in its system hardening and grid design. The responses below were specific questions included in the WSAB's 2021 Guidance Advisory Opinion that provides a comprehensive context of the RCMU Territory.

• Does the POU perform a circuit-by-circuit analysis to identify essential facilities (and whether they have backup power) like hospitals, communication centers, and community resource centers?

RCMU's Response: Yes, RCMU does have a circuit-by-circuit analysis which identifies essential facilities within its service area. The analysis does not identify whether those facilities have their own backup power.

- Does the POU assess system hardening measures that could be installed to prevent PSPS for those facilities?
 RCMU's Response: N/A. RCMU's system is already designed to be 100% underground.
- In what way does the POU prepare these facilities for a PSPS or another wildfire related de-energization event?
 RCMU's Response: N/A. RCMU is not affected by the IOU's PSPS de-energization event and its facilities are not located in a wildfire area.
- For POUs that power water utilities or supply water themselves, if that water is used for drinking and firefighting, are certain projects being undertaken to harden the system for water delivery purposes?

RCMU's Response: N/A. RCMU does not serve sites that power any water utilities or water conveyance.

- Are pump stations self-contained or have some level of fire protection? Is the supply to sewage treatment plants hardened?
 RCMU's Response: N/A. RCMU does not serve any pump stations or sewage treatment plants.
- Is supplemental generation available such as backup batteries or backup power facilities?
 RCMU's Response: No, RCMU does not provide supplemental generation.
- Are the majority installed by the customers themselves or the utility? RCMU's Response: Unknown: If any supplemental generation is installed, it is done by the customers and not installed by the utility.
- Can the utility open and close taps? Can the utility back-feed?

RCMU's Response: No, RCMU cannot control the taps of the customer's backup / supplemental generation.

- Are there wildfire related circumstances wherein either of these tactics would be useful?
 RCMU's Response: N/A
- Can the utility sectionalize in a localized fashion?
 RCMU's Response: N/A

D. VEGETATION MANAGEMENT

RCMU has a 100% underground electric system, so the standard vegetation management practices do not apply to RCMU.

E. INSPECTIONS

RCMU meets or exceeds the minimum inspection requirements provided in the CPUC's GO 165 (Inspection Requirements for Electric Distribution Facilities) by patrolling all pad mounted Transformers, Switches, and Capacitors, with a detailed inspection every 5 years. 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, RCMU currently does not have any overhead powerlines located within or near the High-Fire Threat District within the CPUC's Fire Threat Map. However, RCMU staff uses their knowledge of the specific environmental and geographical conditions of RCMU's service territory to determine if any particular areas require more frequent inspections if necessary.

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

F. RECLOSER POLICY

RCMU does not have any automatic reclosers deployed downstream of RCMU's Arbors substation. All of RCMU's circuit breakers have reclosing functionality which is conducted manually by a lineman in the field. RCMU's system currently does not have this capability to be controlled by a Supervisory Control and Data Acquisition (SCADA) or other remote controls. RCMU has the capability, should it be deemed necessary, to change the relay or reclosing settings during adverse conditions.

G. DEENERGIZATION

RCMU has the authority to preemptively shut off power due to fire-threat conditions, however, this option will only be used in extraordinary emergency circumstances. Due to the minimal risk of RCMU's electrical supply facilities causing a power-line ignited wildfire, RCMU is not adopting specific protocols for de-energizing any portions of its electric distribution system. RCMU will re-evaluate this determination in future updates to this Wildfire Mitigation Plan.

VI. COMMUNITY OUTREACH AND PUBLIC AWARENESS

RCMU works closely with the City's Community Affairs Network (CAN) which serves as the conduit for exceptional relationships and trusted information within the community. RCMU relies on CAN to disseminate key information to customers, residents, and other stakeholders. Vital shared information may include, but is not limited to severe weather updates, utility service interruptions, wildfire or other emergencies, and potential or active Public Safety

Power Shutoff notifications, in coordination with other utility providers. This is done via the City's/Fire District's social media channels including Facebook, Instagram, Twitter, Nextdoor, and the City's website and other publications.

VII. RESTORATION OF SERVICE

In the unlikely event of a wildfire or other emergency event caused by or affecting RCMU's electric system, that would require a public safety power shutoff, the City of Rancho Cucamonga will maintain a proactive plan to communicate with the community during high fire threat periods and disasters.

- Coordinate with the Fire District and the Rancho Cucamonga Police through the City's EOC during emergencies or large-scale outages.
- Expand social media for the public to see current outages and estimated restoration times in coordination with the City's Communications Team.
- Communication plans through the City's EOC will allow RCMU to coordinate with applicable emergency service personnel along with maintaining open lines of communication with customers, media, and internal City staff.



RCMU will work as quickly as possible to restore power safely, following an event, in cooperation with the City's Fire District, Police, and Public Works Departments. RCMU will also engage its on-call high voltage contractors as needed.

RCMU staff and its contractors will ensure which circuits are to be brought up safely and that any vital loads are restored first followed by non-vital loads. In most cases, the following restoration priorities will be followed

depending on the specific incident and available resources:

- Public safety in the affected areas
- Worker safety in performing the restoration work
- Life-support or critical customers
- Critical infrastructure (Key City facilities, City Police and Fire Departments, other key utility facilities (e.g., fiber communications)
- Major commercial activities/accounts critical to continuity of community services (e.g., gas stations, food stores, home supply stores, repair shops, eateries, lodging facilities, financial institutions, etc.)
- To reduce the total number of customers affected
- To reduce the length of time customers have been without power

In directing restoration efforts to best achieve the above priorities, RCMU Staff will generally find it most efficient to dedicate restoration resources to the following types of facilities in the following order of priority to optimally restore electric services:

- Arbors Substation located on Rochester Avenue and Stadium Way
- All Distribution circuits (12 kV)
- Distribution feeders
- Distribution transformers
- Service lines

EVALUATING THE PLAN VIII.

Α. METRICS AND ASSUMPTIONS FOR MEASURING PLAN OUTCOME AND PERFORMANCE

RCMU will track metrics to measure the outcome and performance of this Wildfire Mitigation Plan including the number of fire ignitions; and inspections for above-ground, utility-owned distribution systems components.

Outcome Metric: FIRE IGNITIONS

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

- RCMU 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
- RCMU has knowledge that the fire occurred

RCMU will provide the number of fires that occurred that were less than 10 acres in size. Any fires greater than 10 acres will be individually described.

Performance Metric: ROUTINE INSPECTIONS OF ABOVE-GROUND, UTILITY-OWNED **DISTRIBUTION SYSTEM COMPONENTS**

For purposes of this metric, the routine inspections for above-ground, utility-owned distribution systems components are defined as follows: Inspections of:

- **Distribution Step-Down Transformers**
- Distribution Lines

Β. IMPACT OF METRICS ON PLAN

Table 3: RCMU 2023 Outcome and Performance Metrics

Outcome Metric		
Fire Ignitions	CY 2023	CY 2024
# of Fire Ignition in RCMU Service Area	0	0
# of wildfires in City boundaries NOT in RCMU Service Area (<10 acres)	0	0
# of wildfires in City boundaries NOT in RCMU Service Area (> 10 acres)	0	0

Performance Metric		
Above-Ground Utility-Owned Distribution System Components	CY 2023	CY 2024
# of Inspections for Distribution Step- Down Transformers)	8	7
# of Inspections Completed for Distribution Lines	7	5
Red Flag Warning ⁷	1	3

⁷ The National Weather Service defines a "Red Flag Warning" as warm temperatures, very low humidities, and stronger winds are expected to combine to produce an increased risk of fire danger.

C. MONITORING AND AUDITING OF THE PLAN

This Wildfire Mitigation Plan will be presented to the Rancho Cucamonga City Council and RCMU staff will present updates to this plan.

The WMP, updates, and any associated approvals will be made available for public review on the City Council's agenda located on the City's website, as well as the City's Council agenda posting located for viewing at Rancho Cucamonga City Hall. RCMU's most recent Independent Evaluation Report and WMP are included on RCMU's website located at <u>https://www.cityofrc.us/rcmu.</u> A discussion of the new metrics was discussed between the Fire District and RCMU Staff in the 2023 WMP update.

D. IDENTIFYING AND CORRECTING DEFICIENCIES IN THE PLAN MONITORING

Based on the recommendations of the Rancho Cucamonga City Council, RCMU will correct any identified deficiencies and/or recommendations, as appropriate in the WSAB's Guidance Advisory Opinions. This document also represents the combined effort of the POU industry associations to further the development of a template to respond to the WSAB's Guidance Advisory Opinion in future reporting WMP cycles.

E. MONITORING THE EFFECTIVENESS OF INSPECTIONS

A key mitigation measure against wildfires is vegetation management. Since RCMU has a 100% underground electric system, the standard vegetation management inspections do not apply to RCMU. However, RCMU added the metric of inspections for above ground transformers and distribution lines. Hence, we see the value of adding these inspections to our metrics to improve and support our wildfire mitigation efforts.

IX. INDEPENDENT AUDITOR

Public Utilities Code section 8387(c) requires RCMU 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 on the City's website. This report must also be presented to the Rancho Cucamonga City Council at a public meeting.

In evaluating and selecting an independent evaluator as required in PUC Section 8387(c), the City determined that the Fire District is the most qualified independent evaluator who understands the local conditions and fire risks for the City of Rancho Cucamonga and is aware that RCMU's service area is located in a low-risk fire threat zone with 100% underground electric wire equipment. The City believes that the Fire District is qualified to review the comprehensiveness of the RCMU Wildfire Mitigation Plan.

X. WSAB GUIDANCE ADVISORY OPINION RECOMMENDATIONS (2023 UPDATE)

On November 16, 2022, the Wildfire Safety Advisory Board (WSAB) issued its Guidance Advisory Opinion identifying some specific recommendations that POUs are requested to address in their 2022 WMPs. This Section IX. restates each of the WSAB recommendations where RCMU provides a response.

WSAB Recommendation #1: The WSAB appreciates Rancho Cucamonga's continued inclusion of a context-setting template and the addition of the statutory cross-reference table near the front of their 2022 WMP. The WSAB also appreciates that the utility updated their template with revised customer information – these templates need to be kept up-to-date as utility circumstances change, particularly with relation to assets in high wildfire threat areas. The WSAB encourages Rancho Cucamonga to continue including and updating this information and consider the proposed template in Appendix 1 as they prepare and file their 2023 comprehensive revision WMP.

RCMU's Response: RCMU has updated our WMP based on the proposed template listed in the Guidance Advisory Opinion for the 2023 Wildfire Mitigation Plans of Electric Publicly Owned Utilities and Rural Electric Cooperatives document.

WSAB Recommendation #2: The WSAB appreciates Rancho Cucamonga's clear and prominent website location for WMP information and the inclusion of some historical WMP information, as well as the addition of a paragraph and link to that information in the 2022 WMP itself as requested. The WSA 2 WMP B notes that the 2022 update WMP appears not to be available on the page and encourages Rancho Cucamonga to keep the page up-to-date.

RCMU's Response: RCMU has posted the current version of the WMP on its website. We have deleted the historical versions to present the most recent information. These streamlining efforts should alleviate any electronic access issues.

WSAB Recommendation #3: The WSAB appreciates Rancho Cucamonga's many changes in the 2022 WMP from the 2021 version, including new paragraphs describing coordination with SCE, discussing outage communication in more detail, talking about weather data monitoring, and describing the underground nature of Rancho's assets along with additional information from the previous informational response. In addition, the WSAB appreciates Rancho Cucamonga including some responsive text to the 2022 Guidance Advisory Opinion but notes that it appears the specific Rancho Cucamonga points in that document were not addressed. The WSAB encourages Rancho Cucamonga to continue a relatively robust practice of updating their WMPs.

RCMU's Response: RCMU has completed a robust update for our 2023 WMP. We anticipate continuing to make improvements as deemed fit in our role as an electric utility.

WSAB Recommendation #4: The WSAB applauds the new situational awareness pilot at Rancho Cucamonga, adding three fire-monitoring sensor cameras along the foothills, including pictures and maps related to that new effort. Given the low likelihood of catastrophic wildfire for Rancho Cucamonga, this addition shows a proactive approach to preventing and mitigating potential wildfires, even those not utility related.

RCMU's Response: RCMU is building upon these efforts and will be placing additional cameras throughout the community as funding becomes available. These efforts should assist with ongoing fire prevention and early detection activities and further enhance the city as a world class community. As RCMU territory continues to grow, we will explore additional metrics relating to this new technology.

WSAB Recommendation #5: The WSAB notes that Rancho Cucamonga still included a generic "wires down" metric in their WMP, even with all assets reportedly underground. The WSAB appreciates the updated metric tracking results in the WMP but encourages Rancho Cucamonga to consider more relevant metrics, including performance metrics, in their 2023 comprehensive revision WMP.

RCMU's Response: RCMU has replaced the metric of "wires down" and added the new metric "inspections". This new performance metric is relevant for our underground infrastructure, and we look forward to providing this information to demonstrate RCMU's efforts to mitigate potential wildfires.

END OF DOCUMENT