2025 Update

ABSTRACT
This document was developed for the purpose of establishing protocol to mitigate the risk(s) associated with wildfires. This document takes the latest and mandatory elements for a wildfire mitigation plan under consideration. However, readers should seek the advice of an attorney when confronted with legal issues, and attorneys should perform an independent evaluation of the issues raised in this document.

2023
Reviewed by: Chloeta

2023
Independent Evaluation by: Chloeta Fire

Approved by: SVE Board of Directors

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I. Utility Overview and Context

A. Utility Description and Context Setting Table

The Surprise Valley Electrification Corporation (SVEC or the Cooperative) is a private, non-profit electric cooperative founded in 1937 and energized in 1938 to provide reliable electric service to the member-owners at the lowest rates possible. Originally the service area included the rural areas of Modoc and Lassen counties, California. The newly energized lines brought electricity to 809 customers in Surprise Valley, Canby, Adin, Lookout, and the area known as Westside near Lakeview, Oregon.

The original 1938 system was energized with power generated from three diesel generators located in the building that was formerly the SVEC office building. Since that time, the utility's service area has grown to include service to members in Oregon and the northwest corner of Nevada in Washoe County. Because SVEC's service area extends into Lake County, Oregon, which is within the service boundary of the Bonneville Power Administration (BPA), SVEC purchases all of its wholesale electricity from that federal power agency. This electricity is largely derived from hydroelectric and nuclear generators.

As a utility cooperative, SVEC is governed by a seven-member popularly elected board of directors (the Board) that determines policy and appoints the general manager (GM), who is responsible for SVEC's overall management and operations.

The Cooperative serves 6,687 electric meters. Of those accounts 4,007 are residential, 1,166 are irrigation, 1475 are small commercial, and 39 large power meters.

SVEC has 241 miles of transmission line, 1,984 miles of distribution line, and 366 miles of underground line. For purposes of this document, SVEC uses the term "transmission" to refer to electric power lines that are 69 kV or larger, while "distribution" refers to lines smaller than 69 kV. This distinction is for internal reference purposes only, and is not intended to reflect either regulatory treatment or actual function of the described lines.

Table 1: SVEC Context Summary.

	SVEC	
Service Territory Size	7,650 square miles	
Owned Assets	• Transmission • Distribution • Geothermal	
Number of Customers Served	6,687 of electric customer accounts	
Service Territory Location/Topography	Agriculture Barren/Other Conifer Forest Conifer Woodland Desert Hardwood Forest	Hardwood Woodland Herbaceous Shrub Urban Water Wetland

	SVEC	
Service Territory Wildland Urban Interface (based on total area)	Wildland Urban Interface Wildland Urban Intermix	
Prevailing Wind Directions & Speeds by Season	Wind direction is North-East	
Miles of Owned Lines Underground and/or Overhead	Overhead Distribution: 1,984 miles Overhead Transmission: 241 miles Underground: 366 miles	
Percent of Owned Lines in CPUC High Fire-threat Districts	Overhead Distribution Lines as % of Total Distribution System	Tier 2: 19% Tier 3: 0%
	Overhead Transmission Lines as % of Total Transmission System	Tier 2: 24% Tier 3: 0%
Customers have ever lost service due to an IOU PSPS event?		No
Customers have ever been notified of a potential loss of service due to a forecasted IOU PSPS event?		Yes
Has developed protocols to pre-emptively shut off electricity in response to elevated wildfire risks?		Yes
Has previously pre-emptively shut off electricity in response to elevated wildfire risk?		No

Statutory Cross-Reference Table

Table 2 below summarizes the elements required in PUC Section 8387 and their location within the WMP.

Table 2: Compliance with Public Utilities Code Section 8387(b).

Requirement	Statutory Language	Plan Section
Persons Responsible	**PUC § 8387(b)(2)(A):** An accounting of the responsibilities of persons responsible for executing the plan.	Sec. IV.A.
Objectives of the Plan	**PUC § 8387(b)(2)(B):** The objectives of the wildfire mitigation plan.	Sec. III.
Preventative Strategies	**PUC § 8387(b)(2)(C):** A description of the preventative strategies and programs to be adopted by the local publicly owned electric utility or electrical cooperative to minimize the risk of its electrical lines and equipment causing catastrophic wildfires, including consideration of dynamic climate change risks.	Sec. VI.A.-H.
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.	Sec. IX.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.	Sec. IX.B.
De-energization Protocols	**PUC § 8387(b)(2)(F):** Protocols for disabling reclosers and deenergizing portions of the electrical distribution system that consider the associated impacts on public safety, as well as protocols related to mitigating the public safety impacts of those protocols, including impacts on critical first responders and on health and communication infrastructure.	Sec. VI.H.
Customer Notification Procedures	**PUC § 8387(b)(2)(G):** Appropriate and feasible procedures for notifying a customer who may be impacted by the deenergizing of electrical lines. The procedures shall consider the need to notify, as a priority, critical first responders, health care facilities, and operators of telecommunications infrastructure.	Sec. VII.
Vegetation Management	**PUC § 8387(b)(2)(H):** Plans for vegetation management.	Sec. VI. D.

Requirement	Statutory Language	Plan Section
Inspections	**PUC § 8387(b)(2)(I):** Plans for inspections of the local publicly owned electric utilities or electrical cooperative's electrical infrastructure.	Sec. VI.E.
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 utilities 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 utilities 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 utilities or electrical cooperative's service territory.	Sec. V.A.
CPUC Fire-threat Map Adjustments	**PUC § 8387(b)(2)(K):** Identification of any geographic area in the local publicly owned electric utilities 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.	Sec. V.C.
Enterprise-wide Risks	**PUC § 8387(b)(2)(L):** A methodology for identifying and presenting enterprise-wide safety risk and wildfire-related risk.	Sec. V.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.	Sec. VIII.A.

Requirement	Statutory Language	Plan Section
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: i. Monitor and audit the implementation of the wildfire mitigation plan. ii. Identify any deficiencies in the wildfire mitigation plan or its implementation and correct those deficiencies. iii. Monitor and audit the effectiveness of electrical line and equipment inspections, including inspections performed by contractors that are carried out under the plan, other applicable statutes, or commission rules.	Sec. IX.C.
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 utilities or electrical cooperative's governing board.	Sec. X.

B. Process for Utility Adoption and Submittal of Annual WMP and Opportunities for Public Comment

The most recent draft of the WMP is posted on SVEC's website and made available for public comment for thirty days (30 days). Interested parties are invited to comment on the plan at the time it is presented to SVEC's Board of Directors in a properly noticed public meeting. The 2023 Wildfire Mitigation Plan was reviewed by Independent Evaluator Chloeta Fire. Revisions in this 2025 Update were not reviewed by Chloeta Fire.

A draft copy of the WMP is made available to the public for comment for a minimum period of 30 days.

C. Description of Where WMP Information Can Be Found on Utility Website

The WMP (both draft and final states) is posted on SVEC's website. Public comment opportunities are explained in C. Process for Utility Adoption and Submittal of Annual WMP and Opportunities for Public Comment.

Community involvement can play a significant role in wildfire mitigation. As part of the SVEC's holistic approach, SVEC encourages its members to take proactive measures to safeguard their homes from wildfires. To help create an awareness of fire danger and the steps members can take to mitigate wildfire risk, SVEC provides helpful information on its website. Members will find links to information regarding Defensible Space Requirements, National Weather Service Red Flag Warning (RFW) alerts, and fire season preparation. Links to Modoc and Lassen counties Fire Safe Council websites, which contain excellent information on how residents can mitigate fire hazards, are also provided.

D. Purpose of the Wildfire Mitigation Plan

This Plan describes SVEC's strategies and programs to mitigate the threat of electrical equipment ignited wildfires. It addresses the unique features of SVEC's service area such as topography, weather, infrastructure, grid configuration, and potential wildfire risks. This Wildfire Mitigation Plan (WMP) is subject to direct supervision by SVEC's Board of Directors, and primary responsibility for its implementation resides with the Member Service Manager. Ultimate accountability for the plan resides with the General Manager (GM). This plan meets or exceeds the requirements of PUC section 8387 for publicly owned electric utilities and cooperatives to prepare a WMP. Table 2 outlines the WMP's code compliance with 8387 and the corresponding sections within the plan.

E. Organization of the Wildfire Mitigation Plan

This Wildfire Mitigation Plan includes the following elements:

- Executive summary
- 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
- Annual and historical results for metrics
- Description of community outreach and education

II. Objectives of the Wildfire Mitigation Plan

This objective of this Wildfire Mitigation Plan is to help ensure the continued safe, reliable, and affordable provision of service to SVEC members by creating a clear strategy for wildfire mitigation.

Some of the general elements in SVEC's operations are as follows:

Voluntary and Open Membership: Cooperatives are voluntary organizations, open to all persons able to use their services and willing to accept the responsibilities of membership, without gender, social, racial, political, or religious discrimination.

Democratic Member Control: Cooperatives are democratic organizations controlled by their members, who actively participate in setting policies and making decisions. The elected representatives are accountable to the membership. Members have equal voting rights (one member, one vote).

Members' Economic Participation: Members contribute equitably to, and democratically control, the capital of their cooperative. Members are allocated capital credits for the Cooperative's surpluses.

Autonomy and Independence: Cooperatives are autonomous organizations controlled by their members. If they enter into agreements with other organizations, including governments, or raise capital from external sources, they do so on terms that ensure democratic control by their members and maintain their cooperative autonomy.

Education, Training, and Information: Cooperatives provide education and training for their members, elected representatives, managers, and employees so they can contribute effectively to the development of their cooperatives. They inform the general public, particularly young people and opinion leaders, about the nature and benefits of cooperation.

Cooperation Among Cooperatives: Cooperatives serve their members most effectively and strengthen the cooperative movement by working together. SVEC collaborates through its participation in cooperative organizations at the state and federal levels.

Concern for Community: While focusing on member needs, cooperatives work for the sustainable development of their communities through policies accepted by their members.

Risk management: SVEC manages risk in the context of wildfire mitigation in three basic ways:

A. Vegetation Management and Single Shot Settings

SVEC works to minimize ignition sources through various operational practices and procedures, including rigorous vegetation management programs and "single-shot" system settings during high-risk seasons. Fire mitigation has been an integral part of SVEC's operational practices for years, and SVEC has several existing policies, programs and procedures in place that directly or indirectly manage or reduce this risk. Over time, SVEC has adopted additional fire mitigation programs to adjust to changes in fire-related conditions as well as technological advances and improved operational practices. SVEC continues to evaluate and implement new technologies and operating practices to further mitigate the potential for ignitions and to better respond to high wildfire risk conditions.

B. Resiliency of the Electric Grid

In an effort to ensure its electrical grid's resiliency, SVEC regularly inspects and maintains its equipment and infrastructure to help ensure the resiliency of SVEC's electrical grid.

III. Roles and Responsibilities

A. SVEC Roles and Responsibilities

Table 3 below identifies the individual role responsible for tracking and implementing the various WMP components.

Table 3: Accountability of Plan Implementation.

MITIGATION ACTIVITIES	RESPONSIBLE DEPARTMENT AND WORKGROUP
Risk Analysis	General Manager
Fire-threat assessment in service territory	Line Superintendent / Operations Manager
Wildfire Prevention Strategy Programs	
• Disable reclosers • Planned de-energization	Line Superintendent / Operations Manager and General Manager
• T&D line patrols • 69 kV & transmission line inspections • Wood pole intrusive inspection • Detailed line inspections	Line Superintendent / Operations Manager
• Substation visual and detailed inspections	Line Superintendent / Operations Manager
• Vegetation management • Pole clearing program • Line Patrols	Line Superintendent / Operations Manager
Fire Mitigation Construction	
• Non-expulsion equipment	Line Superintendent / Operations Manager
System Enhancement Capital Projects	
• Install non-expulsion equipment in high-risk areas	Line Superintendent / Operations Manager
Pilot Projects	
• GIS mapping	Member Services Manager

MITIGATION ACTIVITIES	RESPONSIBLE DEPARTMENT AND WORKGROUP
Emergency Preparedness	
• SVEC Emergency Operations	Line Superintendent / Operations Manager
• Public and agency communications for wildfires	Member Services Manager, General Manager

B. Coordination with Water Utilities/Department

SVEC coordinates with regional water districts to facilitate access to fire-fighting equipment and to improve coordination in the event of an emergency situation.

C. Coordination with Communication Infrastructure Providers

Table 4: SVEC Emergency Preparedness and Response Stakeholder List.

STAKEHOLDER GROUP	DESCRIPTION
Critical Agencies	Primary Care Hospitals Schools Public Safety Dispatch Centers Local Emergency Planning Committees California Department of Transportation CPUC Safety and Enforcement Division
Communications	Telecommunications companies Local news stations Local radio station
First Responders	Law enforcement/holding facilities Fire operations facilities CAL Fire stations USFS (U.S Forest Service-Pacific Northwest)
Local Government	Cities/Towns - Modoc and Lassen County (CA), Washoe County (NV), and Lake County (OR)
Safety Councils	Modoc County Fire Safety Council Lassen County Fire Safe Council
Customers	SVEC Members

D. Standardized Emergency Management System

SVEC is a cooperative and is not publicly owned. In the event of an emergency within its service territory, SVEC works with Modoc County and Lassen County EMDs and provides updates as they emerge.

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

SVEC staff evaluated other utilities' fire causes and applied its own field experience to determine the key potential risk drivers. Six categories were identified as potential for causing powerline sparks and ignitions:

- Foreign Contact
- Equipment/Facility Failure

- Wire to Wire Contact/Contamination
- Topography and Climate
- Lightning
- Red Flag Warnings
- Other

SVEC staff identified the following drivers associated with each category. These are discussed below but may not be limited to the following:

Foreign Contact

As is the case for most electrical utilities, most overhead powerlines are installed with bare wire conductor on insulated structures. The benefits of this type of conductor are that it is much lighter and easier to work with, as well as a much more cost-effective method of delivering energy compared to insulated/covered wire. The downside to bare wire is its susceptibility to contact from foreign objects such as wildlife, vegetation, and third-party equipment. Protection equipment is utilized to isolate faults, but there are time delays associated with circuit breakers, reclosers, and fuses. These time delays are not fast enough, in many cases, to prevent all sparks prior to tripping. Ejected molten metal, sparks or burnt foreign objects can potentially ignite any fuels in the vicinity of the fault. Vehicles leaving the roadway and contacting a pole is a common source of faults. Such an impact with poles or guy wires can break poles and/or crossarms, creating enough stress on the conductors to break them. The results can be ground contact, potentially emitting sparks. SVEC has installed animal guards on all banks, reclosure arrestors, and transformers.

Equipment Failure

Equipment can fail for many reasons during its service life. Most equipment requires regular maintenance for optimal performance. Even though SVEC's qualified personnel perform regularly scheduled inspection and maintenance on all system equipment, internal defects that are not visible or predictable can be the cause of destructive equipment failure resulting in ejection of sparks and/or molten metal. The failure of components such as hot line clamps, connectors and insulators can result in wire failure and wire to ground contact. Transformers and capacitor banks can have internal shorts potentially resulting in the ejection materials which could be a fire source. SVEC grounds all capacitor banks and uses Cal Fire-approved equipment in all High Fire Thread Districts HFTDs.

Wire-to-Wire Contact/Contamination

High wind events and storms are potential causes of wire-to-wire contact referred to as contamination. Conductors can sway under these conditions, and if extreme, wire-to-wire contact can occur. When two or more energized conductors encounter each other, they will generally emit sparks or cause breakers to trip, emitting sparks and ejecting material. A vehicle impacting a pole, livestock rubbing on guy wires are also potential causes for contamination.

Certain processes of reenergization of conductors can cause a "galloping" condition that may result in contamination.

Topography and Climate

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

- Severe Drought
- Vegetation Type
- High Winds
- Tree Mortality

Portions of the service area have steep and rugged terrain with thick vegetation and a high tree mortality rate. These factors, along with ongoing drought conditions, make it more vulnerable to wildfire than areas with less extreme topography. This can make access to remote sections of some distribution lines exceedingly difficult and time-consuming. Fire-fighting activities in this type of terrain are also much more challenging.

Geographical Risk Factors

The lack of reliable cell phone coverage in the service area could contribute to a delay in reporting wildfires or other immediate hazards by the general public.

Lightning

Millions of lightning strikes hit the ground in the U.S. every year.[1] When lightning hits a power line, the surge of electricity can cause a flashover and the appropriate corrective action depends on how flashover occurred.

A back flashover occurs when a lightning strike hits a shield wire or a tower structure. When this happens, current flows in both directions and down the tower into the ground, developing a voltage on the crossarm is enough to flash over the insulator string. A backflash is typically caused by large strike currents, high tower surge impedances (tall towers) and/or high footing resistance. One of the most common causes of a transformer explosion is a lightning strike forcing an overload. Damage to wires or equipment elsewhere in the electrical grid can also cause too much electricity to flow into the transformer, causing it to explode. SVEC removes all arrestors in HFTDs.

Red Flag Warning Conditions

The National Weather Service issues Red Flag Warnings (RFW) & Fire Weather Watches to alert fire departments of the onset, or possible onset of critical weather and dry conditions that could lead to rapid or dramatic increases in wildfire activity.[2] A RFW is issued for weather events that may result in extreme fire behavior that will occur within

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[1] National Lightning Detection Network (NLDN).

[2] https://www.fire.ca.gov/programs/communications/red-flag-warnings-fire-weather-watches/

24 hours. A Fire Weather Watch is issued when weather conditions could exist in the next 12-72 hours. A RFW is the highest alert. While a RFW is in effect, SVEC crews working in remote sites limit hot work such as welding, grinding, and cutting. Vegetation Management (VM) and line crews have fire suppression equipment on-site, including water backpacks, shovels, and fire rakes. SVEC has purchased two U.S.F.S. approved water/fire trailers with 500-gallon capacity for our crews working in High Fire Threat Districts. Work crews conduct tail-gate meetings to confirm the location and readiness of the fire suppression equipment. Designated staff assigned as a fire-watch remain on site for up to three hours to ensure a fire does not start after work crews leave a remote or high-risk area.

Other Potential Risk Factors

Construction projects by non-SVEC crews are another possible cause of ignition. Boom trucks working near power lines can contact conductors causing a fault. Digging without first locating power lines is another hazard, as SVEC has approximately 366 miles of underground distribution lines in its service area. These situations would most likely not be the source of an uncontrolled wildfire, as this type of event would be observed and responsive actions immediately taken.

SVEC employs a professionally trained and well-informed workforce. Switching, construction, and maintenance activities are performed daily. Tools and vehicles can be sources of sparks or ignition as well. For example, driving a vehicle over dry grass/brush can cause the dry grass/brush to ignite when contacting hot surfaces. For these reasons, SVEC vehicles are equipped with fire suppression equipment and SVEC staff are trained to respond to fires and in the proper use of fire suppression equipment. Tailgate meetings are held before work to discuss the potential for fire and to confirm the location and condition of on-board fire suppression equipment.

B. Enterprise-Wide Safety Risks

SVEC does not have a history of starting wildfires where SVEC-owned equipment was involved. The following list included in the bowtie diagram below focuses on hypothetical causes of powerline sparks that could potentially start a fire. The bowtie analysis below aims to identify the key root cause/risk drivers and exposure to impacts from a wildfire and identify the possible consequences. Figure 1 displays the risk bowtie, which summarizes the assessment process.

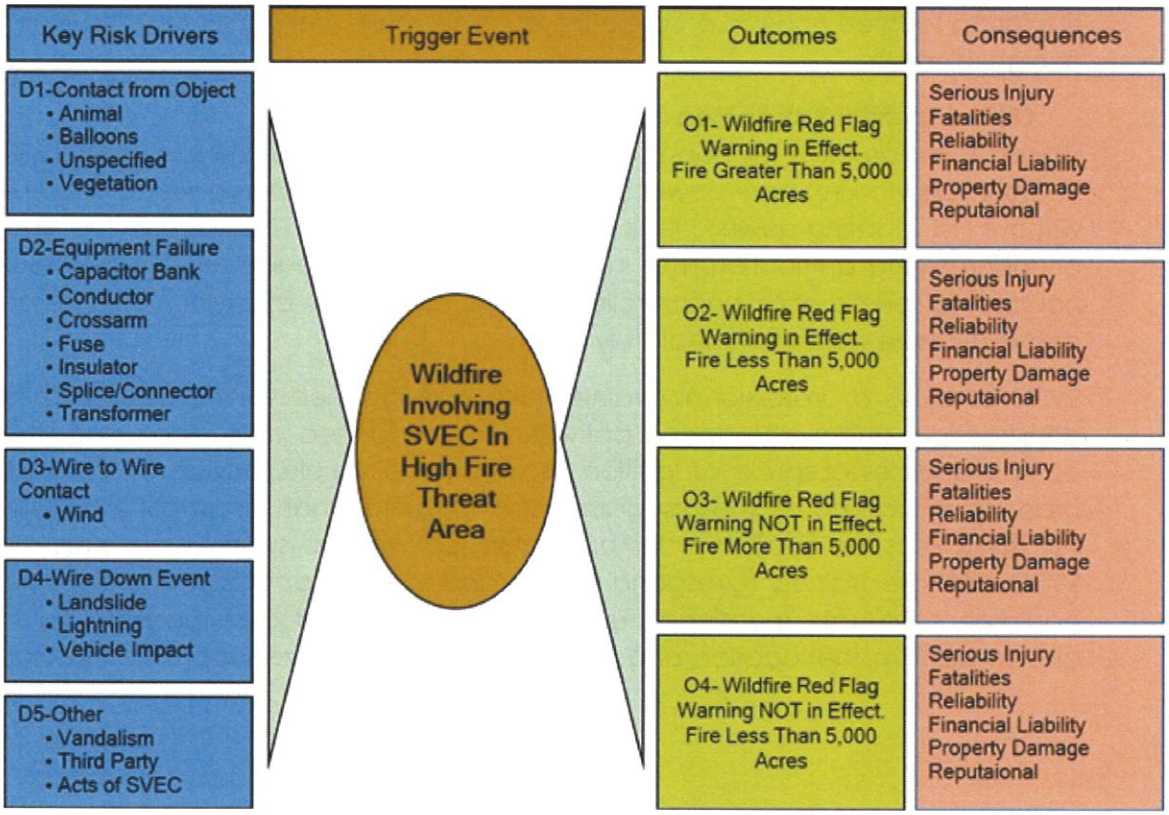


Figure 1: SVEC Risk Factor Bowtie Analysis

Key Risk Impacts

Aforementioned risks have many possible outcomes. The list below outlines some of the worst- case scenarios and consequences:

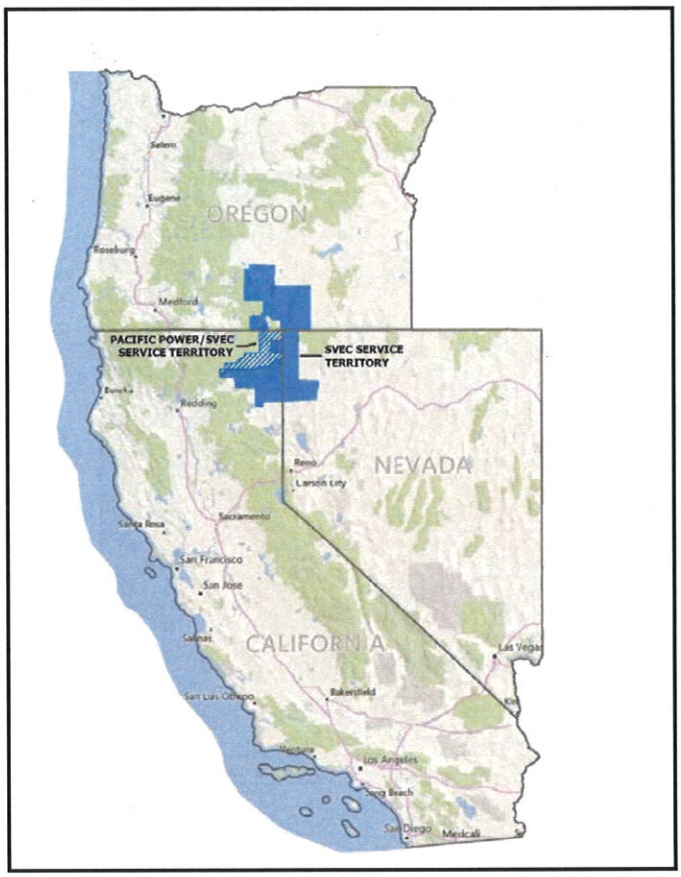
- Personal injuries or fatalities to the public, employees, and contractors
- Damage to public and/or private property
- Damage and loss of SVEC owned infrastructures and assets
- Impacts to reliability and operations
- Damage claims and litigation costs, as well as fines from governing bodies
- Damage to SVEC's reputation and loss of public confidence

C. Changes to CPUC Fire-Threat Map

Based on SVEC's knowledge of historic wildfire events, the existing environment and current information, SVEC believes that the HFTD map appropriately identifies the level of wildfire risks within SVEC's service territory. The CPUC Fire-Threat map identifies Tier 3 (extreme fire risk),

Tier 2 (elevated fire risk) and areas outside of the HFTD. SVEC has no assets located within Tier 3 of the HFTDs.

Figure 2. SVEC serves customers in California, Oregon, and Nevada.



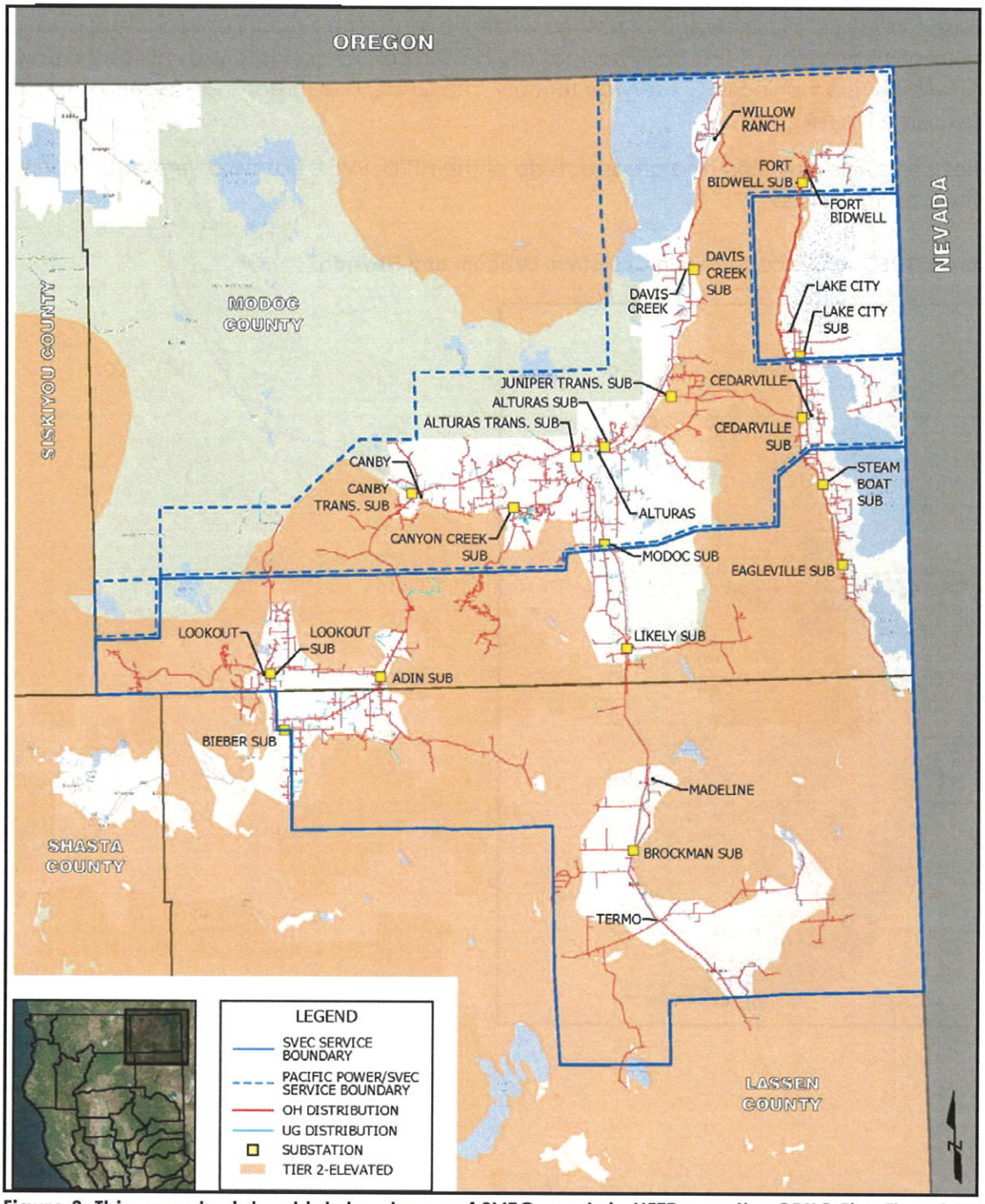


Figure 3. This map depicts a high-level map of SVEC assets in HFTDs per the CPUC Fire-Threat Map.[3]

[3] Adopted by CPUC Decision 1-24-024

Oregon and Nevada Public Utility Commissions have not yet produced HFTD maps such as the one created by California Public Utilities Commission (CPUC). The majority of SVEC's service area is very rural and sparsely populated, serving farming operations in Modoc and Lassen counties. The in-town areas of Alturas are served by Pacific Power and fall under the jurisdiction of the Pacific Corps WMP.

Table 5. A high-level breakdown of the various T&D assets within SVEC's service area in relation to the CPUC threat-level tiers.

Assets	Total	Outside HFTD		Tier 2		Tier 3	
	Line-miles	Line-miles	%	Line-miles	%	Line-miles	%
69 kV OH Transmission	241	181	74	60	26	0	0
24.9 kV OH Distribution	218	158	72	60	28	0	0
12.47 kV OH Distribution	1,541	1,222	79	319	21	0	0
24.9 kV UG Distribution	6.80	6.58	97	0.22	3	0	0
12.47 kV UG Distribution	165	140	85	25	15	0	0
Total OH Transmission	241	181	74	60	26	0	0
Total OH Distribution	1,984	1,605	81	379	19	0	0
Total UG Distribution	366	340.78	93	25.22	7	0	0
Total Substations	20	18	90	2	10	0	0

As shown in Table 5 above, SVEC's OH and UG Distribution assets are located primarily outside of the HFTDs. There is a total of 464.22 OH and UG T&D line-miles located within the Tier 2 (Elevated Threat) HFTD, with 2,073 line-miles located outside the HFTDs. There are no SVEC assets located in a Tier 3 HFTD (Extreme Fire Threat).

Figure 2 depicts SVEC's service territory area in California, Oregon, and Nevada.

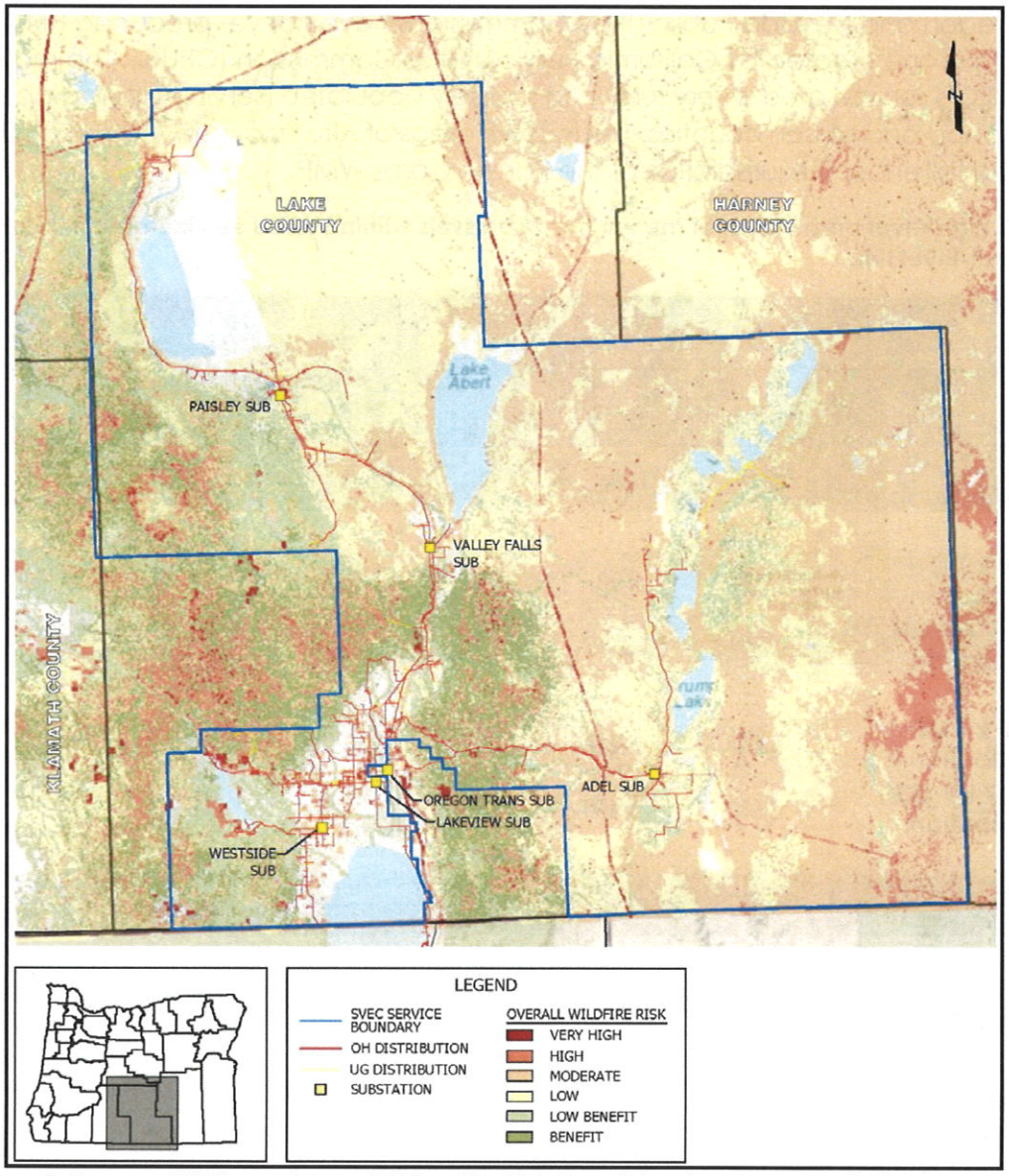


Figure 4. Oregon SVEC assets overlaid on the U.S. Forest Service Overall Wildfire Risk Map.

Figure 4 depicts Oregon SVEC assets overlaid on the U.S. Forest Service Overall Wildfire Risk Map. Overall Wildfire Risk is the product of the likelihood and consequence of wildfire on all mapped highly valued resources and assets combined. This dataset considers the likelihood of wildfire greater than 250 acres (likelihood of burning), the susceptibility of resources and assets to wildfire of different intensities, and the likelihood of those intensities. The data values reflect a range of impacts from a very high negative value, where wildfire is detrimental to one or more resources or assets (for example, structures, infrastructure, early seral stage and/or sensitive forests), to positive, where

wildfire will produce an overall benefit (for example, vegetation condition/forest health, wildlife habitat).

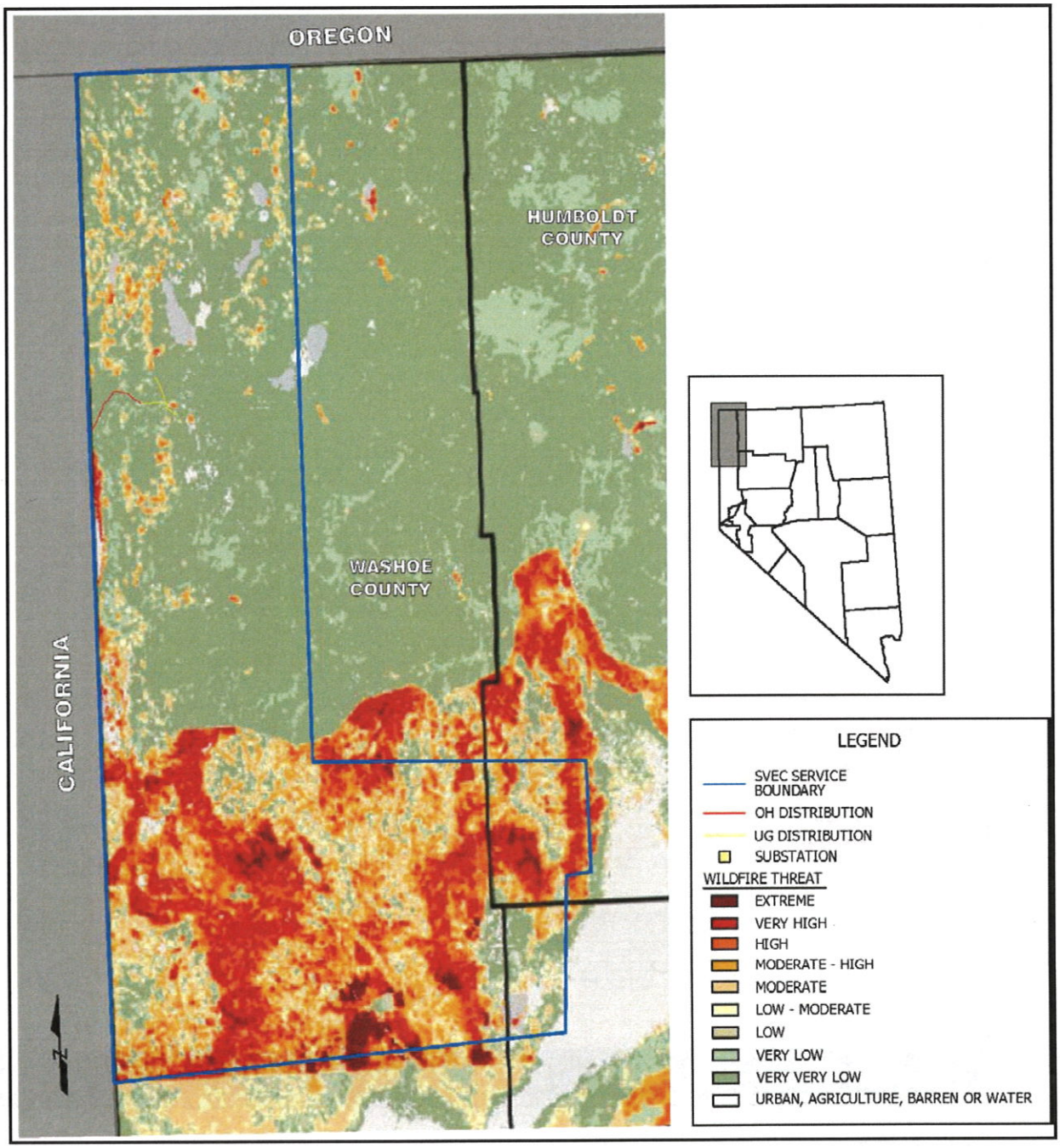


Figure 5. SVEC assets in the Nevada service area.

Figure 5 depicts SVEC assets in the Nevada service area with Division of Forestry wildfire risk overlay.

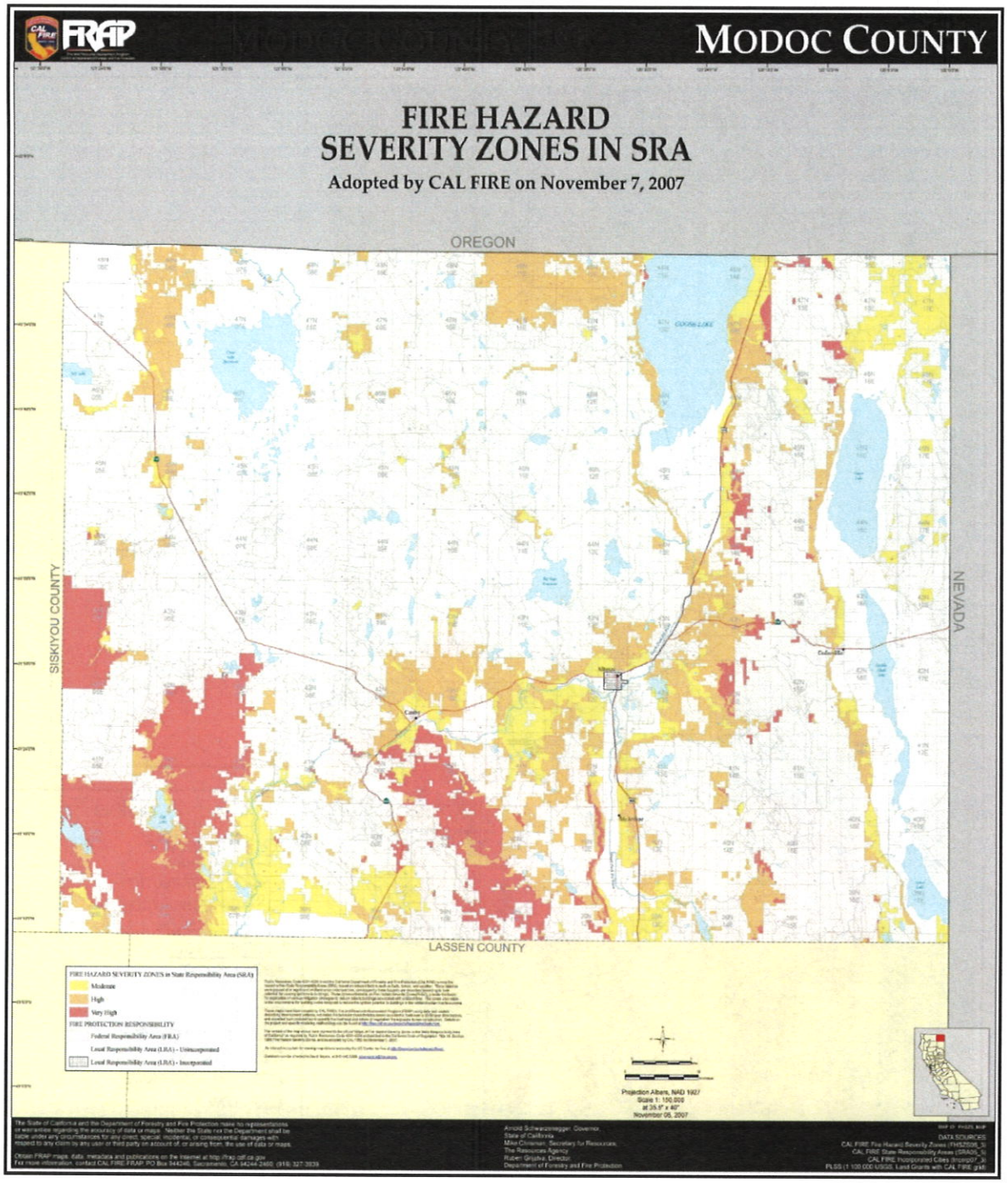


Figure 6. Modoc County SRA Fire Hazard Severity Zones.

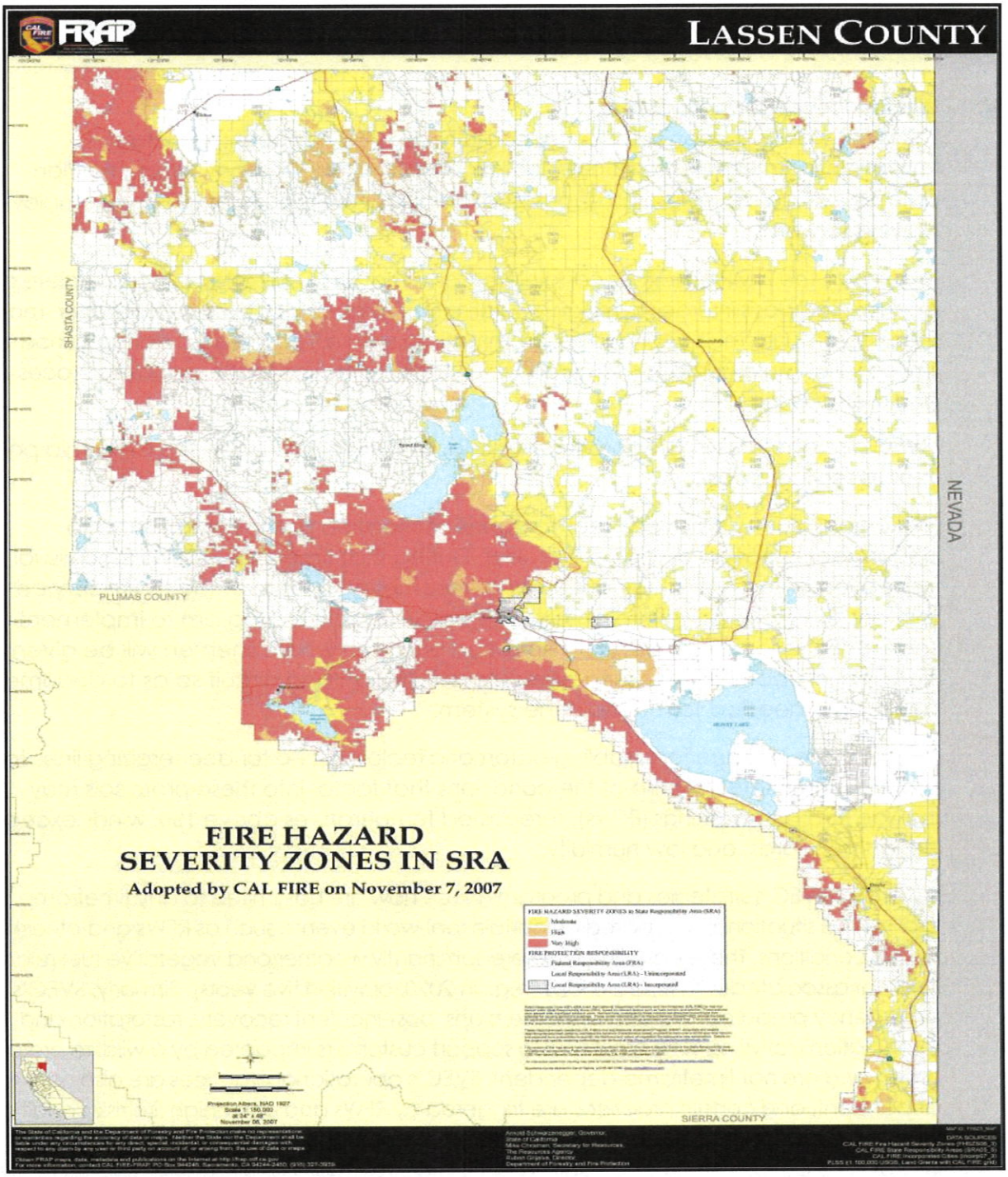


Figure 7. Lassen County (CA) SRA Fire Hazard Severity Zones.

Figures 6 and 7 display the State Responsibility Areas (SRA) for Modoc and Lassen counties. SRAs are recognized by the Board of Forestry and Fire Protection as areas

where Cal Fire is the primary emergency response agency responsible for fire suppression and prevention.

V. Wildfire Preventative Strategies

This WMP was built upon a sound foundation, as SVEC has been proactive in implementing measures to address potential wildfire risks for many years. The Plan outlines existing fire mitigation efforts and identifies new processes SVEC will employ moving forward.

In general, this WMP describes certain programs that SVEC will attempt to complete on an accelerated basis in order to mitigate wildfire risks as quickly as possible. However, many of the programs are multi-year and programmatic in nature, i.e., there is a startup period with limited initial implementation followed by full implementation that expands as processes and methods mature.

SVEC also operates in Oregon and Nevada, and intends to apply the California policies in all its service areas.

SVEC goes out twice every year to connect irrigation pumps in April and to disconnect irrigation pumps in October. During that time SVEC crews do a visual inspection of the entire distribution and transmission lines over the entire service territory. SVEC is looking into an intrusive pole inspection program to implement soon. SVEC also has a detailed inspection program where linemen will be given a detailed inspection sheet for a particular substation and circuit so as to document any repairs needed to maintain the system.

Protocols are in place for disabling automatic reclosers and for deenergizing lines to protect public safety. Some of the conditions that factor into these protocols may include Red Flag Warnings (RFWs), forecasted temperatures above 100, winds exceeding design standards, and low humidity.

Several of SVEC's strategies and programs in use now are not limited to any timeframe and are instead situational and based on certain real-world events, such as RFWs and other high fire-risk conditions. These conditions are predominantly weather and vegetative fuel-related and not associated with time periods (e.g., in 2020, or within five years). Similarly, SVEC's emergency preparedness and response plans, post-incident recovery, restoration and remediation activities, and programs to support customers impacted by a wildfire are event-driven and are not timeframe-dependent. SVEC's operational practices are also not time-dependent, and certain practices are triggered by RFWs and other high fire-risk conditions. Additionally, these practices are updated as SVEC gains the latest information and adopts improved practices. Furthermore, all administrative-related programs such as risk analyses, performance metrics, and monitoring of this WMP will be performed at regular or annual intervals.

A. Weather Monitoring

SVEC relies on weather data from various sources, including the National Weather Service, Cal Fire, and PG&E weather station data. Weather monitoring is implemented on an as-needed basis with protocols in place.

B. Design and Construction Standards

SVEC's design and construction consist of system, equipment, infrastructure design, and technical upgrades. These practices aim to improve system hardening to prevent contact between infrastructure and fuel sources to minimize the risk of SVEC's systems becoming a source of ignition.

C. Vegetation Management

Vegetation management activities are completed annually. Before each upcoming fire season, SVEC supports increased staff for line and vegetation management crews in preparation of wildfire. SVEC also performs inspections of vegetation concerns when either service calls are made or utility employees or vegetation management contractors identify at-risk vegetation while performing day-to-day operations. Contractor/staff safety training and orientation for T&D vegetation management work is ongoing.

SVEC now has two fulltime contracted tree trimming crews that maintains all SVEC transmission and distribution power lines in accordance with California Department of Forestry (CDF) and CPUC requirements for public safety and fire prevention. SVEC also uses temporary crews during the summer months to perform weed abatement under powerlines per Bureau of Land Management (BLM) and CDF guidelines where there is an identified elevated fire danger.

These processes are in regulatory compliance with Federal FAC 003-4 and State regulations, including Public Resources Codes section 4292 and 4293; they also meet or exceed the standards in CPUC GO 95 Rule 35. SVEC utilizes the 2008 "Power Line Fire Prevention Field Guide"[4] in establishing its pole clearing practices.

SVEC has a Cooperation Agreement with the Modoc Fire Safe Council designed to reduce juniper encroachment while also reducing wildfire threat near powerlines in accordance with Rights of Way/Easement maintenance procedures issued by SVEC.

Annual Pole Clearing Program

The pole clearing program is an annual requirement to clear vegetation around poles that have certain CAL FIRE non-exempt equipment on them. This program, in compliance with California Public Resource Code 4292, calls for clearing vegetation within a 10-foot radius of a pole or tower on which non-exempt equipment is attached, unless such pole or tower meets certain criteria that make it exempt from the clearance requirements.

[4] Author: CDF, PG&E, SCEC & SDG&E

Vegetation Inspection and Maintenance

When conducting routine maintenance that involves preventative inspection, SVEC responds to high-risk fuel sources with efforts to remove identified vegetation, as needed. This maintenance work is ongoing with work in each circuit completed every year. Pursuant to GO 95, Rule 35 and Public Resources Code (PRC) 4293 Clearance Exempt Trees, SVEC maintains a record of exempt trees with recommendations or corrective actions. SVEC also performs inspections of vegetation concerns when either service calls are made or utility employees or vegetation management contractors identify at-risk vegetation while performing day-to-day operations.

SVEC Tree Trimming and Removal Guidelines

Circuits are patrolled for vegetation work on a yearly cycle and are maintained to PRC 4292 and PRC 4293 standards.

Any tree or portion of tree that will be within four feet of energized conductors within one year is trimmed or removed to achieve maximum clearance possible while taking into consideration the tree's health, documented rights, and proper arboricultural practices.

Any tree with a diameter at breast height (DBH) of 10 inches or less and is in or out of the right-of-way (ROW) location can be removed if it conflicts with the conductors. No notification or permission is required for this class of tree.

Any tree located in the ROW may be removed if it is or in the future will conflict with conductors.

In order to maintain appropriate fire protection, crews shall cut all trees, shrubs, and brush in the ROW and around the pole guys and anchors.

All material shall be stacked with butts facing the road. If a chipper is used, depending on location, wood chips may be broadcast across ROW or hauled away. The area within fifteen feet each side of the center line of pole and powerlines is considered SVEC ROW and will be cleared.

Poles subject to section 4292 of the California Public Resource Code will have all vegetation cleared to a ten-foot radius of the pole as illustrated in Figure 8.

Best management practices (BMP) will be used on ROW maintenance.

Any tree that can encounter powerlines should be left until SVEC has determined it is safe to remove the tree. All crews are instructed to consider SVEC's lines being worked on or under to be energized at a high voltage.

SVEC Priorities

The following circuits are given priority in clearance work scheduling:

- California Pines Boulevard and surrounding areas distribution line
- Sage Hen Summit from Likely to Madeline 69kV line

- Day Mountain / Widow Valley distribution line, Lookout to Day

Hazard Trees

A subset of Danger Trees[5] A Hazard Tree is defined as any tree or portion of a tree that is dead, rotten, decayed, or diseased and which may fall in to or onto the overhead lines or trees leaning toward transmission and distribution facilities. These trees are sometimes located beyond the easement or ROW. Any tree that is located outside of the ROW and is deemed a hazard tree will be removed or topped to make it safe for conductors. Location, DBH and height of all such trees will be provided to property owners within three days of inspection. The property owners have 15 days to respond for comment, otherwise work will proceed as scheduled.

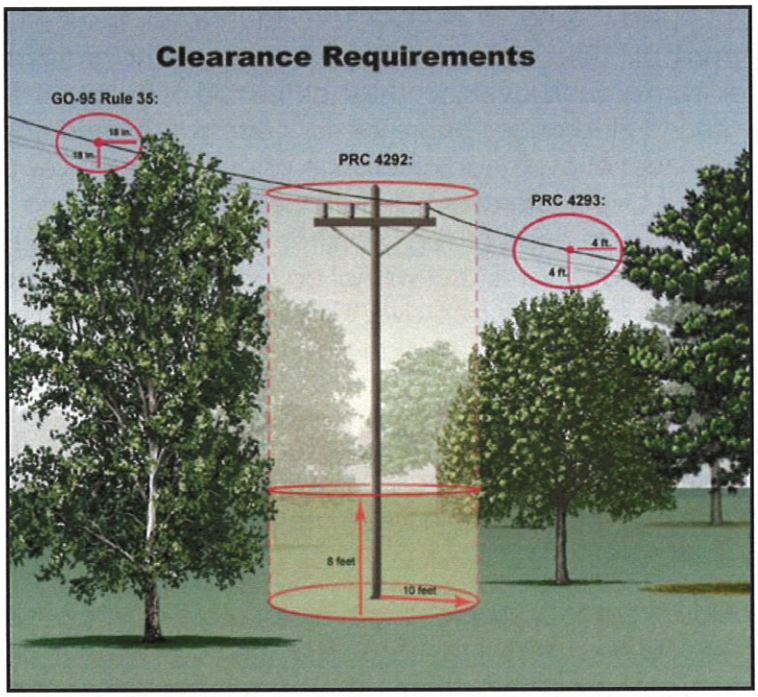


Figure 8. Pole Clearing Requirements.

Ground Level Vegetation Clearance and Removal

SVEC maintains firebreaks around bases of certain power poles throughout the OH distribution system. The projected work product consists of providing a firebreak by removing all vegetation at ground level around and adjacent to specific poles or structures as identified by location and pole number.

ROW Trimming Specifications

SVEC has an operational and management responsibility and is required by State and Federal Agencies to maintain the right of way, under or around its power lines. To lessen our liability of fire and safety hazard due to live, dead, or leaning trees and vegetation, SVEC crews work on an ongoing effort to clear any such hazard by removing any tree or brush that are directly under the power line and considered a problem. Trees or vegetation that are outside of the power line but are encroaching inside the ROW shall be trimmed or removed as needed.

M22-1 Spec — When it is not possible to remove a tree from the right-of-way corridor, said tree should be "topped" or top trimmed by the Pollard method to provide the necessary

[5] As defined by ANSI 300 Part 7 standards

clearance below the line and produce a symmetrical appearance when completed. A "flat-topped" trim is acceptable in many cases when pollarding will remove too much canopy. The standard "L" cut, and "V" trim will not pass inspection and are not the type of tree trimming which SVEC will sponsor or approve. If a tree which requires trimming is standing in the right-of-way corridor it must be topped to SVEC specs.

M22-2 Spec — When side trimming is required to produce a clear and open right-of-way, all limbs extending into the right-of-way "zone" or corridor from trees standing outside the right-of-way shall be removed on both sides of the pole line or under-ground route as necessary for spec clearances from ground level to the sky, as the rule of thumb. The exception to this rule is underground clearances where it is not necessary in most cases to gain more than approximately 15 feet of overhead clearance above ground level. Limbs of all deciduous trees should be cut on the lateral or flush with the tree trunk so, as to prevent, or lessen as much as possible, "suckering" regrowth from the cuts and to extend the effectiveness of trimming. The substandard "L" cut will not pass inspection and is not the type of tree trimming which SVEC will sponsor or approve. If a tree which requires trimming is standing outside the right-of-way corridor it must be side trimmed to SVEC specs.

Clear Cut ROW Specifications

All stumps shall be cut as close to the ground level as possible and parallel to the ground so as not to leave a "spike" or angle cut stump in the ROW which can damage tires or equipment. All cut stumps of deciduous trees should be treated with herbicide wherever practicable to prevent re-sprouting.

All firewood-sized lumber should be cut to a usable length of not more than four feet long. All lumber and/or brush should be stacked to that side of the ROW which may suit the landowner but shall always be stacked away from poles, roadways, and water routes, as in the following:

- 10' minimum width for overhead secondary routes
- 15' minimum width for underground routes of all types
- 20' minimum width for overhead single-phase routes
- 30' minimum width for overhead multi-phase and single-phase routes constructed on cross arms

Chipping Brush and Removal of Lumber or Firewood

In areas where brush chipping is required but chips cannot be blown into the cleared right-of-way, all reasonably accessible brush should be chipped and blown into a truck equipped with a chip dump box or other similar conveyance and hauled away from the work location to be disposed of properly. In areas where brush which is inaccessible for chipping but cannot be stacked as it normally would, chainsaws shall be used to "beaver chop" or reduce the size of limbs and the area occupied by the inaccessible brush so as to present the smallest brush pile possible.

Slash Treatment

The protocol for the treatment of the slash and debris generated by the removal of these trees shall be as follows:

- If the area is accessible by chip truck, chip all wood less than 6 inches (including limbs and tops from larger material) into truck. If the area is not accessible by chip truck, drag brush to chipper location when chipper is in reasonable proximity (within 150 feet) of line clearance tree work. When slash is not in reasonable proximity of a chipper, crews shall lop and scatter the slash out of the Right of Way.
- When slash is in public view or within designated recreation areas, all wood greater than 6 inches in diameter will be cut into manageable lengths and stacked in 4' x 4; piles for public consumption. All wood is to be cut into 4' - 8' lengths.

Access for Maintenance

Crews shall clear the surrounding area where vehicles and chippers are in operation to bare mineral soil for at least 10 feet from location of equipment being operated.

T&D System Vegetation Management Standards

SVEC VM crews perform ground-based inspections of tree and conductor clearances and hazard tree identification. Patrols are scheduled to ensure all lines are inspected for vegetation hazards on a three-year timeline. The results of the patrols are targeted areas for vegetation pruning or removal. Annual ground-based field patrols ensure compliance with state and federal regulatory requirements (Public Resource Code 4293) and alignment with standards in CPUC GO 95 Rule 35 and FAC 003-4. During tree work, contractors aim to achieve up to 12 feet of clearance, unless otherwise directed by SVEC VM staff. The contractor also clears vegetation from SVEC's secondary voltage, service drops and pole climbing space on an as needed basis. SVEC's contractors follow American National Standards Institute (ANSI) A300 concepts and utility directional pruning, which supports proper pruning/tree health while achieving and maximizing the pruning cycle.

SVEC/Contractor Tools and Equipment

Fire Tools and Equipment: SVEC or its contractors shall meet the minimum requirements of Section 4428 (Appendix D) of the California Public Resource Code (C.P.R.C.). Fire tools are kept at each operating landing shall be enough to equip all employees in the fell, yarding, loading, chipping, and material processing operations associated with each landing.

All required fire tools shall be suitable, maintained and in serviceable condition for firefighting purposes. Trucks, tractors, pickups, and other similar mobile equipment shall always be equipped with and carry a size 0 (zero) or larger shovel with an overall length of not less than 46 inches.

Each three-man crew will have the following tools with them while working with an internal combustion engine:

- 1 shovel (size "0" or larger with an overall length of 46 inches).
- 1-10 lb. ABC portable fire extinguisher.
- 1- backpack pump located within 50-feet of working area.

Fire Extinguishers: SVEC or its contractor shall equip each internal combustion truck, tractor, pickup, and other similar mobile equipment with a fire extinguisher for oil and grease fires.

All fire extinguishers shall be mounted, readily accessible, properly maintained and fully charged.

Spark Arrestors and Mufflers: Except for motor vehicles equipped with a maintained muffler as defined in C.P.R.C. Section 4442 (Appendix D) or tractors with exhaust-operated turbochargers, SVEC or its contractor shall equip each operating tractor and any other internal combustion engine with a spark arrestor. Every registered motor vehicle shall always be equipped with an adequate exhaust system meeting the requirements of the California Vehicle Code.

Power Saws: Each power saw shall be equipped with a spark arrestor approved in accordance with C.P.R.C. Section 4442 or 4443 (Appendix D) and shall be maintained in effective working order. An approved fire extinguisher containing a minimum of 14 ounces of fire retardant shall be kept with each operating power saw.

Tank Truck or Trailer: During the Fire Precautionary Period, SVEC or their contractor will have access to a water tank truck/trailer or similar. SVEC now has two such trailers available for its crews.

D. Inspections

Infrastructure Inspections and Maintenance

Inspection plays a key role in wildfire prevention. Recognizing the hazards of equipment that operate high voltage lines, SVEC maintains a rigorous inspection and maintenance program for distribution, transmission, and substation equipment. SVEC currently patrols its system regularly. The following sections outline practices for inspections of SVEC assets.

General Order (GO) 165 contains inspection requirements for electric distribution and transmission facilities, excluding those facilities contained in a substation. Summary of SVEC inspection schedule is shown in Table 6 on the following page.

GO 165 defines three levels of inspections:

- **Patrol inspection:** A simple visual inspection of applicable utility equipment and structures designed to identify obvious structural problems and hazards. Patrol inspections may be carried out in the course of other company business.

- **Detailed inspection:** Individual pieces of equipment and structures are carefully examined, visually and through use of routine diagnostic testing, as appropriate, and (if practical and if useful information can be so gathered) opened and the condition of each rated and recorded.
- **Intrusive inspection:** Involving the movement of soil, taking samples for analysis, and/or using more sophisticated diagnostic tools beyond visual inspections or instrument readings.

If a wire-down situation is discovered, a serviceman or lineman is dispatched to the wire-down location. If SVEC is in a high priority fire situation, office staff will contact the local fire department and/or Cal Fire. The serviceman/lineman will find the downed wire circuit and make sure the recloser is open. Before leaving, the serviceman/lineman will assess and make sure everything is safe at the downed-wire location.

Table 6. Inspection Program Summary.

ASSET CLASSIFICATION	INSPECTION TYPE	FREQUENCY
Overhead Transmission	Patrol Inspection	Annually
	Detailed Inspection	Every five years
	Intrusive Pole Test	After 15 years/every 20 years thereafter
	Hold Down Inspection	Polymer/glass: Annually Glass only: Every two years
Overhead Distribution	Patrol Inspection	Annually
	Detailed Inspection	Every five years
	Intrusive Pole Test	After 15 years/every 20 years thereafter
Underground Distribution	Patrol Inspection	Annually
	Detailed Inspection	Every three years
Substation	Visual Inspection	Monthly
	Detailed Inspection	Annually

Ground Patrols and Inspection

SVEC has a detailed system patrol process complying with GO 165 requirements, which includes annual patrols for most system infrastructure. Manual inspections include both system and vegetation patrols. SVEC monitors vegetation during its system patrols and directs a contractor to conduct additional inspections and vegetation management.

Wood Pole Intrusive Inspections

For wood poles over 15 years in age, an intrusive inspection is conducted. Intrusive inspections require sample material to be taken for analysis. Wood poles are subjected to an intrusive test to determine and identify problems such as rot and decay. Wood poles over 15 years old, which have not been subject to intrusive inspections are to receive intrusive testing and retested within a maximum interval of 20 years. SVEC tested 111 poles on the 69 kV transmission line beginning at the Austin Substation to the Likely & Brockman substations from July 1, 2018, to June 30, 2019. This is 21% of SVEC's entire 69 kV system in California.

Transmission and Distribution Line Inspections

Inspections of the overhead transmission, overhead and underground electric distribution system are performed on a cycle to ensure that all equipment is inspected on a regular schedule. Inspections and maintenance are performed employing measures which are intended to protect the worker, general public and the reliability of the system. The inspection cycles are designed to ensure safety and reliability and are based on standards found in CPUC GO-95, GO-128 and GO-165.

Qualified personnel perform all inspections. System equipment that is found in need of maintenance or repair is categorized depending on the severity of the condition. Repairs are done in order of rating per GO 95.

SVEC is currently changing all old open wire secondary to insulated quad plex or triplex. SVEC is also installing new nova switches on its system to have a more sensitive and programmable fire setting on distribution circuits.

SVEC is in the process of purchasing new pole testing equipment in 2025, which will expand its pole testing program in2026. SVEC tested 80% if its transmission poles as of 2019, and replaced all of the bad tested poles on the entire system.

A record of the inspections and maintenance performed have been submitted to the Line Supervisor (LS) and are maintained by the appropriate office personnel.

Table 7 Inspection Areas.

AREA	NUMBER OF DISTRIBUTION POLES	NUMBER OF TRANSMISSION POLES
Area 1: Big Valley	**6,000+**	**550+**
Area 2: Surprise Valley	**4,000+**	**600+**
Area 3: Alturas-Madeline	**12,000+**	**850+**

Total number of poles	**22,000+**	**2,000+**

Detailed Line Inspections

Detailed Line Inspections (DLI) consist of walking and driving to inspect all SVEC poles. Some of the system is in rugged terrain with difficult access due to the direct alignments on which the distribution lines were built. Binoculars are used to detect and evaluate damage to above ground components. Poles are given a "sound" test to detect decaying or rotten wood.

Inspectors look for the following:

- Mechanical damage
- Loose hardware
- Guy wire and anchor condition
- Disconnects and fuse holder condition
- Insulators and conductor condition
- Condition of transformers and reclosers
- Ground conductors and moldings
- Pole ID signs and other minor hardware
- Raptor nests

DLIs are performed on a five-year schedule on all overhead distribution equipment and pad mounted equipment, and every three years on underground equipment.

Line Patrols

Patrolmen look for obvious signs of defects, structural damages, broken hardware, sagging lines, and vegetation clearance issues. Any anomalies found are addressed based on severity of the defect. Line patrols are performed annually on all distribution lines and equipment.

Instruction to Inspectors

The Preventative Maintenance Plan is designed to provide safe reliable service. The plan is based on sound industry principles and practices. Maintenance work shall be prioritized considering the most urgent need due to compromised safety and reliability.

The inspector will document the condition of the overhead and underground systems, recording defects, deterioration, violations, safety concerns or any other conditions that require attention on the inspection tags. The focus of the inspection shall be on any hazards that could affect the integrity of the system or the safety of line workers and the general public.

Inspection tags (overhead & underground) will be prioritized and issued as follows:

- Priority # 1 – Immediate hazard:
  Conditions that may affect the integrity of the system or present a hazard to workers or the general public. All Priority #1 tags will be responded to

immediately and appropriate action taken until the hazardous condition is remedied.

- Priority # 2 – Non-emergency repair condition:
  Conditions that require maintenance can be scheduled to maintain the integrity of the system. Priority #2 tags will be prioritized by urgency and will be scheduled to have appropriate repairs made to correct the condition within a year where practicable.
- Priority # 3 – Non-emergency repair condition:
  Conditions that do not present a situation that could jeopardize the safety of the system, line workers and the general public. Priority #3 tags will be submitted by the inspector with the time interval recommended. In the judgment of the inspector, work will be scheduled to be completed within two years.

Satisfactory Conditions

Facilities that are found to be within standards and do not require maintenance will be checked off on the patrol sheets and filed for future reference. Completed Maintenance tags will be kept in a file for five years; tags not completed will be placed in a follow-up file to be reviewed until maintenance is performed.

Standards for Record-Keeping and Reporting

General Instructions: If the condition of the system being inspected is satisfactory no further documentation is needed. Conditions other than satisfactory are imported and a list of poles with deficiencies is generated by the Engineer, who will generate a work order.

The inspector collects the following information at the time of inspection:

- Item inspected
- Name of inspector
- Date of inspection
- Location of asset
- Feeder/circuit name
- Facility ID (Pole #)
- Damaged (yes/no)
- Work order priority #1,2,3
- Notes regarding damage (if applicable)
- Pole clearing required (yes/no)
- Vegetation notes (if applicable)
- Height of pole
- Joint owner facility

GO 165 also establishes record retention requirements for each level of inspection. The utility must retain records of patrol and detailed inspections for ten years and must retain records of intrusive inspections for the life of the pole.

SVEC has implemented a new program called Protection Zone Management. With this new program SVEC crews will be able to more efficiently track, inspect, & repair our electric utility assets to meet GO 165 compliance.

Substation Inspections

The Preventative Maintenance Plan provides for regular inspections of substations. Qualified personnel will use prudent care while performing inspections, following all required safety rules to protect themselves, other workers, the general public and the reliability of the system.

SVEC performs various inspections on substations to ensure safety and reliability. SVEC inspections meet or exceed standards in CPUC GO 174. A "Detailed" inspection shall be defined as one where individual piece of equipment and structures are carefully examined visually and through use of routine diagnostic test, as appropriate. If practical and useful information can be gathered, equipment opened and the condition of each piece of equipment rated and recorded.

- Substations shall be visually inspected once a month and a detailed inspection performed annually.
- All overhead line equipment shall be visually inspected once a month and a detailed inspection performed annually.

Visual Inspection

Substation inspectors visit each SVEC substation to visually inspect the facility and all equipment within. A visual inspection is a simple quick look at the system to assure that there are no obvious structural problems, hazards or tree trimming requirements.

The inspectors look for the following:

- Broken or loose hardware
- Vandalism or damage to any equipment
- Oil or gas leaks
- Perimeter fence security
- Condition of the buss
- Insulators and other hardware
- Condition of the control house
- Conditions of the poles/structures and lines exiting the substation
- Condition of the disconnects and fuses for signs of damage and connectivity

Detailed Inspection

A detailed inspection of substation assets is performed annually and includes all items noted in the visual inspection as well as mechanical damage to any component including, but not limited to the items below.

- Insulators /Bushing/Arrestors
- Risers and Conduits
- Transformers

- Reclosers
- Batteries
- Capacitor Bank
- Circuit Breakers
- Fire Detection and Suppression System (Where Applicable)
- Grounding System
- Voltage Regulators

Similar inspections are performed on pad-mounted equipment and equipment installed below grade in vaults or building basements. Underground system vaults, transformers, and switch cabinets etc., are opened and closely inspected. While detailed inspections are required every 3-5 years, depending on the equipment, SVEC performs these inspections on an annual basis. For detailed inspections, utilities' records must specify the condition of inspected equipment, any problems found and a scheduled date for corrective action. For this type of inspection, utilities must submit an annual report summarizing all inspections made, equipment condition observed, and repairs made.

E. Workforce Training

SVEC employs a professionally trained and well-informed workforce. Switching, construction, and maintenance activities are performed daily. Tools and vehicles can be sources of sparks or ignition as well. For example, driving a vehicle over dry grass/brush can cause the dry grass/brush to ignite when contacting hot surfaces. For these reasons, SVEC vehicles are equipped with fire suppression equipment and SVEC staff are trained to respond to fires and in the proper use of fire suppression equipment. Tailgate meetings are held before work to discuss the potential for fire and to confirm the location and condition of on-board fire suppression equipment.

SVEC has developed rules and complementary training programs for its workforce to reduce the likelihood of an ignition. All field staff are trained and required to perform as follows:

- Trained on WMP content
- Trained in proper use and storage of fire extinguishers
- Required, during pre-job briefings, to discuss the potential(s) for ignition and environmental conditions (current and forecasted weather that coincides with the duration of work for the day)
- Required to identify the closest fire extinguisher and other fire abatement tools
- Required to report all ignition events to management for follow-up
- Encouraged to identify deficiencies in the WMP and bring such information to management

F. Recloser Policy

Approximately 70-80 reclosers exist on various distribution lines in SVEC's system. SVEC does not typically disable automatic reclosing functions at SVEC Substations and in the field due to weather-related conditions. Prior to line work or clearing operations, the

reclosers are set to the "one-shot" alternate setting blocking the reclosing function. To disable, SVEC personnel will physically go to each recloser and reset.

G. De-energization

Public Safety Power Shutoffs (PSPS) are a recent development in the strategies used by electric utilities to help keep people and communities safe. However, the risks and potential consequences of initiating a PSPS are significant and extremely complex. SVEC has the authority to preemptively shut off power due to fire-threat conditions. However, this option will be used only in extraordinary circumstances as a last resort to mitigate the potential of SVEC facilities becoming the ignition source of a wildfire event. SVEC will make such determinations of whether to shut off power on a case-by-case basis, based on the following factors and considerations:

- Red Flag Warnings issued by the National Weather Service for zones that contain SVEC circuits
- SVEC staff assessments of local conditions, including wind speeds, humidity, temperature, fuel levels and moisture, and weather data
- Real-time information from SVEC staff in areas identified as high-risk for extreme weather conditions
- Input from local experts and local/state fire authorities
- Alternative ways to provide power to affected areas
- Expected impacts of de-energizing circuits to essential services
- Other means of minimizing potential wildfire ignitions
- Other fire activity in SVEC territory and neighboring regions
- Input from local governments, public officials, and SVEC members
- Potential impacts to communities and members

Pacific Power, with whom SVEC share a portion of the service area, have indicated in their plan that any PSPS conducted on their system will not affect SVEC customers.

VI. Community Outreach and Public Awareness

SVEC has a comprehensive plan for communicating with its customers during emergencies, especially during outages. SVEC's current process includes sharing information with the local newspaper for posting on their Facebook page for unplanned outages. For planned maintenance outages there are several methods, depending on the number of customers affected and the amount of time there is prior to the outage happening. Customers who will be affected either receive a bill stuffer, a postcard in the mail, telephone call advising of the outage or a hang tag at their residence. Information is also posted on the SVEC Facebook web site.

For scheduled maintenance outages, SVEC provides as much notice as possible. Depending on how many customers will be affected by the outage, 500 or more affected customers is a 30-day advance notification. SVEC also shares some power poles with Pacific Power. This organization may sometimes require SVEC to deenergize shared power poles for planned-maintenance work. This work is scheduled at least 1 or 2 weeks in advance.

SVEC calls the local communications companies (phone and internet providers), county government officials, and Office of Emergency Services (OES) prior to planned outages. Businesses are called in all cases. Table 4, SVEC Emergency Preparedness and Response Stakeholder List, displays all the critical local government/agencies that are contacted in case of a catastrophic wildfire event.

Examples of SVEC's communication and engagement with elected officials, government agencies and commercial customers include the following:

- In-person briefings with federal, state, and local elected officials and key staff on wildfire risk mitigation and other utility-related issues with comprehensive "leave- behind" materials
- Meetings with regional and local government staff and elected officials focused on individual SVECs, communities and neighborhoods and mitigation opportunities
- In-person and/or digital communication with critical facilities and key customers through SVEC Strategic Account Advisors
- Interagency projects, collaborative staff training efforts and regular communication with first responders and essential service providers
- Ongoing communication, collaboration and support for local Fire Safe Councils and other fire prevention agencies and nonprofits

Community involvement can play a key role in wildfire mitigation. As part of the SVEC's holistic approach, SVEC encourages its members to take proactive measures to safeguard their homes from wildfires. To help create an awareness of fire danger and the steps members can take to mitigate wildfire risk, SVEC provides helpful information on its web site. Members will find links to information regarding Defensible Space Requirements, National Weather Service RFW alerts and fire season preparation. Links to Modoc and Lassen counties Fire Safe Council websites, which contain excellent information on how residents can mitigate fire hazards, are also provided.

VII. Restoration of Service

If an outside emergency management/emergency response agency requests a power shutdown, or if SVEC elects to deenergize segments of its system due to extreme weather, SVEC staff will patrol the affected portions of the system before the system can be re-energized. Suspect equipment or distribution lines that cannot immediately be patrolled will remain de-energized. Poles and structures damaged in a wildfire must be

assessed and rebuilt as needed prior to re-energization. Periodic customer and media updates of restoration status prior to full restoration will be made.

SVEC work crews will take the following steps prior to restoring electrical service after a de-energization event. These measures are intended to protect the worker, the public, and the system's reliability.

A. Service Restoration Process

- **Patrol:** If the de-energization was a PSPS, lines are patrolled to ensure no hazards have affected the system during the outage. If an outage is due to wildfire or other natural disaster, as soon as it is deemed safe by fire officials, lines and equipment are inspected for obvious damage or foreign objects and to estimate equipment needed for repair and restoration. Lines located in remote and rugged terrain with limited access may require additional time for inspection. VM crews are called on to assist in clearing downed trees and limbs as needed.
- **Isolate:** Isolate the outage and restore power to areas not affected.
- **Repair:** After the initial assessment, SVEC supervisors, managers, and engineers meet to plan the needed work. Re-building will commence as soon as affected areas become safe. Repair plans prioritize substations and transmission facilities, then distribution circuits that serve the most critical infrastructure needs. While the goal is to reenergize all areas as soon as possible, emergency services, medical facilities, and utilities are given first consideration when resources are limited. Additional crew and equipment will be dispatched as necessary. The sheriff's department is notified if an outage will be longer than four hours, as they may desire to check on citizens with medical needs. The sheriff's department will be kept informed of outage and restoration timeframes.
- **Test:** After repairs are completed and the equipment is safe to operate, line segments are energized and tested.
- **Restore:** After successful line testing, power is restored to homes and businesses as quickly as possible. Customers, local news, and other agencies are then notified of the restoration of electric service. Periodic customer and media updates of restoration status prior to full restoration will be made. After the initial power restoration, further demolition and rebuilding will likely take place.

Emergency Restoration Plan Vulnerability and Risk Assessment

The Vulnerability Risk Assessment (VRA) consisted of identifying vulnerable areas and the risks associated with them. We reviewed the protection these vulnerable areas have at present and discussed ways to provide additional protection if they are critical to SVEC's operation.

The following items were reviewed:

- Office Facilities and Cyber Data

We determined the greatest threats to the office facility were from inside fire and vandalism. Fire could destroy office equipment and data; this would cause a major disruption to our business function.

We identified the number of extinguishers in the facility and discussed the need for training in proper use of these. Our community is well equipped with volunteer and agency fire personnel which are located less than one mile from SVEC's facilities.

Vandalism could cause random and severe destruction of property and data. Facilities are locked during off hours. . We identified that sometimes facilities are not locked properly. A check list has been developed to remind employees of proper closing of office facilities.

We considered the effects of floods, snow/ice storms, and earthquakes, we rated the impact of these events as low to the office facility.

- Substations

We determined the greatest threats to our substations were vandalism and equipment failure.

Vandalism at a substation could disable specific equipment or the whole substation resulting in power loss to a portion of the system. We identified that all substations are fenced with chain and barbed wire, locked, and warning signs. All substations are susceptible to projectiles.

Equipment failure is always a possibility and becomes greater as the system ages. Equipment failure would be isolated to one substation, resulting in power loss to limited portions of our system. We can operate with alternate feed to pick up most of our system is a substation is down. We have a dual voltage 7,200/14,400 mobile transformer that can be used at all our substations.

We perform monthly inspections and maintenance at each substation. Our substations are cleared of all vegetation and graveled, making them well protected from wildland fires. Snow and ice storms could cause outages at individual substations but did not rate as a high probability.

- Transmission and Distribution Lines

We determined that snow and ice storms had the highest probability of occurring, but that a wildland fire would cause the most damage and would put the greatest strain on our resources. Both events could result in power loss to a significant portion of the system. We do not envision either of these events taking out our entire system because SVEC's system is spread over a large area and is served by two separate supply transmission lines.

Wildland fire could destroy a significant portion of transmission and distribution facilities, which would tax the resources we have on hand and our ability to restore power quickly. Local wildland fire suppression crews are abundant. The USFS, BLM, Bureau of Indian Affairs, Cal Fire, and numerous rural fire departments are all trained for rapid responses to wildland fires.

Snow, ice, and windstorms could result in destruction and damage in a specific area to transmission and distribution lines and structures. Adequate resources are on hand to manage these events.

A Chain of Command was established in the following order: General Manager, Operations Manager, Line Superintendent, Member Service Manager.

We determined that SVEC does not have any critical assets or infrastructure that is significant to national security.

We discussed communication and have several means available, including radio, cell phones, and land lines. We have direct radio communication with the Modoc County Sheriff's Department.

Contact lists of employees, emergency agencies, and suppliers were developed and added to the ERP.

SVEC does not directly serve hospitals, police, or sheriff departments. However, loss of our Cedar Pass transmission line would result in loss of power to the Surprise Valley Hospital, which is served by Pacific Power. The Surprise Valley Hospital has a backup generator.

Surprise Valley Electric does serve the Big Valley Medical Center, but no patients are housed at this facility.

Surprise Valley Electric does serve Federal and State fire stations in Alturas, Adin, Canby, Cedarville, Ravendale, Likely, and Paisley. Numerous rural volunteer fire stations are also served.

Procedures for Loss of Office Power

Do the following in the event of loss of power to the office:

- UPS battery backup will allow the servers to operate for several minutes.
- UPS battery backup will allow phone system to operate for a short time.
- Connect powerless phone so that one line is available for extended outage.

Procedures for Restoring Power

- Receive calls from affected members.
- Dispatch line crews or qualified employees to determine the extent of damage.

- Assess damage or problem causing the outage, estimate equipment needed for repair and restoration.
- Isolate outage and restore power to areas not affected.
- The line crew on site will repair and restore power if possible.
- Notify Line Superintendent if additional crew and equipment are needed.
- Dispatch additional crew and equipment as necessary.
- Repair and restore as quickly and safely as possible.
- Begin restoration to substations and transmission facilities that serve the largest concentration of consumers.
- Restore power to distribution lines.
- Notify the Sheriff if the outage will be longer than 4 hours. They may desire to check on citizens with medical needs. Keep the Sheriff informed of the situation.

VIII. Plan Evaluation

A. Metrics and Assumptions for Measuring Plan Performance

In addition to a robust mitigation strategy, SVEC developed performance metrics to monitor their efforts over time. The goal of these metrics is to provide a data-driven evaluation of performance to help SVEC determine the effectiveness of the Plan and to identify areas for improvement.

This section identifies SVEC's management responsibilities for overseeing this WMP and includes the operating departments and teams responsible for carrying out the various activities described in the previous chapters. This section also identifies the controllable metrics which are used to demonstrate compliance with this WMP.

Plan Accountability

The Board of Directors makes policy decisions relative to the Cooperative; they are responsible for approving and adopting the Wildfire Mitigation Plan. The GM directs management staff responsible for operations, customer service and finance. The LS supervises the Supervising Foreman and foremen, Trouble man, Linemen, Vegetation Program Manager and Groundman. The office administrator supervises the Clerks, the meter department and provides human resources support and administrative assistance to the LS, GM, Board of Directors, and Controller. The Controller is responsible for SVEC finances. The Administrative Secretary provides support and administrative assistance to the GM and other staff as needed.

The GM is responsible for executing the WMP. Staff are directed as to their roles and responsibilities. The LS is responsible for communicating with public safety, media outlets, public agencies, first responders, local Office of Emergency Services, and health agencies during an emergency or planned maintenance outages. The LS determines when and how to notify outside agencies in cases of wildfire emergency events.

B. Impact of Metrics on Plan

Metrics to gauge the success or shortcomings of the WMP and outlined programs are covered in this section. As with other aspects of the Plan, these metrics will likely evolve in the future iterations of the WMP.

Metrics and Assumptions for Measuring WMP Performance

SVEC will use the following metrics to measure the performance and efficacy of the Plan.

Table 8. WMP Performance Measures.

METRIC	RATIONAL	INDICATOR	MEASURE OF EFFECTIVENESS
Number of Utility Caused Fires	Demonstrates effectiveness of overall plan	Count of events	No material increase
Ignitions on Circuits in HFTD	Demonstrates effectiveness of overall plan	Sum of acres affected	No Material Increase
Events Recorded with Fire Reference	Demonstrates effectiveness of overall plan	Count of events	Reduction in general trend of events
Service Interruption Events with Fire Reference	Assess system hardening efforts	Count of events	Reduction in general trend of events
Non-Expulsion Type Fuse Trip Event with Fire Reference	Measure success of fuse replacement program	Count of events	Reduction in general trend of events
Traditional Fuse Trip Event with Fire Reference	Measure success of fuse replacement program	Count of events	Reduction in general trend of events
Bare Line Contact with Vegetation	Assess Vegetation Management Program	Number of contacts recorded	Reduction of vegetation contacts
Number of Customer Service Calls Re: At Risk Vegetation	Assess if VM Program has reduced customer concerns and risk events	Number of calls received	Reduction in general trend of events
Power Line Down Event in HFRA	Assigns risk to root cause	Count of events	Reduction in general trend of events

SVEC continues to identify areas of its operations that may require a different approach.

PUC section 8387 subsection b(2)(E) requires a discussion of how the application of previously identified metrics to previous Mitigation Plan performance has informed this WMP. As presented above, SVEC's WMP has been effective to date.

C. Monitoring and Auditing the Plan

The WMP is included as a discussion item on the agenda of regularly scheduled management meetings. SVEC monitors the efforts of the WMP annually and reports on its

effectiveness to the Board of Directors. The GM or their designee will update leadership with recommendations or proposed action in enhancing the Plan's objectives over time.

The WMP annual review aligns with SVEC's existing planning process. This review will include an assessment of the WMP programs and performance.

SVEC also periodically engages a third-party evaluator to review and assess SVEC's compliance with WMP regulation requirements for the state of California.

D. Identifying and Correcting Deficiencies in the WMP

The GM is responsible for ensuring that this WMP meets all the State of California guidelines to mitigate the risk of its assets becoming the source or contributing factor of a wildfire. Staff responsible for assigned mitigation areas have the role of vetting current procedures and recommending changes or enhancements to build upon the strategies in the WMP. Either due to unforeseen circumstances, regulatory changes, emerging technologies or other rationales, deficiencies within the WMP will be sought out and reported to the Board of Directors in the form of an updated WMP on an annual basis. The GM, or their designee, will be responsible for spearheading discussions on addressing deficiencies, and collaborating on solutions when updating the WMP for its annual filing. At any point in time when deficiencies are identified, the Supervisors or their delegates are responsible for correcting the deficiencies. SVEC staff and qualified stakeholders are encouraged to bring any potential deficiencies to the attention of the GM. The GM, along with the appropriate staff, will evaluate each reported deficiency, and if determined to be valid, shall record the deficiency for further action.

E. Monitoring the Effectiveness of Inspections

SVEC's compliance with Commission regulations ensures that facilities are inspected and repaired in accordance with GO 165 program standards. Any issues found impacting safety and reliability are addressed as outlined in that program. In addition to this maintenance program, SVEC is constantly evaluating its facilities while performing other activities such as outage patrols, new business planning, replacements, and related field work.

Monitoring the effectiveness of inspection practices will occur through ongoing tracking and annual review of findings resulting from internal processes. The LS or their designee supervises the Vegetation Manager and will review concerns found during routine field work and equipment and line inspections. SVEC will use this information as a method to assess the effectiveness of inspection procedures.

SVEC has quality control processes embedded in its existing general practices. However, for certain programs, there is a formal quality control process. The following depicts a few of these programs.

Written Processes and Procedures

SVEC documents its operational procedures and processes to maintain consistent and thorough implementation at all levels. Processes are reviewed and updated as needed

to maintain the most efficient, effective, beneficial and safety driven methods and protocol.

Distribution System Inspections

Inspections of the overhead transmission, overhead and underground electric distribution system are performed on a cycle to ensure that all equipment is inspected on a regular schedule. Inspections and maintenance are performed employing measures which are intended to protect the worker, public, and the reliability of the system. The inspection cycles are designed to ensure safety and reliability and are based on standards found in CPUC GO-95, GO-128 and GO-165.

Qualified personnel perform all inspections. System equipment that is found in need of maintenance or repair is categorized depending on the severity of the condition. Repairs are done in order of rating per GO 95.

A record of the inspections and maintenance performed will be submitted to the LS and maintained by the appropriate office personnel.

Vegetation Management (VM)

Contractors perform SVEC's vegetation management work. This VM work is routinely audited by SVEC's LS. Quality Assurance (QA) efforts are tracked to monitor program effectiveness and overall tree work performance.

IX. Independent Auditor

PUC section 8387(c) requires SVEC to contract with a qualified independent evaluator with experience in assessing the safe operation of electrical infrastructure to review and assess the comprehensiveness of this WMP. SVEC will select an independent evaluator to provide a report that will be posted to SVEC's website and made available for review at the SVEC office. The *Independent Assessment* and WMP will be available for public review and comment prior to plan adoption at a properly noticed SVEC Board of Directors meeting.