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

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

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
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.

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.

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

- 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.

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.

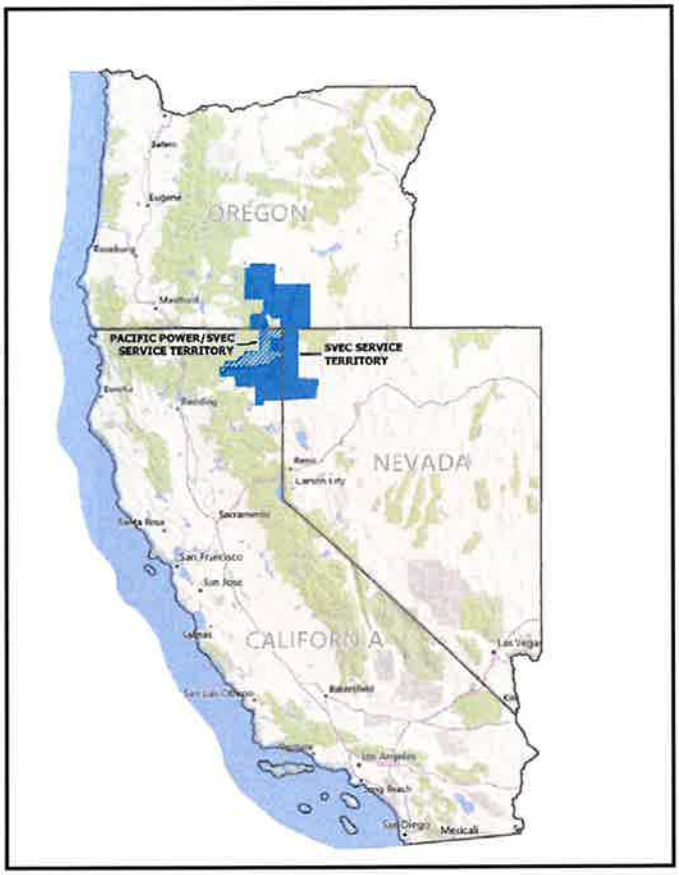
SVEC employs a professionally trained and well-informed workforce. Switching, construction, and maintenance activities are performed daily. Tools and vehicles can be sources of sparks or ignition as well. For example, driving a vehicle over dry grass/brush can cause the dry grass/brush to ignite when 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.

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.



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.

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

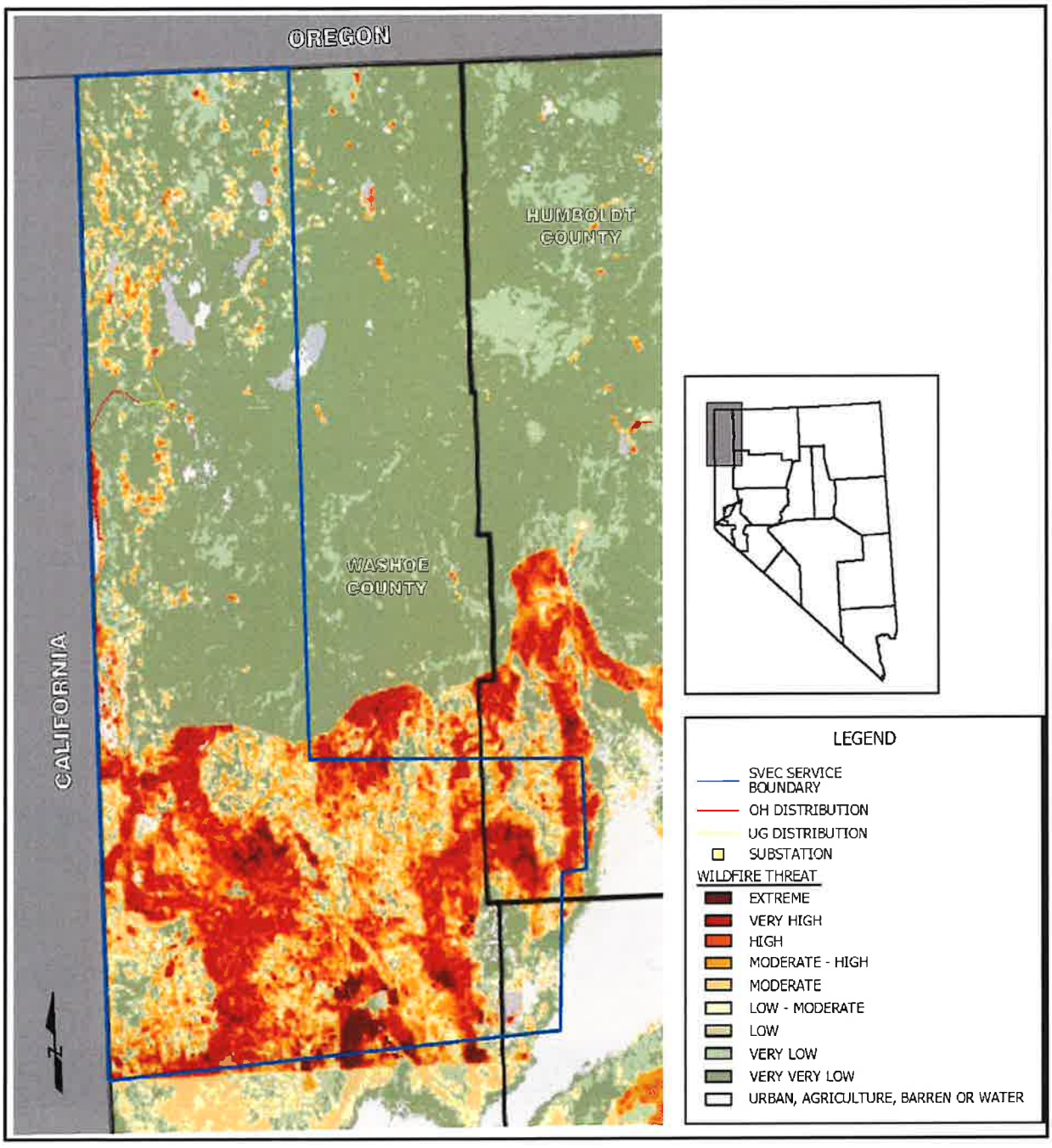


Figure 5. SVEC assets in the Nevada service area.

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

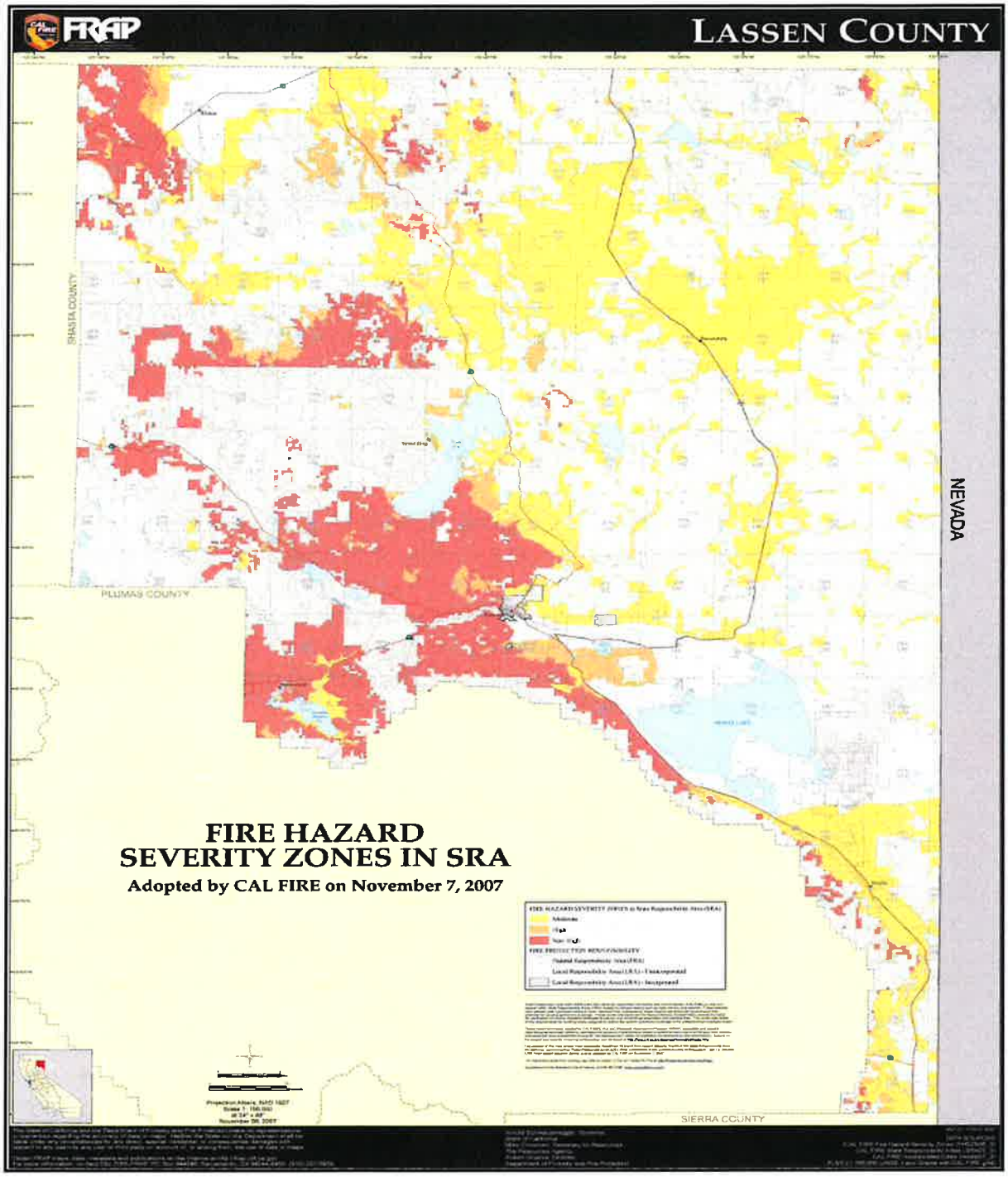


Figure 7. Lassen County (CA) SRA Fire Hazard Severity Zones.

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

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

- 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.

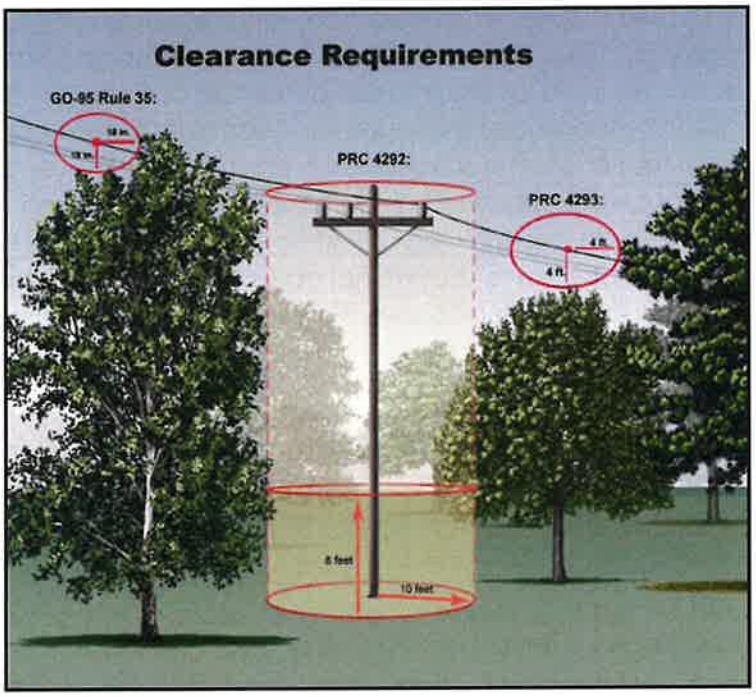


Figure 8. Pole Clearing Requirements.

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

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.

- **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.

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

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 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.

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:

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.

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.

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