1. Executive Summary

LS Power Grid California, LLC (LSPGC) is an Independent Transmission Owner (ITO) specializing in the design, construction, and operation of high-voltage infrastructure. As a transmission-only utility with no retail or end-use customers, LSPGC operates with safety at the forefront while proactively mitigating the risk of utility-associated wildfire ignition. This 2026–2028 Wildfire Mitigation Plan (WMP), developed in accordance with California Public Utilities Code § 8386 and the Office of Energy Infrastructure Safety's (Energy Safety) 2026–2028 WMP Guidelines, outlines LSPGC's strategy for wildfire risk reduction across its current and future system assets.

LSPGC's current operating portfolio includes the Orchard Static Synchronous Compensator (STATCOM) Substation, which is energized and located outside of mapped High Fire Threat Districts (HFTDs). The Fern Road STATCOM Substation, scheduled for energization in Q1 2026, is located within a Tier 2 HFTD and represents the area of greatest wildfire risk. In addition, LSPGC is advancing the development of transmission lines and associated facilities scheduled for energization in the Q2 second half of 2028. These future assets will expand LSPGC's operational footprint and require an integrated wildfire risk management approach to transmission lines.

Although LSPGC does not operate distribution infrastructure, its transmission facilities are engineered and operated to the highest safety standards. LSPGC substations feature modern physical designs—including non-combustible surfacing, reduced fuel defensible space, and perimeter security—that minimize fire ignition potential. Fire modeling, site-specific hazard assessments, and compliance with Energy Safety's initiative construction standards have informed asset design and operational protocols. LSPGC maintains a robust inspection program and real-time situational awareness tools, including permanent weather stations and 24/7 cameras at both Orchard and Fern Road.

This WMP builds on foundational work completed during the 2023–2025 cycle, during which LSPGC established emergency preparedness protocols, conducted wildfire risk modeling, and began operations. The 2026–2028 plan continues the maturation of the mitigation program structured around five core areas:

- Grid design, operations, and maintenance to ensure physical and operational resilience;
- Vegetation management to enforce defensible space around all assets;
- Situational awareness to forecast and respond to risk events;
- Emergency preparedness to ensure intentional, coordinated action during unexpected events;

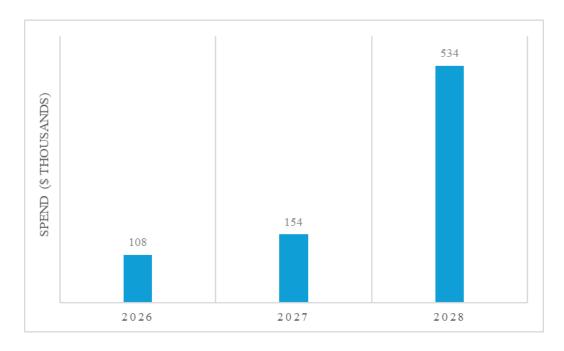


Figure 3-1. LSPGC Summary of Projected WMP Expenditures

3.7 Climate Change

Due to the limited scope, scale, and geographic footprint of LSPGC's current operational and planned electrical infrastructure, LSPGC has not completed a dedicated climate vulnerability assessment. Climate change risks are currently being considered via the probabilistic weather profiles used in the Risk Assessment Methodology scenario modeling as described in Section 5. LSPGC intends to continually validate and refine these assumptions if necessary based on locally observed data at LSPGC sites.

4. Overview of the Service Territory

4.1 Service Territory

LSPGC is an ITO utility and therefore does not have a service territory, defined area served or direct customer base. Currently, LSPGC has one energized substation, Orchard, with plans for additional electrical infrastructure across Northern and Central California as follows:

- Orchard Substation Currently energized
- Fern Road Substation Anticipated timeline for energization (Q1 2026)
- Collinsville Substation and associated transmission lines (overhead and submarine) –
 Anticipated timeline for energization (Q23-Q4 2028)

- Manning Substation and associated transmission lines (overhead) Anticipated timeline for energization (Q23-Q4 2028)
- Power the South Bay (overhead and underground) Anticipated timeline for energization (Q23-Q4 2028)
- Power Santa Clara Valley (underground) Anticipated timeline for energization (Q23-Q4 2028)

In total, LSPGC will have six (6) locations across Northern and Central California for its existing and planned electrical transmission assets. The estimated timeline for energization of LSPGC equipment is indicated above. The electrical corporation's transmission footprint is primarily located in non-HFTD areas, with only one substation that will be in a Tier 2 HFTD (i.e., Fern Road Substation). Note: LSPGC will keep Energy Safety apprised of any changes in the timeline of energizing its equipment, as part of the annual WMP update process.

Table 4-1 provides a high-level overview of LSPGC's electrical assets.

Table 4-1. High-Level Service Territory Components*

Characteristic	HFTD Tier	HFTD Tier	Non-HFTD	Total
Area served (sq. mi.)	N/A	N/A	N/A	N/A
Number of customers served	N/A	N/A	N/A	N/A
Overhead transmission lines (circuit miles)	0	0	14.3	14.3
Overhead distribution lines (circuit miles)	0	0	0	0
Underground transmission lines (circuit miles)	0	0	29.2	29.2
Underground distribution lines (circuit miles)	0	0	0	0

^{*}The overhead line distances are estimates as all the transmission lines are still in design and not anticipated to be energized until $Q_2^2 - Q_4$ of 2028. The only energized equipment is a single substation, Orchard, which is not located in any HFTD.

Figure 4-1 shows the location of LSPGC's current and future electrical assets. Currently, only Orchard substation is energized. Fern Road substation is currently planned to be energized by Q1 of 2026, with all other equipment tentatively scheduled for the Q2second half of 2028.

- **Fire Spread Probability** is the estimated probability of fire spread from LSPGC's assets assuming ignition occurs at each substation and along each unity mile individually. [e.g., 80-100% likelihood]
- Exposure is the density of non-LSPGC values or assets at risk in the surrounding landscape and proximate communities from fire exposure. The values include buildings, critical facilities (e.g., fire stations, hospitals), critical infrastructure (e.g., roads, communication systems) and environmental resources (e.g., critical habitats). Note: The inclusion of these asset-types and assets also serves as a proxy for spatial location of people and communities at risk. The values are overlaid to determine an asset density. The asset density is then weighted (from 1 to 2) depending on where the assets are relative to the fire spread probability contours (ranging from 0-100%). For example, an asset gets a weight of 2 if it is located in the 80-100% fire spread probability contour.
- **Vulnerability** is an additional term(s) to account for the potential increase in damage or loss due to physical susceptibilities to wildfire impacts. For this analysis, structure density is used to identify potential risks of urban conflagration as described earlier.

Once the absolute risk scores are calculated per the above formulation for each substation and each unit-mile of overhead line, the risk scores are normalized from <u>1-60-5</u> (where true 0 is reserved for "unburnable" landscapes such as water features, barren land and urban areas). For prioritization purposes, both the raw risk scores and normalized scores are clustered. This reduces the likelihood of an outlier skewing the results. Note: Substations are treated equivalent to a unit-mile of overhead line, until LSPGC can accrue sufficient operational data to evaluate relative risk for each asset type.

5.2.3 Key Assumptions and Limitations

Table 5-1 summarizes the key assumptions and limitations of the risk assessment and associated modelling.

As LSPGC incrementally energizes its equipment and lines (as specified in Section 4) over the 2026-2028 WMP cycle, it will regularly develop, monitor and evaluate the appropriate scope and validity of its risk assessment methodology and associated modelling assumptions related to the following categories:

• **Ignition risk drivers** (e.g., equipment failure, vegetation hazards, object contact hazards) and associated history

Initiative	Quantitative or Qualitative Target	(Tracking ID #)	Previous Tracking ID (if applicable)		2026 Target / Status	in HFTD for				in HFTD for	in HFRA for		Target / Status	in HFTD for			Three-year total	Section; Page number
Grid Operations and Procedures	Qualitative	Review Emergency Operations Plan and update annually (GD-05)	N/A	N/A	Q4 / Annual Update	N/A	N/A	N/A	Q4 / Annual Update	N/A	N/A		Q4 / Annual Update	N/A	N/A	N/A	N/A	8.7.2; 93
Workforce Planning	Qualitative	Create and rollout HFTD safety training (GD-06)	N/A	-	Creation; Q2/2026	N/A	N/A	N/A	Rollout; Q1,2027	N/A	N/A	N/A	Maintained	N/A	N/A	N/A	N/A	<u>8.8</u> 8.6 ; <u>9</u> 90 <u>4</u>

Note Timelines may be accelerated based on commissioning of assets

8.2.8 Installation of system automation equipment (Tracking ID GD-01)

LSPGC substations and their interconnections to the existing transmission system will be remotely monitored 24 hours per day and controllable by the TSOs in LSPGC's control center. The STATCOM facilities will operate automatically to maintain appropriate system voltages and will feature automatic shutdown capability in the event of an emergency or malfunction.

LSPGC will begin investigating protection settings enhancements such as Broken Conductor detection and tripping and will investigate installation of new technologies such as Gridscope devices in an effort to improve system response time (GD-01).

8.2.9 Line removal (in the HFTD)

This is not applicable. LSPGC has no existing or future planned lines in the HFTD

8.2.10 Other grid topology improvements to minimize risk of ignitions

The LSPGC Fern Road Substation will feature gas-insulated switchgear (GIS), which will be enclosed in a building. The STATCOM equipment for both Fern Road and Orchard Substations will also be enclosed in separate buildings. These structures will have fire detection capability and will reduce risks of both causing an ignition outside of a substation and sustaining damage to equipment from a fire originating outside of a substation.

8.2.11 Other grid topology improvements to mitigate or reduce PSPS events

None. LSPGC has <u>initiated efforts toward</u> establis<u>hing</u>hed its inaugural PSPS program as part of this WMP. As the company gains more operational experience it will evaluate potential improvements to mitigate or reduce PSPS if necessary.

8.2.12 Other technologies and systems not listed above

None. For most of the 2026-2028 period, LSPGC will have only two newly constructed transmission substations in-service. As LSPGC continues to gain operational experience with these assets and expands its system to include transmission lines, the company will explore emerging technology pilots as may be appropriate to LSPGC's limited system.

8.2.13 Status updates on additional technologies being piloted

None. LSPGC currently does not have any active pilot programs.

A priority score of two would indicate a replacement or repair need from one to three years from the finding. Low-urgency conditions are those that have minimal impact on the current operation but may develop into more significant problems if left unattended. This can include issues like minor corrosion, early signs of aging in components, or small anomalies in readings. Tackling these conditions within 1-3 years ensures that they don't escalate into more urgent problems.

A priority score of three would indicate a replacement versus repair need of 3+ years from the finding. End-of-life cycles and major upgrades fall under this priority level. This involves planning for the replacement of circuit-breakers that have reached their operational lifespan or scheduling substantial upgrades to improve overall system performance. These activities require careful budgeting and are typically planned well in advance to align with financial and operational strategies.

8.4.3 Connectors, including hotline clamps

Connectors and clamps are inspected visually as part of the substation monthly quarterly inspection. Visual assessments are compared with previous inspections to alert maintenance personnel of any health degradation trends. Equipment repair or replacement decisions are condition based. Given the findings are during the monthly inspections of the substation, this is considered a time-based preventative maintenance strategy.

Connectors and hotline clamps in a substation should be repaired or replaced whenever inspection reveals any compromise of their mechanical integrity, electrical continuity, or insulating function. Some conditions that warrant repair or replacement decisions are corrosion or oxidation, loose or missing hardware, deformation or wear of contact jaws, signs of overheating or arcing, insulation damage, spring or latch failure, and mechanical binding or seizure. If any of these conditions are found, they would garner a priority score of zero and action would be taken within 4 weeks. They would be taken out of service, repaired or replaced, tested, and placed back in service.

8.4.4 Conductor, including covered conductor

Substation conductors, including rigid bus and strain bus, are inspected visually as part of the substation monthly quarterly inspection. Visual assessments are compared with previous inspections to alert maintenance personnel of any health degradation. Equipment replacement decisions are condition-based.

8.5.2 QA and QC Procedures

Applicable procedures serving as the basis for LSPGC's QA/QC programs are outlined below:

LSPGC Table 8-1. QA and QC Procedures

Initiative/ Activity Being Audited	/ Activity Being Program Applicable procedure type				
Asset Inspections	QA	LSPGC Maintenance Plan	2.0, 12/20/2024		
Equipment Maintenance and Repair	QA	STATCOMs service agreement	1.0, 03/12/2025		
Grid Operations and Procedures	QA	LSPGC Emergency Operations Plan	1.0, 0 <u>1</u> 7/0 <u>1</u> 2/202 <u>5</u> 4		

Note: LSPGC HFTD Safety training will be created in the Q2 of 2026 and rolled out on Q1 of 2027.

8.5.3 Sampling Plan

LSPGC currently has a limited infrastructure footprint, and as of today, does not have assets located in High Fire-Threat Districts (HFTDs). However, this will change with the proposed energization of the Fern Road Substation, which is anticipated to come online in Q1 2026 and is adjacent to an HFTD area. Due to the small asset base, sample sizes for Quality Assurance (QA) and Quality Control (QC) activities remain limited. Nonetheless, the sampling approach is designed to be risk-informed and scalable.

Asset Inspections

At present, LSPGC conducts at least one QA audit annually within areas designated as Tier 2 or Tier 3 HFTDs, where applicable. This is a proactive strategy in preparation for system expansion. As LSPGC's network grows and begins operating in HFTDs, such as at Fern Road, the QA sampling framework will evolve to stratify audits by geography and risk tier.

LSPGC is committed to maturing this process as its system expands and operational experience and lessons learned are realized.

8.6 Work Orders

A summary of procedures related to the processing of LSPGC maintenance work orders is described below:

Formal procedures related to LSPGC's ongoing expansion of its system of record (Maximo) across its transmission platform are currently under development (GD-04). The system of record will be used by Field Operations personnel to open maintenance work orders, assign priority, and schedule corrective actions and will interface with LSPGC field operations supervision, work planning, and supply chain departments to ensure successful and timely close out of maintenance work orders.

A description of how work orders are prioritized based on risk is described below:

 As deficiencies are identified during inspection activities, Field Operations personnel will assign a priority to each work order consistent with the requirements of the LSPGC CAISO Maintenance Procedures and CPUC General Order (GO) 95 rule 18.

LSPGC's prioritization matrix is shown in Table 8-3 below.

LSPGC Table 8-3. Work Order Prioritization

LSPGC Priority	Risk Level	Response	Mapped GO 95 Rule 18 Level
<u>P0</u> 1	Immediate safety, reliability, or fire risk with potential for significant impact	Repair within 4 weeks (with immediate action if needed) Address immediately	Level 1

LSPGC Priority	Risk Level	Response	Mapped GO 95 Rule 18 Level
<u>P1</u> 2	Moderate to low safety or reliability risk	Repair within 4 weeks to 1 year(1) six months for nonconformances that create a fire risk located in Tier 3 of the High Fire-Threat District; (2) 12 months for nonconformances that create a fire risk located in Tier 2 of the High Fire-Threat District; (3) 12 months for nonconformances that compromise worker safety; and (4) 59 months for all other Level 2 nonconformances.	Level 2
P2 / P3 3	Low impact or acceptable, non-emergency condition	Repair within 1 to 3+ years Take action (re-inspect, re-evaluate, or repair) as appropriate	Level 3

A description of the plan for eliminating any backlog of work orders (i.e., open work orders that have passed remediation deadlines), if applicable, is described below:

Because of the limited scope and scale of LSPGC's assets, there has not been and there is
not expected to be, a backlog of open work orders. In the event that multiple work orders
are competing for resources, LSPGC will prioritize work in the HFTD first.

A discussion of trends with respect to open work orders is described below:

• LSPGC has not yet had any open maintenance work orders.

Because LSPGC has extremely limited operational history, Tables 8-5 and 8-6 regarding historical data related to maintenance work orders are not applicable.

Table 9-2. Vegetation Inspections and Pole Clearing Targets by Year

Activity (Program)	Tracking ID	Previous Tracking ID, if applicable		Cml Qtrly Target 2026, Q1	Cml Qtrly Target 2026, Q2	Cml Qtrly Target 2026, Q3	Cml Qtrly Target 2026, Q4	Cml Qtrly Target 2027, Q1	Qtrly Target 2027,	Cml Qtrly Target 2027, Q3	Cml Qtrly Target 2027, Q4	Cml Qtrly Target 2028, Q1	Cml Qtrly Target 2028, Q2	Cml Qtrly Target 2028, Q3	Cml Qtrly Target 2028, Q4	% HFTD Covered in 2026	% Risk Reduction for 2026	% Risk Reduction for 2027	% Risk Reduction for 2028	Three- Year Total	Activity Timeline Target	Section; Page Number
Defensible Space	VM-04		Number of substations inspected	1	2	2	2	2	2	2	2	2	2	2	2	50%	n/a	n/a	n/a	23	90 days	9.6; 110
Transmission Annual MVCD System Inspections	VM-05	n/a	% Inspection completed and loggedCircuit miles inspected	<u>On/a</u>	<u>On/a</u>	<u>O</u> n/a	<u>O</u> n/a	<u>0</u> n/a	<u>O</u> n/a	<u>On/a</u>	<u>O</u> n/a	<u>O</u> n/a	<u>O</u> n/a	<u>0</u> n/a	n/a 100	n/a	n/a	n/a	n/a	n/a	n/a	9.2.1.1;
Transmission Detailed Ground Vegetation Evaluations	VM-06	n/a	% Evaluation documented and reviewedCircuit miles inspected	<u>O</u> n/a	<u>O</u> n/a	<u>O</u> n/a	<u>On/a</u>	<u>O</u> n/a	<u>O</u> n/a	<u>O</u> n/a	n/a 100	n/a	n/a	n/a	n/a	n/a	n/a	9.2.2.1;				
Pole clearing	VM-07	n/a	% of structures inspectedPoles	<u>0</u> n/a	<u>0</u> n/a	<u>0</u> n/a	<u>0</u> n/a	<u>O</u> n/a	<u>0</u> n/a	<u>0</u> n/a	n/a 20	n/a	n/a	n/a	n/a	n/a	n/a	9.4; 107				

Note Cml Qtrly is the abbreviation for Cumulative Quarterly

9.2 Vegetation Management Inspections

LSPGC conducts targeted vegetation management inspections for transmission assets that are energized during the compliance period. These inspections are designed to identify vegetation conditions that could result in encroachments into minimum vegetation clearance distances (MVCD), thereby posing a risk of ignition or system reliability failure. While LSPGC's footprint is limited and does not include distribution infrastructure, its transmission assets will be inspected in accordance with applicable regulations and standards, including NERC FAC-003-54, CPUC General Order 95 (Rule 35), and ANSI A300. The inspection programs outlined in Table 9-3 apply only to energized transmission assets.

Table 9-3. Vegetation Management Inspection Frequency, Method, and Criteria

Туре	Inspection Activity (Program)	Area Inspected	Frequency
Transmission	Annual MVCD System Inspections	Territory-wide	12 months NTE 18 months
Transmission	Detailed Ground Vegetation Evaluations	Territory-wide	As triggered
Transmission	Emergency/Storm Event Inspections	Event-based	Event-based

9.2.1 Annual MVCD System Inspections

9.2.1.1 Overview and Area Inspected

LSPGC performs annual Minimum Vegetation Clearance Distance (MVCD) inspections across all overhead energized transmission line corridors. Inspections are territory-wide, encompassing all LSPGC transmission lines, and are essential for ensuring compliance with regulatory clearance standards and proactively mitigating vegetation-related risks. These efforts are tracked by LSPGC Transmission Annual MVCD System Inspections initiative VM-05.

9.2.1.2 Procedures

Vegetation inspections at LS Power Grid California (LSPGC) transmission facilities are conducted under the framework of LS Power's enterprise-wide Transmission Vegetation Management

Program (TVMP), effective March 15, 2024. This policy outlines the methods—such as aerial, ground patrol, and LiDAR surveys—used to assess vegetation clearance relative to energized conductors. While this program reflects LS Power's internal standards for managing vegetation-related wildfire risk, LSPGC recognizes the need to align with California-specific expectations. Accordingly, a California-specific TVMP is under development to comply with the requirements outlined in the Wildfire Mitigation Plan (WMP) Guidelines and Energy Safety's evolving compliance framework. Updates and changes to the TVMP will be primarily driven by the gap analysis conducted for initiatives VM-01, VM-02, and VM-03.

9.2.1.3 Clearance

Clearances are prescribed according to the NERC FAC-003-54 standards, GO 95 Rule 35, ANSI A-300 guidelines and outlined within the TVMP. LSPGC will maintain strict adherence to these clearance requirements to prevent vegetation encroachment and related outage risks. Special considerations and potential increased clearances are applied for species identified as higher-risk due to growth rates, structural weaknesses, or fire propensity.

9.2.1.4 Fall-in Mitigation

During inspections, trees that pose fall-in risks are identified through visual assessment methods and laser measurement devices. Fall-in mitigation strategies include proactive removal of hazard trees identified during the inspection process. Trees identified as danger trees due to height and proximity are assessed for removal or pruning to mitigate fall-in risk to transmission lines.

9.2.1.5 Scheduling

The MVCD inspections occur every 12 months not-to-exceed (NTE) 18 months. Scheduling prioritizes inspection timing based on vegetation growth cycles and known historical risk patterns. Risk prioritization occurs through Vegetation Priority Ratings (VPR) assigned during inspections, ensuring high-risk areas identified in previous cycles or events receive timely attention.

LSPGC currently has no planned transmission line projects located in the HFTD.

9.2.1.6 Updates

LSPGC was not a California Electrical Corporation prior to 2023 and thus did not have a WMP in the 2020–2022 cycle. LSPGC submitted the WMP for the 2023-2025 cycle but does not currently have any energized Transmission line assets. As LSPGC's currently planned transmission line projects mature in design and become closer to energization, which is

anticipated in Q2 of late 2028, it will evaluate making appropriate changes to its vegetation inspection and management procedures.

9.2.2 Detailed Ground Vegetation Evaluations

9.2.2.1 Overview and Area Inspected

Detailed Ground Vegetation Evaluations (DGVE) (VM-06) provide supplemental priority-based evaluations of line safety, tree species, size, density, age, condition, growth potential, and recommendations for long term tree treatment territory-wide on energized Transmission-line assets. DGVE inspections occur based on clearance threats identified during the annual MVCD inspections. These are designed to identify mid-season vegetation growth that may compromise compliance with established clearance distances or pose additional risks during heightened wildfire season.

9.2.2.2 Procedures

The procedures for DGVE inspections are detailed with the TVMP Procedures (effective March 15, 2024) and focus on high-precision professional assessments by ground verification where necessary as determined by the routine MVCD inspection findings. These procedures will continue to be refined as necessary to adequately address program needs that may be specific to the planned 2028 transmission projects.

9.2.2.3 Clearance

Clearance requirements for DGVE inspections follow NERC FAC-003-54 and GO 95 Rule 35, ensuring regulatory compliance and system reliability. Adjustments to clearance prescriptions during the growth season are made based on data analysis and visual confirmations.

9.2.2.4 Fall-in Mitigation

Fall-in risks identified during MVCD inspections trigger immediate DGVE inspections and subsequent tree removal or trimming actions, focusing especially on species and locations that are historically prone to rapid mid-season growth.

9.2.2.5 Scheduling

DGVE inspections occur based on prioritized status of threat found during MVCD inspections on energized assets. Scheduling prioritizes any elevated fire risk areas or those identified previously as areas of heightened concern.

9.2.2.6 Updates

LSPGC was not a California Electrical Corporation prior to 2023 and thus did not have a WMP in the 2020–2022 cycle. LSPGC submitted the WMP for the 2023-2025 cycle but does not currently have any energized Transmission line assets. As LSPGC gains more operational experience, it will evaluate making appropriate changes to its vegetation inspections procedures.

9.2.3 Emergency/Storm Event Inspections

9.2.3.1 Overview and Area Inspected

Triggered by storm events or other natural disasters causing grid disturbances, emergency inspections cover territory-wide affected transmission corridors immediately following incidents to rapidly identify and remediate vegetation damage.

9.2.3.2 Procedures

These inspections may utilize drone, helicopter, or ground inspection methods on energized assets to quickly evaluate the impact of storms or other emergencies, adhering strictly to safety and regulatory guidelines.

9.2.3.3 Clearance

Emergency inspection activities focus on rapidly restoring regulatory clearance distances (NERC FAC-003-54 and GO 95 Rule 35) disrupted by storm-induced vegetation movements or tree falls.

9.2.3.4 Fall-in Mitigation

Emergency inspections specifically target trees and limbs compromised by severe weather that pose imminent fall-in risks to transmission infrastructure, prioritizing immediate remediation

9.2.3.5 Scheduling

Inspections are conducted post-event as soon as possible based on appropriate safety protocols, with resources mobilized urgently based on severity and impact scope, prioritizing critical infrastructure and elevated fire-risk zones if applicable.

9.2.3.6 **Updates**

LSPGC was not a California Electrical Corporation prior to 2023 and thus did not have a WMP in the 2020–2022 cycle. LSPGC submitted the WMP for the 2023-2025 cycle but does not

currently have any energized T-line assets. As LSPGC gains more operational experience, it will evaluate making appropriate changes to its vegetation inspections procedures.

9.3 Pruning and Removal

9.3.1 Overview

Pruning and removal activities for LSPGC are conducted on energized assets as a result of MVCD inspection findings. These actions include both planned cyclical maintenance as well as specific interventions following inspections and assessments. Activities are distinguished by the following three classes of work:

- Large scope mechanical, consisting of equipment assisted tree removal techniques (ground to sky, mowing or mastication).
- Small scope mechanical, consisting of cutting hand tools from the ground or climbing where necessary.
- Various herbicide applications consisting of foliar, basal, and cut and spray, or hack and squirt.

Pruning and removal decisions are based on maintaining clearances specified by regulatory and operational requirements, while ensuring minimal environmental impact and consideration of landowner preferences.

9.3.2 Procedures

Pruning and removal activities are conducted following standardized procedures outlined in the governing documents:

- Transmission Vegetation Management Program Policy and Procedures, effective March 15, 2024.
- ANSI A-300 standards for pruning and vegetation care.
- ANSI Z-133 standards for arboricultural safety and operations.
- NERC FAC-003-54 guidelines for maintaining required clearances on transmission lines.
- California General Order 95, Rule 35, and Appendix E, which specify clearances required for vegetation near overhead conductors in High Fire Threat Districts (HFTDs).

Procedures detail the methods of pruning (directional pruning to minimize future risk), full removal protocols for incompatible or hazard vegetation, as well as stump treatments to control regrowth. Woody vegetation is pruned and cleared to maintain a safe clearance buffer

9.4.2 Procedures

LSPGC currently has no operational or planned transmission lines located in the SRA. LSPGC will develop clearly defined procedures and standards to execute pole clearing activities effectively and safely in California in the event that SRA designations change or LSPGC has a future project located in the SRA.

All procedures are expected to align with:

- Transmission Vegetation Management Program Policy and Procedures, effective March 15, 2024
- PRC 4292,
- California Code of Regulations Title 14 CCR 1254,
- CPUC General Order 95, Rule 35,
- ANSI A-300 arboricultural standards
- NERC FAC-003-54 vegetation management guidelines.

Any ultimate procedure will specify methods for vegetation removal, herbicide treatments, and management of woody debris. All pole clearing activities strictly adhere to environmental and safety standards, ensuring minimal impact and maximum fire prevention effectiveness.

9.4.3 Scheduling

Once assets are energized, and if they are located in applicable areas, pole clearing activities will be scheduled according to risk-based prioritization, seasonal conditions, and regulatory requirements on poles that require pole clearing:

- Routine Pole Clearing: Scheduled annually or as needed as it relates to vegetation density and growth to maintain clearances in all SRAs.
- Enhanced Pole Clearing in HFTD Tier 2 and Tier 3: Conducted at more frequent intervals based on detailed inspections and risk modeling results. High-risk areas identified by Vegetation Priority Ratings receive expedited scheduling.
- Emergency Clearing: Conducted as identified following storm events or other significant events that cause grid disturbances. Work orders triggered by inspections or events must be completed urgently, typically within 3 business days for critical cases.

9.5.2 Procedures

LSPGC vegetation is managed according to our TVMP, adherence to process will be related to existing TVMPs in the various states where operations exist. Modification to practices will reflect the outcome of the gap analysis (VM-02) as it relates to Transmission line design and construction requirements and state regulatory requirements based on location of assets and legal rights. Relevant documents currently governing LSPGC Vegetation management plan include: Transmission vegetation management plan, LSPGC, dated March 15, January 2024.

9.5.3 Scheduling

Wood and slash management activities will be strategically scheduled based on wildfire risk, regulatory requirements, and operational practicality:

- Residential and High Fire Threat District (HFTD) Areas: Complete removal or chipping will
 be scheduled and performance will be in concert with tree work and not to exceed the
 project schedule.
- Rural and Forested Areas: Chipping and spreading or lop-and-scatter conducted within two weeks of vegetation management activities.
- High-Risk Fire Zones: Enhanced removal scheduling immediately following vegetation activities, especially during peak fire season or pre-fire season maintenance.

9.5.4 Updates

LSPGC was not a California Electrical Corporation prior to 2023 and thus did not have a WMP in the 2020–2022 cycle. LSPGC submitted the WMP for the 2023-2025 cycle but does not currently have any energized Transmission line assets. As LSPGC gains more operational experience, it will evaluate making appropriate changes to its vegetation wood and slash management procedures.

9.6 Defensible Space

9.6.1 Overview

LSPGC maintains defensible space around all transmission substations, with increased requirements for those located in the HFTD. These efforts are tracked by LSPGC's Defensible Space initiative VM-04. LSPGC routinely performs inspections and vegetation abatement activities to maintain adequate clearance within and around the perimeter of each substation where possible. These activities are designed to reduce the risk of ignition caused by vegetation contact with electrical equipment and to ensure compliance with applicable safety standards.

Inspections and work procedures are aligned with the California Fire Code (Title 24, Part 9), Public Resources Code § 4291, and General Order (GO) 174.

9.6.2 Procedures

The LSPGC Substation Defensible Space Procedure, version 1.0, effective 07/201/2025 governs defensible space activities for all substations. Substation vegetation inspections are conducted monthly and ahead of forecasted fire-weather conditions if necessary, which may include RFWs, fire weather watches, and high-wind events. The inspections focus on identifying vegetation encroachment or growth that could interfere with equipment clearances or obstruct emergency access and conformance with the LSPGC Defensible Space Procedure. LSPGC requires a zero-vegetation zone within substation fenced areas, a low (or zero) fuel zone within 30 feet of the substation perimeter, and if located in the HFTD, a reduced fuel zone within 30-100 feet of the substation perimeter. In all cases, the procedure and associated vegetation management activities apply to LSPGC-owned or controlled property only. When clearance discrepancies are identified during inspections, corrective vegetation management work orders are issued to qualified vegetation management contractors. The work includes removal of grasses, brush, and woody vegetation from within and around substation sites. High-priority orders are escalated for immediate action.

All vegetation work within substations is coordinated through substation field operations personnel to ensure safe access and compliance with site security protocols.

9.6.3 Scheduling

Routine substation vegetation abatement is typically scheduled semiannually, with a primary cycle at the end of Q2 in advance of peak fire season. Supplemental abatement may be directed based on growth rates, fuel conditions, or the results of interim inspections. Substation inspections occur monthly, with vegetation work triggered as needed throughout the year. Vegetation abatement required in the HFTD is considered high-priority. Clearance work for a single substation site can typically be completed within a single mobilization cycle

9.6.4 Updates

Since its last WMP submission, LSPGC has developed a more-defined formal procedure around defensible space activities in order to provide better direction to field personnel. At this time, no additional major updates or procedural revisions are planned for the 2026–2028 WMP cycle. LSPGC will continue to evaluate the effectiveness of its substation defensible space program and implement updates as needed in response to changing environmental conditions or regulatory guidance

9.7 Integrated Vegetation Management

9.7.1 Overview

LSPGC employs a combination of vegetation management strategies that align with the legal, regulatory, and operational requirements governing each asset or system, all while supporting a long-term conversion process aimed at reducing the presence of high-risk or threatening plant species. These strategies reflect the principles of Integrated Vegetation Management (IVM), combining mechanical, manual, biological, and chemical treatments to maintain safe and reliable system operations while promoting sustainable and compatible ground cover. As part of LSPGC's initiative VM-01 LSPGC will perform a gap analysis on its integrated vegetation management policies and look for areas of improvement. Specific activities not covered in previous sections, but central to LSPGC's IVM approach, include:

- The strategic use of herbicides and growth regulators to control invasive or fast-growing species.
- Support the transition to low-growing, compatible vegetation near critical infrastructure.

9.7.2 Procedures

These activities are governed by the LSPGC Transmission Vegetation Management Plan (TVMP), dated March 152, January 2024, which outlines the standards, methods, and decision-making frameworks for integrated vegetation management across the system. By combining proactive treatments with long-term ecological strategies, LSPGC ensures its vegetation management program not only meets immediate operational and regulatory needs but also advances long-term system resilience and wildfire risk reduction

9.7.3 Scheduling

Integrated Vegetation Management practices are incorporated across all vegetation treatment and removal activities, aligning with the long-term ground cover conversion goals established for the LSPGC system. These practices aim to promote the establishment of low-growing, compatible vegetation that reduces the need for intensive future maintenance and minimizes wildfire risk. The scheduling of IVM activities is governed by the priorities and timelines set forth in the LSPGC Transmission Vegetation Management Plan (TVMP). Scheduling decisions are risk informed and directly influenced by geographic and regulatory factors, with High Fire Threat District Tier 2 and Tier 3 areas receiving the highest prioritization for IVM activities due to their elevated wildfire risk profiles. Non-HFTD areas are scheduled according to standard maintenance cycles but may be accelerated if risk modeling or site-specific assessments indicate heightened exposure or system vulnerability. By integrating IVM principles with risk-

9.10 Post-Fire Service Restoration

9.10.1 Overview

LSPGC will conduct strategic vegetation management activities on energized assets as part of post-fire service restoration efforts to rapidly and safely restore power after wildfire incidents. The objective of these activities is to mitigate immediate risks posed by damaged vegetation, facilitate rapid access to electrical infrastructure, and maintain reliability and public safety. Post-fire vegetation management activities are differentiated from standard operations and specifically tailored to the unique conditions following wildfires, including hazard tree removal, debris clearing, and prioritization of emergency response tasks. LSPGC's post-fire vegetation activities include:

- When safety conditions allow, imminent hazard tree identification and removal.
- Clearance of burned and partially burned vegetation.
- Access route clearing to enable rapid inspection and repairs.
- Assessment and removal of vegetation presenting ongoing risks post-restoration.

9.10.2 Procedures

LSPGC will develop more formal procedures prior to the energization of any T-line assets to execute effective vegetation management during post-fire restoration, ensuring systematic and safe operational conduct. Key procedural documents are expected to include: Post-Fire Vegetation Management Procedure and Hazard Tree Assessment and Removal Procedure. These procedures will adhere to the following guidelines:

- ANSI A-300 Standards for hazard tree pruning and removal.
- NERC FAC-003-54 guidelines for vegetation management around critical transmission infrastructure.
- PRC 4292 guidelines for defensible space post-fire.

Procedures will outline clear criteria for identifying hazard vegetation, detailed assessment processes, prioritization strategies, and decision workflows explicitly tailored to post-fire conditions.

9.10.3 Scheduling

Post-fire vegetation management activities are scheduled and triggered by specific fire-related events and assessed conditions:

- Immediate Response (based on safe access): Hazard tree removals and critical vegetation clearing during active fire suppression and emergency restoration phases Prioritized based on severity of damage, immediate threat to infrastructure, and public safety risks.
- Secondary Response (Within 15–60 days post-fire): Comprehensive assessments and removal of hazard trees that pose longer-term threats to system reliability. Conducted in all wildfire-impacted areas, with prioritization based on fire intensity, vegetation condition, and infrastructure damage.
- HFTD Considerations: Scheduling of vegetation management activities will be expedited significantly within High Fire Threat Districts (HFTD Tier 2 and 3), recognizing the increased risk of subsequent ignition events or damage from compromised vegetation.

9.10.4 Updates

LSPGC was not a California Electrical Corporation prior to 2023 and thus did not have a WMP in the 2020–2022 cycle. LSPGC submitted the WMP for the 2023-2025 cycle but does not currently have any energized Transmission line assets. As LSPGC gains more operational experience, it will evaluate making appropriate changes to its vegetation post fire service restoration procedures

9.11 Quality Assurance and Quality Control

9.11.1 Overview, Objectives, and Targets

Because LSPGC currently has only substation assets in-service and its first transmission lines are currently planned to be energized in <u>Q2 of mid to late-2028</u>, the vegetation QA/QC program is limited to Defensible Space (Table 9-5). For Transmission line assets, QA/QC processes and protocols are being developed and will be implemented prior to energization. It is likely that initial Transmission line vegetation inspections will not occur until the next WMP cycle.

Table 9-5. Vegetation Management QA and QC Program Objectives

Initiative/Activity Being Audited	Tracking ID	Quality Program Type	Objective of the Quality Program
Defensible Space Inspections	VM-04	QA	To ensure defensible space inspections are according to procedure and to remedy any non-conformance.

9.11.2 QA/QC Procedures

Because LSPGC currently has only substation assets in-service and its first transmission lines are currently planned to be energized in <u>Q2 of mid to late-</u>2028, the vegetation QA/QC program is limited to Defensible Space. LSPGC's Substation Defensible Space Procedure, Version 1.0, effective <u>07</u>1/21/2025, includes a Quality Assurance section. Additional QA/QC procedures will be formally developed and implemented as necessary for transmission line assets prior to their operational commissioning.

9.11.3 Sample Sizes

For the majority of this WMP cycle, LSPGC's sample size for the defensible space QA/QC program is expected to be limited to two (2) substations. Because one of these substations is located in the HFTD and the other is in a limited vegetation, lower risk area the substation located in the HFTD was chosen for the annual quality assurance review.

9.11.4 Pass Rate Calculation

For the QA/QC review related to defensible space inspections, any material inconsistencies between the most recent substation inspection report and observed field conditions versus what is acceptable per LSPGC defensible space procedure will result in a failed inspection. For example, the following would result in a non-passing QA/QC review:

- Vegetation observed inside the substation fence which was not reported on and flagged for mitigation during the most recent monthly inspection
- Vegetation observed to be outside allowable parameters within 100 feet of the substation perimeter which was not reported on and flagged for mitigation during the most recent monthly inspection

Substation QA/QC Pass rate =
$$\frac{Passed\ Inspections}{Total\ Inspections}*100$$

9.11.5 Other Metrics

Other than the QA/QC program, the routine monthly defensible space inspections are used to determine the effectiveness of the vegetation management program. For example, continued vegetation-related findings during the monthly inspections resulting in vegetation remediation work orders could be an indicator that additional or modified treatment methods may be warranted. As LSPGC gains additional operational experience the substation vegetation management/maintenance practices may evolve.

10. Situational Awareness and Forecasting

10.1 Targets

LSPGC is committed to developing and maintaining robust situational awareness capabilities to monitor wildfire risk and operational conditions in near real-time across its transmission infrastructure. These efforts support early detection and mitigation of potential ignition risks. For the 2026–2028 WMP cycle, LSPGC has established qualitative and quantitative targets across the five core initiatives. Table 10-1 below provides a summary of the targets for each initiative.

Note: LSPGC will be operating substation equipment only for the majority of the 2026-2028 time period, with the expected energization of LSPGC's first transmission line equipment in <u>Q2</u> of <u>mid to late</u> 2028.

10.1.1 Qualitative Targets

LSPGC's qualitative targets focus on enhancing visibility into field and environmental conditions, integrating advanced monitoring systems, and enabling prompt response to fire threats as shown in Table 10-1.

10.1.2 Quantitative Targets

LSPGC's quantitative targets reflect incremental milestones for deploying field-based situational awareness infrastructure and tracking key operational metrics as shown in Table 10-1

Table 10-1. Situational Awareness Targets by Year

Initiative	Quantitative or Qualitative Target	Activity (tracking ID #)	Previous Tracking ID, if applicable	Target Unit	2026 End of year total/Completion Date	% risk reduction for 2026	2027 Total/Status	% risk reduction for 2027	2028 Total/Status	% risk reduction for 2028	Three- year total	Section; Page number
Environmental Monitoring Systems	Quantitative	Install weather stations at planned project sites (SAF- 03)	N/A	Weather stations	0	N/A	1	N/A	4	N/A	5	10.2.3;
Environmental Monitoring Systems	Qualitative	Integrate weather stations feed from energized site as a standard feed into the operations center. (SAF-03)	N/A	N/A	In progress; July 2026	N/A	Completed; October 2027	N/A	Completed; October 2027	N/A	N/A	10.2;
Grid Monitoring Systems	Quantitative	Install perimeter cameras at substations (SAF-01)	LSP-06	# of cameras installed	0	N/A	0	N/A	72TBD based on final design	N/A	TBD	10.4;138
Grid Monitoring Systems	Qualitative	Install perimeter cameras from energized site as standard feed into the operations center. (SAF-01)	LSP-06	N/A	In progress; July 2026	N/A	Completed; July 2027	N/A	Completed; July 2027	N/A	N/A	10.4 <u>;</u> 139 10.3; 140
Ignition Detection Systems	Qualitative	Complete ignition sensor feasibility study at HFTD energized assets (SAF-02)	N/A	N/A	Start; Q3 2026	N/A	Completed; End of Q4 2027	N/A	Completed; End of Q4 2027	N/A	N/A	10.4; 138

Initiative	Quantitative or Qualitative Target	Activity (tracking ID #)	Previous Tracking ID, if applicable	Target Unit	2026 End of year total/Completion Date	% risk reduction for 2026	2027 Total/Status	% risk reduction for 2027	2028 Total/Status	% risk reduction for 2028	Three- year total	Section; Page number
Ignition Detection Systems	Quantitative	Install integrated fire-detection systems in STATCOM buildings (SAF-02)	N/A	# of detections systems	1	N/A	0	N/A	0	N/A	1	10.4; 138
Weather Station Maintenance and Calibration	Quantitative	Calibrate weather stations semi-annually (SAF-04)	N/A	# of weather stations	2	N/A	2	N/A	2	N/A	6	10.5.5; 146 140
Weather Station Maintenance and Calibration	Qualitative	Follow manufacturer calibration procedures and document compliance (SAF-04)	N/A	N/A	Procedure followed and documented	N/A	Procedure followed and documented	N/A	Procedure followed and documented	N/A	6	10.5.5; 145
Weather Forecasting	Quantitative	Expand weather forecasting capability at planned project sites. (SAF-05)	N/A	# of weather stations	0	N/A	0	N/A	4	N/A	4	10.5.4; 145
Weather Forecasting	Qualitative	Integrate weather- forecasting support tool into operations (SAF-05)	N/A	N/A	In progress; Q2 2026	N/A	Completed; Q2 2027	N/A	Completed; Q2 2027	N/A	N/A	10.5.4; 146 10.5; 142

10.3.1 Existing Systems, Technologies, and Procedures

As the only energized equipment is the Orchard Substation, LSPGC has no installed linemounted grid monitoring systems, such as fault anticipators, fault current limiters, or automated reclosers. However, LSPGC employs high-reliability EHV system protection schemes and centralized SCADA-based monitoring via its EMS. These systems and procedures enable comprehensive real-time supervision and situational awareness of LSPGC's substations. This is currently employed by Orchard substation. See Table 10-3.

Monitoring Architecture

- System Used: LSPGC uses the AspenTech OSI EMS) a NERC-compliant and scalable SCADA platform.
- **Functionality**: The EMS provides real-time visualization and control of equipment status, alarms, transformer health (oil and winding temperatures), Sequence of Events (SOE) logging, and trend data.
- **Control Center**: These systems are deployed at both the Primary and Backup Transmission Operations Control Centers, ensuring operational redundancy.

Training and Procedures

- TSO Training: TSOs receive instruction on interpreting EMS data and understanding the
 relationship between ambient conditions (e.g., weather) and system operability. These
 instructions are outlined in the Operationsors Training Process Manual (dated March 75,
 2025) and include practical use of weather intelligence tools and awareness of wildfirerelated operational impacts.
- **SCADA Procedures**: TSOs follow NERC-standard operating procedures and use real-time alarm and trending information to assess potential issues.

Fault and Failure Detection

While no inline sensors (e.g., DFAs, fault current limiters) are presently installed, the following are available:

- Transformer Monitoring: Temperature alarms (oil and winding) with real-time SCADA visibility and archival trending for early detection of overload or equipment failure risk.
- Breaker/Recloser Operations: All circuit breakers are monitored through SCADA and logged via SOE recording; however, reclosers are not applicable to LSPGC's transmissiononly topology.

10.5.4 Evaluating Activities

LSPGC currently uses StormGeo for weather forecasting capabilities at its energized site, Orchard Substation (energized March 2025) and under construction site Fern. This third-party platform provides real-time weather data such as temperature, wind speed, humidity, and precipitation to support situational awareness. While LSPGC does not currently conduct inhouse weather forecast modeling or decision support based on forecasted fire potential, it will evaluate the need for enhanced forecasting capabilities as its operational footprint expands.

Four additional substations (Collinsville, Manning, Power the South Bay, and Power Santa Clara Valley) are under development. LSPGC intends to incorporate StormGeo or equivalent weather data solutions at these sites once they are energized, as highlighted in the initiative SAF-05. Weather station equipment at substations will be calibrated semi-annually to ensure accuracy

10.5.5 Weather Station Maintenance and Calibration

LSPGC has established a Target (SAF-04) to perform semi-annual inspections and calibrations for all operational weather stations, ensuring continued accuracy and reliability of sensor data. As LSPGC currently has only one operational substation and associated weather station, there is no acceptable percentage of weather station outages. If a weather station outage is observed, LSPGC will attempt to repair or replace the device as soon as practical. In the interim period for repair or replacement, LSPGC's contracted meteorologist utilizes several other weather stations, weather forecasting tools and resources via commercial and government sources that are not owned or operated by LSPGC. Therefore, if the single Orchard weather station goes offline, there is redundancy provided by external weather stations and forecasting tools.

LSPGC is currently evaluating procurement of a spare weather station to further reduce the impact to operational decision making.

Currently, there are no limitations to performing annual maintenance on weather stations.

The single LSPGC weather station in operation was installed in the last calendar year and has not had maintenance performed to-date. Therefore, there has yet to be an incomplete maintenance or calibration events for the single station.

Without a traditional service territory and with small, isolated planned facilities located throughout the state of California, LSPGC considers an acceptable coverage level is to have a single weather station at each substation location, with redundancy provided by external weather stations and forecasting tools employed by the contracted meteorologist. This will be reevaluated as additional facilities come online that include transmission lines that span larger areas (estimated Q24 2028). Given the small size of current (Orchard Substation) and future

planned sites, the combination of local weather stations and externally sourced weather forecasting tools and equipment should reasonable cover LSPGC's equipment locations.

10.6 Fire Potential Index

LSPGC does not currently calculate its own Fire Potential Index (FPI). Instead, it relies on proprietary wildfire and meteorological intelligence services from StormGeo, which provide site-specific forecasts that include active fire risk, fire danger indices, and PSPS risk. These forecasts are used to support operational decision-making and real-time risk awareness.

If operational needs or regulatory expectations change, LSPGC may consider incorporating data from public sources such as the United States Geological Survey (USGS) or the Wildland Fire Assessment Program's Severe Fire Danger Mapping System to calculate or supplement an FPI.

10.6.1 Existing Calculation Approach and Use

LSPGC does not generate or calculate a Fire Potential Index (FPI) internally. Instead, it utilizes external forecasts provided by its weather intelligence vendor, StormGeo_(Tracking ID: ENV—WTH-004), to assess wildfire risk across its assets. These forecasts incorporate:

- Weather model inputs (temperature, wind speed/direction, humidity)
- Fuel moisture content from third-party and NOAA datasets
- Local terrain and elevation models
- Forecasts of fire danger potential and PSPS-triggering conditions

LSPGC uses these forecasts operationally to:

- Alert TSOs of elevated wildfire risk
- Enhance situational awareness during RFW periods
- Inform risk-based readiness and response planning at substation sites

If needed in the future, LSPGC may draw from the USGS Fire Danger Rating System or similar federal sources to support in-house FPI calculations.

Government Code, § 8593.3

International Organization for Standardization [ISO] 31000

NERC FAC-003-54 Guidelines for maintaining required clearances on transmission lines

Public Utilities Code section 768.6 Statute related to emergency and disaster preparedness plans

Public Resources Code § 4291 on defensible space

Public Resources Code § 4292 Statute related to firebreaks near a utility pole.

Public Utilities Code § 8370(d) Microgrid definition

Public Utilities Code § 8386 Statute related to electrical lines and equipment