

LS Power Grid California, LLC
2026-2028 Wildfire Mitigation Plan

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Wildfire Mitigation Plans
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for Submittal to:

OFFICE OF ENERGY INFRASTRUCTURE SAFETY

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Revision 0

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ACRONYM LIST

°F	Fahrenheit
AFN	Access and Functional Needs
ANSI	American National Standard Institute
CAISO	California Independent Systems Operator
CAL FIRE	California Department of Forestry and Fire Protection
CFPP	Construction Fire Prevention Plan
CPUC	California Public Utilities Commission
EAMS	enterprise asset management system
EFD	Early Fault Detection
EHV	extra high voltage
EMS	Energy Management System
ERC	Emergency Response Commander
FEMA	Federal Emergency Management Agency
GIS	gas-insulated switchgear or Geographic Information System
HFRA	High Fire Risk Area
HFTD	High Fire Threat District
ISO	International Organization for Standardization
ITO	Independent Transmission Operator
kV	kilovolt
LOU	Letter of Understanding
LRA	Local Responsibility Area
LSPGC	LS Power Grid-California
MOA	memorandum of agreement

N/A	Not Applicable
NERC	North American Electric Reliability Corporation
NIMS	National Incident Management Systems
PG&E	Pacific Gas and Electric Company
PRC	California Public Resources Code
PSPS	Public Safety Power Shutoffs
RAWS	Remote Automatic Weather Stations
RFW	Red Flag Warning
ROS	Rate of Spread
SCADA	Supervisory Control and Data Acquisition
SME	Subject Matter Expert
SRA	State Responsibility Area
STATCOM	Static Synchronous Compensator
SVI	Social Vulnerability Index
TBD	to be determined
TSO	Transmission System Operator
WEAP	Worker Environmental Awareness Program
WMP	Wildfire Mitigation Plan
WUI	Wildland-Urban Interface

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 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;

- Community and agency engagement to strengthen coordination with first responders and local stakeholders.

This WMP follows Energy Safety's risk-informed framework, beginning with asset-specific hazard identification and scenario modeling, and progressing through risk analysis, prioritization, and implementation. LSPGC methodology integrates GIS-based wildfire overlays, fuel condition modeling, ignition risk drivers, and critical infrastructure exposure. As a result, mitigation actions are aligned with the risk landscape surrounding each facility.

The 2026–2028 WMP underscores LSPGC's approach to infrastructure stewardship and wildfire risk mitigation. As LSPGC transitions from its initial footprint to a more expansive transmission network, this WMP provides a scalable framework for continued wildfire resilience and grid reliability across the 2026-2028 WMP cycle.

2. Responsible Persons

Cameron Fredkin, Chief Operating Officer at LSPGC is the executive-level owner with overall responsibility for this Wildfire Mitigation Plan. LSPGC Table 2-1 provides the program owners with responsibility for each of the main components of the plan. Questions related to activities described in this plan can be submitted to LSPGC through the following email address: wildfire@lspower.com.

LSPGC Table 2-1. LSPGC Responsible Persons

Section No.	Section Title	Name	Title	Phone Number	Email
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2	Responsible Person	Rituraj Yadav	Associate Manager, Wildfire Mitigation	208-281-8255	ryadav@lspower.com
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4	Overview of the Service Territory	James Rekowski	Associate Project Manager	636-534-3341	jrekowski@lspower.com
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8	Grid Design, Operations, and Maintenance	Rituraj Yadav	Associate Manager, Wildfire Mitigation	208-281-8255	ryadav@lspower.com

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10	Situational Awareness and Forecasting	Rituraj Yadav	Associate Manager, Wildfire Mitigation	208-281-8255	ryadav@lspower.com
11	Emergency Preparedness, Collaboration, and Public Awareness	Heath Holt	Senior Health, Safety, and Environmental Manager	512-982-5668	hholt@lspower.com
12	Enterprise Systems	Rituraj Yadav	Associate Manager, Wildfire Mitigation	208-281-8255	ryadav@lspower.com
13	Lessons Learned	James Rekowski	Associate Project Manager	636-534-3341	jrekowski@lspower.com

3. Overview of WMP

3.1 Primary Goal

The primary goal of the WMP is to describe how LSPGC will construct, maintain, and operate its electrical equipment in a manner that will keep customers and communities safe by minimizing the risk of catastrophic wildfire.

3.2 Plan Objectives

LSPGC's WMP overarching objective is to comply with applicable provisions of Public Utilities Code Section 8386 at LSPGC's facilities.

Certain provisions in Public Utilities Code Section 8386 and the WMP Guidelines, such as those addressing communications with customers and protocols for disconnecting service to customers, do not apply to an ITO such as LSPGC. This WMP addresses provisions in Public Utilities Code Section 8386 and the WMP Guidelines as they relate to the LSPGC transmission facilities.

3.3 Utility Mitigation Activity Tracking IDs

LSPGC's Utility Mitigation Activity Tracking IDs (Tracking IDs) related to the initiatives and targets detailed in this WMP are shown in the LSPGC Table 3-1 These are used throughout the WMP.

LSPGC Table 3-1. Mitigation Initiative Tracking IDs

Activity ID	Previous Activity ID	ACTIVITY DESCRIPTION	WMP INITIATIVE CATEGORY	WMP INITIATIVE
ENT-01		Centralize vegetation data and integrate inspection workflows for energized substation	Enterprise Systems	Substation Vegetation Management
ENT-02		Maintain SCADA and operational telemetry for substation oversight	Enterprise Systems	Grid Monitoring
ENT-03		Develop basic dashboards for inspection trends and risk prioritization	Enterprise Systems	Risk Assessment
EP-01		Update System Restoration Plan to include Fern Road Substation	Emergency Preparedness, Collaboration and Public Awareness	Emergency Preparedness and Recovery Plan

Activity ID	Previous Activity ID	ACTIVITY DESCRIPTION	WMP INITIATIVE CATEGORY	WMP INITIATIVE
EP-02		Establish wildfire-specific communication protocols	Emergency Preparedness, Collaboration and Public Awareness	Public Outreach, Communication, and Engagement
EP-03	LSP-09	Initiate and maintain annual outreach with local fire/emergency agencies near energized assets	Emergency Preparedness, Collaboration and Public Awareness	External Collaboration and Coordination
GD-01		Investigate advanced protection system enhancements for potential inclusion in project design	Grid Design, Operations, and Maintenance	Grid Operations and Procedures
GD-02	LSP-02	Monthly Substation Inspections	Grid Design, Operations, and Maintenance	Asset Inspections
GD-03		Dissolved Gas Analysis Test at energized transformers	Grid Design, Operations, and Maintenance	Equipment Maintenance and Repair

Activity ID	Previous Activity ID	ACTIVITY DESCRIPTION	WMP INITIATIVE CATEGORY	WMP INITIATIVE
GD-04	LSP-03	Use Maximo to manage assets, inspections, and maintenance	Grid Design, Operations, and Maintenance	Work Orders (Asset Management)
GD-05		Review Emergency Operations Plan and update annually	Grid Design, Operations, and Maintenance	Grid Operations and Procedures
GD-06		Create and rollout HFTD safety training	Grid Design, Operations, and Maintenance	Workforce Planning (Asset Management)
SAF-01	LSP-06	Install perimeter cameras at substations	Situational Awareness and Forecasting	Grid Monitoring Systems
SAF-02		Complete ignition sensor feasibility study at energized assets	Situational Awareness and Forecasting	Ignition Detection Systems
SAF-03		Install weather stations at planned project sites	Situational Awareness and Forecasting	Environmental Monitoring Systems
SAF-04		Calibrate weather stations semi-annually	Situational Awareness and Forecasting	Weather Station Maintenance and Calibration

Activity ID	Previous Activity ID	ACTIVITY DESCRIPTION	WMP INITIATIVE CATEGORY	WMP INITIATIVE
SAF-04		Follow manufacturer calibration procedures and document compliance	Situational Awareness and Forecasting	Weather Station Maintenance and Calibration
SAF-05		Expand weather forecasting capability at planned project sites.	Situational Awareness and Forecasting	Weather Forecasting
VM-01		Application of current Vegetation Management standards to future Transmission Line asset	Vegetation Management and inspections	Integrated Vegetation Management
VM-02		Applications of current Wood and Slash Management standards to future Transmission Line assets	Vegetation Management and inspections	Wood and Slash Management
VM-03		Development of construction fire safety plan	Vegetation Management and inspections	Workforce Planning

Activity ID	Previous Activity ID	ACTIVITY DESCRIPTION	WMP INITIATIVE CATEGORY	WMP INITIATIVE
		for Transmission Line vegetation activities		
VM-04		Conduct inspections	Vegetation Management and inspections	Defensible Space
VM-05		Transmission Annual MVCD System Inspections	Vegetation Management and inspections	Vegetation Management Inspections
VM-06		Detailed Ground Vegetation Evaluations	Vegetation Management and inspections	Vegetation Management Inspections
VM-07		Pole clearing activities	Vegetation Management and inspections	Pole clearing

3.4 Prioritized List of Wildfire Risks and Risk Drivers

LSPGC's prioritized list of risk drivers is shown below in Table 3-1. Because LSPGC has had no prior ignitions in its short history of operations, the priority is based on anticipated risk drivers based on project-specific risk assessments of LSPGC's existing and planned facilities. Because no historical risk data timeframes exist, LSPGC created three priority levels: 1, 2, and 3. A catastrophic failure of a large transformer has been identified as the highest priority risk based on LSPGC's currently planned facilities. This is followed by other equipment failure scenarios and finally by contacts to energized equipment by foreign objects. Topographic and climatologic risk factors were based on HFTD designation and future expected conditions at LSPGC site locations.

For template risks where no priority exists in Table 3-1 those risk drivers are not applicable to LSPGC facilities because either LSPGC has no plans to own or operate the specified equipment or the topography in the area of LSPGC's facilities is not conducive to the risk driver.

Table 3-1. List of Risks and Risk Drivers to Prioritize

Priority	Risk	Risk Driver	x% of ignitions in HFTD	Topographical and Climatological Risk Factors
1	Equipment / facility failure or damage	Transformer	N/A	HFTD, heat, humidity, wind, precipitation
2	Equipment / facility failure or damage	Anchor/guy	N/A	HFTD, heat, humidity, wind, precipitation
2	Equipment / facility failure or damage	Capacitor bank	N/A	HFTD, heat, humidity, wind, precipitation
2	Equipment / facility failure or damage	Conductor	N/A	HFTD, heat, humidity, wind, precipitation

Priority	Risk	Risk Driver	x% of ignitions in HFTD	Topographical and Climatological Risk Factors
2	Equipment / facility failure or damage	Connector device	N/A	HFTD, heat, humidity, wind, precipitation
2	Equipment / facility failure or damage	Insulator and bushing	N/A	HFTD, heat, humidity, wind, precipitation
2	Equipment / facility failure or damage	Lightning arrestor	N/A	HFTD, heat, humidity, wind, precipitation
2	Equipment / facility failure or damage	Pole	N/A	HFTD, heat, humidity, wind, precipitation
2	Equipment / facility failure or damage	Switch	N/A	HFTD, heat, humidity, wind, precipitation
3	Contact from object	3rd party contact	N/A	HFTD, heat, humidity, wind, precipitation
3	Contact from object	Aircraft vehicle contact	N/A	HFTD, heat, humidity, wind, precipitation
3	Contact from object	Animal contact	N/A	HFTD, heat, humidity, wind, precipitation
3	Contact from object	Ballon contact	N/A	HFTD, heat, humidity, wind, precipitation

Priority	Risk	Risk Driver	x% of ignitions in HFTD	Topographical and Climatological Risk Factors
3	Contact from object	Land vehicle contact	N/A	HFTD, heat, humidity, wind, precipitation
3	Contamination	Contamination	N/A	HFTD, heat, humidity, wind, precipitation
3	Lightning	Lightning	N/A	HFTD, heat, humidity, wind, precipitation
3	Vandalism/ theft	Vandalism/ theft	N/A	HFTD, heat, humidity, wind, precipitation
3	Vegetation contact	Blow-in	N/A	HFTD, heat, humidity, wind, precipitation
3	Wire-to-wire contact	Wire-to-wire contact	N/A	HFTD, heat, humidity, wind, precipitation
--	Contact from object	Other contact from object	N/A	N/A
--	Contact from object	Unknown	N/A	N/A
--	Dig-in	Dig-in	N/A	N/A
--	Equipment / facility failure or damage	Cross arm	N/A	N/A
--	Equipment / facility failure or damage	Cutout	N/A	N/A

Priority	Risk	Risk Driver	x% of ignitions in HFTD	Topographical and Climatological Risk Factors
--	Equipment / facility failure or damage	Fuse	N/A	N/A
--	Equipment / facility failure or damage	Other	N/A	N/A
--	Equipment / facility failure or damage	Recloser	N/A	N/A
--	Equipment / facility failure or damage	Relay	N/A	N/A
--	Equipment / facility failure or damage	Sectionalizer	N/A	N/A
--	Equipment / facility failure or damage	Splice	N/A	N/A
--	Equipment / facility failure or damage	Tap	N/A	N/A
--	Equipment / facility failure or damage	Tie wire	N/A	N/A

Priority	Risk	Risk Driver	x% of ignitions in HFTD	Topographical and Climatological Risk Factors
--	Equipment / facility failure or damage	Unknown	N/A	N/A
--	Equipment / facility failure or damage	Voltage regulator/booster	N/A	N/A
--	Protective device operation	Protective device operation	N/A	N/A
--	Unknown	Unknown	N/A	N/A
--	Vegetation contact	Fall-in (branch failure)	N/A	N/A
--	Vegetation contact	Fall-in (root failure)	N/A	N/A
--	Vegetation contact	Fall-in (trunk failure)	N/A	N/A
--	Vegetation contact	Grow-in	N/A	N/A

3.5 Performance Metrics

The performance metrics, including initiative targets that LSPGC reports to Energy Safety per the Energy Safety Data Guidelines, are comprehensive and allow LSPGC to evaluate the effectiveness of this WMP. Therefore, LSPGC does not have any additional self-identified performance metrics (Table 3-2).

Table 3-2. Self-Identified Performance Metrics Table

Performance Metric	Assumption that underlies the use of the metric	Mitigation Section associated with the Performance Metric (state “WMP” if the metric applies to entire plan)
None	N/A	N/A

3.6 Projected Expenditures

LSPGC’s current projected expenditures related to the activities summarized in Section 3.3 for the 2026-2028 WMP cycle are shown below in Table 3-3 and Figure 3-1.

Table 3-3. Summary of Projected WMP Expenditures

Year of WMP Cycle	Spend (thousands \$USD)
2026	Projected = 108
2027	Projected = 154
2028	Projected = 534

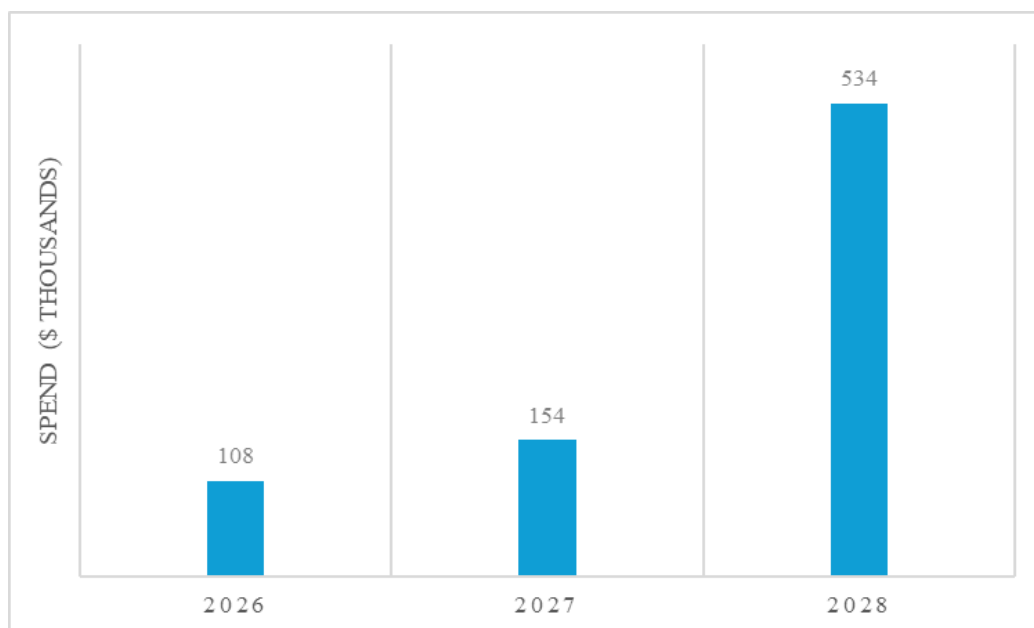


Figure 3-1. LSPGC Summary of Projected WMP Expenditures

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 (Q3-Q4 2028)

- **Manning Substation and associated transmission lines** (overhead) – Anticipated timeline for energization (Q3-Q4 2028)
- **Power the South Bay** (overhead and underground) – Anticipated timeline for energization (Q3-Q4 2028)
- **Power Santa Clara Valley** (underground) – Anticipated timeline for energization (Q3-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 2	HFTD Tier 3	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 Q3-Q4 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 second half of 2028.

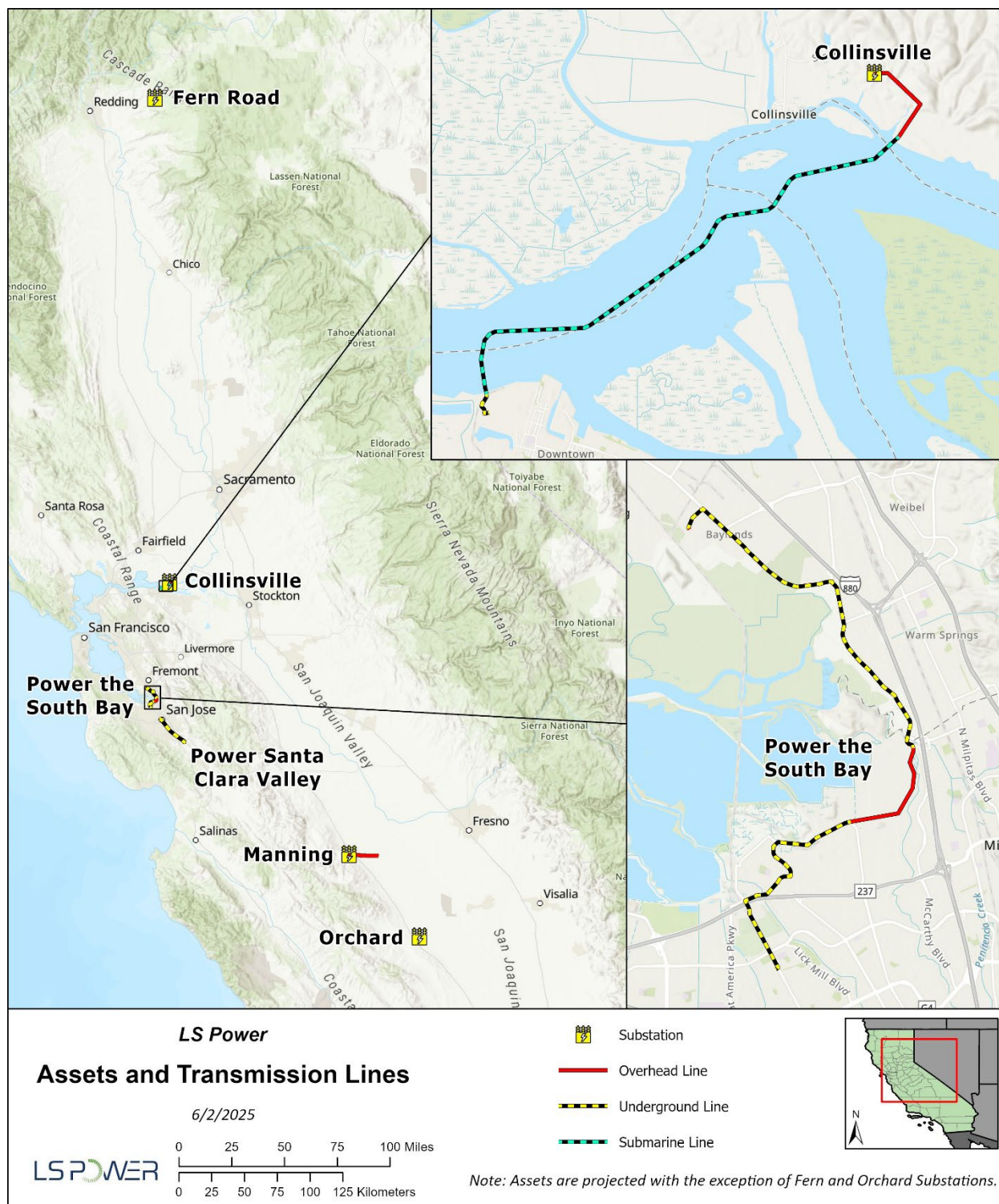


Figure 4-1. High-Level Map of Electrical Asset Components for LSPGC.
Only Orchard substation is currently energized.

4.2 Catastrophic Wildfire History

LSPGC has not experienced any ignitions from its equipment that has resulted in a catastrophic wildfire; therefore, LSPGC does not have information for Table 4-2. Note: Only Orchard substation has recently been energized.

Table 4-2. Catastrophic Electrical Corporation Wildfire

Ignition Date	Fire Name	Official Cause	Fire Size (acres)	No. of Fatalities	No. of Structures Destroyed and Damaged	Financial Loss (US\$)	Lesson(s) Learned
None	N/A	N/A	N/A	N/A	N/A	N/A	N/A

4.3 Frequently Deenergized Circuits

LSPGC currently only has 1 substation, Orchard, that is energized. Therefore, it has never invoked a Public Safety Power Shutoffs (PSPS) and does not have information for Table 4-3.

Table 4-3. Frequently Deenergized Circuits

Entry #	Circuit ID	Name of Circuit	Dates of Outages	Number of Customers Hours of PSPS per Outage	Measures Taken, or Planned to Be Taken, to Reduce the Need for and Impact of Future PSPS of Circuit	Estimated Annual Decline in Deenergization and Deenergization Impact on Customers
None	N/A	N/A	N/A	N/A	N/A	N/A

5. Risk Methodology and Assessment

This section of the WMP describes the overall methodology for determining wildfire risk, key assumptions and input data, risk analysis and risk results. This risk methodology informs the overall wildfire risk mitigation strategy and prioritization of initiatives discussed in Section 6.

Currently, LSPGC only has one energized electrical asset – the Orchard substation – as shown in Figure 4-1. However, over the course of the 2026-2028 WMP cycle, the electrical corporation anticipates that all of its assets identified in Section 4 will be coming online. As such, LSPGC has elected to undertake a quantified wildfire risk assessment for all its current and future planned assets, in order to establish a baseline understanding of its wildfire risk profile to help inform decision-making and prioritizations.

Note: The majority of LSPGC’s current and future electrical assets are located outside any HFTD with the exception of the Fern Road substation, which is located in Tier 2. As such, most of the electrical assets have a lower risk of causing utility-ignited wildfires.

Further, as LSPGC is a relatively new ITO in the State of California it is closely observing its fellow utilities and monitoring their developments as it pertains to risk methodology and assessment. LSPGC will continue to adopt, implement, and update appropriate risk methodologies, assessments, and modeling where such approaches and tools allow LSPGC to gain a better understanding of the risks and how those risks should be mitigated.

5.1 Methodology

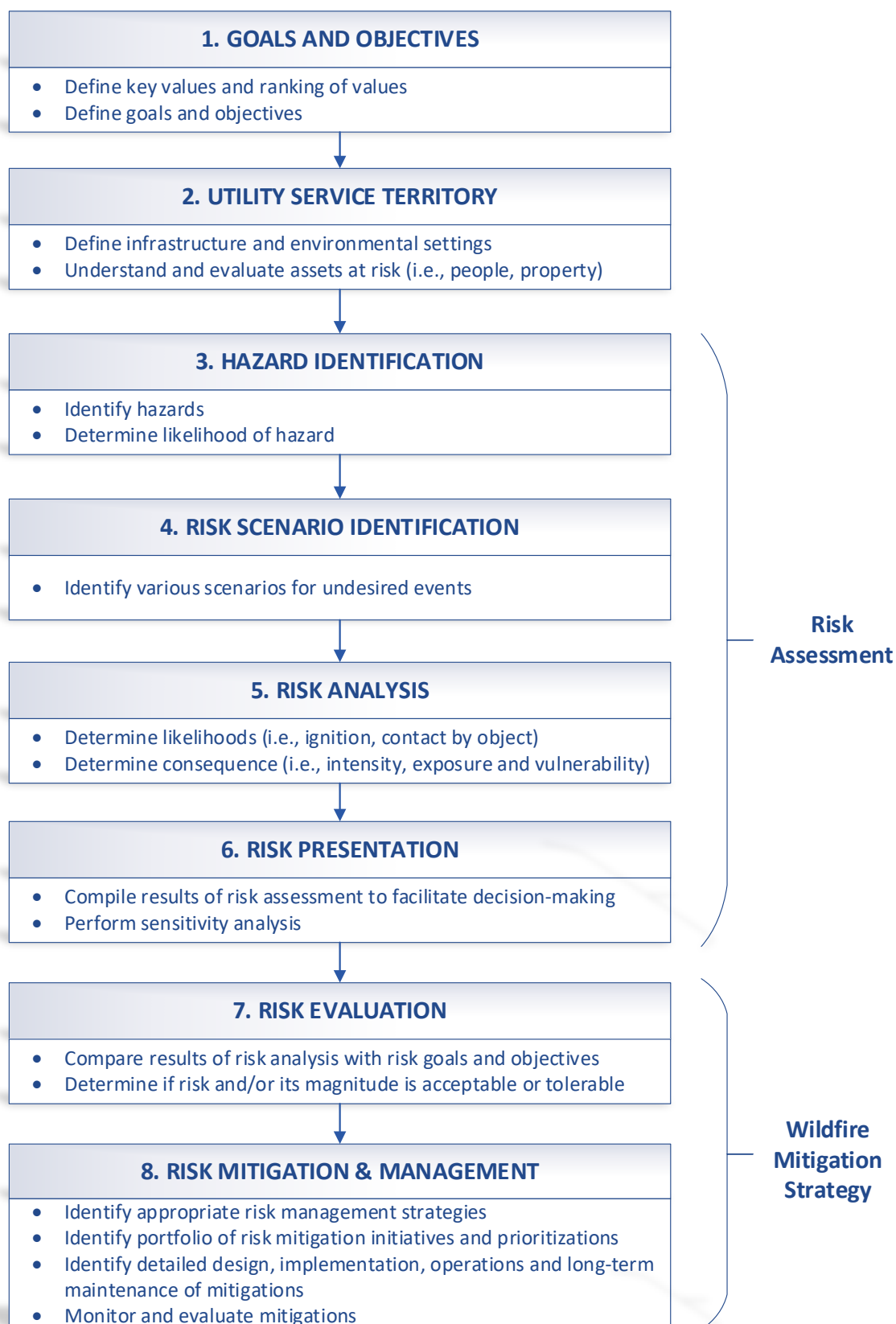
5.1.1 Overview

This section provides (1) an overview of LSPGC’s approach for understanding and quantifying its wildfire risk, and (2) an overview of future practices and policies to help further enhance its risk-informed and data-driven approach for decision-making. These future developments aim to further enhance LSPGC’s ability to understand, monitor and evaluate its potential current and future wildfire risk and/or outage risk.

Note: As LSPGC has only recently energized one substation, it has no ignition or outage history (PEDS or PSPS). Thus, the risk methodology only includes the risks components relevant to LSPGC’s current operations. As the electrical corporation brings additional equipment online and develops an operational history, the risk components and associated components will expand accordingly.

5.2 Risk Analysis Framework

LSPGC has adopted a generalized risk framework to help enhance its understanding of wildfire hazards, risks and vulnerabilities of its electrical assets across the enterprise, and to use this understanding to inform the decision-making process in developing its 2026-2028 WMP. The wildfire risk framework, as shown in LSPGC Figure 5-1, is based on well-established risk-informed approaches from other relevant fire-safety and disaster risk management sectors, guidance documents, industry best practices and latest research in utility-related wildfire risks.



LSPGC Figure 5-1. Generalized Risk-Informed Framework

As with any risk-informed approach, the process begins with identifying key goals and objectives, selecting and ranking values and/or assets at risk, followed by a multi-step risk assessment – comprised of a hazard analysis, risk scenario development, quantified risk analysis and presentation of the risk – and finally several steps for evaluating the risk assessment outcomes to inform decision-making and management strategy. LSPGC Figure 5-1 depicts this process.

5.2.1 Risk and Risk Component Identification

In anticipation of energizing all its electrical assets described in Section 4 during the 2026-2028 WMP cycle, LSPGC has elected to undertake a quantified wildfire risk assessment, in order to establish a baseline understanding of its wildfire risk profile in the absence of any operational history or existing wildfire mitigation programs.

Given the limited nature of LSPGC's operations, the overall utility risk is solely comprised of wildfire risk as schematically shown in Figure 5-1.

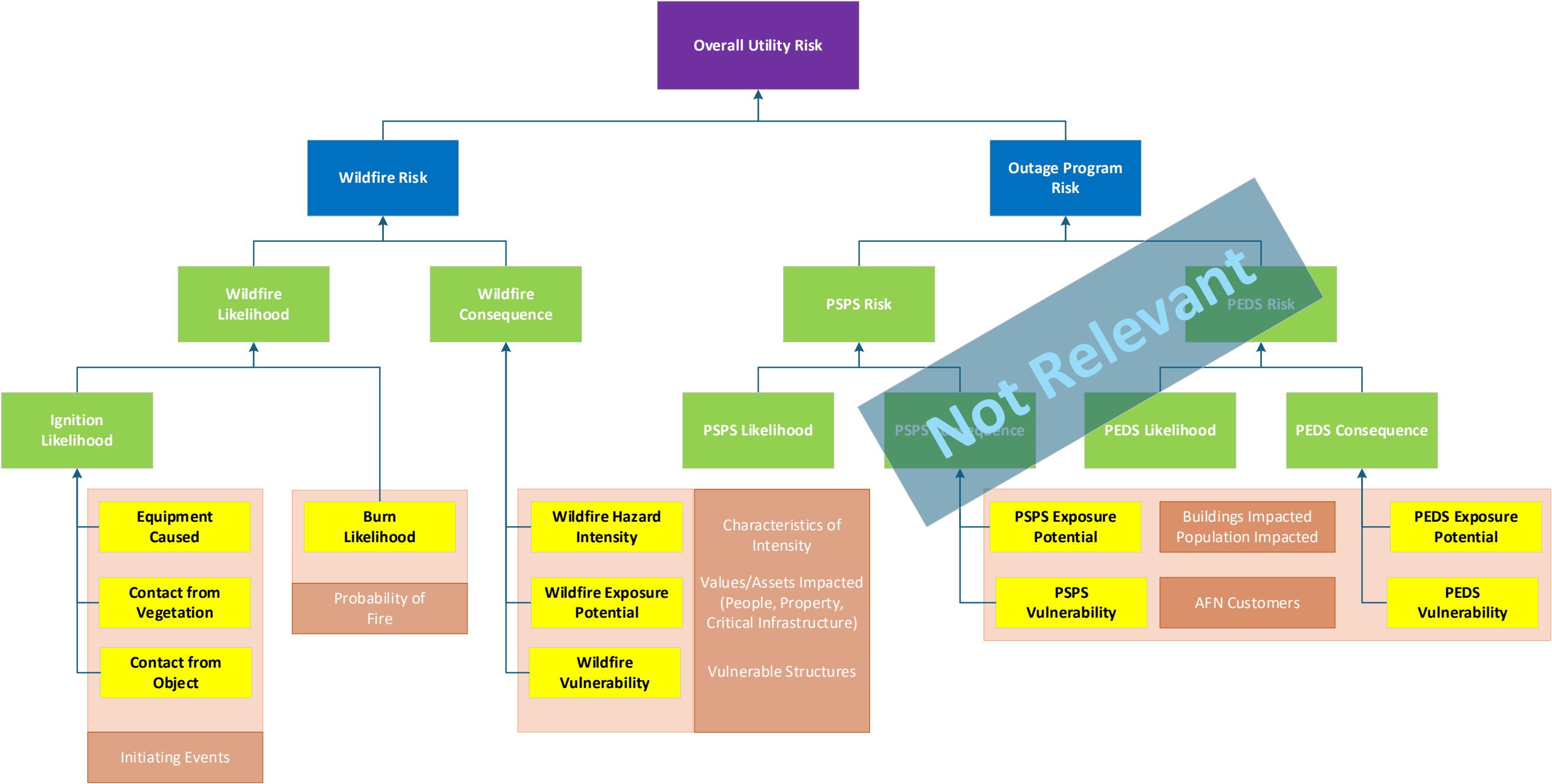


Figure 5-1. LSPGC Risk Analysis Framework

As LSPGC has no ignition history, “wildfire risk” is defined as follows:

- **Wildfire Risk** – The total anticipated impacts from ignition at a specific location. This does not consider the likelihood of ignition nor the likelihood the ignition will become a wildfire as LSPGC has no ignition history. However, wildfire risk does consider the potential consequences – i.e., accounting for hazard intensity, exposure potential and vulnerability – to surrounding landscapes and communities. To estimate potential wildfire impacts, ignitions are assumed to occur equally at all assets (substations and overhead unit miles), and that all ignitions result in wildfire.
- **Outage Program Risk (Not Relevant)**

Wildfire Risk is further broken down into various risk components. These risk components are split into two categories, intermediate and fundamental. Fundamental risk components are the inherent risk components that LSPGC must determine as part of its risk analysis. Intermediate risk components are the likelihood and consequence related to wildfire risk. Each fundamental or intermediate risk component provides valuable insight into LSPGC’s wildfire risk calculations.

There is only one intermediate risk component:

1. **Ignition likelihood (Not Considered)** – LSPGC has no ignition history, and only the Orchard substation is currently energized. Ignitions are assumed to occur for each substation and each unit mile for overhead transmission lines equally.
2. **Wildfire likelihood (Not Considered)** – LSPGC has no ignition or operational history and therefore has no data of wildfire likelihood given an ignition source and resulting fire. For the purpose of the risk analysis, all ignitions are assumed to result in a wildfire given probabilistic weather conditions in the area.
3. **Wildfire consequence** – The total anticipated adverse effects from a wildfire to the surrounding landscapes and communities. This considers the wildfire hazard intensity, the wildfire exposure potential, and the inherent wildfire vulnerabilities of values-at-risk (see definitions in the following list).

There are three fundamental risk components that are currently relevant to LSPGC’s equipment and operational history:

1. **Burn likelihood (Not Considered)** – LSPGC has no fire history therefore has no data of wildfire likelihood given an ignition source. For the purpose of the risk analysis, all ignitions are assumed to result in a wildfire given probabilistic weather conditions in the probabilistic set of weather profiles, vegetation, and topography.

2. **Wildfire hazard intensity** – The potential intensity of a wildfire at a specific location within the service territory given a probabilistic set of weather profiles, vegetation, and topography.
3. **Wildfire exposure potential** – The potential physical, social, or economic impact of wildfire on people, property, critical infrastructure, livelihoods, health, environmental services, local economies, cultural/historical resources, and other high-value assets. These may include direct or indirect impacts, as well as short- and long-term impacts.
4. **Wildfire vulnerability** – The susceptibility of people, community and physical assets to experience adverse effects from a wildfire, including characteristics that influence their implicit or explicit capacity to anticipate, cope with, resist, and/or recover from the wildfire (e.g., AFN, SVI, age of structures, firefighting capacities).

LSPGC has adopted these definitions for its 2026-2028 WMP. Table 5-4 describes how these individual hazard risks, intermediate risk components and fundamental risk components are addressed in the current LSPGC risk model and the future end-state.

LSPGC is currently using a customized fire consequence model and sub-models that incorporates the risk components listed above through Subject Matter Expert (SME) evaluation and validation against past fire behaviors.

5.2.2 Risk and Risk Components Calculation

5.2.2.1 Likelihood of Risk Event

Likelihood of Ignition

Likelihood of ignition is not explicitly considered, as LSPGC only recently energized one substation (Orchard), and thus has no ignition history. Thus, ignitions are conservatively assumed to occur equally for all currently energized substations, future substations and overhead transmission lines per unit-mile.

Burn Likelihood

Burn likelihood is not explicitly considered, as LSPGC only recently energized one substation (Orchard), and thus has no ignition history or wildfire history. Thus, all ignitions are conservatively assumed to result in a wildfire incident.

5.2.2.2 Consequence of Risk Event

Wildfire Consequence

Wildfire consequence is determined based on the combination of fire hazard intensity, wildfire exposure potential and wildfire vulnerability as schematically shown in

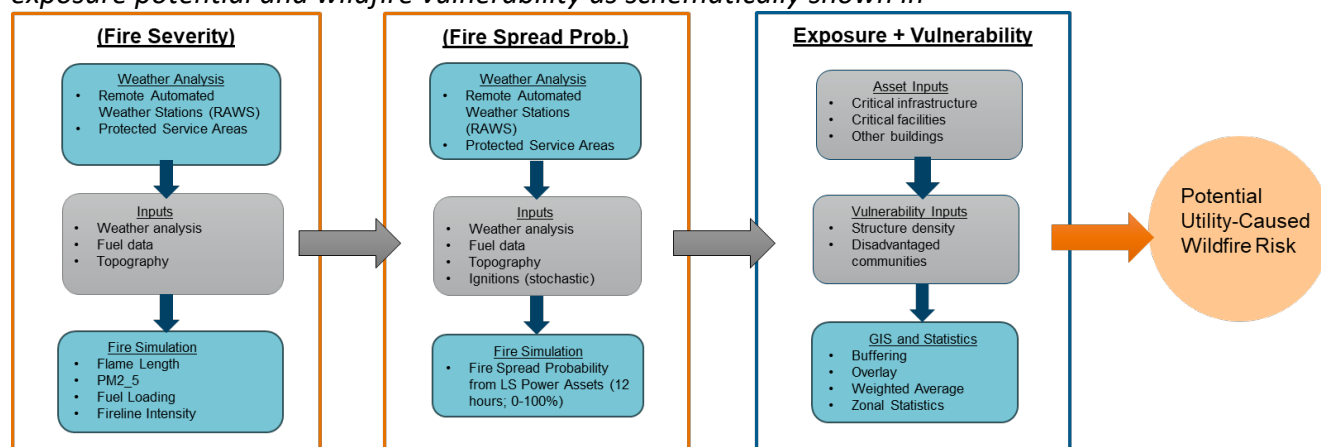


Figure 5-2.

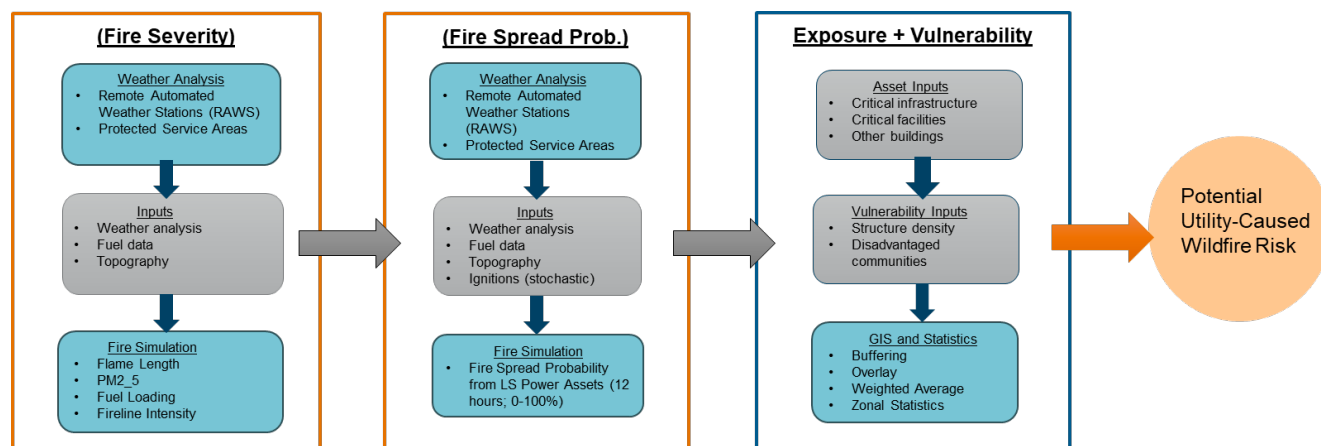


Figure 5-2. LSPGC Wildfire Consequence Calculation Schematic

Wildfire consequences are calculated at the substation-level for all substations and at the unit-mile level for all overhead lines. Wildfire behavior modelling using a variety of publicly and commercially available fire behavior software (e.g., FlamMap) is used to quantify fire severity and fire spread probability.

Wildfire Hazard Intensity

Wildfire hazard intensity is based on fire modelling using probabilistic weather conditions, fuel load data and topography. A variety of landscape-scale, static fire behavior outputs are used to develop a comprehensive fire intensity layer developed by Jensen Hughes.

Wildfire Exposure Potential

Wildfire exposure potential is based on a probabilistic fire spread model, developed by Jensen Hughes and is based on probabilistic weather conditions, fuels, topography and 20-years of stochastic ignitions for each unit-mile and for each substation. This model is used to spatially determine the likelihood of various values-at-risk in the surrounding landscapes and communities proximate to LSPGC's equipment. The assumed values-at-risk include buildings, critical infrastructure, critical facilities and known environmental assets/natural resources.

Wildfire Vulnerability

To approximate potential physical and social vulnerabilities that could impact wildfire consequences proximate to LSPGC's equipment, the wildfire consequence model includes structure density as a proxy for increased susceptibility to structure-to-structure fire spread (i.e., urban conflagration), as well as disadvantage community (DAC) locations as a proxy for social vulnerability. The structure density vulnerability value for each substation and for each unit-mile ranges from 0-1. A value of 1 represents the highest vulnerability to structure-to-structure fire spread and is based on empirical structure separation distances and ignitability. A value of 0 represents no added vulnerability to urban conflagration. A similar range of values are used to represent social vulnerability using the presence of a DAC. In this case, where the DAC is located within a potential fire footprint from a LSPGC caused fire, a value of 1.0 is applied; otherwise, a value of 0 is applied.

5.2.2.3 Risk

As previously discussed, LSPGC's overall utility risk is solely based on wildfire risk as it only recently energized one substation and does not have a history of ignitions, wildfire incidents or operational history implementing outage program risk (with associated PSPS risk or PEDS risk). Refer to Figure 5-1 for schematic representation of overall utility risk.

Wildfire risk is calculated based on the following general formula:

$$Risk = [Fire\ Severity \times Fire\ Spread\ Probability] \times (Exposure + Vulnerability)$$

Where,

- **Fire Severity** – is a linear combination of a variety of static, landscape-scale fire behavior characteristics. Each output is normalized to a 0-5 scale, such that each characteristic is on the same scale. The final combined fire severity layer is then normalized to a 0-5 scale.

- **Fire Spread Probability** – is the estimated probability of fire spread from LSPGC’s assets assuming ignition occurs at each substation and along each unit-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 1-6 (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

- **Projected changes to environmental settings** due to climate change (e.g., fuel type conversions, changes in weather patterns, changes in fire danger days)
- **General equipment failure rates** with functional dependencies by wind, age of equipment, weathering, other types of faults
- **General vegetation-related faults** as a function of species, fire regime, wind speed, etc.
- **General object-contact faults** as a function of cause/type (e.g., animal contact, contact by inanimate object)
- **Localized weather conditions** per substation and by unit-mile for overhead lines
- **Vegetation management activities** by LSPGC and surrounding landowners
- Number, type and spatial arrangement of **high value assets and resources** in proximate communities to LSPGC's equipment
- **Outage risk program** and associated risk components (i.e., PSPS risk and PEDS risk), as relevant.
- Extent, distribution and characteristics of relevant **physical vulnerabilities** of proximate communities and associated assets to LSPGC's equipment.
- Extent, distribution and characteristics of relevant **social vulnerabilities** of proximate communities to LSPGC's equipment.

Table 5-1. Risk Modeling Assumptions and Limitations

Assumption	Justification	Limitation	Applicable Models
The utility risk model does not currently evaluate the effect of adopting mitigation measures on risk reduction. Risk reduction effects of each mitigation measure are evaluated qualitatively.	As LSPGC currently only has one substation energized, it does not have sufficient operational history to quantitatively evaluate the effects of various mitigation measures on risk reduction.	N/A	N/A
The likelihood of ignition is not explicitly considered. Conservatively, ignitions are assumed to occur equally for all currently energized substations, future substations and overhead transmission lines per unit-mile.	LSPGC only recently energized 1 substation (Orchard) and thus has no ignition history (e.g., equipment failure rates, hazard vegetations fault rates).	N/A	Wildfire Risk Model
Burn likelihood is not explicitly considered. Conservatively, all ignitions are assumed to result in a wildfire incident.	LSPGC only recently energized 1 substation (Orchard) and thus has no ignition history or wildfire history.	N/A	Wildfire Risk Model

Assumption	Justification	Limitation	Applicable Models
Static wind conditions based on probabilistic historical data are assumed across the analytical domain by unique Protected Service Area.	Static wind conditions, at landscape scales, are considered standard practice for understanding landscape-scale wildfire behavior modelling for baseline conditions.	Local weather conditions may result in localized severe fire weather conditions. However, the locations where this may be under-conservative will depend on topographic conditions.	Fire Intensity model and Fire Spread Model
Fuels are assumed to be continuous and uniform for the scale of the input data (i.e., 30m resolution)	This is standard practice for wildfire modelling inputs.	N/A	Fire Intensity Model and Fire Spread Model.

Assumption	Justification	Limitation	Applicable Models
Fire characteristics at a point only depends on the conditions at that point (point-functional model). This means that there are certain non-local phenomena like: • Increase of ROS due to a concave front. • Fire interaction between different parts of the same fire or a different one.	This is standard practice for wildfire modelling inputs.	N/A	Fire Intensity Model and Fire Spread Model.
Fire spread is assumed to be elliptical (Rothermel model) although there are several variations such as double ellipse, oval, egg-shape, etc.	This is standard practice for wildfire modelling inputs.	N/A	Fire Intensity Model and Fire Spread Model.
Weather is given hourly and is assumed to remain constant during that time. There is no interpolation in time to compute the evolution of weather between hours.	This is standard practice for wildfire modelling inputs.	N/A	Fire Intensity Model and Fire Spread Model.

Assumption	Justification	Limitation	Applicable Models
Fire is not coupled with the atmosphere in any way. This may seem like a major limitation in the model as wind is a main contribution to fire spread. Coupling of fire and atmospheric conditions is currently in the realm of research, with high levels of uncertainty.	This is standard practice for wildfire modelling inputs.	N/A	Fire Intensity Model and Fire Spread Model.
Gusts are not considered in the model	This is standard practice for wildfire modelling inputs.	N/A	Fire Intensity and Fire Spread Model.
No interaction between slope and wind other than creating an effective or equivalent wind. This means that fire is assumed to have an elliptical shape no matter the alignment of wind and slope.	This is standard practice for wildfire modelling inputs.	N/A	Fire Intensity Model and Fire Spread Model.
Spotting is only considered for crown fires	This is the current limitation of fire behavior models	N/A	Fire Intensity Model and Fire Spread Model.

5.3 Risk Scenarios

LSPGC's risk model considers one (1) design basis scenario for determining its baseline wildfire risk. With the implementation of fire behavior modelling and quantified risk assessment as described in Sections 5.1 and 5.2, LSPGC will be able to conduct long-term risk mitigation planning, monitoring and evaluation of its overall risk levels on a pre-mitigation, post-mitigation, and ongoing risk decision-making basis.

5.3.1 Design Basis Scenarios

The governing design basis scenario for LSPGC's risk analysis closely reflects:

- **Wind Load Condition 3 – Extreme** – 97th percentile wind conditions based on maximum daily values over a 20-year history. This corresponds to a probability of exceedance of 3 percent on an annual basis (i.e., 33.3-year return interval).
- **Weather Condition 2 – Long-Term Conditions** – The statistical weather analysis is representative of fire seasons covering the full 20-year history.
- **Vegetation Condition 1 – Current Fuel Load** – The wildfire intensity and spread models evaluated the current fuel loads where LSPGC's assets reside, including any existing burn scars that reduce the near-term fire hazard

These are summarized in Table 5-2.

Table 5-2. Summary of Design Scenario

Scenario ID	Design Scenario	Purpose
WL1	Wind Load Condition 3	Used in Fire Intensity and Fire Spread models.
WC2	Weather Condition 2	
VC1	Vegetation Condition 1	

5.3.2 Extreme-Event/High Uncertainty Scenarios

LSPGC has only recently energized one (1) substation. No extreme event scenarios are considered for the risk assessment (Table 5-3).

Table 5-3. Extreme Event Scenarios

Scenario ID	Extreme-Event Scenario	Purpose
N/A	N/A	N/A

5.4 Summary of Risk Models

Table 5-4 summarizes the calculation approach for each risk metric and risk component utilized in LSPGC's overall risk assessment.

Table 5-4. Summary of Risk Models

ID	Risk Component	Design Scenario(s)	Key Inputs	Source of Inputs (Data and/or Models)	Key Outputs	Units
R1	Overall utility risk	WL1, WC2, VC1	Wildfire risk (R2)	See related models	Overall utility risk at a substation or by unit-mile.	Unitless
R2	Wildfire risk	WL1, WC2, VC1	Wildfire Consequence (IRC3)	See related models	Wildfire risk at a substation or unit-mile	Unitless
IRC2	Wildfire consequence	WL1, WC2, VC1	Wildfire hazard intensity (FRC5) Wildfire exposure potential (FRC6) Wildfire vulnerability (FRC7)	See related models	Consequence score from 0-6 at a resolution of 30m	Unitless
FRC5	Wildfire hazard intensity	WL1, WC2, VC1	Topography Sustained wind speeds Vegetation	LANDFIRE Weather model LANDFIRE	Intensity of a fire at a 30m x 30m grid	Unitless
FRC6	Wildfire exposure potential	WL1, WC2, VC1	Topography Sustained wind speeds Vegetation Assets-at-Risk	LANDFIRE Weather model LANDFIRE Microsoft, DHS	Number, extent and type of assets exposed (structures, critical facilities and infrastructure) at a 30m resolution	Unitless
FRC7	Wildfire vulnerability	WL1, WC2, VC1	Structures	Microsoft	Spacing of structures	Feet

5.5 Risk Analysis Results and Presentation

This section of the WMP presents a high-level overview of the baseline wildfire risk calculated using the approaches discussed in Section 5.2 for the scenarios discussed in Section 5.3.

5.5.1 Top Risk Areas within the HFRA

LSPGC's transmission footprint is primarily located in non-HFTD areas, with only one substation in a Tier 2 HFTD – Fern Road. See Figure 4-1 for location.

LSPGC does not have any self-identified HFRA's that are outside or deemed at higher risk than the California Public Utilities Commission's (CPUC's) HFTD designations. LSPGC will continue to assess if the HFRA areas need to be identified or HFTD boundaries need adjustment in 2026 and beyond.

LSPGC determines overall utility risk at the unit-mile level via its Wildfire Consequence modelling discussed in Section 5.2.2. The risk models evaluate all LSPGC current and future substations and overhead lines, and rank both asset types by overall utility risk which only includes wildfire risk.

5.5.1.1 Geospatial Maps of Top-Risk Areas within the HFRA

LSPGC determines overall utility risk at the unit-mile level via its Wildfire Consequence modelling discussed in Section 5.2.2. The risk models evaluate all LSPGC current and future substations and overhead lines, and rank both asset types by overall risk. Note: Only the Orchard substation is currently energized and is located in a non-HFTD..

Figure 5-3 shows relative risk levels for the current and future substation and overhead unit-mile. Currently, only Orchard substation is energized. Fern Road substation is planned to be energized by Q1 of 2026, with all other equipment tentatively scheduled for Q3-Q4 of 2028.

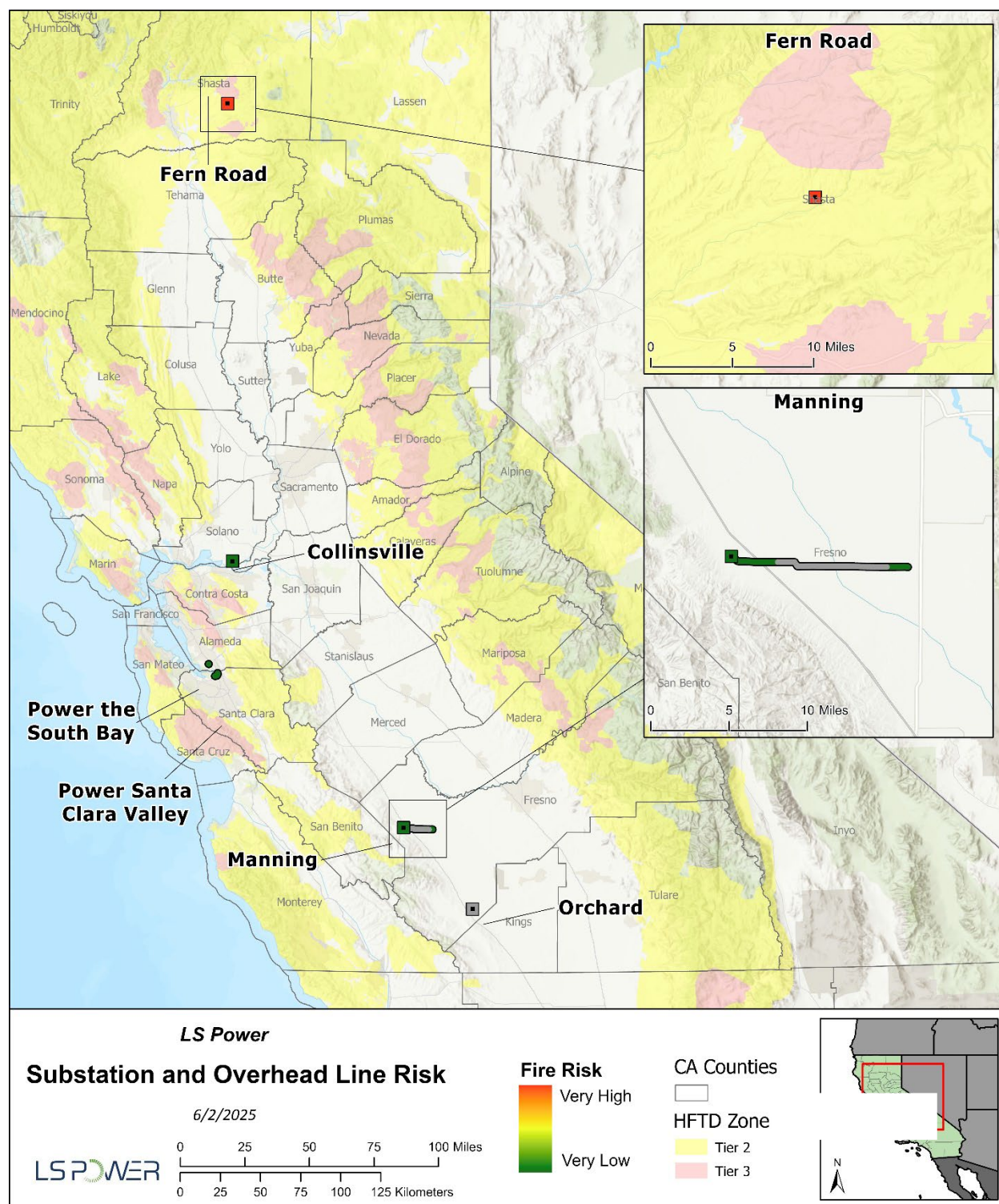


Figure 5-3. Top Risk Assets Across LSPGC assets. No additional HFRA identified.

Fern Road is the only substation located in an HFTD, 2nd Tier, and the only LSPGC asset considered to be in a very high HFRA, from a relative wildfire risk perspective. Comparing the

absolute risk scores, the Fern Road substation is 2 orders of magnitude greater than any other equipment or line. No other LSPGC assets are considered to be in an HFRA. Therefore, ranking risk based on the top %s is not relevant for LSPGC's current or near-term future infrastructure.

5.5.1.2 Proposed Updates to the HFTD

Currently, LSPGC does not see a need for any changes to the HFTD designations for the locations of its assets of which nearly all are located in non-HFTD areas, with the exception of Fern Road substation, which will be located in Tier 2, when it is energized (estimated for Q1 of 2026).

If conditions change, due to changes in land use, vegetation characteristics, or climatological factors that introduce problematic wildfire hazards and risks, LSPGC will propose such changes to the Commission at that time.

5.5.2 Top Risk-Contributing Circuits/Segments/Spans

LSPGC identifies and maps wildfire risk for all its current and near-term future planned substations and overhead unit-miles. Though substations are not typically considered circuits, segments, or spans, LSPGC is including them in the interest of comprehensively displaying wildfire risk of its existing and planned assets. The output of this effort is shown below in Table 5-5.

*Table 5-5. Summary of Top-Risk Circuits, Segments, or Spans***

Risk Ranking	Circuit, Segment, or Span ID	Overall Utility Risk Score	Wildfire Risk Score	Outage Program Risk Score	Top Risk Contributors	Total Miles	Version of Risk Model Used
1	Fern ST	5.00	5.00	N/A	N/A	N/A	N/A
2	Manning ST	0.12	0.12	N/A	N/A	N/A	N/A
3	Manning UM-12	0.08	0.08	N/A	N/A	0.3	N/A
4	Manning UM-11	0.03	0.03	N/A	N/A	1	N/A
5	Manning UM-3	0.02	0.02	N/A	N/A	1	N/A
6	Manning UM-2	0.02	0.02	N/A	N/A	1	N/A
7	Manning UM-1	0.01	0.01	N/A	N/A	1	N/A
8	Collinsville UM-1	0.01	0.01	N/A	N/A	0.8	N/A
9	Collinsville ST	0.00	0.00	N/A	N/A	N/A	N/A
10	POSB UM-1	0.00	0.00	N/A	N/A	1	N/A
11	POSB UM-2	0.00	0.00	N/A	N/A	0.8	N/A
12	POSB UM-3	0.00	0.00	N/A	N/A	0.03	N/A

Risk Ranking	Circuit, Segment, or Span ID	Overall Utility Risk Score	Wildfire Risk Score	Outage Program Risk Score	Top Risk Contributors	Total Miles	Version of Risk Model Used
13	Manning UM-4	0.00	0.00	N/A	N/A	1	N/A
14	Manning UM-5	0.00	0.00	N/A	N/A	1.1	N/A
15	Manning UM-6	0.00	0.00	N/A	N/A	1	N/A
16	Manning UM-7	0.00	0.00	N/A	N/A	1	N/A
17	Manning UM-8	0.00	0.00	N/A	N/A	1	N/A
18	Manning UM-9	0.00	0.00	N/A	N/A	1	N/A
19	Manning UM-10	0.00	0.00	N/A	N/A	1	N/A
20	Orchard ST	0.00	0.00	N/A	N/A	N/A	N/A

**Note: ST – Substation; UM – Unit Mile*

***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 2028.*

5.6 Quality Assurance and Quality Control

LSPGC has utilized third parties such as Jensen Hughes to review and process its data as it pertains to risk. Jensen Hughes uses open, peer reviewed data sets, along with best practices and latest research in quantifying wildfire risk, particularly as LSPGC currently has extremely limited operational history. LSPGC will continue to explore methods to improve its data gathering, QA/QC processes, and independent review of its data, models, and assumptions.

Internally, the LSPGC monitors and gathers data from the CPUC, other utilities, the US Census Bureau, the National Weather Service, and more. LSPGC seeks data from these reliable sources and reviews the data for quality, completeness, relevance to its operations and fit for the purpose to which it is applied.

5.6.1 Independent Reviews

LSPGC has utilized third parties such as Jensen Hughes to review and process its data as it pertains to risk. Jensen Hughes uses open, peer reviewed data sets, along with best practices and latest research in quantifying wildfire risk, particularly as LSPGC currently has extremely limited operational history. LSPGC will continue to explore methods to improve its data gathering, QA/QC processes, and independent review of its data, models, and assumptions.

5.6.2 Model Controls, Design, and Review

The quantified risk assessment as described earlier is based on nationally recognized, publicly available weather analysis tools (e.g., FireFamilyPlus), fire behavior modelling tools (e.g., FlamMap), vegetation/fuel models from the LANDFIRE program, and asset and vulnerability datasets (e.g., US Census Bureau). These tools and datasets are produced, maintained and validated by nationally recognized, federal and state agencies. Each component of the risk assessment is modular and therefore evaluating variations in parameters can be isolated for sensitivity analysis. LSPGC relies on subject matter experts in wildfire risk assessments and fire behavior modelling to ensure that integrity and validity of the various components of the risk assessment. This includes ground-truthing fuel models, validating outcomes of fire behavior outputs from previous fire incidents, etc.

LSPGC will continue to evaluate the quality and reliability of the risk assessment and associated models, inputs and analyses as it develops an operational history. LSPGC relies upon Jensen Hughes to maintain version control, which meets all the requirements set forth by Energy Safety in this section. As previously mentioned, the risk assessment and associated models and software are developed and maintained by nationally recognized tools and data sources, that meet the industry's standards for quality control, verification and validation.

5.7 Risk Assessment Improvement Plan

LSPGC has made significant improvements in its risk assessment capabilities to optimize the identification of areas of highest wildfire risk. These efforts have helped LSPGC better inform its selection of wildfire mitigation initiatives and prioritization as it continues to energize transmission infrastructure over the course of the 2026-2028 WMP cycle. In the past two years, LSPGC has transitioned from a qualitative risk assessment to a quantitative, semi-probabilistic risk modeling capabilities.

- In 2023, LSPGC engaged a third-party consultant to undertake wildfire behavior modelling to understand landscape scale fire characteristics at the Orchard and Fern Road locations. In addition, LSPGC engaged a separate third-party consultant to undertake an independent review of its current and future transmission sites.
- In 2025, LSPGC engaged Jensen Hughes to develop a quantified wildfire risk assessment based on stochastic ignition locations/sources, probabilistic weather, probabilistic wildfire spread, multi-factor wildfire hazard intensity modelling, and integration of potential assets-at-risk in surrounding landscapes and communities.

The following improvements are planned for the quantified risk assessment as LSPGC develops an operational history:

- **Risk Event Tracking** – Developing a database to collect data on wildfire risk drivers as required by Energy Safety for reporting in Table 3-1, and to inform the probability of ignition component for the quantified risk assessment.
- **Wildfire Incident Tracking** – Developing a database to collect data on wildfire history for LSPGC assets including information on ignitions that lead to fire, size of resulting fire, etc.

The following narrative provides a summary of the proposed improvement plan included in Table 5-6.

5.7.1 RA-1-A. Risk Event Tracking

- **Problem Statement** – As LSPGC has only recently energized one substation (Orchard), it does not have any operational history to identify wildfire risk drivers (e.g., sources of ignitions, faults, etc.).
- **Planned Improvement** – LSPGC plans to develop and implement a system for collecting data on wildfire risk drivers and near miss events to help better inform potential

initiating events for wildfires and ultimately identify mitigations measures to reduce those events.

- **Anticipated Benefit** – LSPGC anticipates the benefit of collecting wildfire risk event drivers and near misses will help increase awareness and understanding of potential sources of initiating events for wildfires due to its equipment, identify potential mitigation measures to reduce the likelihood of those events, and eventually use the data to inform the “ignition likelihood” component of the quantified risk assessment.
- **Region prioritization (where relevant)** – As LSPGC has only one energized asset (Orchard), the proposed improvement measure will not have a region prioritization element at this time.

5.7.2 RA-1-B. Wildfire Incident Tracking

- **Problem Statement** – As LSPGC has only recently energized one substation (Orchard), it does not have any operational history that have led to wildfire incidents or near miss events.
- **Planned Improvement** – LSPGC plans to develop and implement a system for collecting data on wildfire/fire incidents and near miss events to help better inform the potential for catastrophic wildfires across its equipment locations, and the associated technical and programmatic areas of improvement for these types of events.
- **Anticipated Benefit** – LSPGC anticipates the benefit of collecting wildfire/fire incident details and near misses will help increase awareness and understanding of the potential for catastrophic wildfires due to its equipment and operational practices, identify potential mitigation measures to reduce the likelihood of catastrophic events, and eventually use the data to better inform the “burn likelihood” component of the quantified risk assessment.
- **Region prioritization (where relevant)** – As LSPGC has only one energize asset (Orchard), the proposed improvement measure will not have a region prioritization element at this time.

Table 5-6. LSPGC Risk Assessment Improvement Plan

Key Risk Assessment Area	Proposed Improvement	Type of Improvement	Expected Value Add	Timeframe and Key Milestones
RA-1-A. Risk Event Tracking	As LSPGC has only recently energized one substation (Orchard), it does not have any operational history to identify wildfire risk drivers (e.g., sources of ignitions, faults, etc.)	LSPGC plans to develop and implement a system for collecting data on wildfire risk drivers and near miss events to help better inform potential initiating events for wildfires and ultimately identify mitigations measures to reduce those events.	LSPGC anticipates the benefit of collecting wildfire risk event drivers and near misses will help increase awareness and understanding of potential sources of initiating events for wildfires due to its equipment, identify potential mitigation measures to reduce the likelihood of those events, and eventually use the data to inform the “ignition likelihood” component of the quantified risk assessment	2026: Full deployment for logging risk drivers and near-miss events at Orchard Substations by end of Q4. 2027: Use collected data to enhance ignition likelihood decision making; develop QA/QC standards and internal reporting by end of Q2. 2028: Evaluate tracking system performance and integrate findings into mitigation strategies and 2029 WMP planning.

Key Risk Assessment Area	Proposed Improvement	Type of Improvement	Expected Value Add	Timeframe and Key Milestones
RA-1-B. Wildfire Incident Tracking	As LSPGC has only recently energized one substation (Orchard), it does not have any operational history that have led to wildfire incidents or near miss events.	LSPGC plans to develop and implement a system for collecting data on wildfire/fire incidents and near miss events to help better inform the potential for catastrophic wildfires across its equipment locations, and the associated technical and programmatic areas of improvement for these types of events.	LSPGC anticipates the benefit of collecting wildfire/fire incident details and near misses will help increase awareness and understanding of the potential for catastrophic wildfires due to its equipment and operational practices, identify potential mitigation measures to reduce the likelihood of catastrophic events, and eventually use the data to better inform the “burn likelihood” component of the quantified risk assessment.	2026: Launch incident classification and data capture process across all operational sites by end of Q4. 2027: Correlate incident data with mitigation effectiveness and environmental factors by end of Q2. 2028: Use data to inform wildfire and emergency planning updates by end of Q4.

6. Wildfire Mitigation Strategy

6.1 Risk Evaluation

6.1.1 Approach

The risk evaluation approach in this WMP is designed to meet a range of industry-recognized standards (e.g., International Organization for Standardization [ISO] 31000), best practices, and research to determine a wildfire mitigation strategy. The intent is to use this approach to help inform LSPGC's development of a portfolio of wildfire mitigation initiatives and activities that meet the goals and objectives stated in Section 3.1 and Section 3.2 of this WMP. LSPGC Figure 5-1 depicts the framework used in LSPGC's approach. Once the risk assessment is completed the following general steps are conducted:

- Risk Evaluation
 - Compare results of risk analysis with risk goals and objectives
 - Determine if risk and/or its magnitude is acceptable or tolerable
- Risk Mitigation and Management
 - Identify appropriate risk management strategies
 - Identify portfolio of risk mitigation initiatives and prioritizations
 - Identify detailed design, implementation, operations and long-term maintenance of mitigations
 - Monitor and evaluate mitigations

6.1.2 Risk-Informed Prioritization

In making risk mitigation decisions, LSPGC has identified and evaluated where it can make investments and take actions to reduce its overall utility risk. LSPGC developed a prioritization list based on overall utility risk presented in Table 5-5. This is presented in Table 6-1. LSPGC will institute mitigation measures at all assets to reduce risk; the Fern Road Substation, once energized, is currently classified as top priority for greatest identified risk.

Table 6-1. List of Prioritized Areas in LSPGC Service Territory Based on Overall Utility Risk

Priority	Circuit Segment and/or Span ID	Length (miles)	Overall Utility Risk	Wildfire Risk	Outage Program Risk	Percent of Overall Utility Risk	Associated Risk Drivers
1	Fern Substation	N/A Substation Only	5.00	5.00	N/A	94.0%	Transformer Failure Other Equipment Failures
2	Manning Substation	Substation and 4.3 miles OH	0.12	0.12	N/A	5.0%	Transformer Failure Other Equipment Failures Contract to Energized Equipment by Foreign Objects

6.1.3 Activity Selection Process

LSPGC is in the process of creating and implementing more formal processes to identify and select appropriate wildfire mitigation activities and to monitor the implementation of the WMP. In the following subsections, LSPGC describes how it will approach these strategies for each of the following time periods: once operational, annually, and within 3 years.

6.1.3.1 Identifying and Evaluating Activities

LSPGC has focused on the state of the company (newly operational with one asset) as well as the nature of the facilities themselves (existing and nearly completed substations as well as future planned transmission lines) combined with the results of the risk assessment performed in Section 5 of this WMP to identify and evaluate mitigation initiative activities. Initiatives selected focused on continuing to create and mature operating practices as well as implementing common mitigation techniques to reduce risk at all substations, but particularly in substations located in identified HFTDs. Many typical wildfire mitigation activities are geared towards distribution equipment and circuits, making them not applicable to LSPGC.

While LSPGC does not currently have formal procedures to identify and evaluate mitigation activities, the following factors are used informally to determine the universe of potential activities:

- Applicability transmission equipment
- Applicability to substations
- Ability to tailor activity to HFTD (e.g. increased vegetation management)
- Technical feasibility
- Cost
- Implementation schedule
- Environmental/permitting impacts
- Fit within existing project designs

For example, LSPGC's substation inspection activity (GD-02) is planned to occur on a monthly basis at all sites. While substation inspections are a common practice across the utility industry, there are many times they are performed at a frequency of less than monthly. Given the size of LSPGC's expected footprint over the majority of the 2026-2028 WMP cycle, it was determined that performing monthly inspections at all stations could be accomplished with currently planned resources while providing meaningful risk reduction

6.1.3.2 Activity Prioritization

LSPGC lacks a meaningful operational history to help establish baseline risk. Therefore, for initial prioritization purposes, the results of previous and current risk assessments are the primary drivers for activity prioritization. Because LSPGC currently does not have PSPS risk, the prioritization was limited to wildfire risk. As the HFTD substation (Fern Road) represents the bulk of LSPGC's wildfire risk, activities that are applicable to substations were prioritized. Once LSPGC gains more operating experience, additional data points for prioritization of mitigation initiatives will be available in the future, including consideration of stakeholder feedback.

Risk assessments performed by LSPGC have identified the Fern Road substation as the location of highest risk, with equipment failure (transformer) identified as a low-probability, but realistic potential of ignition source. Mitigation activities which would reduce risk in these areas were given the highest priority. For example, activities EP-01 (update System Restoration Plan to include Fern Road substation), GD-03 (Transformer Dissolved Gas Analysis Tests), GD-06 (HFTD safety training), and VM-01 (defensible space inspections) were all considered high priority activities directly related to risk reduction at Fern Road.

Additionally, LSPGC has proposed some mitigation activities (GD-01 and SAF-02) which involve investigating new technologies or system enhancements to better understand their application, costs, and risk impact as relevant to LSPGC's assets. These activities will help LSPGC mature its future mitigation activity prioritization.

6.1.3.3 Activity Scheduling

LSPGC is currently implementing processes to monitor implementation of the WMP. Initiatives will be scheduled based on their frequency and applicability with regards to construction versus operational status. For example, LSPGC currently has an operational substation, but will not have operational transmission lines until very late in the current WMP cycle therefore activities relevant to substations will take scheduling priority. Similarly, the first asset located in the HFTD is expected to be operational early in the WMP cycle so those high priority activities tailored to HFTD substation risk reduction will also receive scheduling priority. Below, LSPGC describes how it will approach activity scheduling for activities impacting the below asset categories scenarios:

- **HFTD Substation:** Mitigation activities directly applicable to the Fern Road substation receive the highest scheduling priority.
- **All Other Substations and Operational System:** Mitigation activities applicable to any other substations and general operational systems receive the second scheduling priority.

- **Transmission Lines:** Mitigation activities applicable to transmission lines receive the third scheduling priority.

LSPGC did not determine a need for any interim mitigation initiatives as it has not identified any long-lead time activities.

Effectiveness of each initiative will be evaluated on a case by case basis. Most Initiatives will be evaluated based on a binary result of yes or no regarding if they were accomplished. When applicable, a statistical analysis can be done to measure progress and if the initiative is on track based on the initiative targets listed throughout the WMP. LSPGC does not have adequate historical operational data in order to quantify risk reduction effectiveness of discrete activities.

6.1.3.4 Key Stakeholders for Decision-Making

Stakeholder groups involved in the decision-making process are listed in Table 6-2.

Table 6-2. Stakeholder Roles and Responsibilities in the Decision-Making Process

Stakeholder	Stakeholder Point of Contact	Electrical Corporation Point of Contact	Stakeholder Role	Engagement Methods	Mitigation Initiative Activity	Level of Engagement for Mitigation Initiative Activity
LSPGC Business Leadership	Director, Asset Management	Associate Manager, Wildfire Mitigation	•Provides guidance and decision making on wildfire mitigation near and long-term planning •Informed on wildfire mitigation execution status •Informed and provides guidance on strategy/risk prioritization methodologies	Monthly Internal Meetings	All	Internal

Stakeholder	Stakeholder Point of Contact	Electrical Corporation Point of Contact	Stakeholder Role	Engagement Methods	Mitigation Initiative Activity	Level of Engagement for Mitigation Initiative Activity
Office of Energy Infrastructure Safety (OEIS or Energy Safety)	OEIS Deputy Director, Director of OEIS	Principal Manager, Regulatory Affairs & Compliance - State Regulatory Relations	• Defines WMP requirements • Participates and provides guidance in working groups • Reviews wildfire mitigation plan submissions and provides feedback, areas for continuous improvement, and issues approval or denial of plan	• Written comments • Ad hoc meetings	All	Local
Local Fire Agencies (includes Cal FIRE)	Various California Fire Chiefs	LSPGC Health, Safety, and Environmental Manager	Consulted	Ad hoc meetings	All	Local

6.2 Wildfire Mitigation Strategy

LSPGC does not have a service territory, so the selection of mitigation initiatives considered the current planned assets and their respective locations. Near-term initiatives and associated activities focus on the transition from construction to operations and the implementation of operating practices with priority given to the HFTD substation.

The initiatives chosen were selected to reduce overall wildfire risk and establish robust operating practices. Initiatives related to design were generally not pursued because the initial design of the assets, the age of the assets (new or yet-to-be built), and the nature of its transmission facilities results in LSPGC's equipment being inherently hardened against wildfire risk.

LSPGC did not determine a need for any interim mitigation initiatives. Described below is an overview for each initiative category.

Grid Design, Operations, and Maintenance:

LSPGC selected multiple initiatives in this category to further its priority goal of reducing wildfire risk in the HFTD, including risk events specific to potential equipment failures. The investigation of protection system enhancements (GD-01), monthly substation inspections (GD-02), Dissolved Gas Analysis Tests for transformers (GD-03) and HFTD safety training (GD-06) are all directly related to risk reduction at the Fern Road HFTD site. In addition, the incorporation of maintenance work orders into Maximo (GD-04) and the annual review and update of grid operations procedures (GD-05) are further to LSPGC's goal to continue to mature operational capabilities.

Vegetation Management:

Given LSPGC will have only substation assets for the majority of the 2026-2028 WMP cycle, the priority vegetation management activity is the substation defensible space monthly inspections (VM-01). Other vegetation management activities will be phased in ahead of the energization of transmission line assets expected to occur in the second half of 2028.

Situational Awareness and Forecasting:

LSPGC has identified three prongs to its approach to situational awareness and forecasting initiatives. The first is expanding these capabilities to future planned sites (SAF-01, SAF-03, SAF-05). The second is focused on maintaining reliability and capability at existing sites (SAF-04). The third prong of the approach is investigation of additional capabilities that may be appropriate for LSPGC to help further reduce risks in the future (SAF-02).

Emergency Preparedness:

LSPGC's has identified one priority initiative for Emergency Preparedness to update its System Restoration Plan (EP-01) to include the HFTD Fern Road substation. Additional activities (EP-02 and EP-03) are geared toward maturing and maintaining communications related to emergency preparedness.

Enterprise Systems:

LSPGC has six initiative activities related to enterprise systems. These include the expansion of Maximo for Asset Management (GD-04), evaluation and potential use of ignition detection systems (SAF-02), expansion of system weather forecasting capabilities (SAF-05), vegetation management enterprise system integration (ENT-01), maintaining grid monitoring capability throughout system expansion (ENT-02), and the development of dashboards for risk prioritization (ENT-03). Table 12-1 provides a summary list of mitigation initiatives.

6.2.1 Anticipated Risk Reduction

LSPGC describes its wildfire mitigation strategy, including the process it uses to select mitigations, and any interim mitigation initiatives in Sections 6.1 and 6.2.2 respectively

Section 5 of this document provided the process by which LSPGC established a risk-ranking of current and planned facilities to focus mitigation initiatives on those areas with the highest potential wildfire consequences. An anticipated risk reduction is not calculated at this time for the following reasons:

- Orchard Substation is not in an HFTD, and therefore all the mitigations that are provided satisfy statutory requirements and best practices for fire safety. The substation is not deemed to be at risk, and therefore identifying anticipated risk reduction is not relevant.
- Fern Rd Substation is in a 2nd Tier HFTD that is planned for energization in Q1 of 2026. As this location is yet to be completed, estimates for risk reductions will need to be evaluated as the construction is completed and LSPGC has more certainty on site conditions and details for specific mitigations and associated risk reductions. This evaluation can be submitted as part of the 2026 WMP Update, in accordance with the completion of the construction schedule.
- All other planned sites and overhead lines are not at a stage where anticipated risk reductions can be determined. This will need to be evaluated as these sites and infrastructure are designed.

6.2.1.1 Projected Overall Risk Reduction

As assets in HFTDs or HFRAAs are constructed, risk naturally increases. For current and planned LSPGC assets in HFTDs or HFRAAs (i.e., Fern Rd substation estimated for Q1 of 2026)– the only planned equipment in a HFTD) construction mitigations, such as a Construction Fire Prevention Plans (CFPPs), will reduce anticipated risks during this period.

When assets become operational, regular data collection (Section 5.7) will help quantify the amount of risk as a function of time. Planned mitigation initiatives will be implemented immediately upon operations, truncating the period of potential higher risk. Projected overall risk is anticipated to remain constant over time unless there is a measurable change in environmental conditions. Refer to Section 6.2.1 above for a more detailed narrative on anticipated risk reduction approaches for LSPGC infrastructure. A figure is not currently provided.

6.2.1.2 Risk Impact of Activities

As discussed in Section 6.2.1, there is currently no risk impact for Orchard substation and risk impact assessment of activities for future planned sites and transmission lines will be developed at that time. Table 6-3 is not applicable at this time.

6.2.1.3 Projected Risk Reduction on Highest-Risk Circuits Over the Three-Year WMP Cycle

In accordance with the WMP Guidelines, the reporting requirements of this section do not apply to ITOs.

Table 6-4. Summary of Risk Reduction for Top-Risk Circuits

Circuit, Segment, or Span ID	Initial Overall Utility Risk	2026 Initiative Activities	2026 Overall Utility Risk	2027 Initiative Activities	2027 Overall Utility Risk	2028 Initiatives Activities	2028 Overall Utility Risk
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

6.2.2 Interim Mitigation Initiatives

LSPGC did not determine the need for any interim mitigation initiatives as robust system hardening designs are being used and other mitigation measures will be in place from the start during both construction and operations.

7. Public Safety Power Shutoff

LSPGC is an ITO and does not own, operate, or maintain electric distribution facilities. The Orchard Substation does not include reclosers or any other distribution equipment. As noted in Section V of the 2026-2028 WMP Technical Guidelines, Table 3, ITO Modified Reporting Requirements, ITOs do not have end-use customers. Energy Safety notes that ITOs must comply with Public Utilities Code section 8386(c)(8). However, beyond that, reporting requirements associated with Section 7 of the 2026-2028 WMP Technical Guidelines do not apply to ITOs.

LSPGC has never deployed a PSPS since operations began at the Orchard Substation. As LSPGC's transmission system continues to expand, it will continue to evaluate the potential need for formalized PSPS procedures.

8. Grid Design, Operations, and Maintenance

8.1 Targets

LSPGC's targets in the areas of Grid Design, Operations, and Maintenance are detailed in the sections below. 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 mid to late 2028.

8.1.1 Qualitative Targets

Initiatives that have qualitative targets in the Grid Design, Operations, and Maintenance category are listed in Table 8-1 below.

8.1.2 Quantitative Targets

Initiatives that have quantitative targets in the Grid Design, Operations, and Maintenance category are listed in Table 8-1 below.

Table 8-1. Grid Design, Operation, and Maintenance Targets by year

Initiative	Quantitative or Qualitative Target	Activity (Tracking ID #)	Previous Tracking ID (if applicable)	Target Unit	2026 Target / Status	% Planned in HFTD for 2026	% Planned in HFRA for 2026	% Risk Reduction for 2026	2027 Target / Status	% Planned in HFTD for 2027	% Planned in HFRA for 2027	% Risk Reduction for 2027	2028 Target / Status	% Planned in HFTD for 2028	% Planned in HFRA for 2028	% Risk Reduction for 2028	Three-year total	Section; Page number
Grid Design and System Hardening	Qualitative	Investigate advanced protection system enhancements for potential inclusion in project design (GD-01)	N/A	N/A	Begin review and investigation	0	0	N/A	Complete investigation	0%	0	N/A	Implement design if applicable	0.00%	0%	N/A	N/A	8.2.8; 67
Asset Inspections	Quantitative	Monthly Substation Inspections (GD-02)	N/A	# of inspections	21	50%	N/A	67%	24	50%	N/A	67%	24	50%	N/A	67%	69	8.3.2;70
Equipment Maintenance and Repair	Quantitative	Dissolved Gas Analysis Test at energized transformers (GD-03)	N/A	# of inspections	Q4 / 3	N/A	N/A	N/A	Q4 / 6	50%	N/A	N/A	Q4 / 6	N/A	N/A	N/A	15	8.4.11;81
Work Orders	Qualitative	Use Maximo to manage assets, inspections, and maintenance (GD-04)	N/A	N/A	initial system configuration	N/A	N/A	N/A	Expanded asset coverage	N/A	N/A	N/A	QA/QC reporting enhancement	N/A	N/A	N/A	N/A	8.6; 90

Initiative	Quantitative or Qualitative Target	Activity (Tracking ID #)	Previous Tracking ID (if applicable)	Target Unit	2026 Target / Status	% Planned in HFTD for 2026	% Planned in HFRA for 2026	% Risk Reduction for 2026	2027 Target / Status	% Planned in HFTD for 2027	% Planned in HFRA for 2027	% Risk Reduction for 2027	2028 Target / Status	% Planned in HFTD for 2028	% Planned in HFRA for 2028	% Risk Reduction for 2028	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	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	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	8.6;90

Note Timelines may be accelerated based on commissioning of assets

8.2 Grid Design and System Hardening

8.2.1 Covered conductor installation

LSPGC currently has no transmission or distribution lines. While transmission lines are planned for 2028, covered conductor is typically a hardening strategy for distribution equipment and is not appropriate for LSPGC's planned overhead extra high voltage (EHV) transmission.

8.2.2 Undergrounding of electric lines and/or equipment

LSPGC currently has no transmission or distribution lines. LSPGC is designing some of its future transmission line projects as underground lines. However, this is being done as part of the original project design to facilitate line routing in an urban area and is not a retrofit of existing infrastructure. The reduction in fire risk will be realized upon in-service of these projects which is anticipated to occur in 2028.

8.2.3 Distribution pole replacements and reinforcements

This is not applicable. LSPGC is a transmission-only company and will not own distribution equipment.

8.2.4 Transmission pole/tower replacements and reinforcements

LSPGC does not currently have any poles or towers to reinforce, and its first poles and towers are scheduled to be newly installed in 2028.

8.2.5 Traditional overhead hardening

LSPGC does not currently have any overhead lines to harden, and its first poles and towers are scheduled to be newly installed in 2028.

8.2.6 Emerging grid hardening technology installations and pilots

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.

8.2.7 Microgrids

This is not applicable. LSPGC is a transmission-only company that does not generate electricity or serve customers.

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 established 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.

8.3 Asset Inspections

Table 8-2 provides a summary of the asset inspections LSPGC conducts. Figure 8-1 depicts the general asset management and inspection workflow

Table 8-2. Asset Inspection Frequency, Method, and Criteria

Type	Inspection Activity (Program)	Frequency or Trigger (Note 1)	Method of Inspection (Note 2)	Governing Standards & Operating Procedures	Cumulative Quarterly Target 2026, Q1	Cumulative Quarterly Target 2026, Q2	Cumulative Quarterly Target 2026, Q3	Cumulative Quarterly Target 2026, Q4	Cumulative Quarterly Target 2027, Q1	Cumulative Quarterly Target 2027, Q2	Cumulative Quarterly Target 2027, Q3	Cumulative Quarterly Target 2027, Q4	Cumulative Quarterly Target 2028, Q1	Cumulative Quarterly Target 2028, Q2	Cumulative Quarterly Target 2028, Q3	Cumulative Quarterly Target 2028, Q4	% of HFRA and HFTD Covered Annually by Inspection Type	Condition Find Rate Level 1	Condition Find Rate Level 2	Condition Find Rate Level 3
Transmission	Inspection	Annual	Ground, Aerial	GO 165, LS Power Grid maintenance plan Appendix one, Rev. 2	0	0	0	0	0	0	0	0	0	0	1	1	N/A	N/A	N/A	N/A
Substation	Detailed	Monthly	Ground	GO 165, LS Power Grid maintenance plan	3	9	15	21	6	12	18	24	6	12	18	24	50%	N/A	N/A	N/A

Inspections will be scheduled as assets are commissioned and may not follow the cumulative target, targets will be updated accordingly.

8.3.1 Transmission Inspection

8.3.1.1 Overview

LSPGC Field Operations personnel and qualified contractors will perform line patrol inspections by visually inspecting applicable utility equipment and structures. Inspections will be conducted by experienced and trained individuals. The ground inspection is designed to visually inspect transmission structures and components. This process complies with California General Orders 95 and 165, and inspections will comply with General Industry Safety Orders 12, 13, 36, 37, and 38. Inspectors will document their findings in the system record and submit them to LSPGC management.

8.3.1.2 Frequency or Trigger

On commissioned energized assets, inspections of the transmission lines will occur on a 5-year cycle, a minimum of 20% of structures shall be inspected per year and following any significant system disruption while following all applicable statutory codes and regulations.

Inspections are conducted post-disruption event as soon as possible based on appropriate safety protocols, with resources mobilized urgently based on severity and impact scope, prioritizing critical infrastructure and high-risk zones. At this time, LSPGC has no planned transmission line projects located in the HFTD and contemplates treating transmission inspections with equal priority.

8.3.1.3 Accomplishments, Roadblocks, and Updates

LSPGC does not anticipate having energized transmission lines until mid-2028 at the earliest, therefore this inspection program was not included in LSPGC's previous WMP. This inspection program represents a new entry into the WMP and for these reasons there have been no accomplishments or roadblocks observed.

8.3.2 Substation Detailed Inspections (Tracking ID GD-02)

8.3.2.1 Overview

LSPGC Field Operations personnel and qualified contractors will perform patrol inspections by visually inspecting applicable utility equipment and structures every month. Inspections will be conducted by experienced and trained individuals. The monthly patrol is designed to visually inspect major substation equipment and miscellaneous equipment, including breakers, switches, current transformers, rigid bus, strain bus, fence, yard condition, foundations, etc. This process complies with California Fire Code Title 24, Part 9 and California General Order 174, and inspections will comply with General Industry Safety Orders 12, 13, 36, 37, and 38.

Inspectors will document their findings in the system of record and submit them to LSPGC management.

8.3.2.2 Frequency or Trigger

Inspections of the facility and equipment will occur monthly. Additional inspections are conducted post-disruption event as soon as possible based on appropriate safety protocols, with resources mobilized urgently based on severity and impact scope. For these inspections, resource priority will be given to LSPGC's substation located in the HFTD if necessary.

8.3.2.3 Accomplishments, Roadblocks, and Updates

LSPGC successfully implemented this routine substation inspection program in 2025 without any observed roadblocks. There have been no material changes to this program since LSPGC's prior WMP and LSPGC will continue to review future opportunities for enhancement as more operational experience is gained.

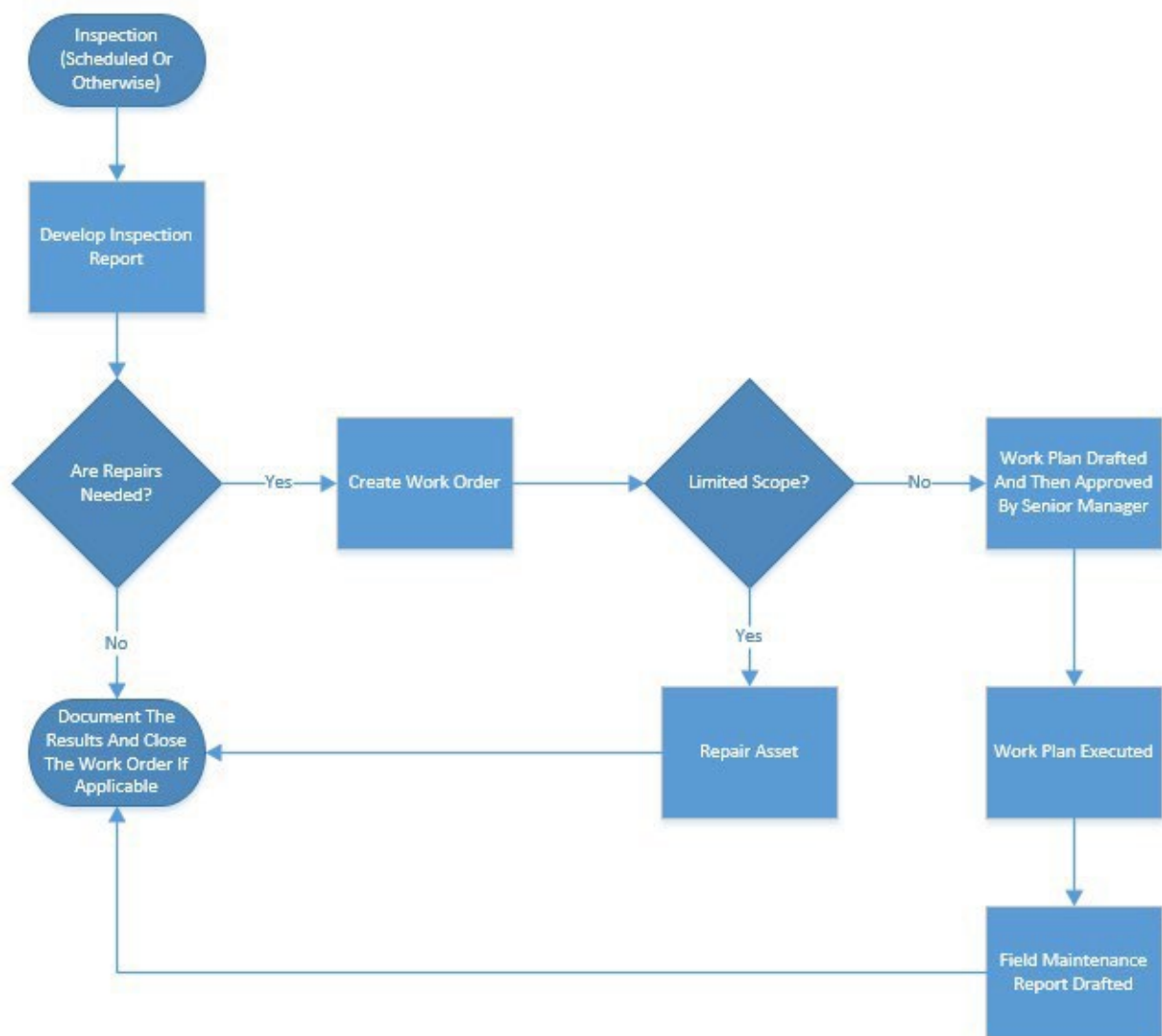


Figure 8-1. Asset Management and Inspections Workflow

8.4 Equipment Maintenance and Repair

In addition to the inspections described in Section 8.3, Asset Inspections, LSPGC will perform in-depth testing and analysis on major substation equipment based on industry best practices and manufacturer recommendations. For most equipment, LSPGC uses the results of maintenance testing and operational history to inform the ultimate decisions regarding repair or replacement of equipment (Figure 8-1). Given that the LSPGC system is comprised of new assets, it will likely be many years before the need to replace equipment due to age.

LSPGC's California Independent Systems Operator (CAISO) approved maintenance practices for major equipment are described in the subsections below. Specifically discussed are the following:

- **Condition monitoring:** a description of how the electrical corporation monitors the condition of the equipment (e.g., human visual inspection, automated visual inspection, human sensor readings, automated sensor readings).
- **Maintenance strategy:** identification and brief description of the maintenance strategy (e.g. reactive, preventative, predictive, reliability-centered).
- **Replacement/repair condition:** a description of how equipment is identified for repair or replacement (e.g., time interval, inspection finding, sensor reading, predictive maintenance, data analytics, machine learning).
- **Timeframe for remediation:** a list of possible conditions and findings, including the priority level and associated timeframes for remediation of each.

The following topics are not applicable to LSPGC since the equipment has not experienced failures or ignitions at this point.

- Failure rate
- Ignition rate
- Failure and ignition causes

8.4.1 Capacitors

To ensure continued reliability and performance, the capacitor system undergoes two levels of upkeep. First, a monthly visual inspection covers every capacitor bank and its associated components. Maintenance personnel document the condition of electrical connections, hardware torque, surface integrity (checking for damage, corrosion, or oil leaks), and the state of isolators, MOVs, damping reactors, TAG enclosures, electrodes, bushings, and louvers. The

bypass circuit breaker is also checked according to its own maintenance procedures. All findings are recorded on a standardized monthly inspection form.

Second, once per year a comprehensive maintenance regimen is performed on the entire compensation system. In addition to repeating the visual inspection items, technicians verify hardware torque and measure capacitance on sample capacitors, test MOV mounting torque, and characterize damping reactor and resistor windings through DC resistance and inductance measurements. Where triggered air gaps are in service, gap settings are checked and adjusted as needed, TAG capacitance is measured, and varistor energy-absorption and current-handling capabilities are quantified via analog/pulse tests and counter logs. Trigger-circuit and plasma-injector functionality are also validated at both positive and negative ten-kilovolt levels.

By combining these monthly visual checks with annual in-depth testing and corrective maintenance, the Substation Series Compensation System remains both safe and effective. This dual-tiered approach minimizes the risk of unplanned outages, protects against overvoltage damage during faults, and preserves the long-term integrity of critical transmission-line support equipment.

This is a time-based, periodic preventive maintenance strategy. By scheduling basic visual inspections every month and then performing more in-depth testing and servicing once a year, we can catch early signs of wear or faults before they lead to failures, while also ensuring that critical components are fully tested and refreshed on a regular cadence.

LSPGC employs a priority scale of 0-3. A priority of zero would necessitate a repair within 4 weeks of finding the issue. A priority of one would necessitate a repair from 4 weeks to 1 year of the finding. A priority of two would necessitate a repair of 1-3 years of the finding. And a priority of three would be an issue that is not imminent, and repair timeframe is greater than 3 years if not prescribed monitoring for further degradation which would necessitate the priority to be escalated.

During the monthly and annual inspections, certain defects signal an elevated risk of imminent failure and would score a priority of zero which should be addressed within about four weeks to avoid unplanned outages or equipment damage. Some examples of findings that would necessitate a zero priority would be oil leaks or seepage at capacitor joints, cracked or chipped porcelain on bushings and insulators, hardware torque drift beyond tolerance, excessive MOV Leakage Current or Elevated Temperature, misadjusted or non-triggering TAG gaps, low insulation resistance or high dissipation factor, significant corrosion, bypass breaker mechanical or trip-circuit anomalies.

Issues found that should be addressed as a priority one, within 4 weeks and 1 year of the finding, are issues that are not imminently destructive but still require correction in the medium term to prevent accelerated wear or reliability degradation. Some examples of findings that would score a priority of one include more minor surface corrosion or flaking paint, a more slight drift in TAG or MOV performance, a gradual rise in dissipation factor, loose or worn non-critical hardware, minor contamination of insulator surfaces, and early signs of louver or vent blockage in TAG enclosures.

More minor issues scoring a priority of two, address within 1 and 3 years of the finding, are considered “slow-burn” types of issues that provide time before action is necessary to log and group together with other issues found for a more optimized and bundled project. Some of these issues would include fading paint, a steady but within-tolerance drift in sample capacitance or rising tan-delta indicating aging dielectric, mild oil discoloration in oil-filled components, shallow oxidation on ground-grid straps, and early wear on motor-operator gears.

Issues that fall into a longer-term priority score (3+ year) are those tied to end-of-life replacement cycles, major capital refurbishments, or system-wide upgrades that can be budgeted and executed as part of broader projects. Examples include fully replacing the capacitor bank when its cumulative service life and number of fault interruptions approach design limits, structural work and foundation issues, and any full equipment end of life replacement needs. These issues would be noticed over time allowing advanced planning and budgeting.

8.4.2 Circuit breakers

The Substation Gas (SF₆) Circuit Breakers are maintained on a tiered schedule to ensure reliable operation and early detection of degradation. Monthly visual inspections are conducted under the Substation-wide maintenance task and documented on a dedicated inspection form.

Technicians verify the condition of porcelain bushings and high-voltage grounding connections, confirm that anti-condensation heaters and indicator lights operate correctly, and look for loose bolts, rust, discoloration, or corrosion. They also inspect the protection relay (SEL-2411) and record critical parameters—SF₆ gas pressure and density, total operation count, motor-start counter, and mechanism hydraulic-oil level—against the acceptable ranges. All results are compared to previous results and trends are analyzed. Any value falling outside its limit triggers prompt notification of the Transmission Field Services Supervisor and a corrective action plan.

Every five years, a complete breaker maintenance is performed, combining the monthly visual checks with in-depth electrical, mechanical, and gas-system testing. Electrical tests include power-factor, insulation-resistance, and pole-resistance measurements, plus torque inspections

of bushings, tank hardware, and rupture-disk fittings. Exterior upkeep covers cleaning bushings, touching up paint, and verifying anti-pumping circuits, alarms, and lockouts. The breaker's operating mechanism undergoes timing tests, limit-switch calibration, brush wear inspection, auxiliary-switch adjustment, linkage cleaning and lubrication, and travel-analysis during full test operations to detect evolving wear patterns. Finally, SF₆ gas integrity is confirmed through pressure-vs.-temperature density checks, moisture-content analysis, and flange/fitting leak tests; trends in gas density and moisture are compared against historical values to identify leaks or contamination before they impair interrupting performance.

In addition, there may be a need for a more intensive internal inspection. This would entail opening the breaker to examine contact surfaces, head internals, and replace desiccants plus all complete breaker maintenance tasks. The Director of Transmission Field Services reviews results from the complete maintenance program, cumulative fault duties, or any major fault events near the breaker's design limits to decide when an internal examination is warranted. This type of approach ensures that in-depth service occurs only when needed to address fault-induced wear or to forestall imminent failures, while still incorporating all tasks from the five-year maintenance regimen.

The monthly and five-year preventative maintenance is considered a time-based preventative maintenance program while the internal inspections are considered condition-based maintenance that is only triggered by actual breaker condition, fault duty, or major events. Combining these two strategies is considered Reliability-Centered Maintenance (RCM). This is working to ensure both routine upkeep and targeted intervention occur exactly when the equipment shows signs of needing it.

Circuit-breakers are flagged for repair or replacement based on priority scores. A priority score of zero would indicate a replacement or repair need within 4 weeks of the finding. Issues such as abnormal SF₆ readings, gas leaks, or corroded bolts fall under this category. These problems directly affect the functionality and safety of the circuit-breakers. Abnormal SF₆ readings indicate a possible malfunction in the insulation gas, gas leaks can lead to serious environmental hazards, and corroded bolts could compromise the structural integrity of the equipment. These require correction within four weeks.

A priority score of one would indicate a replacement or repair need from 4 weeks to one year of the finding. Conditions that don't threaten short-term safety but can affect reliability are assigned to this priority. Examples include minor wear and tear, non-critical component failures, or slight deviations in performance metrics. While these issues may not pose immediate risks, they can cumulatively impact the efficiency and reliability of the circuit-breakers. Such conditions should be addressed within one year.

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 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 quarterly inspection. Visual assessments are compared with previous inspections to alert maintenance personnel of any health degradation. Equipment replacement decisions are condition-based.

Currently, no commissioned energized transmission line assets exist in California. If they are energized in the future, transmission conductors and accessories would be inspected from the air annually and from the ground on a 5-year cycle.

The monthly and five-year preventative maintenance is considered a time-based preventative maintenance program.

Some of the conditions that warrant a priority score of zero and should be addressed within 4 weeks of the finding include broken strands exceeding the replacement threshold, loose, broken, or corroded hardware on strain bus or conductor, arc-tracking or burn marks on insulators, sag beyond acceptable clearance tolerances or a loss of tension in a strain span, cotter keys missing, removal of nesting materials, splices that are well outside of tolerance while also showing poor results from IR scans, any poor IR conditions, and contamination build-up on insulators or spacers that can affect reliability or have already.

Further conditions that warrant a priority score of one and should be addressed between 4 weeks and one year of the finding include pitting corrosion or severe necking of hardware, broken strands not yet exceeding the replacement threshold, bird caging conductor, missing dampers or spacers, and mild sag that has not yet exceeded the clearance tolerances or minor loss of tension in a strain span.

Some examples of conditions that warrant a priority score of two and should be addressed within one and three years include pitting beginning or slight necking of hardware, nicks in the conductor, shallow rust or oxidation on hardware, or slight degradation of vibration dampers or spacers operating within spec but losing damping efficiency.

Any conditions that warrant a priority score of three and should be addressed in 3+ years of the finding are conditions that require extensive planning or are slowly degrading. This would include full reconductor conditions driven by Planning or full condition degradation of the entire conductor, too many repair needs, insulators nearing end of life and losing dielectric or mechanical properties, brittle spares or dampers, or any components becoming obsolete. These conditions would be addressed in a long-range capital asset upgrade.

8.4.5 Fuses, including expulsion fuses

Not applicable. LSPGC does not own any fuses.

8.4.6 Distribution pole

Not applicable. LSPGC does not own any distribution equipment.

8.4.7 Lightning arrestors

Substation surge arresters are visually inspected as part of the monthly substation inspection. This includes checking bushings as well as the connections to jumpers and grounds. Every 10 years, surge arrester testing is performed to evaluate the integrity of the arrester. Equipment repair or replacement decisions are condition- based. This is a time-based preventative maintenance strategy.

A priority score of zero, requiring repair or replacement within 4 weeks of the finding, would be for conditions that signal compromised overvoltage protection, but has not failed yet.

Unexpected failures would fall into this score though as well. Any chips or cracks the bushing has experienced would indicate a potential moisture ingress path and would need to be replaced. A poor IR scan reading would also necessitate a priority score of zero.

A priority score of one, requiring repair or replacement from 4 weeks to one year from the finding, would be for conditions that signal a gradual creep towards end of life with past results indicating a trend. Examples include mild erosion of the silicone rubber or porcelain housing that provides a pathway for longer-term dielectric decay, gradual rise in leakage current, or minor contamination build-up on the sheds.

A priority score of two, requiring a repair or replacement from 1 – 3 years from the finding, would be for conditions that are slowly progressing or known obsolescence that has not yet compromised protection but signal future renewal needs. Examples include contamination that can't be removed with washing, mild polymer housing issues that haven't cracked the bushing but will over time, and creeping leakage current that remain within nameplate but trending up.

A priority score of three, requiring a repair or replacement in over 3+ years from the finding, would be for long-term planning needs such as end-of-life replacements and bundled capital project needs. This priority would not be for repairs but more for full replacement conditions under planned capital projects.

8.4.8 Reclosers

Not applicable. LSPGC does not own any reclosers.

8.4.9 Splices

Not applicable. LSPGC does not own any splices, however when assets are commissioned or energized, transmission conductors are inspected annually from the air. As part of this inspection, the splices would have IR scans done to look for hot spots and visual inspections to

spot out of spec splices. If they are found to be out of spec of having a poor IR reading, these would be replaced. This is an example of a time-based preventative maintenance strategy.

A priority score of zero, requiring repair or replacement within 4 weeks of the finding, would be for conditions that signal the splice is compromised and is about to fail or has failed. This could include noticing it is starting to come apart or split. A very high IR reading would indicate an immediate replacement need.

A priority score of one, requiring repair or replacement from 4 weeks to one year from the finding, would be for conditions such as a splice with a slightly elevated IR reading indicating an emerging replacement need.

A priority score of two, requiring a repair or replacement from 1 – 3 years from the finding, would be for conditions such as out of spec shapes.

8.4.10 Transmission poles/towers

LSPGC has no energized transmission line poles or towers; however, poles and towers are visually inspected on a 5-year cycle – a minimum of 20% of structures shall be inspected per year and following any significant system disruption. We also fly the line annually and would notice any gross defects of the poles or towers during these inspections. Visual assessments are compared with previous inspections to alert maintenance personnel of any health degradation. Equipment repair or replacement decisions are condition-based. This is an example of a time-based preventative maintenance strategy.

Problems found during the inspections are prioritized based on a priority ranking system. The ranking provides a time prescription for completing the corrective action based on the severity of the problem identified.

A priority score of zero would be repaired or replaced within 4 weeks and would be any issues that have caused the tower or pole to become compromised structurally and have the potential for failure. Broken components or bent members would fall into this priority.

Issues found during inspections scoring a priority one, addressed from 4 weeks to one year after the finding, would address any issues that are not imminent failures but will degrade performance or shorten the components' life if left. This would include surface rust or missing bolts or nuts.

A priority score of three, requiring a replacement in 3+ years is a long-term prescription for end-of-life decisions or planning needs. This would be for full replacements of the structures and a predictive strategy for replacement before any failure were to occur.

8.4.11 Transformers (Tracking ID GD-03)

Transformers are inspected visually as part of the substation monthly inspection. Visual assessments are compared with previous inspections to alert maintenance personnel of any health degradation. Measurable items such as oil levels, temperature, dissolved concentration gas, moisture, and humidity are also recorded and compared against acceptable values. A corrective plan is established in the event of deviations.

A dissolved gas analysis test is performed annually (GD-03). The results of this test can indicate a wide range of conditions and malfunctions which could result in equipment damage if left unchecked.

Complete transformer testing is performed every 5 years to assess the transformer windings for abnormalities and to evaluate the general operation of the transformer. This includes power factor testing, resistivity testing, resistance testing, turns ratio testing, cooling system inspection, relay operation testing, and visual inspections. Every 25 years, transformer oil tanks are emptied to perform an internal winding inspection. Equipment repair or replacement decisions are condition-based. This is an example of a time-based preventative maintenance strategy.

When the values of these tests fall outside the tolerances the prescription can range from additional testing in shorter intervals to replacement of parts. Once the tests indicate an issue, immediate action is taken. Most of these issues fall into priority zero and priority one scoring.

A priority score of three, requiring a repair or replacement in 3+ years is a long term time scale for end-of-life decisions or planning needs.

8.4.12 Non-exempt equipment

Not applicable. LSPGC does not own any non-exempt equipment.

8.4.13 Pre-GO 95 legacy equipment

Not applicable. LSPGC does not own any pre-GO 95 legacy equipment.

8.4.14 Other equipment not listed

Fern Road and Orchard Substations both feature dual (STATCOMs). LSPGC has entered into a 15-year long term service agreement with Siemens for the annual preventative maintenance prescriptions. These inspections are more invasive and at times require outages to complete. The entire system is inspected.

The LSPGC Owner inspection items are monthly and are primarily accomplished through visual inspections. Visual inspections consist of a monthly periodic observation of the STATCOM and related equipment. These inspections include various component checks as well as any minor maintenance activities needed to address any identified problems with the STATCOM equipment or components. All identified issues will be logged into the computerized maintenance management system and promptly addressed.

Issues found during inspections typically fall into priority zero, addressed within 4 weeks of the finding, include any issues with the STATCOM that cause the system to be interrupted. This could include cooling system issues, Voltage Source Converter module issues, sensor issues, or motor and pump issues.

Issues found during inspections scoring a priority one, addressed from 4 weeks to one year after the finding, would address any issues that are not imminent failures but will degrade performance or shorten the components' life if left. This would include poorly performing cooling systems, pumps or motors, slight coolant leaks, or modules temperature measurements increasing.

A priority score of two, requiring a repair or replacement in one to three years would be for any slower-evolving issues that haven't yet jeopardized real-time voltage support but signal the need for a medium-term replacement or repair. These could be trends developing showing a degradation of the equipment or end-of-life needs for electronics or relays, firmware upgrades or hardware upgrades. These would be planned for an optimal project.

A priority score of three, requiring a repair or replacement in 3+ years is a long-term prescription for end-of-life decisions or planning needs. This would be for full replacements of the components and a predictive strategy for replacement before any failure was to occur.

8.5 Quality Assurance and Quality Control

8.5.1 Overview, Objectives, and Targets

Table 8-3. Grid Design, Asset Inspections, and Maintenance QA and QC Program Objectives

Initiative/Activity Being Audited	Tracking ID	Quality Program Type	Objective of the Quality Program
Asset Inspections	GD-02	QA	Validate that asset inspections are performed according to the LSPGC Maintenance Plan and that results are documented completely and accurately.
Equipment Maintenance and Repair	GD-03	QA	Confirm that Dissolved Gas Analysis (DGA) testing is performed annually in accordance with the LSPGC Maintenance Plan.
Workforce Planning	GD-06	QA	Verify that all LSPGC Field Operations personnel accessing facilities in Tier 2+ HFTD complete HFTD Safety Training once the training is implemented.

Table 8-4. Grid Design, Asset Inspections, and Maintenance QA and QC Activity Targets

Initiative/ Activity Being Audited	Type of Audit	Population /Sample Unit	2026 Population Size	2026: Sample Size	2027: Population Size	2027: Sample Size	2028: Population Size	2028: Sample Size	Percent of Sample in the HFTD	Confidence level / MOE	2026: Pass Rate Target	2027: Pass Rate Target	2028: Pass Rate Target
Asset Inspections	Field	Total # of inspections per year	21	1	24	2	24	2	50%	95%/2%	100%	100%	100%
Equipment Maintenance and Repair	Field	# of Dissolved Gas Analysis Test performed.	3	3	6	6	6	6	50%	N/A	100%	100%	100%
Grid Operations and Procedures	Desktop	# of LSPGC Field Operations staff accessing Tier 2+ HFTD sites annually	9	9	9	9	9	9	100% of those accessing HFTD facilities	N/A	100% completion of HFTD Safety Training prior to access	100% completion of HFTD Safety Training prior to access	100% completion of HFTD Safety Training prior to access

Note 1: Targets may be adjusted as additional assets become energized

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	Program type	Applicable procedure	Revision and effective dates
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, 07/02/2024

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.

Equipment Maintenance and Repair

Given the small number of high-voltage transformers in service, all applicable units undergo annual Dissolved Gas Analysis (DGA), making the QA approach a full census rather than a statistical sample.

Grid Operations and Procedures

Operational QA activities focus on ensuring that all qualified LSPGC Field Operations team who may access Tier 2 or Tier 3 HFTD areas have completed required HFTD-specific safety training. All team members will need to pass the safety training to be able to access the site.

LSPGC uses all QA/QC findings to support internal feedback loops and continuous improvement. As new assets come online—particularly those near or within HFTDs—sampling plans will be reassessed to maintain relevance, rigor, and alignment with Energy Safety expectations.

8.5.4 Pass Rate Calculation

LSPGC Quality Control and Quality Assurance program pass rate details are shown in Table 8-2 below.

LSPGC Table 8-2. Pass/Fail Criteria and Pass Rate Calculation

Initiative/ Activity Being Audited	Quality Program Type	Sample Unit	Pass Criteria	Fail Criteria	Pass Rate Calculation
Asset Inspections	Field	Total number of inspections per year	Field conditions are consistent with inspection report and inspection report is consistent with inspection program procedures	Inspection report inconsistent with procedures or field conditions inconsistent with inspection report	Number of inspections passed/total inspections audited
Equipment Maintenance and Repair	Field	# dissolved gas analysis test performed in a calendar year	Field records confirm maintenance completed per service agreement	Maintenance activity not performed or documentation incomplete	Number of maintenance items passed ÷ total audited
Workforce Planning	Desktop	LSPGC Field Operations staff	Records confirm completion of	Missing or incomplete HFTD training records for	Number of personnel records passed ÷ total records audited

Initiative/ Activity Being Audited	Quality Program Type	Sample Unit	Pass Criteria	Fail Criteria	Pass Rate Calculation
		accessing Tier 2+ HFTD sites	required HFTD Safety Training	personnel with Tier 2+ access	

8.5.5 Other Metrics

LSPGC became operational in March 2024 with the energization of its first substation (Orchard). As such, quality assurance and quality control (QA/QC) programs are in the early stages of implementation, and performance monitoring is limited to foundational metrics that are appropriate for a single energized facility with no overhead line infrastructure.

LSPGC anticipates expanding its QA/QC effectiveness metrics as more substations are energized and additional infrastructure comes online. In the interim, the following preliminary metrics are in use to assess the effectiveness of QA/QC activities:

- **Inspection and Audit Pass Rates:** Internal compliance inspections and contractor audits are tracked for completion and pass/fail outcomes. Results are reviewed quarterly by Asset Management to identify any recurring deficiencies.
- **Rework or Deficiency Closure Rate:** Any deficiencies identified during commissioning, maintenance activities, or inspections are logged and tracked to closure. LSPGC tracks the number of repeated findings or reopened work orders within a 6-month window.
- **Post-Construction QA Findings:** For new construction, LSPGC tracks the number of corrective actions required during energization/startup due to incomplete or out-of-spec work. This metric informs construction QA procedures.

As LSPGC's operations expand, additional metrics—such as outage recurrence tied to equipment condition or failed QA inspections—will be developed and incorporated into the QA/QC program to ensure long-term program effectiveness and accountability.

8.5.6 Documentation of Findings

LSPGC's QA/QC programs are being newly created to coincide with this WMP cycle. Results will be documented via written record held within the applicable department. As LSPGC continues to gain operational experience, lessons learned will be realized. If the QA programs result in findings below the anticipated pass rates, the corrective action plan will be developed by the applicable department lead and tailored to the unique issue identified.

8.5.7 Changes to QA and QC Since Last WMP and Planned Improvements

LSPGC's prior WMP cycle QA/QC plans were focused on construction phase activities. During this WMP cycle, LSPGC is implementing its first QA/QC programs tailored to operational assets.

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

Priority	Risk Level	Response
1	Immediate safety, reliability, or fire risk with potential for significant impact	Address immediately
2	Moderate to low safety or reliability risk	(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.

Priority	Risk Level	Response
3	Low impact or acceptable, non-emergency condition	Take action (re-inspect, re-evaluate, or repair) as appropriate

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 8-5. Number of Past Due Asset Work Orders Categorized by Age

HFTD Area	0-30 Days	31-90 Days	91-180 Days	181+ Days
Non-HFTD	N/A	N/A	N/A	N/A
HFTD Tier 2	N/A	N/A	N/A	N/A
HFTD Tier 3	N/A	N/A	N/A	N/A

Table 8-6. Number of Past Due Asset Work Orders Categorized by Age for Priority Levels

Priority Level	0-30 Days	31-90 Days	91-180 Days	181+ Days
Priority 1	N/A	N/A	N/A	N/A

Priority Level	0-30 Days	31-90 Days	91-180 Days	181+ Days
Priority 2	N/A	N/A	N/A	N/A
Priority 3	N/A	N/A	N/A	N/A

8.7 Grid Operations and Procedures

8.7.1 Equipment Settings to Reduce Wildfire Risk

LSPGC intends to operate its system in a manner that minimizes overall wildfire risk. Because the company is an ITO with very limited operational history as it relates to substations and no operational history as it relates to lines, items such as recloser settings, circuit settings, and historical effectiveness are not currently applicable.

LSPGC operates Orchard Substation and will be operating future substations using proven EHV system protection philosophies and equipment for its 500 kV transmission equipment as well as the lower voltage STATCOM equipment. This includes:

- 500 kV circuit breakers between LSPGC's substations and interconnecting utility equipment leaving the substations. Breakers are equipped with single pole operation for high-speed ground fault interruption.
- Breaker failure relaying with quad-redundant direct transfer trip.
- High-speed communication-assisted transmission line protection with quad-redundant protection systems and four communication paths.
- STATCOM internal protection/control systems that will alarm, shut down, or disconnect equipment in case of emergency or malfunction.
- 500 kV/low-voltage dual transformer differential protective relaying, including temperature monitoring.

The protective equipment described above will be monitored 24/7 by LSPGC System Operations via its Energy Management System (EMS) through supervisory control and data acquisition (SCADA). Grid-connected protection systems will operate automatically and do not require manual TSO intervention. Protection system settings will adhere to North American Electric Reliability Corporation (NERC) Reliability Standards and good utility practice.

Table 8-7. Top Ten Impacted Circuits from Changes to PEDS in the Past Three Years

Circuit ID	Number of outages in past three years	Cumulative outage duration	Cumulative number of customers impacted by outages
None	N/A	N/A	N/A

8.7.2 Grid Response Procedures and Notifications

LSPGC maintains an Emergency Operations Plan to detail the steps that the company takes to ensure public safety while quickly and efficiently restoring its transmission system in the event of a grid emergency, such as a fault or ignition.

In the event of a grid emergency, the LSPGC TSO will notify field personnel who will respond to the substation site within approximately 2 hours to assess the severity of the event. The event will be classified based on estimated restoration time as a Level 1 (restoration can be completed within 24 hours), Level 2 (restoration can be completed within 72 hours), or Level 3 (greater than 72 hours to restore) event, with corresponding increases in the scope and scale of the response for each level. For Level 2 and 3 events, an Emergency Response Commander (ERC) will direct the overall emergency operations activities. The ERC will lead efforts to safely restore power and may take the following actions if necessary:

- Assign a communications coordinator to notify local officials
- Notify master service agreement contractors
- Mobilize field staff
- Engage engineering support
- Engage environmental support
- Notify the Supply Chain Manager
- Notify the Safety Manager

Upon restoration of a system outage or emergency, all record documentation of the response will be stored and updated as necessary and per the LSPGC Change Management Policy. GD-05 has been established to review the Emergency Operations Plan and update annually.

8.7.3 Personnel Work Procedures and Training in Conditions of Elevated Fire Risk

LSPGC develops site-specific CFPPs for construction sites. The Fern CFPP is completed, and the CFPPs for future assets are in progress with expected completion in 2028. The CFPP details project fire risks, mitigation measures, any agency-specific requirements, work procedures, and communication protocols for work performed at a specific site.

Prior to starting any work at a Substation site, each worker will participate in training on Fire Prevention and Safety. This training will be provided as part of the Worker Environmental Awareness Program (WEAP) training and includes a discussion of:

- Fire prevention procedures
- Fire detection and reporting
- Extinguishment tools and methods
- Fire response procedures
- Overview of the CFPP

At the Orchard Substation, which is located outside of the HFTD, upon issuance of a Red Flag Warning (RFW), LSPGC and its contractors will cease work in areas where vegetation would be susceptible to accidental ignition by project activities. In areas where no vegetation is present, project work may proceed; however, hot work may be limited or suspended during RFW conditions. The Project Manager and Construction Supervisors are responsible for ensuring receipt of RFWs and communicating the relevant details to field crews. All field personnel will be provided with radio and/or telephone access that is operational in all work areas to allow for immediate reporting of fires.

During periods of extreme fire risk, work restrictions may be imposed. Unfinished work, repairs, or vegetation management may be allowed to continue if they pose a greater fire risk if left in their current state. LSPGC will consult with local fire agencies in these situations.

8.8 Workforce Planning

HFTD Safety Training will be developed and all LSPGC Field Operations personnel accessing facilities in Tier 2+ HFTD will be required to complete the training (GD-06).

LSPGC Field Operations substation personnel will be the primary resources supporting asset inspections, grid hardening activities, and risk event inspections. Shown in Table 8-4 are the relevant job titles and qualifications.

LSPGC Table 8-4. Qualifications and Training Substation Personnel

Job Title	Qualifications	Training
Supervisor, Field Operations	• 5+ years of experience in utility field operations or equivalent • Requires completion of a technical or vocational training program as a substation or relay technician • Relevant prior experience with an electric utility or testing services contractor • Knowledge of substation equipment maintenance tasks • Familiarity of specialized technical software and test equipment utilized for substation maintenance activities	• Hazard Communication • Portable Fire Extinguishers • Emergency Action Plan • NERC CIP
Substation Operator	• Requires completion of a technical or vocational training program as a substation or relay technician • Relevant prior experience with an electric utility or testing services contractor • Knowledge of substation equipment maintenance tasks • Familiarity of specialized technical software and test equipment utilized for substation maintenance activities	• Hazard Communication • Portable Fire Extinguishers • Emergency Action Plan • NERC CIP

Job Title	Qualifications	Training
Relay Technician	• Requires completion of a technical or vocational training program as a substation or relay technician • 5+ years of relevant experience with an electric utility or testing services contractor • Knowledge of substation equipment maintenance tasks • Familiarity of specialized technical software and test equipment utilized for substation maintenance activities • Thorough understanding of protective relaying, communication, metering, and SCADA systems	• Hazard Communication • Portable Fire Extinguishers • Emergency Action Plan • NERC CIP

Once LSPGC energizes transmission line assets, currently expected in 2028, LSPGC Field Operations transmission line personnel will also support asset inspections, grid hardening activities, and risk event inspections. The anticipated roles and associated qualifications are outlined in Table 8-5.

LSPGC Table 8-5. Qualification and Training Transmission Personnel

Job Title	Qualifications	Training
Manager, Transmission Lines	• 5+ years experience in transmission line engineering, maintenance, or project management • Project and contractor oversight experience	• Hazard Communication • Portable Fire Extinguishers • Emergency Action Plan

Job Title	Qualifications	Training
Transmission Line Inspector	•TBD	• Hazard Communication • Portable Fire Extinguishers • Emergency Action Plan

From time-to-time, additional LS Power shared services personnel may be required to support LSPGC's grid hardening activities. This may include, but is not necessarily limited to, the following roles and qualifications shown in Table 8-6.

LSPGC Table 8-6. Qualifications and Training Shared Services Personnel

Job Title	Qualifications	Training
Principal Engineer	• Bachelor of Science in Engineering • Expertise in substation, transmission, or protection system design	• Varies
Senior Manager, System Protection	• 5 – 10+ years of protection engineering experience • Strong knowledge of NERC/CIP compliance	• NERC CIP • Hazard Communication • Portable Fire Extinguishers • Emergency Action Plan
Transmission Line Engineer	• BS Electrical or Civil Engineering • Familiarity with wildfire hardening strategies and CPUC General Orders 95/165	• Pole loading and clearance design software training
Substation Engineer	• BS Electrical Engineering • Familiarity with grounding, insulation coordination, and substation hardening techniques	• Varies

Job Title	Qualifications	Training
Sr. Manager, Health, Safety, and Environmental	• BS in safety, health sciences, or related field • Licensed Paramedic with field response experience • Utility/industrial safety management background • Knowledge of wildfire risk and field safety in utility environments	• Hazard Communication • Portable Fire Extinguishers • Emergency Action Plan
Associate Manager, Wildfire Mitigation	• Experience in risk modeling, GIS mapping, or fuels assessment • Familiarity with OEIS, CPUC, and CAL FIRE requirements	• Hazard Communication • Portable Fire Extinguishers • Emergency Action Plan

9. Vegetation Management and Inspections

9.1 Targets

LSPGC’s vegetation management strategy aims to minimize the risk of vegetation-related ignitions near critical transmission infrastructure while supporting ecosystem integrity and regulatory compliance. The plan emphasizes proactive inspection, risk prioritization, and vegetation clearing activities to maintain safe operating conditions around substations and transmission assets.

LSPGC has established qualitative and quantitative targets to guide vegetation management and inspection activities throughout the 2026–2028 WMP cycle. Targets are aligned with the initiatives defined in the WMP and structured to address key risk factors near transmission assets.

Qualitative and Quantitative Target Areas Include:

- Wood and Slash Management (Section 9.5): Identify and manage woody debris to reduce fuel loads.
- Defensible Space (Section 9.6): Maintain clearances around substations in accordance with PRC 4291, local regulations, and internal procedures.

- Integrated Vegetation Management (IVM) (Section 9.7): Apply best practices for vegetation control that balance operational safety and ecological value.
- Workforce Planning (Section 9.13): Ensure adequate staffing and training to execute vegetation activities effectively.

9.1.1 Qualitative Targets

Qualitative targets have been developed for wood and slash management, Integrated Vegetation Management (IVM), and workforce planning as shown in Table 9-1.

9.1.2 Quantitative Targets

Quantitative targets have been developed for substation defensible space and transmission vegetation inspections as shown in Table 9-2.

Table 9-1. Vegetation Management Targets by Year (Non-inspection Targets)

Initiative	Quantitative or Qualitative	Activity (Tracking ID)	Previous Tracking ID, if applicable	Target Unit	2026 Total/Status	% Risk reduction for2026	2027 Total/Status	% Risk reduction for 2027	2028 Total/Status	% Risk reduction 2028	Three-year Total	Section; Page Number
Integrated Vegetation Management	Qualitative	Application of current Vegetation Management standards to future Transmission Line assets (VM-01)	n/a	n/a	Gap analysis complete	n/a	Solution analysis complete	n/a	Implementation based on energization timelines	n/a	n/a	9.7.1, 111
Wood and Slash Management	Qualitative	Applications of current Wood and Slash Management standards to future Transmission Line assets (VM-02)	n/a	n/a	Gap analysis complete	n/a	Solution analysis complete	n/a	Implementation based on energization timelines	n/a	n/a	9.5.2; 109
Workforce Planning	Qualitative	Development of construction fire safety plan for Transmission Line vegetation activities (VM-03)	n/a	n/a	Gap analysis complete	n/a	Solution analysis complete	n/a	Implementation based on energization timelines	n/a	n/a	9.13; 121

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

Activity (Program)	Tracking ID	Previous Tracking ID, if applicable	Target Unit	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	Cml Qtrly Target 2027, Q2	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	LSP-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	Circuit miles inspected	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	9.2.1.1; 102
Transmission Detailed Ground Vegetation Evaluations	VM-06	n/a	Circuit miles inspected	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	9.2.2.1; 104
Pole clearing	VM-07	n/a	Poles	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	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-003-4, 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

Type	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-003-4 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 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-003-4 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-003-4 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-003-4 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 around conductors, with debris chipped or lopped and scattered according to applicable regulations and wood and slash management techniques described in section 9.5.

9.3.3 Scheduling

Pruning and removal work schedules are determined based on inspection findings and assigned priority levels (Vegetation Priority Rating or VPR). Pruning and removals identified as high priority (e.g., VPR 1 or 2) are addressed on an expedited timeline consistent with urgency and risk assessment. Typically, high-risk findings must be remediated immediately or within a prescribed timeline that aligns with risk severity based on VPR. Standard pruning and removal activities following routine inspections are scheduled to align with growth cycles and clearance requirements and are typically completed within the same calendar year as inspections. The scheduling will be adjusted according to the tier designation of the High Fire Threat District (HFTD) or other recognized risk areas if applicable, ensuring resources prioritize regions with heightened wildfire risk or vegetation management challenges.

9.3.4 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 pruning and removal procedures.

9.4 Pole Clearing

9.4.1 Overview

LSPGC will implement pole clearing activities around energized transmission structures once they become operational, ensuring compliance with statutory requirements in State Responsibility Areas (SRAs) and upholding safety, reliability, and regulatory standards. These efforts will be tracked through initiative VM-07. Upon commissioning pole clearing activities will encompass:

- Pole Clearing in compliance with PRC Section 4292:
- In State Responsibility Areas (SRA), LSPGC maintains a firebreak around transmission poles by clearing vegetation within a minimum radius of 10 feet from the pole, extending 8 feet vertically from ground level, consistent with PRC Section 4292 and Title 14 CCR 1254.

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-003-4 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.

9.4.4 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 pole clearing procedures.

9.5 Wood and Slash Management

9.5.1 Overview

At present, no active wood and slash management practices exist for transmission line assets because no LSPGC Transmission line assets are currently in service. However, as part of ongoing system development, LSPGC will conduct a thorough evaluation of the Best Management Practices,(BMPs) along with associated restrictions and regulatory requirements, to inform the design and construction of future Transmission line infrastructure. This forward-looking approach ensures that as new assets come online, LSPGC will apply robust, proactive wood and slash management strategies aligned with both legal obligations and wildfire mitigation best practices.

At substation sites, LSPGC actively manages all live and dead vegetation that could pose a threat to the infrastructure during a wildfire or cause a wildfire arising from within the substation to spread outwards to the surrounding landscape. These activities include but are not limited to removing slash generated from cutting and trimming trees, mowing surface fuels such as grass and other herbaceous vegetation, weed removal, grubbing tree seedlings, and pruning. Vegetation management practices are designed to minimize wildfire risk and ensure compliance with regulatory requirements, particularly PRC Section 4292. All woody debris or other accumulated cut vegetation produced at substation sites is promptly removed to maintain minimum prescribed, defensible space requirements. Additionally, within the designated vegetation management buffer zones, any remaining vegetation is either fully cleared or reduced to effectively mitigate the potential spread of fire within or escaping to outside of the site.

No active practices exist because no energized T-line assets exist. An evaluation of fuels mitigation BMPs and associated restrictions or regulatory requirements will be performed as it relates to design and construction.

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 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 07/01/2025 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 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-based scheduling, LSPGC ensures that vegetation management activities are targeted, efficient, and aligned with both immediate operational needs and long-term system resilience objectives.

9.7.4 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 integrated vegetation management procedures.

9.8 Partnerships

Due to the currently limited scope and scale of LSPGC's footprint (one substation), LSPGC does not currently have any formal partnerships that are associated with its vegetation management program; therefore, there is no information to be provided for Table 9-4. As LSPGC expands its transmission system and pursues integrated vegetation management programs towards the later period of this WMP cycle, LSPGC will look to establish collaborative partnerships where feasible.

Table 9-4. Partnerships in Vegetation Management

Partnering Agency/ Organization	Activities	Objectives	Electrical Corporation Role	Anticipated Accomplishments
N/A	N/A	N/A	N/A	N/A

9.9 Activities Based on Weather Conditions

9.9.1 Overview

LSPGC acknowledges that certain weather conditions—such as Red Flag Warnings (RFWs), high wind events, and extended dry spells—can elevate the risk of wildfire ignition. In response, LSPGC supplements its standard inspection and maintenance activities with operational decisions informed by weather forecasts and environmental conditions. These actions are currently focused on substation sites, as LSPGC's transmission lines are currently under construction and are not expected to be in service until at least mid-2028.

9.9.2 Procedures

The LSPGC Emergency Operations Plan, Version 1.0, effective 1/1/2025 addresses transmission emergencies due to wildfire. Operational decisions are typically informed by:

- Monitoring of National Weather Service (NWS) forecasts and RFWs,
- Observations of local weather conditions near substation sites,

- Coordination with field personnel to initiate pre-event inspections when fire weather conditions are forecasted.

Decisions to conduct supplemental inspections or vegetation work are made by operations and safety personnel based on available forecasts and proximity to High Fire Threat Districts (HFTDs).

9.9.3 Scheduling

Weather-based activities are triggered and scheduled based on situational factors, including:

- Issuance of RFWs for areas adjacent to LSPGC facilities,
- Predicted high wind or extreme heat events,
- Wildfires occurring near substation locations.

When conditions allow, pre-event vegetation inspections are performed ahead of forecasted weather events. These inspections are conducted as a supplement to monthly substation inspection routines and prioritize vegetation that may pose an ignition risk or that may have grown into clearance zones between inspections.

9.9.4 Updates

LSPGC's first asset was energized on March 12, 2025, and is still in its early operational phase. As such, there have been no significant changes to LSPGC's weather-driven mitigation practices since the initial implementation of the 2023–2025 WMP. LSPGC is continuing to build operational familiarity with its assets and learning from peer utilities, contractors, and regulatory guidance. Future WMP updates may reflect more formalized procedures as experience is gained and operational patterns emerge.

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-003-4 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 mid to late 2028, 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.

For operational substations qualified field personnel will thoroughly document the results of monthly substation and vegetation management condition inspections. At least once per calendar year, LSPGC Field Operations Supervisor or his designee will perform a field audit of a defensible space inspection to verify that the inspection results are in accordance with procedures and observed field conditions (Table 9-6).

Table 9-6. Vegetation Management QA and QC Activity Targets

Initiative/ Activity Being Audited	Population /Sample Unit	2026: Population Size	2026: Sample Size	2026: % of Sample in HFTD	2027: Population Size	2027: Sample Size	2027: % of Sample in HFTD	2028: Population Size	2028: Sample Size	2028: % of Sample in HFTD	Confidence level / MOE	2026: Pass Rate Target	2027: Pass Rate Target	2028: Pass Rate Target
Defensible Space Inspection	Substation	2	1	100%	2	1	100%	2	1	100%	100%/0%	100%	100%	100%

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 mid to late 2028, the vegetation QA/QC program is limited to Defensible Space. LSPGC's Substation Defensible Space Procedure, Version 1.0, effective 1/1/2025, 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

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

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.

9.11.6 Documentation of Findings

QA/QC audits of defensible space inspections are documented in writing and stored by LSPGC Field Operations leadership. Any discrepancies identified during these reviews are reported to the Director, Field Services and the Associate Manager, Wildfire Mitigation who will work together to create a Corrective Action Plan. Additional training and/or modification to procedures will be considered with the ultimate corrective action plan tailored to the nature of the discrepancy.

9.11.7 Changes to QA/QC Since Last WMP and Planned Improvements

LSPGC's prior WMP cycle QA/QC plans were focused on construction phase activities. During this WMP cycle, LSPGC is implementing its first QA/QC programs tailored to operational assets. LSPGC is committed to maturing this process as its system expands and operational experience and lessons learned are realized.

9.12 Work Orders

LSPGC Work orders are currently limited to defensible space inspections.

9.12.1 Priority Assignment

Priority assignment for work orders driven by substation defensible inspections are as described in Section 8.6. A description of how work orders for future energized Transmission line assets are expected to be prioritized is described below:

As deficiencies are identified during inspection activities, field operations personnel will assign priority to each work order consistent with the requirements of the LSPGC maintenance procedures and CPUC GO 95 (LSPGC Table 9-1). LSPGC is developing documentation to support the prioritization matrix shown below:

LSPGC Table 9-1. Work Order Priorities

Priority	Risk Level	Response
1	Immediate safety, reliability, or fire risk with potential for significant impact	Address as soon as possible

Priority	Risk Level	Response
2	Moderate to low safety or reliability risk	Address within 3 months
3	Low impact or acceptable, non-emergency condition	Address or re-evaluate within 12 months

9.12.2 Backlog Elimination

Because of the limited scope and scale of LSPGC's assets, there is not expected to be a backlog of open work orders. Facing the potential for prioritized work, additional inspections will be performed to determine new priority dates and protocol to address the work before a threat can become an encroachment. LSPGC will prioritize work based on HFTD tiers and other fire threat areas.

9.12.3 Trends

As LSPGC does not currently have any T-line assets energized within California, there is no data on open work orders; therefore, no aging work orders to establish a trend.

Table 9-7. Number of Past Due Vegetation Management Work Orders Categorized by Age and HFTD Tier

HFTD Area	0-30 Days	31-90 Days	91-180 Days	181+ Days
Non-HFTD	N/A	N/A	N/A	N/A
HFTD Tier 2	N/A	N/A	N/A	N/A
HFTD Tier 3	N/A	N/A	N/A	N/A

Table 9-8. Number of Past Due Vegetation Management Work Orders Categorized by Age and Priority Levels

Priority Level	0-30 Days	31-90 Days	91-180 Days	181+ Days
Priority 1	N/A	N/A	N/A	N/A
Priority 2	N/A	N/A	N/A	N/A
Priority 3	N/A	N/A	N/A	N/A

9.13 Workforce Planning

Field Operations personnel dedicated to the LSPGC substation assets will be the primary resources supporting existing asset inspections, vegetation management/defensible space inspections, and risk event inspections. Inspector qualifications for substations are as described in Section 8.8. Vegetation management activities within and around substations will be performed by contractors experienced in utility vegetation management. Personnel will be required to hold valid Qualified Applicator Licenses or Certificates for any chemical treatments and follow all federal, state, and local regulations. As LSPGC gets closer to the expected energization of its first transmission line assets, the transmission vegetation management program will continue to be refined through the execution of a gap analysis per initiative VM-03, and resource plans will be finalized. In future WMP updates, Table 9-9 will be updated to include additional roles and associated qualifications of personnel responsible for transmission lines.

Table 9-9. Vegetation Management Qualifications and Training

Worker Title	Minimum Qualifications for Target Role	Applicable Certifications	# of Electrical Corporation Employees with Min Quals	# of Electrical Corporation Employees with Special Certifications	# of Contracted Employees with Min Quals	# of Contractor Employees with Applicable Certifications	Total # of Employees	Reference to Electrical Corporation Training/Qualification Programs
Licensed herbicide applicators	QAL or QAC	Qualified Applicators License or Qualified Applicators Certificate	0	0	TBD	TBD	TBD	N/A

9.13.1 Recruitment

Due to the limited scope and scale of LSPGC's current and planned operations, the majority of vegetation management activities are anticipated to be accomplished by qualified contractors. LSPGC does not currently have any partnerships with colleges or universities.

9.13.2 Training and Retention

All training is performed in accordance with LSPGC TVMP with directed intent to build upon employees' technical and professional progression, with emphasis on utilizing professional associations such as the International Society of Arboriculture. All internal personnel are required to take a comprehensive TVMP standard refresher course, and annual team training including a day in the field. Contractor personnel training requirements will be evaluated and developed prior to T-line energization

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 mid to late 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; 131
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; 131
Grid Monitoring Systems	Quantitative	Install perimeter cameras at substations (SAF-01)	LSP-06	# of cameras installed	0	N/A	0	N/A	TBD 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	10.3; 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; 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; 142

10.2 Environmental Monitoring Systems

LSPGC became operational in 2025 with the commissioning of the Orchard Substation. The Fern Road Substation is anticipated to be energized in Q1 2026 and additional planned sites and associated commissioning will occur through 2028. Narratives in the subsections below will generally refer to both phases.

10.2.1 Existing Systems, Technologies, and Procedures

LSPGC has installed a weather station at Orchard Substation. Weather stations installed at each site supply real-time data to the control center, including wind speed and direction, humidity, and temperature. LS Power will follow the manufacturer's recommendations regarding calibration and maintenance. This includes cleaning of the sensors if contamination is observed (inspections performed monthly). After the initial factory calibration, LS Power will return a station to the manufacturer for calibration if there is reason to believe the data is inaccurate based on comparison with other data sources (StormGeo). If fire activity is detected, either through visual surveillance or triggered alarms from fire detection systems Transmission System Operators respond immediately per emergency procedures.

Table 10-2. Environmental Monitoring Systems

System	Measurement/ Observation	Frequency	Purpose and Integration
Weather Stations	wind speed, wind direction, wind gusts, humidity, and temperature	24/7 per site	Purpose: to monitor environmental conditions at each facility. Integration: weather stations are included in station design and installed during initial station construction. Testing and calibration is done during commissioning of each site.
Fire Detection Systems	heat/smoke	24/7	Real-time detection of potential fire activity inside substation buildings

System	Measurement/ Observation	Frequency	Purpose and Integration
(Substation Buildings)			

10.2.2 Evaluation and Selection of New Systems

LSPGC uses a risk-informed, phased approach to evaluate and select new environmental monitoring systems to enhance wildfire risk mitigation at its facilities. This process emphasizes the system’s ability to improve situational awareness, reduce ignition risk, and support operational decision-making, particularly in or near High Fire-Threat Districts (HFTDs).

10.2.2.1 Evaluation Criteria

Key factors in evaluating the need for new systems include:

- **Fire Risk Profile:** Location within Tier 2 or Tier 3 HFTDs is a primary determinant for whether a new substation or Transmission line warrants additional monitoring infrastructure.
- **System Impact Potential:** Estimated improvement in wildfire risk modeling and weather forecasting accuracy.
- **Operational Readiness:** The status of site energization and commissioning.
- **Technology Efficacy:** Proven field performance, integration capability, and reliability of the proposed system.

10.2.2.2 Post-Energization Evaluation

For sites not yet energized—such as Fern Road, Collinsville, and Manning—LSPGC will defer final evaluation and potential deployment of new environmental monitoring systems until after energization is complete and site-specific risk assessments can be performed. Monitoring system deployment at these locations will depend on:

- Whether the asset is located within a CPUC-designated HFTD.
- Results from initial operational and wildfire exposure assessments.
- Regional climatology and the presence of surrounding wildfire-prone vegetation.

This approach allows LSPGC to focus resources on the highest-risk operational assets while retaining flexibility to scale monitoring as needed.

10.2.2.3 Evaluation and Selection Process

Figure 10-1 is a simplified flow chart used to guide selection.

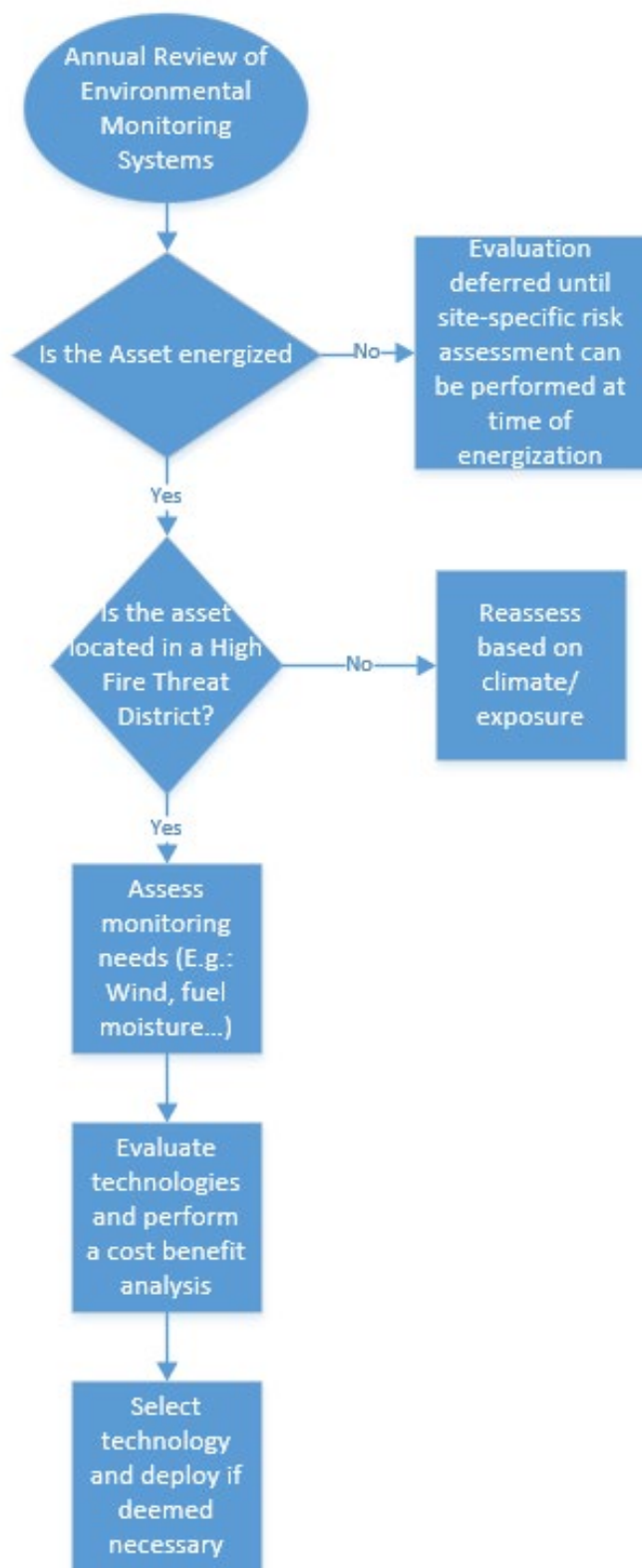


Figure 10-1. Evaluating New Environmental Monitoring Systems

10.2.2.4 Current Systems and Forward Outlook

LSPGC has installed a weather station at the Orchard Substation, a facility energized in 2025. This system supports real-time weather monitoring and provides localized data to inform wildfire emergencies as stated in Emergency Operations Plan.

Additional systems will be considered on a case-by-case basis, contingent on operational status, site-specific wildfire risk, and alignment with LSPGC's overall wildfire mitigation strategy.

10.2.3 Planned Improvements

LSPGC will enhance its environmental monitoring systems to support wildfire risk mitigation through the following actions:

- **Expansion of Weather Station Network:** LSPGC plans to install additional permanent weather stations at future substations as they become energized and will be ingested as a direct feed into the control center as indicated in the initiative, SAF-03. These stations will collect real-time local meteorological data including wind speed and direction, temperature, relative humidity, and precipitation. The existing weather station at the energized Orchard Substation will serve as a reference model. The Fern Road Substation, expected to be energized in Q1 2026, will be the next installation site, followed by Collinsville, Manning, Power the South Bay, and Power Santa Clara Valley, targeting installations through 2028 based on energization schedules and risk prioritization.
- **Redundant Environmental Monitoring through External Data Feeds:** LSPGC will continue to leverage external environmental data (e.g., from NWS/NOAA and local Remote Automatic Weather Stations (RAWS)) to supplement on-site station data. Integration of these external sources into LSPGC's operational dashboards will improve spatial coverage and provide redundancy.

These initiatives focus on physical environmental sensing infrastructure and data collection systems that enable proactive wildfire risk management. Ignition detection technologies and weather forecasting tools are addressed separately in Sections 10.4 and 10.5, respectively.

10.2.4 Evaluating Activities

LSPGC conducts ongoing evaluation of its environmental monitoring program to ensure that deployed systems and processes remain effective in supporting wildfire mitigation and operational readiness.

The evaluation procedures include:

- **Annual Review:** LSPGC will assess the performance and value of its weather intelligence systems—including forecasting platforms and alerting protocols—on an annual basis.
- **Post-Event Assessment:** In the event of a wildfire near an LSPGC facility, a targeted review will be conducted to assess how environmental monitoring systems performed, what data were available, and whether they supported timely and appropriate operational actions.
- **Operator and Field Feedback:** LSPGC management will regularly solicit feedback from TSOs and field personnel regarding the relevance, clarity, and timeliness of environmental data and alerts. This feedback loop is critical to identifying opportunities for procedural and technological improvement.

10.3 Grid Monitoring Systems

LSPGC currently monitors its energized facility, Orchard Substation, using a centralized EMS integrated with SCADA for real-time operational visibility. This architecture is deployed across both Primary and Backup Transmission Operations Control Centers and provides continuous situational awareness of Orchard's high-voltage transmission equipment.

At Orchard, SCADA-connected systems track the live status of all major components—including breakers, disconnect switches, bus ties, and protection relays—as well as analog measurements such as power flow, voltage, transformer temperatures, and gas/pressure levels in equipment. These readings support fault detection, equipment health assessment, and verification of proper protection system functionality.

System Operators receive automated Sequence of Events (SOE) alarms and trend data that indicate abnormal conditions or equipment failure. Fault conditions such as breaker misoperations, abnormal relay states, or transformer overheating are immediately visible through SCADA, prompting diagnostic review and field response when necessary.

While LSPGC does not yet deploy line-mounted sensors such as fault indicators or distributed fault anticipators, Orchard is equipped with transformer temperature sensors, breaker status monitors, and relaying scheme health checks that serve as diagnostic indicators of equipment performance and operational anomalies.

These monitoring practices are central to LSPGC's wildfire mitigation posture, enabling timely response to electrical faults or abnormal operating conditions that could increase fire risk. All practices and system capabilities currently in place at Orchard will be expanded to future substations once energized.

Existing systems and monitors will be applied to the planned future sites as well.

10.3.1 Existing Systems, Technologies, and Procedures

As the only energized equipment is the Orchard Substation, LSPGC has no installed line-mounted 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 Operators Training Process Manual (dated March 5, 2025) and include practical use of weather intelligence tools and awareness of wildfire-related 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 transmission-only topology.

- **Failure Conditions:** EMS alarms provide failure-mode visibility for transformers, breakers, and ancillary station systems.

Measurement Verification and Calculated Quantities

- All SCADA-connected analog and digital values are subject to initial commissioning tests, cross-verification with manual readings, and continuous plausibility checks by TSOs.
- Calculated values (e.g., temperature rates of change or trip counts) are derived within the EMS platform and logged for trending and forensic evaluation. These do not currently use field equations, as no derived fault analytics are performed from raw waveform capture.

Intermittent Monitoring

- LSPGC will evaluate the need for grid-mounted monitoring equipment at future substations and transmission lines after those facilities are energized and post-operational risk assessments are complete.

Table 10-3. Grid Operation Monitoring Systems

System	Measurement/ Observation	Frequency	Purpose and Integration
Orchard Substation EMS (SCADA-based via AspenTech OSI EMS)	Transformer oil and winding temperatures Breaker status and alarms SOE logging SACADA analog/digital values	Continuous (real-time)	Provides centralized real-time visibility, control, and alarming for critical substation assets. Integrated with LSPGC's Primary and Backup Transmission Control Centers.

10.3.2 Evaluation and Selection of New Systems

LSPGC evaluates the need for additional grid operation monitoring systems through a structured, feedback-informed, and risk-aware process described below. This process prioritizes substations with higher operational complexity or potential exposure to wildfire risk, particularly after energization. Figure 10-2 is a simplified flow chart used to guide selection.

Evaluation Process

LSPGC management conducts an annual review of grid monitoring effectiveness and also initiates targeted evaluations following any ignition event. These evaluations consider:

- **Operational Insights:** Input from TSOs and field personnel regarding system limitations, alarm responsiveness, and situational awareness.
- **Risk Reduction Potential:** Assessment of whether new systems could measurably reduce equipment-related ignition risk (e.g., through earlier fault detection or better failure diagnostics).
- **Technology Efficacy:** Benchmarks of new technologies based on vendor performance data, interoperability with the existing EMS, and pilot results from peer utilities.

If a new technology demonstrates significant promise for reducing equipment failure or improving detection of pre-failure conditions, especially in areas with elevated wildfire risk exposure, it may be considered for pilot testing or site-specific deployment.

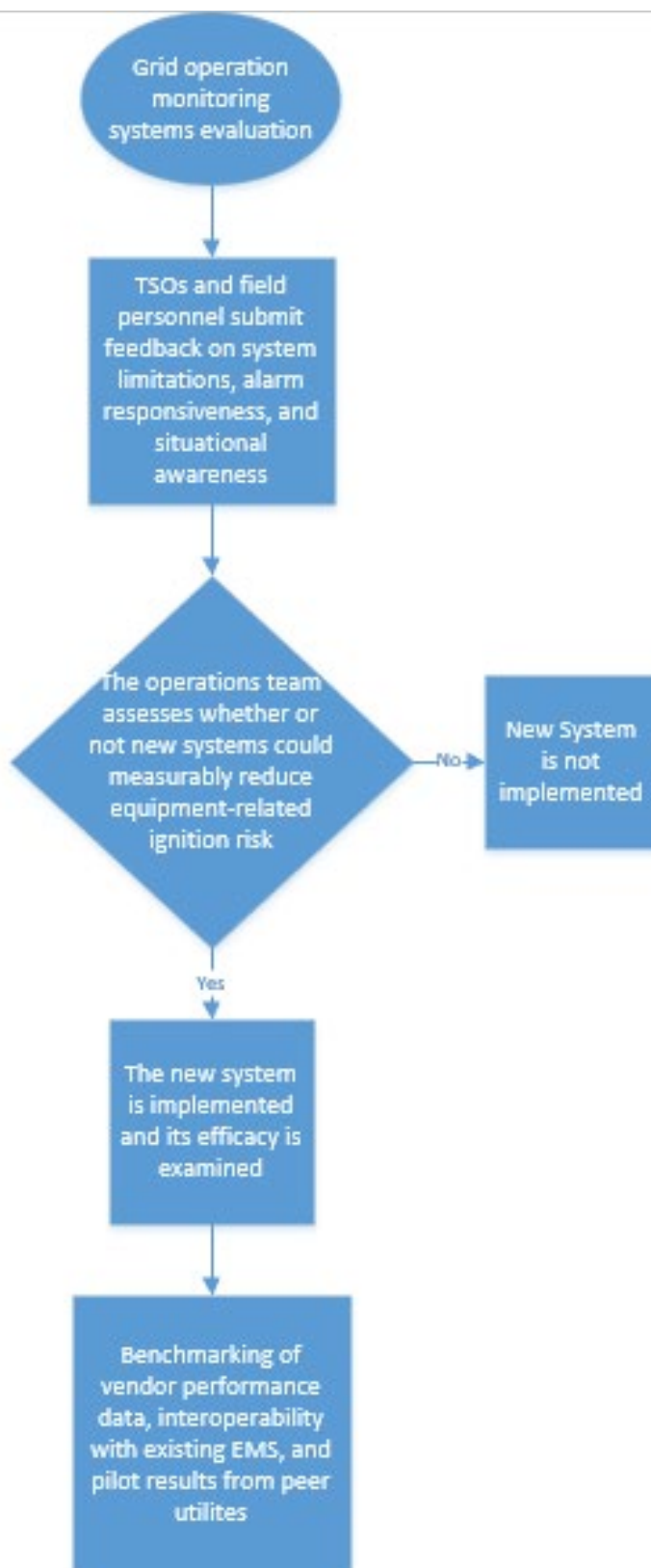


Figure 10-2. Evaluating New Grid Monitoring Systems

10.3.3 Planned Improvements

At this time, LSPGC does not have plans to implement additional grid monitoring systems beyond commissioning the core SCADA, surveillance, and alarm systems at future substations and Transmission lines once they are energized. Monitoring at these locations will follow the same architecture and functionality currently in use at the Orchard Substation.

As part of the energization process, each substation site and transmission lines, Fern Road, Collinsville, Manning, Power the South Bay, and Power Santa Clara Valley, will be equipped with:

- Full integration into LSPGC's EMS
- Real-time transformer monitoring
- Live video surveillance via perimeter cameras and fire alarm systems
- SCADA-based alarm visibility from both the Primary and Backup Transmission Operations Control Centers

Any future enhancements or technology additions related to substations or future transmission lines will be evaluated through the process described in Section 10.3.4 and reflected in future WMP cycles or change orders as appropriate.

10.3.4 Evaluating Activities

LSPGC conducts regular evaluations of the efficacy of its grid operation monitoring program to ensure that existing systems continue to support safe, reliable operations and wildfire risk mitigation.

The core of LSPGC's evaluation process includes:

- **Annual Operator Feedback Loop:** Management solicits structured feedback from TSOs and relevant field personnel each year. This includes assessment of alarm performance, SCADA visibility, and the practical usefulness of grid monitoring data in operational decision-making.
- **Post-Incident Review:** In the event of an ignition, system failure, or abnormal event, LSPGC conducts a focused review of how monitoring systems performed—specifically, whether any system detected precursors, alarms were triggered appropriately, or any data gaps were evident.

- **Performance Review of EMS Functions:** LSPGC verifies that SCADA telemetry, alarm response times, and Sequence of Events (SOE) recording continue to meet internal standards and support situational awareness.
- **Peer Benchmarking (as available):** Lessons learned and technology observations shared by peer utilities are periodically reviewed to inform potential improvements or process changes.

These evaluations inform the annual review described in Section 10.3.2 and support continuous improvement of LSPGC's operational monitoring strategy.

10.4 Ignition Detection Systems

LSPGC's ignition detection strategy focuses on leveraging existing video surveillance and fire alarm systems to monitor Orchard substation for potential ignition events. These systems are integrated into centralized operations and are supported by 24/7 observation from a NERC-certified control center. LSPGC is also exploring the feasibility of using AI-driven video analytics for early smoke and flame detection, as highlighted in the initiative (SAF-02).

LSPGC currently monitors one energized site (Orchard Substation), with similar infrastructure planned for Fern Road, Collinsville, Manning, Power the South Bay, and Power Santa Clara Valley once those sites are energized. These systems support rapid situational awareness and allow TSOs to detect and respond to fire activity in near real time.

10.4.1 Existing Ignition Detection Sensors and Systems

LSPGC uses the following systems for ignition detection at the Orchard Substation site (See Table 10-4):

- **High-Definition Video Surveillance:** LSPGC has installed 29 optical cameras at the Orchard Substation, providing comprehensive 24/7 visual coverage of the facility, including all equipment areas and perimeter fencing. These cameras support both real-time monitoring and post-event analysis, particularly for fire-related activity. Similar systems are planned for all future substations and will be ingested as direct feed into the control center, though the exact number and placement of cameras may vary depending on final design and operational requirements, as those facilities are currently under construction, as highlighted in the initiative SAF-01.
- **Fire Alarm Systems:** All substations are equipped with hardwired, monitored fire alarm systems installed within enclosed structures such as control houses, STATCOM buildings, and GIS buildings. These systems detect smoke, flame, or heat and immediately alert Transmission System Operators (TSOs). Upon alarm activation, TSOs initiate visual

verification through on-site surveillance cameras and follow established response protocols.

- **SCADA-Based Transformer Monitoring:** Oil and winding temperatures are monitored continuously through the EMS platform and alarms notify TSOs of abnormal readings, allowing operators to identify thermal anomalies that could indicate pre-ignition conditions.
- **Fire Growth Potential Software:** LSPGC is in the process of evaluating various fire growth potential modeling platforms, including Technosylva's suite of tools, to determine their relevance and appropriate application for its planned facilities. Given that only one asset is currently energized and the risk profile is limited, implementation of such tools at this time is not operationally warranted. However, LSPGC intends to reassess the need for software-based modeling as the system expands and additional substations come online.

All sensor data are monitored by TSOs in real time from both the Primary and Backup Transmission Operations Control Centers. These systems are integrated into LSPGC's broader SCADA environment and used as part of wildfire readiness and reliability decision-making.

System Attributes

- **General Locations:** 29 cameras are installed at Orchard Substation and are positioned both inside critical buildings (e.g., control houses, STATCOM/GIS enclosures) and externally near the perimeter fence—though always within the secured substation boundary. Similar surveillance systems will be commissioned at all future substations. Fire detection/alarm systems are located inside of enclosed substation buildings.
- **Communication Resiliency:** Systems are tied into redundant EMS/SCADA networks with failover capabilities between primary and backup control centers.
- **Integration and Use:** Visual and alarm-based data are integrated with TSO response protocols as outlined in LSPGC's Operations Alarm Standard (effective March 31, 2024). SCADA events are archived and reviewed during post-event forensic analysis to support continuous improvement and identify potential failure modes.
- **False Positives:** Fire alarms are visually verified through on-site surveillance cameras before initiating any external response. Procedures established in the Operations Alarm Standard ensure that alerts are assessed and validated to minimize false positives while maintaining readiness for genuine emergencies. LSPGC has not yet experienced a fire alarm during operation.

- **Detection-to-Confirmation Time:** Alarms are real time; confirmation generally occurs within 1–2 minutes via TSO camera review.
- **Cybersecurity:** Systems are subject to LSPGC’s enterprise cybersecurity standards, including network segmentation, access controls, and vendor hardening practices.

Table 10-4. Fire Detection Systems Currently Deployed

Detection System	Capabilities	Companion Technologies	Contribution to Fire Detection and Confirmation
High-Definition Surveillance Cameras	Real-time and post-event viewing of substation grounds	Weather station alerts, alarm logs	Allow TSOs to detect visible smoke/flame activity and assess severity
Fire Alarm Systems	Detects heat/smoke/flame in control house enclosures	Surveillance cameras	Notifies TSOs of fire activity in buildings; visually confirmed
SCADA Transformer Monitoring	Continuous tracking of temperature readings for early fault indicators	EMS/SCADA, alarm thresholds	Alerts operators to overheating that may precede ignition

10.4.2 Evaluation and Selection of New Detection Systems

LSPGC reviews the performance and adequacy of ignition detection systems annually, incorporating both operator feedback and incident review. The following criteria guide evaluation of potential new detection systems:

- **Risk Reduction Potential:** Technologies are assessed for their ability to shorten detection-to-response time and reduce the likelihood of undetected ignitions.
- **Technology Maturity and Accuracy:** Systems are evaluated for detection accuracy, false positive rates, and integration feasibility with existing infrastructure.
- **Field Operations Feedback:** Input from on-site operations teams plays a key role in evaluating both the practical utility of proposed technologies and identifying site-specific constraints (e.g., substation layout, visibility obstructions, or maintenance burden). This input is formally captured as part of the annual review and procurement planning cycle.

- **Budget Considerations:** Funding for new systems is prioritized based on site-specific risk profiles and alignment with LSPGC’s wildfire mitigation objectives. Budgeting is reviewed annually as part of capital and expenses planning.

10.4.3 Planned Integration of New Ignition Detection Technologies

LSPGC is preparing for the integration of AI based ignition detection systems at its substations as additional sites become operational (SAF-02). These systems will be designed to support early identification of fire-related events and provide real-time situational awareness to TSOs at LSPGC’s NERC-certified control center.

Integration of New Systems into Existing Physical Infrastructure

LSPGC will launch a wildfire mitigation initiative (SAF-02) to evaluate the integration of AI-based ignition detection software with its existing surveillance camera systems. This software would support automated detection of smoke or flame activity and alert TSOs in real time, potentially reducing detection time in early-stage fire events. Results from the pilot and coordination with peer utilities will inform any future decisions.

Integration of New Systems into Data Analysis Workflows

At LSPGC’s future substation sites, alarm and camera data will be integrated into LSPGC’s EMS, which serves as the operational interface for TSOs. Data from ignition detection systems will be archived, reviewed, and used to:

- Support real-time alarm verification and response
- Inform trend analysis and post-event review
- Supplement ongoing wildfire risk assessment and mitigation planning

Additionally, LSPGC will be evaluating the feasibility of future AI-enabled detection analytics to enhance camera-based ignition detection (see Section 10.4.2). Should this evaluation result in future implementation and integration, the HFTD will be prioritized for this program.

Budget and Staffing Considerations

At this time, LSPGC does not anticipate requiring additional full-time staff to support these integrations. Existing TSO roles and EMS infrastructure are expected to accommodate the added functionality.

As part of the evaluation of potential AI-enabled ignition detection, costs and benefits will be holistically considered and any budget requirements will be reassessed during LSPGC’s annual budgeting process.

10.4.4 Evaluating Activities

LSPGC evaluates the efficacy of its fire detection systems through an annual review process informed by operational experience, operator feedback, annual testing, and post-event analysis described below.

Evaluation Procedures

- **Annual Testing:** Substation building fire detection systems are tested annually to ensure operational capability.
- **Annual Operator Feedback:** LSPGC management solicits structured feedback from TSOs and field personnel on the performance and reliability of fire detection systems, including alarm responsiveness, visual coverage, and ease of confirmation.
- **Post-Event Review:** Following any alarm activation, ignition incident, or fire-related anomaly, LSPGC conducts a targeted review to assess:
 - Detection accuracy and response timeline
 - Effectiveness of camera or alarm verification
 - Any false positives or missed detections
- **Technology Evaluation:** New ignition detection technologies, including the camera-based detection initiative (see Section 10.4.2), will be reviewed by LSPGC management using vendor data, peer utility case studies, and integration potential with existing EMS platforms. Where applicable, pilot evaluations may be used to validate system performance prior to broader consideration.
- **Performance Metrics:** LSPGC tracks system availability, alarm frequency, and confirmation rates to identify trends and support continuous improvement.

These evaluations are used to inform maintenance schedules, future system upgrades, and wildfire mitigation strategy development. Outcomes of evaluations are incorporated into the annual WMP review process and future filings.

10.5 Weather Forecasting

LSPGC uses third-party weather intelligence services and localized environmental sensors to support weather-related situational awareness and operational decision-making. While LSPGC does not operate proprietary weather forecasting models, it leverages regional and site-specific forecasts from commercial and government sources, integrated with internal data sources such as RAWS stations and weather stations installed at its substation sites.

10.5.1 Existing Modeling Approach

LSPGC contracts with a meteorologist to provide detailed, focused weather forecasts, at least weekly, tailored to the Orchard substation. This will be expanded to future sites and transmission lines as they come online. Weather forecasting currently relies on externally sourced weather forecasting services to provide meteorological data for operational awareness. These include:

- **StormGeo:** LSPGC’s primary weather intelligence provider. Forecasts from StormGeo integrate data from NOAA, NWS, and other global forecast models to deliver localized weather alerts and fire danger indicators to LSPGC operations personnel.
- **RAWS and FireFamilyPlus:** LSPGC uses RAWS data and FireFamilyPlus to analyze site-specific climatological trends, percentile thresholds, and Red Flag Warning indicators.
- **Substation-Level Weather Stations:** Each operational substation is equipped with a weather station that captures site-level wind speed, wind direction, temperature, humidity, and barometric pressure. These real-time data feeds are used to validate or supplement third-party forecasts and alerting.

Model Inputs & Outputs (External Provider)

LSPGC’s provider-generated forecasts incorporate the following general features:

- **Inputs:**
 - Land cover, land use, and terrain elevation from regional geographic information system datasets
 - Global and regional NWP (Numerical Weather Prediction) model ensembles
 - RAWS station data and surface observations
- **Outputs:**
 - Air temperature, relative humidity, wind speed and direction
 - Rainfall accumulation, solar radiation, and barometric pressure
 - Forecast maps and tabular outputs at hourly and daily intervals

Forecast Characteristics

- **Time Horizon:** Short-range (up to 7 days), with daily updates.
- **Spatial Granularity:**
 - Horizontal resolution: 250 m – 1 km (depending on model used by the provider)

- Vertical resolution: Standard layers for surface and low-level wind and temperature profiles
- **Analysis Modules:**
 - Local weather analysis
 - Fire potential index mapping and alerting
- **SME Review:**
 - Forecasts and alerts are reviewed daily by LSPGC operations and safety staff. Urgent alerts trigger TSO awareness and monitoring.

Improvements Since Last WMP

This is LSPGC's first full WMP cycle with energized assets. Integration of the StormGeo platform and installation of weather stations at Orchard Substation represent baseline capabilities. Expansion to future substations is planned.

10.5.2 Known Limitations of Existing Approach

Weather models have temporal and spatial limitations to the parameters that are being modeled into the future. As LSPGC does not operate its own modeling system, limitations are tied to the resolution and availability of third-party forecast data and the placement of environmental sensors:

- **Lack of In-House Model Control:** LSPGC does not directly configure or calibrate model physics or assimilation settings.
- **Spatial Resolution Constraints:** Forecast resolution may not fully capture microclimates or complex topography near some substation sites.
- **RAWS Data Gaps:** Availability of nearby RAWS data may be limited in some regions, reducing the fidelity of historical trend analysis.
- **Forecast Granularity:** Fire danger indices and meteorological variables are not always downscaled to substation-specific zones.

These limitations do not currently affect LSPGC's operational readiness, but they are monitored annually and addressed where feasible through site-specific sensor deployment and continuous communication with the external forecasting provider.

10.5.3 Planned Improvements

LSPGC does not plan to implement weather forecast modeling at this time.

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 in-house 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 Q4 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 reasonably 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.

Table 10-5. Fire Potential Features

Feature Group	Feature	Altitude	Description	Source	Update Cadence	Spatial Granularity	Temporal Granularity
N/A	N/A	N/A	LSPGC does not calculate its own FPI	N/A	N/A	N/A	N/A

10.6.2 Known Limitations of Existing Approach

LSPGC's reliance on third-party wildfire forecasting services introduces several known limitations:

- No direct control over modeling assumptions, inputs, or resolution
- Spatial resolution may not fully capture localized microclimates around substations
- Proprietary methodology details may not be fully transparent to LSPGC
- Integration of fuel moisture and vegetation-specific metrics is limited to vendor-provided indices

However, the forecasts are tailored to operational needs and provide consistent, actionable intelligence for daily and weekly planning.

Since the last WMP submission, LSPGC has expanded StormGeo services to include site-specific wildfire risk alerting for the energized Orchard Substation. This capability will be extended to future substations (Fern, Collinsville, Manning, Power the South Bay, and Power Santa Clara Valley) upon commissioning.

10.6.3 Planned Improvements

LSPGC plans to fully integrate StormGeo's fire risk and PSPS forecasting outputs into its operational decision-making protocols across all substations and transmission lines as they are energized. This includes configuring automated alerts for site-specific fire risk thresholds and increasing TSO reliance on daily fire danger outlooks.

11. Emergency Preparedness, Collaboration, and Community Outreach

11.1 Targets

LSPGC's emergency preparedness targets for 2026–2028 support the transition from construction to operational readiness. These include establishing site-specific emergency procedures, coordinating with local agencies, and defining communication protocols for wildfire response.

While targets are provided across key initiatives, LSPGC does not serve retail customers and does not initiate PSPS events. Therefore, no customer support target is applicable.

11.1.1 Qualitative Targets

Qualitative targets for implementing and improving LSPGC's Emergency Operations Plan (EOP) are described below in Table 11-1 for the 3-year plan.

Table 11-1. Emergency Preparedness and Community Outreach Targets by Year

Initiative	Activity (tracking ID #)	Previous Tracking ID, if applicable	2026 End of year total/Completion Date	2027 Status	2028 Status	Section; Page number
Emergency Preparedness and Recovery Plan	Update System Restoration Plan to include Fern Road Substation (EP-01)	N/A	Finalize; Q1 2026	Maintained; Q1 2027	Maintained; 2028	11.2.1.1.; 151
Public Outreach, Communication, and Engagement	Establish wildfire-specific communication protocols (EP-02)	N/A	Framework Drafted: Q4 2026	Completed: Q3 2027	Maintained; 2028	11.3.1; 157
External Collaboration and Coordination	Initiate and maintain annual outreach with local fire/emergency agencies near energized assets (EP-03)	N/A	Started: Q2 2026	Ongoing; 2027	Ongoing; 2028	11.3.2; 161

11.2 Emergency Preparedness and Recovery Plan

11.2.1 Overview of Wildfire and PSPS Emergency Preparedness and Service Restoration

LSPGC has developed an Emergency Operations Plan (EOP) to support emergency preparedness. The EOP aligns with the minimum standards outlined in CPUC General Order (GO) 166 and incorporates relevant provisions from Rulemaking R.15-06-009 and Decision D.21-05-019. The EOP establishes an operational framework for response and restoration activities at LSPGC's energized Orchard Substation and is expected to evolve alongside system expansion. The current version of the EOP is dated January 2025 and represents LSPGC's first formal, systemwide emergency preparedness document.

For construction-phase assets, such as the Fern Road Substation, LSPGC utilizes project-level safety and fire prevention plans developed by contractors. These documents include provisions for jobsite readiness, incident response, and coordination with external agencies, serving as interim controls until permanent emergency procedures are adopted post-energization.

Most Recent Emergency Preparedness Plan

- Emergency Operations Plan (EOP), January 2025

Other Relevant Emergency Preparedness Documents

- Construction Fire Prevention Plan, Gates 500 kV Dynamic Reactive Support Project – Orchard Substation, August 17, 2022
- Project-Specific Safety Plan, LS Power Orchard Substation Project, January 5, 2023

11.2.1.1 Protocols and Procedures for Wildfire Response and Recovery

LSPGC's Emergency Operations Plan includes a specific section on Transmission Emergencies due to Wildfires. When wildfire conditions elevate, the organization initiates the following:

- Increases internal situational awareness and monitoring through platforms such as StormGeo
- Notifies CAISO, if applicable
- Notifies interconnecting utilities (e.g., PG&E) of any relevant impacts
- Alerts internal Transmission System Operator (TSO) staff
- Initiates assessments of infrastructure status through remote or on-site methods

LSPGC does not operate distribution-level infrastructure and does not conduct PSPS events. However, if an interconnecting utility initiates a PSPS or if the CAISO issues operational directives that may impact LSPGC facilities, we will respond in accordance with standard operational protocols. LSPGC will follow its System Restoration Plan to resume operations safely and efficiently. The System Restoration Plan will be reviewed and updated as needed to reflect changes in infrastructure, including the energization of new assets as highlighted in the EP-01 initiative.

Due to the limited operational footprint, LSPGC has not yet developed a formal wildfire-specific operational flow diagram. We expect to formalize and publish this resource as system complexity and risk profiles grow.

11.2.1.2 Key Personnel, Qualifications, and Training

LSPGC's emergency response framework aligns with National Incident Management System (NIMS) and Incident Command System (ICS) principles. This structure enables defined leadership roles and operational coordination during emergencies.

Incident Commander

The IC oversees overall emergency operations, including resource management and external coordination (e.g., with CAISO and interconnecting utilities).

Designated Emergency Response Representatives

- **Field Operations Representative** – Leads damage assessments and field logistics
- **Control Room Operations Representative** – Oversees system monitoring and CAISO coordination
- **Operational Technology (OT) Representative** – Maintains performance of SCADA, RTUs, protective relays, communications infrastructure, and substation systems. Ensures system visibility, supports diagnostics, and assists in restoration of any degraded technology systems critical to operational continuity
- **Safety Representative** – Ensures field safety compliance and advises the IC on operational risks
- **Asset Management Representative** – Supports infrastructure condition tracking and post-event documentation
- **Company Leadership Representative** – Provides executive-level guidance and resource authorization

Training and Preparedness

Emergency LS Power Grid California ensures that all emergency response personnel are adequately trained for their roles within the Incident Command System (ICS) and are prepared to respond effectively to emergencies, including wildfire and other operational events. The following training programs support this objective:

1. Emergency Response Roles and ICS Integration
 - a. Purpose and Scope: Prepares emergency response staff to operate effectively within the ICS framework during incidents. Personnel complete Federal Emergency Management Agency (FEMA)-certified NIMS 100, 200, and 700 training modules, which provide foundational ICS principles, operational coordination, and multi-agency communication practices.
 - b. Frequency: One-time certification upon role assignment
 - c. Tracking Method: Completion is retained through individual FEMA certification records and may be referenced as needed for role qualification.
2. Fire Extinguisher Use and Emergency Evacuation Procedures
 - a. Purpose and Scope: In-house computer-based training (CBT) that provides personnel with practical knowledge of portable fire extinguisher use and site-specific evacuation protocols.
 - b. Frequency: Annually
 - c. Tracking Method: Completion and refresher cycles are tracked in the training management system.
3. ICS Tabletop Exercises
 - a. Purpose and Scope: Facilitates discussion-based simulations that validate response readiness for a range of emergency scenarios. These exercises are designed to reinforce ICS roles, interdepartmental coordination, and decision-making under evolving operational conditions.
 - b. Frequency: Annually
 - c. Tracking Method: Attendance is documented and maintained for compliance purposes.

Training content is reviewed and revised as needed in response to regulatory changes, operational feedback, or lessons learned from exercises and real-world incidents feedback.

11.2.1.3 Mutual Aid Agreements and Coordination

As of March 2025, LSPGC has one energized facility (Orchard Substation) and additional substations under construction. Given the limited scope of operations, LSPGC has not yet executed formal Memoranda of Agreement (MOAs) or Letters of Understanding (LOUs) with state, local, or tribal agencies. As system operations mature, LSPGC will evaluate the need for formal agreements to support broader emergency coordination and response capabilities.

11.2.1.4 Communications and Customer Outreach

LSPGC does not serve end-use customers. We will work closely with interconnecting utilities and CAISO, as needed, to ensure coordinated communication and situational awareness during wildfire season or other emergency events.

Planned communications may include:

- Pre-season coordination briefings with applicable utilities and agencies
- Relay of PSPS or emergency notifications that may affect LSPGC infrastructure
- Post-event summaries of facility status and restoration timelines

As our system grows, we will continue refining communication practices in alignment with our role as an ITO.

11.2.1.5 Improvements Since Last WMP Cycle

LSPGC's first transmission asset was placed in service in March 2025. As such, there is no prior operational baseline from which to assess emergency preparedness improvements. At this time, LSPGC has not identified specific changes or updates needed to its emergency protocols. We will continue to evaluate operational performance as experience grows and revise plans accordingly in future WMP cycles.

Table 11-2. Key Gaps and Limitations in Integrating Wildfire- and PSPS-Specific Strategies into Emergency Plan

Gap or Limitation Subject	Brief Description of Gap or Limitation	Remedial Action Plan
N/A	N/A	N/A

11.2.2 Planning and Allocation of Resources

LSPGC has developed its resource planning and allocation methods to support public safety and system resilience during service restoration, particularly in the context of wildfire-related events. As an ITO, LSPGC does not serve retail customers but recognizes the critical role of its transmission assets in maintaining grid reliability. Accordingly, LSPGC focuses on substation infrastructure, transmission equipment readiness, and operational coordination to support emergency response activities within its limited operational footprint.

Resource Planning for Service Restoration

LSPGC maintains an asset tracking system to support repair coordination, resource allocation, and response organization. While there have been no outages caused by wildfire to date—given that LSPGC’s first transmission asset was energized in March 2025—the Emergency Operations Plan (EOP) outlines clearly defined roles and responsibilities for restoration personnel, including transmission system operators, asset management staff, and designated emergency response representatives.

Restoration efforts are carried out under structured internal protocols and aligned with the Incident Command System (ICS) framework described in the EOP. To support efficient resource deployment, LSPGC periodically reviews internal and contractor readiness in the following areas:

- **Inventory Control:** Availability of critical spare components such as transformers, circuit breakers, and switching devices
- **Workforce Availability:** Identification of qualified personnel and procedures for on-call mobilization
- **Contractor Readiness:** Pre-engagement of emergency support vendors and service providers as appropriate

These resource strategies support LSPGC’s ability to maintain system continuity and perform safe, controlled restoration of transmission infrastructure during wildfire-related incidents.

Contingency Measures for Increased Response Needs

LSPGC’s emergency preparedness framework includes contingency measures to support safe and effective operations during periods of elevated wildfire risk or increased reports of potentially unsafe conditions. These measures are executed through the structure and procedures outlined in the Emergency Operations Plan and follow the ICS model to enable flexible, coordinated response.

Key contingency components include:

- **Use of Staging Areas:** LSPGC may utilize pre-identified locations near critical infrastructure—such as the Orchard and Fern Road substations—for temporary positioning of personnel and equipment to facilitate timely restoration efforts.
- **Resource Flexibility:** Internal staff and contractors can be reassigned or mobilized as needed to respond to localized emergencies or external wildfire impacts, based on conditions and asset accessibility.
- **Regional Coordination:** LSPGC works in close coordination with CAISO, interconnecting utilities, and applicable state and local agencies to ensure alignment of restoration planning with broader system reliability and public safety objectives.

As LSPGC’s system continues to expand, these contingency practices will be evaluated and enhanced to reflect changing operational needs and lessons learned from field experience.

11.3 External Collaboration and Coordination

11.3.1 Communication Strategy with Public Safety Partners

As of this 2026–2028 Wildfire Mitigation Plan cycle, LS Power’s transmission system is in active development. Currently, only the Orchard substation is energized, and additional facilities are expected to be constructed and placed in service during the 2026–2028 period. Due to the limited operational footprint, LSPGC’s communication with public safety partners is presently informal and tailored to specific project development and construction activities, as shown in Table 11-3. These gaps are further outlined in Table 11-4 below and describe LSPGC’s plan on how to address them going forward. LSPGC acknowledges the importance of establishing a standardized, fully compliant communication framework and will enact efforts to formalize its approach in advance of broader system energization as per the initiative EP-02.

Current State

LSPGC currently engages with local fire departments, county emergency services, and local government agencies on an as-needed basis, primarily through project-specific outreach or during permitting and environmental compliance efforts. Communication is typically conducted through:

- Direct contact between LS Power project managers or environmental compliance staff and agency representatives
- Participation in agency briefings or coordination meetings related to construction activities

- Provision of contact information and updates via email or phone

As LSPGC's system expands and operational activity increases, communication protocols will transition from project-specific outreach to standardized procedures guided by the Emergency Operations Plan (EOP), which follows the Incident Command System (ICS) structure. The EOP will define formal roles and procedures for notifying external agencies during wildfire-related threats, outages, or re-energization events.

Although LSPGC does not initiate PSPS events, it will coordinate with interconnecting utilities and CAISO as needed to support communication related to any PSPS activity that may affect its transmission infrastructure. LSPGC recognizes its responsibility to keep public safety partners informed in such cases.

Table 11-3. High-Level Communication Protocols, Procedures, and Systems with Public Safety Partners

Public Safety Partner Group	Name of Entity	Key Protocols	Frequency of Prearranged Communication Review and Update
Local Fire Agencies	Shasta County Fire Dept	Coordination during permitting, emergency site access, wildfire	Annually
CPUC	CPUC	Regulatory reporting and fire-related incident notifications	Annually
PG&E (interconnecting utility)	PG&E	Incident coordination, PSPS-related information relay	Annually
CAISO	CAISO	Event-based notification of grid-impacting conditions	Annually

Table 11-4. Key Gaps and Limitations in Communication Coordination with Public Safety Partners

Gap or Limitation Subject	Brief Description of Gap or Limitation	Remedial Action Plan
Emergency communication process still evolving	Continue development of formal protocols	Strategy: Update the existing the Emergency Operations Plan to include planned sites upon energization. Target timeline: Q4 2026
Local public safety contact lists not fully developed	Expand contact lists as additional assets become operational	Strategy: Create an internal regional and local fire agencies contact list around existing construction and planned future sites. Target timeline: Q4 2026

11.3.2 Collaboration on Local and Regional Wildfire Mitigation Planning

LSPGC recognizes the critical role of local and regional partners in comprehensive wildfire mitigation. At present, only the Orchard substation is energized, and other transmission infrastructure is under construction. Due to this limited operational footprint, LSPGC's collaboration with local governments, regional task forces, and non-governmental organizations has primarily occurred in the context of project development, permitting, and environmental compliance, rather than direct participation in local wildfire mitigation planning efforts (e.g., General Plan Safety Elements or Community Wildfire Protection Plans). Table 11-5 provides a list of potential local and regional partners for future wildfire mitigation collaboration efforts.

Nonetheless, LS Power is committed to deepening its engagement with local and regional wildfire planning stakeholders as system assets are energized. LSPGC has identified emerging collaboration framework as a gap in its local collaboration planning. Table 11-6 below outlines this gap and describes how it will be addressed and mitigated in the future. The company will begin mapping out relevant plans and stakeholders within its expected service areas and is working to identify opportunities for alignment between its Wildfire Mitigation Plan (WMP) and existing or emerging local plans as per initiative EP-03. This includes attending informational meetings, initiating conversations with fire safe councils and local governments, and planning for future integration of WMP strategies into local risk-reduction initiatives.

To support this transition, LS Power will:

- Develop a stakeholder engagement framework focused on wildfire mitigation planning starting in 2026.
- Assign wildfire planning liaisons to represent LSPGC in relevant forums and meetings.
- Create and publish online resources to notify partners of available data, tools, and support from LS Power.
- Proactively request participation in local planning updates where LSPGC assets are located or planned.

Table 11-5. Collaboration in Local and Regional Wildfire Mitigation Planning

Name of County, City, or Tribal Agency or Civil Society Organization (e.g., nongovernmental organization, fire safe council)	Program, Plan, or Document	Last Version of Collaboration	Level of Collaboration
Local County Resource Management Agency	LSPGC currently doesn't have any activity with Tribal Agency, CSO, or fire safe council.	N/A	N/A
Local Fire Safe Council	LSPGC currently doesn't have any activity with Tribal Agency, CSO, or fire safe council.	N/A	N/A
Local County Resource Conservation District	LSPGC currently doesn't have any activity with Tribal Agency, CSO, or fire safe council.	N/A	N/A
Regional Forest and Fire Capacity Program (RFFCP) Grantee	LSPGC currently doesn't have any activity with Tribal Agency, CSO, or fire safe council.	N/A	N/A

Table 11-6. Key Gaps and Limitations in Collaborating on Local and Regional Wildfire Mitigation Planning

Subject of Gap or Limitation	Brief Description of Gap or Limitation	Strategy for Improvement
Emerging Collaboration Framework	As a newly operational transmission operator with a limited public-facing presence to date, LSPGC has had few formal collaboration opportunities with local agencies and fire councils.	Strategy: Develop and publish web-based informational materials outlining LSPGC’s wildfire mitigation approach and infrastructure footprint. Assign a wildfire planning liaison and initiate outreach meetings with local agencies in regions where construction is active or planned. Timeline: Web materials online by Q4 2026; Internal engagement begins Q1 2027.

11.3.3 Collaboration with Tribal Governments

As an ITO LSPGC does not have end-use customers nor any assets on tribal lands.

Table 11-7. Collaboration with Tribal Agencies

Name of County, City, or Tribal Agency or Civil Society Organization(e.g., nongovernmental organization, fire safe council)	Program, Plan, or Document	Last Version of Collaboration	Level of Collaboration
None	N/A	N/A	N/A

Table 11-8. Key Gaps and Limitations in Collaborating with Tribal Agencies

Subject of Gap or Limitation	Brief Description of Gap or Limitation	Strategy for Improvement
None	N/A	N/A

11.4 Public Communication, Outreach, and Education Awareness

This section does not apply to LSPGC, an ITO, per Chapter V of the 2026–2028 WMP Guidelines. LSPGC complies with applicable requirements under Public Utilities Code § 8386, including subsections (c)(7) and (c)(19)(B).

Table 11-9. Emergency Communication to Stakeholder Groups

Stakeholder Group/Target Community	Event Type	Method(s) for Communicating	Means to Verify Message Receipt	Interests or Concerns Before, During, and After Wildfire and PSPS events
None	N/A	N/A	N/A	N/A

11.4.1 Messaging

This section does not apply to LSPGC, an ITO, per Chapter V of the 2026–2028 WMP Guidelines. LSPGC complies with applicable requirements under Public Utilities Code § 8386, including subsections (c)(7) and (c)(19)(B).

11.4.2 Outreach and Education Awareness Activities

This section does not apply to LSPGC, an ITO, per Chapter V of the 2026–2028 WMP Guidelines. LSPGC complies with applicable requirements under Public Utilities Code § 8386, including subsections (c)(7) and (c)(19)(B).

Table 11-10. List of Target Communities

Target Community	Interests or Concerns Before, During, and After Wildfire and PSPS events
None	N/A

11.4.3 Engagement with Access and Functional Needs Populations

This section does not apply to LSPGC, an ITO, per Chapter V of the 2026–2028 WMP Guidelines. LSPGC complies with applicable requirements under Public Utilities Code § 8386, including subsections (c)(7) and (c)(19)(B).

11.4.4 Engagement with Tribal Nations

This section does not apply to LSPGC, an ITO, per Chapter V of the 2026–2028 WMP Guidelines. LSPGC complies with applicable requirements under Public Utilities Code § 8386, including subsections (c)(7) and (c)(19)(B).

11.4.5 Current Gaps and Limitations

This section does not apply to LSPGC, an ITO, per Chapter V of the 2026–2028 WMP Guidelines. LSPGC complies with applicable requirements under Public Utilities Code § 8386, including subsections (c)(7) and (c)(19)(B).

Table 11-11. Key Gaps and Limitations in Public Emergency Communication Strategy

Gap or Limitation Subject	Brief Description of Gap or Limitation	Remedial Action Plan
None	N/A	N/A

11.5 Customer Support in Wildfire and PSPS Emergencies

This section does not apply to LSPGC, an ITO, per Chapter V of the 2026–2028 WMP Guidelines. LSPGC complies with Public Utilities Code § 8386(c)(21) regarding wildfire and PSPS-related support for relevant stakeholders.

12. Enterprise Systems

LSPGC leverages its enterprise systems to ensure safe and reliable operations across multiple wildfire risk mitigation domains. These systems support end-to-end lifecycle management of field data, from collection and analysis to action and review.

12.1 Targets

The following section and Table 12-1 outlines the qualitative targets that guide LSPGC's advancement of enterprise system capabilities. These targets reflect a commitment to continuous improvement in data integration, system usability, and operational alignment.

12.1.1 Qualitative Targets

LSPGC has established qualitative targets to ensure progress in developing and integrating enterprise systems throughout the 2026–2028 WMP cycle. Table 12-1 below outlines each initiative, the associated activity, tracking IDs, and anticipated schedule.

Table 12-1. Enterprise Systems Targets

Initiative	Activity (tracking ID #)	Previous Tracking ID, if applicable	2026 End of year total/Completion Date	2027 Total/Status	2028 Total/Status	Section ; Page number
Asset Management	Use Maximo to manage assets, inspections, and maintenance (GD-04)	N/A	Initial system configuration	Expanded asset coverage	QA/QC and reporting enhancements	12.2.1; 174
Vegetation Management	Centralize vegetation data and integrate inspection workflows (ENT-01)	N/A	System setup and data population	Reporting and contractor access	Audit and tracking features enabled	12.2.1; 174
Grid Monitoring	Maintain SCADA and operational telemetry for substation oversight (ENT-02)	N/A	Baseline alarms mapped	Monitoring workflows in use	System validated against commitments	12.2.1; 174
Ignition Detection	Research and complete evaluation of potential ignition detection capabilities at HFTD	N/A	Review available technologies	Assess feasibility and applicability	Inform long-term strategy and planning	10.4; 138

Initiative	Activity (tracking ID #)	Previous Tracking ID, if applicable	2026 End of year total/Completion Date	2027 Total/Status	2028 Total/Status	Section ; Page number
	energized assets (SAF-02)					
Weather Forecasting	Use StormGeo and RAWs data for operational awareness (SAF-05)	N/A	Data feeds configured	Alerts routed to key personnel	Used to inform operational readiness	10.5.4; 145
Risk Assessment	Develop basic dashboards for inspection trends and risk prioritization (ENT-03)	N/A	Planning and baseline development	Data inputs aligned to initiatives	Dashboards used in internal reviews	12.2; 174

12.2 Summary of Enterprise Systems

12.2.1 Asset Management, Inspection, and Substation Vegetation Management Enterprise System(s)

LSPGC uses IBM Maximo as its enterprise asset management system (EAMS), which serves as the primary database for asset data, inspection results, maintenance records, and compliance documentation. All operational asset data is stored centrally within Maximo to ensure consistent and secure recordkeeping (GD-04).

The system is governed through a formal upgrade and change management process managed by a steering committee that meets biannually. This committee prioritizes system enhancement requests and oversees the annual implementation of incremental updates, while major version upgrades are planned in alignment with the Maximo roadmap. All updates are tested in a controlled environment prior to deployment. If Maximo were ever to be replaced, data from the system could be fully migrated due to its structured format and export capabilities, ensuring continuity and data accuracy. At present, no migration is planned.

Asset identification is carried out at the time of commissioning. All assets, including substations and associated equipment, are entered into Maximo as part of an onboarding process that includes a completeness review of the asset list and the preventative maintenance program. This ensures that each asset is appropriately classified, assigned a maintenance schedule, and incorporated into ongoing inspection routines (GD-04).

LSPGC integrates 100 percent of its commissioned operational assets into Maximo. Because only commissioned assets are considered “active,” full asset identification is maintained through this process, and there are no known exceptions. Any assets not yet in service remain outside the live system until operationalized (GD-04).

LSPGC performs vegetation management at substations as part of its preventative maintenance and operational inspection activities and will expand its vegetation management program ahead of the anticipated energization of transmission lines in late 2028. Vegetation conditions are assessed in conjunction with scheduled site visits, and any required corrective actions are documented and initiated through Maximo. These records are tracked alongside broader substation inspections. As the broader vegetation management program is expanded, vegetation inspection data and associated workflows will be captured in an enterprise system (ENT-01).

To ensure data integrity, the Asset Management department performs quality checks on asset records, work order documentation, and inspection results. Records are reviewed for accuracy

and completeness upon entry. Maximo maintains strict access controls to ensure that only authorized, trained users can modify data. The system allows for structured queries and exports, ensuring that data is accessible across formats for reporting and analysis. All inspection and maintenance documentation are retained indefinitely. LSPGC does not plan to dispose of historical maintenance data, as it informs long-term risk analysis and asset performance trends.

Quality assurance and control are integrated into Maximo workflows. Supervisory reviews of inspection findings are conducted prior to the closure of corrective work orders. Contractor-submitted data is verified by LSPGC personnel. These QA/QC practices ensure that field data is reviewed and validated before being incorporated into the official asset record.

Wildfire mitigation activities, including inspections, maintenance actions, and risk-informed capital improvements, are scheduled, tracked, and monitored in Maximo. The system captures the lifecycle of each mitigation task, including creation, assignment, status changes, and completion. This supports regulatory reporting and provides transparency across workstreams (ENT-02).

Access to Maximo is role-based. Trained employees from engineering, substations, and wildfire mitigation teams are authorized to view and update records relevant to their functions. Contractor access is limited and subject to review by internal staff. Users can track work order status, view scheduling data, and input field results, while LSPGC personnel validate and approve final entries.

Work order and inspection data within Maximo are used to inform asset-level risk assessments and support the prioritization of maintenance and interim mitigation activities. By analyzing inspection trends, condition ratings, and failure data, LSPGC will be able to allocate resources efficiently and address elevated-risk assets before issues escalate (ENT-03).

Since the last Base WMP submission, LSPGC has continued with routine system maintenance and version updates to Maximo. No major changes or migrations have occurred, but minor enhancements have been implemented in line with operational needs. Future updates will be coordinated through the Maximo steering committee, with an emphasis on improving user interface, data validation workflows, and reporting capabilities.

12.2.2 Transmission Lines and Right of Way Vegetation Management Enterprise System

LSPGC does not currently own or operate any transmission lines or associated rights-of-way in California. The company does not anticipate having transmission infrastructure in service prior to 2028. As part of internal planning and operational readiness efforts, LSPGC expects to

evaluate potential system needs related to vegetation management for transmission lines and rights-of-way in advance of any asset commissioning. This may include reviewing available enterprise tools and configurations, including options to extend existing capabilities within Maximo. The narrative associated with transmission vegetation management systems will be updated in future filings as appropriate to reflect any operational changes or system implementation decisions.

13. Lessons Learned

13.1 Description and Summary of Lessons Learned

As a newly operational ITO in California, LSPGC is building its wildfire mitigation program from the foundational level. While the 2023–2025 WMP cycle represented LSPGC’s first formal implementation period under California’s WMP framework, the company has proactively embedded a culture of learning, adaptation, and continuous improvement. Orchard Substation was energized in March 2025, providing limited operational data during the cycle, while the Fern Road Substation remains under construction and is expected to be energized during the 2026-2028 WMP cycle.

Although LSPGC has not experienced Public Safety Power Shutoff (PSPS) events, catastrophic ignitions, or wildfire compliance violations to date, the organization has leveraged internal analysis, third-party engineering reviews, field engagement, and collaboration with peer utilities to shape its wildfire mitigation practices. Lessons learned were identified through pre-operational inspection findings, vegetation management reviews, and active participation in Energy Safety-led working groups.

Table 13-1 below summarizes key lessons learned during the 2023–2025 WMP cycle.

Table 13-1. Lessons Learned

ID #	Year of Lesson Learned	Subject	Category and Source of Lesson Learned	Description of Lesson Learned	Proposed WMP Improvement	Timeline for Implementation	Reference
1	2024	Vegetation management in substation defensible space area	Construction period inspections and contractor input	Defensible space in HFTD is not one-size fits all and needs to consider safety, terrain features and project design	Create formal Substation Defensible Space Procedure	Q1 2026	Substation Defensible Space Procedure one finalized
2	2023	Contractor construction fire prevention plan improvements	Emergency Preparedness	Contractor CFPP drafts were routinely underwhelming and required many iterations of feedback before approval	Create CFPP template requirements to be provided to contractors for future major projects	Q4 2026	CFPP requirements document once drafted

13.2 Working Group Meetings

As a newly operational ITO, LSPGC has not participated in formal Energy Safety working group meetings during the 2023–2025 WMP cycle. However, representatives from LSPGC have attended wildfire-focused utility conferences, industry workshops, and peer networking forums to stay informed on best practices and mitigation innovations relevant to California’s wildfire mitigation landscape.

These engagements included sessions related to:

- Risk-informed design of transmission infrastructure in wildland-urban interface zones
- Vegetation management planning for substation-adjacent land
- Detection technologies such as Early Fault Detection (EFD) and fire-spread modeling tools
- Enterprise asset tracking and digital reporting aligned with Energy Safety data requirements

These interactions informed several enhancements in LSPGC’s 2026–2028 WMP, including improved vegetation inspection processes, investment in data governance infrastructure, and evaluation of detection technologies for future feasibility assessments.

LSPGC will continue to monitor and participate in future Energy Safety-led working groups as applicable, and to engage with peer utilities and technical conferences for continuous learning.

13.3 Discontinued Activities

LSPGC does not have any discontinued wildfire mitigation activities to report for the 2026–2028 WMP cycle.

As LSPGC was not operational during the 2020–2022 cycle and only partially operational during 2023–2025 (with Orchard Substation energized in March 2025 and Fern Road Substation still under construction), not previously implemented WMP activities have been retired, replaced, or removed.

Accordingly, Table 13-2 is not applicable for this WMP cycle. LSPGC will report on any future discontinued or retired activities in upcoming WMP cycles as operational conditions evolve.

Table 13-2. Lessons Learned from Discontinued Activities

Discontinued Initiative Activity (Tracking ID)	Rationale for Discontinuation	Lessons Learned	Replacement Activities (include page # where discussed)
N/A – No discontinued activities to report during 2023–2025. LSPGC became operational in March 2025			

APPENDIX A: DEFINITIONS

Unless otherwise expressly stated, the following words and terms, for the purposes of these Guidelines, have the meanings shown in this chapter.

Terms Defined in Other Codes

Where terms are not defined in these Guidelines and are defined in the Government Code, Public Utilities Code, or Public Resources Code, such terms have the meanings ascribed to them in those codes.

Terms Not Defined

Where terms are not defined through the methods authorized by this section, such terms have ordinarily accepted meanings such as the context implies.

Definition of Terms

Term	Definition
Access and functional needs population (AFN)	Individuals, including, but not limited to, those who have developmental or intellectual disabilities, physical disabilities, chronic conditions, or injuries; who have limited English proficiency or are non-English speaking; who are older adults, children, or people living in institutionalized settings; or who are low income, homeless, or transportation disadvantaged, including, but not limited to, those who are dependent on public transit or are pregnant. (Gov. Code, § 8593.3(f)(1).)
Asset (utility)	Electric lines, equipment, or supporting hardware.

Term	Definition
Benchmarking	A comparison between one electrical corporation's protocols, technologies used, or mitigations implemented, and other electrical corporations' similar endeavors.
Burn likelihood	The likelihood that a wildfire with an ignition point will burn at a specific location within the service territory based on a probabilistic set of weather profiles, vegetation, and topography.
Catastrophic wildfire	A fire that caused at least one death, damaged over 500 structures, or burned over 5,000 acres.
Circuit miles	The total length in miles of separate transmission and/or distribution circuits, regardless of the number of conductors used per circuit (i.e., different phases).
Circuit segment	A specific portion of an electrical circuit that can be separated or disconnected from the rest of the system without affecting the operation of other parts of the network. This isolation is typically achieved using switches, circuit breakers, or other control mechanisms.
Consequence	The adverse effects from an event, considering the hazard intensity, community exposure, and local vulnerability.
Contact from object ignition likelihood	The likelihood that a non-vegetative object (such as a balloon or vehicle) will contact utility-owned equipment and result in an ignition.
Contact from vegetation likelihood of ignition	The likelihood that vegetation will contact utility-owned equipment and result in an ignition.
Contractor	Any individual in the temporary and/or indirect employ of the electrical corporation whose limited hours and/or time-bound

Term	Definition
	term of employment are not considered “full-time” for tax and/or any other purposes.
Critical facilities and infrastructure	Facilities and infrastructure that are essential to public safety and that require additional assistance and advance planning to ensure resiliency during PSPS events. These include the following: Emergency services sector: Police stations Fire stations Emergency operations centers Public safety answering points (e.g., 9-1-1 emergency services) Government facilities sector: Schools Jails and prisons Health care and public health sector: Public health departments Medical facilities, including hospitals, skilled nursing facilities, nursing homes, blood banks, health care facilities, dialysis centers, and hospice facilities (excluding doctors' offices and other non-essential medical facilities) Energy sector: Public and private utility facilities vital to maintaining or restoring normal service, including, but not limited to, interconnected publicly owned electrical corporations and electric cooperatives Water and wastewater systems sector: Facilities associated with provision of drinking water or processing of wastewater, including facilities that pump, divert, transport, store, treat, and deliver water or wastewater Communications sector:

Term	Definition
	Communication carrier infrastructure, including selective routers, central offices, head ends, cellular switches, remote terminals, and cellular sites Chemical sector: Facilities associated with manufacturing, maintaining, or distributing hazardous materials and chemicals (including Category N-Customers as defined in D.01-06-085) Transportation sector: Facilities associated with transportation for civilian and military purposes: automotive, rail, aviation, maritime, or major public transportation (D.19-05-042 and D.20-05-051)
Customer hours	Total number of customers, multiplied by average number of hours (e.g., of power outage).
Dead fuel moisture	The moisture content of dead organic fuels, expressed as a percentage of the oven dry weight of the sample, that is controlled entirely by exposure to environmental conditions.
Detailed inspection	In accordance with General Order (GO) 165, an inspection where individual pieces of equipment and structures are carefully examined, visually and through routine diagnostic testing, as appropriate, and (if practical and if useful information can be so gathered) opened, and the condition of each is rated and recorded.
Disaster	A serious disruption of the functioning of a community or a society at any scale due to hazardous events interacting with conditions of exposure, vulnerability, and capacity, leading to one or more of the following: human, material, economic, and environmental losses and impacts. The effect of the disaster can be immediate and localized but is often widespread and could last a long time. The effect may test or exceed the capacity of a

Term	Definition
	community or society to cope using its own resources. Therefore, it may require assistance from external sources, which could include neighboring jurisdictions or those at the national or international levels. (United Nations Office for Disaster Risk Reduction [UNDRR].)
Discussion-based exercise	Exercise used to familiarize participants with current plans, policies, agreements, and procedures or to develop new plans, policies, agreements, and procedures. Often includes seminars, workshops, tabletop exercises, and games.
Electrical corporation	Every corporation or person owning, controlling, operating, or managing any electric plant for compensation within California, except where the producer generates electricity on or distributes it through private property solely for its own use or the use of its tenants and not for sale or transmission to others.
Emergency	Any incident, whether natural, technological, or human caused, that requires responsive action to protect life or property but does not result in serious disruption of the functioning of a community or society. (FEMA/UNDRR.)
Enhanced inspection	Inspection whose frequency and thoroughness exceed the requirements of a detailed inspection, particularly if driven by risk calculations.
Equipment caused ignition likelihood	The likelihood that utility-owned equipment will cause an ignition through either normal operation (such as arcing) or failure.
Exercise	An instrument to train for, assess, practice, and improve performance in prevention, protection, response, and recovery capabilities in a risk-free environment. (FEMA.)

Term	Definition
Exposure	The presence of people, infrastructure, livelihoods, environmental services and resources, and other high-value assets in places that could be adversely affected by a hazard.
Fire hazard index	A numerical rating for specific fuel types, indicating the relative probability of fires starting and spreading, and the probable degree of resistance to control; similar to burning index, but without effects of wind speed. ¹
Fire potential index (FPI)	Landscape scale index used as a proxy for assessing real-time risk of a wildfire under current and forecasted weather conditions.
Fire season	The time of year when wildfires are most likely for a given geographic region due to historical weather conditions, vegetative characteristics, and impacts of climate change. Each electrical corporation defines the fire season(s) across its service territory based on a recognized fire agency definition for the specific region(s) in California.
Fireline intensity	The rate of heat release per unit time per unit length of fire front. Numerically, it is the product of the heat yield, the quantity of fuel consumed in the fire front, and the rate of spread. ²
Frequency	The anticipated number of occurrences of an event or hazard over time.
Frequent PSPS events	Three or more PSPS events per calendar year per line circuit.
Fuel continuity	The degree or extent of continuous or uninterrupted distribution of fuel particles in a fuel bed thus affecting a fire's ability to

¹ National Wildfire Coordinating Group: <https://www.nwcg.gov/node/393188> (accessed May 9, 2024).

² National Wildfire Coordinating Group: <https://www.nwcg.gov/node/447140> (accessed May 9, 2024).

Term	Definition
	sustain combustion and spread. This applies to aerial fuels as well as surface fuels. ³
Fuel density	Mass of fuel (vegetation) per area that could combust in a wildfire.
Fuel management	Act or practice of controlling flammability and reducing resistance to control of wildland fuels through mechanical, chemical, biological, or manual means, or by fire, in support of land management objectives. ⁴
Fuel moisture content	Amount of moisture in a given mass of fuel (vegetation), measured as a percentage of its dry weight.
Full-time employee (FTE)	Any individual in the ongoing and/or direct employ of the electrical corporation whose hours and/or term of employment are considered “full-time” for tax and/or any other purposes.
GO 95 nonconformance	Condition of a utility asset that does not meet standards established by GO 95.
Grid hardening	Actions (such as equipment upgrades, maintenance, and planning for more resilient infrastructure) taken in response to the risk of undesirable events (such as outages) or undesirable conditions of the electrical system to reduce or mitigate those events and conditions, informed by an assessment of the relevant risk drivers or factors.
Grid topology	General design of an electric grid, whether looped or radial, with consequences for reliability and ability to support PSPS (e.g., ability to deliver electricity from an additional source).

³ National Wildfire Coordinating Group: <https://www.nwcg.gov/node/444281> (accessed May 9, 2024).

⁴ National Wildfire Coordinating Group: <https://www.nwcg.gov/node/386549> (accessed May 9, 2024).

Term	Definition
Hazard	A condition, situation, or behavior that presents the potential for harm or damage to people, property, the environment, or other valued resources.
Hazard tree	A tree that is, or has portions that are, dead, dying, rotten, diseased, or otherwise has a structural defect that may fail in whole or in part and damage utility facilities should it fail
High Fire Threat District (HFTD)	Areas of the state designated by the CPUC as having elevated wildfire risk, where each utility must take additional action (per GO 95, GO 165, and GO 166) to mitigate wildfire risk. (D.17-01-009.)
High Fire Risk Area (HFRA)	Areas that the electrical corporation has deemed at high risk from wildfire, independent of HFTD designation.
Highly rural region	Area with a population of less than seven persons per square mile, as determined by the United States Bureau of the Census. For purposes of the WMP, “area” must be defined as a census tract.
High-risk species	Species of vegetation that (1) have a higher risk of either coming into contact with powerlines or causing an outage or ignition, or (2) are easily ignitable and within close proximity to potential arcing, sparks, and/or other utility equipment thermal failures. The status of species as “high-risk” must be a function of species-specific characteristics, including growth rate; failure rates of limbs, trunk, and/or roots (as compared to other species); height at maturity; flammability; and vulnerability to disease or insects.

Term	Definition
High wind warning (HWW)	Level of wind risk from weather conditions, as declared by the National Weather Service (NWS). For historical NWS data, refer to the Iowa State University archive of NWS watches/warnings. ⁵
HWW overhead (OH) circuit mile day	Sum of OH circuit miles of utility grid subject to a HWW each day within a given time period, calculated as the number of OH circuit miles under a HWW multiplied by the number of days those miles are under said HWW. For example, if 100 OH circuit miles are under a HWW for one day, and 10 of those miles are under the HWW for an additional day, then the total HWW OH circuit mile days would be 110.
Ignition likelihood	The total anticipated annualized number of ignitions resulting from electrical corporation-owned assets at each location in the electrical corporation's service territory. This considers probabilistic weather conditions, type and age of equipment, and potential contact of vegetation and other objects with electrical corporation assets. This should include the use of any method used to reduce the likelihood of ignition. For example, the use of protective equipment and device settings (PEDS) to reduce the likelihood of an ignition upon an initiating event.
Incident command system (ICS)	A standardized on-scene emergency management concept specifically designed to allow its user(s) to adopt an integrated organizational structure equal to the complexity and demands of single or multiple incidents, without being hindered by jurisdictional boundaries.
Initiative activity	See mitigation activity.

⁵ <https://mesonet.agron.iastate.edu/request/gis/watchwarn.phtml>.

Term	Definition
Initiative construction standards	The standard specifications, special provisions, standards of practice, standard material and construction specifications, construction protocols, and construction methods that an electrical corporation applies to activities undertaken by the electrical corporation pursuant to a WMP initiative in a given compliance period.
Level 1 finding	In accordance with GO 95, an immediate safety and/or reliability risk with high probability for significant impact.
Level 2 finding	In accordance with GO 95, a variable safety and/or reliability risk (non-immediate and with high to low probability for significant impact).
Level 3 finding	In accordance with GO 95, an acceptable safety and/or reliability risk.
Limited English proficiency (LEP) population	Population with limited English working proficiency based on the International Language Roundtable scale.
Line miles	The number of miles of transmission and/or distribution conductors, including the length of each phase and parallel conductor segment.
Live fuel moisture content	Moisture content within living vegetation, which can retain water longer than dead fuel.
Locally relevant	In disaster risk management, generally understood as the cope at which disaster risk strategies and initiatives are considered the most effective at achieving desired outcomes. This tends to be the level closest to impacting residents and communities, reducing existing risks, and building capacity, knowledge, and normative support. Locally relevant scales, conditions, and perspectives depend on the context of application.

Term	Definition
Match-drop simulation	Wildfire simulation method forecasting propagation and consequence/impact based on an arbitrary ignition.
Memorandum of Agreement (MOA)	A document of agreement between two or more agencies establishing reciprocal assistance to be provided upon request (and if available from the supplying agency) and laying out the guidelines under which this assistance will operate. It can also be a cooperative document in which parties agree to work together on an agreed-upon project or meet an agreed objective.
Mitigation	Undertakings to reduce the loss of life and property from natural and/or human-caused disasters by avoiding or lessening the impact of a disaster and providing value to the public by creating safer communities. Encompasses mitigation categories, mitigation initiatives, and mitigation activities within the WMP.
Mitigation activity	A measure that contributes to or accomplishes a mitigation initiative designed to reduce the consequences and/or probability of wildfire or outage event. For example, covered conductor installation is a mitigation activity under the mitigation initiative of Grid Design and System Hardening.
Mitigation category	The highest subset in the WMP mitigation hierarchy. There are five Mitigation Categories in total: Grid Design, Operations, and Maintenance; Vegetation Management and Inspections; Situational Awareness and Forecasting; Emergency Preparedness; and Enterprise Systems. Contains mitigation initiatives and any subsequent mitigation activities.
Mitigation initiative	Efforts within a mitigation category either proposed or in process, designed to reduce the consequences and/or probability of wildfire or outage event. For example, Asset Inspection is a mitigation initiative under the mitigation category of Grid Design, Operations, and Maintenance.

Term	Definition
Model uncertainty	The amount by which a calculated value might differ from the true value when the input parameters are known (i.e., limitation of the model itself based on assumptions). ⁶
Mutual aid	Voluntary aid and assistance by the provision of services and facilities, including but not limited to electrical corporations, communication, and transportation. Mutual aid is intended to provide adequate resources, facilities, and other support to an electrical corporation whenever its own resources prove inadequate to cope with a given situation.
National Incident Management System (NIMS)	A systematic, proactive approach to guide all levels of government, nongovernment organizations, and the private sector to work together to prevent, protect against, mitigate, respond to, and recover from the effects of incidents. NIMS provides stakeholders across the whole community with the shared vocabulary, systems, and processes to successfully deliver the capabilities described in the National Preparedness System. NIMS provides a consistent foundation for dealing with all incidents, ranging from daily occurrences to incidents requiring a coordinated federal response.
Operations-based exercise	Type of exercise that validates plans, policies, agreements, and procedures; clarifies roles and responsibilities; and identifies resource gaps in an operational environment. Often includes drills, functional exercises (FEs), and full-scale exercises (FSEs).
Outage program risk	The measure of reliability impacts from wildfire mitigation related outages at a given location.

⁶ Adapted from SFPE, 2010, "Substantiating a Fire Model for a Given Application," Society of Fire Protection Engineers Engineering Guides.

Term	Definition
Overall utility risk	The comprehensive risk due to both wildfire and PSPS incidents across a utility's territory; the aggregate potential of adverse impacts to people, property, critical infrastructure, or other valued assets in society.
Overall utility risk, PSPS risk	See Outage program risk.
Parameter uncertainty	The amount by which a calculated value might differ from the true value based on unknown input parameters. (Adapted from Society of Fire Protection Engineers [SFPE] guidance.)
Patrol inspection	In accordance with GO 165, a simple visual inspection of applicable utility equipment and structures designed to identify obvious structural problems and hazards. Patrol inspections may be carried out in the course of other company business.
Performance metric	A quantifiable measurement that is used by an electrical corporation to indicate the extent to which its WMP is driving performance outcomes.
Population density	Population density is calculated using the American Community Survey (ACS) one-year estimate for the corresponding year or, for years with no such ACS estimate available, the estimate for the immediately preceding year.
Preparedness	A continuous cycle of planning, organizing, training, equipping, exercising, evaluating, and taking corrective action in an effort to ensure effective coordination during incident response. Within the NIMS, preparedness focuses on planning, procedures and protocols, training and exercises, personnel qualification and certification, and equipment certification.

Term	Definition
Priority essential services	Critical first responders, public safety partners, critical facilities and infrastructure, operators of telecommunications infrastructure, and water electrical corporations/agencies.
Property	Private and public property, buildings and structures, infrastructure, and other items of value that may be destroyed by wildfire, including both third-party property and utility assets.
Protective equipment and device settings (PEDS)	The electrical corporation's procedures for adjusting the sensitivity of grid elements to reduce wildfire risk, other than automatic reclosers (such as circuit breakers, switches, etc.). For example, PG&E's "Enhanced Powerline Safety Settings" (EPSS).
PEDS outage consequence	The total anticipated adverse effects from an outage occurring while increased sensitivity settings on a protective device are enabled at a specific location, including reliability and associated safety impacts.
PEDS outage exposure potential	The potential physical, social, or economic impact of an outage occurring when PEDS are enabled on people, property, critical infrastructure, livelihoods, health, local economies, and other high-value assets.
PEDS outage likelihood	The likelihood of an outage occurring while increased sensitivity settings on a protective device are enabled at a specific location given a probabilistic set of environmental conditions.
PEDS outage risk	The total expected annualized impacts from PEDS enablement at a specific location.
PEDS outage vulnerability	The susceptibility of people or a community to adverse effects of an outage occurring when PEDS are enabled, including all characteristics that influence their capacity to anticipate, cope with, resist, and recover from the related adverse effects (e.g.,

Term	Definition
	high AFN population, poor energy resiliency, low socioeconomics).
PSPS consequence	The total anticipated adverse effects of a PSPS for a community. This considers the PSPS exposure potential and inherent PSPS vulnerabilities of communities at risk.
PSPS event	The period from notification of the first public safety partner of a planned public safety PSPS to re-energization of the final customer.
PSPS exposure potential	The potential physical, social, or economic impact of a PSPS event on people, property, critical infrastructure, livelihoods, health, local economies, and other high-value assets.
PSPS likelihood	The likelihood of an electrical corporation requiring a PSPS given a probabilistic set of environmental conditions.
PSPS risk	The total expected annualized impacts from PSPS at a specific location. This considers two factors: (1) the likelihood a PSPS will be required due to environmental conditions exceeding design conditions, and (2) the potential consequences of the PSPS for each affected community, considering exposure potential and vulnerability.
PSPS vulnerability	The susceptibility of people or a community to adverse effects of a PSPS event, including all characteristics that influence their capacity to anticipate, cope with, resist, and recover from the adverse effects of a PSPS event (e.g., high AFN population, poor energy resiliency, low socioeconomics).
Public safety partners	First/emergency responders at the local, state, and federal levels; water, wastewater, and communication service providers; community choice aggregators (CCAs); affected publicly owned electrical corporations/electrical cooperatives; tribal

Term	Definition
	governments; Energy Safety; the Commission; the California Office of Emergency Services; and CAL FIRE.
Qualitative target	Specific, measurable, achievable, realistic, and timely outcomes for the overall WMP strategy, or mitigation initiatives and activities that a utility can implement to satisfy the primary goals and subgoals of the WMP program.
Quantitative target	A forward-looking, quantifiable measurement of work to which an electrical corporation commits to in its WMP. Electrical corporations will show progress toward completing targets in subsequent reports, including data submissions and WMP Updates.
RFW OH circuit mile day	Sum of OH circuit miles of utility grid subject to RFW each day within a given time period, calculated as the number of OH circuit miles under RFW multiplied by the number of days those miles are under said RFW. For example, if 100 OH circuit miles are under RFW for one day, and 10 of those miles are under RFW for an additional day, then the total RFW OH circuit mile days would be 110.
Risk	A measure of the anticipated adverse effects from a hazard considering the consequences and frequency of the hazard occurring. <u>133</u>
Risk component	A part of an electric corporation's risk analysis framework used to determine overall utility risk.
Risk evaluation	The process of comparing the results of a risk analysis with risk criteria to determine whether the risk and/or its magnitude is acceptable or tolerable. (ISO 31000:2009.)
Quantitative target	A forward-looking, quantifiable measurement of work to which an electrical corporation commits to in its WMP. Electrical

Term	Definition
	corporations will show progress toward completing targets in subsequent reports, including data submissions and WMP Updates.
RFW OH circuit mile day	Sum of OH circuit miles of utility grid subject to RFW each day within a given time period, calculated as the number of OH circuit miles under RFW multiplied by the number of days those miles are under said RFW. For example, if 100 OH circuit miles are under RFW for one day, and 10 of those miles are under RFW for an additional day, then the total RFW OH circuit mile days would be 110.
Risk	A measure of the anticipated adverse effects from a hazard considering the consequences and frequency of the hazard occurring. ⁷
Risk component	A part of an electric corporation's risk analysis framework used to determine overall utility risk.
Risk evaluation	The process of comparing the results of a risk analysis with risk criteria to determine whether the risk and/or its magnitude is acceptable or tolerable. (ISO 31000:2009.)
Risk event	An event with probability of ignition, such as wire down, contact with objects, line slap, event with evidence of heat generation, or other event that causes sparking or has the potential to cause ignition. The following all qualify as risk events: - Ignitions - Outages not caused by vegetation - Outages caused by vegetation

⁷ Adapted from D. Coppola, 2020, "Risk and Vulnerability," Introduction to International Disaster Management, 4th ed.

Term	Definition
	Wire-down events Faults Other events with potential to cause ignition
Risk management	Systematic application of management policies, procedures, and practices to the tasks of communication, consultation, establishment of context, and identification, analysis, evaluation, treatment, monitoring, and review of risk. (ISO 31000.)
Rule	Section of Public Utilities Code requiring a particular activity or establishing a particular threshold.
Rural region	In accordance with GO 165, area with a population of less than 1,000 persons per square mile, as determined by the U.S. Bureau of the Census. For purposes of the WMP, “area” must be defined as a census tract.
Seminar	An informal discussion, designed to orient participants to new or updated plans, policies, or procedures (e.g., to review a new external communications standard operating procedure).
Sensitivity analysis	Process used to determine the relationships between the uncertainty in the independent variables (“input”) used in an analysis and the uncertainty in the resultant dependent variables (“output”). (SFPE guidance.)
Situational Awareness	An on-going process of gathering information by observation and by communication with others. This information is integrated to create an individual's perception of a given situation. ⁸

⁸ 121 <https://www.nwcg.gov/node/439827> (assessed May 13, 2024).

Term	Definition
Slash	Branches or limbs less than four inches in diameter, and bark and split products debris left on the ground as a result of utility vegetation management. ⁹
Span	The space between adjacent supporting poles or structures on a circuit consisting of electric lines and equipment. "Span level" refers to asset-scale granularity.
Tabletop exercise (TTX)	A discussion-based exercise intended to stimulate discussion of various issues regarding a hypothetical situation. Tabletop exercises can be used to assess plans, policies, and procedures or to assess types of systems needed to guide the prevention of response to, or recovery from a defined incident.
Trees with strike potential	Trees that could either, in whole or in part, "fall in" to a power line or have portions detach and "fly in" to contact a power line in high-wind conditions.
Uncertainty	The amount by which an observed or calculated value might differ from the true value. For an observed value, the difference is "experimental uncertainty"; for a calculated value, it is "model" or "parameter uncertainty." (Adapted from SFPE guidance.)
Urban region	In accordance with GO 165, area with a population of more than 1,000 persons per square mile, as determined by the U.S. Bureau of the Census. For purposes of the WMP, "area" must be defined as a census tract.
Utility-related ignition	An event that meets the criteria for a reportable event subject to fire-related reporting requirements. ¹⁰

⁹ California Public Resources Code section 4525.7.

¹⁰ CPUC Decision 14-02-015, Appendix C, page C-3:

<https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M087/K892/87892306.PDF>.

Term	Definition
Validation	Process of determining the degree to which a calculation method accurately represents the real world from the perspective of the intended uses of the calculation method without modifying input parameters based on observations in a specific scenario. (Adapted from ASTM E 1355.)
Vegetation management (VM)	The assessment, intervention, and management of vegetation, including pruning and removal of trees and other vegetation around electrical infrastructure for safety, reliability, and risk reduction.
Verification	Process to ensure that a model is working as designed, that is, that the equations are being properly solved. Verification is essentially a check of the mathematics. (SFPE guidance.)
Vulnerability	The propensity or predisposition of a community to be adversely affected by a hazard, including the characteristics of a person, group, or service and their situation that influences their capacity to anticipate, cope with, resist, and recover from the adverse effects of a hazard.
Wildfire consequence	The total anticipated adverse effects from a wildfire on a community that is reached. This considers the wildfire hazard intensity, the wildfire exposure potential, and the inherent wildfire vulnerabilities of communities at risk.
Wildfire exposure potential	The potential physical, social, or economic impact of wildfire on people, property, critical infrastructure, livelihoods, health, environmental services, local economies, cultural/historical resources, and other high-value assets. This may include direct or indirect impacts, as well as short- and long-term impacts.
Wildfire hazard intensity	The potential intensity of a wildfire at a specific location within the service territory given a probabilistic set of weather profiles, vegetation, and topography.

Term	Definition
Wildfire likelihood	The total anticipated annualized number of fires reaching each spatial location resulting from utility-related ignitions at each location in the electrical corporation service territory. This considers the ignition likelihood and the likelihood that an ignition will transition into a wildfire based on the probabilistic weather conditions in the area.
Wildfire mitigation strategy	Overview of the key mitigation initiatives at enterprise level and component level across the electrical corporation's service territory, including interim strategies where long-term mitigation initiatives have long implementation timelines. This includes a description of the enterprise-level monitoring and evaluation strategy for assessing overall effectiveness of the WMP.
Wildfire risk	The total expected annualized impacts from ignitions at a specific location. This considers the likelihood that an ignition will occur, the likelihood the ignition will transition into a wildfire, and the potential consequences—considering hazard intensity, exposure potential, and vulnerability—the wildfire will have for each community it reaches.
Wildfire spread likelihood	The likelihood that a fire with a nearby but unknown ignition point will transition into a wildfire and will spread to a location in the service territory based on a probabilistic set of weather profiles, vegetation, and topography.
Wildfire vulnerability	The susceptibility of people or a community to adverse effects of a wildfire, including all characteristics that influence their capacity to anticipate, cope with, resist, and recover from the adverse effects of a wildfire (e.g., AFN customers, Social Vulnerability Index, age of structures, firefighting capacities).

Term	Definition
Wildland-urban interface (WUI)	The line, area, or zone where structures and other human development meet or intermingle with undeveloped wildland or vegetation fuels (National Wildfire Coordinating Group).
Wire down	Instance where an electric transmission or distribution conductor is broken and falls from its intended position to rest on the ground or a foreign object.
Work order	A prescription for asset or vegetation management activities resulting from asset or vegetation management inspection findings.
Workshop	Discussion that resembles a seminar but is employed to build specific products, such as a draft plan or policy (e.g., a multi-year training and exercise plan).

Definitions of Initiatives by Category

Category	Section #	Initiative	Definition
Risk Methodology and Assessment	5	Risk Methodology and Assessment	Development and use of tools and processes to assess the risk of wildfire and PSPS across an electrical corporation's service territory.
Wildfire Mitigation Strategy	6	Wildfire Mitigation Strategy Development	Development and use of processes for deciding on a portfolio of mitigation initiatives to achieve maximum feasible risk reduction and that meet the goals of the WMP.

Category	Section #	Initiative	Definition
Grid Design, Operations, and Maintenance	8.2	Grid Design and System Hardening	Strengthening of distribution, transmission, and substation infrastructure to reduce the risk of utility-related ignitions resulting in catastrophic wildfires.
Grid Design, Operations, and Maintenance	8.3	Asset Inspections	Inspections of overhead electric transmission lines, equipment, and right-of-way.
Grid Design, Operations, and Maintenance	8.4	Equipment Maintenance and Repair	Remediation, adjustments, or installations of new equipment to improve or replace existing connector equipment, such as hotline clamps.
Grid Design, Operations, and Maintenance	8.5	Quality Assurance and Quality Control	Establishment and function of audit process to manage and confirm work completed by employees or contractors, including packaging QA/QC information for input to decision-making and related integrated workforce management processes.
Grid Design, Operations, and Maintenance	8.6	Work Orders	Actions taken to manage the electrical corporation's open work orders resulting from inspections that prescribe asset management activities.
Grid Design, Operations, and Maintenance	8.7	Grid Operations and Procedures	Operations and procedures to reduce across the electrical

Category	Section #	Initiative	Definition
			corporation's system to reduce wildfire risk.
Grid Design, Operations, and Maintenance	8.8	Workforce Planning	Programs to ensure that the electrical corporation has qualified asset personnel and to ensure that both employees and contractors tasked with asset management responsibilities are adequately trained to perform relevant work.
Vegetation Management and Inspections	9.2	Vegetation Management Inspections	Inspections of vegetation around and adjacent to electrical facilities and equipment that may be hazardous by growing, blowing, or falling into electrical facilities or equipment.
Vegetation Management and Inspections	9.3	Pruning and Removal	Pruning, removal, and other vegetation management activities that are performed as a result of inspections.
Vegetation Management and Inspections	9.4	Pole Clearing	Plan and execution of vegetation removal around poles per Public Resources Code section 4292 and outside the requirements of Public Resources Code section 4292 (e.g., pole clearing performed outside of the State Responsibility Area).
Vegetation Management and Inspections	9.5	Wood and Slash Management	Actions taken to manage all downed wood and "slash" generated from vegetation management activities.

Category	Section #	Initiative	Definition
Vegetation Management and Inspections	9.6	Defensible Space	Actions taken to reduce ignition probability and wildfire consequence due to contact with substation equipment.
Vegetation Management and Inspections	9.7	Integrated Vegetation Management	Actions taken in accordance with Integrated Vegetation Management principles that are not covered by another initiative.
Vegetation Management and Inspections	9.8	Partnerships	Collaboration of resources, expertise, and efforts to accomplish agreed upon objectives related to wildfire risk reduction achieved through vegetation management.
Vegetation Management and Inspections	9.9	Activities Based on Weather Conditions	Actions taken in accordance with weather condition forecasts that indicate an elevated fire threat in terms of ignition probability and wildfire potential.
Vegetation Management and Inspections	9.10	Post-Fire Service Restoration	Actions taken during post-fire restoration to restore power while active fire suppression is ongoing and actions that occur following active fire suppression during the post-fire suppression repair and rehabilitation phases of fire protection operations.
Vegetation Management and Inspections	9.11	Quality Assurance and Quality Control	Establishment and function of audit process to manage and confirm work completed by employees or contractors, including packaging

Category	Section #	Initiative	Definition
			QA/QC information for input to decision-making and related integrated workforce management processes.
Vegetation Management and Inspections	9.12	Work Orders	Actions taken to manage the electrical corporation's open work orders resulting from inspections that prescribe vegetation management activities.
Vegetation Management and Inspections	9.13	Workforce Planning	Programs to ensure that the electrical corporation has qualified personnel and to ensure that both employees and contractors tasked with vegetation management responsibilities are adequately trained to perform relevant work.
Situational Awareness and Forecasting	10.2	Environmental Monitoring Systems	Development and deployment of systems which measure environmental characteristics, such as fuel moisture, air temperature, and velocity.
Situational Awareness and Forecasting	10.3	Grid Monitoring Systems	Development and deployment of systems that checks the operational conditions of electrical facilities and equipment and detects such things as faults, failures, and recloser operations.
Situational Awareness and Forecasting	10.4	Ignition Detection Systems	Development and deployment of systems which discover or identify

Category	Section #	Initiative	Definition
			the presence or existence of an ignition, such as cameras.
Situational Awareness and Forecasting	10.5	Weather Forecasting	Development methodology for forecast of weather conditions relevant to electrical corporation operations, forecasting weather conditions and conducting analysis to incorporate into utility decision-making, learning and updates to reduce false positives and false negatives of forecast PSPS conditions.
Situational Awareness and Forecasting	10.6	Fire Potential Index	Calculation and application of a landscape scale index used as a proxy for assessing real-time risk of a wildfire under current and forecasted weather conditions.
Emergency Preparedness, Collaboration and Public Awareness	11.2	Emergency Preparedness and Recovery Plan	Development and integration of wildfire- and PSPS-specific emergency strategies, practices, policies, and procedures into the electrical corporation's overall emergency plan based on the minimum standards described in GO 166.
Emergency Preparedness, Collaboration and Public Awareness	11.3	External Collaboration and Coordination	• Actions taken to coordinate wildfire and PSPS emergency preparedness with relevant public safety partners including

Category	Section #	Initiative	Definition
			the state, cities, counties, and tribes. • Development and integration of plans, programs, and/or policies for collaborating with communities on local wildfire mitigation planning, such as wildfire safety elements in general plans, community wildfire protection plans, and local multi-hazard mitigation plans.
Emergency Preparedness, Collaboration and Public Awareness	11.4	Public Communication, Outreach, and Education Awareness	• Development and integration of a comprehensive communication strategy to inform essential customers and other stakeholder groups of wildfires, outages due to • wildfires, and PSPS and service restoration, as required by Public Utilities Code section 768.6. • Development and deployment of public outreach and education awareness program(s) for wildfires; outages due to wildfires, PSPS events, and protective equipment and device settings; service restoration before, during, and after the incidents and vegetation management.

Category	Section #	Initiative	Definition
			Actions taken understand, evaluate, design, and implement wildfire and PSPS risk mitigation strategies, policies, and procedures specific to access and functional needs customers.
Emergency Preparedness, Collaboration and Public Awareness	11.5	Customer Support in Wildfire and PSPS Emergencies	Development and deployment of programs, systems, and protocols to support residential and non-residential customers in wildfire emergencies and PSPS events.
Enterprise Systems	12	Enterprise Systems Development	Structures and methods that allow the electrical corporation and its employees and/or contractors to accept, store, retrieve, and update data for the production, management, and scheduling of related work.

Definitions of Activities by Initiative

Initiative	Section #	Activity	Definition
Grid Design and System Hardening	8.2.1	Covered conductor installation	Installation of covered or insulated conductors to replace standard bare or unprotected conductors (defined in accordance with GO 95 as supply conductors, including but not limited to lead wires, not enclosed in a grounded metal pole or not covered by: a “suitable protective covering” (in

Initiative	Section #	Activity	Definition
			accordance with Rule 22.8), grounded metal conduit, or grounded metal sheath or shield). In accordance with GO 95, conductor is defined as a material suitable for: (1) carrying electric current, usually in the form of a wire, cable or bus bar, or (2) transmitting light in the case of fiber optics; insulated conductors as those which are surrounded by an insulating material (in accordance with Rule 21.6), the dielectric strength of which is sufficient to withstand the maximum difference of potential at normal operating voltages of the circuit without breakdown or puncture; and suitable protective covering as a covering of wood or other non-conductive material having the electrical insulating efficiency (12kV/in. dry) and impact strength (20ft.-lbs) of 1.5 inches of redwood or other material meeting the requirements of Rule 22.8-A, 22.8-B, 22.8-C or 22.8-D.
Grid Design and System Hardening	8.2.2	Undergrounding of electric lines and/or equipment	Actions taken to convert overhead electric lines and/or equipment to underground electric lines and/or equipment (i.e., located underground and in accordance with GO 128).
Grid Design and System Hardening	8.2.3	Distribution pole replacements and reinforcements	Remediation, adjustments, or installations of new equipment to improve or replace existing distribution poles (i.e., those

Initiative	Section #	Activity	Definition
			supporting lines under 65kV), including with equipment such as composite poles manufactured with materials reduce ignition probability by increasing pole lifespan and resilience against failure from object contact and other events.
Grid Design and System Hardening	8.2.4	Transmission pole/tower replacements and reinforcements	Remediation, adjustments, or installations of new equipment to improve or replace existing transmission towers (e.g., structures such as lattice steel towers or tubular steel poles that support lines at or above 65kV).
Grid Design and System Hardening	8.2.5	Traditional overhead hardening	Maintenance, repair, and replacement of capacitors, circuit breakers, cross-arms, transformers, fuses, and connectors (e.g., hot line clamps) with the intention of minimizing the risk of ignition.
Grid Design and System Hardening	8.2.6	Emerging grid hardening technology installations and pilots	Development, deployment, and piloting of novel grid hardening technology.
Grid Design and System Hardening	8.2.7	Microgrids	Development and deployment of microgrids that may reduce the risk of ignition, risk from PSPS, and wildfire consequence. "Microgrid" is defined by Public Utilities Code section 8370(d).
Grid Design and System Hardening	8.2.8	Installation of system automation equipment	Installation of electric equipment that increases the ability of the electrical corporation to automate system operation and monitoring, including equipment

Initiative	Section #	Activity	Definition
			that can be adjusted remotely such as automatic reclosers (switching devices designed to detect and interrupt momentary faults that can reclose automatically and detect if a fault remains, remaining open if so).
Grid Design and System Hardening	8.2.9	Line removals (in HFTD)	Removal of overhead lines to minimize the risk of ignition due to the design, location, or configuration of electric equipment in HFTDs.
Grid Design and System Hardening	8.2.10	Other grid topology improvements to minimize risk of ignitions	Actions taken to minimize the risk of ignition due to the design, location, or configuration of electric equipment in HFTDs not covered by another initiative.
Grid Design and System Hardening	8.2.11	Other grid topology improvements to mitigate or reduce PSPS events	Actions taken to mitigate or reduce PSPS events in terms of geographic scope and number of customers affected not covered by another initiative.
Grid Design and System Hardening	8.2.12	Other technologies and systems not listed above	Other grid design and system hardening actions which the electrical corporation takes to reduce its ignition and PSPS risk not otherwise covered by other initiatives in this section.
Grid Operations and Procedures	8.7.1	Equipment Settings to Reduce Wildfire Risk	The electrical corporation's procedures for adjusting the sensitivity of grid elements to reduce wildfire risk.
Grid Operations and Procedures	8.7.2	Grid Response Procedures and Notifications	The electrical corporation's procedures it uses to respond to faults, ignitions, or other issues detected on its grid that may result in a wildfire.

Initiative	Section #	Activity	Definition
Grid Operations and Procedures	8.7.3	Personnel Work Procedures and Training in Conditions of Elevated Fire Risk	Work activity guidelines that designate what type of work can be performed during operating conditions of different levels of wildfire risk. Training for personnel on these guidelines and the procedures they prescribe, from normal operating procedures to increased mitigation measures to constraints on work performed.

APPENDIX B: SUPPORTING DOCUMENTATION

No additional summary is required.

APPENDIX C: ADDITIONAL MAPS

No additional maps are required.

APPENDIX D: AREAS FOR CONTINUED IMPROVEMENT

In its evaluation of LSPGC's 2025 WMP Update, Energy Safety did not identify any new areas for continued improvement. Therefore, LSPGC is not required to report on any areas for continued improvement in its 2026-2028 Base WMP.

APPENDIX E: REFERENCED REGULATIONS, CODES, AND STANDARDS

The following Codes and standards were used in the development of the WMP.

ANSI A300 Standards for pruning and vegetation care

ANSI Z-133 Standards for arboricultural safety and operations

ASTM E 1355 Standard Guide for Evaluating the Predictive Capability of Deterministic Fire Models

California Fire Code (Title 24, Part 9), Minimum Clearance Provisions

California Code of Regulations (Title 14 CCR 1254)

Federal Emergency Management Agency (FEMA)-certified NIMS 100, 200, and 700

General Industry Safety Orders 12

General Industry Safety Orders 13

General Industry Safety Orders 36

General Industry Safety Orders 37

General Industry Safety Orders 38

General Order 95 Standards for Overhead Electric Line Construction.

General Order 128 Standards for Construction of Underground Electric.

General Order 165 Standards for electric distribution and transmission facilities.

General Order 166 Standards for Operation, Reliability, and Safety during Emergencies and Disasters.

General Order 174 Standards for Electric Utility Substations

Government Code, § 8593.3

International Organization for Standardization [ISO] 31000

NERC FAC-003-4 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