

# Powerline Clearance Information Session

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# Agenda

## 1. Wildfire Mitigation Plan

## 2. Vegetation Management Program

- Overview
- Powerline Clearance Regulations
- Customer Communications/Public Information

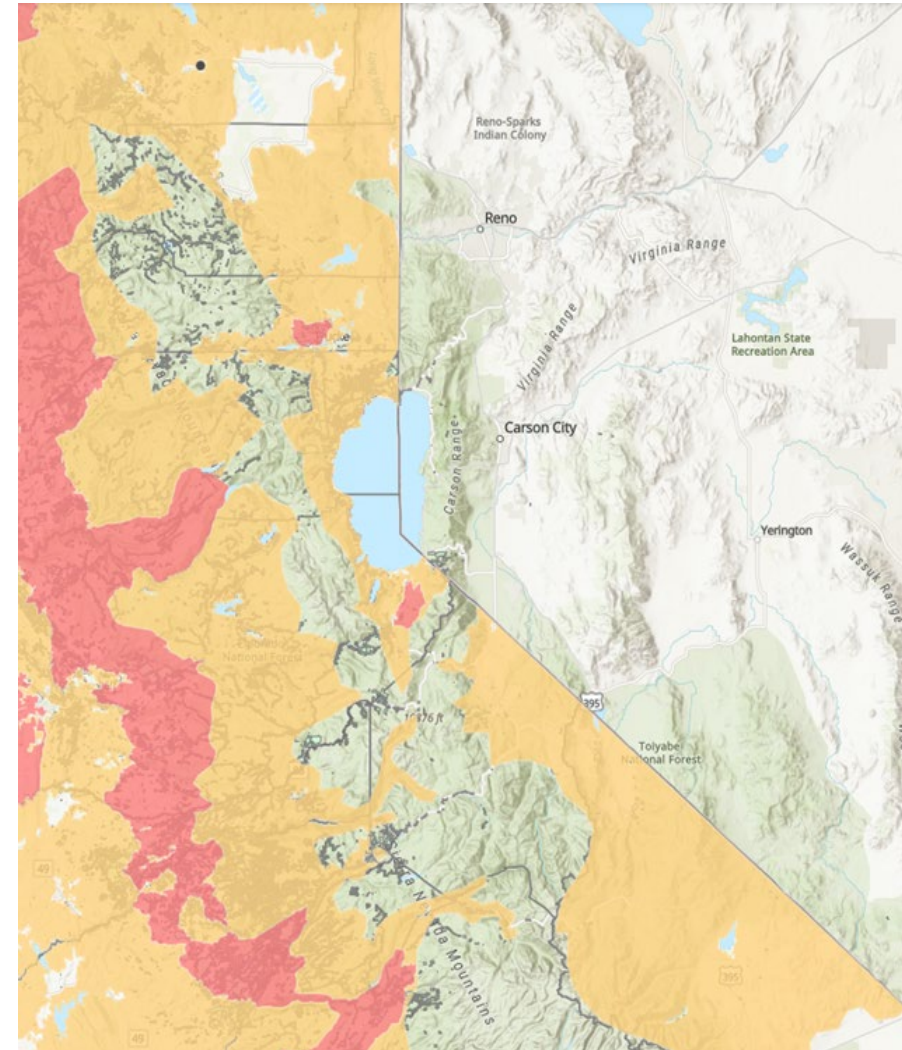
## 3. Q & A



# Liberty Service Territory



# CPUC High Fire Threat District (HFTD) Map



# What is Wildfire Mitigation?



**Vegetation Management**



**System Hardening**



**Situational Awareness**



**Public Safety Power Shutoffs**



# Purpose of Vegetation Management

- Maintain reliable electric Transmission and Distribution systems through effective vegetation management
- Comply with regulatory requirements established by the California Public Utilities Commission (CPUC), California Public Resource Codes (PRC), and Title 14 California Code of Regulations (CCR)
- Electric reliability and public safety
- [Liberty Vegetation Management - More than just Trimming Trees \(youtube.com\)](#)



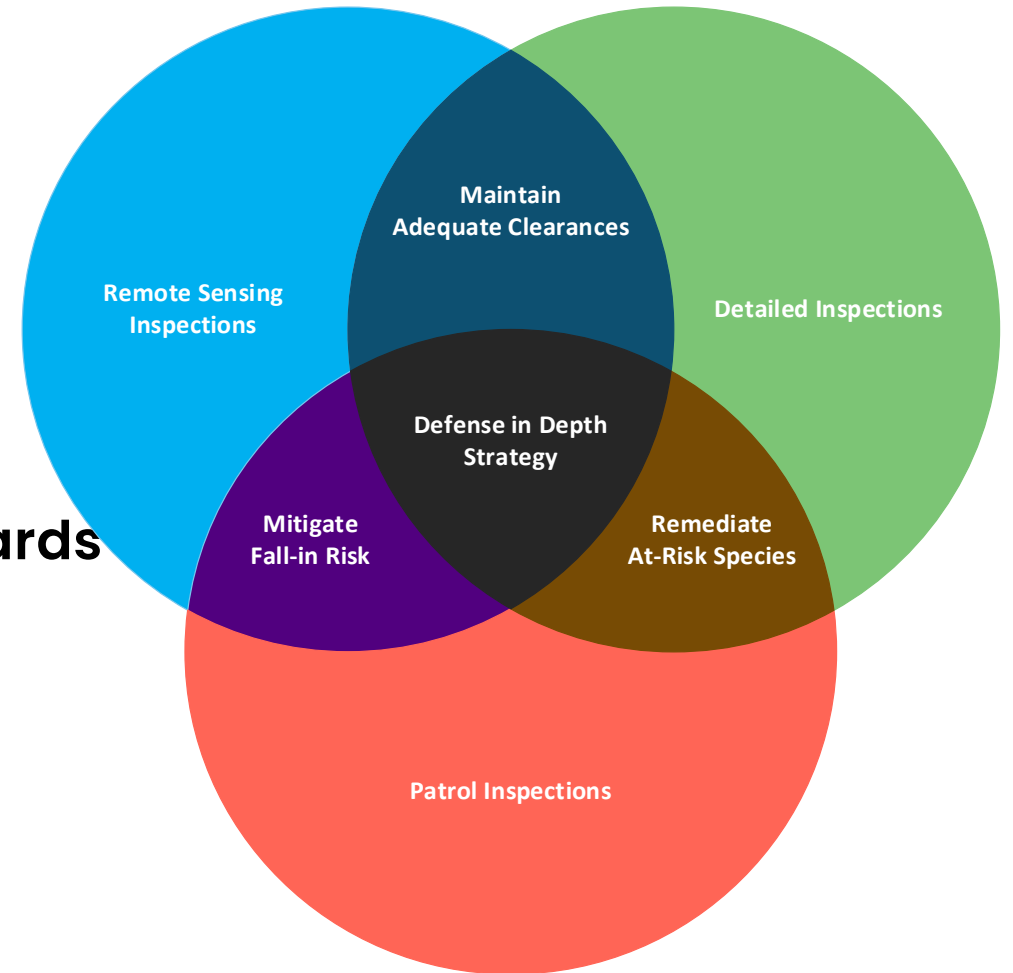
# Liberty's Vegetation Management Plan

## Inspections

- LiDAR/Remote Sensing
- Ground Based/Certified Arborists

## Maintenance

- Maintain Clearances to regulatory standards
- Mitigating Fall-In Risk
- Pole Clearing
- Fuel Management



# Utility Responsibility

## Public Resource Code 4292: Firebreak Clearing

Utilities are required to maintain firebreaks around poles located in wildland areas during fire season that have certain equipment with the potential to emit sparks when operating properly.

## Public Resource Code 4293: State Responsibility

Utilities are required to maintain clearance between vegetation and high voltage power lines during fire season in wildland areas to prevent wildfires. Also requires removal of dead, diseased or dying trees that could fall into power lines.

## General Order 95: Utility Vegetation Management Requirements

Utilities are required to maintain clearance between vegetation and high voltage power lines, at all times, in all areas for public safety and electric system reliability.

### Clearance Requirements; PRC 4293, GO 95 Rule 35, HFTD Case 14

Voltage	Regulation Clearance Distance (RCD)	Maintenance Action Threshold (MAT)	Maintenance Clearance Distance (MCD)
14.4kV	4'	6'	12'-15'
60kV	4'	6'	12'-15'
120kV	10'	15'	30'-35'



# Clearance Requirements

## 14.4 kV Distribution





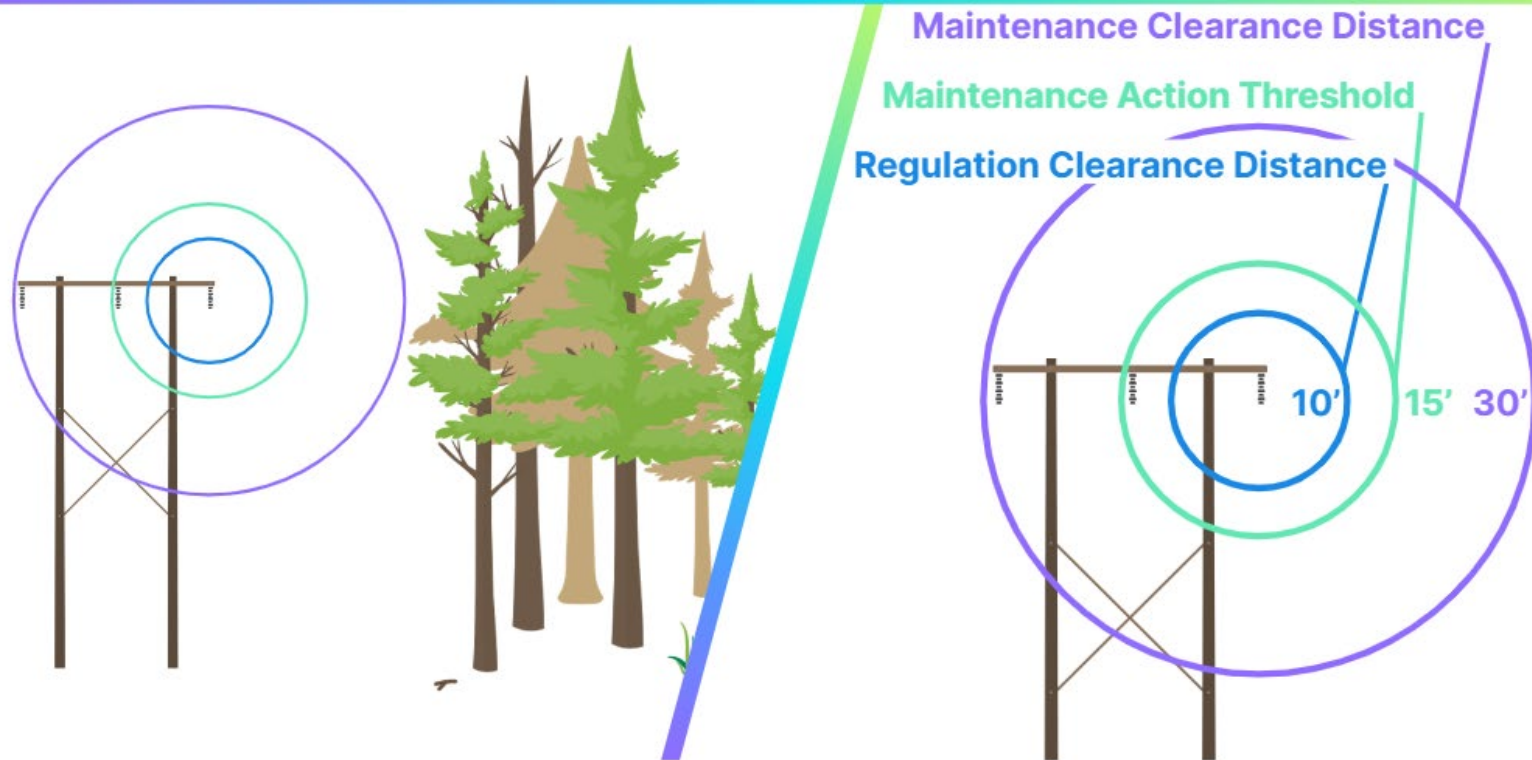
# Clearance Requirements

## 60 kV Transmission



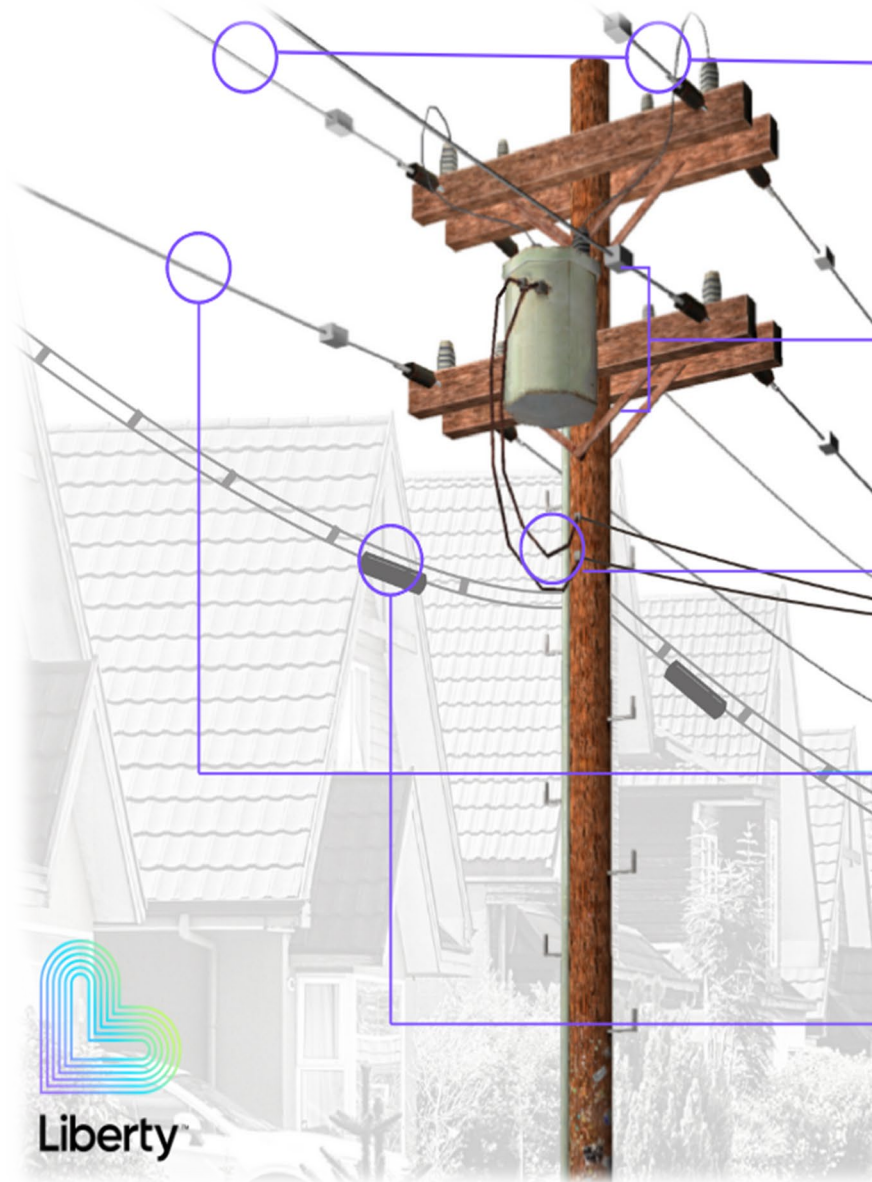
# Clearance Requirements

## 120kV Transmission



# What about Service Drops, Secondary Lines, and Triplex?

- Defined as 750 volts or less.
- Typically, are coated wire. Primary and neutral twisted around a messenger cable.
- G.O. 95 Rule 35 specifies evidence of strain or abrasion on these lines requires correction. No specified clearance requirements
- Complete removal of trees that *could* impact secondary or service lines are homeowner responsibility.
- Tree attachments



## Primary Lines

Primary lines carry high-voltage electricity from the nearby substation to the transformer. Voltages range from 2,300 to 39,000 volts on primary lines.

## Transformer

Transformers convert high-voltage electricity from primary wires to lower voltage for customer use.

## Secondary Service Drop

A secondary service drop carries the electricity from the transformer to the customer.

## Neutral Wire

Neutral wires acts as a line back to the substation and balances out the amount of electricity or load on the system.

## Telephone/Cable Line

Telephone and cable TV lines are the lowest wires on the power pole.



Liberty



# Hazard Tree Mitigation

- Liberty establishes plans and procedures for mitigation of hazard trees
- Identified through ground-based inspections on a routine cycle basis or in response to environmental conditions or tree mortality
- VM-03 Hazard Tree Plan
- VM-05 Vegetation Threats Procedure
- Priority levels and mitigation timelines established based on tree and site conditions



# Customer Communications

## Liberty's VM Notification Policy

Provides guidelines for notifying customers and landowners of required and planned vegetation work. Liberty exercises due diligence in notifying customers of its vegetation management efforts.

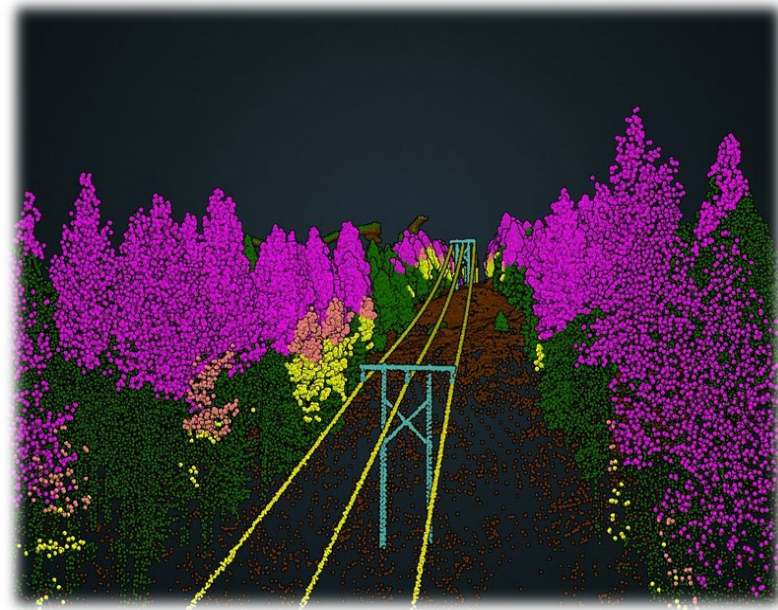
- In Person
- Door hangers
- Notice of Intent Letters & Tree Work Notification Forms
- Postcards
- Social Media
- Emails and Bill Inserts



# Public Information & Contacting the VM Department

<https://california.libertyutilities.com/north-lake-tahoe/residential/safety/electrical/tree-safety.html>

- Tree Inspection Requests
- FAQs



# Contact Information

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## Submit Tree Inspection Request:

Email: [CAtree@libertyutilities.com](mailto:CAtree@libertyutilities.com)

Phone: 1-800-782-2506

<https://california.libertyutilities.com/north-lake-tahoe/residential/safety/electrical/tree-safety.html>



# Thank you

