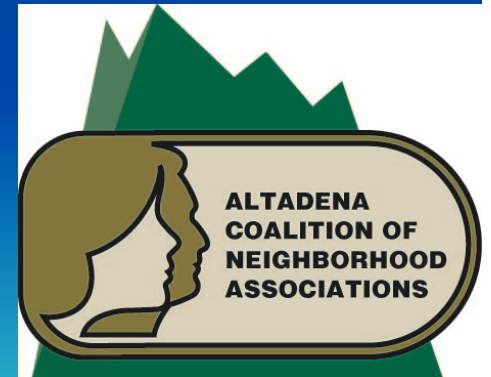


Altadena Coalition of Neighborhood Associations (ACONA)

Let's keep Altadena
*"The best neighborhood in LA
County"!*

March 26, 2019



Agenda for Tonight's Meeting

7:00 PM – 8:30 PM

- **7:00 PM – 7:05 PM Quick introductions and welcome**
- **7:05 PM – 7:25 PM Tree Trimming in Altadena by SCE (Southern California Edison) to prevent Wildfires**
 - David Guzman, Manager of Vegetation Management, SCE
 - David Ford, Government Relations Manager, SCE
- **7:25 PM – 7:45 PM Tree Trimming from an Arborist's Perspective**
 - Rebecca Latta, Certified Tree Risk Assessor
- **7:45 PM – 8:00 PM Clean Power Alliance**
 - Christian Cruz, Community Outreach Manager
- **8:00 PM – 8:30 PM Open discussion Q&A**
- **8:30 PM Meeting end**



Your ACONA Team

- Elliot Gold
- Nina Ehlig
- Melody Comfort
- Ellen Walton
- Holly Rundberg
- Carlotta Martin
- Sussy Nemer
- Captain Vicki Stuckey



- **7:05 PM – 7:25 PM Tree Trimming in Altadena by SCE (Southern California Edison) to prevent**

Wildfires

- David Guzman, Manager of Vegetation Management, SCE
- David Ford, Government Relations Manager, SCE



Southern California Edison Vegetation Management Overview ACONA



Vegetation Management Program

Mission:

Further prevent risks to public safety and system reliability by managing vegetation in proximity to our electric facilities

Objectives:

Maintain a safe and reliable electric transmission and distribution system by using a defense-in-depth strategy to manage vegetation and minimize encroachments from vegetation, thus effectively managing the risk to public safety, vegetation-related wildfires, and vegetation-related outages that could lead to cascading

Vegetation Management Team

Team:

- 20+ in-house certified arborists
- Certified arborist tree inspection contractors
- Notification consultants
- 800+ pruning contractors
- Quality control oversight

Proudly serving SCE's territory:

- ~900,000 trees inspected annually
- ~700,000 trees pruned per year; 400,000 trees in high fire risk areas
- ~ 39,000 dead, dying, diseased tree removals as prescribed



Program Overview

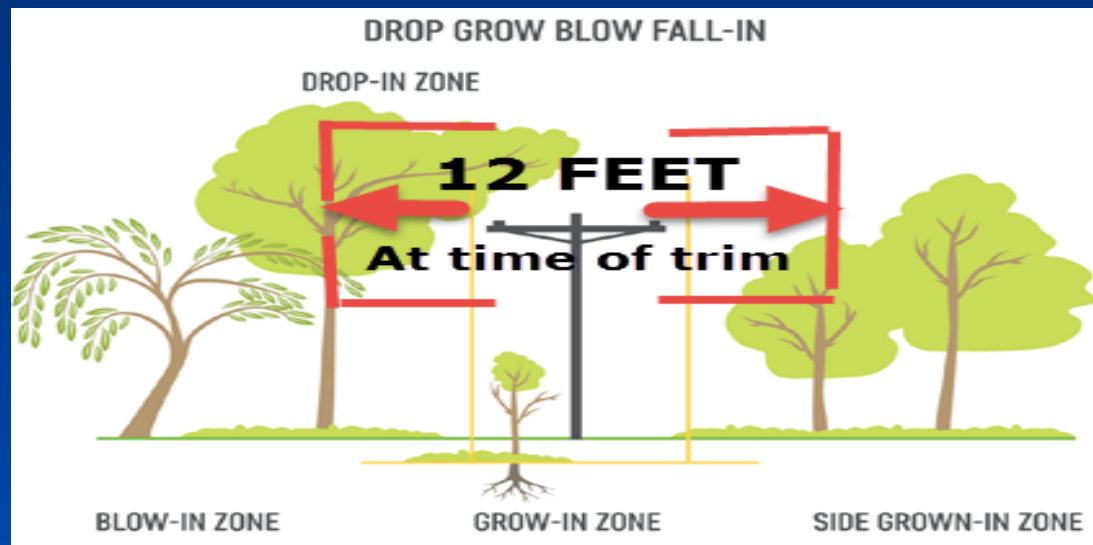
<p>Distribution Vegetation Management Plan (DVMP)</p> <p>69kV and below</p>	<p>Clear and maintain vegetation from Distribution lines per the new standards to prevent encroaching into the required clearance zones</p>	<p>Clearance at time of pruning:</p> <ul style="list-style-type: none"> •12'
<p>Transmission Vegetation Management Plan (TVMP)</p> <p>69kV and above</p>	<p>Removals are likely where clearances cannot be met/obtained</p>	<p>Clearance at time of pruning:</p> <ul style="list-style-type: none"> •12' (69kV) •30' (115kV to 500kV)
<p>Hazard Tree Management Program (HTMP)</p>	<p>Perform tree risk evaluation to identify hazard tree characteristics that can pose a risk to our electrical facilities</p>	<p>High Risk² and within the Utility Strike Zone</p>
<p>Integrated Vegetation Management Plan (IVMP)</p>	<p>Strategies to promote desirable, stable, low-growing plants</p>	<p>SCE Rights-of-Way</p>

¹ Distances are consistent with CPUC recommended minimum clearances in General Order 95, Appendix E, Case 14

² Risk assessments are ranked by a tool that considers tree and site attributes to indicate possible hazardous conditions posed to equipment

Clearance Illustration

SCE Vegetation clearance requirements align with industry best practices



Where overhead conductors traverse trees and vegetation, safety and reliability of service demand that certain vegetation management activities are to be performed to establish and maintain necessary and reasonable clearances

Mitigation Criteria (Distribution)

- **Pruning:** Regulations require SCE maintain minimum 4 ft. clearance distances at all times in High Fire Threat Districts
 - 2017 CPUC decision increased “recommended time-of-trim clearance”:
 - 12 ft. (from 6.5 ft.)
 - To ensure compliance, SCE adopted the following standards:
 - Minimum clearance distance, accounting for weather/tree movement: 6 ft.
 - Pruning distance: 12 ft. above, below, and to side of conductor
 - Clearance less than 12’ only allowed when rate of growth indicates compliance can be maintained for an extended period
- **Removal:** Trees that represent a risk to SCE facilities and public safety
 - Fast growing trees that cannot maintain compliance for 12 months
 - Dead, dying or diseased trees
 - Trees that cannot be pruned in accordance with ANSI A300 Tree Pruning Standards

ANSI: Approved American National Standard

New Tree Pruning Standards

In 2017, GO 05, Rule 35 Appendix E adopted new recommended minimal clearances at time of trim. These clearance requirements in high fire areas are 12'. Additional clearances may be required due to the factors below:

- Line dynamics
- Tree dynamics
- Tree characteristics
- Location




Customer Interface

	Pre-Inspection	Notification Consultant	Prune/Remove	Final Inspection
Description	Perform tree assessment and write prescription	Make customer contact to discuss and coordinate work	Tree crew performs work	Inspect work performed
Resources	Approved Vendor SCE Approves Work	SCE Approved Vendor	SCE Approved Vendor	SCE reviews work performed
Schedule	~30 Days before scheduled work		24-48 Hours	Day after tree pruned/removed

Customer Interface	<u>1st Notification</u> Light Pruning	<u>1st Notification</u> Heavy Pruning	<u>2nd Notification</u> All Pruning	<u>No Notification</u> Quality Control
	Pre-Inspection Contractor will leave door hanger describing proposed pruning work and indicate tree crew arrival (+30 days)	For heavy tree work, the property owner will be contacted in person to discuss the tree pruning plan	Tree Contractor will leave door hanger and indicate work will be performed within 24-48 hours	No customer interruptions or contact

Customer Notification Pre-Inspection Door Hanger



Notice of Vegetation Activities

Insert Card

Maintaining vegetation near electrical equipment is necessary for public safety, fire prevention and facility access.

It has been determined that vegetation work will be required on your property. This service is at NO COST to you.

The following activities will be taking place on your property within ____ days

Tree Trimming Tree Removal Other:


Comments: _____

Questions? Contact the SCE authorized agent below:

Name _____
Phone Number _____
Email Address _____

If necessary, please feel free to contact the corporate office of the authorized agent or SCE for verification.

Company Name _____
Company Contact Information _____





SCE Consulting
Utility Foresters are
ready to answer any
customer concerns

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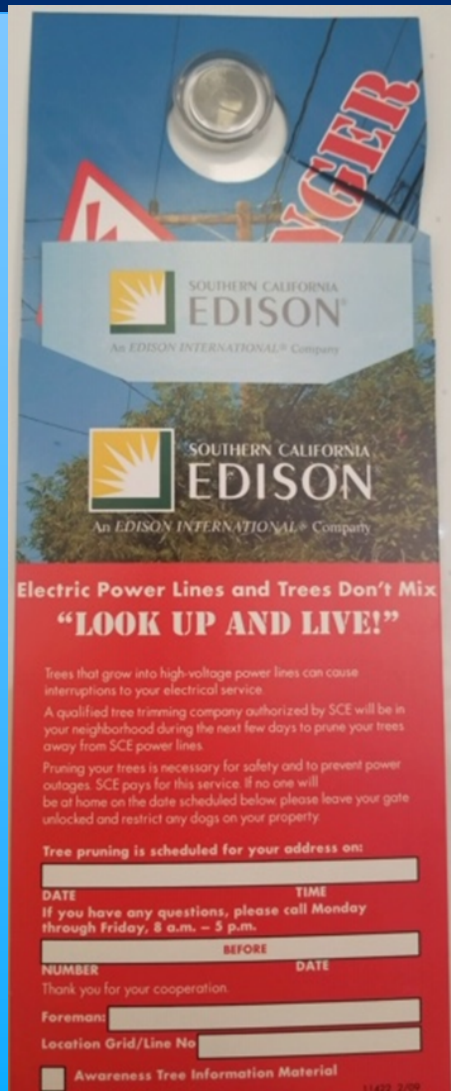
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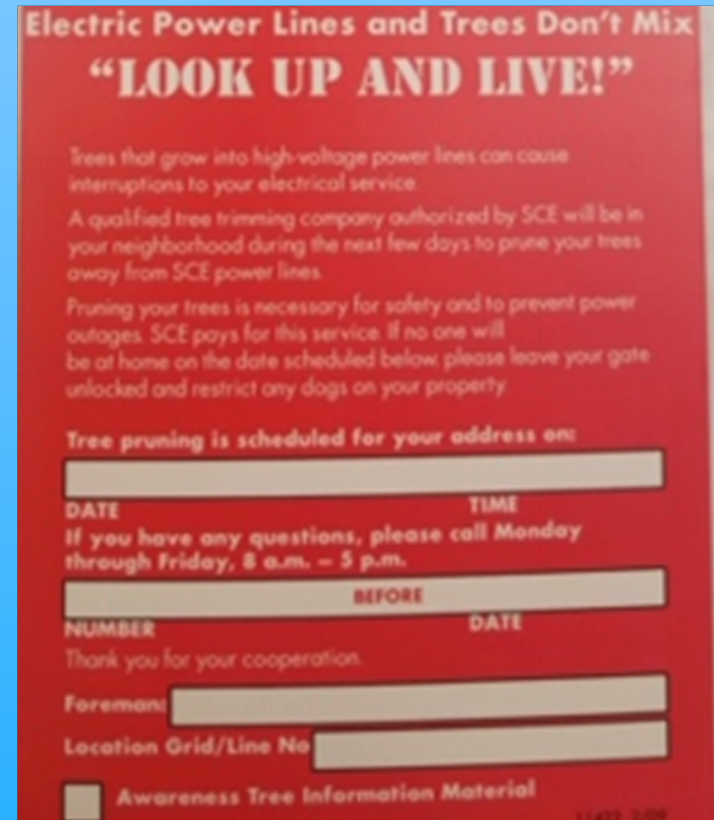
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Company Name _____
Company Contact Information _____

Customer Notification Tree Pruning Door Hanger



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Utility Foresters are
ready to answer any
customer concerns



Hazard Tree Assessment Considerations

Hazard Tree Attributes

Basal wound
Bleeding and/or resinous
Bulges and/or swellings
Cankers, including bleeding & gall rust
Cavities
Codominant or multiple stems from base or higher on trunk
Conks indicating heart rot, root rot, sap rot or canker rot
Cracks including shear
Dead branches and/or top
Dieback of twigs and/or branches
Embedded wires or cables
Excessive lean toward a power line or excessive bow
Fire damage
Foliage – off-color, flagging or loss
Hazard beam
History of limb failure(s) on tree
Included bark
Insect activity such as frass from termites, bark beetles or carpenter ants
Branches overhanging power line in fire areas
Lightning damage
Live crown ratio below 30%
Mistletoe – dwarf or broad-leaf
Nesting holes – birds, mammals, insects
Dead palm fronds that can dislodge during high winds
Past poor pruning practices
Roots injured, exposed, undermined or uplifted
Seam
Species failure patterns
Unnatural or structurally unsound canopy weight distribution
Weak, unsound branch attachments

Site Attributes

Areas known to be affected by introduced tree pathogens
Areas of recent clearing/new edge
Change in drainage
Change in grade
Construction – including trenching, paving or road construction
Cultural disturbance to landscape - natural or unnatural
Diseased center – dead tree in middle and dying trees around it
High stand density with single species composition
High Winds (fire watch)
History of failure(s) at site
History of repeated outages on circuit
Fire damage
Recent thinning or logging
Slope (by grade or percentage)
Soils prone to slides
Specific conditions like high winds
Storm damage



UTILITY PRUNING PRACTICES AND CONSEQUENCES

Rebecca Latta, Consulting Arborist



Fires and Power Lines

- Lines can break in the wind and ignite fuels on the ground
- Lines can slap together
- Equipment gets old or fails
- Trees contact lines
- Deliberate debris burning, fireworks and rogue campfires are still among the most common causes of wildfires in California.



Change in Utility Pruning Guidelines

- Aggressive Vegetation Management
- Change in General Order 95 Rule 35 Table 1 Appendix E
 - Case 13 – Clearances for all lines
 - Case 14 (High Fire Threat District as Identified by Calfire) – more trees shifted into high fire categories.



Municipal vs. Investor Owned Utilities

- Municipal – Owned by the community
Pasadena, Glendale, Riverside, Burbank
- Investor Owned
SCE, PG&E, SCG&E, Sierra Pacific



Coordination and Notification

- Notification has been poor, misleading or non-existent in parts of Altadena.
- Coordination with County Public Works was poor. County assets were topped without notification.
- Each jurisdiction forced to make its own agreement with Edison separately. No consistent policies between cities.





Appendix E – Guidelines to Rule 35

Appendix E Guidelines to Rule 35

The following are guidelines to Rule 35.

Voltage of Lines	Case 13 of Table 1	Case 14 of Table 1
Radial clearances for any conductor of a line operating at 2,400 or more volts, but less than 72,000 volts	4 feet	12 feet
Radial clearances for any conductor of a line operating at 72,000 or more volts, but less than 110,000 volts	6 feet	20 feet
Radial clearances for any conductor of a line operating at 110,000 or more volts, but less than 300,000 volts	10 feet	30 feet
Radial clearances for any conductor of a line operating at 300,000 or more volts	15 feet	30 feet

12 Note: Added November 6, 1992 by Resolution SU-15. Revised September 20, 1996 by Decision No. 96-09-097, August 20, 2009 by Decision No. 09-08-029, January 12, 2012 by Decision No. 12-01-032, and December 14, 2017, by Decision D. 17-12-024.



More Aggressive Approach

- New guidelines may allow them to take trees within 200 feet of lines that are not dead, dying or diseased. Utilities appear to be phasing these removals.
- No 2nd opinion requirement for trees outside ROW
- Trees shifted into category with more recommended clearance – see Fire Threat map www.cpuc.ca.gov/FireThreatMaps

Line Clearances

Clearances observed in the field:

- Insulated lines – no abrading branches – 6 inches
- Non-insulated lines – 12 feet in HFRA regardless of species. Trees pruned out of season
- Non-insulated lines - 4 - 6 feet in non HFRA.



Edison's Wildfire Plan

- The plan requests authorization to recover costs of their Program for Grid Safety
- These costs are above currently authorized rates
- The Wildfire plan is required by SB 901
- 185 pages—Many good technology and equipment upgrades
- Comment by March 27, 2019



Covered Conductors

- Clearance limits for covered conductors are less.
- Edison discusses covered conductors known as ‘tree wire’ and used in areas with dense vegetation.
- In 2018 SCE only had 50 miles of covered conductor. They seem to have plans to install more.
- New covered conductor was installed in La Canada Flintridge going through oak woodland in late 2018 early 2019.



Fire Behavior

- Wind Driven Fires
 - Spread with embers
 - Ignite houses which are fuel
 - Extra clearance does not improve outcomes



Rate of Growth

- Slow vs. Fast Growing Species—Slower growing species may need less clearance and in some cases large branches can be retained (see wildfire plan details).
- Palms—Very dangerous because fronds ignite and fly in wind-driven fires. Removals important to protect homes.



Tree Form

- Upright species that get very tall under power lines may need to be replaced in some circumstances.
- Phased removals may be needed, but a replacement plan maximizing carbon sequestration benefits provided by trees should be prioritized.
- Slow growing, round-headed trees like oaks should not be topped.



Topped Trees May Die

- Edison promises to replace trees
- Where is the plan for replacement
- Mitigation fund in LA County restoring funding to LA County Forestry and Fire nurseries in San Dimas and Malibu might be a good option
- Cities and counties should control mitigation on public property, not Edison



Pruning Standards

- ANSI A300 National Pruning Standards
- ISA Best Management Practices for Tree Pruning (2018)
- Tree Care for Wildlife Best Management Practices (July 2018)



Pruning Practices

- Crown Reduction
- Side Cutting
- V cutting



Topping

- Not considered an acceptable arboricultural practice
- Takes stored starch (energy) from the tree to restore foliage. Can weaken tree.
- Promotes poorly attached sprouts that may later fail.
- Promotes decay in the topping cuts

































Big Picture

- SB 901 – Should it have exemptions for CEQA? What are the long term consequences of the program?
- How many trees might be removed Statewide?
- When combined with the 20M Acres of vegetation planned for removal by Calfire, could these programs increase temperatures, make local heat islands worse?



Mitigation

- What role do these trees and vegetation being removed have in mitigating peak temperatures in the summer?
- What efforts have the investor owned utilities made to replace the resource they are removing?



Mitigation

- Who pays if the topped tree dies?
- What if Edison gave LA County money to their forestry program to grow trees in existing nurseries in Malibu and San Dimas for replanting efforts?



What can you do?

- Contact the CPUC and comment on Edison's Wildfire Plan by March 27, 2019 at public.advisor@cpuc.gov
- Reach out to your elected city, county and state officials with your concerns.





Locally powered energy innovation.

Clean Power Alliance

(see separate file)

**Christian Cruz, Community
Outreach Manager, Clean Power
Alliance**

• QUESTIONS?



**Please be sure you
signed in**

(if we already have your email
address, we just need your name)



Schedule for remaining ACONA Meetings 2019

- May 28th
- September 24th
- November 26th



Thank you!
Questions?