

# City of Alcoa Electric Department Vegetation Management Policy

## General

The City of Alcoa Electric Department (CAED) is subject to certain requirements by TVA to provide and maintain reliable electricity to customers within its operating territory. Further, National Electric Safety Code (NESC) and Occupational Safety and Health Administration (OSHA) regulations require electric utilities to keep vegetation clear from overhead power lines in order to ensure safety to their crews and the general public.

Most power interruptions are caused by tree limbs falling on or growing into the primary high voltage power lines. CAED is diligent in its tree trimming efforts to reduce the frequency and duration of tree-related power outages. To accomplish and maintain this goal, CAED continually evaluates new products and methods for managing vegetation growth on its rights-of-way / easements (R.O.W.), in an effort to be as economically efficient as possible.

## Customer's Responsibilities

All CAED customers are responsible for trimming trees away from the low-voltage service wires on the customer's property. These wires are identified as the bundled wires spanning the customer's property that connect the electric meter to the transformer pole (See Figures 1, 2, & 3 in the Appendix). If the customer's failure to adequately trim these trees results in damage to the low-voltage service wires [and/or other CAED, or customer equipment] all repairs will be the responsibility of the customer. The customer shall also maintain a clear pathway to the electric meter. If the customer fails to maintain this pathway and receives a written notice from CAED requesting a clear path, electric service may be disconnected until the customer has cleared the pathway.

By request of the customer, CAED will disconnect and drop the service wire to allow for safer and easier trimming; when customer notifies CAED that the work is complete, CAED will return and reconnect service. This is provided free of charge to all CAED customers and offered only during regular business hours.

**New Construction:** New homes and businesses constructed on previously vacant land shall not have trees or shrubs planted under or adjacent to CAED's primary high voltage lines. CAED requires that an applicant provide all necessary easements for installation and maintenance of electric lines. Additionally, applicant shall provide for the trimming of trees and removal of tree cuttings for all new primary or secondary overhead lines that are greater than fifty feet (50') from the main primary line or service tap point. CAED will NOT provide this service. The applicant may perform the trimming themselves or may hire a tree trimming contractor directly. The trimming will be completed to the satisfaction of and inspected by CAED prior to the new service being constructed.

## CAED's Responsibilities & Rights

CAED is responsible for maintaining proper vegetation clearance from all transmission and distribution primary lines, along with low voltage secondary lines, i.e. routine trimming. Please see supportive diagrams in Appendix for graphical representation. CAED will NOT provide routine trimming for low voltage service wires but will remove fallen limbs/trees from these lines during outage restoration, if necessary. As described in the above section and if requested by customer, CAED will disconnect/reconnect service wires, free of charge, for trimming purposes.

While conducting routine trimming, CAED (or its contractors) will attempt to notify property owners of planned line clearance prior to actual trimming. However, during emergencies, such as a fallen tree on primary lines causing a power outage, prior notification may not be possible. Please note that according to CAED's Electric Service Rules and Regulations, CAED is not required to notify anyone of work being performed on acquired easements or established R.O.W.

By applying for electric service, all CAED customers agree to abide by the Electric Service Rules and Regulations, specifically in regard to necessary access for tree trimming and reasonable rights-of-entry to all CAED's facilities. CAED's employees and contractors shall be granted access to customers' premises at all reasonable times for the purpose of tree trimming / vegetation management, including but not limited to: inspecting, cutting, spraying and site cleanup. CAED's contractors shall be identified using ID badges, magnetic vehicle signs, and/or other such means.

**Site Cleanup:** For routine trimming of occupied/maintained areas (e.g. property that is maintained using conventional lawn care and/or light duty farm (e.g. bush hog) equipment), CAED (or its contractors) will remove cut limbs and brush after the work has been completed, leaving the premises as neat as before the trimming. Limbs that are considered firewood and are larger than (6") six inches in DBH (Diameter Breast Height) and longer than (4') four feet in length will be cut into manageable lengths and stacked at the trimming site. Any unwanted firewood will be stacked as close to the stump as possible for property owner. For routine trimming in areas that are not occupied and land is unmaintained (e.g. forest where property owner is not keeping the electric line easement / R.O.W. cleared), all cut limbs and brush will be laid flat, and left in the easement / R.O.W. Additionally, CAED (or its contractors) is not responsible for the cleanup of any trees, limbs, brush or debris caused by natural affects, storms, and/or restoration of power due to the same.

**Underground and Overhead Subdivisions:** CAED may have express and implied easements and rights-of-ways within all subdivisions. These easements were granted by the developers as a condition of electrical service. The width of these easements varies between subdivisions but generally extend inward 10 feet from the property line on all exterior lot lines and 5 feet on each side of all interior lot lines. Other easements also exist along the location of underground and overhead lines that are not constructed along the property lines. Those easements are generally 10 feet along either side (for a total width of 20 feet) of an installed single phase distribution line. The customer should not plant trees or shrubs within these easements unless granted permission in writing by the CAED. Trees that are planted within these easements and are a threat to the CAED' overhead or underground facilities can be removed without notice and recourse.

## Methods and Specifications

All CAED bucket / manual trimming and pruning methods shall be in accordance with Tree Line USA requirements and ANSI A300 guidelines. In addition to these nationally recognized guidelines, CAED typically adheres to the following trimming specifications.

- **25-foot minimum to 50-foot maximum clearance from 69kV transmission primary lines**, on approximate 5-year trim rotations.
- **10-foot minimum clearance from 13kV distribution primary lines**, on approximate 4-year trim rotations (Note: this is a measurement from conductor, not center of pole).
- **5-foot minimum clearance from pole-to-pole low voltage secondary lines**, measured radially from conductor.
- **5-foot minimum clearance around all down guy anchors.**
- **Any tree that is a safety hazard and/or threatens the integrity of the primary high voltage lines will be considered for complete removal, even when hazard tree is outside of R.O.W. or easement.**
- All overhanging limbs are to be removed, unless directed otherwise by CAED
- Compatible species (such as flowering dogwoods, Eastern Redbud, American Holly), under most circumstances may be left in CAED rights of way
- Non-compatible species (such as Tulip Poplar, and Easter White Pine), shall be cut or removed to the proper width for the respective primary line or to the existing established corridor
- Fruit trees, ornamental trees and yard trees/shrubs, where CAED has set a precedent by trimming in the past, may be trimmed to maintain that precedent, but will not be removed entirely without property owner's written permission
- Vines growing on guy wires, poles, or any other CAED equipment, shall be cut at ground line and treated with an approved herbicide immediately after cutting
- CAED does not approve of the topping of trees as this can contribute to the decline in the health of trees

CAED's trimming efforts are for the sole purpose of providing reliable electricity to its customers along with maintaining a safe work zone for electric crews and the general public. If a customer is dissatisfied with the result of CAED's trimming

operations, it will be the responsibility of the customer to hire a reputable and knowledgeable tree trimming contractor to provide any additional trimming.

All trees that are trimmed by CAED or its contractors will be trimmed by one of the methods in Table 1 (also shown graphically in the Appendix). The method used at a specific site will be determined utilizing the criteria of each listing in Table 1 and corresponding specification(s) listed above.

### **Table 1: Method of Trimming**

1. **Lateral (Vee) Cutting**  
Used for deciduous ornamental or non-ornamental trees whose center is nearly in-line with the center of the primary overhead line. This is considered to be directly under or almost directly under the line.
2. **Side Cutting / "L" Cutting**  
Used for all deciduous type and very large ornamental evergreen trees whose trunks are too far outside the center line of the primary overhead line to use lateral (Vee) cutting, but are far enough from the center line not to warrant top cutting.
3. **Removal**  
Cutting the tree trunk at ground level, with or without stump removal. No stumps will be removed without the full approval of the CAED Tree Trimming Foreman.

### **"Cash Value" Hardwoods and Wood Chips**

No cash value hardwood (e.g., walnut and cherry) tree trunks will be removed from the site. Wood Chips will be provided upon request when CAED contract crews are working in location near the property of the owner's request.

### **Herbicide Treatment on Rights-of-Way**

When Herbicide treatment is applied, the CAED or its Contractors will use environmentally safe and EPA-approved herbicides on its R.O.W. to target tree and shrub species that can grow to a height that will affect overhead electric facilities. Herbicide treatment may be used as a follow up to tree trimming / cutting efforts in order to provide less costly and longer-term maintenance of brush and to provide improved access along R.O.W. Efforts will be made to notify affected landowners in person or by leaving a door hanger or other means of notification at the premises. All treatment will be performed using low volume back-pack or tank truck type sprayers for delivery. Stumps and exposed roots of removed trees and areas around removed vines may also be treated with approved herbicides. Herbicides will not be applied to or near croplands, gardens, lawns, pastures or other maintained areas. \*Concerning Firewise USA sites, as determined by the National Fire Protection Association, under severe or more intense drought conditions, as determined by the U.S. Drought Monitor, the CAED upon request will consider chipping unmaintained areas where a high density stem count of standing dead brush exists along CAED's R.O.W.

### **Aerial Helicopter Trimming**

The CAED may utilize aerial helicopter trimming in certain areas where it deems appropriate. These areas may include, but are not necessarily limited to, areas of the system that have a heavy presence of overhanging vegetation, sections of the distribution/transmission system that travel through steep or otherwise difficult to reach terrain, etc. Efforts will be made to notify affected landowners who are in the vicinity of the planned aerial trimming. CAED Contractors are required to abide by all applicable and relevant federal, state, and local laws and regulations pertaining to aerial trimming. Site cleanup of aerial trimming operations shall comply with the "Site Cleanup" requirements noted above. Aerial trimming of radial single phase distribution lines serving properties managed by a legally recognized H.O.A. or a single property owner, will not occur without the permission of the H.O.A. or property owner.

# Appendix

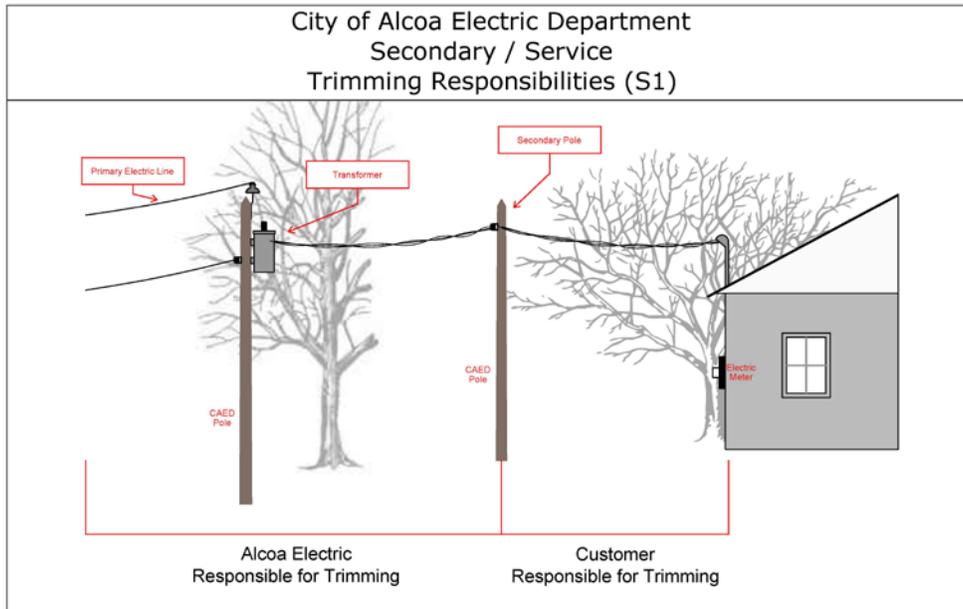


Figure 1

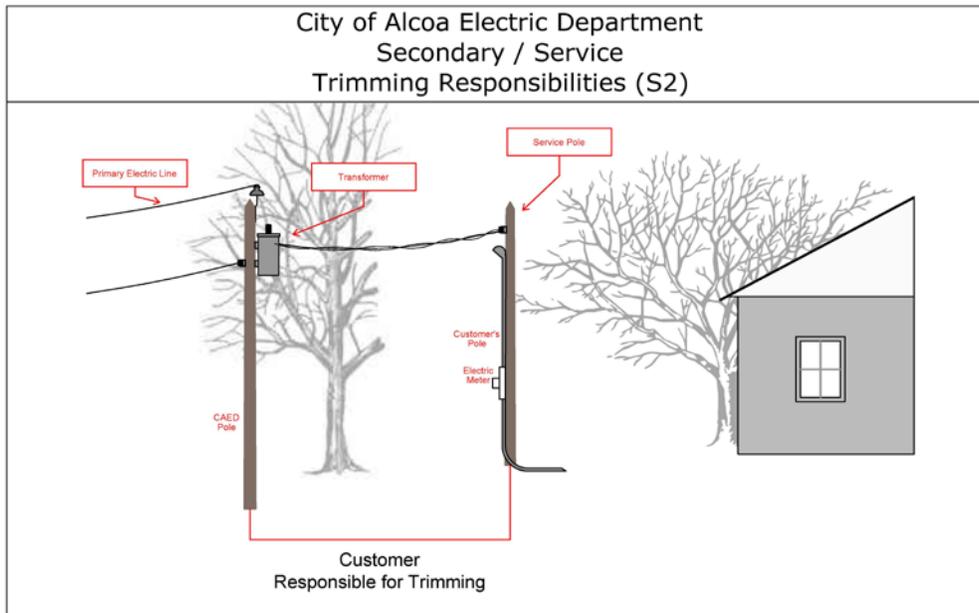
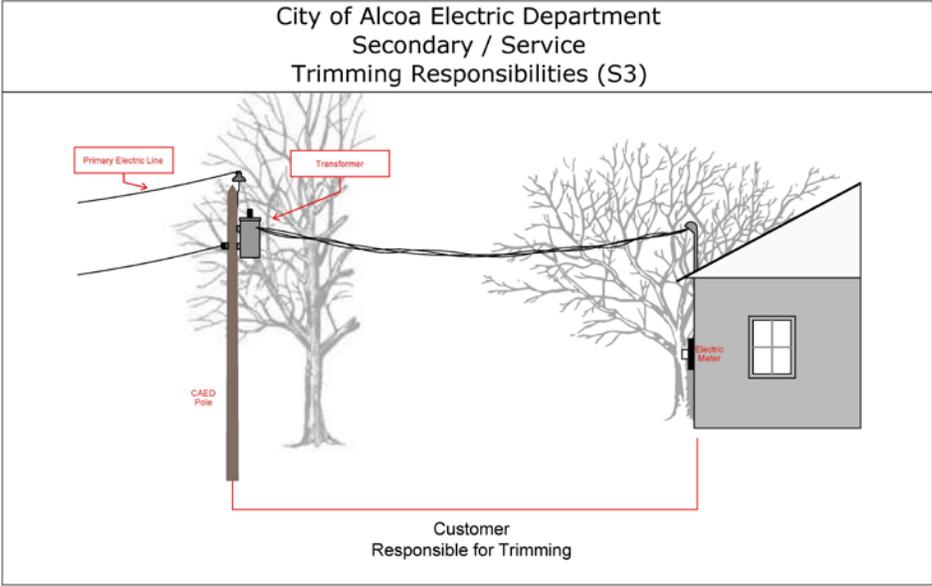
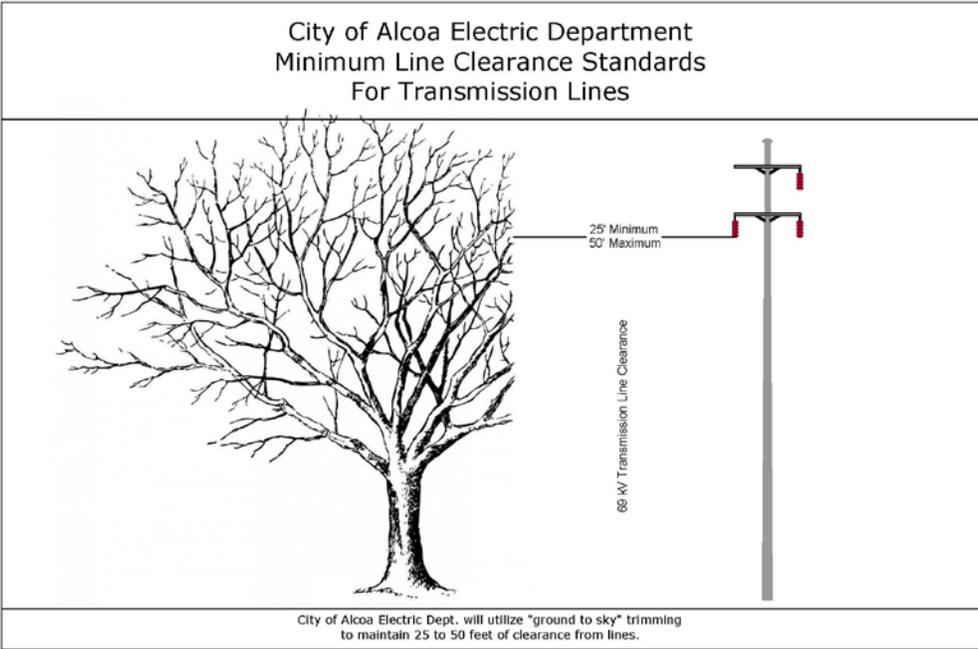


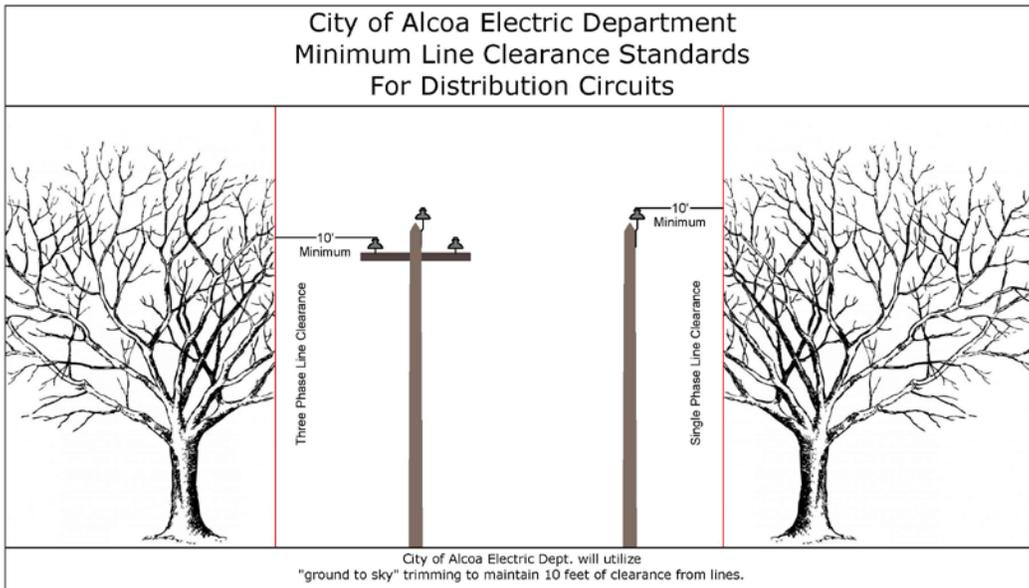
Figure 2



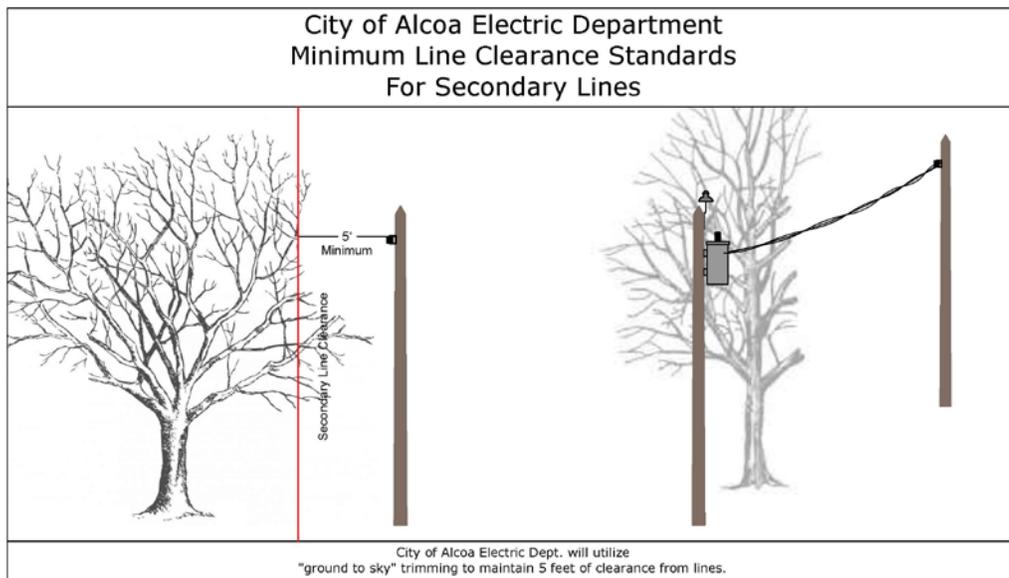
**Figure 3**



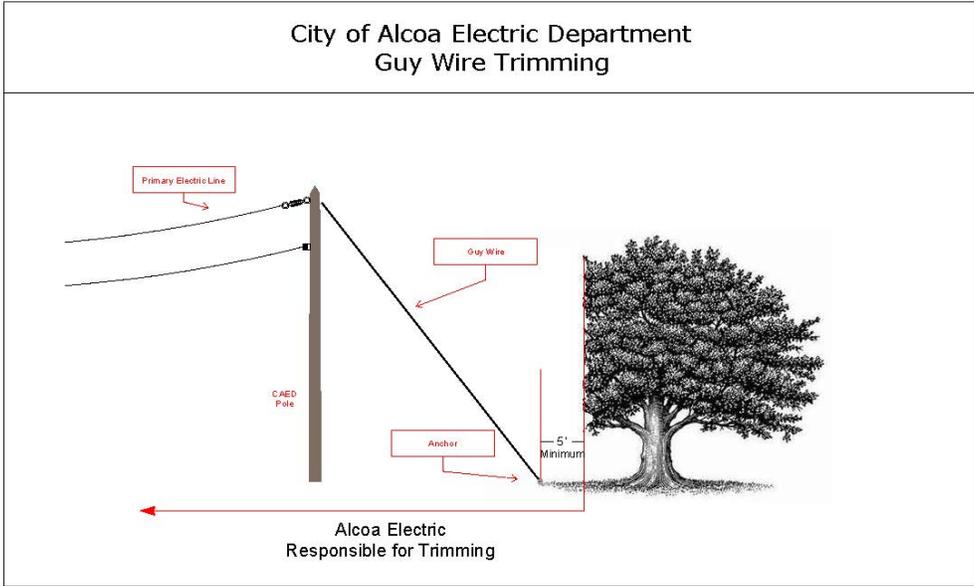
**Figure 4**



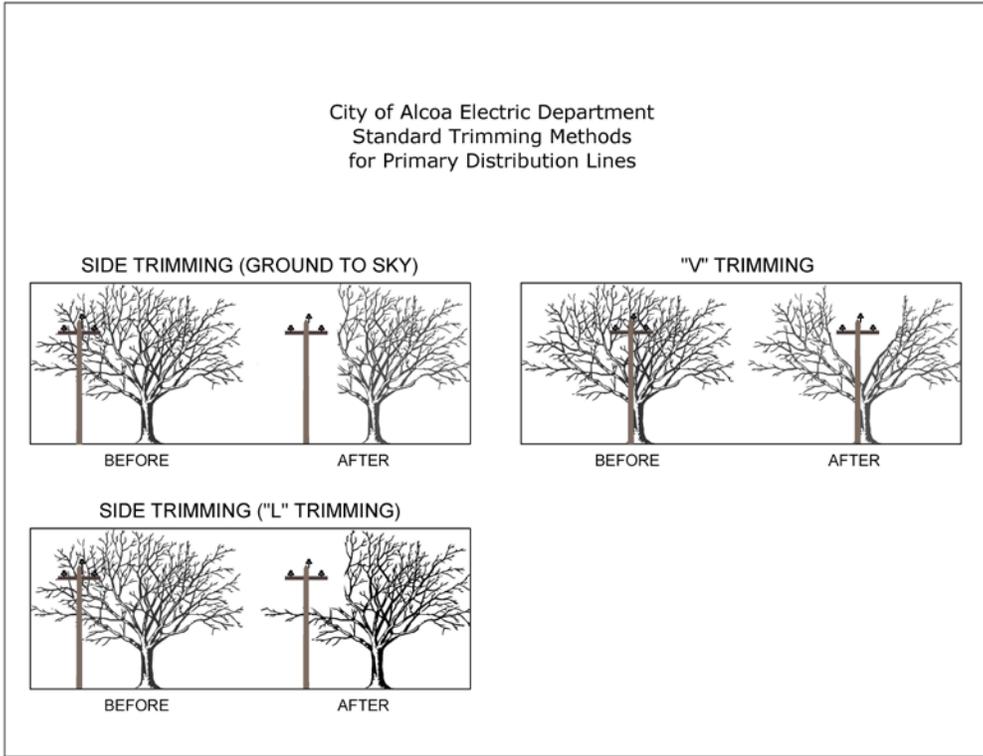
**Figure 5**



**Figure 6**



**Figure 7**



**Figure 8**