

SOUTH CAROLINA ELECTRIC & GAS COMPANY'S
LINE CLEARING SPECIFICATION
 FOR ELECTRIC DISTRIBUTION RIGHT-OF-WAYS

It shall be understood that the following sections regarding South Carolina Electric & Gas Company's (herein after "Company" or "SCE&G") clearing specifications, trimming techniques and notification requirements may not apply in emergency situations. Variance from the specifications contained herein for the described work, shall require the approval of local Company management. For each distribution line work area where approval or authorization by local Company management is required or authorized, such approval or authorization at a minimum must be documented in writing on the circuit map by a Company employee with authority to make changes on the circuit map.

A. Clearing Specifications

1. Right-of-Way ("R/W") width is measured as approximately 15' laterally on either side of primary poles and it extends 15 feet beyond the dead end primary pole.
2. TREES: Trees growing beside primary conductors shall be side trimmed to provide approximately ten feet (10') minimum clearance from the outermost primary conductor or back to the previously established clearing limit, whichever is greater. Such side clearance shall be as high as possible with a 55' bucket or twenty feet (20') above the highest primary conductor, whichever is greater, and to the ground on non-amenity/yard trees. If a mechanical trimmer is used, side clearance shall be as high as possible with the mechanical trimmer. Trees off of the right of way as measured ten feet (10') from the outermost primary conductor but leaning over the right of way shall be trimmed as appropriate, or removed upon approval of the local Company management. The Contractor may leave lower limbs that are ten feet (10') below the lowest primary conductor on amenity/yard trees except in backlot inaccessible areas. Such limbs are sometimes referred to as the shelf.

Amenity/yard trees growing under primary conductors shall be trimmed approximately ten feet (10') below the bottom most primary conductor or four feet (4') below the system neutral, whichever is greater. Note that in order to prune according to ANSI A300 (See Section B.1.) clearance underneath the conductor may be as much as fourteen feet (14') below the primary conductor or eight feet (8') below the neutral conductor particularly when removing vertically growing branches back to a suitable lateral. Amenity/yard trees and non-amenity/yard trees on the right of way as measured ten feet (10') from the outermost primary conductor shall be removed when authorized by the local Company management.

The system neutral is not considered a primary conductor for the sake of defining clearance in this Specification except when the neutral is positioned on a cross arm.

At the time of trimming, any dead trees shall be cleared as specified in Section D.

Note: Conditions will exist on certain trees that will preclude the above clearances. Examples of such conditions include 1) Parent limbs/leaders of such significant size that removal of such limbs/leaders would jeopardize the health of the tree or substantially change the tree's appearance. 2) Significant size limbs that are pushing the neutral down far enough so that it may be more reasonable to relocate the neutral above such limbs than remove these limbs. 3) Significantly large tree trunks which are located less than 10 feet from the outermost primary conductor.

3. BRUSH: Brush shall be defined as vegetation with DBH (diameter at breast height = 4.5 feet above the ground) of eight inches (8") or less. Such vegetation shall include both woody and non-woody species such as small trees, bushes, shrubs, vines and other herbaceous species. Brush may also be described according to its location as either Yard Setting Brush or Non-Yard Setting Brush.

Yard Setting Brush is intentionally planted vegetation that may be considered part of a privacy screen, municipal buffer, or other amenity/yard vegetation. Such brush is often found in residential or commercial settings and along rear or side property lines. Volunteer stems of tall-growing tree species eight inches (8") DBH or less within Yard Setting Brush (i.e. not including planted landscaping trees) should be removed and stump treated, or they may be basal treated and left standing if small and inconspicuous. Planted trees should be reported to the local Company management for authorization before removal. The volunteer stems of tall-growing tree species that cannot be removed shall be trimmed approximately fourteen feet (14') below the bottom most primary conductor or approximately eight feet (8') below the system neutral, whichever is greater. Stems of low growing/ornamental species including but not limited to shrubs and trees such as dogwoods, Japanese maples, redbuds, crape-myrtles, flowering cherries, wax myrtles, river birch, cedar, Leyland cypress and various fruit trees may be left and trimmed accordingly. Trimming of low growing/ornamental vegetation shall not result in stubs. Low growing/ornamental vegetation should be trimmed no more than four feet (4') below the neutral (unless the neutral is located on a cross arm, in which case the standard clearance of ten feet (10') below the bottom most primary conductor should be obtained). Topping should always be avoided for most low growing/ornamental vegetation (exceptions include cedars and Leyland cypress).

Non-Yard Setting Brush is vegetation that is not considered part of a privacy screen, municipal buffer, or other amenity/yard vegetation; such brush is often associated with rural right of way but shall also include brush on vacant lots or unattended urban settings. Where the Company has specified easement widths brush shall be cleared from the full width of such easements. All brush on vacant lots, along roadways, etc. shall be cleared a minimum of fifteen feet (15') from either side of the pole, or to the edge of the previously established right-of-way, whichever is greater. Exceptions to this clearance may include cedars and Leyland cypress. Upon company management approval, Cedars and Leyland Cypress may be topped approximately four feet (4') below the system neutral unless the system neutral is located at or above the top primary conductor in which case the cedars and Leyland cypress should be trimmed approximately ten feet (10') below the bottom most primary conductor. At the time of hand cutting, stumps should be treated with

Garlon 4. Note that when distribution conductor shares right-of-way or structures with transmission conductor, brush should only be cleared on the distribution right-of-way.

The method of clearing brush shall be determined by the Contractor, subject to the local Company management's approval. The Contractor is encouraged to practice selective clearing, the removal of tall-growing tree species with minimum damage to the residual vegetation, where practical by leaving and trimming accordingly any plants in the brush which are of value to the landscape. This could include low-growing and ornamental trees, shrubs, etc. Hand cutting and basal herbicide application techniques lend themselves well to selective clearing; however, any herbicide applications, which will result in standing dead vegetation, must be approved by the local Company management.

4. Distribution Underbuild: All distribution underbuild on transmission structures will be maintained by the transmission department. The transmission department will trim all distribution main line conductors to the specification outlined in this document. All tap lines off the under build structure will be maintained by the distribution department.
5. Distribution lines Paralleling Transmission Lines: Distribution lines shall be trimmed to the Transmission Specifications, i.e. cutting to edge of R/W, cutting "ground to sky", and mowing to the edge of the R/W.
6. Distribution Double Circuit Lines: When distribution construction provides for multiple circuits upon the same structure, trimming shall be from ground to the top of the highest tree limb, "ground to sky".
7. Distribution Lines crossing Interstate highways, railroads, and lines, facilities, and/or rights of way of other electric utilities shall have crossing spans and the adjoining span on each side of the crossing free from overhanging or decayed tress or limbs that otherwise are at risk of falling into the line.
8. Distribution SCADA Switches: Distribution Lines shall be trimmed ground to sky on spans either side of a Distribution SCADA switch.
9. SECONDARY, SERVICE AND LIGHT CONDUCTORS, SPAN GUYS, and Down Guys shall be cleared to eliminate heavy enough contact to displace them from their normal sag such that abrasion is likely to occur. At the time of trimming, dead or green limbs shall be cleared for a distance of approximately one-foot (1') around Secondary, Service, Light Conductors, Span Guys, and Down Guys. The exception to this clearance will be open wire secondary; open wire secondary shall be cleared approximately five-feet (5') around the conductors. Significant size limbs that are pushing the service out of its normal sag far enough that it may be more reasonable to relocate the service than remove these limbs shall be brought to the attention of the local Company Management.
10. LIGHT FIXTURES shall be cleared only if limbs have damaged the fixture or are likely to damage the fixture. Trim clearance, when performed for light fixtures, is

approximately five feet (5'). Light fixtures shall not be trimmed to enhance light coverage on the ground.

11. Vines: Vines on anchors and on all poles to include primary, secondary, lift, street light and span guys shall be cut approximately 6 inches above ground level, completely removing 5 feet of vines above the 6 inch cut. The remaining 6 inches of vines shall be stump, basal and/or foliar treated as appropriate. In addition, vines from other sources which are located on the neutral wire, CATV, phone, fiber optic, etc, shall be cut loose. Vines that are hanging loose as a result of the tree being trimmed should be cut away to the point that they are no longer unsightly, however, the Contractor is not responsible for removing an entire mass of vines (for example, a heavy growth of vines growing from the ground to a point above the neutral would require the neutral to be cut in the clear but the Contractor would not be required to remove the vines below the neutral).
12. Poles: Brush located in Yard Settings shall be cut or trimmed from Poles and down guys to the extent that the brush is not rubbing the down guy / pole or otherwise so as to provide safe operation of system.. Brush located in Non-Yard Settings shall be cleared six feet (6') around at ground level.
13. Anchors: Yard Setting Brush located around anchors shall be cut or trimmed to the extent that the brush is not grown up around the anchor. Anchors within the 15' R/W shall be cleared as outlined in Section 2. Non-Yard Settings Brush located around anchors generally found off the r/w (a minimum of 15' from the outermost primary conductor, or to the edge of the previously established right-of-way, whichever is greater) shall be cleared 6' around at ground level.
14. The stumps of all brush and trees cleared shall not exceed three inches (3") above ground level and shall be cut level, except trees growing in fences may be cut at fence post height provided they are basal stem treated in addition to stump treated.
15. All hardwood stumps, including vines, resulting from hand cutting shall be treated within one (1) hour with an approved herbicide to prevent sprouting. Upon approval by the local Company management, hardwood brush may be basal stem treated instead of hand cut.
16. The Contractor is encouraged to blow chips onto the right-of-way when in Non-Yard Settings. Chips should not be dumped into wetlands or right-of-way thought to possibly be wetlands.
17. The Contractor is expected to consider unique tree maintenance guidelines and policies of cities and/or other local entities as approved by the local Company management.
18. The above clearing specifications shall apply to both maintenance and capital work. It shall not be the Contractor's responsibility to secure the permission of the property owner to cut down, remove or trim trees or brush on new right of way construction or the widening of existing right of way.

B. Trimming Techniques

1. Where conditions permit, the Contractor shall use the accepted arboricultural techniques specified in the ANSI A300 standard to obtain specified clearances and direct future growth away from the power lines. In order to eliminate undesirable stubs and the resultant suckers, all final cuts greater than one inch (1") in diameter are to be made with a proper cut to a parent limb or suitable size lateral limb. Consult with the appropriate Company Forester regarding ANSI trimming, proper cuts, etc. Note that a property owner's request may not follow the natural trimming technique; however, each crew is expected to demonstrate reasonable success in implementing natural trimming. Trimming techniques that leave stubs and the excessive shaping of trees shall be avoided.
2. If after necessary trimming, the owner does not like the appearance of the tree and requests additional work, such additional trimming may be done so as to give the tree satisfactory shape and appearance, or the tree may be considered for removal.
3. Where conditions permit in rural/remote locations, it will be acceptable for the Contractor to use mechanical pruning equipment according to the guidelines in the ANSI A300 (Part 1) standard which states that cuts should be made close to the main stem, outside of the branch bark ridge and branch collar.. Mechanical trimmers should not be used on amenity/yard trees without the permission of the landowner.
4. Precautions should be taken on all vegetation to avoid stripping and tearing of bark, excessive wounding, or "pointers." The Contractor may be required to return to trees with such problems and make rectification (*i.e.*, repairing torn bark, painting cuts for cosmetic reasons, prune away pointers). All loose limbs or hangers should be removed from trees to the point where no safety threat is posed to the public or SCE&G's facilities.
5. Trimming cuts shall not be painted unless requested by a customer or when requested by the local Company management for aesthetic purposes. The Contractor shall use a tree paint approved by the appropriate Company Forester to treat any tree trim cuts (shiners) made on any municipal trees where required.

The following guidelines apply only to work performed by SCE&G crews or specifically assigned to contract tree crews by local Company management.

C. SCE&G Spot Trimming Guidelines

1. Maintenance (line clearance) tree trimming other than routine scheduled circuit clearing Work is defined as "spot trimming". Spot trimming is generally performed only if vegetation causes recurring electric service interruptions, or is a hazard and poses a high probable threat to the safe operation of SCE&G facilities. A hazard exists when there is a structural tree defect such as a dead tree or a dead/broken or otherwise defective limb endangering SCE&G facilities.

The following guidelines are used by SCE&G to determine if spot trimming is warranted:

- a. On primary voltage facilities (conductors, transformers, switches, etc.), vegetation that has caused recurring interruptions warrants spot trimming. Dead trees shall be trimmed according to the SCE&G Dead Tree Trimming Guidelines described in Section E. Dead or defective tree limbs that are likely to cause interruptions on primary voltage facilities warrant spot trimming. Live trees or limbs that are close to primary voltage facilities, or even burning, do not warrant spot trimming unless there is an interruption history, or if children are reported to climb or are likely to climb such trees.
 - b. Secondary, service and security light conductors as well as guy wires are generally spot trimmed only if limbs are in heavy enough contact to displace them from their normal sag such that abrasion is likely to occur. This also applies to bare, open wire secondary, service or security light conductors. A limb simply touching these facilities does not warrant spot trimming. Also SCE&G generally does not remove trees for service or security light conductors. Instead, SCE&G will “drop” a service or security light conductor temporarily while a customer’s private contractor removes a tree near these facilities. SCE&G will not charge customers for “dropping” these conductors.
2. Light fixtures are spot-trimmed only if limbs have damaged the fixture or are likely to damage the fixture. Trim clearance when performed for light fixtures is approximately five feet (5’). Light fixtures are generally not spot-trimmed to enhance light coverage on the ground. Vegetation around lights is usually someone’s landscaping which is the responsibility of the customer, municipality, or property owner. As vegetation matures, it can prevent light from illuminating areas that previously were illuminated. Especially with trees, a point is eventually reached where light coverage is reduced permanently, unless the tree or other vegetation is completely removed or the light is moved to another more open pole.
 3. SCE&G generally does not remove debris resulting from a tree or limb falling onto SCE&G’s facilities. However, if limbs resulting from tree growth are trimmed away from SCE&G’s facilities during restoration of service, such limbs may be removed from the site after the storm or outage has ended as approved by local Company management. Also, SCE&G does not remove stumps.

Note: SCE&G has no right or obligation to remove or trim trees that pose no threat to our facilities. This is the responsibility of the property owner. For customers whose requests do not fall within the above guidelines, upon request, SCE&G will give them a cost estimate to do the work at the customer’s expense if the Work is needed due to the location of SCE&G’s facilities.

D. SCE&G Dead Tree Trimming Guideline

The following dead tree trimming guidelines are used by SCE&G:

1. SCE&G may clear a dead tree near primary voltage facilities if the Company determines that the tree poses a significant risk to its facilities. Generally, dead trees will be handled by the most efficient of the following three clearing plans: 1) removing only the limbs on the line side of the tree trunk, 2) topping the tree and leaving the trunk, or 3) cutting the tree at the stump. The appropriate local Company management will be ultimately responsible for determining the clearing plan used.
2. Priority will be given to dead trees that threaten three-phase lines. (The appropriate local Company management will be ultimately responsible for determining the priority for dead tree spot trimming.) Other dead trees will be evaluated on a case-by-case basis. Possible options for addressing other dead trees may include not cutting these trees or delaying spot trimming until three-phase line trees are cleared.
3. Customers may be given the option of calling a tree contractor of their choice for a quote on performing dead tree work that SCE&G deems non-threatening to the Company's facilities. In order for the customer's private contractor to remove a tree(s); SCE&G will drop a secondary, service or security light conductor when requested in advance by the customer and at no charge to the customer. SCE&G may clear a non-threatening dead tree at the customer's expense if the tree is within ten feet of a primary device and the customer requests that the tree be removed.

The following SCE&G guidelines shall apply to debris from dead trees:

1. SCE&G will leave all dead tree debris (limbs, trunk, and stump) on site if in accordance with local governmental ordinances.
2. When in customer yards, the debris policy and clearing plan should be communicated to the customer prior to beginning the work through whatever local Company management approved means are available.