

Central Florida Electric Cooperative's Vegetation Management

Central Florida Electric's management and staff recognize and appreciate that trees are valuable assets to our members' landscapes and to the quality of life in our area. However, this must be balanced with the constant threat to our members' electric service because trees and tree branches are the most frequent causes of power outages for your co-op. Trees adjacent to Central Florida Electric's rights-of-way must be kept pruned and clear of the power lines. This helps us provide a safe and reliable supply of electricity to our members.

There are several issues that we are often questioned about, concerning tree pruning and vegetation maintenance and new right-of-way clearing activities. In this article you will find valuable information about the following portions of our vegetation management program:

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Vegetation Management Programs

Central Florida Electric has several vegetation management programs designed to minimize contact between trees and power lines as much as possible. Below is a list of the programs:

Right-of-Way Vegetation Maintenance Program: This program has line clearance tree crews clearing and pruning trees year round. They re-clear your cooperative's power line rights-of-way on each circuit systematically on a five to seven year rotation in most areas. Systematic vegetation management cycles help to reduce tree related outages and to expedite service restoration during storms or inclement weather.

Pre-Cycle Vegetation Maintenance Program: This program is designed to reduce tree related outages by inspecting each circuit on a one year cycle for dead and danger trees and trees that may have grown too close to the power lines since the last vegetation maintenance re-clearing cycle. Pre-cycle vegetation maintenance tree crews works on this program year round.

Vegetation Maintenance Mowing Program: This program mows rights-of-way and utilizes a very cost effective means of clearing. We also mow up branches which are trimmed in unimproved areas.

Vegetation Maintenance Herbicide Spraying Program: This program selectively sprays undesirable brush and trees on rights-of-way. The use of herbicides to control vegetation enables our mowing program to increase the savings. Making use of Herbicidal Spraying allows us to preserve wild flowers and other low growth vegetation. This vegetation provides not only food but also valuable habitats for small animals. The cost savings in this program is magnified by the reduced number of man hours and equipment needed to maintain our rights- of-way.

New Rights-of-Way Clearing Program: New rights-of-way are cleared of trees and vegetation to the clearance specification of Central Florida Electric's Engineering Department. A Member applying for new service will be assisted by our Engineering Department to know exactly what their responsibility will be in clearing the new right-of-way.

Reasons for Tree Pruning and Clearing

The two most important reasons for tree pruning and keeping clear rights-of-way are member safety and service reliability. Trees must be pruned to prevent contact between power lines and tree limbs to reduce the constant threat of causing tree related power outages. "Climbable" trees near power lines are a safety hazard and must also be removed or pruned on a regular basis to prevent children from climbing the trees and coming in contact with the conductors. Limbs over hanging power lines must be pruned because of the threat of falling on the power lines during inclement weather and cause extensive outages and damage. Trees that grow too close to power lines can sway during inclement weather, such as thunder storms or high winds and touch the power lines. This gives electricity a path to the ground (which it is always seeking) causing a potentially serious fire and safety hazard along with power outages.

Notification of Vegetation Maintenance

Notification of right-of-way vegetation maintenance will be given on all circuits scheduled for re-clearing. Central Florida Electric will notify consumers by telephone and the placement of signs along roadways in the area being cleared. Notification is not always possible as some vegetation maintenance crews, such as, mowing crews, spraying crews, pre-cycle maintenance crews, and some pruning crews move quickly through an area. The crew may re-clear vegetation while they are on-site without actually speaking with the member or property owner.

Method of Tree Pruning

Central Florida Electric's vegetation management pruning methods, both initial and re-pruning, is performed in accordance with the latest recognized and approved principles of modern arboriculture and tree surgery where possible. Lateral or natural tree pruning methods are used according to ANSI A-300 standards. This is the voluntary standard for all tree work in the United States. [The National Arbor Day Foundation](#) and the [International Society of Arboriculture](#) endorse lateral tree pruning as one of the best methods of line clearance tree pruning for the health of the trees. Although a tree's appearance may be considered unusual after the initial pruning, it quickly improves with time and growing seasons. Branches or limbs should be cut flush with supporting trunk or limb so that the fewest stubs are left whenever possible. The flush cut method is used as defined by Dr. Alex Shigo, U.S. Forest Research Scientist. Branches or limbs are flush to the branch bark line and not necessarily flush with the trunk of the tree. Central Florida Electric's Vegetation Management does not recognize topping trees as an acceptable method of tree pruning.

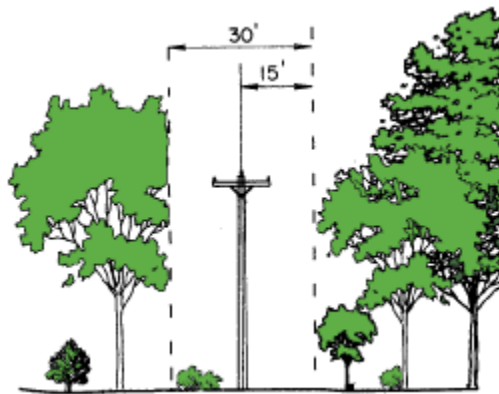
Lateral and side tree pruning are the most acceptable methods for utilities in line clearance vegetation maintenance. Lateral pruning is a technique whereby branches are removed at a parent branch or at a lateral branch large enough to assume the terminal role. Branches growing into the utility line space are removed and those branches growing away from or parallel to the conductors remain. Wherever possible, the trees are allowed to achieve their normal mature height with crown development away from the conductors.

Clearance Specifications

In all situations, trees near primary lines should be pruned before they actually touch the power lines and enough clearance must be obtained so that the trees do not grow back into the lines before the vegetation maintenance crews make the cycle and prune them again. The exact amount of clearance obtained at any given site varies considerably and is dependent on the voltage and construction of the power line, the sagging of the conductors at elevated temperatures, the combined movement of the power lines and trees during adverse weather conditions, the normal re-growth of the species of trees involved, and the position of the trees in relation to the power lines.

Distribution Line Clearances: The normal minimum clearance for 3 phase, 2 phase, single phase primary lines, is 15 feet from the conductor on each side. The clearance on primary lines helps reduce tree related outages during inclement weather and storms. The preferred minimum clearance is five feet on each side of all service drops and triplex cables. Minimum clearance on primary power lines will be from ground line to as high as equipment can safely reach. Effort will be made to eliminate all trees, tree parts, and growth points beneath the wires and all weak, diseased, and dead limbs above the wires which may fall or blow into the wires.

Transmission Line Clearances: The preferred minimum clearance is 50 feet each side of pole line. Minimum clearance above transmission lines will be from ground line to the sky.



Tree Removal

Pre-cycle Maintenance Program: Central Florida Electric inspects each circuit on a yearly cycle for hazardous trees and conditions. Trees that are severely leaning, dead, decayed, or otherwise hazardous to the power lines are classified as "danger trees." Dead and danger trees are cut and removed systematically on this scheduled cycle. Trees that threaten to endanger the power lines are cut, or cut down to a height that will not threaten our power lines.

Request for Tree Removal: Central Florida Electric will cut down green trees that are directly below the power lines in our rights-of-way or so close to the power lines that they require drastic pruning. The tree trunk and larger limbs will be cut into whatever lengths the tree's owner desires or firewood size and left on-site. Central Florida Electric will cut danger trees that are adjacent to our power lines along the edge of the rights-of-way. In improved areas such as yards, the dead and danger trees will be cut down and cut up into manageable lengths and left on-site. In unimproved areas such as woods, the dead and danger trees will be cut or cut down to a height whereas to not have any threat to our power lines and left as is on-site.

Central Florida Electric reserves the right to refuse to cut or remove any tree which, in its judgment, can be safely cut or removed by a private tree company with no damage to our lines.

Service Wires and Outdoor Lights

Central Florida Electric's vegetation maintenance crews will prune the limbs five feet around your service wire to your residence upon request. We will also prune limbs around your outdoor light service upon request. Pruning limbs for outdoor light pattern is the responsibility of the member. The service wires will only be cleared of small branches not large limbs or trees over the service wires.

If you, or a private tree company hired by you, feel that it is unsafe to work close to the service wire or to cut or remove trees next to it, please call your local district office for an appointment during regular business hours to schedule a Serviceman to disconnect your electric service and re-install it after the tree work is completed. There is no charge for this service.

Debris Disposal

Vegetation Management's Rights-of-Way Re-clearing Program: Branches and brush debris from the scheduled rights-of-way re-clearing maintenance activities in improved areas, such as, yards and lawns, will be chipped, cleaned up, and hauled away. The yards and lawn areas should be left as clean as they were before the work was performed. Large limbs and wood will be cut in firewood lengths and left on-site.

Branches and brush debris that are pruned and left in unimproved areas, such as, woods and areas not maintained by the property owner, will be mowed and mulched up by a large mulching mower and left.

Fallen trees, branches, wood, and brush debris generated as a result of storms and storm restoration will not be cleaned up by Central Florida Electric.

Dead and Danger Tree Program: Dead and danger trees cut along the edge of, and adjacent to, rights-of-way in improved areas, such as yards and lawns, will be cut down and left. Central Florida Electric will give notification, if possible, to the property owners before cutting and leaving dead and danger trees in improved areas. Central Florida will cut trees up into manageable lengths at the property owner's request. Dead and danger trees cut in unimproved areas, such as, woods and areas not maintained will be cut down and left on-site. **Central Florida Electric is not responsible for removing, or the disposal of dead tree debris.**

Tree Planting and Power Lines

Central Florida Electric's Vegetation Management supports the philosophy of "The Right Tree in the Right Place" as a means of having a more attractive community to live in and a more dependable electrical system to serve its members. When you start landscaping around your home and in your yard, please look up before planting trees. Do not plant trees if power lines are overhead. If the power lines are overhead, please evaluate the species of trees you wish to plant outside of the power line right-of-way. For help in selecting tree species and to determine the distance for you to plant trees from the power line right-of-way, please pick up a "landscape planning guide" from your local district office.

For more information and assistance in helping with your landscape planning near our power lines, please call Central Florida Electric's Supervisor of Right-of-way at 1-800-227-1302 ext. 202.