# Distribution Line Clearance Guidelines For Cutting Rights-of-Way by the Mile

# Southwest Tennessee Electric Membership Corporation

for the pruning, removal, and clearing of vegetation under or adjacent to electrical conductors.

The intent for these guidelines is to provide requirements and specifications for necessary line clearance of vegetation within close proximity of distribution lines on all Southwest Tennessee Electric Membership Corporation (STEMC) rights-of-way.

STEMC and/or its agents will in practice remove existing vegetation under or adjacent to its power lines. In cases where such removals are impractical, Southwest and/or its agents will prune existing trees and/or vegetation under or adjacent to its power lines to a vertical minimum clearance of 10' from the neutral wire and a horizontal minimum clearance of 15' from the nearest phase wire. While these are minimum required clearances, STEMC will require greater clearances for species specific trees.

Standards for all pruning clearances should comply with ANSI, A-300: *Performance Standards for the Care and Maintenance of Tree, Shrubs, and other Woody Plants;* and ANSI, Z-133.1 *Pruning, Trimming, Repairing, Maintaining, and Removing Tree and Cutting Brush-Safety Requirements.* 

Vegetation should be managed to provide adequate clearances to meet cycle maintenance requirements. Factors to consider in determining clearances include, but are not limited to, species' growth rate, species' failure characteristics, the vegetation in relation to utility lines, the movement of vegetation and utility lines during routine winds, and sagging of electrical lines due to elevated temperatures, ice, or snow. Trees with obvious defects (danger trees) in proximity to all electrical equipment shall be removed. Removal of trees 10" or less DBH are a standard part of this contract. Removal of trees greater than 10" DBH requires approval by a STEMC Forester. In general, while landowners' permission is desired, it is not required to meet cycle maintenance requirements. However, a reasonable attempt to contact and inform landowners will be made. STEMC will send letters to all members on the circuit informing them when work is to be performed. The person is charge of the work for the contractor shall also attempt to contact the resident and inform them that work is being done per the letter sent by STEMC. Refusals by the member will be promptly brought to the attention of the STEMC Forester.

### Work Units

All prices are to include clean-up of all brush and wood.

The standard work unit is mile of overhead primary line as determined by the STEMC mapping system.

Any woody stem vegetation that is less than or equal to 10 inches DBH is considered a standard part of the work to be performed.

Removal of any trees as noted below require the **approval of a STEMC Forester** and prices for removal are per the contract bid price.

10.1-20"	Any woody stem vegetation that is 10.1 to 20 inches at DBH
20.1-30"	Any woody stem vegetation that is 20.1 to 30 inches at DBH
30"+	Any woody stem vegetation that is 30.1 inches at DBH will be considered a bid tree for time and material

#### <u>Trims</u>

Trims are to be pruned at proper laterals behind given distance for that species of tree. If no proper lateral can be found then the cut shall be taken to the base of the tree. STEMC defines a proper lateral as a limb being pruned or trimmed back to a limb that is 1/3 the size of the limb being cut. Trimming with a machine such as a Jarraff is allowed as long as the quality of the cut is acceptable to the Forester. When trimming from a bucket truck, all pruning clearances shall comply with ANSI, A-300: *Performance Standards for the Care and Maintenance of Tree, Shrubs, and other Woody Plants*; and ANSI, Z-133.1: *Pruning, Trimming, Repairing, Maintaining, and Removing Tree and Cutting Brush – Safety Requirements*. No limbs are to be left growing under energized lines that will create a shelf effect. Trims in manicured yards shall be pruned back to proper distance and proper laterals. Hangers and broken limbs due to work being done shall be removed. Old stubs left from previous work shall be removed. All dead wood on trimming side of tree shall be removed.

#### **Service Trims**

Service trims require a 6 foot clearance around lines and to a proper lateral if possible. Uninsulated secondary wires are to be pruned the same as primary lines.

#### Overhang

Overhang on overhead primary line shall be cut on all trees ground to sky. All limbs growing straight or down toward the lines **and decayed or damaged limbs** shall be removed.

#### Removals

Removals are any trees above ten inches in diameter at DBH and are to be cut within one inch of the ground. All removals must be approved in advance by the STEMC Forester. Trees are to be removed from property daily unless an agreement with the Landowner has been made to leave trees by a STEMC Forester only. Trees or logs are not to be left in right-of-way or manicured yards.

#### **Stumps**

Stumps, including brush and trees, are to be cut within one inch of ground level. All stumps from removals are to be sprayed with appropriate herbicide to prevent re-growth. All stumps shall be sprayed within thirty minutes of removal. Herbicide shall have a dye, and must be available for inspection by the STEMC Forester. Old stumps left from storm damage or other previous work shall be cut and sprayed.

#### Removal of Woody Stem Brush and Debris

Brush, including vines such as kudzu, is to be cut at ground level leaving no sharp stubs that can cause injury or property damage. All woody stem brush and debris shall be disposed through mechanical means, either by mechanical bush hogging of right-of-way, or through chipping of all brush and wood. At the completion of work there shall not be any brush over broom stick handle size on the floor of the right-of-way. Whenever possible, wood chips must be blown into the woods or right-of-way rather than the truck. Chip piles must be adequately spread out and must not cover cut wood or brush. All wood shall be cut into firewood length (18-20") and neatly stacked along edge of right-of-way.

## Description of Work Process

Right-of-way maintenance work is planned by our Forestry Department to accommodate a five year cycle. The Forester is responsible for sending letters informing members that the Contractor will be cutting right-of-way in their area in the defined timeframe and attempting to resolve potential issues prior to vegetation removal. Then, the work is given to the Contractor. Upon completion, the work is inspected by the Forester for completeness, adequacy, and adherence to specifications and standards. Any work not done to these specifications will be redone at no cost to STEMC. Upon satisfactory completion, the Forester recommends payments of the invoice. Note that adequate time must be allowed for the Forester to inspect the work prior to payment. This is generally considered to be receipt of an invoice for inspection two weeks prior to the last Wednesday of the month. Payments will be made monthly in whole mileage units with only the final invoice allowing for a partial mile. Mileage is determined by the STEMC's mapping system which includes both primary line mileage and secondary line mileage. Note that pricing is to be based upon overhead primary mileage.

#### Work Week

The normal work week shall consist of hours between 7:00 am and 4:00 pm, Monday through Friday. The actual work schedule will be determined by the Contractor in conjunction with STEMC. Changes to an established work schedule shall be made by mutual agreement between STEMC and its Contractor. The location of all crews shall be reported to the STEMC Forester daily, along with the moving on/off or quitting early of any crew on the STEMC system.

#### Reports

All contractors shall provide weekly line clearance reports indicating the number of miles cut. A summary of the weekly reports shall be due no later than Tuesday of the following week. These numbers shall be provided to a STEMC Forester. The dates of performance of such work together with any other pertinent information needed to properly describe or measure the work performed shall be documented. (Such as spans cut)

#### **Contractors Equipment**

All contractors' equipment and personnel shall be in good operating condition and neat appearing and maintained at all times. STEMC will release contract crews from its system at its discretion if it is determined that vehicles and/or equipment is not operating or is of an appearance that is not to its satisfaction. All Contractor personnel must dress safely and neatly to perform the work and their conduct must be such that a positive image of STEMC is represented.