How are trees pruned in a remote or wooded area?

In remote/rural locations, utilities often utilize mechanical equipment to increase efficiency and worker safety. Large saws mounted on high-reaching booms can be used to prune the sides of right-of-way corridors. In some cases, saws are suspended from helicopters. When using this equipment it is understood that the quality of the cuts can be less than those made by hand. Nevertheless, efforts are made to avoid unnecessary damage to the tree.

Chemical application is another method of side pruning where herbicides are applied to the foliage of selected branches growing into the right-of-way corridor. The treated branches eventually die and are shed by the tree.

Who will be performing the work on my trees?

Only qualified utility line clearance professional arborists who meet OSHA qualifications are legally permitted to work within 10 feet of power lines or work on a tree that has branches within 10 feet of power lines. Line clearance arborists are trained to prune trees according to American National Standards Institute (ANSI) A-300 pruning standards and follow industry best practices, which helps preserve the health of trees.

Danger: Homeowners should never hire a private tree contractor to work within 10 feet of power lines or attempt to do the work themselves. The utility should always be contacted for information first.

What specific pruning guidelines are followed?

The ANSI A-300 Part 1: Tree, Shrub and Other Woody Plant Maintenance—Standard Practices, Pruning are the accepted guidelines and are endorsed by the International Society of Arboriculture (ISA). They promote directional pruning methods which minimize pruning stress and focus on tree health while obtaining necessary clearance from power lines.

How often is utility tree pruning completed?

The time between maintenance activities varies from utility to utility and between different regions of the country. Sometimes the cycle is mandated by the state agency. The interval is based on:

- expected re-growth rates of the tree species
- amount of clearance obtained at the time of pruning
- available program funding

Some utilities conduct 'mid-cycle' pruning and/or inspections to mitigate the fastest growing trees and extend the cycle.

The Right Tree in the Right Place

Planting the right tree in the right place can increase property value and energy efficiency of your home. It will also minimize property damage and power outages caused when trees come into contact with power lines. When planting a new tree, consider where you are placing it and what the tree will look like when it reaches its mature height and width. Look up from the proposed planting site and ensure there are no overhead wires in the vicinity. If there are, consult your utility before planting. Also, before planting, make sure you are aware of the location of any underground utilities. To be certain you do not accidentally dig into any lines and risk injury, always call your utility companies first.

Additional Information

For additional information, contact:

- Utility Arborist Association; ***www.utilityarborist.org***
- American National Standards Institute; ***www.ansi.org***
- Tree Care Industry Association; ***www.tcia.org***
- Trees are Good; ***www.treesaregood.org***
- Tree Vitalize; ***www.treevitalize.com***
- International Society of Arboriculture; ***www.isa-arbor.com***
- Arbor Day Foundation; ***www.arborday.org/utility***

UTILITY PRUNING OF TREES

Trees and Distribution Electric Service Q & A

Any utility company's primary goal is to provide safe, reliable service. This brochure is intended to provide a generalized overview of how an electric utility may use tree maintenance techniques to achieve their goal.

Warning: Do not attempt to prune or remove trees in contact with or near electric lines unless OSHA line clearance certified. Contact your local electric utility before planting or pruning a tree near overhead electric wires.

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Electric Utility Pruning Q & A

Why do electric utilities prune trees?

SAFETY—Utility vegetation maintenance reduces electric hazard risk to the public by:

- providing separation between wires and vegetation to eliminate potential electrical shock
- reducing potential wildfire hazards from tree/wire conflicts

RELIABILITY—Trees are among the most common causes of utility service interruptions. Trees that are too close to power lines can interfere with electric service; especially when weather brings lightning, wind, ice, or wet snow.

How much will be cut from my tree?

Typically, a qualified utility forester or vegetation manager prescribes the amount and type of pruning necessary based on:

- tree growth rate and structure
- wind direction
- tree species: strong or weak wooded
- tree health or vigor
- environmental factors
- water sources
- proximity of tree to wires and line configuration—higher voltage lines require greater clearance

My trees are not even touching the wires, why do they have to be pruned now?

Utility companies are proactive and try to prune trees BEFORE they pose a risk to the power lines. Because trees are dynamic, factors such as swaying in the wind, sagging with ice/snow weight, and uprooting in storms are examples of how problems can develop without warning even if the trees are not in contact with wires at this moment.

What is directional pruning?

Directional pruning removes branches growing toward the power lines while leaving those that are growing away. It is the most appropriate pruning method for utility line clearance.

How will a tree look after it is directionally pruned?

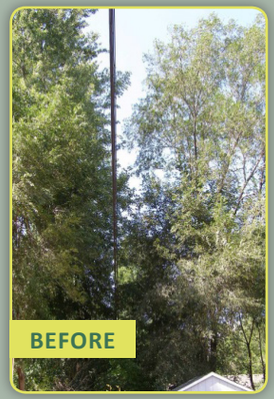
Trees growing directly under power lines may appear U or V-shaped (crown reduction or through-pruning). Trees growing alongside power lines may appear L- shaped, or one side may be completely removed (side pruning). The tree may often appear misshapen but this pruning is being performed to provide for safety and service reliability, not for aesthetic purposes. In general, trees growing near the power lines will never have the potential to grow with a "natural" shape.

DO NOT TOP TREES!

Also called 'rounding-over,' this is not directional pruning and is not an acceptable pruning practice. It involves cutting branches to stubs or lateral points that are not large enough to grow successfully. It can severely weaken the tree and even kill some species.

EXAMPLES OF PROPER THROUGH-PRUNING:

EXAMPLES OF PROPER SIDE PRUNING:



EXAMPLES OF PROPER SIDE PRUNING:

EXAMPLE OF A PROPER CROWN REDUCTION:

Why won't the utility put the lines underground?

Undergrounding of lines is very expensive and results in more difficult (and longer) repairs in the event of a power failure. Also, converting an overhead system to underground typically causes substantial damage to existing trees' root systems.

Is my tree a candidate for removal?

Situations where tree removal may be preferable to line clearance pruning include:

- Tall or fast-growing species growing directly under the power lines that require frequent pruning and will never have a natural form
- Saplings (brush) with the potential to grow into or close to the lines
- Large, previously topped trees under the lines
- Trees with a high risk of failure (examples – leaning, in decline, severe dieback, cracked, split, hollow, etc)

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