



Board of Commissioners:

Jeff Randall, District 1
Kenneth Collins, District 2
Dan Toepper, District 3

Kevin Streett, General Manager

SUBJECT: Right-of-Way Vegetation Management

OBJECTIVE: To state the policy regarding vegetation management

POLICY:

Maintaining adequate vegetation clearance from lines and electric utility equipment is vital to the safe and reliable operation of the electric distribution and transmission system. It is the intent of the Jefferson County Public Utility District (PUD) to maintain proper tree clearance near overhead distribution and transmission lines for safety reasons, to minimize interruptions of electric service, and to provide access for line operations. The PUD will provide cost-effective vegetation management services on a scheduled seven-year maintenance cycle that ensure vegetation clearance from power lines and equipment is consistent with Rural Utilities Service (RUS) and PUD specifications.

The PUD requires that the American National Standards Institute (ANSI) A300 Tree Care Operations standard practices relating to quality tree care, pruning, and integrated vegetation management be followed to the extent possible when planned maintenance is being performed in the vicinity of electric lines and equipment. Employees and contractors shall also adhere to (ANSI) Z133.1 Safety Standards.

I. PLANTING TREES OR MOVING TREES

- A. Customers should consider the mature canopy size of trees to be planted on their property. No tree shall be planted that will interfere with distribution or transmission lines when fully grown. Trees that will grow taller than fifteen (15) feet shall be planted at least twenty (20) feet away from pole center for single phase distribution lines and thirty (30) feet away from pole center for multiphase distribution lines. If a customer's tree is in violation of the required distance, the customer will receive a Tree Transplanting Notice- see Appendix A, from the PUD informing them of the violation allowing them to address the issue timely.
- B. Trees shall not be planted within forty (40) feet of pole center for transmission lines. Trees planted closer than this distance may be removed by the PUD.

- C. Customers and contractors should contact 811 to locate underground utilities to avoid personal harm and damage to the lines and interruption of electrical service when planting or moving trees. Customers and contractors will be responsible for paying repair costs for lines that are damaged due to digging.
- D. Customers shall not plant trees within ten (10) feet of underground cable. Necessary repair of underground lines could cause damage to trees planted near the cable. When planting around pad mount transformers or junction boxes, all vegetation shall be planted at least three (3) feet away from all sides and ten (10) feet away from the access panel.
- E. Trees less than 10 feet in height growing near the overhead distribution or transmission may be moved or cut down by the customer to reduce potential safety and service hazards. A customer shall not risk his/her safety by cutting or moving trees taller than ten (10) feet located near power lines

II. TREE REMOVAL AND PRUNING

- A. The PUD is responsible for maintaining tree clearance only on power lines owned by the PUD. Responsibility for tree clearance on customer owned lines belongs to the customer. When the line belongs to the customer, hiring of a professional tree service is recommending to ensure customer safety and prevent damage to electric lines.
- B. Trees endangering PUD owned lines may be cut down or pruned by the PUD to eliminate any immediate hazard. Trees less than 8" inches in diameter in rural, forested, and agricultural road right of way corridors will be removed with or without the consent of the property owner.
- C. The PUD will provide vegetation maintenance along primary lines (those between the substation and the service transformer) and PUD owned transmission lines. The appropriate vegetation management practices will be utilized at the discretion of the PUD's Special Project Coordinator to achieve required line clearances until the next maintenance cycle. Trees and brush growing within the right-of-way corridor outside of the home landscape will be removed by the PUD. Right-of-way corridors will be managed to ten (10) feet for single phase distribution, twenty (20) feet for multiphase distribution and forty (40) feet for transmission lines to either side of pole center.

Trees outside the right-of-way corridor, which are dead, dying, structurally defective or otherwise pose a danger of falling on the lines (hazard trees) will also be removed.

Landscape trees are trees located within an established lawn area or are ornamental specimens growing within the home landscape. Generally, the main trunk of landscape trees should be ten (10) feet or more from the vertical plane of the wires for distribution lines. Landscape trees will be pruned to provide

clearance until the next scheduled maintenance cycle. The pruning distance will depend upon the species, cycle length and location of the tree. Landscape trees requiring repetitive pruning or those which are disfigured while achieving necessary clearance may be selected for removal with the property owner's consent.

To protect the public from electric injury, a minimum safety clearance from uninsulated conductors shall be obtained on all trees, regardless of location. A Safety Clearance Action Threshold has been established and is outlined in Appendix B. Safety clearance will be obtained with or without the property owner's consent.

Trees and brush growing in the right-of-way corridor will be cleared to forty (40) feet either side of pole center for transmission lines. If there are mature trees growing within the landscape right-of-way corridor, they may be trimmed, at the PUD discretion, to prevent possible contact between the trees and conductor in the event of falling trees or line blowout created by wind.

- D. During maintenance cycle work all trimmings that can be reached will be chipped and removed.
- E. When work is necessary because trees have caused a power outage or because trees have died and present a hazard, all debris will be left for disposal by the property owner.
- F. Stump removal will not be performed by the PUD

III. CHEMICAL APPLICATIONS

- A. Jefferson County PUD uses no chemical applications to manage trees and brush within the right-of-way corridor.

IV. NOTIFICATION

- A. Typically, door-to-door contacts, brochures, door hangars, phone messages, and/or electronic communications explaining policies and practices may be used to notify property owners of vegetation management work.
- B. No advance notice will be given prior to off-schedule work, including the removal of hazard or storm-damaged trees or power restoration activities.

V. DEFINITIONS

- A. "Hazard Trees"- trees outside the right-of-way corridor, which are dead, dying, structurally defective or otherwise pose a danger of falling on the lines.

- B. "Distribution Lines"- a distribution line is as generic term for a distribution voltage (2,400 volts to 35,000 volts) line that carries power from a substation to a residence or business. These lines may be overhead or underground.
- C. "Line Blowout"- the distance a power line can be expected to swing during high wind.
- D. "Primary Line" – a power line that carries medium voltage power to distribution transformers located near the customers premises.
- E. "Secondary Line"- lower voltage lines from the distribution service transformer to the customer's service (s). The lines may be overhead or underground and may include equipment such as pole-mount utility secondary connectors.
- F. "Transmission Line"- a bare, uninsulated, high voltage (69,000) volts to 345,000 volts) overhead power line, usually strung from steel towers or tall wood, or metal poles, that carries power for power generation plants to substations.

RESPONSIBILITY:

Employees are responsible for understanding and complying with this policy.

PUD representatives, or other qualified personnel, are responsible for communicating this policy to the customers.

Supervisors are responsible for monitoring and ensuring compliance with this policy.

The General Manager is responsible for the overall administration of this policy as it applies to employees.

The PUD reserves the right to change, suspend, eliminate, depart from, or add to all or any part of this policy at any time, with or without prior notice, whenever the board of commissioners or management determines it is in the best interest of the PUD to do so.



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APPENDIX A

Tree Transplanting Notice

At Jefferson County PUD our priority is to provide safe, reliable electric service at a reasonable cost to customers. One of the most serious obstacles to meeting this goal is vegetation contacting electrical equipment. We work to prevent this problem through our vegetation management program.

To control future maintenance costs, we routinely remove trees that are growing within the electric power line corridor that would otherwise require trimming someday. It is less costly to remove these tall-growing tree species while they are small. Allowing young trees to develop to the stage where removal or repeated trimming is necessary can be expensive and, in some cases, unattractive.

Some of the small trees growing in the electric power line corridor across your property are species that are not compatible with power lines and may pose outage problems in the future. Please help your PUD avoid these reliability concerns by removing the trees or transplanting them to a more suitable location.

Be sure to call 811 before you dig so underground utilities can be located. There is no charge for this service. All equipment, tools, personnel and the trees themselves must remain ten (10) feet or more from energized power lines at all times. Failure to do so could result in damage to electrical equipment, personal injury, or even death. We ask that all holes be filled to prevent potential injury to persons or equipment.

Thank you for your help in controlling maintenance costs and enhancing the reliability of the electric distribution system. We appreciate your understanding and cooperation.



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APPENDIX B

Safety Clearance Action Threshold for Distribution Lines.

The Jefferson County PUD Special Projects Coordinator may, at times, exercise professional discretion in adjusting the PUD's vegetation management specifications to any tree-line clearance project. This document will describe the bottom limit of discretion for climbable trees. This boundary is useful to assure that appropriate clearance is achieved to minimize electrical risk to the public.

A critical protection clearance for primary and secondary conductors shall be established when vegetation management work is performed. Upon completion of any tree work on a property, no tree structures or parts may remain that could support the weight of a small child (40 lbs.) within specific protection zones, as herein defined. The protection zone consists of a rectangular shaped area measured ten (10) feet to the side of each conductor, ten (10) feet below the lowest conductor and ten (10) feet above the highest conductor.

Outside of regular maintenance cycles, tree structures or parts capable of supporting the weight of a small child (40 lbs.) and found to exist within these protection zones must receive the highest priority in applying an appropriate remedy.

"Readily Climbable"- A tree with any of the following characteristics:

1. A tree that has branches, branch stubs, or multiple trunks existing within a distance of ten (10) vertical feet from the ground.
2. A tree that has branches, branch stubs, or multiple trunks existing within a distance of ten (10) vertical feet from accessible structures such as wood poles, sheds, trailers, decks, playground equipment, etc.
3. A tree with access into its crown by way of an adjacent tree having similar characteristics as described in #1 and #2 above.
4. Any other conditions, structures or situations which in the opinion of the Special Projects Coordinator may cause a tree to be "readily climbable".

Trees fitting this definition may have remedies applied such as removing the tree, pruning branches or stubs, cutting selected trunks to create a single trunk tree, removing hand or foot holds, removing structures such as wood piles, sheds, trailers, decks, playground equipment, etc.