

TENNESSEE REGULATORY AUTHORITY



460 James Robertson Parkway
Nashville, Tennessee 37243-0505

August 30, 2012

MEMORANDUM

To: Docket File 12-00051

From: Paul Greene, Utility Consultant, Utilities Division *PG*

Subject: Docket No. 12-00051 - *Petition of Kingsport Power Company d/b/a AEP Appalachian Power to Implement a Storm Damage Rider Tariff for Recovery of Storm Costs.*

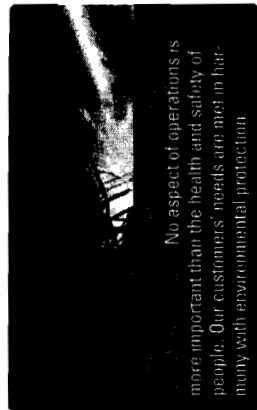
Per Staff's verbal request, the attached information (provided to Staff during our review) is to be officially filed in Docket 12-00051 as a filing by AEP re: AEP Vegetation Management Plan.



Transmission Right of Way Clearing and Maintenance

A Balanced Approach to Vegetation Management

Appalachian Power
P.O. Box 1056
Charleston, WV 25327
AppalachianPower.com



No aspect of operations is more important than the health and safety of people. Our customers' needs are met in harmony with environmental protection.

A History of Environmental Stewardship

American Electric Power (AEP) owns the nation's largest electric transmission system, a nearly 39,000-mile network of high-voltage power lines carrying electricity to more than five million customers in 11 states. North America demands a safe, reliable electric grid and AEP's lines form a substantial part of the backbone of this grid.

To safeguard the reliability of our transmission delivery system and your electric service, we have developed a vegetation management program to control the growth of trees and other vegetation around our transmission facilities and rights of way. The program balances our customers' need for reliable energy with respect for the natural environment that surrounds our facilities.

Our goals are to:

- Protect our system and minimize outages
- Minimize any adverse environmental impacts
- Ensure compliance with all applicable laws and regulations
- Perform our work as safely and economically as possible, and
- Maintain a positive relationship with land owners and the public.

This brochure will provide you with an overview of our policies for vegetation management in our transmission rights of way, and hopefully address the majority of questions you may have about those policies.

Federal Requirements

In August 2003, a major power outage struck the northeastern United States and southeastern Canada. Investigators found that a root cause of the blackout was a tree that had come in contact with a transmission line.

As a result of that event, new national standards with substantial penalties for non-compliance were created governing vegetation management practices for lines that are considered part of the national transmission grid. The standards were developed by the North

American Electric Reliability Corporation (NERC) under the direction of the U.S. Federal Energy Regulatory Commission (FERC). The standards mandate that minimum clearance distances between transmission lines and the nearest vegetation must be established by each utility. Our policies ensure that we are in compliance with the federal guidelines. Appalachian Power's right-of-way easements typically grant the right to remove trees and other obstructions as well as rights to access, inspect, repair and maintain transmission lines.

To conform to the standards and maintain the reliability of the transmission system, we've made it a policy to remove all trees and other woody-stemmed vegetation within the rights of way of power lines that are considered part of the national transmission grid if the distance from the conductors to the ground is less than 100 feet.

However, under certain circumstances (unique topographic and/or environmentally-sensitive conditions) Appalachian Power may allow compatible, low-growing species to remain in the right of way. In maintained areas (i.e. mowed yards, lawns and public areas), Appalachian Power will work with landowners to determine if trees and other vegetation deemed compatible with safe operation of the line may remain. In all cases, compatible species are limited to those that grow no more than 15 feet tall at maturity.

This policy limits the potential for vegetation to interfere with the operation of the line. In areas where the distance from wires to the ground is greater than 100 feet, only vegetation that will potentially interfere with the operation of the line is removed, trimmed, or otherwise controlled.

General Policies

Public Safety – Electricity can be deadly, so that's why we have vegetation management specialists trained in safe clearances and tree removal.

Customers should never attempt to trim or remove tree limbs near or adjacent to any power lines. If you're concerned about a tree that may be in contact with a power line, contact Appalachian Power at one of the numbers listed in this brochure.

Work Planning/Notification – Appalachian Power closely follows jurisdictional regulations that pertain to advising property owners of our planned activities.

Tree Removal – The Appalachian Power vegetation management program emphasizes tree removal to promote long-term vegetation control.

Tree Pruning – In those rare cases when we find that tree removal is not practical, we will prune trees to satisfy federal guidelines. Manual pruning is performed by qualified line clearance arborists in compliance with standards set by the International Society of Arboriculture, the American National Standards Institute and the Tree Care Industry Association. Access, terrain and tree height may necessitate the use of mechanical pruning

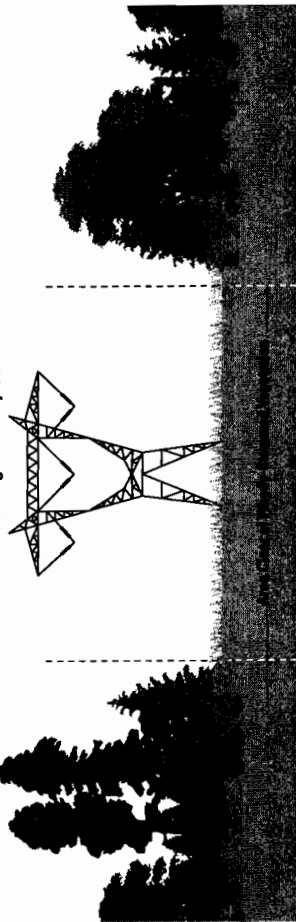
equipment. In very difficult terrain or inaccessible areas, an aerial saw may be used for side trimming on transmission rights of way.

Vegetation Clearing – We employ manual and mechanized clearing where the vegetation is too tall for herbicide applications and aerial application is not possible, or where the immediate removal of vegetation is necessary.

Herbicide Application – We apply herbicides to control the root systems of woody stemmed vegetation and to reduce the cost of future maintenance. In all cases, Appalachian Power uses herbicides that are registered by the U.S. Environmental Protection Agency and the appropriate state regulatory agency. The herbicides are applied by licensed application businesses that employ trained applicators.

Debris Cleanup – The debris that results from our clearing activities is left on the rights of way to naturally decompose and return nutrients to the soil and reduce the possibility of soil erosion. The company ensures that any brush that falls into roadways, waterways, fences, lawns or pastures or other maintained areas is collected and removed to a wooded area of the right of way.

Transmission Right-of-Way Corridor



Working With Property Owners

We continually strive to strike a balance between service reliability and respect for the natural landscape.

We continue to invest time and resources into public education concerning proper tree care and sound environmental practices. Appalachian Power is an active participant in many organizations that support responsible vegetation management practices including: the National Arbor Day Foundation, the Utility Arborist Association, the International Society of Arboriculture, and various state and local vegetation management organizations.

Responsive to Concerns

While Appalachian Power goes to great lengths to collaborate with our neighbors, there are times when a landowner and the company may disagree on a specific issue. If that happens, we work diligently to resolve the problem and attempt to reach a mutually agreeable solution.

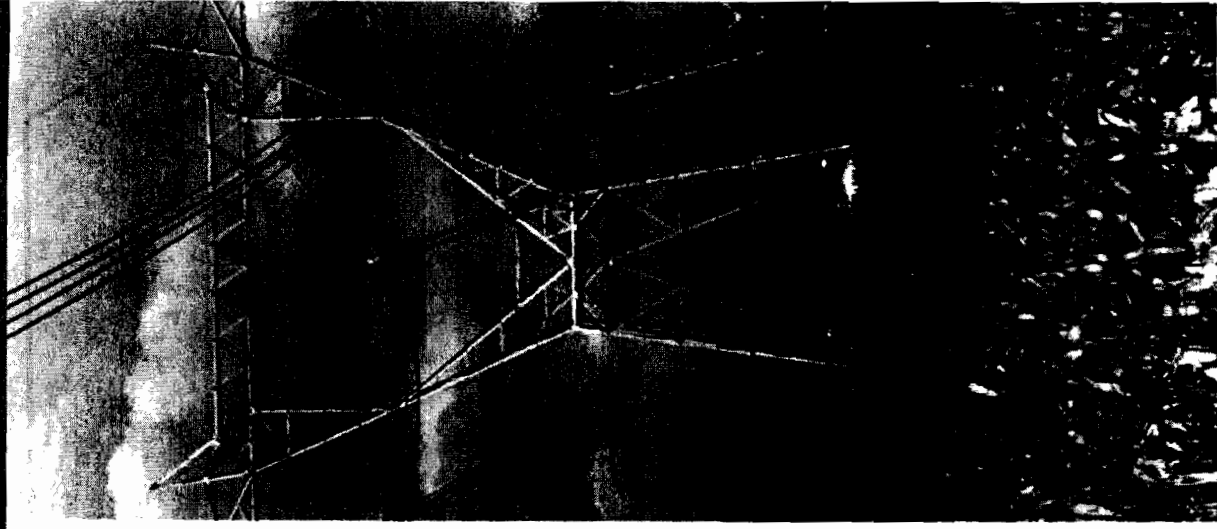
If you have a question or concern about Appalachian Power's transmission right-of-way vegetation management program, please contact us at one of the following telephone numbers:

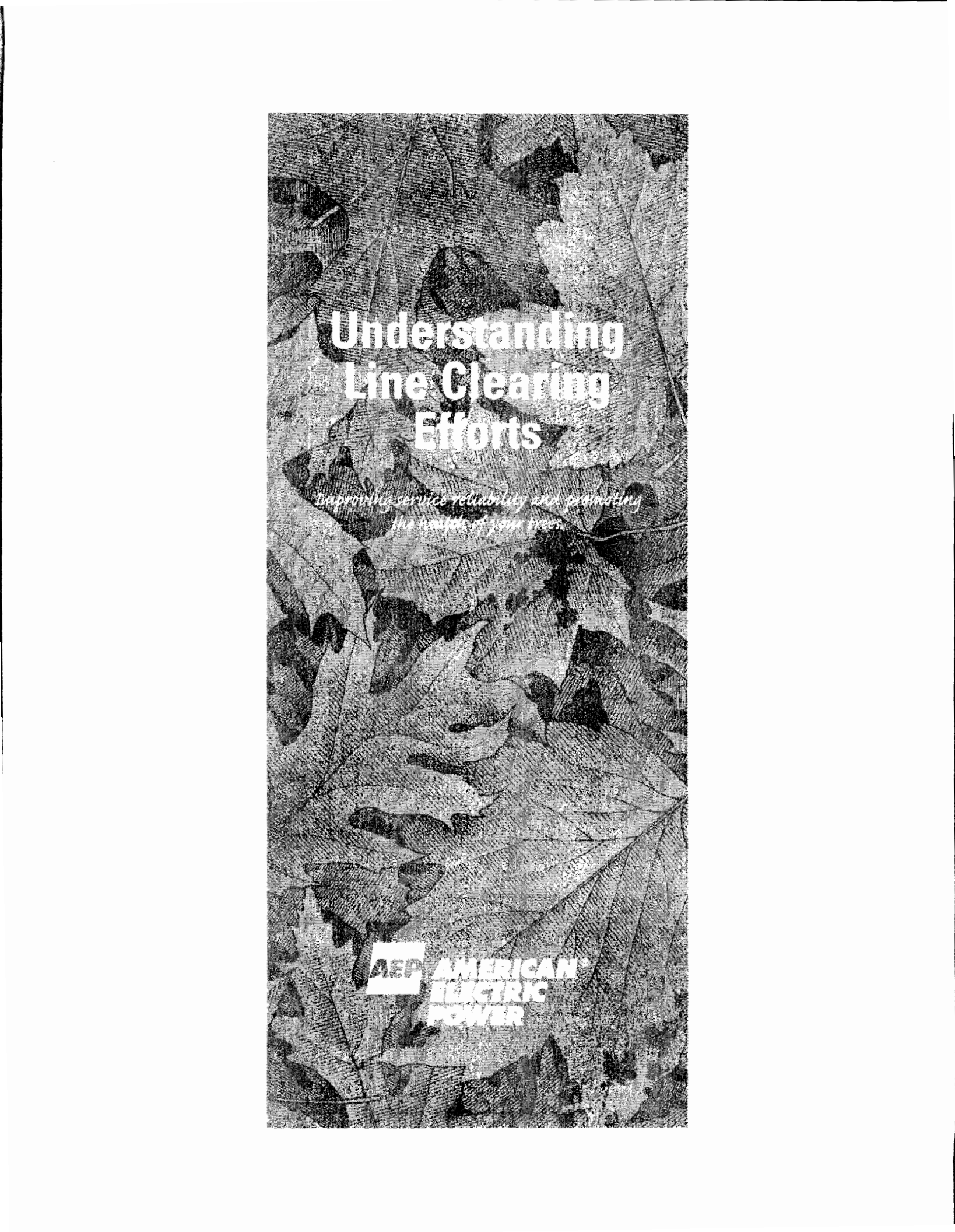
Appalachian Power

Tennessee: 1-800-967-4273

Virginia: 1-800-956-4273

West Virginia: 1-800-982-4273





Understanding Line Clearing Efforts

*Improving service reliability and protecting
the health of your trees.*

AEP AMERICAN[®]
ELECTRIC
POWER

Trees are an important part of our environment. That's why American Electric Power (AEP) is committed to balancing the importance of trees with the equally important need to provide you reliable electricity safely.

To do this, we must control the growth of vegetation around power lines and other energized equipment. Tree limbs that come into contact with power lines are the most common cause of brief and prolonged power outages, especially during storms. Just one tree limb can knock out electric service to dozens of families up to several miles away. Interfering trees and brush also can delay the efforts to restore service that has been interrupted.

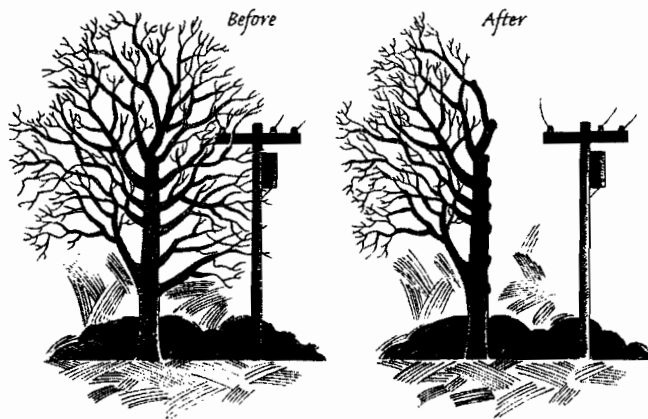
Under the direction of a team of professional foresters and certified technicians, we follow trimming standards set by the International Society of Arboriculture, American National Standards Institute and the Tree Care Industry Association. These standards help provide reliable electricity safely and most importantly, promote the health and well being of your trees.

Line Clearance

AEP is concerned about trees that threaten the safe and reliable delivery of your electric service. That is why we have a comprehensive program to manage trees and brush. Our experience and knowledge of line clearance requirements and growth patterns of tree species allows us to better spot hazards, as well as potential problems.

Before tree crews even enter an area, an AEP forester will tour the community to determine the work to be done. He or she looks for trees growing directly under power lines, overhanging branches and limbs, hazardous trees, or those trees that have the potential to contact power lines in the near future. Overall, it is AEP's objective to remove obstructions to provide at least 10 feet of clearance from the line.

Customers should never attempt to trim or remove tree limbs near or adjacent to power lines. If you are concerned about a tree that may be in contact with a power line, contact AEP either by phone (see back panel) or through the Internet at www.aepcustomer.com.

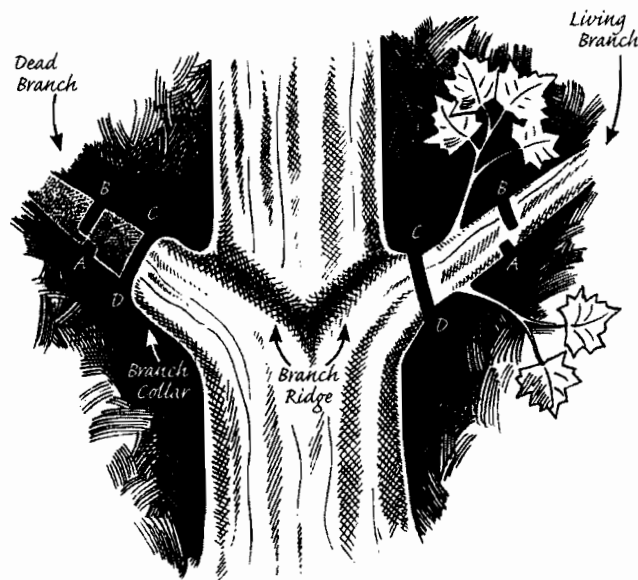


This illustration shows how trees growing too close to power lines may be trimmed. AEP's objective is to remove obstructions to provide at least 10 feet of clearance from the line. This allows for access to perform routine maintenance and helps prevent contact during most storms. In addition, the cuts allow for some re-growth until the tree is trimmed again.

Trimming and Removal

As stated earlier, AEP follows trimming standards set by the International Society of Arboriculture, American National Standards Institute and the Tree Care Industry Association. This means that we utilize practices that protect tree health while directing future growth away from the power lines. Trees near the power lines that cannot be trimmed according to these guidelines should be considered for removal.

In addition, brush may be managed through a number of means...it may be mowed, hand cut or treated with US EPA registered herbicides.



This illustration shows how AEP certified technicians correctly prune limbs. The first cut (A) is made from the bottom of the branch, up $\frac{1}{4}$ of the way through. The second cut (B) is made down through the branch until it drops, effectively removing the weight mass of the limb. The final collar-cut (C to D) is made without peeling the bark down the trunk. The branch collar is a swollen area at the base of every branch fork. By cutting just outside the collar, the tree will 'seal' the cut surface in just a few years.

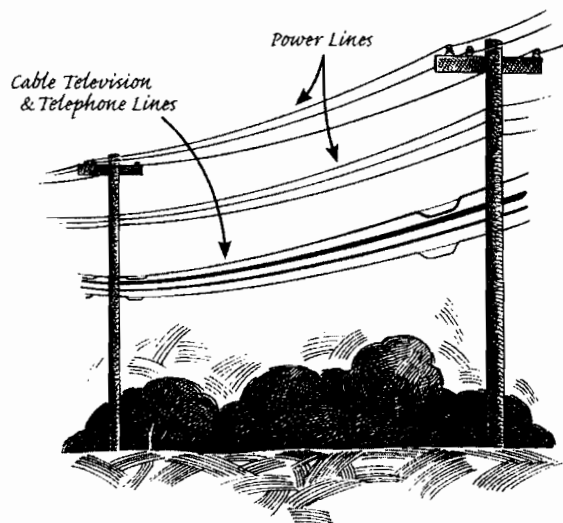
Safety is a Priority

Any tree, even a strong healthy one, in close proximity to a power line can present a safety hazard. AEP will take **immediate** action to remove the tree if it identifies a "climbable" tree too close to a power line. In addition, other circumstances may require a tree to be removed. In those cases, AEP will work with the property owner and/or the local community prior to the tree's removal.

A power line taken down by a tree branch, or through other means, poses a serious safety hazard. It is impossible to tell by looking at a downed wire if it is energized, and therefore dangerous. Keep in mind that there are circumstances under which cable television and telephone lines can become energized if an electrical line comes into contact with these lines. If you ever see a downed line, consider it to be an electric line and energized. Stay away from it and call AEP.

Helping Identify Lines on a Pole

For many customers, it is difficult to determine or identify what lines on a pole are electric lines and what are cable television and telephone lines. As a general reference, power lines normally are the highest lines located on a pole. The following illustration helps identify the different facilities located on a utility pole.

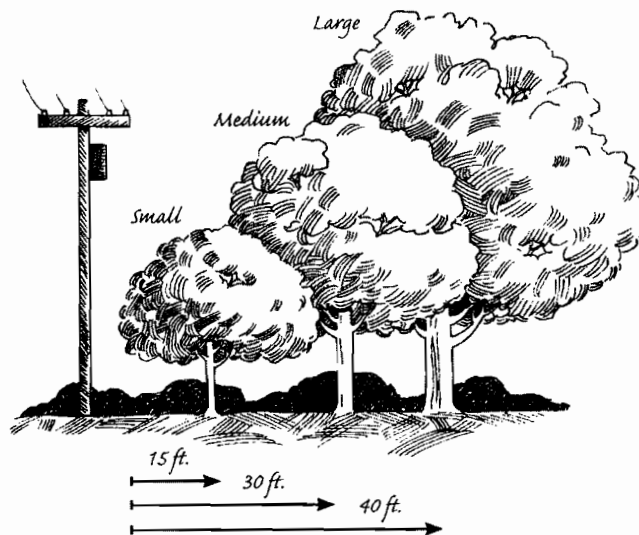


Planning Guide

Choosing the right place for the right tree is an important decision. By taking the time to plan before you plant, you'll be rewarded with some beautiful results and avoid problems in the future.

When you plant new trees, AEP suggests looking above, below and around the intended area. Today's sapling can be tomorrow's problem, causing an electrical outage or accident. Avoid buying the fastest-growing or the cheapest tree you can find. It may be a costly mistake you'll pay for later. Fast-growers are traditionally weak-wooded trees that can be damaged easily during storms. These trees are hazardous if located adjacent to dwellings or power lines and will require repeated pruning.

In general, AEP recommends only shrubs be planted under power lines. Small variety trees need to be planted at least 15 feet away from power lines, medium variety trees at least 30 feet away and large variety trees at least 40 feet away from power lines.



For underground transformers (those green or gray metal boxes in back or front yards), AEP asks that vegetation be planted at least 10 feet from the side of the box with the locked door and at least 3 feet away from all remaining sides of the transformer.

Before You Dig

Whether you're digging to plant a tree or for any other purpose, AEP offers the same advice: Be sure you know the location of any underground utility facilities before you dig.

Hitting any type of utility line guarantees loss of that service and possible loss of life. And it can be avoided through a simple telephone call. Most states in the AEP service territory provide a service where customers can place a single call for the location identification of a variety of utility lines. Please keep in mind that most companies require at least two working days notice for completing the work.

Trees and landscaping can be a significant investment. You will want to protect this investment from possible damage or removal during an emergency by keeping plantings away from locations where crews likely may work. AEP generally is not responsible for replacing trees it must remove to ensure safety and service reliability. In fact, AEP encourages customers to check with the company before placing anything — swing sets, decks or porches, pools, etc. — within the area of underground and overhead power lines. Encroachments to these areas present serious safety hazards and may be subject to damage, removal or relocation at your expense.

Jobsite Cleanup

Branches and limbs generated on a daily basis by our contract tree crews are disposed of in the most economic and practical manner possible. During AEP's regular line clearing activity, branches and limbs within maintained or landscaped areas will be removed, while wood will remain on the property for the resident's use. In non-maintained areas, wood, branches and limbs will remain either to decompose naturally or for the resident's use. Customers are reminded that during emergency power restoration, AEP crews clear trees from our facilities and move to the next location. AEP does not return to remove wood, branches and limbs.

When it comes to tree maintenance, AEP wants to work with you. That is why we appreciate your efforts to plant the right tree in the right place. Doing so can help us avoid line clearance efforts and help you protect your investment.

For more information regarding AEP's line clearing program, please contact us at one of the following telephone numbers:

Arkansas	888-216-3490
Indiana	800-311-4634
Kentucky	800-572-1113
Louisiana	888-216-3490
Michigan	800-311-6424
Ohio	800-277-2177
Oklahoma	888-216-3490
Tennessee	800-967-4237
Texas	888-216-3490
Virginia	800-956-4237
West Virginia	800-982-4237

For more information about tree planning and maintenance, AEP suggests the following websites:

aepcustomer.com
isa-arbor.com
arborday.org
treecareindustry.org

For information on the following subjects, contact AEP at the numbers listed or through AEPcustomer.com:

- Tree Species Guide (including trees not recommended)
- Conserving Energy with Trees



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