Managing vegetation around electric transmission lines

Our vegetation management practices focus on public safety and keeping the lights on.

Ensuring safety and electric reliability
American Transmission Co. owns and operates more than 9,500 miles of transmission lines in the upper Midwest, providing power to more than 5 million customers. We know that safety and electric reliability are important to you. By keeping the rights-of-way free of trees and incompatible vegetation, we help ensure the safety and reliability of the high-voltage electric transmission system.

Why vegetation is removed
Vegetation that grows too close to transmission wires can cause a dangerous situation. Electricity can arc from the wires to a tree branch, igniting a fire or causing an outage. A tree does not need to make direct contact with a transmission line to create a hazard. Incompatible vegetation in a right-of-way can threaten the reliability of the electric transmission system and lead to wide-spread power outages. Dense, incompatible vegetation in the transmission line rights-of-way hinders access for crews and equipment needed to inspect, maintain and make repairs to the poles and wires.

Easements grant rights to remove vegetation
An easement gives ATC the legal rights to use the property for the specific purpose of constructing, operating and maintaining a transmission line. The property within the easement is often referred to as the transmission line right-of-way or easement strip. Though easement rights may vary from property to property, they typically limit the use of the right-of-way, and they typically allow ATC to remove trees, incompatible vegetation and other obstacles that could interfere with the operation and maintenance of the transmission line. As the property is transferred and sold to new owners, the easement remains in place.

ATC’s vegetation management practices
Outages that occur on high-voltage transmission lines can create a larger, widespread impact than those that occur on lower-voltage distribution lines because thousands of homes and businesses can be impacted. An outage on one transmission line can trigger outages on other lines across a large geographic area. This cascading effect could result in significant damage to the entire electrical system that would create challenges when restoring power after an outage.

ATC’s vegetation management program helps ensure that adequate clearances between transmission lines, trees and other vegetation are maintained at all times. To achieve safe clearances in the right-of-way, incompatible vegetation is pruned or removed.

In most situations, landowners should expect that all trees and dense, incompatible vegetation will be removed from the right-of-way during vegetation management work. Trees that are dead, dying, diseased, leaning toward the wires, or are displaying some other defect to their structural integrity are considered hazard trees. Removing hazard trees, even when they are located outside the right-of-way, helps ATC avoid the danger of these trees causing an outage or damage to the lines, poles and wires. If a landowner refuses a hazard tree removal that subsequently creates an impact on the electric transmission system, that landowner could be held liable for any damages to ATC’s system.

How we work with you
ATC generally gives landowners advance notice to make them aware that right-of-way maintenance is scheduled in their area. Typically a work plan for each property is developed by professional utility foresters, which is based on ATC vegetation management standards. Right-of-way width, pole type, voltage, vegetation growth rates, line sag and sway, and vegetation maintenance cycles also are factors in developing a work plan.
ATC may evaluate exceptions, or allowable vegetation, within the easement for certain compatible vegetation. Some incompatible vegetation may be eligible for relocation by the property owner. Landowners can address these and other concerns with the utility forester. Keep in mind that in some situations, especially emergencies, it is not always possible to alert property owners that crews will be on site.

**Herbicide application**

Vegetation may be treated with herbicides through a variety of application methods based on site conditions. Herbicide application lessens the need for extensive clearing and mowing in the future. ATC uses herbicides applied by licensed applicators. The herbicides may be applied directly to specific trees or brush or applied over an entire area. When used correctly, minimal effects can be expected on grasses.

**What to plant near power lines**

Low-growing vegetation is most compatible with high-voltage transmission lines. Herbicides that are used effectively promote the growth of compatible vegetation that can thrive and support a suitable habitat for pollinators and other wildlife. Low-growing vegetation also has deep root systems, making these plants resilient and more likely to recover from disturbances resulting from maintenance and repair work in the right-of-way.

Visit [atc-GrowSmart.com](http://atc-GrowSmart.com) to review our planting guide, which provides suggestions for grasses and flowers that are compatible with transmission line facilities in the Upper Midwest. Be aware that guidelines for planting vegetation near lower-voltage distribution lines operated by your local distribution utility may be vastly different from those recommended by ATC.

Also, be sure to contact Wisconsin’s Diggers Hotline or Michigan’s MISS Dig at 811 before digging. A locating service will mark your property for underground utilities at no cost to you.