

# Managing vegetation around electric transmission lines



**Managing the growth of trees and other vegetation around our 9,440 miles of transmission lines is key to helping ensure public safety and electric system reliability.**

## **We maintain system safety and reliability**

Trees near power lines can be hazardous to public safety; they can also threaten electric service reliability and damage the electric system. Woody vegetation that grows near transmission lines can impede access for crews to inspect, maintain and repair this critical infrastructure. Clearing trees and vegetation around transmission lines helps to preserve the safety and reliability of the electric system.

## **Electric industry is taking a stricter approach**

During the past decade, several electric grid failures in the U.S. and Canada have been caused by trees, including the 2003 east coast blackout that affected 50 million people. The federal government has since developed mandatory reliability standards requiring utilities to establish vegetation management programs with the goal of preventing outages caused by tree contact with high-voltage power lines.

### **Right-of-way is cleared for new or upgraded transmission lines.**

The information in this brochure generally applies to the maintenance of existing transmission lines. New construction or re-builds require a right-of-way clear of all vegetation and trees to provide adequate space for crews and equipment. In accordance with the easement rights granted when new facilities are constructed, it is ATC's intention to keep the right-of-way clear of vegetation following the construction, with the goal of establishing the growth of non-woody, native grasses.

In response, American Transmission Company's vegetation management program has been enhanced and aims to reduce overall risks to safety and reliability by taking a stricter approach to clearing transmission line corridors and adopting practices that align with easement rights. Trees and other vegetation that in the past may have been pruned or "topped" are now being removed. We also clear away invasive woody plants, like buckthorn and honeysuckle, which can impede access for our maintenance crews, shield fast-growing trees from sight and choke out desirable low-growing native vegetation. Planting guidelines offered by your local utility for its lower voltage distribution system may not be appropriate for higher voltage transmission lines.



## **Vegetation management practices apply to right-of-way**

A transmission line right-of-way typically includes land directly beneath the wires (wire zone) and land between the wire zone and the edge of the right-of-way (border zone).

Line voltage (kilovolts)	Wire Zone	Border Zone
200 kV and above	Remove all trees and brush, regardless of height. In residential, urban areas small shrubs with a maximum height of 3 feet may be allowed.	Remove all trees and brush, regardless of height. In some cases we may allow low-growing, low-density vegetation as described below for facilities under 200 kV.
69 kV-200 kV	Remove all trees and brush, regardless of height. In residential, urban areas small shrubs with a maximum height of 8 feet may be allowed.	Clear all trees and vegetation with a mature height greater than 15 feet. Low-growing, low-density vegetation may be allowed to remain.
Under 69 kV (distribution lines)	Consult your local electric utility service provider for planting guidelines.	

- We apply herbicides with the property owner's permission to minimize re-growth of trees and woody species. Native grasses are generally not affected by the application of herbicides. Only certified and licensed applicators conduct this work.
- We remove dead, dying, diseased or leaning trees or branches outside the easement if they threaten the safe and reliable operation of the transmission system.

## We discuss right-of-way maintenance work with landowners

In most situations we notify landowners in advance and provide a description of our plans, the reason for the work and time frame. By discussing our plans with property owners, the safety and practicality of relocating trees or bushes can be evaluated. ATC does not compensate for relocation or maintenance work. In emergency situations it is not always possible to alert property owners that our crews will be on site.

## Easement agreements allow clearing work

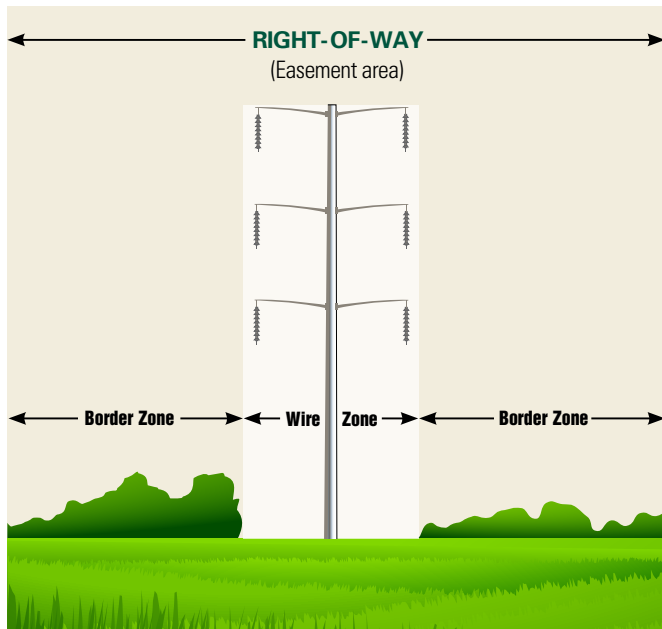
An easement grants ATC the legal right to build, operate and maintain a power line and clear vegetation. An easement is a permanent, legal land right to use the land or property of another owner for a special purpose. Utilities typically acquire easements with landowners rather than purchase the property outright. Compensation is made to landowners at the time the easement is acquired. Landowners retain ownership of their property, but its use is restricted. As the property is transferred and sold to new owners the easement remains in place.



## Planting near power lines

With property owner participation, transmission line corridors can be cultivated with native grasses that provide food value to birds and wildlife and are more compatible with the operation of a high-voltage transmission line. Native grasses also have deep root systems, making them resilient and thus likely to recover easily from maintenance and repair work. While all vegetation in the easement is subject to removal, you can visit our website for species of grasses and flowers that are less likely to interfere with access for emergency or maintenance crews.

Keep in mind that small, immature trees planted today can grow into problem trees in the future. Planting trees outside the easement at an adequate distance from power lines allows the canopy and root system to develop more fully. Make sure there are no buried wires before digging for a new tree by contacting Wisconsin's One Call at 811 or 800-242-8511, or the local utility in Michigan. There is no charge for this service.



The right-of-way — or the land area described in the easement — must be clear of woody vegetation and structures that could interfere with the safe and reliable operation of the power line. While many property owners will use the easement area for gardens, prairie plantings, wild flowers, along with other non-vegetation uses, anything in the easement is subject to removal should conditions or circumstances relating to the operation of our facilities warrant it.



Helping to **keep the lights on**, businesses running and communities strong®

Toll-free: **866.899.3204** ■ **262.506.6700** ■ P.O. Box 47 ■ Waukesha, WI 53187-0047