

# A guide to **agricultural use** of ATC utility corridors



*Have questions related to land use around ATC facilities and utility corridors? You're not alone. Though it's not possible to cover every scenario, this guide provides some helpful basic information. To learn more about specific questions and situations, contact an ATC real estate representative at (866) 899-3204. Our team of experts will be happy to assist you.*

## **Fences**

Landowners are prohibited from building structures or fences within utility corridors and may never do so without prior written approval from ATC. Unauthorized structures can pose safety risks and hinder the ability of our crews to access power lines. However, in certain cases, approval may be granted. To request permission to build structures or fences in a utility corridor, contact ATC before beginning installation. Our staff will help you identify the appropriate type of fence for the location and make sure the design complies with ATC requirements and policies. Here are some general guidelines:

- If a fence already exists in the designated area where a utility corridor will be constructed, all or part of the fence may be removed to allow crews unobstructed access to the area. A temporary fence will be set up during construction. Following completion of the project, ATC will work with the landowner to replace the fence in a manner consistent with ATC requirements.
- Fences in ATC utility corridors may be subject to height restrictions.
- Fences must remain the proper distance from any ATC structures.
- During maintenance activities, fences that inhibit access to ATC equipment or facilities may be temporarily removed.
- Any fence that will span the entire width of the utility corridor must include a gate at least 14 feet wide to allow access for service vehicles. The fence should include a double-locking gate or similar feature, allowing both the property owner and ATC contractors the ability to open the gate without disturbing the other's lock. ATC will provide a lock for use in conjunction with the landowner's lock at no cost.
- Electric fences within the utility corridor may require installation of special grounding and/or filtering equipment to counteract the potential for induced voltages. ATC will install and maintain grounding or filter units for existing electric fences (in place prior to construction of a power line) within a utility corridor. Property owners are responsible for costs associated with the installation and maintenance of grounding or filter units for new (previously not existing) electric fences built within ATC utility corridors.
- Grounding requirements for all fences will be established on a case-by-case basis. Grounding is typically recommended for metal fences without metal posts located in or near the utility corridor.



## **Irrigation systems and wells**

Many types of irrigation systems can be operated safely near high-voltage power lines, including central-pivot. However, when installing irrigation systems near ATC facilities, it's essential to maintain proper clearances with respect to all power lines. Also, because water conducts electricity, it's important to make sure irrigation equipment does not spray a continuous solid stream onto high-voltage power lines. This could allow electricity to flow from the line through the stream of water to the ground, causing outages and endangering people and property nearby. The risk of an electric fault is reduced or eliminated when the water stream is broken up or forms a spray. Improper installation of an irrigation system may increase the risk of shocks. Before installing an irrigation system near an ATC facility, contact us to review your plan. We can provide helpful information on storing, handling, installing and operating irrigation systems near ATC facilities. Finally, keep in mind that wells are not permitted in utility corridors.



## Clearances

The Occupational Safety and Health Administration has established minimum safe working clearances that must be maintained when working or operating machinery near power lines. These clearances vary depending on the voltage of the line involved. To verify the voltage of a line you will be working near and required OSHA clearances, contact ATC. The height of power lines above the ground can differ at various points across their span. What's more, lines can rise and fall with changes in temperature and electricity usage. Sufficient clearance on one day can be different the next. When working near or under high-voltage power lines, always consider the following:

- When operating machinery that extends vertically, such as sprayers, augers, hay elevators and fertilizer applicators, keep in mind that additional clearance is needed above the truck height. Be sure to maintain proper clearance from the highest point on your equipment to the power line above.
- Use a spotter to make sure tall equipment remains a safe distance from power lines.
- Historically, high-voltage power lines were built assuming 14-foot vehicle heights in compliance with electrical codes. However, the grades of roads running beneath high-voltage power lines can change over time. To ensure safety, always verify clearances with ATC.
- Do not store or pile material or equipment within the utility corridor without prior approval from ATC.
- Do not make changes in grade of more than one foot in the utility corridor without prior written consent from ATC.

## Conservation Reserve Program land

Electric grid structures can impact the amount of utility corridor acreage that qualifies for reimbursement as part of the Conservation Reserve Program. Participating landowners are responsible for contacting the Farm Service Agency to learn if and how ATC's easement may impact their CRP contract. ATC will work with landowners on this matter.

## Crops and crop damage

In general, once construction of power lines and facilities is completed, agricultural crops excluding trees, dense shrubs, brush and hops, may be grown within utility corridors. Tree farms and orchards are prohibited. However, crops grown within the utility corridor are at risk of damage by crews needing to access the line for maintenance or emergency repair. ATC will reimburse landowners for crop and/or property damage caused by our work. The Accustom Rate Guide is used as a guideline for crop damage payments.

## Drain Tiles

Drain tiles are permitted within utility corridors. However, ATC is not responsible for damage to drain tiles installed within a utility corridor or easement area after the easement was obtained or acquired.

## Electric fields

Electric fields generated by high-voltage power lines can cause a build-up of induced voltage in ungrounded equipment and vehicles nearby. This is more likely to occur when larger vehicles and equipment are parked on nonconductive surfaces, such as asphalt or dry rock. Induced voltage can cause nuisance shocks when this equipment is contacted by people standing on the ground. However, these shocks can be eliminated or minimized by installing a grounding strap or chain on the vehicle or equipment, or by parking farther from the power line. Refueling vehicles within the utility corridor should be avoided.

## Fires and field burning

Fire and smoke can damage power lines, insulators, and structures within the utility corridor. What's more, smoke and hot gases emanating from a fire near a power line can create a conductive path for electricity. This can allow electrical current to run from the power line through the smoke to the ground, causing outages and endangering people and property nearby. In addition, anyone who causes damage to power lines and equipment can be held responsible. Before starting a fire near power lines, contact ATC for information about safe and smart burning methods and to notify us when such activity will take place.

## GPS and communication equipment

The use of GPS navigation systems has become common in the farming industry. Accordingly, there has been much speculation about the potential impact of high-voltage power lines on the operation of GPS equipment. To date, major manufacturers of satellite navigation systems have found no evidence GPS signals are degraded as a direct result of the presence of high-voltage power lines. These findings are supported by a 2002 study conducted by the Institute of Electronics and Electrical Engineers, which concluded high-voltage power lines are unlikely to degrade GPS signals.

However, according to The Electric Power Research Institute AC Transmission Line Book—200kV and Above, Third Edition, under some conditions high-voltage lines may interfere with the Nationwide Differential System, a system that consists of a network of broadcast stations operated between 283.5-325 kilohertz. High-voltage power lines may also cause some

interference with AM receivers, TV receivers, amateur radio receivers, aircraft communications receivers and specialized devices such as radio astronomy antennas. If you experience interference you suspect may be caused by our facilities, please contact us. When possible, we will attempt to mitigate any issues.

### Livestock

In the event pasturing or livestock areas are located near the utility corridor where construction will take place, ATC will work with owners to erect temporary fencing to keep animals away. Livestock owners are asked to refrain from spreading manure in the utility corridor during construction to minimize the potential spread of disease. In general, ATC discourages confining animals beneath high-voltage power lines. ATC uses helicopters to perform low-flying inspections of our lines each year. We may also use helicopter-mounted aerial saws to manage vegetation. Animals confined to pens in or near utility corridors may become startled and are at risk for injury during these operations.

### Manure pits

Due to various issues related to access and clearance, manure pits are not permitted within the utility corridor without prior approval from ATC without prior written consent.

### Organic farming

To minimize the re-growth of trees and woody vegetation within the utility corridor, ATC routinely applies herbicides. Organic farmers or landowners concerned about the use of herbicides can request herbicidal sprays not be used and vegetation managed using mechanical methods where organic crops are currently grown. To learn more about the herbicides and application methods used by our contractors, contact an ATC real estate representative at (866) 899-3204.

### Property damage

If ATC maintenance or construction activities cause compaction, rutting or damage to existing drain tiles, we will pay landowners reasonable compensation upon completion of the work.

### Soil compaction and excavation

During construction, heavy truck traffic may cause soil compaction in areas leading to and from the work site. To minimize damage to the land, ATC crews frequently employ construction mats and other measures. If necessary, ATC will reimburse landowners for subsoil used to mitigate compaction in the utility corridor. ATC may also use concrete footings for its structures, requiring the excavation of subsoil, which must be temporarily piled off to the side. Excess excavated soil will be transported to an off-site disposal location, unless the landowner requests the soil remains on the property.

### Stray voltage

Believe stray voltage may be an issue on your property? First, contact your local electric utility. ATC and local utilities work together to perform individual investigations to better understand the interactions between both systems.

### Trees and landscaping

To provide access for construction and maintenance equipment, the utility corridor is typically cleared of trees and brush. When this work is required, ATC will provide advance notice to landowners. ATC has the right to trim and remove trees and woody vegetation within the utility corridor, and to remove trees near the utility corridor deemed a hazard to power lines due to decay or defect. In addition, in accordance with ATC's easement agreements, any vegetation in the utility corridor that hinders access to the power line or does not meet our specifications for approval may be trimmed or removed, and ATC is under no obligation to pay for, restore or replace it.

## ENCROACHMENT REQUEST FORM

Have a question about uses or structures (including fencing) permitted in or near a utility corridor? Contact the ATC real estate department for information or to submit an [Encroachment Request Form](#).

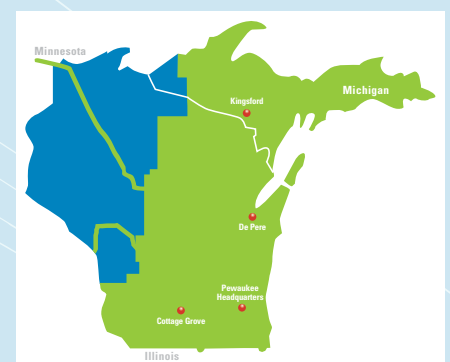
## Who we are

ATC owns, operates, maintains and protects the high-voltage electric grid that helps meet the electric needs of approximately five million people in parts of Wisconsin, Michigan, Minnesota and Illinois.

We are regulated by the Federal Energy Regulatory Commission, North American Electric Reliability Corporation and the states in our service area. We also work with state natural resource and environmental quality departments, the U.S. Fish and Wildlife Service and the Army Corps of Engineers when building new projects or upgrading existing facilities. We are a member of the Midcontinent Independent System Operator that manages the flow of high-voltage electricity across 15 U.S. states and the Canadian province of Manitoba.

**Questions? Contact ATC's real estate department at (866) 899-3204.**

## ATC service area



*Energizing Your Future*

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