

## Step Six

### **Restoration of the corridor**

When construction is complete and weather conditions permit, the transmission line corridor is cleaned up and restored. This work may include tile and fence repair, soil decompaction, repairing ruts, tilling, seeding, and in certain areas, wetland restoration. If damage occurred to crops or other non-restorable property during construction, the project will fairly reimburse landowners for the damage.



# Badger Coulee Transmission Line Project

Construction process

[www.BadgerCoulee.com](http://www.BadgerCoulee.com)

## About the project

The Badger Coulee Electric Transmission Line Project was approved by the Public Service Commission of Wisconsin in April 2015. The project will ensure electric reliability in western Wisconsin and improve access to lower-cost power and renewable energy. The 180-mile line will run from the Briggs Road Substation near Holmen to the North Madison and Cardinal Substations in Dane County. Construction will begin in early 2016 to meet an in-service date in 2018. For maps and additional information, please visit our website, [www.BadgerCoulee.com](http://www.BadgerCoulee.com).

## Steps involved in constructing the Badger Coulee Transmission Line

After obtaining easements from affected property owners, construction will generally follow the sequence of activities outlined in this brochure. The process may vary depending on the design of the line, soil conditions, geology, terrain and other variables. *The photos in this brochure are for illustrative purposes; techniques and equipment used also may vary based on site-specific conditions.*

## Project contacts:

### **Lee Meyerhofer**

Senior Local Relations Representative  
866-899-3204, ext. 6572  
[lmeyerhofer@atcllc.com](mailto:lmeyerhofer@atcllc.com)

### **Charles Gonzales**

Senior Local Relations Representative  
866-899-3204, ext. 3644  
[cgonzales@atcllc.com](mailto:cgonzales@atcllc.com)

## Who we are



American Transmission Co. is a Wisconsin-based transmission-only utility that owns, operates, builds and maintains transmission facilities in portions of Wisconsin, Michigan, Minnesota and Illinois.

For more information about ATC and our projects, visit [www.atc-projects.com](http://www.atc-projects.com).



Xcel Energy is a major U.S. electricity and natural gas company with retail operations in eight Western and Midwestern states, including Wisconsin. Xcel Energy provides a comprehensive portfolio of energy-related products and services to 3.4 million electricity customers and 1.9 million natural gas customers through its regulated operating companies. For more information about Xcel Energy, visit [www.xcelenergy.com](http://www.xcelenergy.com).

## Step One

### **Construction access and corridor clearing**

Generally speaking, the transmission line corridor for a 345,000-volt line is 120 feet, with some exceptions. Before construction begins, crews will develop plans to enter the corridor via access lanes or roads. Both the corridor and access lanes need to be cleared of trees and other vegetation to accommodate the use of large construction equipment, which will include drilling rigs, concrete trucks, cranes, pick-ups and other vehicles. Construction mats are often used in wet or soft areas to minimize compaction and soil disturbance and to improve site safety.



## Step Two

### *Equipment mobilization and material delivery*

Several laydown yards will be established, although none are planned immediately adjacent to the transmission line corridor. Materials, including steel poles, steel casing and rebar cages will be delivered to these yards for staging. Such equipment as cranes, drill rigs, concrete trucks, boom trucks, trailers and vehicles also may be stored at these sites.



## Step Three

### *Foundation construction*

Drilled pier foundations for 345-kV structures are typically 30 to 60 feet deep and are usually eight to 12 feet in diameter. After drilling, concrete is poured into reinforcing steel in the hole. Specialty foundations may be required in areas of poor or rocky soils.



## Step Four

### *Placing the structure*

The Badger Coulee line primarily will use weathering steel monopoles. Weathering steel poles are earth-toned and require less maintenance than painted or galvanized steel. The poles are assembled at the site, raised and set in place with cranes or other heavy equipment.



## Step Five

### *Stringing conductors (wires)*

After poles have been placed, the wires are installed by pulling them from one structure to the next using a temporary pulley system. After stringing conductor through a series of structures, the wires are hung on insulators that are attached to the poles. Trucks, heavy equipment and in some locations, helicopters, will be used to string the lines. Other equipment, including bird diverters, spacers and devices to prevent the wires from galloping may also be installed.

