

Spring Valley–North Lake Geneva Electric Reliability Project



Q. What is being proposed for this project?

- Construction of a new, approximately 25-mile 138,000 volt transmission line from the existing Spring Valley Substation in western Kenosha County to the North Lake Geneva Substation in southern Walworth County, Wis.
- Construction of a new substation in the Town of Wheatland or the expansion of the existing Richmond Road Substation in the Town of Randall.
- Other system modifications are planned depending on the route chosen between the Spring Valley and North Lake Geneva substations.

Q. Why is this project needed?

Studies indicate that a new 25-mile, 138-kV transmission line, a substation and other system improvements are needed to strengthen the electric transmission system to meet growing demand. The existing electric transmission system in this area will not be adequate to meet future demand, and will be vulnerable to low voltages and power outages. This project will provide support to the lower voltage distribution system, provide system redundancy and allow for planned outages to equipment and facilities when maintenance and repairs are needed.

Q. Are there feasible alternatives to building this line?

Our system planners evaluate several alternatives when determining the optimal solution that will meet the transmission need. We work with the local electric utilities to determine opportunities for boosting the low-voltage distribution system. Decisions about a transmission line proposal are based on cost, operational needs, usage and growth forecasts for the area.

Q. Can the transmission line be placed underground?

American Transmission Co. is required to explore low-cost options when proposing new transmission lines, which is typically overhead construction. Construction, environmental issues, operational challenges and costs generally rule out underground transmission lines for most projects. Areas where overhead lines may not be feasible, such as near airports, will be evaluated for underground construction.

Q. What are the roles of the Public Service Commission of Wisconsin and the Wisconsin Department of Natural Resources?

The PSC is the regulatory agency that reviews and approves major utility projects in Wisconsin. ATC must submit an application, which generally includes at least two route options along with all the documentation required for the PSC to review the project and render a decision. The Wisconsin DNR also fully participates in the review of the application. The PSC will notify affected individuals when the review process has started and will schedule public hearings so that the public may offer formal comments on the project. This review can take up to a year depending on the type of project.

Q. What is this project going to cost and who is going to pay for it?

The estimated cost of this proposed project is approximately \$80 million to \$95 million. The cost of transmission projects are paid for by utility customers through their electric bills; transmission costs make up approximately 7 to 10 percent of the monthly bill, which is shared by 5 million electric customers in ATC's service area.

Q. How are routes identified and selected?

The routes for a transmission line project are developed in sequential phases beginning with many potential routes and narrowing to a few options. We consider options that are appropriate for the location and consistent with routing criteria under state laws. Transmission line routing involves trade-offs between a variety of factors. The route options that are most promising balance community input with environmental impacts, constructability, current and future land use, project costs and specific electric system needs.



Q. How do you build transmission lines in areas where distribution poles already exist?

In some areas, we may consider the use of steel poles approximately 60 to 100 feet high, placed 400 to 600 feet apart to carry both the transmission line and the distribution line. Shorter poles are placed at the mid-point between the taller poles to support the distribution wires, which are placed below the transmission wires. In some cases, we may consider working with the local utility to bury the distribution line to minimize the overall impact of the transmission lines.

Q. Do the lines make noise?

The sound level of a 138-kV transmission line in the right-of-way is low to unnoticeable, depending on weather conditions. In general, sparking or buzzing sounds on transmission lines are more likely to occur around higher voltage lines (345-kV). For the Spring Valley–North Lake Geneva project, the sound may be audible directly underneath the line but the volume is well below other typical background noises such as traffic, wind, or a normal conversation.

Q. How much land is needed for an easement for this transmission line?

ATC needs approximately 45 feet on private property for a route that is adjacent to a road because such a route takes advantage of existing road right-of-way. For routes on private property that are not adjacent to a road, ATC needs a width of approximately 80 to 100 feet. Right-of-way width is determined by engineering requirements for safe clearances. We compensate landowners when an easement is needed on private property.

Q. Will you need to remove the trees?

Incompatible or dense woody vegetation within the easement is removed to allow construction crews to work safely and to allow the transmission line to operate reliably and safely once it's completed and placed in service. We will discuss any vegetation removal plans with landowners in advance.

Q. What can I expect during construction?

Construction plans are included in our application to the PSC and finalized following project approval from the PSC. Affected landowners will be notified in advance of construction activities with details about the schedule, hours, equipment and vehicles associated with the construction.

Q. Would the proposed transmission line impact the environment?

ATC works to minimize environmental impacts of construction, operation and maintenance and must comply with all laws that regulate activities that could significantly disturb birds, wildlife, wetlands and environmentally sensitive areas. During transmission line siting and design, ATC identifies sensitive areas and develops plans to reduce or mitigate potential impacts. These plans are identified in ATC's regulatory application which also is shared with the Wisconsin DNR.

Q. Will the project impact my property value?

Research suggests little negative impact on residential property values, except where the transmission line is within 200 feet of a residence. In those circumstances, the studies find an average effect between 1 and 10 percent of the property value, depending on the specifics of the property. According to a 2014 SNL Financial article on transmission lines and property values, "studies also suggest the impact of transmission lines on the value of homes tends to dissipate over time with the use of landscaping or other shielding techniques." If your property is impacted by this project, an ATC real estate representative will be in contact with you to negotiate a proposed easement to build and maintain access to the line. At least one, though possibly two appraisals will be ordered by ATC so that the value of the easement can be fairly and accurately paid to the landowner.

Q. What is the next step in the process?

ATC has identified proposed route options for the transmission line and possible sites for the new substation. ATC will continue its analysis of the two proposed routes and monitor any changes in land use before finalizing the alternatives that will be included in ATC's regulatory application. ATC is required to identify at least two route alternatives in its application, which will be sent to the PSC in spring 2015. If the project is approved, the PSC ultimately selects which route and substation site will be constructed.



ATC is a Green Tier company, selected by the Wisconsin DNR for demonstrating superior environmental performance and continual improvement.

