

## POWER LINES BRING RENEWABLE ENERGY INTO COMMUNITIES

Demand for renewable power is on the rise. Growing societal sentiment for limiting use of carbon-based resources is prompting changes in state, regional and national energy policies. Currently, more than 30 states have required utilities to produce or purchase a greater portion of their electricity from renewable energy sources. Some of these changes represent dramatic increases over prior standards and will, by necessity, require expanded transmission line capacity across the Midwest region.

### MIDWESTERN STATES' RENEWABLE ELECTRICITY REQUIREMENTS

Illinois.....	25% by 2025	Minnesota .....	25% by 2025
Indiana .....	10% by 2025	Missouri.....	15% by 2021
Iowa.....	105 megawatts	Wisconsin.....	10% by 2015

### HELPING STATES MEET RENEWABLE ENERGY GOALS

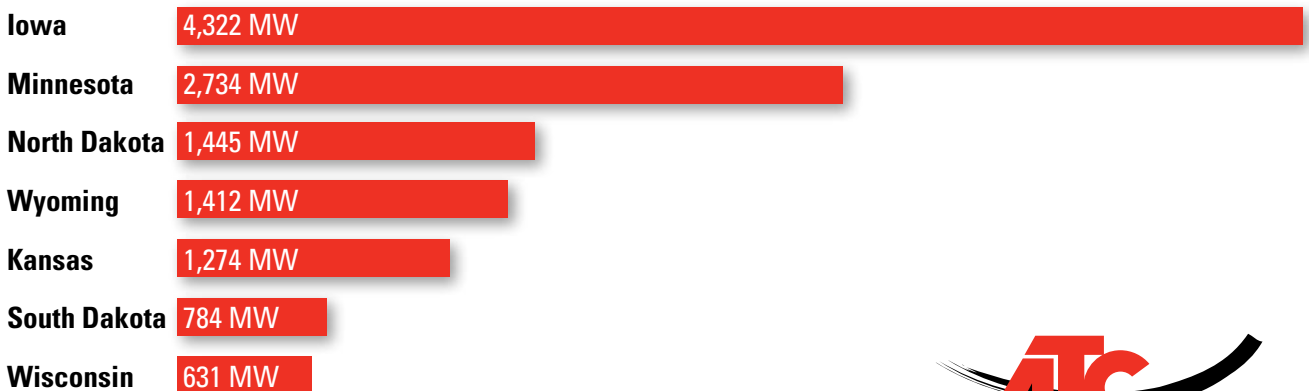
Wind generation is leading the way in renewable energy development. Nationally, wind power has experienced phenomenal growth, increasing from 2,200 megawatts in 1999 to more than 40,000 megawatts of wind power capacity in 2011. The Midwest region has some of the richest renewable wind potential in the U.S.; harvesting this resource and bringing the resulting electric generation to market requires an upgrade to the transmission system in the heart of the nation.

The need for transmission that can help deliver renewable energy and address reliability issues has been identified in several regional studies, including the Strategic Midwest Area Renewable Transmission Study and MISO Regional Generation Outlet Study. Transmission is needed because investing in renewable resources to the west, in the nation's wind alley, instead of in areas with lower quality wind resources, is more efficient due to higher availability of wind, and that translates into hundreds of millions of dollars in potential savings.

Wisconsin currently has two 345-kilovolt connections to access wind power from the west – the Arrowhead-Weston and Eau Claire-Arpin transmission lines. The Badger Coulee line would increase the ability of utilities in the state to import high-quality wind power from wind alley states.

ATC is participating in several regional planning efforts to ensure the transmission system can deliver the energy needed to meet states' renewable goals while also addressing reliability issues in the Midwest.

### WIND POWER ONLINE IN WISCONSIN AND THE NATION'S WESTERN WIND ALLEY AT THE END OF 2011

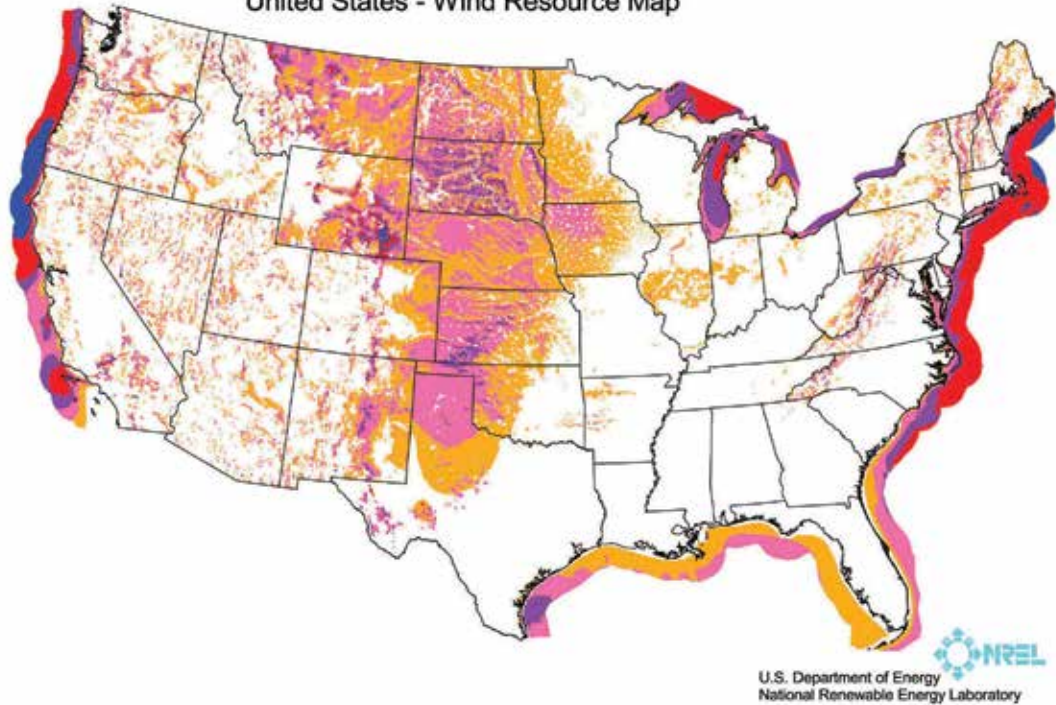


*One megawatt is enough to power approximately 275 homes.  
Statistics from the American Wind Energy Association, [www.awea.org](http://www.awea.org).*



[www.atc-projects.com](http://www.atc-projects.com)

United States - Wind Resource Map



## RENEWABLE ENERGY GENERATION DIFFERS FROM TRADITIONAL GENERATION

Establishing renewable generation is very different than traditional power plants. Traditional generation is typically built near existing transmission facilities and railways that bring the fuel to the generator.

Renewable generation must be located where wind, solar, or water power resources are abundant, and sufficient space exists to harness them. These sites are often in remote locations with site-specific resources, far away from population centers with well-developed transportation and electric transmission infrastructure. Once a location for a renewable-generating facility is identified, a plan to connect the generation to the long-distance transmission grid must be developed.

## ATC LINKS ELECTRIC GENERATION TO THE TRANSMISSION GRID

ATC owns and operates the system of structures and wires that carry electricity at high voltages over long distances from power plants and wind farms to local distribution facilities within the eastern two-thirds of Wisconsin, the Upper Peninsula of Michigan, and portions of Minnesota and Illinois. When a new generation facility is proposed, ATC works closely with developers to ensure that transmission interconnections and improvements are made to accommodate the electricity that is produced.

## WIND POWER ON THE ATC SYSTEM

ATC has connected more than 600 megawatts of wind to the grid—enough to power approximately 165,000 homes. ATC is well-positioned to support future wind development. An additional 800 megawatts of wind projects are currently under construction or being studied throughout the ATC service area.



ATC IS A MEMBER OF THE GREEN MASTERS PROGRAM, A RECOGNITION AND ASSESSMENT PROGRAM FOR WISCONSIN BUSINESSES INTERESTED IN IMPROVING

Information current as of June 2017



[www.atc-projects.com](http://www.atc-projects.com)