

# FINANCE AND COMMERCE

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## Utilities kick off study of transmission lines

by [Bob Geiger](#) Staff Writer

Several utilities and electric-transmission concerns are sponsoring a comprehensive study of the Upper Midwest's electric transmission grid – part of the effort to develop renewable energy resources in the region.

Dubbed the Strategic Midwest Area Transmission Study, or SMARTransmission, the study is being conducted by Quanta Technology LLC to detail extra-high voltage transmission alternatives throughout North Dakota, South Dakota, Minnesota, Wisconsin, Iowa, Indiana, Ohio and Illinois.

The near-constant breezes in the Upper Midwest are being looked to as a major source of renewable energy, but once generated, that power must be transmitted to the densely populated (and energy hungry) East Coast, along extra-high voltage lines.

Currently, the highest capacity transmission lines in the Upper Midwest are 345 kilovolt lines. That's less than half the capacity of some high-voltage transmission lines that are being considered. President Barack Obama has supported the construction of new extra-high voltage transmission infrastructure to replace aging transmission lines.

No cost was disclosed for the study. The results will be coordinated and shared early next year with the Midwest Independent Transmission System Operator – a multi-state regional electric system based in Carmel, Ind. – and the PJM Interconnection, a regional trade operator that sells wholesale electricity to 13 eastern states and the District of Columbia.

Power companies participating in the SMARTransmission study are Electric Transmission America, a joint-venture between subsidiaries of American Electric Power and MidAmerican Energy Holdings Co.; the American Transmission Co.; Exelon Corp.; NorthWestern Energy; MidAmerican Energy Co. and Minneapolis-based Xcel Energy Inc.

Not included in the transmission study is Novi, Mich.-based ITC Holdings, an electric-transmission company that has proposed a 3,000-mile network of 765-kilovolt extra-high voltage transmission lines stretching from central North Dakota to Indiana.

States included in ITC's proposed transmission network, called the Green Power Express, are North Dakota, South Dakota, Minnesota, Iowa, Wisconsin, Illinois and Indiana.

ITC Holding's proposed network could transport 12,000 megawatts of energy. The price tag for the project, scheduled to be complete by 2020, is \$10 billion to \$12 billion.

Minneapolis-based wind energy developer National Wind LLC is one of several companies working with ITC Holdings' ITC Midwest business unit on the Green Power Express.

According to a February filing with the Federal Energy Regulatory Commission, Minnesota would have four substations – two in the southern portion of the state, one west of the Twin Cities and one northeast of the metro area in Chisago County – if the Green Power Express is built.