

Dubuque, Iowa to Madison, Wisconsin

TRANSMISSION LINE

The Dubuque County, IA to Dane County, WI, or Cardinal Hickory Creek, project is one of 17 Midwestern projects designed to help bring more renewable energy onto the grid and increase service reliability to homes and businesses. These projects will upgrade existing transmission lines in many places, better connect the regional grid and add new lines in key areas. This line will help the Midwest capitalize on valuable wind resources, creating jobs and revenue for rural landowners and communities, and continue to build a cleaner and healthier energy future.

Quick Facts

Connection: Dubuque Co., IA to Dane Co., WI

Line length: 125 miles (approx.)

Line capacity: 345 kilovolts

Project owners/developers: ATC & ITC

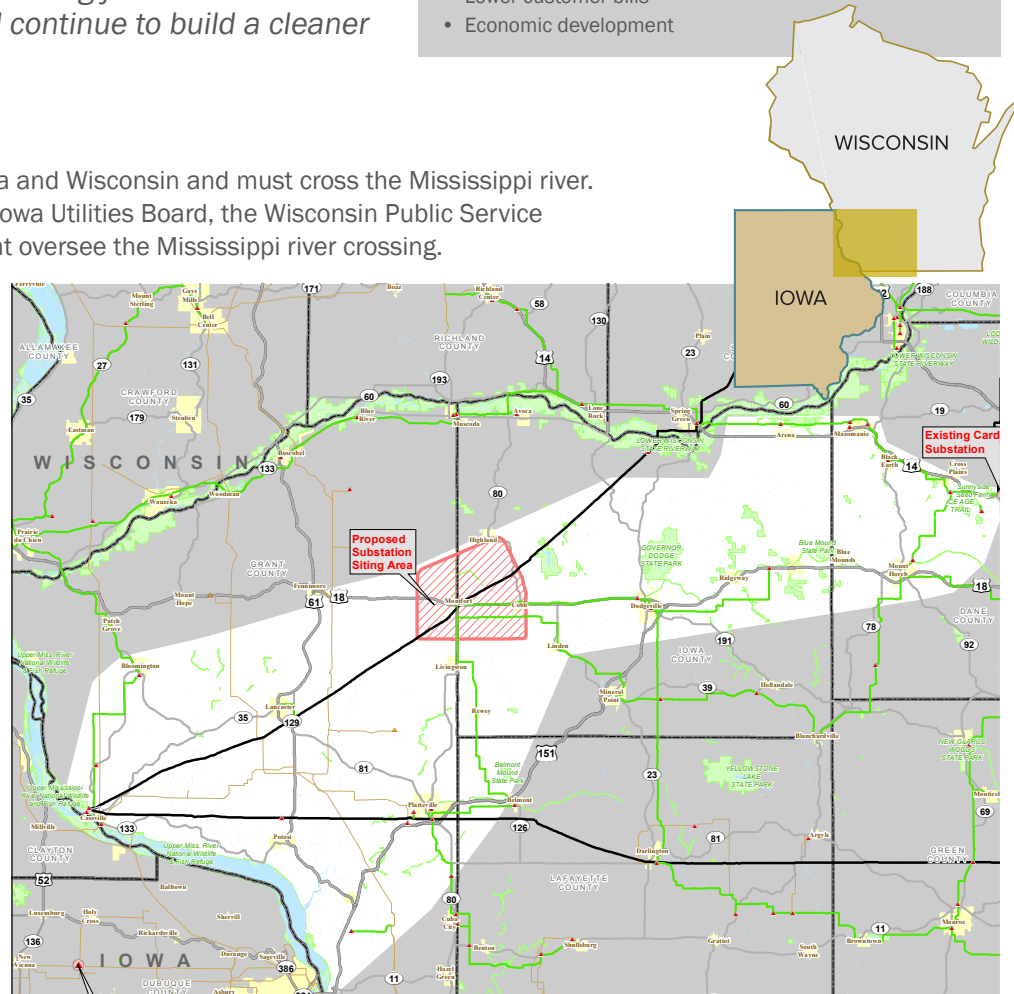
Year in-service: 2020 anticipated

Benefits:

- Increased clean energy on the grid
- Lower customer bills
- Economic development

Regulatory process

- The Dubuque to Madison line connects Iowa and Wisconsin and must cross the Mississippi river. Therefore, it needs approval from both the Iowa Utilities Board, the Wisconsin Public Service Commission (PSC) and federal agencies that oversee the Mississippi river crossing.
- **There are still many public participation opportunities in the regulatory process.** Public input is critical to make sure the most appropriate and least environmentally-sensitive routes are identified. The public may comment on the draft environmental impact statement regarding the Mississippi river crossing and on the project route and need applications in both Wisconsin and Iowa in 2016. There will also be public hearings and open houses throughout the project area.
- The Wisconsin PSC regulatory process combines the route siting process and the 'need' determination. The PSC will approve the need for the project, if the transmission developer demonstrates that the project is in the best interest of Wisconsin customers, when compared to alternative projects, including non-transmission alternatives. For route siting, the developer submits two route options for the PSC to consider.
- Federal approval of the Mississippi River crossing requires multiple agencies with jurisdiction to approve a crossing location. These agencies include the U.S. Fish & Wildlife Service, Army Corps of Engineers, and possibly others.
- Iowa requires the transmission developer to prove the need for a line to the Iowa Utilities Board (IUB). The developer must submit a preferred route option to be considered as part of the decision about the application. The need and route are approved together with what is called a Petition for Franchise. The Iowa Utilities Board regularly updates a short summary document on the status of petition applications, here: http://www.state.ia.us/government/com/util/docs/misc/S_and_E/E_Docket_Status.pdf. The IUB also holds public hearings in each county along proposed routes.



Project Location

Project costs

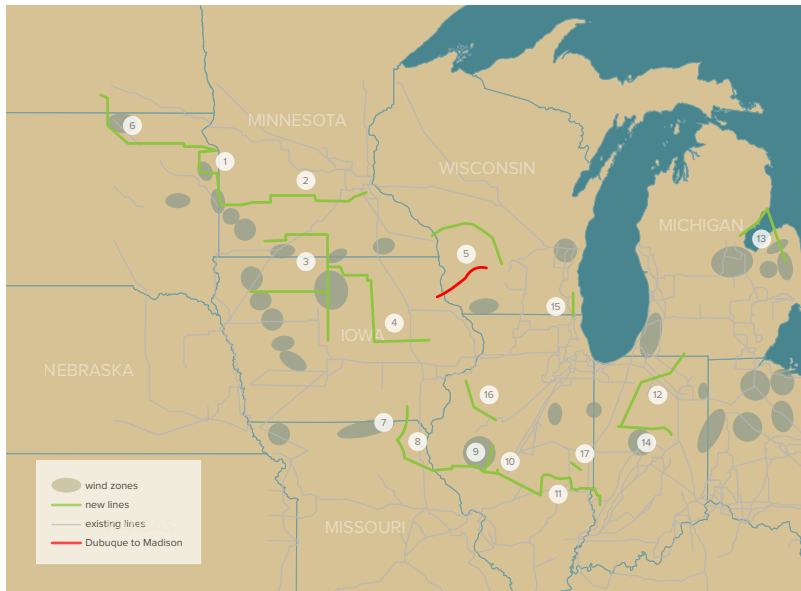
Wisconsin customers will pay for approximately 15 percent of the project – that’s about \$67 million of the project’s estimated \$450 million cost, depending on the final route. Customers outside Wisconsin will cover the rest, investing more than \$380 million in the project. **The line’s cost is shared equally by all Midwest electricity customers** because it is one of a package of regional lines designed by the Midwest grid operator to deliver less expensive electricity and promote clean energy region-wide.

Why new transmission in the upper Midwest?

The Midwest has some of the nation's richest wind resources along with significant solar potential. For example, Iowa is the nation's second largest wind electricity producer, Minnesota utilizes the fifth most wind electricity per capita, and **Wisconsin has enough wind to generate 103,757 MW – more than four times its current electricity use.** New clean energy transmission will make it possible to fully leverage these resources.

However, **the growth of the rural-based wind industry is limited by our current transmission system.** The existing grid was designed to serve a relatively small number of large power plants and, as a result, is not in the right places to fully support the large amounts of geographically diverse clean energy shaping our new energy economy. Just as we built out the railroads and interstate to bring goods to market, updated transmission is a must to tap into the Midwest's extraordinary rural energy resources.

Dubuque to Madison and the other 16 projects the regional grid operator, MISO, approved as Multi-Value Project lines (see below), are critical pieces of an updated grid designed to expand regional renewables at the lowest cost and to lower electricity prices overall.



MISO Multi Value Project Portfolio

“Wind prices are extremely competitive right now, offering lower costs than other possible resources, like natural gas plants. These projects offer a great hedge against rising and often volatile fuel prices.”

-David Sparby, Xcel Energy's Northern States Power CEO announcing 600 MW of new wind for Xcel on July 16, 2013.

CONTACT

NATHANIEL BAER
Iowa Environmental Council
Cell: 319.321.8449
Office: 515.244.1194 x206
Baer@iaenvironment.org

STEPHANIE ENLOE
Center for Rural Affairs
563.875.0066
Stephaniee@cfra.org

ALLEN GLECKNER
Fresh Energy
651.726.7570
gleckner@fresh-energy.org

TYLER HUEBNER
RENEW Wisconsin
608.255.4044 Ext: 1
tyler.huebner@renewwisconsin.org

Clean Energy Transmission Benefits for Wisconsin and the Midwest

Thoughtful and informed transmission line siting that engages all stakeholders can provide the Midwest and Wisconsin with grid updates that are a smart investment for future generations, while also providing substantial benefits to rural communities and the environment.

Clean energy

The Dubuque to Madison line is crucial for unlocking the Midwest's wind power potential and meeting its clean energy goals. **This line is specifically designed to bring more wind power on the grid and will directly result in more wind power development.**

Lowering customer bills

Developing more wind and solar will help keep future electricity costs lower because both have no fuel cost. A more efficient regional electrical grid also gives Wisconsin increased access to lower-cost electricity.

Protecting our air and water

Connecting more clean energy to the grid **reduces the need for fossil fuel electricity.** Doing so will reduce the health impacts, water pollution and consumption, and mitigate the dramatic costs from climate change, including health care and insurance costs, caused by fossil fuel electricity.

Energy Efficiency and Distributed Renewables

Energy efficiency, distributed renewables, and large-scale renewables, particularly wind power, are all critical parts of a cost-effective clean energy future. In order to reduce carbon pollution to the levels necessary and replace retiring fossil fuel plants, all three of these clean energy solutions must be used. Moreover, a robust transmission grid will be essential to enable maximum levels of distributed renewables in the future.

For more information and discussion about clean energy transmission in Wisconsin check out Wisconsin Eye's episode online at:

<http://bit.ly/WisconsinEyeBadgerCoulee>

