

SD WIND

Bi-Weekly newsletter from South Dakota Wind Application Center

Announcements

- The newest addition to our website is a list of free "tools" for wind/solar/geothermal projects: <http://wac.sdwind.org/research>

Notes From...

Terry Wolf

Missouri River Energy Services
Transmission Engineer Manager

What is needed to help wind energy thrive in South Dakota?

For large scale development of wind energy, there would need to be some large scale transmission development, similar to what is being proposed by some national transmission development companies, as the transmission system was developed to serve the areas customers based on the existing set of generation resources.

However, due to the historical development of transmission in the northern plains, there exists a long standing tariff seam or paper barrier that makes development of wind energy more costly in most of South Dakota, by approximately 20%, than in other states like Minnesota and Iowa for instance. For any large scale wind energy development to proceed, this paper barrier needs to be fixed. Without fixing this paper barrier, it will be difficult if not impossible for wind generation to be developed. The most significant tariff seams issues are; allocation of costs for transmission development and ancillary services needed to address the variability of wind energy.

Q/A

Q: Will Substation/Transmission line attract lightning?

A: Substation structures and transmission lines may attract lightning; however, the shield wire (found along the top of the structures) provides protection to the system. Lightning that would hit the area will hit the line rather than a house or tree.

Source:

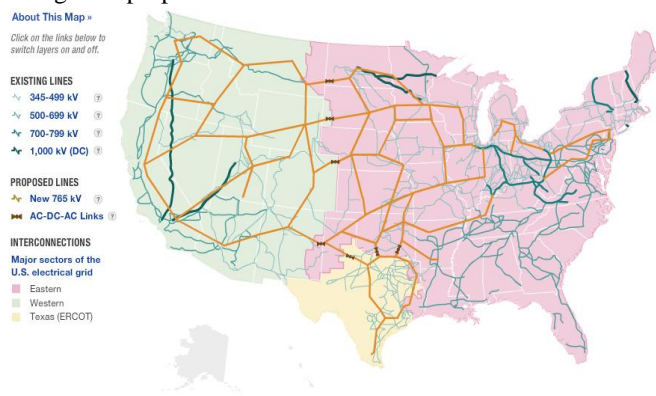
http://www.gatewaywestproject.com/faq_general_transmission.aspx

Please submit questions on our website at:

<http://wac.sdwind.org/contact>

Fun Fact

The map below is the United States current transmission lines along with proposed transmission lines.



Source: <http://www.npr.org/news/graphics/2009/apr/electric-grid/>

News Clip

Transmission Lines in South Dakota

Millions of dollars in wind energy projects are being held up because there isn't the transmission capacity to move the electricity into the cities. Ledyard King and Larry Bivins report in the Sioux Falls Argus Leader that up to 300,000 megawatts of wind projects are on hold because of insufficient transmission capacity. "It's a huge problem for future development," said Steve Wegman, executive director of the South Dakota Wind Energy Association. "It's like sitting on 1 million bushels of corn and having no way to move it out of there other than a five-gallon bucket." Transmission capacity is the "glass ceiling for renewable energy development right now," said one wind energy advocate.

Reference: <http://www.windaction.org/news/21881>