
From: South Dakota Public Utilities Commission[<u>SMTP:PUCDOCKETFILINGS@STATE.SD.US</u>]
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Comments: Dakota Rural Action P.O. Box 549 Brookings, SD 57006 EL13-028 I. General Comments A. South Dakota's Wind Industry According to the United States Department of Energy's National Renewable Energy Laboratory's wind resource assessment data, South Dakota has 882,412 megawatts of potential wind energy resources. North Dakota, South Dakota, Minnesota, Missouri, and Iowa combined have a wind energy potential of 2,838,000 MW, around 34 percent of the total onshore potential in the lower 48 U.S states, or enough to meet the current electricity needs of the U.S. at least two times over. Those resources developed to date have made a significant difference to the economy of rural South Dakota. The industry directly supports up to 1,000 jobs in operations and maintenance, construction, manufacturing, and many other support sectors. The state has four manufacturing facilities associated with wind energy production. Landowners throughout the state receive approximately \$2.3 million in land lease payments each year. Wind energy has also positively impacted South Dakota's environment. Approximately 26 percent of the state's energy was

produced by wind in 2013, 2nd most of any state. In total, this output avoids 1.6 million metric tons of carbon dioxide emissions annually, the equivalent of taking over 280,000 cars off the road. The water consumption savings from wind projects in South Dakota total nearly 585 million gallons of water per year. B. Transmission Limitations A lack of transmission infrastructure remains the biggest impediment to a meaningful expansion of the wind industry. Design of the electric grid exacerbates the problem. Our grid was built to connect large, individual generating units with discrete population centers. In South Dakota, as elsewhere, transmission constraints remain the single biggest limiting factor to further expansion of this successful industry. Using data provided by the Federal Energy Regulatory Commission (FERC), Edison Electric Institute tracks the number of transmission lines throughout the United States and offers statistics relating to the capacity of each line and the pole miles that an individual line covers. A comparison of this data to the 10 states rated by the National Renewable Energy Laboratory as having the highest potential for wind development shows of the 37,736 miles of lines greater than 400 kV, only 2,348 - 6 percent are located in the top ten states for wind energy potential. Of the 3,710 miles of lines capable of carrying capacity greater than 600 kV, only 9 miles are located in states that lead the nation in capacity potential. That's good for less than 1 percent. South Dakota ranks 4th in wind energy potential but falls a distant 25th in capacity between 254 and 400 kV at only 473 miles. The state has only two pole miles of lines greater than 400 kV. Up to 950 megawatts of South Dakota wind projects are stranded in the Midcontinent System Operator's interconnection queue. These projects cannot move forward without an increased investment in transmission infrastructure. II. Comments on Proposed Project A. Community Engagement One of the most useful tools used in the transmission siting process is the feedback provided by the public at meetings and hearings. Local communities and landowners provide a unique perspective during the development process, and can inform routing and siting efforts. Developers must take the time to gather this feedback and integrate it, using this input to avoid sensitive areas. Likewise, it is important that regulators and state officials take the time to consider the input of local communities when examining these projects, providing a basis for their decision-making. One specific area where local input is especially helpful is in the avoidance of sensitive environmental areas. Even if these areas cannot be entirely avoided, communities can provide essential information for an effort to mitigate potential negative impacts. This is also true for residences and community buildings, which can be overlooked early in the development process. Proximity of transmission lines to these areas is an important consideration that regulators and developers must make, and any final route must reflect such an effort. B. Specific Recommendations Notably, much of the testimony surrounding this line shows the need for developers to form relationships with communities. Wind development has clearly benefitted South Dakota, and more should be done to make clear that further wind energy development and improved energy transmission go hand-inhand. Lines that support clean energy should also aim to do more than simply fulfilling the regulatory requirements set out for them. To help differentiate these lines, developers should work with local communities to determine what energy solutions may work for their area, on top of improving the transmission grid. Forming relationships with local communities and stakeholders should also involve coordination on local energy solutions-developers can provide information on energy efficiency and local renewable energy projects, and assist communities in developing these projects. Making this effort will set these lines apart, and benefit local communities affected by transmission projects. Avoidance or mitigation of potential interruptions to agricultural operations should also be an essential goal of transmission development. Developers must work with landowners to identify areas that may be affected, find methods to either avoid them completely or mitigate disruptions to everyday operations. Developers must also be open with information about the project, providing clear

and consistent information to stakeholders. One reason that early and frequent meetings are so important to the transmission development process is that allows stakeholders to ask vital questions that can often only be answered by developers or regulators. Insuring that landowners receive this information is essential, especially because of the speed of the South Dakota regulatory process for transmission. III. Concluding Remarks The electric power transmission network was not designed to penetrate areas of South Dakota that are brimming with wind energy potential. Approving this line represents a positive step toward addressing this challenge. However, it is important that the line be sited in a way that works alongside affected communities and landowners, and achieves an outcome that meets the needs of all stakeholders involved.