



With family schedules feeling out of control, the things we can control become more important. That's why we're members of our electric co-op. The whole reason the co-op exists is to bring us the electricity we need. So they look out for us. They invest in the best technology you can get, just to keep the power on. Not because they have to. they actually do it because it's the right thing to do. And that's what matters.

In a Touchstone Energy Cooperative, the people have the power.



Produced by the following electric cooperatives in South Dakota and western Minnesota:

Black Hills Electric, Custer, S.D.  
Bon Homme Yankton Electric, Tabor, S.D.  
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# Renewables



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two more at Minot, N.D., in 2002.

In 2003, we worked with FPL Energy to develop two 27-turbine wind farms, at Highmore, S.D., and Edgely, N.D. A similar effort with FPL yielded another 33-unit wind farm at Wilton, N.D., in January 2006. Cooperatives made these "farms" possible by agreeing to purchase all the output of these three wind projects.

Also, co-ops are purchasing the output from single wind turbines at the Rosebud Indian Reservation and the Pipestone, Minn., high school, along with 19 customer-owned small wind turbines in western Minnesota and South Dakota.

Basin Electric Power Cooperative, which generates and purchases power to supply cooperatives in the region, is ranked eighth in the nation in renewable energy sales. In 2005, Basin Electric's wind energy sales totaled enough electricity to ultimately serve 8,000 average homes, if wind was always available.

Currently, this region's cooperatives are working with partners to install waste-heat-recovery generators at four compressor stations along the Northern Border Pipeline. Energy in the form of hot air from the natural gas pipeline compressors, currently vented to the atmosphere, will be captured by heat exchangers, used to drive turbines and generate electricity for cooperative customers.

Without legislative mandates, electric cooperatives are voluntarily developing economically-viable renewable energy projects. During its 2005 annual meeting, Basin Electric Cooperative owners approved a voluntary renewable energy goal: to provide 10 percent of Basin's generating capacity for its members from renewable sources by 2010. With an estimated 8 percent of the demand of electric cooperative members in the Dakotas now coming from wind energy, cooperatives are well on their way towards this goal.

Electric cooperatives could not integrate these renewable resources into their power supply mix without support from Western Area Power Administration. As the federal agency responsible for marketing and delivering Missouri River hydropower, Western operates the jointly-owned high-voltage transmission system, which was designed to deliver Missouri River hydropower and supplemental power to electric cooperatives and municipal utilities in the region. This reliable system has worked well and helps to keep electric rates low. However, using these constrained transmission lines solely for new purposes, such as delivering large blocks of "green power" from new large wind farms to distant markets, creates a multitude of challenges to this highly-complex electric grid.

Our commitment to harness the region's vast wind resources must be balanced with the practical responsibility to deliver reliable, affordable electricity to customers. Wind and other renewable energy developments must be economically-viable projects and meet the challenge of maintaining highly-reliable service.

While there is a need for more domestic energy resources, wind is not the total solution. A rational transmission policy, which opens new outlets for wind and other renewables (coupled with traditional proven resources such as coal-based generation), is essential. The region's cooperatives intend to continue to pursue these goals, while maintaining affordable and reliable electric service.

**There are many** complicated issues involved with developing wind farms in South Dakota. However, who is responsible for commercial wind turbine development in South Dakota and North Dakota is not complicated. Rural electric cooperatives are making it happen!

Currently, electric cooperative customers in South Dakota and western Minnesota receive approximately 8 percent of their electricity from the wind. Added to the approximately 30 percent of power supply from hydropower dams on the Missouri River, almost 40 percent of the electricity supplied to cooperative customers is generated by renewable resources.

Touchstone Energy® Cooperatives have caused the development and are involved in the marketing of electricity from 93 utility-size wind turbines in the region.

Electric co-ops built the first four commercial-size wind turbines in the Dakotas – two at Chamberlain, S.D., in 2001 and