



Wind-E-News

Your PUC Commissioners



Bob Sahr
Commissioner



Gary Hanson
Commissioner



Dusty Johnson
Commissioner

PUC Commissioners' Welcome

We are living in the era of wind power development in South Dakota. The Wind-E-News is our opportunity to communicate with you on a regular basis about happenings in this dynamic industry. We all know that South Dakota has strong wind currents. A recent U.S. Department of Energy survey ranked our state as the second best in terms of wind power potential. View the South Dakota wind resource map on page 3 to see the potential wind brings to your part of

the state.

The Commission worked with Governor Rounds, the State Legislature and the Rural Electric Association to put incentives into place that led to our state's first major wind farm being developed near Highmore. This project is a tremendous success story, as you'll see by reading the story below.

The PUC is committed to being a resource for landowners, civic and economic development leaders, and all South

Dakotans on wind issues. We want to answer your questions about potential wind development. We want to speak to groups in your community about the latest industry trends, opportunities and challenges.

We look forward to partnering with you in the future to help develop more renewable wind energy in South Dakota. Please contact us if you'd like to learn more about the wind industry.

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Hyde County's Wind Farm—A Success Story

Located ten miles south of Highmore in Hyde County, 27 wind turbines turn in the wind, generating 40 megawatts of capacity to the grid. Over 10,000 homes, or a community the size of Vermillion, South Dakota, could be served by our State's first major wind farm.

This successful venture was made possible through the partnership forged by FPL Energy, Basin Electric Power Cooperative, East River Electric Power Cooperative,

South Dakota Rural Electric Association and it's member Cooperatives and South Dakota landowners.

Wind easements can provide landowners with income in the area of \$2,000 to \$4,000 per year per turbine, depending on various factors.

Former Highmore Mayor Mike Newton, believes the wind farm will generate \$400,000 to \$450,000 a year in new revenue for Hyde County, which will include approximately \$250,000 in



Wind Turbines in Highmore, SD.

property taxes.

Changes in South Dakota's tax structure approved by Governor Rounds and Lawmakers during last year's legislative session, allowed the Hyde County project to proceed and have set the stage for future wind power development in South Dakota.

Sign our on-line [Production Tax Credit Petition](#) for more wind power development! (see pg. 2)

Coming Soon!

PUC Wind Power Video

Sign up on-line to receive the Wind Video in DVD or VHS: www.puc.sd.gov

You Can Help Support Wind Power!

People oftentimes ask what can I do to encourage more wind power development? Here's an easy way: **"sign" our on-line**

Production Tax Credit Petition.

The Production Tax Credit (PTC) is a federal tax incentive that helps make wind power development possible.

Unfortunately, Congress has never made the Production Tax



Credit permanent. During the debate over the Energy Bill, Congress allowed the PTC to expire. This uncertainty dampened wind power development across the United States in 2004.

Fortunately, the Production Tax Credit was recently reenacted, but only until December 31, 2005. The SD Public Utilities Commission

wants to see the PTC become permanent. This certainly will help spur new projects. **We need your help!** Please go to the PUC website (www.puc.sd.gov) and **"sign" our on-line petition** supporting the Production Tax Credit. If you don't have access to the Internet or if you have any problems using the on-line form, please call our office at 1-800-332-1782 and we will assist you.

PUC, FPL Energy & SDSU Working to Expand Wind Potential

Earlier this year, the PUC presented SDSU with a check from FPL Energy for \$50,000. The donation was made to help expand WRAN- the Wind Resource Assessment Network. Currently there are five WRAN sites in SD with six proposed new sites. SDSU will use the money to buy new anemometers, which are instruments used to measure wind power.

"There are many great locations for wind farms in South Dakota, and the new sites will help attract wind power development to those areas," said Commissioner Bob Sahr. "We hope to at least double the number

of sites in the SDSU network." "We're excited to team with SDSU and want South Dakota to have the

Grants for WRAN received from:

- Florida Power and Light Energy
- US Department of Energy
- SD Governor's Office of Economic Development
- Technical assistance and site locations from East River Electric Cooperative

best publicly available wind information in the country," said Commissioner Gary Hanson.

"Our goal is to help SDSU become a leader when it comes to wind energy. WRAN is one example of

how SDSU is committed to wind development and to our state's future," said Commissioner Dusty Johnson. "We're eager to see this program expand to other areas of the state."

Increasing the number of wind resource assessment stations could potentially give a big boost to rural economic development in South Dakota. Data gathered from WRAN will provide proof of the state's wind energy potential while at the same time leading to important studies of the possible impact and value of South Dakota's wind power.

3 Keys to Success: Wind, Transmission & a Buyer

There's a lot of underlying popular support for wind energy. While we are optimistic about the potential for wind energy in South Dakota, developing a wind farm takes a lot of work and three main ingredients:

1. **WIND**- we all realize that there is an abundance of this in South Dakota, but proper testing is essential as there are better places than others for wind farms
2. **TRANSMISSION LINES** - a lot of the power lines are full or

nearly full so finding lines with extra available capacity may be difficult but not impossible

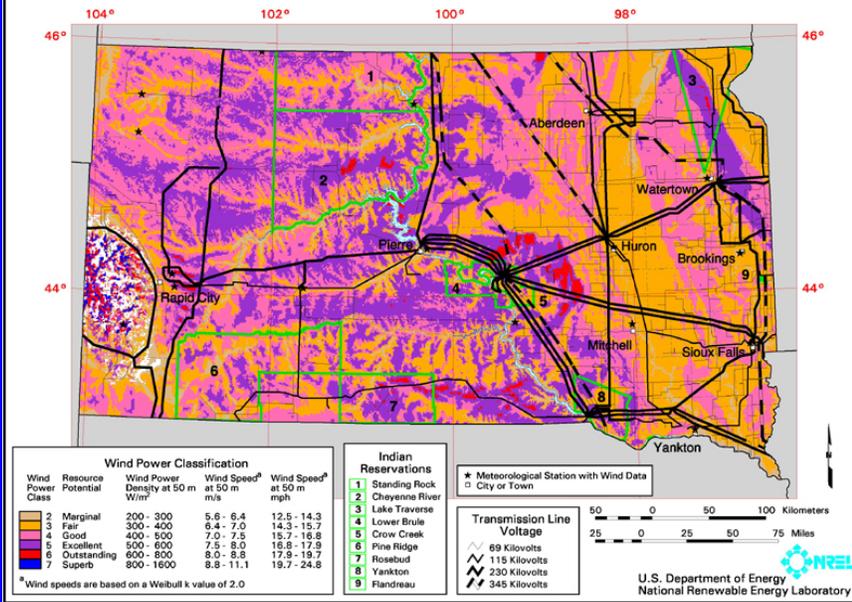
3. **A BUYER**- you must have someone to buy the electricity; this may be the biggest hurdle a landowner faces

The wind industry has been around for thousands of years and while we all use the statement "don't reinvent the wheel", when it comes to the technology of wind, it's been reinvented numerous times. The promise and excitement of a

potential wind farm may ultimately be overshadowed by daunting obstacles.

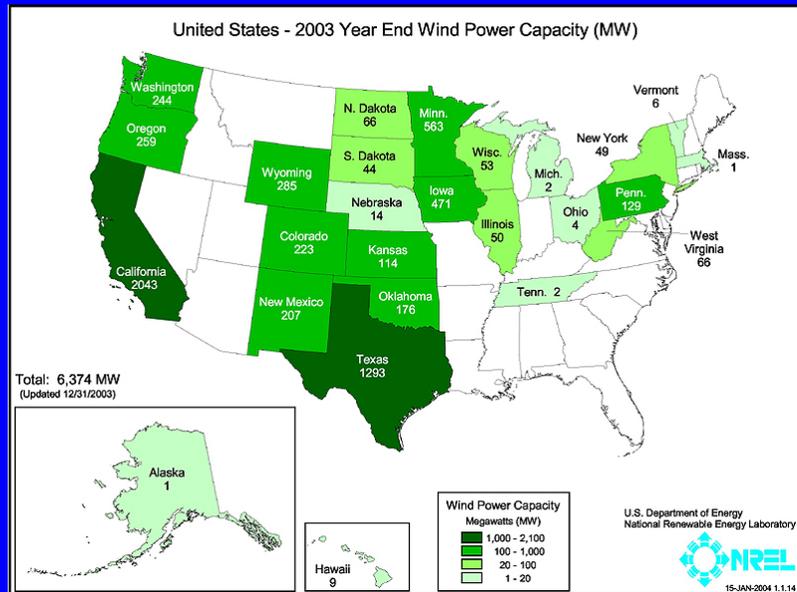
When landowners are asked to sign a contract with a wind power developer, they should keep in mind building wind farms is a speculative business. We always recommend getting professional advice from your attorney before signing on the dotted line.

South Dakota - Wind Resource Map

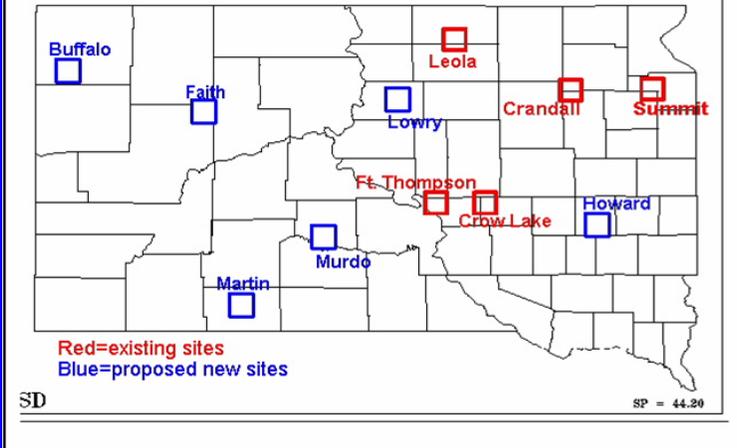


This is a map of wind energy potential across South Dakota. Although this type of map doesn't eliminate the need for on-site wind resource measurement, it can help utilities, developers and landowners gain a better understanding of where the best wind resource areas are.

This is a map that gives an idea of how much wind power installed wind projects are producing in South Dakota and the United States.



SDSU Wind Resource Assessment Network Map



The WRAN is a network of instrument stations scattered across South Dakota to measure wind speed and solar irradiance.

Each site includes:

- 4 anemometers (measures wind speed and direction)
- 2 wind direction vanes
- 1 pyranometer (measures solar irradiance)
- 1 datalogger (records the measurements)

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A huge **THANK YOU** to the US Department of Energy for their support of the following projects: the Wind-E-Newsletter, the town meetings on wind power that have been conducted in South Dakota, the Wind Video (available soon!) and the Wind Resource Assessment Network (WRAN). Without the expertise and financial support of the Department of Energy, all of this would have been difficult to accomplish. **THANK YOU!**



Resources & Links:

- *South Dakota Wind Energy Center*
www.highmore.org/wind
- *American Wind Energy Association*
www.awea.org
- *National Renewable Energy Laboratory*
www.nrel.gov
- *National Wind Coordinating Comm.*
www.nationalwind.org
- *Wind Powering America*
www.windpoweringamerica.gov
- *Wind Resource Assessment Network (WRAN)*
www.engineering.sdstate.edu/~wran/

Visit us on
the WEB!

www.puc.sd.gov

PUC Wind Power Initiatives

We are working hard at the PUC to develop our state's wind power potential. Here are some of our efforts:

- **T**own meetings across South Dakota addressing landowner issues
- **J**oint effort with SDSU to build Wind Resource Assessment Network (WRAN) monitoring stations throughout the state
- **A**ctively working with wind power developers
- **R**esource for landowners, local leaders and economic development groups
- **I**ntput into Western Area Power Administration's (WAPA) Dakota Wind Study
- **A**dvocacy at state, regional and federal levels
- **O**n-line petition for the Production Tax Credit (PTC)
- **C**oming soon, the PUC Wind Power Video!
- **S**upported Governor Rounds' legislation to spur wind power development