

# MICROFILM DIVIDER

OMB/RECORDS MANAGEMENT DIVISION

SFN 2053 (2/85) 3M



ROLL NUMBER

DESCRIPTION

1221

2001 HOUSE FINANCE AND TAXATION

HB 1221

2001 HOUSE STANDING COMMITTEE MINUTES

BILL/RESOLUTION NO. HIB 1221

House Finance and Taxation Committee

☐ Conference Committee

Hearing Date January 24, 2001

Tape Number	Side A	Side B	Meter #
1		X	3,669
Committee Clerk Signature <i>Janice Stein</i>			

Minutes:

**REP. AL CARLSON, CHAIRMAN** Opened the hearing.

**REP. DALE SEVERSON.** Introduced the bill. This bill provides an opportunity for developers to take the sales tax portion out of the bill. Our legislature, in 1999, did this for our oil refinery in Mandan. It provides an incentive for wind developers to come to our state to set up wind towers. He proposed amendments to the bill. He related to the emergency clause on the bill. If we get the opportunity to put up the wind plant, we could start construction as early as May, 2001, that is why the emergency clause is added to the bill.

**REP. CARLSON** It talks about the capacity of one hundred kilowatts, will that take care of all of the units that are being built?

**REP. SEVERSON** Yes, one hundred kilowatts, or one megawatt.

**REP. CARLSON** This bill does not have an ending date, we may address some of those issues.

With no further testimony, the hearing was closed.

Page 2  
House Finance and Taxation Committee  
Bill/Resolution Number HB 1221  
Hearing Date January 31, 2001

**COMMITTEE ACTION 1-31-01, Tape #2, Side A, Meter #4750**

**REP. CLARK** Made a motion to adopt amendments which would give a sales and use tax exemption.

**REP. WIKENHEISER** Second the motion. **MOTION CARRIED BY VOICE VOTE.**

**REP. BRANDENBURG** Presented another amendment which would add an emergency clause so the wind towers could be built right away. He also had an amendment which would add an end date of ten years to the exemption.

**REP. WIKENHEISER** Second the motion. **MOTION CARRIED BY VOICE VOTE.**

**REP. BRANDENBURG** Reviewed the site contracts for the wind towers with committee members. He presented a copy of the contracts for each committee member.

**REP. DROYDAL** Made a motion for a **DO PASS AS AMENDED.**

**REP. KELSH** Second the motion. **MOTION CARRIED**

15 Yes      0 No      0 Absent\

**REP. KELSH** Was given the floor assignment.

**FISCAL NOTE**  
 Requested by Legislative Council  
 01/15/2001

Bill/Resolution No.: HB 1221

Amendment to:

**1A. State fiscal effect:** *Identify the state fiscal effect and the fiscal effect on agency appropriations compared to funding levels and appropriations anticipated under current law.*

	1999-2001 Biennium		2001-2003 Biennium		2003-2005 Biennium	
	General Fund	Other Funds	General Fund	Other Funds	General Fund	Other Funds
<b>Revenues</b>						
<b>Expenditures</b>						
<b>Appropriations</b>						

**1B. County, city, and school district fiscal effect:** *Identify the fiscal effect on the appropriate political subdivision.*

1999-2001 Biennium			2001-2003 Biennium			2003-2005 Biennium		
Counties	Cities	School Districts	Counties	Cities	School Districts	Counties	Cities	School Districts

**2. Narrative:** *Identify the aspects of the measure which cause fiscal impact and include any comments relevant to your analysis.*

HB 1221 redefines power plants subject to the existing sales tax exemption to include wind-powered electrical generating facilities.

**3. State fiscal effect detail:** *For information shown under state fiscal effect in 1A, please:*

**A. Revenues:** *Explain the revenue amounts. Provide detail, when appropriate, for each revenue type and fund affected and any amounts included in the executive budget.*

The baseline forecast does not specifically assume the construction of a large-scale wind-powered electrical generating facility in the revenue forecast for the next biennium. Therefore, this bill will not reduce the current forecasted revenues. If HB 1221 is enacted, however, each subsequent tower that would be erected would receive a sales tax exemption of approximately \$30,000. (This assumes tax-exempt components, including the steel frame, blades, wiring and the turbine itself, of \$600,000 per tower.)

**B. Expenditures:** *Explain the expenditure amounts. Provide detail, when appropriate, for each agency, line item, and fund affected and the number of FTE positions affected.*

**C. Appropriations:** *Explain the appropriation amounts. Provide detail, when appropriate, of the effect on the biennial appropriation for each agency and fund affected and any amounts included in the executive budget. Indicate the relationship between the amounts shown for expenditures and appropriations.*

Name:	Kathryn L. Strombeck	Agency:	Tax Department
Phone Number:	328-3402	Date Prepared:	01/23/2001

Date: 1-31-01  
Roll Call Vote #: 1

2001 HOUSE STANDING COMMITTEE ROLL CALL VOTES  
BILL/RESOLUTION NO. HB 1221

House FINANCE & TAXATION Committee

☐ Subcommittee on \_\_\_\_\_  
or  
☐ Conference Committee

Legislative Council Amendment Number \_\_\_\_\_

Action Taken Do Pass as amended

Motion Made By Rep. Drovdal Seconded By Rep. Kelsh

Representatives	Yes	No	Representatives	Yes	No
CARLSON, AL, CHAIRMAN	✓		NICHOLAS, EUGENE	✓	
DROVDAL, DAVID, V-CHAIR	✓		RENNER, DENNIS	✓	
BRANDENBURG, MICHAEL	✓		RENNERFELDT, EARL	✓	
CLARK, BYRON	✓		SCHMIDT, ARLO	✓	
GROSZ, MICHAEL	✓		WIKENHEISER, RAY	✓	
HERBEL, GIL	✓		WINRICH, LONNY	✓	
KELSH, SCOT	✓				
KROEBER, JOE	✓				
LLOYD, EDWARD	✓				

Total (Yes) 15 No 0

Absent 0

Floor Assignment Rep Kelsh

If the vote is on an amendment, briefly indicate intent:

**REPORT OF STANDING COMMITTEE**

HB 1221: Finance and Taxation Committee (Rep. Carlson, Chairman) recommends **AMENDMENTS AS FOLLOWS** and when so amended, recommends **DO PASS** (15 YEAS, 0 NAYS, 0 ABSENT AND NOT VOTING). HB 1221 was placed on the Sixth order on the calendar.

Page 1, line 4, remove "and" and after "date" insert "; and to declare an emergency"

Page 1, line 14, after "facility" insert ", on which construction is completed before January 1, 2011"

Page 2, line 3, after "facility" insert ", on which construction is completed before January 1, 2011"

Page 2, after line 8, insert:

**"SECTION 4. EMERGENCY.** This Act is declared to be an emergency measure."

Renumber accordingly



2001 SENATE FINANCE AND TAXATION

HB 1221

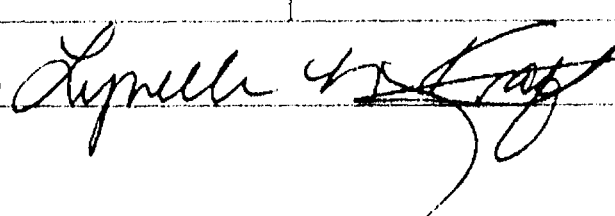
## 2001 SENATE STANDING COMMITTEE MINUTES

### BILL/RESOLUTION NO. 1221

Senate Finance and Taxation Committee

☐ Conference Committee

Hearing Date 3/14/01

Tape Number	Side A	Side B	Meter #
1	x		0-51.9
2	x		10.2-26.4
Committee Clerk Signature 			

Minutes:

Senator Urlacher: Opened the hearing on HB 1221, relating to sales and use tax exemptions for certain wind powered electrical generating facilities.

Representative Bill Devlin: Co-sponsored the bill, testified in support of 1221, 1222, and 1223.

Wind energy may provide the opportunity to reverse the trend of out migration and bring economic development opportunity to our farms, our communities, and our people. We have a marvelous opportunity to start the harvesting of an asset and turn it into energy and dollars for our state. Through this process, we can create not only good opportunities for our people, we have a once in a lifetime opportunity to make this happen. The time is now, and we are the legislature that can make it work. We can work hand in hand with the coal industry to meet joint needs for transmission lines that will export power created by both industries, we don't need to see competition between the industries in ND, instead we must look at collaborating between everybody.

Senator Terry Wunzek: Co-sponsored the bill, testified in support of all three bills. I see this as a very viable, potentially beneficial economical development for our state that could help bring new dollars into the state. What have we got to loose by considering this legislation? There will be no property tax abatements extended unless there is generating plants built. We're extending an opportunity for our state to bring outside development into the state. Something that we desperately need, something to bring dollars and high-tech jobs into the state.

Representative Mike Brandenburg: Co-sponsored the bill, testified in support of all three bills. This legislation has been a bipartisan effort by legislators working towards wind energy development. In this bill, in the construction phase of wind turbines, the sales tax would be removed.

Representative Dale Severson: Co-sponsored the bill, testified in support of all three bills. This bill is designed to provide an opportunity for wind generation that occurs within the next decade to have the sales tax removed on the equipment that's purchased for it. Griggs-Steele is the only district in the state that has made a proposal for wind energy to Excel in Minnesota. We are still waiting for the short list to see if we're on that. This provides a mechanism to put us on a level playing field with other states that have bid, there were nine bids. We think that by passing this legislation, would put us on the level field with the other bidders. This provides the developer to make a contract with farmers, with the people he's buying the equipment from, as well as bid for the known fixed cost. It's also an incentive to provided economic growth. We put on the Emergency Clause in the House because of our bid that's already placed. If we get the bid, we could actually be up and running before the law would be enacted.

Senator Urlacher: The first move is to identify where the most favorable locations are?

Representative Dale Severson: That is correct. And I think you'll hear testimony that that has already been done for our state.

Senator Christmann: Is there some evidence that eliminating the sales tax on the supplies would entice the building of one, or are we just doing them a favor on something they're going to build anyway?

Representative Dale Severson: The other states have removed the tax. We had a bill in 1999 that removed the sales tax on all the equipment used for the Mandan Refinery, it was used to provide incentive to keep people doing what they're doing. It just levels the playing field with other states that do provide that.

Senator Christmann: The other states have taken the same adjustment?

Representative Dale Severson: We're not real sure. I don't know that every state has, I know that MN has. They're our key competition.

Senator Kroeplin: Co-sponsored the bill, testified in support of all three bills. Wind energy is probably the purest form of economic development that we could have. Turning wind into electricity and then into cash, you couldn't ask for anything better. It create new wealth, and that opportunity doesn't come along that often.

Jay Haley: EAPC Arch. Engineers in Grand Forks, testified in support of all three bills. Written testimony and map attached. Went through testimony and explained map.

Senator Urlacher: In regard to the \$2,000 land-lease payments, how many generators does that involve?

Jay Haley: 57.

Senator Wardner: Is it feasible to go west with the transmission lines with the energy needs out that way?

Jay Haley: There's a bottleneck between our grid and the western grid. Right now, that bottleneck is about a 200 MW bottleneck. They need to upgrade that in order to export more power to the west. That could happen in the next 5-10 years.

Senator Nichols: Would there have to be cooperation with regard to transmission lines, do they have that commitment at this time if there were to be some construction done?

Jay Haley: In order to put in that bid, we have to prove that we could get the power to Minneapolis. If we can't deliver the power, we're not going to be in the running for the bid.

Senator Nichols: With regard to the land-lease payments to landowners, how are these set up?

Jay Haley: Each company has their own lease agreement. 15-20 years is a typical term of an agreement. The average is \$3,000-4,000.

Senator Christmann: Why is the bill asking for a tax credit for up to \$30,000 a year?

Jay Haley: ND is not very well situated in terms of a favorable climate for wind development. MN and other states have climates that are much more conducive to wind development. MN has additional incentives that we simply can't compete with.

Senator Christmann: Why do we need \$30,000 if the average is \$3,00-4,000?

Jay Haley: The tax credit that you're referring to does not go to the landowner. A wind developer will finance these projects. The credit goes to the developer.

Mike Hohl: President of DMI, a wind tower manufacturing company in West Fargo, testified in support of all three bills. Used to manufacture equipment for sugar beet industry. Realized the need to change in the agriculture industry. We now manufacture wind towers. To us, it is an economic development question. We have 120 employees that would not have a job if it was not for wind energy. The industry is going to grow and we need to be a part of it. We currently have orders for a number of other states. We are committed to this industry. The tower that we sell is

very transportation critical, it's very heavy. So the manufacturer that is closer to the developing area, obviously has an advantage.

Senator Kroepelin: Can you tell us a little bit more about the towers.

Mike Hohl: The major sellers are the 50-60 meter towers. That number is growing. There are some designs up to 100 meters high. A 100 meter tower probably has a wall thickness exceeding an inch and a half. They're usually made in two or three sections and then bolted together.

Senator Nichols: Do you manufacture the parts of the tower from top to bottom or do you have subcontractors that do parts of the work?

Mike Hohl: The tower starts out with a concrete foundation and then a series of anchor bolts. We go from the bolts to the top where the turbine cell itself is bolted. We take care of everything in between.

Senator Nichols: Do you have your own research capabilities?

Mike Hohl: We have some. It's difficult because it's changing as we speak.

Senator Christmann: When you sell out of state, do they pay state sales tax?

Mike Hohl: No, they're are shipped out of state so there is no sales tax.

Keith Monson: Chairman of the Griggs/Steele Economic Development Corp. and Chairman of Griggs/Steele Wind Power Development Group, testified in support of all three bills. The second largest hurdle economic development usually comes up against is lack of sufficient local resources. I have never seen anything that has probably had unanimous support like wind energy. We're hoping we're on the short list for the bid. We are also looking at new jobs as the result of this. ND needs to take a proactive stance to promote electricity as an export.

Senator Urlacher: Have you determined what the cost would be to the consumer?

Keith Monson: That's why these bills are so critical. I can't give any particular price.

Senator Christmann: How much do companies with transmission lines in MN pay per mile for their taxes on the lines?

Keith Monson: One example is the postage stamp. It depends, there's different formats.

Representative Mike Brandenburg: Gives absentee testimony from Roger Johnson. Written testimony attached.

Brian Kramer: North Dakota Farm Bureau, testified in support of all three bills. We think there should be some wind energy incentives in North Dakota.

Senator Urlacher: Closed the hearing. Action delayed.

Others signed the roster in support.

Discussion held later. Committee discussed all three bills. Meter number 10.2-26.4, Tape 2.

Senator Christmann: Concerned that all the exemptions will take away from the real benefit to the state.

Senator Kroeplin: Believes it will bring new jobs and economic development.

Reference made to the Heskitt Plant and the coal industry taxes.

Senator Christmann: I will support what the committee supports but I want to make clear that we're going to lose some tax revenues from the coal industry. I think out of these three that the sales tax exemption one is the best.

Senator Nichols: I agree with Senator Christmann in regards to the sales tax, we do that in primary sector business to get things going. I can't see the income tax one as being too big of a factor for a while, and that is restricted to so many years.

#### COMMITTEE ACTION:

Motion made by Senator Kroeplin for a DO PASS, Seconded by Senator Wardner. Vote was 5 yeas, 0 nays, 1 absent and not voting. Bill carrier was Senator Wardner.

Date: 3/14/01  
Roll Call Vote #: 1

2001 SENATE STANDING COMMITTEE ROLL CALL VOTES  
BILL/RESOLUTION NO. 1221

Senate Finance and Taxation Committee

☐ Subcommittee on \_\_\_\_\_  
or  
☐ Conference Committee

Legislative Council Amendment Number \_\_\_\_\_

Action Taken DO PASS

Motion Made By Kroeplin Seconded By Wardner

Senators	Yes	No	Senators	Yes	No
Senator Urlacher-Chairman	✓				
Senator Wardner-Vice Chairman	✓				
Senator Christmann	✓				
Senator Stenehjem					
Senator Kroeplin	✓				
Senator Nichols	✓				

Total (Yes) 5 No 0

Absent 1

Floor Assignment Wardner

If the vote is on an amendment, briefly indicate intent:



**REPORT OF STANDING COMMITTEE (410)**  
March 14, 2001 4:15 p.m.

**Module No: SR-44-5635**  
**Carrier: Wardner**  
**Insert LC: . Title: .**

**REPORT OF STANDING COMMITTEE**

HB 1221, as engrossed: Finance and Taxation Committee (Sen. Urlacher, Chairman)  
recommends **DO PASS** (5 YEAS, 0 NAYS, 1 ABSENT AND NOT VOTING).  
Engrossed HB 1221 was placed on the Fourteenth order on the calendar.

2001 TESTIMONY

HB 1221

Chairman Carlson and Members of the House Finance and Tax Committee.

For the record, I am Representative Bill Devlin, District 23 from Finley. District 23 is a rural district that includes all of Steele, Griggs and Nelson Counties along with parts of Ramsey and Walsh counties.

I am here to give testimony in support of House Bills 1222, 1221 and 1223. As you are well aware, these bills all deal with wind energy issues.

My district has been devastated by the out-migration of population over the last twenty years. Steele and Griggs counties have lost between 25 and 30 percent of their populations during that time period. Other rural counties have seen similar decreases in population.

Wind energy may very well provide the opportunity to reverse that trend and bring economic development opportunities to our farms, our towns and our people.

I look at wind energy in it's infancy much like others, generations ago, looked at the coal industry. We have a marvelous opportunity in this legislative session to start harvesting another of our assets, the wind that sweeps across our prairie, and turn it into energy, as well as dollars for our people and our state.

Though this process we can create unlimited opportunities for our people.

I think we have a once in a lifetime opportunity to make this happen. The time is now, and we are the legislature that can make it happen.

We can work hand-in-hand with the coal industry, to meet joint needs for transmission lines that will export the power created by both industries throughout the nation. We don't need to see competition between the industries in North Dakota, but instead we look for collaboration between everyone.

Mr. Chairman, there are people here who will answer every technical question that this committee will have through the hearing process. Because of the number of issues we have before the House Human Services Committee this morning, I respectfully ask the committee to wait for the people that will follow my testimony to get all your questions answered. I urge this committee to give the a Do Pass recommendation to all three bills. Thank you for the opportunity to testify in support of House Bills 1222, 1221 and 1223.

HB 1221  
1222  
1223

## **Wind Energy Development Is Good for North Dakota**

**By Jay Haley  
EAPC Architects Engineers  
Grand Forks, ND  
1-11-01**

### **Wind Energy is a Powerful Resource for Rural Economic Development.**

- Wind farms offer a new cash crop for farmers and ranchers.
- A landowner receives \$2,000 to \$4,000 per year for each wind turbine depending on its size and production.
- A fully developed section of land can support 10 to 12 megawatts of wind generation.
- A fully developed section of land would generate more than \$30,000 per year in land-lease payments to the landowner.
- Land that is fully developed with wind turbines is still more than 95% available for its original agricultural use.
- Wind development creates 15 to 19 jobs per 100 megawatts of installed capacity.
- Two North Dakota companies are engaged in the manufacture of wind turbine components (towers and blades).

### **North Dakota has the Greatest Wind Resource in the Nation**

- North Dakota's wind potential is over 138,400 MW, which could supply about 1/3 of the nations' annual power requirements.
- There are few poor wind sites in North Dakota. Some sites are just better than others.
- North Dakota ranks at the bottom of states that are utilizing their wind resource.
- North Dakota needs more transmission capacity.
- The transmission grid in the upper Midwest is in need of substantial upgrades and new transmission in order to increase the export capacity of North Dakota.
- WAPA studies indicate there is sufficient transmission capacity available throughout North Dakota in smaller parcels of 50 to 150 MW each.
- Both the coal industry and the wind industry need new transmission capacity in order to expand their industries.
- The coal and wind industries would benefit by working together on solving the transmission issues.

### **Wind Energy is the Fastest Growing Energy Technology in the World**

- Wind energy has had the highest growth rate for over ten years. The annual growth rate last year was more than 40%.
- There are more than 35,000 wind turbines installed worldwide with a capacity of more than 12,000 MW.

# **Benefits of Wind Development In North Dakota**

**By Jay Haley  
EAPC Architects Engineers  
Grand Forks, ND  
1-11-01**

## **Introduction**

The wind industry has been looking closely at North Dakota for years. The reason is simple; North Dakota has the greatest wind potential in the United States. Until now, there's been no utility-scale wind development with the exception of a few single-turbine installations scattered around the state. Things are about to change. Over the last year, every major wind developer in the world has visited North Dakota in preparation for expansion into the Midwest.

The cost of wind energy has dropped dramatically in the last ten years to the point where wind power is competitive with any form of new generation. The demand for clean renewable energy is growing at an ever-increasing rate. Today, wind is the fastest growing energy technology in the world.

## **What Does Wind Development Mean for North Dakota?**

### **Rural Economic Development**

First and foremost, wind energy means rural economic development. Wind development has the ability to revitalize rural communities. For example, the Griggs-Steele Wind Development Group is planning the development of a 130 MW wind farm to be located in Griggs and Steele counties in North Dakota. The project will consist of 85 to 175 wind turbines with a capital cost of approximately \$130 million dollars. It will create around 200 construction-related jobs, and once complete will create 15 to 20 full-time jobs. Local landowners will receive land-lease payments ranging from \$2,000 to \$3,500 per year for each wind turbine placed on their land. This is a new cash crop for the farmer. Land-lease payments to local landowners will total more than \$500,000 annually. All this at no cost to the landowner. In addition, the annual property tax revenue will be approximately \$750,000. This scenario can be repeated all over the state.

Wind development also results in increased tourism. People will travel a long way to see a wind farm. Communities in southern Minnesota and northern Iowa have experienced a distinct increase in business volume for hotels, motels, restaurants, gas stations, convenience stores, hardware stores, lumber yards, and cement plants.

## **Manufacturing**

A number of local businesses already benefit from wind development. Tubular towers are being manufactured by Dakota Machine in West Fargo, and LM Glasfiber in Grand Forks manufactures turbine blades. Additional wind development in the Midwest will increase business volume for these industries as well as create opportunities to add turbine assembly plants.

## **Wind and Coal - Different Markets**

There are many counties engaged in North Dakota's coal industry that could enjoy the economic benefits from wind development without negatively impacting the current coal industry. Wind energy is not meant to replace coal or other forms of generation, but rather to complement them. The market for wind energy is growing at an increasing rate. This market is not necessarily in North Dakota. For example, Northern States Power in Minnesota has a requirement to purchase a total of 825 MW of wind energy by the year 2012 (about 300 MW have been added so far). Major cities such as Chicago, Denver, and Kansas City have increasing demand for wind energy. Green power marketing projects are starting up all over the country. The Federal government is also required to purchase renewable energy. All of these markets can be served by wind energy from North Dakota. Coal-fired generation cannot supply the green power demand of this new market.

## **Transmission Issues**

The electrical grid is somewhat like a vast ocean, with buckets of water being added and drawn off at many points along the shore. Adding 1000 MW of wind energy to our regional grid, the Mid-continent Area Power Pool (MAPP), is comparable to a drop in the ocean. Preliminary studies performed by Western Area Power Administration (WAPA) indicate that the grid can absorb new generation at various locations in increments of 25 MW to 150 MW. However, the export of thousands of megawatts of new generation will require building new transmission lines. Coal and wind interests will both benefit by working together to develop new transmission access to the marketplace. In the short term, North Dakota should develop those 25 MW to 150 MW parcels. Wind energy means rural economic development and it's good for all of North Dakota.

# Griggs/Steele Wind Power Group

HB 1221- 1222  
1223

Chairman -- Carlson

Vice-chairman -- ???

— ~~Re~~ Committee Members

- Thank you for allowing me to talk on the economic development potential of wind power.
- My name is Keith Monson, and I am here testifying as Chairman of the Griggs/Steele Wind Power Group.
- I don't have a long history in economic development efforts, but I have been around long enough to know that the first and most troublesome hurdle in any effort is usually the funding. Wind Power development has been the single exception to this rule that I have encountered to date. Funding and the expertise to actually construct these projects is readily available, and in fact pushing local groups and the State as a whole to let it happen.
- The second largest hurdle in economic development is usually an agreement as to whether there is sufficient local resources to sustain the effort. In this case the wind regime in ND as a whole is well documented and is literally in everyone's face every day. And, I've never seen anything, especially when it involves using someone else's property for the development, that has what can probably be called unanimous support from those most directly impacted.
- The Griggs/Steele Wind Power Group is currently waiting to hear if its' bid is on a short list for the 80 MW project requested by NSP, now Excel Energy. If I could, I would like to detail some of the benefits we are hoping to receive if this project were to be built in our area.
  1. In anticipation of the project we already have landowners receiving easement payments on land the project would be constructed on.
  2. In the short term we would be looking at a construction boom as the project is being built.
  3. Long-term landowners would receive payments based on the actual production from the turbines on his property. These payments would vary

based on the size of the turbine used, but a figure of \$3000 per turbine per year, should be a conservative number, for a total of about \$200,000/year.

4. In addition, the local property tax generated -- using the rates proposed in the pending legislation --- would amount to about \$250,000 per year.
5. It is also anticipated that this project would create 8 to 10 full time jobs during the life of the project. That conservatively equates to another \$200,000 per year pumped into the local economy.
6. Totaling the straight up cash inflows on a yearly basis, yields \$450,000 per year on what is a relatively small project in light of the potential.
7. Even though these calculations are only valid for the anticipated 20 year life of the contract with NSP, I can't believe wind generated electricity won't be continue to be utilized way into the future.

- In a news conference late last year I forwarded the idea of looking at the generation of electricity, or electricity itself as a product. A product not unlike wheat, barley, or any other of a variety of products that we produce here, for export. Electricity is electricity, - it's a product, - we produce it for export, - and someone on the other end sends us money. That's new wealth, which we then spend in our daily activities that creates additional economic activity.
- California is currently demonstrating a dramatic shortage of a product which we can produce in abundance, with very little investment, and which, as enumerated above has a huge potential for creating new wealth.
- Even though we have the best wind regime in the Nation here in North Dakota, there are concerted efforts going on all over the country, seeking to fill that need. I would like to see North Dakota as a State, take a proactive stance in making sure that everything that can be done, is done, in promoting electricity as a product for export.

*Karl Maxson*

*Chairman*



- Good morning ~~Senator~~ ~~for Mr. Carlson~~, my name is Mike Hohl president of DMI, *manufacturing firm in West Fargo*
- I appreciate the opportunity to talk to you about DMI and the importance of the wind industry to our future.
- I would like to start out by giving you a short history of our company. Dakota Machine Tool was stated back in 1978 ~~to service the sugarbeet industry in the Red River valley.~~
- 1<sup>st</sup> products were sugarbeet pilers and as the company grew we began to branch out into manufacturing process equipment for the sugar factories not only here in the valley but across the US.
- Then a couple of years ago as we saw the struggles that the ag industry was encountering we looked for other opportunities to provide some stability to our company.
- Cold call to Vestas.
- 1<sup>st</sup> order spring of 1999 - 14 - 65 - meter towers delivered to WPS NW of Green Bay, WI near Lake Michigan.
- 2000 - 84 various towers to 8 states and Canadian provinces.
- Expect to manufacture about 150 towers in 2001.
- **So why is this important to you and North Dakota?**
- In 1999 wind towers occupied approximately 7% of our gross sales which declined approx 22% from 98.
- In 2000 wind towers comprised about 80 % of our gross sales which declined another 29% from 99.
- In 2001 we expect wind towers to occupy in excess of 90% of our gross sales which is budgeted to increase 50% from 2000.
- "DMI would NOT be around today without wind power and the associated 120 jobs would not be there either!
- **Wind power = economic development - that is ~~the message we want you to take away with you today.~~**
- As you ND #1 in the world for wind resources.
- I am also sure that you have access to data indicating the wind power potential in ND - depending on who you talk to, the numbers can vary BUT even the most conservative number indicates that this industry has the potential of contributing billions with a "B" over the next fifty years.
- Rough #'s in current dollars, each megawatt cost about \$1mm installed - that means that over that 50 year period \$5bb of direct funds would be pumped back into our state not say anything about the \$2 - 3 thousand of income per wind turbine per year each farmer would reap as well as how many times that sum will be rolled over in each community indirectly with what workers and others employed by the industry spend.
- That's our story.
- Are there any questions

*Tower - 10% of cost*

*Major Utility  
RFP. for 400 towers  
Iowa CA  
Kansas Alberta  
Oregon*

RelerKelsh@aol.com

01/31/2001 01:05 PM

To: mbranden@state.nd.us, dseverso@state.nd.us

cc:

Subject: Fwd: Sunset Clause Testimony

----- Message from on -----

To: Al Carlson, Chairman, ND House Finance and Taxation Committee

Re: Wind Energy House Bills 1221, 1222, and 1223

The proposed amendment that would add a sunset clause would defeat the purpose of the bills, that being to promote wind development. The effect of the sunset clause would be to render wind projects unfinanceable. Wind project financing usually depends on long-term power purchase agreements with fixed prices for the electricity sold. Lending institutions and investors accustomed to financing wind development projects would not be willing to fund a project faced with such uncertainty in future project costs.

Respectfully Submitted,

Jay Haley  
EAPC Architects Engineers  
3100 DeMers Ave.  
Grand Forks, ND 58201  
Phone: (701) 775-5507  
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**Testimony of Agriculture Commissioner Roger Johnson  
Submitted by Ken Junkert  
House Bill 1221, House Bill 1222, and House Bill 1223  
House Finance and Taxation Committee  
Fort Totten Room  
January 24, 2001**

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Chairman Carlson and members of the House Finance and Taxation Committee, I am here on behalf of Agriculture Commissioner Roger Johnson. The Commissioner supports HB 1221, HB 1222, and HB 1223, which relate to wind energy development and taxation in North Dakota.

There is great potential for wind energy development in North Dakota. Wind energy experts estimate that North Dakota has the potential to generate 138,400 megawatts of power per year, which is more than any other state in the country. Wind Powering America estimates that the average annual income for a farmer is \$2000 per wind turbine.

Landowner and public interest in wind energy and other renewable energies is growing in North Dakota and throughout the United States. Wind energy is environmentally friendly and allows us to capitalize on an abundant natural resource.

I believe that wind energy development offers a unique opportunity for our state to complement our existing coal and hydropower energy industries, and to offer a new, supplemental source of income for landowners.

Testimony of Agriculture Commissioner Roger Johnson  
House Bill 1221, House Bill 1222, and House Bill 1223  
January 24, 2001  
Page two

While developing new sources of energy is a good idea, one of the biggest hurdles is going to be transmission of power. Therefore, the best way to overcome the hurdle is to make sure the energy partners work together so we can export energy to bigger markets.

Chairman Carlson and committee members, Commissioner Johnson urges a do pass on HB 1221, HB 1222 and HB 1223. I would be happy to answer any questions you may have.

**Testimony on HB 1221, HB 1222, and HB 1223**

**House Finance and Taxation Committee**

**January 24, 2001**

Mr. Chairman, for the record my name is Dale Niezwaag and I am representing Basin Electric Power Cooperative. Basin Electric Power Cooperative supports HB 1221, 1222, and 1223.

New technologies need governmental support through research and incentives to give them momentum to grow. In the energy industry, much progress must be credited to good public policy and government incentive. Many of our members want access to renewable energy. The Basin Electric board of Directors in recognition of growing interest in renewable energy recently approved a wind power development program. Our program will give our members access to wind power either through outside sources or by helping install equipment for groups of cooperatives.

Just this month Basin Electric was awarded the first-ever wind energy loan guarantee from the Rural Utilities Service. That loan-guarantee will be used to finance the construction of up to three turbines. The electricity generated from those turbines will be distributed throughout the Basin Electric service area. Several of member cooperatives in North Dakota have already initiated plans to provide their consumers with an option to purchase wind energy.

Where will wind energy go? We don't know for sure, but we do feel it is important to evaluate it, and the incentives proposed for the state along with the efforts of Basin Electric and its members is a good place to start. Similar legislation is also being proposed in South Dakota.

Basin Electric and its members have always been advocates of sound environmental stewardship and progressive alternate energy research. The development of wind energy and is in keeping with that heritage.

COMMISSIONER OF AGRICULTURE  
ROGER JOHNSON



PHONE (701) 328-2231  
(800) 242-7535  
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DEPARTMENT OF AGRICULTURE  
State of North Dakota  
600 E. Boulevard Ave. Dept. 602  
Bismarck, ND 58505-0020

**Testimony of Roger Johnson  
Agriculture Commissioner  
House Bill 1221, House Bill 1222, and House Bill 1223  
Senate Finance and Taxation Committee  
Brynhild Haugland Room  
March 14, 2001**

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Chairman Urlacher and members of the Senate Finance and Taxation Committee, I am Commissioner of Agriculture Roger Johnson. I am here today in support of HB 1221, HB 1222, and HB 1223, which relate to wind energy development and taxation in North Dakota.

HB 1221 provides a sales and use tax exemption for wind energy equipment, HB 1222 seeks to equalize the taxation value of wind farms with that of coal-fired plants of similar size, and HB 1223 deals with state income tax credits for wind energy turbines on leased land.

There is great potential for wind energy development in North Dakota. Wind energy experts estimate that North Dakota has the potential to generate 138,400 megawatts of power per year, which is more than any other state in the country. Wind Powering America estimates that the average annual income for a farmer is \$2000 per wind turbine.

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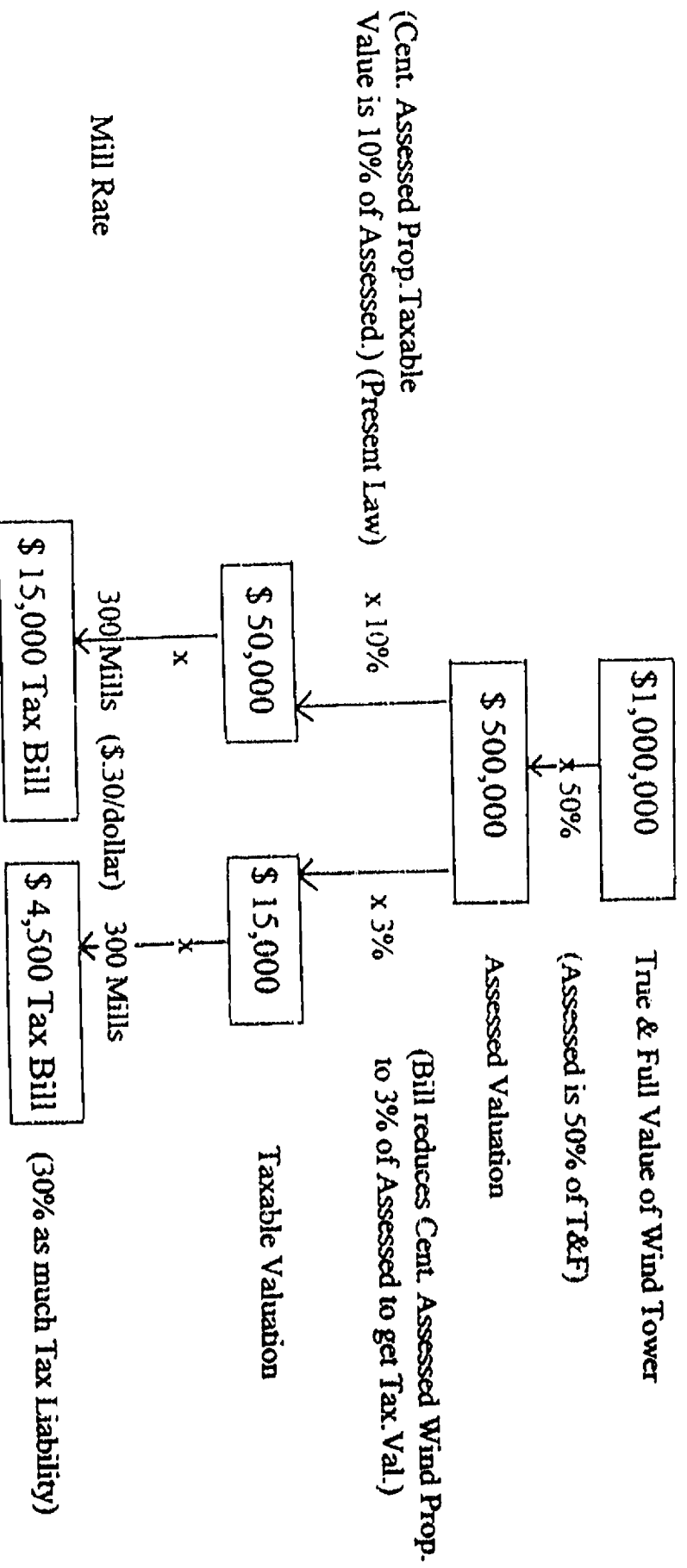
Dakota and throughout the United States. Wind energy is environmentally friendly and allows us to capitalize on an abundant natural resource.

I believe that wind energy development offers a unique opportunity for our state to complement our existing coal and hydropower energy industries, and to offer a new, supplemental source of income for landowners.

While developing new sources of energy is a good idea, one of the biggest hurdles is going to be transmission of power. Therefore, the best way to overcome the hurdle is to make sure the energy partners work together so we can export energy to bigger markets.

Chairman Urlacher and committee members, I ask for your favorable consideration of HB 1221, HB 1222 and HB 1223. I would be happy to answer any questions you may have.

# WIND TOWER PROJECTIONS



300 mills was used because it's a round number and close to 1999 statewide average consolidated mill rate of 285.00. "Consolidated" means a combination of county, school, township, park, etc. Levies that apply to property.

## Possibilities of Wind Towers

0 Wind Towers x 15,000 = 0	10 Wind Towers x 4500 = 45,000
	100 Wind Towers x 4500 = 450,000
	1,000 Wind Towers x 4500 = 4,500,000



Senate Finance and Taxation Committee  
March 14, 2001  
Testimony of Harlan Fuglesten,  
Communications and Government Relations Director  
North Dakota Association of Rural Electric Cooperatives  
on HB 1221, HB 1222, and HB 1223

Mr. Chairman and Members of the Senate Finance and Taxation Committee. My name is Harlan Fuglesten, Communications and Government Relations Director for the North Dakota Association of Rural Electric Cooperatives. Our Association represents 17 distribution cooperatives and five generation and transmission cooperatives based or doing business here in North Dakota. Together, our members are responsible for nearly 90 percent of the investment in coal-based electric generation in North Dakota, and our members sell more than 40 percent of the retail electricity in the state.

In addition to our strong support of our state's coal-based electric generation industry, our electric cooperatives also recognize that wind is another important regional energy resource. Our Association and its members support research and development of renewable energy resources such as wind, water, solar, and geothermal. Great River Energy was one of the pioneers of wind energy development in Minnesota. Basin Electric is actively involved in making renewable wind energy available to its member cooperatives through its PrairieWinds Project, and Minnkota Power's Infinity Wind Energy program will provide wind energy to its member systems. Tentative plans call for both these programs to be operational as early as this fall. While these are small scale wind energy projects, they may pave the way for larger projects in the future.

On behalf of the North Dakota Association of Rural Electric Cooperatives and its member systems, we urge a DO PASS on HB 1221, HB 1222, and HB 1223.

**Testimony on HB 1221, HB 1222, and HB 1223**

**Senate Finance and Taxation Committee**

**March 14, 2001**

Mr. Chairman, for the record my name is Dale Niezwaag and I am representing Basin Electric Power Cooperative. Basin Electric Power Cooperative supports HB 1221, 1222, and 1223.

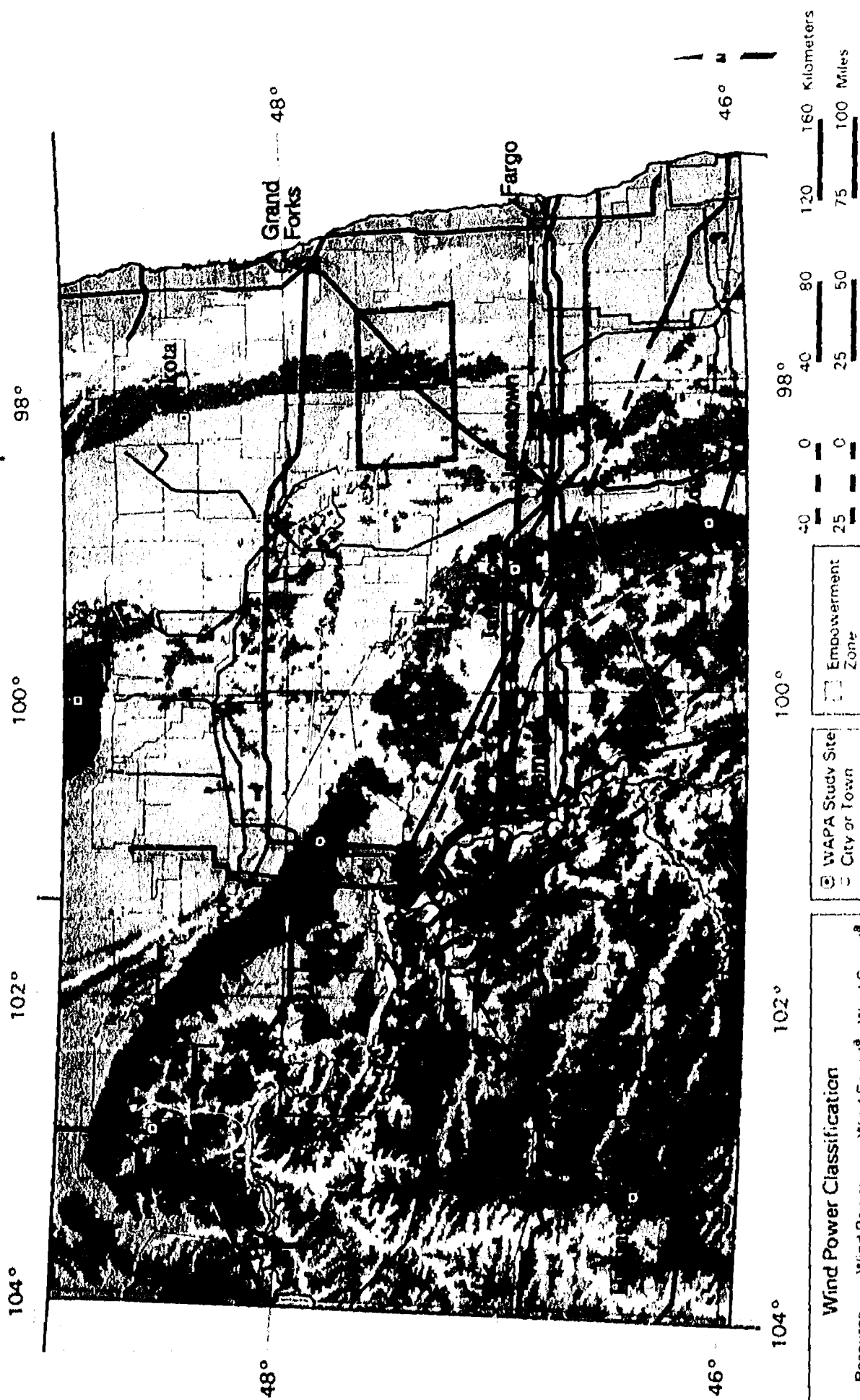
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In January Basin Electric was awarded the first-ever loan guarantee for wind energy from the Rural Utilities Service. That loan-guarantee will be used to finance the construction of up to three turbines. The electricity generated from those turbines will be distributed throughout the Basin Electric service area. Several of member cooperatives in North Dakota have already initiated plans to provide their consumers with an option to purchase wind energy.

Where will wind energy go? We don't know for sure, but we do feel it is important to evaluate it, and the incentives proposed for the state along with the efforts of Basin Electric and its members is a good place to start. Similar legislation has also been passed in South Dakota.

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# North Dakota - Wind Resource Map

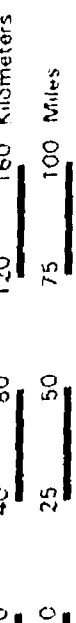


Wind Power Classification			
Wind Power Class	Resource Potential	Wind Density at 50 m	Wind Speed at 50 m
2	Marginal	200 - 300 W/m <sup>2</sup>	5.6 - 6.4 m/s
3	Fair	300 - 400 W/m <sup>2</sup>	6.4 - 7.0 m/s
4	Good	400 - 500 W/m <sup>2</sup>	7.0 - 7.5 m/s
5	Excellent	500 - 600 W/m <sup>2</sup>	7.5 - 8.0 m/s
6	Outstanding	600 - 800 W/m <sup>2</sup>	8.0 - 8.9 m/s

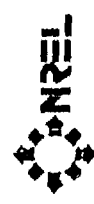
<sup>a</sup> Wind speeds are based on a Weibull k value of 2.0

Transmission Line	
Voltage	
69 Kilovolts	—
115 Kilovolts	—
230 Kilovolts	—
345 Kilovolts	—
Under Construction	—

Indian Reservations	
1	Turtle Mountain
2	Devil's Lake Sioux
3	Lake Traverse
4	Standing Rock
5	Fort Berthold



U.S. Department of Energy  
National Renewable Energy Laboratory



# **Benefits of Wind Development In North Dakota**

**By Jay Haley  
EAPC Architects Engineers  
Grand Forks, ND  
3-14-01**

## **Introduction**

The wind industry has been looking closely at North Dakota for years. The reason is simple; North Dakota has the greatest wind potential in the United States. Until now, there's been no utility-scale wind development with the exception of a few single-turbine installations scattered around the state. Things are about to change. Over the last year, every major wind developer in the world has visited North Dakota in preparation for expansion into the Midwest.

The cost of wind energy has dropped dramatically in the last ten years to the point where wind power is competitive with any form of new generation. The demand for clean renewable energy is growing at an ever-increasing rate. Today, wind is the fastest growing energy technology in the world.

## **What Does Wind Development Mean for North Dakota?**

### **Rural Economic Development**

First and foremost, wind energy means rural economic development. Wind development has the ability to revitalize rural communities. For example, the Griggs-Steele Wind Development Group is planning the development of a 80 MW wind farm to be located in Griggs and Steele counties in North Dakota. The project will consist of 57 wind turbines with a capital cost of approximately \$80 million dollars. It will create around 200 construction-related jobs, and once complete will create 10 to 15 full-time jobs. Local landowners will receive land-lease payments ranging from \$2,000 to \$3,500 per year for each wind turbine placed on their land. This is a new cash crop for the farmer. Land-lease payments to local landowners will total more than \$200,000 annually. All this at no cost to the landowner. In addition, the annual property tax revenue will be approximately \$450,000 (assuming current legislation passes). This scenario can be repeated all over the state.

Wind development also results in increased tourism. People will travel a long way to see a wind farm. Communities in southern Minnesota and northern Iowa have experienced a distinct increase in business volume for hotels, motels, restaurants, gas stations, convenience stores, hardware stores, lumber yards, and cement plants.

## **Manufacturing**

A number of local businesses already benefit from wind development. Tubular towers are being manufactured by Dakota Machine in West Fargo, and LM Glasfiber in Grand Forks manufactures turbine blades. Additional wind development in the Midwest will increase business volume for these industries as well as create opportunities to add turbine assembly plants.

## **Wind and Coal – Different Markets**

There are many counties engaged in North Dakota's coal industry that could enjoy the economic benefits from wind development without negatively impacting the current coal industry. Wind energy is not meant to replace coal or other forms of generation, but rather to complement them. The market for wind energy is growing at an increasing rate. This market is not necessarily in North Dakota. For example, Xcel Energy in Minnesota has a requirement to purchase a total of 825 MW of wind energy by the year 2012 (about 300 MW have been installed so far). Major cities such as Chicago, Denver, and Kansas City have increasing demand for wind energy. Green power marketing projects are starting up all over the country. The Federal government is also required to purchase renewable energy. All of these markets can be served by wind energy from North Dakota. Coal-fired generation cannot supply the green power demand of this new market.

## **Transmission Issues**

Preliminary studies performed by Western Area Power Administration (WAPA) indicate that the grid can absorb new generation at various locations in increments of 25 MW to 150 MW. However, the export of thousands of megawatts of new generation will require building new transmission lines. Coal and wind interests will both benefit by working together to develop new transmission access to the marketplace. In the short term, North Dakota should develop those 25 MW to 150 MW parcels. Wind energy means rural economic development and it's good for all of North Dakota.