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2001 HOUSE FINANCE AND TAXATION

HB 1222

2001 HOUSE STANDING COMMITTEE MINUTES

BILL/RESOLUTION NO. HB 1222

House Finance and Taxation Committee

Conference Committee

Hearing Date January 24, 2001

Tape Number	Side A	Side B	Meter #
1	X		112
Committee Clerk Signature <i>Jamie Stein</i>			

Minutes:

REP. AL CARLSON, CHAIRMAN Opened the hearing and read the fiscal note to the bill.

REP. MIKE BRANDENBURG, DIST. 26, Introduced the bill. Stating this bill brings a positive note to the state. This bill does not have a fiscal note. The power that is generated is paid back to the land owner who has a wind turbine. He submitted a handout which showed wind tower projections. See attached copy.

REP. CARLSON Asked Rep. Brandenburg to explain the overstruck language in the bill.

REP. BRANDENBURG Stated that Jay Haley would speak to that.

REP. CARLSON It appears to have some effect on centrally assessed property.

REP. S. KELSIL, DIST. 11, SOUTH CENTRAL FARGO Testified in support of the bill. Generation from wind energy is the fastest growing form of electrical generation in the world. We have the greatest wind resource of any place in the nation. Many areas of the country are experiencing electricity shortages and within a few years, areas of the upper midwest, will

experiencing the same types of shortages. The Lignite Council's Vision 21 Project will provide a firm resource for this, and the wind energy sector will be working in conjunction with, and in cooperation with, our existing generation industry. I expect the electricity generation industry will soon be acting as one industry, sharing infrastructure, pooling resources to expand and enhance the infrastructure, and marketing this. North Dakota needs economic development, and we need venture capital. He stated he supported all three bills, HB 1221, 1222, & 1223.

REP. HERBEL How does the three percent compare with the states around us.

REP. KELSH Stated there would be other people that would be able to answer that with more clarity. Right now, if we compare ourselves to Minnesota, North Dakota property taxes would be two and a half times what they are in Minnesota on wind generated facilities.

REP. BILL DEVLIN, DIST. 23, Testified in support of the bill. He testified in support of all three wind generation bills, HB 1221, 1222, and 1223. He stated his district has been devastated by the out migration of population over the last twenty years. Wind energy may very well provide the opportunity to reverse that trend. He stated, he looks at wind energy, much like other people, years ago, looked at the coal industry. We have a marvelous opportunity with this legislation. We need to harvest our assets, the wind sweeping across the prairies, and turn it into energy as well as dollars for the people or our state. In this process, we can create unlimited opportunities for the people of North Dakota. I think we have a once in a lifetime opportunity to make this happen. The time is now. We can work hand in hand with the coal industry.

SEN. ROBERT ERBELE, DIST. 28, Testified in support of the bills #1221, 1222, & 1223.

He stated he viewed this as a strong opportunity for our state. Don't have to worry about reclamation. This is an opportunity to stabilize our population. We all campaigned on economic development and talked about increasing our tax base, this can do that quite well.

SEN. KEN KROEPLIN, DIST. 23, Testified in support of the bills. This is true economic development which will create new wealth. It doesn't come along all that often.

JAY HALEY, EAPC ARCHITECTS ENGINEERS, GRAND FORKS, ND, Testified in support of HB 1221, 1222 and 1223. See attached written testimony

REP. CARLSON Referred back to Rep. Herbel's question, What are the surrounding states doing, what are they centrally assessing, and how does our three percent compare to the surrounding states.

JAY HALEY The tax in Minnesota is almost all centrally assessed. The comparison that we have done, suggests that the same wind farm in North Dakota, would be taxed at a rate two and a half times higher than that same wind farm in Minnesota. This tax bill addresses that and puts it on an equal playing field with Minnesota, so that the tax should be comparable from state to state.

REP. DROVDAL Wind energy isn't a new concept, it has been around for quite a few years, What has changed in the last ten years to make it attractive to put up wind plants in North Dakota now?

JAY HALEY I have been involved with this business almost twenty years now, over that twenty years, if I heard it once, I heard it a thousand times, is wind energy doesn't make sense, it is not reliable, etc. Maybe the last fifteen years that has been true, but what happened since 1985, they have been making incremental design improvements and technology, today you have some

of the finest, most reliable electrical generating technology that exists. Today, these wind turbines are routinely showing an availability of ninety nine plus percent. They are rarely down for unscheduled reasons. The cost of wind generation has come down. The wind generation is the least form of new generation. There is an opportunity before us today, that probably didn't exist five years ago.

REP. BRANDENBURG Asked Mr. Haley to explain the size of the turbines.

JAY HALEY We are not talking about the old wind chargers of yesterday, that some of you are familiar with. These are large utility scale wind turbines. The generation capacity of these machines is going to range from 750 kilowatts up to 1.5 megawatts. In terms of size, these machines are about 260 feet tall. The blades are each, in the neighborhood of 200 feet long. At the tip of its arc, the blade will be approaching 400 feet in the air. Each of those blades weigh about 9,000 pounds. This is not your grandfather's windcharger.

REP. HERBEL Like all of the other entities that are interested in developing energy, have you checked on the transmission of the energy.

JAY HALEY There has been quite a bit of work done on transmission issues. There have been, to my knowledge, five studies that have been completed or underway to identify the limitations and the existing capacity that is available on the grid. In the short term, wind development in North Dakota, I see a short term and a long term. In the short term, there are pockets of transmission capacity available. They exist in pockets of twenty megawatts here, one hundred megawatts over here, the largest pocket is probably one hundred fifty megawatts or less. In the short term, maybe the next three to five years, I expect to see those pockets to be developed by other projects, and that will help to get this industry going. There is a lot of work being done in

the long term, where we will go to a large scale and transmit that directly to one of the largest centers. When you do that, what you have effectively done, is taking a load to Chicago and stuck it right in the middle of North Dakota.

REP. DROYDAL We in North Dakota, have an economic development council who works very hard in bringing in new businesses, this appears like a new type business that would come in here, in the case of the EDC, they can provide a local tax exemption for these same property taxes this bill is debating, do wind energy turbine companies qualify for these EDC exemptions in property tax?

JAY HALEY I asked that question and the answer was that probably yes, but you need to apply.

REP. CARLSON Asked what the capability was for each of these towers, how many megawatts of power do they produce?

JAY HALEY One megawatt machine would provide enough power on an annual basis to power approximately three hundred homes.

REP. CARLSON Is that the size you are talking about, the one megawatt tower?

JAY HALEY It is ranging from seven hundred fifty kilowatts up to two megawatts. The machines which are in production today are about 1.3 to 1.5 megawatts.

REP. CARLSON Asked how they determined what the landowner receives?

JAY HALEY It is based on an industry average, it is about two percent of the gross revenue of the project. In terms of how many kilowatt hours the turbines produce on a wind farm, take two percent of that, you get a range of somewhere in the neighborhood of two thousand dollars per year. The larger 1.5 megawatt machines will probably generate something in the neighborhood of thirty five hundred to four thousand dollars per year.

REP. CARLSON At what wind level will your turbines function?

JAY HALEY These machines will start up at approximately ten miles per hour. When you are standing on the ground and think it is a calm day, more than likely, there is a ten mile per hour wind two hundred and fifty feet up. They don't produce a lot of power in a ten mile per hour wind, but as the wind increases, the power outflow increases, at thirty five miles per hour, these machines will be putting out their full rate capacity. At about sixty miles per hour, the machine will shut itself off, to reduce the wear and tear of the machine. The machines are designed for a wind rating of one hundred forty miles per hour.

REP. LLOYD How much land is consumed by wind turbines, and how do we transmit it?

JAY HALEY The maximum backup density of a wind farm in North Dakota, is about ten to twelve megawatts per section of land. If you pack them too close, they interfere with each other, then they rob energy from each other. You will have two to five or seven turbines in a cluster. Those turbines will then be cabled underground to a transformer, which would be located centrally with that cluster. From that collection transformer, it would more than likely be cabled underground to a substation. Once you get to the substation, you can go overhead with wires and transmit the power out of the area.

REP. LLOYD How much tillable acres would still have to farm?

JAY HALEY If you put the maximum packed density, ten to twelve megawatts on a section of land, you could still use ninety eight percent of that land.

REP. LLOYD What if I am disking my field, and my disk hits that turbine, what happens?

Or my tractor runs into it.

JAY HALEY You will probably have to repair your tractor. It is routine to see a crop go right up to the foundation of the tower. It is also routine to see cows grazing right up to the tower. They fit in very well with an agricultural picture.

REP. CARLSON Another question that comes to mind, is the environmental issue, and the wildlife issue, I would wager, someone will think you will kill a bird.

JAY HALEY The wind industry, many years ago, had an incident in California, where inadvertently on one of the wind farms, placed in the middle of a city of prairie dogs. The significance of that is that, prairie dogs along with hawks and eagles, thought these were nice perching posts, there were a lot of birds killed and that caused alarm amongst the Audobon Society and the wildlife folks and the wind industry. The result of that is that every wind farm has gone in with the U.S. Fish & Wildlife, and Ducks Unlimited, it has been very carefully monitored, and what they learned is, that California is a unique and isolated case. The U.S. Fish & Wildlife folks have put together a document which, if approved, will allow wind development on grassland easements on a case by case basis.

REP. CARLSON You were saying that the top of the blade is four hundred some feet, in a lot of places in North Dakota, that would be the highest thing around.

JAY HALEY The U.S. Fish & Wildlife has told us, that the impact is not what the concern is, these machines turn very slowly, the collisions really are not a concern for them. The concern they have is, putting these turbines in the grassland areas, which may disturb their nesting sites.

REP. SCHMIDT Have you got any data regarding the cost of maintenance for one of these chargers?

JAY HALEY The wind industry keeps extensive data on maintenance. Typically, what they do is, they have a scheduled maintenance routine twice a year they go through a maintenance procedure, which may take two people about a half a day to complete. The machines are available to operate ninety nine percent of the time. The scheduled down time on these machines is very minimal.

REP. CARLSON How do you envision the wind industry's cost of transmission, getting your power to a main transmission line, or in the building of a transmission line?

JAY HALEY It would be the same as any other utility. We make a request to transmit power on a particular line. Studies are done whether or not there is capacity on that line to fulfill your request. They also look at whether there are any system upgrades which are necessary to fulfill that request. If there is enough capacity and there are some upgrades that are required, the wind developer will pay for those upgrades, just like any other utility would.

REP. CARLSON What if it is thirty miles to the main transmission line you want to get to, who is going to pay for the line to get it there?

JAY HALEY The developer of the wind field.

DENNIS ANDERSON, EDGELEY, CHAIRMAN OF WIND DEVELOPMENT GROUP,

Testified in support of the bill. They are currently working on a twenty megawatt project, but are approved for a one hundred megawatt project. Are currently working with people in Kulm and Ellendale areas, two counties and three school districts. We will be working on a thousand megawatt project in the hill area from Highway 46 to the South Dakota line. We want to see one thousand towers put in there. One megawatt tower is one million dollars. You take one thousand towers times one million dollars, that is a billion dollar project. We understand that it

