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ROLL NUMBER

DESCRIPTION

1385

2005 HOUSE INDUSTRY, BUSINESS AND LABOR

HB 1385

2005 HOUSE STANDING COMMITTEE MINUTES

BILL/RESOLUTION NO **HB 1385**

House Industry, Business and Labor Committee

☐ Conference Committee

Hearing Date **26 January 05**

Tape Number	Side A	Side B	Meter #
2		X	0 - end
3	X		0 - 4
Committee Clerk Signature Jan Prindle			

Minutes:

Chairman Keiser opened the hearing of HB 1385.

Rep. Steven L. Zaiser, District 21, introduced the bill. (Testimony attached.) He alerted the Committee that there will be a friendly amendment coming for this bill.

Tim Simons, SEED board member and CEO of Crown Point Wind Power appeared in support of the bill. The source of this bill dates back to the latter days of Clinton administration when environmental groups, utilities, and renewable energy companies got together to address the future electrical needs in the US. At the time that they came up with a method of using natural gas as the prime method of producing new sources of electrical energy in the US. During that period of time, hundreds of thousands megawatts of gas was used. It wasn't exactly what they anticipated would happen.. In other states that promote wind energy products, like in MN, they have mandated some amount that has to be paid by public utilities for small generation. In ND because of our great resource here we like to think wind is one of best resources, it's one of

the cheapest methods of producing electricity. We like to call this bill the farmer's fertilizer and homeowner's heating reduction act.

Rep. Ruby: How do know the amount of the avoided cost?

Simons: There's always a problem with the avoided cost. There's the installed cost and the avoided cost. Installed cost for coal, gas, and wind is about $450 - $500 a KW installed for gas, about $1000 per KW wind, and depending on who ask between $2,000 to $4,500 for coal. Then comes the term "avoided" cost. That means if I don't dig out the call then I avoid the cost of digging out the coal, but my other facilities costs remain the same. So the avoided cost of coal is based upon the 1954 price of digging it out of the ground. It's about 1.5 - 1.8 cents per kilowatt hour. Because in the increase in the amount of natural gas that we're using, we have two avoided costs. One is for the Peakers and one for the combined sizers. That's between 3.71 and 5.71 per KW hour. That's at the wellhead if we don't burn it. Do you understand that, do you follow?

Chairman Keiser: If you say yes, you're going to be explaining it to the rest of the Committee!

Rep. Froseth: In easy terms then is what this means is it will make wind energy cheaper?

Simons: No. It will make the cost of heating your house and your fertilizer cheaper.

Froseth: It will make the electricity generated wind cheaper than the electricity generated by any other source.

Simons: No. Still the cheapest source of electricity is generated by present mine mouth coal facilities. What we don't want to do is right now during this period of time is burn that gas when we have all this wind available. If we are using wind and not taking any money for other

costs, if they're not burning that gas there's a price for not burning and that's what they should pay wind. Did I get there yet?

Froseth: The end result to me is that the price of wind generated electricity will be cheaper than it presently is if this bill passes?

Simons: No. It will not.

Rep. Kasper: The way I'm reading this bill is that it's a guaranteed requirement that the company's have to buy wind energy and you're setting minimum price. Is that what the intent of this bill is. It's going to guarantee a market for the wind energy that's being produced in ND.

Simons: It would require projects under 3 megawatts, in SD it's under 2, to purchase that power at the avoided cost.

Rep. Kasper: In that case you have a guaranteed purchaser of your power under 3 megawatts.

Tony Straquadine, manager of human resources, Alliance Pipeline, testified in favor of the bill. **(Testimony attached, includes map of where Alliance operates).**

Rep. Kasper: Where is this waste heat coming from?

Straquadine: It's coming from our natural gas compressors. Today we three stations, 35,000hp natural gas turbine compressor that is used to move the natural gas through our system. We don't own the gas, but we are required to operate those units to move that gas from Canada to the Midwest.

Rep. Boe: Your natural gas powered pumps--is that the most efficient way to pump or is electricity cheaper than burning the natural gas?

Straquadine: Today there is an argument relative to the base load availability of electricity. Whether we could put electric compression in in place of the natural gas compression. Our

system was initially designed based on the availability of natural gas through our system that we use to move that gas, to compress it. We've done some additional studies for expansion and may put in electric compression.

Rep. Keiser: I don't want to divulge any proprietary information but if we're going to guarantee the rate and at the rate this is currently being produced, I have to assume that your cost to produce a unit today is significantly lower than what it is costing present providers. If your cost is significantly lower, it's economically viable.

Straquadine: I don't think I would say that as much as by passing this amendment it makes it more attractive for us to consider the economic viability in this project. Yes. It would be more viable.

Steve Schultz, Otter Tail Power Company, testified in opposition to HB 1385. **(Testimony attached.)**

Kathy Aas, representing Xcel Energy, testified in opposition of the bill. **(Testimony attached.)**

Rep. Ruby: Could this possibly create a situation where it risk having reliable energy if you are forced to purchase a large amount and then it's not available because it's not windy.

Aas: Yes. I understand it could.

Dennis Boyd, MDU Resources Group and MDU, testified they are very much opposed to HB 1385. We agree with the feelings offered by Otter Tail and Xcel and are very much opposed to this bill.

Dale Niezwaag, representing Basin Electric Power Cooperative, testified in opposition to the bill. **(Testimony attached.)**

Rep. Thorpe: You mention the gas generated peaking plants. How many of these does Basin own and where are they located.

Niezwaag: We have three sites: One in Iowa, nine in Wyoming, and we're building one in Aberdeen SD. The nine in Wyoming were put there to handle the coal bed methane load that was building up faster than we could a generation source built or build transmission into it. We put that there to fill that immediate need.

Rep. Thorpe: In looking at your diagram here, there are some situations where people are producing energy with small units and use what they can use and the rest is pulled into the system. I know there is one such situation in Minot now. Does this take away the ability of the power company to negotiate that separately? It would probably raise the cost of buying the power from that generator. Is that correct.

Niezwaag: That's correct.

Rep. Boe: Do you envision as wind energy is developed is there going to be more need for more peaking plants?

Niezwaag: We need to have a back up source. You need to have the ability to provide power all the time. Whether we do that with a coal plant or a peaking plant, I can't say. In our area, depending on your point of view, you are blessed or cursed, with low cost coal. It is very cheap to distribute. In cities they have installed a lot of natural gas peaking plants. In that case where you have those plants and the price of gas is high and the wind is blowing and you can substitute the wind energy for those plants that's a good thing to do. That's when wind is a good fit. In our case where we only use gas generating for the hottest and coldest days of the year, it's not a good thing.

Rep. Keiser closed the hearing on HB 1385.

(There is attached written testimony in favor of HB 1385 submitted by Dakota Resource Council.)

2005 HOUSE STANDING COMMITTEE MINUTES

BILL/RESOLUTION NO. **HB 1385**

House Industry, Business and Labor Committee

☐ Conference Committee

Hearing Date **26 Jan O5**

Tape Number	Side A	Side B	Meter #
3	X		200 - 572
Committee Clerk Signature	Jan Prindle		

Minutes:

Chairman Keiser opened the work session on HB 1385. He said that Rep. Zaiser said that there may have been a misstatement made in the opposition testimony relative to PERPA

Timothy Simons, Crown Butte Wind: PERPA is the Public Utility Regulatory Policy Act which is federal and the policeman for PERPA is FERC. There's a couple of things he was addressing there especially for the consumer owned utilities. They were talking about the IOWA case say that yes, we're governed by PERPA, the law, but the policeman can't. They are the department of energy and we are the department of agriculture. That's slowly being cleared up to see how much they have to comply with PERPA is FERC is the policeman. The second thing is PERPA says that for projects over 100,000 watts and 20 megawatts if they are a qualifying facility the utility will have to buy electricity at their avoided cost and avoided cost shall be determined by the state. In this state it's the PSC. The PSC then says okay what is your avoided cost and up till now the avoided cost, and this is going on in SD now and in March they

will have a meeting on that. The point of it here is it the avoided cost of new generation or the avoided cost of 1954 coal extraction. Of course, they want to say it is 1954 coal extraction to bring the costs as low as possible. The PSC can determine what that avoided cost is according to FERC.

Chairman Keiser: Committee members what are your wishes. There was an amendment offered on this bill. I want to point that out for the Committee members. What are the wishes of the Committee?

Rep. Boe: I move a **Do Not Pass.**

Rep. Ruby: I second.

?: I don't like the idea that we have to subsidize the wind energy. I think that it should make it on its own merits.

A roll call vote was taken.

Yes: 14 No: 0 Absent: O The Do Not Pass motion carried.

Rep. Boe will carry the bill.

FISCAL NOTE

Requested by Legislative Council
01/18/2005

Bill/Resolution No.: HB 1385

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.*

	2003-2005 Biennium		2005-2007 Biennium		2007-2009 Biennium	
	General Fund	Other Funds	General Fund	Other Funds	General Fund	Other Funds
Revenues	$0	$0	$0	$0	$0	$0
Expenditures	$0	$0	$0	$0	$0	$0
Appropriations	$0	$0	$0	$0	$0	$0

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

2003-2005 Biennium			2005-2007 Biennium			2007-2009 Biennium		
Counties	Cities	School Districts	Counties	Cities	School Districts	Counties	Cities	School Districts
$0	$0	$0	$0	$0	$0	$0	$0	$0

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

We estimate that this bill would cause little to no fiscal impact. If one of the decisions of the Commission is contested, there may be some out of pocket costs for hiring an expert, using the office of administrative hearings to hear a case, or having one of the Assistant Attorneys General handle an appeal. Such costs cannot be accurately estimated at this time.

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.*

   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:	Illona Jeffcoat-Sacco	**Agency:**	PSC
Phone Number:	701-328-2407	**Date Prepared:**	01/21/2005

Date: 1-26-05

Roll Call Vote #: 1

2005 HOUSE STANDING COMMITTEE ROLL CALL VOTES
BILL/RESOLUTION NO. HB 1385

House **INDUSTRY, BUSINESS AND LABOR** Committee

☐ Check here for Conference Committee

Legislative Council Amendment Number

Action Taken Do Not Pass

Motion Made By Boe Seconded By Ruby

Representatives	Yes	No	Representatives	Yes	No
G. Keiser-Chairman	X		Rep. B. Amerman	X	
N. Johnson-Vice Chairman	X		Rep. T. Boe	X	
Rep. D. Clark	X		Rep. M. Ekstrom	X	
Rep. D. Dietrich	X		Rep. E. Thorpe	X	
Rep. M. Dosch	X				
Rep. G. Froseth	X				
Rep. J. Kasper	X				
Rep. D. Nottestad	X				
Rep. D. Ruby	X				
Rep. D. Vigesaa	X				

Total (Yes) 14 No 0

Absent

Floor Assignment Rep. Boe.

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

REPORT OF STANDING COMMITTEE (410)
January 26, 2005 1:26 p.m.

Module No: HR-17-1105
Carrier: Boe
Insert LC: . Title: .

REPORT OF STANDING COMMITTEE

HB 1385: Industry, Business and Labor Committee (Rep. Keiser, Chairman) recommends **DO NOT PASS** (14 YEAS, 0 NAYS, 0 ABSENT AND NOT VOTING). HB 1385 was placed on the Eleventh order on the calendar.

2005 TESTIMONY

HB 1385

Testimony, HB 1385
Rep. Steven Zaiser

Good morning, Chairman Keiser and members of the IBL Committee. I'm here to introduce House Bill 1385.

I am a member of an advisory board called SEED, which is the acronym for Sustainable Energy for Economic Development. One of the primary objectives of the board is to promote, facilitate, and create wind energy projects in the state. A fellow member of that board will discuss the bill in greater detail.

This bill is about making wind a viable form of energy in this state. North Dakota is often called the Saudi Arabia of wind, but for that to really be so we need to do a better job of harnessing this renewable form of energy and to work together with the lignite industry to make North Dakota a state with a diversified energy resource. If the whole transmission process could be worked out equitably, the state's revenue potential from the sale of energy is simply phenomenal.

I seriously hope you will consider a "do pass" on a bill that will help level the playing field.

Thank you,

Rep. Steven Zaiser

Alliance Pipeline Inc.
6385 Old Shady Oak Road
Suite 150
Eden Prairie, MN
55344

Toll-Free 1-877-733-3183

January 26, 2004

Chairman George J. Keiser
Industry, Business and Labor Committee
North Dakota House of Representatives

Re: Summary of Testimony on HB 1385

Dear Chairman Keiser:

Representing Alliance Pipeline Inc. is Tony Straquadine, Manager, Human Resources.

Alliance Pipeline is a new, interstate pipeline that moves significant volumes of rich natural gas from Canada to the upper Mid-West markets on a daily basis. The pipeline commenced service in December 2000 and has consistently operated in a safe and efficient manner since this date. We operate 323 miles of 36" diameter pipe in North Dakota.

Alliance currently has three Compressor Stations located in Towner, Wimbledon and Fairmount, with our ND Area Operations office located in Valley City. Since our start-up, we have created 14 good paying jobs in the state.

We have one 35,000 horsepower General Electric natural gas compressor in service at each of the above Compressor Stations. These units are operating over 97% of the time to move natural gas through our system. Currently, it is not economical for Alliance to capture the waste-heat generated by these compressors through the addition of environmentally friendly, waste-heat electrical generating equipment.

We respectfully request your consideration in amending HB 1385 to include electricity generated from waste-heat co-generation systems. Through a proven design, Alliance would have a more economically viable opportunity to generate up to six MW of electricity per day at each station.

Your support in amending HB 1385 to include this 'green power' created by waste-heat co-generation would assist Alliance to grow our business in the State of North Dakota.

Sincerely,

Anthony Straquadine, Jr.
Manager, Human Resources
Alliance Pipeline Inc.

Call Before You Di

North Dakota One-Call (800) 795-0555

ALLIANCE® pipeline

Bottineau County
33.46 miles of pipe
180 Landowners
$464,017.17 in Property Taxes

Pierce County
25.55 miles of pipe
140 Landowners
$447,111.29 in Property Taxes

Renville County
5.24 miles of pipe
41 Landowners
$75,358.92 in Property Taxes

Benson County
3.87 miles of pipe
27 Landowners
$68,892.04 in Property Taxes

McHenry County
49.89 miles of pipe
272 Landowners
$849,731.12 in Property Taxes

Wells County
27.31 miles of pipe
203 Landowners
$431,369.46 in Property Taxes

Eddy County
4.81 miles of pipe
25 Landowners
$107,704.17 in Property Taxes

Stutsman County
12.95 miles of pipe
84 Landowners
$196,011.30 in Property Taxes

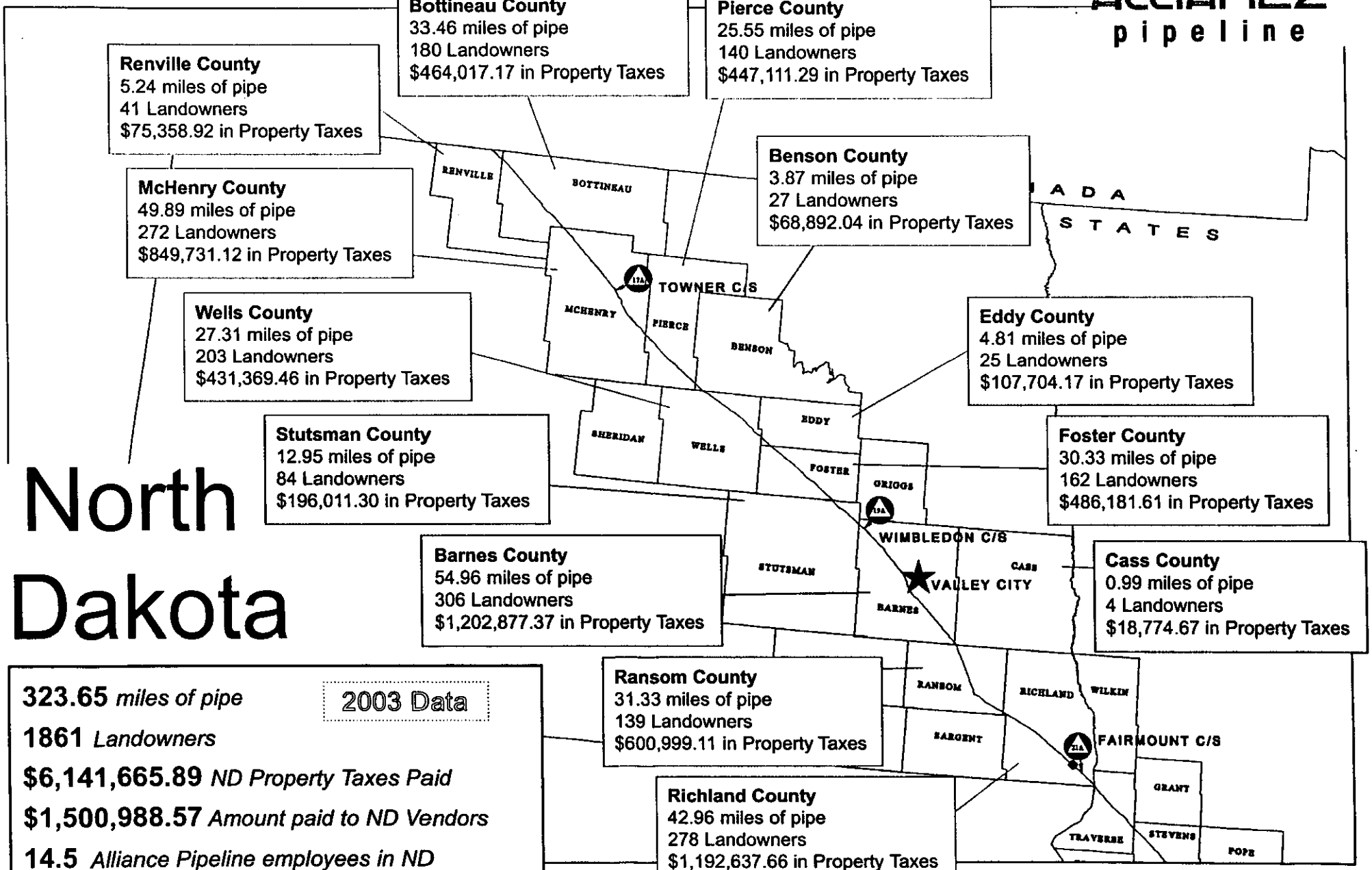
Foster County
30.33 miles of pipe
162 Landowners
$486,181.61 in Property Taxes

Barnes County
54.96 miles of pipe
306 Landowners
$1,202,877.37 in Property Taxes

Cass County
0.99 miles of pipe
4 Landowners
$18,774.67 in Property Taxes

Ransom County
31.33 miles of pipe
139 Landowners
$600,999.11 in Property Taxes

Richland County
42.96 miles of pipe
278 Landowners
$1,192,637.66 in Property Taxes



North Dakota

323.65 *miles of pipe*

2003 Data

1861 *Landowners*

$6,141,665.89 *ND Property Taxes Paid*

$1,500,988.57 *Amount paid to ND Vendors*

14.5 *Alliance Pipeline employees in ND*

Testimony of Steve Schultz on behalf of Otter Tail Power Company
Concerning HB 1385

Mr. Chairman and members of the committee, my name is Steve Schultz, and I represent Otter Tail Power Company. I am here today to express our opposition to HB1385.

Under the Public Utilities Regulatory Policies Act of 1978, commonly referred to as PURPA, authority for wholesale transaction rates specifically resides with the Federal Electric Regulatory Commission (FERC). Numerous states have tried to establish rates above true avoided costs and in every case that was challenged in front FERC the law was struck down. One of the most recent cases involved the Iowa legislature attempting to set a wholesale price above true utility avoided costs. As with other cases, FERC struck down the state law.

Section 18CFR292 is the section of PURPA that deals with this sort of transactions.

We understand that the proponents of wind generation are trying to help wind be more competitive in the market place but they must find a way to do this within the existing law framework. Passing a law that clearly violates federal law will simply waste the time and financial resources of all the impacted parties.

Xcel Energy Testimony
HB 1385
House Industry, Business and Labor Committee
January 26, 2005

Good morning, Mr. Chairman, Members of the Committee. For the record, my name is Kathy Aas and I represent Xcel Energy.

Xcel Energy opposes HB 1385 for a number of reasons, top among them is the fact that this bill could create significantly higher electricity costs for North Dakota citizens. This bill favors wind developers at the expense of our customers at a time when electric rates are on the verge of increasing for numerous other reasons. Please let me explain.

HB 1385 requires our customers and us to pay more for electricity than we do under current PURPA rules and ND tariffs. It favors wind developers at the expense of our customers at a time when electric rates are on the verge of increasing.

The bill states that the Public Service Commission shall require a utility to pay for electricity generated from any wind generation facility of three megawatts or less, an amount that is the avoided cost of producing that electricity from natural gas. It is not clear whether this is just the energy cost from a natural gas facility or whether it also encompasses the capacity value from the natural gas facility. For our discussion today, let's assume those who drafted the bill intended it to refer just to the energy savings.

If our interpretation is correct, this means our company would be paying more under this mandated pricing system the energy would cost under the present bidding process we use. Right now, with federal production tax credits, we expect to pay at most $35/MWh (3.5¢/kwh) for wind-generated electricity in North Dakota and Minnesota.

This bill would have us pay about 4¢/kwh or more, a 14% increase over what we would otherwise pay. And, increased costs for us, ultimately mean higher prices for customers.

Secondly, HB 1385 could create an administrative nightmare, similar to the situation that exists in Minnesota whereby a consortium assembles a large wind facility (50-100 MW) and then parcels the facility into 3 MW ownership blocks and claims a right to the special tariff for each 3 MW block. You can see how these costs could add up quickly and through this loophole, cost our customers more for their electricity.

Thirdly, this bill removes flexibility from utilities. Right now, the Public Utility Regulatory Policy Act (**PURPA**) requires us to pay avoided costs for wind generation. We currently use the 3.5¢/kwh rate mentioned earlier or a lesser amount developed by using the hourly decremental cost of generation on our electric system.

Lastly, this bill provides no cap on the amount of wind we would have to buy from this source of wind generation. Smart developers could push hundreds of megawatts of wind-generated electricity at utilities without consideration of the impacts on the extra ancillary service costs wind creates nor on the limitations of our present transmission system to get this electricity to customers who need it, in this state or beyond.

In conclusion, as a company we work diligently to keep prices reasonable for our customers. We strive to maintain a balanced portfolio of energy resources, constantly balancing the cost of various generation types and their effect on the environment. This bill raises serious concerns about our ability to keep our rate low and maintain a reasonable mix of energy sources. We strongly urge you to vote no on HB 1385.

Dale Niezwaag - Basin Electric Power Cooperative
North Dakota House Bill No. 1385
House Industry Business and Labor Committee
January 26, 2005

Mr. Chairman and members of the committee, my name is Dale Niezwaag and I am here representing Basin Electric Power Cooperative in opposition to HB 1385. This bill attempts to do two things, 1) Artificially increase the price utilities pay for small wind turbine projects and 2) Give the Public Service Commission partial control over cooperative rates. We are opposed to both of these outcomes.

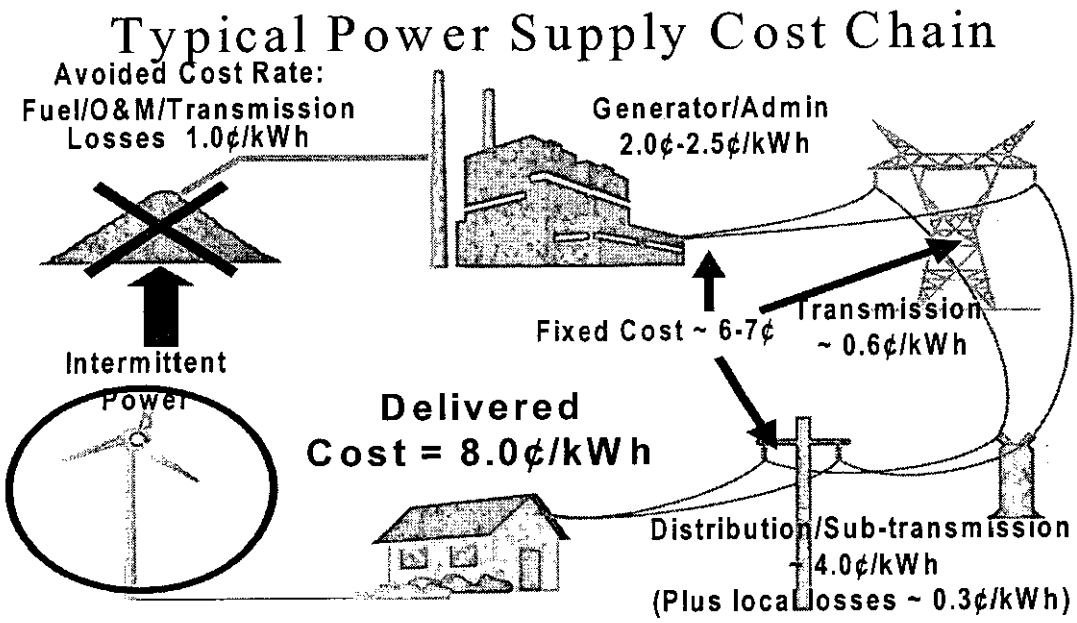
Over the past several years, Basin Electric Power Cooperative has taken a very active role in development of renewable energy in our region. We currently have approximately 87 MW of wind generation resources, about three percent of our supply obligation. Many of our rural electric consumer-owners see wind generation as a source of rural economic development, jobs and increased tax base. We agree.

In fact, with our member's support, we have already committed well over $150 Million of our member's money to wind projects and wind power purchase agreements extending over the next 25 years.

We face challenges in our efforts to develop our excellent wind resource. We need to do it in a prudent and economical manner and be able to integrate those resources without negatively affecting reliability. We do not take lightly, our mission to provide reliable power supply to our members at the lowest reasonable cost.

The bill ties the price for a utility's avoided cost for purchase of electricity from wind generation to the price of electricity produced from natural gas peaking units.

The bill defines avoided cost as "the cost of producing that electricity from natural gas". It does not address the costs of transporting that power to the load (transmission system) or the costs of backup generation when the wind does not blow. Basin Electric's current avoided cost rate for its North Dakota members, which was developed to meet federal guidelines, is 1 cent per kWh, plus a capacity payment for any capacity value provided by the seller. The rate is based upon the fuel savings, plus variable operations and maintenance costs, plus transmission losses that result from not having to generate that electricity from our existing base-load coal-based facilities. The diagram in this handout shows the cost component of generating and delivering electricity:



We also have a wind purchase rate for wind projects that are owned by our member's and are not larger than 2MWs. Under that rate, we will purchase the electricity from those wind projects

at 2 cents/kWh. That rate is based on what we believe is the price we would pay for electricity from a commercial size wind project. It should be noted that the rate is higher than our avoided costs and reflects Basin electric's strong support of wind energy.

In contrast, this legislation ties the price that utilities must pay for wind generation to the price of electricity produced from natural gas. It must be recognized that utilities use gas peaking units only to protect themselves from having to buy electricity on the open market.. The price of natural gas has risen in the last few years and on a BTU basis, natural gas fuel is currently about 10 times as expensive as coal. As a result gas peaking units are on standby throughout the year only operated when needed tomeet peak loads on the hottest summer days or the coldest winter days when demand outstrips base-load supply.

Because of the high cost of natural gas, Basin does not own any gas base-load plants, only gas peaking plants. It is important to recognize that wind is typically lowest during the hot summer days when power demands are high and the gas generating peaking units might be needed.

For example, assuming the cost of gas at $5.00/million BTUs (today's price is quite a bit higher) and using the efficiency of typical gas turbines, the price for wind energy would be about 5.5 cents/kWh if this legislation were in effect. When compared to our true avoided cost of 1 cent/kWh, the subsidy required in this bill would be about $350,000 per year for each 3MW project. The cost of that subsidy would have to come from the pockets of the wind owner's neighbors when they pay their electricity bill.

I encourage a "Do Not Pass" recommendation on HB 1385. That concludes my testimony and I would be happy to answer any questions at this time.

Dakota Resource Council

P. O. Box 1095, Dickinson ND 58602-1095
(701) 483-2851; www.drcinfo.com

Testimony, House Bill 1385
House Industry, Business and Labor
January 26, 2005

Chairman Kaiser and members of the committee.

Dakota Resource Council submits this testimony in support of HB 1385, which will amend and reenact the pricing of electricity generated from wind resources.

This bill will authorize the North Dakota Public Service Commission to require that a public utility, electric cooperative, or municipal electric utility pay for electricity generated from wind resources an amount that is the avoided cost of the public utility's, electric cooperative's, or municipal electric utility's cost of producing that electricity from natural gas from electricity generated by a wind turbine electric generation unit or generation facility of three megawatts or less.

Currently there is a 1.8% annual rate in growth of electricity consumption in the United States. At this rate the energy consumption in the United States will increase 50% in less than 25 years.

The projected imports of foreign natural gas that are based on the Energy Information Administration's (EIA) 2004 outlook have the rate of imports of natural gas rising at 3.1% annually. The projected increase in U.S. imports of natural gas from foreign sources will take us down an energy dependent path that we have already experienced with oil.

This bill will place the value of electricity generated from clean renewable wind energy at the same price as electricity generated from natural gas. The only other source of new electrical generation to base the price of wind on would be to base it on the cost of generating electricity from new coal generation plants, which is about 5.0 to 5.5 cents per kilowatt-hour or more.

Dakota Resource Council supports HB 1385 as it provides a fair price to electricity generated from wind energy for wind turbines or wind generating facilities of three megawatts or less.

PROPOSED AMENDMENTS TO
HOUSE BILL NO. 1385

Page 1, line 2, after "wind" insert "or waste heat co-generation"

Page 1, line 7, after "wind" insert "or waste heat co-generation"

Page 2, line 3, after "wind" insert "or waste heat co-generation"

Page 2, line 6, after "turbine" insert "or waste heat" and replace "three" with "six"

Renumber accordingly