

**2011 HOUSE ENERGY AND NATURAL RESOURCES**

**HB 1460**

# 2011 HOUSE STANDING COMMITTEE MINUTES

## House Energy and Natural Resources Committee Pioneer Room, State Capitol

HB 1460  
01/27/2011  
13649

☐ Conference Committee

Committee Clerk Signature



### Minutes:

Rep. Porter: We will open HB 1460.

Rep. Nelson: I serve district 7 This HB would continue the work that the previous legislatures of North Dakota and what they have accomplished in developing the vast wind resources across our state responsibly. North Dakota is the leader in commercial wind development in the county. I did hand out some proposed amendments. There is some confusion in what limits that would take place. (see attachment 1) The final issue that this bill addresses is to residents of the development area that are not landowners and they may be outside the area that is in the field. With the passage of HB 1460 this industry can continue to grow in a manner that would continue the expectation this state has always had in responsibly meeting the needs of the growing energy needs of this country.

Rep. Kreun: On line 19 it "says a commercial wind energy conversion unit" What does that consist of?

Rep. Nelson: My understanding is that it would be the area that is in the field. It is mapped out as the field where the turbines are being placed.

Rep. Kreun: Would this state law supersede the county or any other laws that are in place?

Rep. Nelson: There are some county ordinances that take place. Behind this is that there are standards for compensation. If there is a local setback provision that's in place I don't see this bill get in the way of that.

Rep. Kreun: If you build a wind turbine within a half mile of your neighbor, does that mean you have to compensate him?

Rep. Nelson: A farm application is not a commercial application.

Rep. Kreun: We do have commercial applications out in the rural area, so do they have to compensate their neighbors?

Rep. Nelson: The intent of this bill is not to do that on a one turbine issue. The Definition of a one turbine facility would clear that. This is intentionally open ended from the stand point of a grandfather clause. There a number of pending turbines that may or may not be part of what this committee might want to consider for this law.

Rep. Kreun: If we take this to a subcommittee there is a lot more into this then it appears.

Rep. Damschen: How would we pay one landowner for an obligation and then pay rest without a contract of any kind?

Rep. Nelson: There may be multiple wind turbines in a quarter of land. In a perfect world all of them would be placed far enough back where it wouldn't affect any other landowners. But wind doesn't operate that way. In some places there are better alleys for the wind development to take place. The negotiation would take place with the person where the turbine sits and there is a measurable wake formula that would be developed and used to measure that effect that it has on the neighbor.

Rep. Nathe: You state that the commercial wind energy conversion facility receives compensation. How is that compensation determined?

Rep. Nelson: Yes there is a formula that the Public Service Commission would have to establish. Every contract is buyer and seller contract and that wouldn't change that would be negotiated on a one on one basis.

Rep. Nathe: If I am the adjacent landowner and can't come to an agreement would that stop the development?

Rep. Nelson: Not under the proposed bill. The person that has the land where the turbine is setting would have that final decision?

Rep. Kasper: On line 7 " the Public Service commission shall adopt the formula" and on lines 11 and 12 "the negotiations are done between the private parties" Can you give an example of a formula that the Public Service Commission develops which then enters into private negotiation?

Rep. Nelson: When a wind developer comes in to an area and talks to the landowner that is a private negotiation between the landowner and the wind company. You would determine the value of the wind turbine, if it meets the setback provision by your local ordinance and the wake is on your land that this bill doesn't touch that. The public Service Commission will develop a formula to determining the wind wake and the percent of wind that you are using to develop those kilowatt hours.

Rep. Kasper: Would that require the Public Service Commission to come to each location to take measurements of what the average wind speed and which way the wind blows?

Rep. Nelson: I can't tell you how that would work. I have looked at a number of those formulas and it's not time consuming.

Rep. DeKrey: We have people putting up wind towers for private gain they are not necessarily public power. There is somebody making money off of this. How far should the compensation go?

Rep. Nelson: Those people within a half mile of the development area are the ones that are most affected. The problem is that a lot of people have a problem with wind development but most that have that problem are the ones that aren't getting paid. As the industry grows in this state we will have to acknowledge that sometime. The easement doesn't go up there isn't a higher cost for the adjacent owner. That is not an additional payment.

Rep. Nathe: The way I read this "any facility within a half mile of an owner's resident" so if I have property in the middle of nowhere and not adjacent to a tower then this does not apply?

Rep. Nelson: Right

Rep. Nathe: You state here "in addition to the wind source compensation for audio, visual and other perceptible impacts" What are perceptible impacts?

Rep. Nelson: I don't know

Rep. Porter: Whether there is a residence or not doesn't make any difference it is the wake impact of an adjacent landowner in addition to if there is a residence there that could be a separate issue even if there is no wind impact?

Rep. Nelson: yes if there is a tower on the land adjacent to your land out in the middle of nowhere in the wind wake you would share in that compensation, but you would have to have a residence there within a half mile to share in the last provision.

Rep. Porter: Then there are two components in that legislation?

Rep. Nelson: yes and we did talk about section 2 of the bill to clarify that. The opinion of the Legislative Council we didn't need section 2.

Rep. Porter: If the wind wake off of a tower is at an elevation 200 or 300 feet higher then what the adjacent property is, how is that dealt with?

Rep. Nelson: I will defer that question to Brad Crabtree.

Rep. Porter: Is the wind wake on the prevailing side of the wind farm?

Rep. Nelson: My thought is that it is averaged in that formula.

Rep. Porter: As we are looking at this on a site, potentially it is the whole outside area of the wind farm that would be extended outside the boundary of the wind farm?

Rep. Nelson: I defer that question to those that more involved.

Rep. Porter: What other states or jurisdictions are doing this?

Rep. Nelson: I can get a listing of all those in the country.

Rep. Porter: I would like that.

Rep. Mueller: I am from district 24. There is a lot of wind development going on in Barnes County, and moving into Ransom County. We have 5 wind farms that are running or in the process of becoming up and running. We have heard from some of our constituents back there that they discouraged, in a couple cases they have moved off their place in the country because of the big wind turbine that they look at every day. There are some site issues but I hear more about the noise, I have been out there and haven't heard a lot of noise. The flicker effect and the road inconveniences have all been an issue in our area.

I think it makes a whole of sense as we move into wind energy that everybody knows the rules. That is good thing for those that are going to be affected by the development on their property and also for those people who will come in and do the development.

Other states as indicated by the bill sponsor have developed these kinds of things. We have a lot models out there. The ones that you don't hear so much about are the ones that do have a system

where they do compensate everyone within the footprint even if the land that is in the footprint does not have a turbine on it. HB 1460 expends on that a little bit. It is important for the people who are within a half mile and may not be in the footprint but are the ones that have discouraging things to say about wind development. If they are part of the action in terms of compensation I think those issues would for the most part go away. The bill asks the Public Service Commission to go and get the particulars down. It is something that can be done in determining wind wakes and some other particulars like compensation for those that aren't in that footprint and are being affected in one way or another. It is a big deal for North Dakota and our country when we can develop the wind that is always blowing here.

Rep. Porter: The oil situation is a very different; we dealt on that and say we can't sever the wind. If we would have had that at statehood we wouldn't have any issues in the oil patch either. Where does the money come from to pay for the new players that aren't part of the system?

Rep. Mueller: The bill sponsors did not have any intention of increasing the obligation on the part of the wind development company in regard to a specific spot. What we are talking about is the people that are having that tower put up on their land will more than likely get to share a bit of that. Not every wind turbine that goes up is going to fall into this.

Rep. Porter: If it does not increase the cost then you are taking away from the person who has the tower?

Rep. Mueller: That would more likely be the end result.

Rep. Keiser: I am from district 47. I have had a lot of constituents who have contacted me personally and asked me "what are you going to do about this"? What the bill sponsors are trying to do is to recognize the reality that we have an issue in this state. We have an alternative as policy makers we can say "let's not try and become engaged in this issue" or we can make a decision to attempt to set a course. We recognize that this bill is not perfect but it is easily fixed. The question "what is a commercial entity?" we can define by saying we are generating power for regional distribution and resell or come up with another formula or you need so much capacity of power that you are generating for commercial production and resale.

If we do solve the transmission issue in the United States, wind power is going to become significantly more important to the State of North Dakota and the magnitude of this problem will grow. The Public Service Commission is the agency that represents us on these kinds of issues. They have elected members of the commission that meet with the public have public hearing and develop policies. The residence issue is a big deal. The wind towers do affect the resale of their property. I don't know what the impact to your crops would be if you are on the wrong side of many wind turbines.

Rep. Damschen: why would someone sign an easement for a wind tower to be located on their land if my neighbor can do it and I can collect compensation for living next door?

Rep. Keiser: Because you would get a larger amount of compensation.

Rep. Damschen: Who determines whether I get more benefit or more harm than the neighbor?

Rep. Keiser: This isn't for 10 neighbors this is for within a half mile.

Rep. Damschen: This is part of the problem. If it happens to be 500 feet from another landowner's property and he might not like the determining decision for damages. Where is the line drawn?

Rep. Keiser: The same as where do we draw the line with the oil development?

Brad Crabtree: I am testifying as a landowner and have been a long -standing advocate both of wind energy development and of policies to safeguard landowner rights in the development process. (see attachment 2-3) I am in support of HB 1460.

North Dakota law already recognizes a private property right to the wind resource. Senate Bill 2239 passed 4 sessions ago states and I quote "A wind easement means a right executed by or on behalf of the owner of land or air space a property owner may grant a wind easement in the same manner and with same effect as the conveyance of a interested real property." We have in statute a private property right to the wind resource but we lack corresponding state policy to protect that right. Under section 3803 in the North Dakota Century Code it says "all resource owners within an established unit receive royalty compensation on a formula basis when development affects that shared resource." That is why the sponsors of this bill in my view of thought, thoughtfully proposed unitization as a new approach in Section 1 of this bill. This bill has 2 very different components. One is a bill to establish rules and compensation formulas for the unitization of a wind farm. Section 2 is to establish a separate policy for compensating home owners that live on the edge of a wind farm.

There have been questions about how the compensation would work. For most wind turbines that are on a large parcel of land, they will not affect the adjacent landowner. In those cases where you have an optimal land site and property lines crossing that site it will in those cases be under a unitization approach that is being advocated here. The adjacent landowner based on the amount of their land that is impacted would receive a portion of that wind turbine payment. If there are setbacks the wind turbines wouldn't be located near property lines anyway.

Section 1 would not increase net cost developers because those turbines that are near other property lines, the compensation would come from the annual payments. The proposed policy to compensate an adjacent homeowner is different, that would increase the cost of the wind farm. The landowners that don't get a turbine but are close to a turbine would be entitled as matter of formula for some compensation but they would not have a right to stop that turbine. That is the same way oil and gas works.

In section 2 of the bill It is about the noise and flicker issues these issues are very important to people and what is happening is a small number of residents are becoming a growing voice opposing wind farms because they feel like they are bearing impacts with no compensation. Wind energy is at risk here. It is important to do this in a proactive way.

Rep. Nathe: "Of other perceptible impacts for compensation" What does that include?

Brad Crabtree: I trust the Public Service Commission and the staff with the utilities and the wind developers and the landowners and local governments providing input to come up with a compensation policy that is transparent, equitable and affordable for development.

Rep. Nathe: Would you be opposed to taking that statement out?

Brad Crabtree: No I wouldn't be.

Rep. Kasper: On page 2 of your testimony under your key points you talk about negotiating settlements "when the wind rights of more than one landowner are significantly impacted" how would you define significantly impacted?

Brad Crabtree: This is a for if answer. I would be comfortable with using the data that the wind developer provides to the PSC anyway and they have to develop model in their own projects just to get a project developed.

Rep. Kasper: Each wind situation is unique. How do you come up with a formula that will fit everything and who is the most impacted?

Brad Crabtree: I was referring to all things being equal. The Public Service Commission under Legislation like this would have the flexibility to do what Minnesota did relative to defining setbacks. They don't do what is purposed here. Under Federal law they wouldn't put wind turbines near that duck slue. The PSC could say "tuff luck Brad since your wetlands is not developable the compensation formula does not apply to you."

Rep. Nelson: The wind development doesn't want other wind towers in that close area isn't that correct?

Brad Crabtree: That is right, my focus is private property rights and wind rights because of what happened to my neighbors. Some of the proposed turbines were only 150 feet upwind from my neighbors land, had those turbines been constructed my neighbors who were working with a different developer for 5 years would never have been able to put the turbines on their land.

Rep. Nelson: How is that area being controlled now?

Brad Crabtree: It depends some developers in my area are being very responsible. What they are offering in the contract I have with them is if you have a parcel of land that doesn't get a turbine in the end you will get a wind resource payment is a very fine level of compensation. The difference is that they have some real local ownership among all the landowners together as a group.

Woody Barth: I represent North Dakota Farmers Union. The concerns we hear are about those adjoining landowners and the compensation that they get, so we are in support of HB 1460.

Rep. Porter: Is there any opposition to HB 1460?

Rep. Brandenburg: I represent district 28. We have been talking about property of the people that are affected. What about the property rights of the people can have these wind towers. The more regulations that we have the more hoops that we have to go thru kills projects like this. All of this discussion that you are hearing came out of the hearing at the Energy and Transmission Committee. There is a reason why this industry is here. North Dakota is a good place to put up wind towers and looking at the way they set up wind farms there is a process to it. Look at the size of these wind farms the towers are 300 feet plus. That means if you have to have a 5 rotor setback you are looking at 1500 feet. If you have a 1500 foot setback you are looking at one turbine in a section of land in some places. The industry would like to have 2-3 towers in a section. I think a lot of these things need to be worked out with the landowners. I strongly oppose this bill. A township can zone right now and they can go in and do the same thing which is, share the money with their neighbors.

Illona Jeffcoat-Sacco: General Council with the Public Service Commission: The Commission asked me to appear today to oppose HB 1460. HB 1460 would require the commission to adopt rules establishing a unitization formula to proportionally compensate property owners whose wind resources are affected by the site of a commercial wind energy facility. (see attachment 4)

Rep. Kelsh: What are some of the considerations that the Commission would take into account when they would be sighting a wind conversion of any size?

Illona Jeffcoat - Sacco: the Commission has a list of exclusion and avoidance areas in rule. An exclusion area means you cannot build a facility there whether it is transmission lines, coal plants or wind farms and avoidance area means hopefully you will not build it there unless you have a very good reason and no alternative. We recognize that for wind farms those exclusion and avoidance areas might be different than for a coal plant a pipeline or for something else. We have been working with other stakeholders and representatives with the empower commission in conjunction with the introduction of Senate bill 2196 to try to come up with the most pertinent and reasonable exclusion and avoidance areas for wind farms.

The 1400 feet setback that was discussed a little earlier is not a specific exclusion area today it is not in commission rule. It is in commission presence from other wind farm discussions.

Rep. Kelsh: If a developer comes to you and asks for your sighting of a wind farm and the developer says "this to us is where it will produce the most energy" will this affect the compensation that goes to the landowner and the adjacent landowners?

Illona Jeffcoat-Sacco: I agree with you completely. I think if this is not enacted then this statement will remain true. I don't think the wind developers would site a wind farm based on compensation but I do think there is the potential for the two to start to intrude on each other. You want to have somebody else do it, but for the commission to do it will very much muddy a sighting proceeding.

Rep. Kelsh: Who would you recommend?

Illona Jeffcoat-Sacco: I don't have a recommendation. I think the Legislation did try and figure out a solution to that, I don't anyone is enforcing that. There are certain things that have to be met in state law.

Rep. Damschen: How does it work to require one person to sign an easement to collect a payment? How do they divide that payment up to those that don't sign an easement?

Illona Jeffcoat-Sacco: I share your concern and questioning in how that would work. When I heard the question I had the same thoughts. Where is the money coming from? I do not have a legal method to tell you to use to make such a project work.

John Olson: I am here representing Next Era Energy. This issue was broached by your interim committee and you had several meetings that considered that and did not take action. The word I would use to describe this whole issue is this is a real problem when you start getting into wind rights and trying to come up with a formula to treat this like you would treat oil and water etc. Another thing that happened at that interim committee was that there was a combination of landowners that came in through one of the promoters and testified to a group that formed Empower and they did come up with a footprint of both participating and nonparticipating landowners in this wind farm. Landowners have come up with a solution to address the participating and nonparticipating landowners in a wind farm.

Next Era has no problems with that we are promoting the development of wind farms and if landowners want to get together and thru private contract do that kind of proposal. When you enact a law and then turn it over to a rule making authority based upon this bill we have concerns because we don't know what is going to happen. We have a task force that is meeting with the PSC staff and other people that are from the industry in trying to address some of these issues. We are looking for rules that the PSC can adopt relating to things such as setback, noise and flicker and those kinds of issues. We are going to come up with some good products in answering some of those concerns.



Next Era is in 17 states in the country and we have about 8,000 megawatts of wind power in those states and some provinces. North Dakota is about 1,000 megawatts.

Rep. Porter: We will close the hearing.

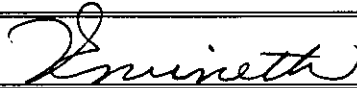
## 2011 HOUSE STANDING COMMITTEE MINUTES

House Energy and Natural Resources Committee  
Pioneer Room, State Capitol

HB 1460  
02/03/2011  
13649

☐ Conference Committee

Committee Clerk Signature



Minutes:

Rep. Porter: We will open HB 1460. HB 1460 came with an amendment sponsors amendment which is .1001 from Rep. Nelson prepared on January 27, 2011

Rep. Kasper: I make a motion to move the amendment.

Rep. DeKrey: Second.

Rep Porter: Is there any discussion on the amendment? Voice vote taken. Motion Carries. We have an amended bill in front of us.

Rep. DeKrey: I move a do not pass as amended.

Rep. Brabandt: Second.

Rep. Porter: Is there any discussion? Do not pass motion prevails

Yes 11 No 4 Absent 0 Carrier: Rep. Kreun

**FISCAL NOTE**  
**Requested by Legislative Council**  
02/08/2011

Amendment to: HB 1460

**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.*

	2009-2011 Biennium		2011-2013 Biennium		2013-2015 Biennium	
	General Fund	Other Funds	General Fund	Other Funds	General Fund	Other Funds
<b>Revenues</b>	\$0	\$0	\$0	\$0	\$0	\$0
<b>Expenditures</b>	\$0	\$0	\$193,600	\$0	\$193,600	\$0
<b>Appropriations</b>	\$0	\$0	\$193,600	\$0	\$193,600	\$0

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

2009-2011 Biennium			2011-2013 Biennium			2013-2015 Biennium		
Counties	Cities	School Districts	Counties	Cities	School Districts	Counties	Cities	School Districts

**2A. Bill and fiscal impact summary:** *Provide a brief summary of the measure, including description of the provisions having fiscal impact (limited to 300 characters).*

Requires the Commission to adopt rules establishing a unitization formula to proportionally compensate property owners whose wind resources are affected by siting a wind farm. This is not possible with existing resources, but will require one additional FTE.

**B. Fiscal impact sections:** *Identify and provide a brief description of the sections of the measure which have fiscal impact. Include any assumptions and comments relevant to the analysis.*

The bill is one section; the whole bill has fiscal impact.

**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.*

No revenues are expected.

**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.*

One formula will not take into consideration all the variable factors that would appropriately allocate compensation amongst various adjacent landowners. Wind is not finite; wind resources are impacted by very site specific characteristics (e.g. tower placement and topographical changes). Each wind farm, each turbine, would require its own analysis and unitization formula. Consequently, the Commission will require one FTE to implement the bill. The estimate is based on a Public Utility Analyst II, Grade 12, and associated costs. We estimate salary and benefits to be \$176,300 and operating expenses to be \$17,300.

**C. Appropriations:** *Explain the appropriation amounts. Provide detail, when appropriate, for each agency and fund affected. Explain the relationship between the amounts shown for expenditures and appropriations. Indicate whether the appropriation is also included in the executive budget or relates to a continuing appropriation.*

We require appropriation for one additional FTE (see B above).

Name:	Mark Gruman	Agency:	PSC
Phone Number:	701-328-2400	Date Prepared:	02/10/2011

V12  
2/3/11

PROPOSED AMENDMENTS TO HOUSE BILL NO. 1460

Page 1, after line 6, insert:

"1."

Page 1, line 9, remove "The formula must provide for a base payment to the owner of"

Page 1, line 10, remove "the property on which is located a wind turbine."

Page 1, line 10, after "compensation" insert "under the formula"

Page 1, line 12, replace "Under the" with "Of that total amount, the formula must provide for a base payment to the owner of the property on which is located a wind turbine. Of that total amount"

Page 1, line 13, remove "formula"

Page 1, line 17, replace "An" with:

"2. In addition to compensation under subsection 1, the public service commission shall provide for compensation to an"

Renumber accordingly

Date: 2-3-11  
Roll Call Vote #: 1460

2011 HOUSE STANDING COMMITTEE ROLL CALL VOTES  
BILL/RESOLUTION NO. \_\_\_\_\_

House House Energy and Natural Resources Committee

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

Action Taken: ☐ Do Pass ☒ Do Not Pass ☒ Amended ☐ Adopt Amendment  
☐ Rerefer to Appropriations ☐ Reconsider

Motion Made By Rep Seconded By Rep.

Representatives	Yes	No	Representatives	Yes	No
Chairman Porter	✓		Rep. Hanson	✓	
Vice Chairman Damschen	✓		Rep. Hunsakor	✓	
Rep. Brabandt	✓		Rep. Kelsh		✓
Rep. Clark	✓		Rep. Nelson		✓
Rep. DeKrey	✓				
Rep. Hofstad	✓				
Rep. Kasper	✓				
Rep. Keiser	✓	✓			
Rep. Kreun	✓				
Rep. Nathe	✓				
Rep. Anderson		✓			

Total (Yes) 11 No 4

Absent 0

Floor Assignment Rep. Kreun

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

**REPORT OF STANDING COMMITTEE**

**HB 1460: Energy and Natural Resources Committee (Rep. Porter, Chairman)**  
recommends **AMENDMENTS AS FOLLOWS** and when so amended, recommends  
**DO NOT PASS** (11 YEAS, 4 NAYS, 0 ABSENT AND NOT VOTING). HB 1460 was  
placed on the Sixth order on the calendar.

Page 1, after line 6, insert:

"1."

Page 1, line 9, remove "The formula must provide for a base payment to the owner of"

Page 1, line 10, remove "the property on which is located a wind turbine."

Page 1, line 10, after "compensation" insert "under the formula"

Page 1, line 12, replace "Under the" with "Of that total amount, the formula must provide for  
a base payment to the owner of the property on which is located a wind turbine. Of  
that total amount"

Page 1, line 13, remove "formula"

Page 1, line 17, replace "An" with:

"2. In addition to compensation under subsection 1, the public service  
commission shall provide for compensation to an"

Renumber accordingly

2011 TESTIMONY

HB 1460



REP. JON NELSON

Chairman Porter and members of the House Natural Resource Committee, my name for the record is Jon Nelson and I serve District 7 in the North Dakota House of Representatives. I am with you today to introduce HB 1460.

Proposed HB 1460 would continue the work that this committee and previous legislatures in North Dakota have accomplished in developing our vast wind resources across our state responsibly. North Dakota is a leader in commercial wind development in the country, and many landowner concerns have occurred in the development of this resource. HB 1460 would provide that the PSC would set forward some very general rules in regard to adequately compensating landowners when that resource crosses property lines.

In Section 1 of the bill, the Public Service Commission would adopt a unitization formula to compensate all landowners who are affected by the placement of the turbine. Although the PSC provides a 1400 foot setback from inhabited dwellings by commission rule, this bill would not alter that setback. Passage of this bill would attempt to provide the industry flexibility to site turbines in a more optimum location which may be closer to property lines and with the base payment, the landowner where the turbine is placed would receive that payment and that landowner would share in the total payment with other landowners who are affected by that turbine.

It is important to note that this does NOT increase the cost of the payment to the industry but rather share the cost of the wind wake with those that are affected. A wind resource is not unlike any other property right. With input from the industry and the general public, a rulemaking procedure seems to be a method that would best formulate a compensation formula that can be used as wind development continues to grow across the state.

The final issue that this bill proposes to address is the issue of those residents of a development area that are not landowners and may be outside the area that is directly inside the development area. We would propose that for those citizens that live within a half mile radius of the development area, a compensation plan to address the sound, sight, and other issues that take place with the siting of a wind turbine, would be addressed.

With the passage of HB 1460, this industry can continue to grow in a manner that would continue the expectation that this state has set in responsibly meeting the needs of the growing energy needs of this country and doing it in a manner that respects the landowners and the citizens that live in the areas that this development occurs.

Chairman Porter and committee members, thank you for allowing me to introduce HB 1460 today and it is my hope that after reviewing and discussing this proposal you will give it a DO Pass recommendation. Thank you.

**Testimony in Favor of HB 1460: To Establish Policies for Allocation and Compensation of Wind Rights and Compensation of Homeowners Adjacent to Wind Farms**

**House Energy and Natural Resources Committee  
January 27, 2011**

**Brad Crabtree  
Landowner, Dickey County  
(701) 647-2041, [crabtree@drtel.net](mailto:crabtree@drtel.net)**

Chairman Porter and Committee members, thank you for the opportunity to testify in support of HB 1460. I am testifying as a landowner who operates a ranch in Dickey County and as a long-standing advocate both of wind energy development and of policies to safeguard landowner rights in the development process. My own land is under contract for development of a future wind farm by enXco for Excel Energy.

As many members of this Committee know, our township of just over 30 residents developed the state's first zoning ordinance for commercial wind farms in 2005. We zoned to protect the commercial wind rights of individual landowners and wind developers—rights that were threatened by the proposed siting of turbines right along the property lines and upwind of landowners without turbines. The affected landowners and their developer would have lost all economic use of that land for future wind development—without consultation or compensation.

Subsequently, a similar situation emerged in Barnes County, which again led to local conflict and, in that case, legal action between developers in district court.

In these cases and others, local landowners and officials were forced to take matters into their own hands through zoning or legal action, but they have consistently stated a preference for uniform state policy to address their concerns.

The reason for this conflict is simple. Wind turbines create wind wakes that diminish the wind resource of nearby turbines, or the wind resource of adjacent land, much like an upwind sailboat steals wind from boats downwind. Designing wind farms to reduce wind wake effects is standard operating procedure for commercial wind developers siting their own turbines, and this legislation would require the PSC to establish a compensation policy that recognizes these impacts on the wind resource of landowners without turbines.

North Dakota law already clearly recognizes a landowner's private property interest in wind. SB 2239, passed four sessions ago, states that a "wind easement means a right . . . executed by or on behalf of an *owner* of land or airspace . . . . A property owner may grant a wind easement in the same manner and with the same effect as the conveyance of an interest in real property." The affirmation of this private property right to a wind resource in statute lacks corresponding state policy to protect that right.

The situation we encounter is not unique to wind development. The early days of oil and gas development in North Dakota saw similar conflicts over correlative rights—the rights of one resource owner relative to those of another. That's why the North Dakota Industrial Commission today regulates the establishment of spacing units for oil and gas pools, and section 38-08 of the North Dakota Century Code

requires that all resource owners within an established unit receive royalty compensation on a formula basis when development affects their shared resource.

That's why the sponsors of this legislation have thoughtfully proposed unitization as a new approach in Section 1 on this bill. Past legislative efforts focused on establishing setbacks for wind turbines from property lines. In response to wind developers who recognize the need to protect landowners' wind rights, but who worry that setbacks will rigidly constraining their ability to develop commercial wind farms, the unitization approach in this bill would allow developers maximum flexibility to site turbines in optimal locations, while making sure that affected landowners without turbines receive due compensation for the loss of the future use of their wind resource.

Here's some key points to consider:

- This bill does not get government into the business of determining overall compensation. That's left to the market and private negotiations between developers and landowners. It merely requires establishing a formula for how that privately negotiated compensation is to be allocated when the wind rights of more than one landowner are significantly impacted. It's important to note that most turbines will not significantly impact the wind rights of neighboring landowners, and this formula would only apply in those cases where turbines are close to property lines.

With the amendments proposed by the sponsors, this bill will not increase overall costs to developers because, in those cases where a turbine affects multiple landowners, the overall per turbine compensation will be shared, but not increased.

- However, the landowner who hosts the turbine still benefits, even in those cases where they receive less compensation for a particular turbine. Here's why: the flexibility of unitization will allow more turbines to be sited in a given area than would be possible under an alternative setback approach.
- While significantly affected landowners without turbines would receive compensation they deserve, they could not in turn stop the siting of a turbine that otherwise meets state and local siting requirements. That makes this legislation development-affirmative and increases certainty that wind developers need to plan and finance projects.
- In short, everybody wins under this approach: developer, landowners with turbines and neighbors without turbines.

Section Two of this bill addresses another important and growing problem: homeowners living right next to a wind farm bear all the burdens of visual impact, flicker from turbine blades and some noise, without receiving any of the financial benefits. This small number of rural residents risk becoming a growing voice in opposition to wind energy development because they feel unjustly burdened without any compensation. Requiring that the PSC develop an appropriate and consistent policy for compensating those rural homeowners in closest

proximity to wind farms will help make them feel like partners in wind energy development, rather than victims.

Finally, it's worth emphasizing that this legislation has been endorsed by North Dakota Alliance for Renewable Energy. NDARE's member energy companies, farm and commodity organizations, economic development organizations and renewable energy advocates want to see the specifics of a policy developed thoughtfully by the PSC with input from all affected parties, just as this legislation would require.

Around the U.S., and increasingly in North Dakota, growing conflict between landowners and rural residents, on the one hand, and wind developers on the other, risks choking off future wind development and the economic opportunity it provides. Therefore, the wind industry has a long-term business interest in transparent, equitable and affordable siting and compensation policies that build support for their industry among landowners and rural residents. That's why many developers already voluntarily implement good neighbor policies, including right here in North Dakota. However, not all developers do so, and the conflict generated by poor practices risks harming the entire industry. This legislation will establish consistent, positive practices across the industry and help ensure that North Dakota remains in a leadership position in wind energy development in this country.

Thank you for consideration of this legislation and I respectfully urge you to vote "do pass" on HB

1460.

## **Who Owns the Wind? An Emerging Public Policy Issue**

As wind energy continues its major expansion in the US, the allocation and definition of property rights related to wind could rival the historical "water wars" of the West. Defining the legal boundaries of wind rights and how they will be allocated is emerging as a major policy issue for state legislatures and regulators.

In determining the allocation of wind rights, it is important to recognize that the land on which a turbine is located does not produce the wind, so any effort to establish a legal wind right to the surface estate needs to be considered thoroughly by all stakeholders. Currently wind project payments to landowners for wind leases are primarily for use of the surface estate, not for the wind itself. However, claims to uninterrupted flow of this natural resource could constrain development of this important resource and slow efforts to achieve national energy security.

Although wind is considered "free", the task of defining rights to the energy in those flowing air molecules is only now coming on the radar screen of risk managers (and trial attorneys). State legislatures will have to act soon to define wind rights, or inefficient litigation will provide that definition through the courts. If that happens, the legal risks of litigation over property boundary wind rights will seriously inhibit the ability of wind developers to build wind projects in many areas.

Separately, "viewshed" and noise concerns will also need to be addressed, as these issues are often used to oppose wind projects. The potential severance of wind rights from the surface estate, can also raise future hurdles for wind development as landowners are impacted by a wind installation, while others receive the benefit.

The main issue arises from the fact that the large wind turbines produce a downwind effect (wake) on the airflow as it passes the turbine blades. This downwind effect reduces the amount of energy that could be extracted by nearby downwind turbines. The original level of energy in the wind stream is not fully reconstituted until some distance downwind from the turbine. When this downwind effect crosses property boundaries, the determination of who has priority rights to the energy in that airflow becomes an issue. Thus far, it has been simply assumed that obtaining a regulatory permit and investment of significant expenditures somehow vests such rights in a wind project. However, the uncertainty of that tenuous principle invites almost certain litigation.

In addition to the reduction in available energy to nearby turbines, the downwind effect of additional turbulence in the airstream can produce additional stresses on nearby wind turbines. Where turbines have insufficient spacing, turbine manufacturers dictate operating limits to mitigate the stresses caused by the turbulence. In turn, that reduces production.

Both energy loss and turbulence diminish rapidly with distance, but as a general rule of thumb, wind developers typically try to space wind turbines apart by a distance of at least

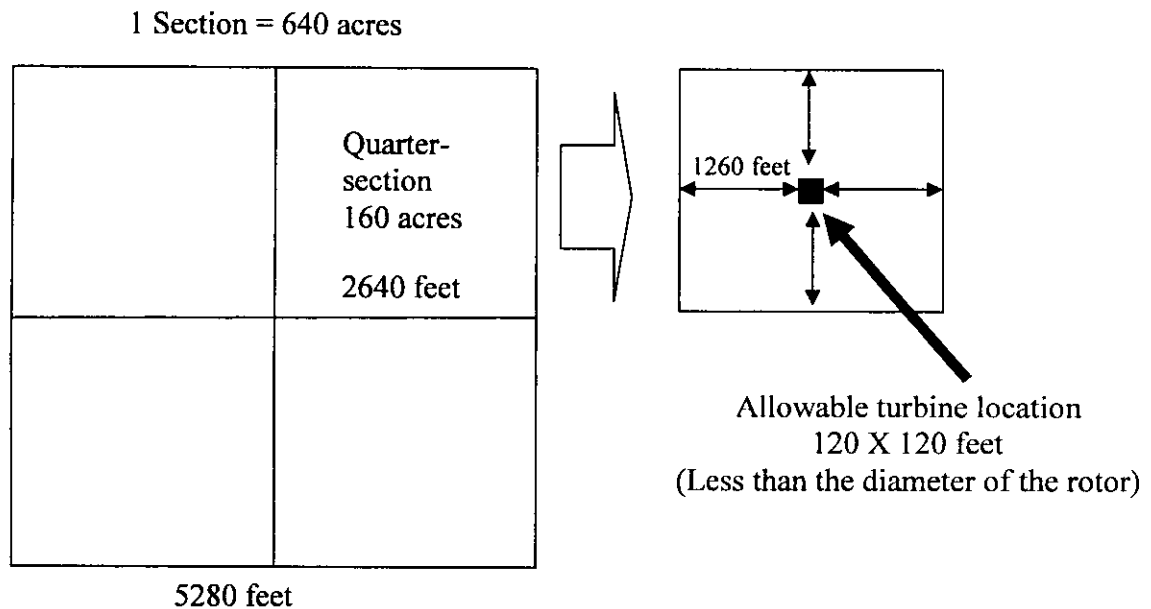
five to ten times the diameter of the turbine rotor, in the direction of the predominant winds. From an engineering and economic perspective, this downstream effect is considered to be reduced to an acceptable level at that spacing. Crosswind spacing in the non-predominant wind direction can be closer, but even then spacing should be three rotor diameters or more. For example, a common size wind turbine of 1.5 Mega-Watts can be expected to have a 70 to 77 meter rotor diameter (230 to 252 feet) or even larger. Selecting even the minimum five rotor-diameter spacing prevents the installation of any other turbine within a distance of 385 meters (1260 feet) from the turbine.

Unfortunately, this need for spacing between wind turbines does not address property boundaries. As a result, property rights to the flowing airstream and allocation of those rights to different property owners becomes a contentious issue.

In some regulatory arenas, five rotor diameter spacing has been established as a required setback distance from property lines. Such a setback requirement makes it difficult to develop wind projects in areas that do not involve extremely large landowner and contiguous holdings. This constraint is almost universal in most areas of the country since property holdings are often in quarter-sections or smaller.

The illustration below shows the constraints established with a setback of five rotor-diameters. Such a setback limits the location of a turbine to the center of a quarter-section. As can be seen from Figure 1 below, the only allowable space on a quarter-section of land would be a small square 120 feet by 120 feet. It is also very likely that such a small location could be a poor wind site or unbuildable. Essentially, such a setback requirement limits wind projects to only large landholders, with smaller landowners unable to erect even a single turbine on their property.

Figure 1: 5 Rotor-diameter Setback Requirements



Even a minimal setback, such as the “fall distance” of a turbine will sterilize major swaths of land from developing its wind resource. For instance a setback of the “fall distance” from property lines within an area is divided into quarter-sections, will sterilize over 50% of that area preventing wind development.

Since it is critical to locate turbines in the best possible location to optimize their production, wind developers need as much flexibility as possible to properly site turbines. This need to site turbines in optimal locations is driven by the physics of wind energy.

The available energy in wind is a function of the cube of the wind speed, which means that doubling the wind speed will increase the amount of available energy by 8 times ( $2 \times 2 \times 2 = 8$ ). In practical terms, the wind speed is affected by topography, not property boundaries. Moving a turbine just a few hundred feet can cause a significant change in average annual wind speed. For example, a mere 1 mph change in the average annual wind speed can change the production of a wind turbine by 15%. Such a supposedly minor difference in wind speed can spell the difference between success and failure for a wind project.

The downwind impact of a large wind turbine also raises the issue of equity among landowners if an adjacent landowner is inhibited from economically erecting a turbine when a neighbor has already erected a large turbine. In such an instance, the existing turbine, if located near the property line can affect the economic viability of another wind turbine nearby the opposite side of the property line.

This equity issue is complicated by the importance of wind turbine placement and the adjacent property may or may not have a viable turbine location within the zone of

influence from the initial turbine. For instance, the adjacent property may contain a valley, a wetland or an even higher hill. The valley or wetland would preclude a viable turbine, while a higher hill may be an even better location.

State legislatures or Congress will need to provide some form of legal certainty to allow developers to make the large investments needed to develop our national wind resources. Just as wildlife is considered a public resource, and is regulated by the state, the use of wind also needs to be allocated with regulatory certainty. Presently neither wind nor wildlife is "owned" by property surface estate, but in the case of wind rights, there is substantial uncertainty of that principle.

For regulatory allocation of natural resources, two possible models are suggested. Each has been successfully used in similar natural resource contexts. The first model is based on the allocation of water rights, primarily in western states, where water is a scarce resource and needed to be allocated on some basis. The second model is the unitization of oil fields.

The first model, which might best be termed "First in Time; First in Right" allocates the resource based on the order in which users demonstrate beneficial use of the resource. The second model "Unitization" has been successfully used in the oil industry. In this model, an area of influence caused by the development of an oil field is determined and that area is unitized. In a unitized oil field, the resource owners in that region submit their resources to a common development and receive the benefits and output in a share proportional to the portion of the resource they submitted.

The purpose of this paper is to explore the pros and cons of each model. Either model could be successfully applied to wind development. It is not the intent of this paper to express a preference, however, a choice must be made if wind development is to progress without delays caused by litigation uncertainty.

### **"First in Time; First in Right"**

This regulatory model approach is essentially what the title implies. In typical western water law, the first user to develop a qualified use of water (i.e., irrigation) from a flowing stream develops certain rights to divert a defined quantity of water from the stream if it is available. That diversion quantity is allocated or "adjudicated" to this user according to applicable state laws.

Later users of water from that stream can still divert water from that stream, but only in quantities that do not affect the earlier users' ability to divert the allocated quantity of water. A priority system exists where later users must recognize earlier users' rights to divert their allocated quantities of water.

This legal model could be applied in a similar fashion to wind rights. If a wind turbine is built, it would have first rights to the energy in the flowing air within a reasonable distance around the turbine. Subsequent developers would need to maintain an adequate



distance from first developer's turbines to avoid significant impacts to the earlier turbine's production. A suggested distance might be five rotor diameters in the predominant wind direction and three rotor diameters in the crosswind direction as earlier described.

The advantages of this model are simplicity and increased investor confidence that a wind project will not be subject to litigation over the wind rights from nearby landowners.

The disadvantage of this model is the perception of nearby landowners that the development of a wind project could affect their ability to develop a project on their own property.

### **"Unitization"**

This model would somewhat mimic the concept used in oil field unitization. When an oil well is drilled, the oil flows to the well from all directions, without regard for ownership of mineral rights. Thus adjacent mineral rights holders could theoretically have their oil drain to the nearby well, without recompense. To address the rights of all owners of mineral rights, the oil field is unitized under a formal procedure. Under unitization, the production of an oil field is then allocated proportionally to the surrounding mineral rights owners, in accordance with pre-determined impact.

This concept could be applied in a similar fashion to wind rights. Conceptually, the affected areas of a wind resource could be allocated either on the basis of a defined wind project boundary containing multiple turbines, or on an individual turbine basis, with the wind resource around each turbine allocated on a proportional basis.

In the case of wind resource allocation, benefits such as wind lease payments would need to be allocated in more than one component. This is due to the fact that the property on which turbines are placed will experience more impact than nearby landowners. A potential allocation of payments among landowners might be:

- Payments for the general wind resource, allocated on a proportional share of the landowners within the affected area (either within the project boundary, or within, say five rotor diameters of each individual wind turbine).
- Payments for direct surface impacts to landowners receiving turbines.
- Payments to landowners with direct surface impacts such as roads and cable easements.
- Payments for other real or perceived impacts.

The advantages of this approach would be the distribution of benefits among a broader base of landowners, reducing potential inequities among those stakeholders. A broader distribution of benefits among the local stakeholders will also enhance community support and minimize potential opposition to a wind project.

The disadvantages of the unitization model are its complexity and the potential for unwilling landowners to be drawn into a project in which they do not wish to participate. However, this could be the case, whether or not an unwilling landowner would have a turbine placed on or near their land.

Another challenge would be determining the appropriate allocation of payments to the various stakeholders. Obviously, a landowner with a turbine would be affected more than a nearby landowner, who would experience no physical impacts whatsoever. Another complication might be the case where a landowner is also the project developer and an area-wide payment schedule for leases does not exist. Defining an adequate payment would be difficult as each party would have opposing incentives for determining payments.

Absent a regulatory formula defining payments, project developers would be challenged on many fronts to achieve a satisfactory balance among the various stakeholders.

### **Conclusions:**

To allow a resource as important as wind energy to develop to its fullest potential, legal certainty will be required for investors to continue to commit the enormous funds involved in development of a wind project. The state must define ownership of wind resources and the boundaries and limits of that ownership.

In considering the allocation of wind rights, it may help to consider how modern technologies already affect the airspace above landowners' surface rights. For instance, aviation already uses the airspace above property surfaces, and a landowner (or a wind developer) cannot erect a structure above certain heights near an airport. Also, microwave and radio towers use the airspace above private property for radio signals without consent of the landowners. Indeed, wind developers must avoid placing turbines within existing microwave paths or where those turbines might affect other technologies, such as military radar, television or radio.

Either of the above models, as well as other models or combinations thereof, would suffice to address the allocation of the wind resource. **It is important to not infringe on landowners' property rights within the boundaries of a landowner's property. It is equally important that a landowner not be able to infringe on the rights of his/her neighbors to develop wind resources. In any case, it will be critical to preclude the ability of any landowner to veto development of a wind turbine or facility when that turbine or facility is not located on his/her property.**

As an example, a Texas court recently ruled on the issue of "viewshed", where nearby landowners filed suit claiming impacts to their views. The court essentially ruled that property rights to viewshed 'end at the property line', hopefully settling that potentially debilitating issue for wind development.

Wind is a free-flowing natural resource that crosses property boundaries and is not “owned” by anyone; nor is it “produced” on any one property. Allocation of that valuable natural resource by state or federal authority is needed soon or the industry will be inhibited by litigation, uncertainty and increased costs – all of which will divert productive investment from an industry that has great potential to enhance national energy security.

*attachment 4*

## **House Bill 1460**

**Presented by:** Illona A. Jeffcoat-Sacco  
General Counsel  
Public Service Commission

**Before:** House Energy and Natural Resources Committee  
Honorable Todd Porter, Chairman

**Date:** January 27, 2011

### **TESTIMONY**

Mister Chairman and committee members, I am Illona Jeffcoat-Sacco, General Counsel with the Public Service Commission. The Commission asked me to appear today to oppose House Bill 1460.

House Bill 1460 would require the Commission to adopt rules establishing a unitization formula to proportionally compensate property owners whose wind resources are affected by the siting of a commercial wind energy conversion facility. We do not believe the Public Service Commission is the appropriate agency to implement these provisions.

The Commission is a regulatory agency with jurisdiction over several types of energy development and utility services in North Dakota. These include coal mining, energy conversion and transmission facility siting, and oversight of generation, transmission and distribution investment for regulated gas and electric utilities. This regulatory authority does not extend to enforcement of standards affecting the relationship between landowners and developers.

The siting act addresses land acquisition practices in three areas but the Commission is not charged with implementing or enforcing those provisions. Likewise, the Commission's authority to approve regulated utility company investment does not include any enforcement authority regarding land acquisition for that investment. Similarly, coal and surface leases are reviewed to ensure a mining company has the necessary landowner consents before a mining permit is issued, but the Commission does not enforce any acquisition standards or lease provisions.

The Commission also sees implementation problems in the language of the bill itself. It will be almost impossible to determine whether an impact is more than minimal (lines 13 and 14). In addition, the rights conferred by lines 13 and 14 could easily conflict with the rights conferred in lines 17 through 21.

These implementation and interpretation problems are compounded by the inherent conflict between oversight of compensation for a project and the regulation of project location based on environmental considerations. One can easily envision both landowners and developers questioning whether the Commission favored compensation factors over environmental location factors, or vice versa.

The Commission does note the bill sponsors have a theoretical point. A wind turbine in one location can impact adjacent landowners, not only the quality of their wind resource but other impacts as well. These are very site specific circumstances, and are already well within the scope of what the Commission can consider in a siting case, and on a case-by-case basis. This would seem to

be a far superior approach to address the concern. In the opinion of the Commission, this further negates the need for this bill, though it does highlight the importance of separate legislation supported by the PSC and the EmPower Commission that would, as a practical matter, give the PSC authority to site all commercial wind farms regardless of size.

For all of these reasons, the Public Service Commission opposes House Bill 1460.

This concludes my testimony. I will be happy to answer any questions you may have.