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Natural Resources Committee
January 27, 2016

[LB824]

The Committee on Natural Resources met at 1:30 p.m. on Thursday, January 27, 2016, in Room 1525 of the State Capitol, Lincoln, Nebraska, for the purpose of conducting a public hearing on LB824. Senators present: Ken Schilz, Chairperson; Curt Friesen, Vice Chairperson; Dan Hughes; Jerry Johnson; Rick Kolowski; Brett Lindstrom; John McCollister; and David Schnoor. Senators absent: None.

SENATOR SCHILZ: Good afternoon, everyone, and welcome to the Natural Resources Committee hearing for today. My name is Ken Schilz, senator from Ogallala; Chair of the committee. I welcome everyone here today. We have most of the committee members here, and those that aren't here at this point, I think, will be showing up momentarily. So if we could start to my far left, we'll let the senators introduce themselves.

SENATOR KOLOWSKI: Senator Rick Kolowski, District 31 in southwest Omaha.

SENATOR McCOLLISTER: John McCollister, District 20 which is the geographic center of Omaha.

SENATOR SCHNOOR: Does that make you feel better?

SENATOR McCOLLISTER: It does.

SENATOR SCHNOOR: David Schnoor, District 15, which is Dodge County, which is northwest of Omaha.

SENATOR LINDSTROM: Senator Brett Lindstrom, District 18, northwest Omaha.

SENATOR JOHNSON: Senator Jerry Johnson, District 23, Saunders, Butler, and most of Colfax Counties.

SENATOR HUGHES: Dan Hughes, District 44, ten counties in southwest Nebraska: Perkins, Chase, Dundy, Hayes, Hitchcock, Frontier, Red Willow, Furnas, Gosper, and Harlan, and almost far enough away from Omaha. (Laughter)

SENATOR SCHILZ: There we go. We also have Senator Curt Friesen, who I think will be here momentarily. He may be introducing a bill in another committee. So when he gets here, we'll

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welcome him here. Also I'd like to introduce Barb Koehlmoos, the committee clerk for the Natural Resources Committee; as well as Laurie Lage, the committee counsel. Pages today, we have Kellie Wasikowski, a sophomore at UNL from Omaha. And Jake Kawamoto, also...I think he's a junior at UNL. So we're happy to have them today. Today we have one bill on the agenda, LB824 by Senator McCollister. And if you're planning on testifying, please pick up a green sign-in sheet. They're on the table at the back of the room. And if you do not wish to testify, but would like your name entered into the official record as being present at the hearing, there's a form on the table that you can sign and this will be part of the official record of the hearing. Please fill out that sign-in sheet in its entirety and print. And then once you come up, please give that sheet to Barb, the committee clerk over here, and that helps us to make a more accurate public record. And if you do not choose to testify, you can also submit comments in writing to the committee as well, and then we'll have those read into the official record too. If you have handouts, please make sure you have 12 copies for the pages to hand to the committee. And if you don't have, we'll try to work it out with you so that you can get that. And when you come up to testify, please speak clearly into the microphone. Tell us your name and spell your first name and last name. Please turn off your cell phones at this time, or turn them to silent. And please keep your conversations to a minimum or take them out into the hallway if you need to talk a little bit, because the mikes are extremely sensitive and we can pick up...if you're whispering in the front row, a lot of times that mike will actually pick you up. And so, the transcribers...you might find yourself in on a bill that you didn't expect to be recorded on. We don't have any displays of support or opposition to a bill whether it's vocal or otherwise at the public hearing, and this is to allow our testifiers the respect that they deserve while they're giving their testimony. How many people do we have today that plan on testifying? Quite a few. So we will use the light system today. And I'm planning on five minutes right now. And if it starts to go long on questions and stuff, we may actually move that back to three minutes if we have to. I don't think we will. But please keep your comments concise and to the point. And if you hear the same testimony that you're going to give earlier, it's okay to just stand up and come to the testifier's stand and just say--yeah, what they said. That's okay, because we can take that. So with that, what will happen is you'll get the green light for four minutes; you get the yellow light for one minute, and then once the red light comes on, it's time to get up and let the next person come up. So with that I think that's all the housekeeping we need to do today. So we'll turn it over to Senator McCollister, as I see he's really eager to get his bill introduced. So, Senator McCollister, it's all yours.

SENATOR MCCOLLISTER: Good afternoon, Chairman Schilz, and my fellow members of the Natural Resources Committee. My name is John, J-o-h-n, McCollister, M-c-C-o-l-l-i-s-t-e-r, I represent District 20 in Omaha and I'm here to introduce LB824. LB824 was developed in part based on negotiations that took place during the last session and over the interim as a way to remove barriers that have discouraged significant investment in the state of Nebraska. And at this time I'd like to acknowledge the great contribution of Senator Ken Haar. You may recall his bill,

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LB407, you heard last year. And it played a part in the development of this bill. LB824 is not, I repeat not, an anti-public power proposal. As you will learn from the testimony this afternoon, the proponents of this bill are willing to continue working with the public power industry to fashion policy that is good for Nebraska. LB824 does speak to the issues of property tax relief and the need to reduce superfluous regulation that can impede the economic development in our state. Moreover, it embraces issues raised by Governor Pete Ricketts as some of the guiding principles of his administration. Specifically, LB824 would provide a less burdensome regulatory framework designed to facilitate the export of renewable energy into the Southwest Power Pool, SPP, market. And with LB824, we would have an opportunity to facilitate billions of dollars in new investment in Nebraska, the creations of new, high-paying jobs, and, most significantly, provide significant new property tax revenue in many of our rural communities. Not only are these changes important to grow Nebraska, but they acknowledge the major changes in the electric industry that have occurred over the past few years. Our state's current regulatory structure is decades old. But the industry and the market have changed dramatically over the last six years and major simplification of existing structures is required to remove barriers that place our state in a competitive disadvantage with regard to renewable energy. The entrance of our largest utilities into the Southwest Power Pool has fundamentally changed the way our utilities operate. Because of each SPP generator offers its electrical production to the SPP, our utilities, therefore, compete against many other electric generators throughout the entire SPP footprint. Nebraska is no longer an electric-generating island unto itself. The proponents who will follow me will explain more fully how Nebraska is ripe for billions of new investment. Some of the proposed investments in renewable energy, as you will learn, will be significant, creating an environment which private industry suppliers and exporters renewable energy can invest in Nebraska will also create thousands of new jobs and reduce property taxes in many of our rural communities. While major investment in renewable energy in our state will undoubtedly affect the same market which our utilities sell and buy electricity, that market is and will continue to be affected by construction in our neighboring states. We can build a wall up around the state and watch our neighbors grow their economies, or we can embrace and participate in this opportunity. LB824 would open the door to that participation and in resulting benefits of economic development and property tax relief. Thank you, members of the committee. I look forward to working with the Natural Resources Committee to continue work on this bill and continue to work with the proponents and the opponents of this bill and come to a bill that is acceptable to the entire state. Thank you, Mr. Chairman. [LB824]

SENATOR SCHILZ: Thank you, Senator McCollister. Any questions for Senator McCollister? Senator Johnson. [LB824]

SENATOR JOHNSON: Thank you, Senator Schilz. Thank you, John, for bringing this in. You and I have had some conversations on this...and...this bill, and particular my district. Do you see

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anything...I don't see it, but do you see anything in this bill that changes any local control or has any adverse or positive effects with this bill? [LB824]

SENATOR McCOLLISTER: Well, thank you, Senator Johnson. And I appreciate the question, because that is an important principle that this bill embraces. Local control should decide. The zoning laws or the discussions or some of the concerns of local people in all the areas throughout Nebraska, should they have any, should be something that we deal with. And this bill does not change any of the existing controls with regard to that. [LB824]

SENATOR JOHNSON: Thank you. [LB824]

SENATOR McCOLLISTER: Thank you for the question. [LB824]

SENATOR SCHILZ: Thank you, Senator Johnson. Any other questions? Seeing none, thank you for your testimony. At this time I would like to invite Senator Haar up. He can...some privileges to the job, right? [LB824]

SENATOR HAAR: Thank you. And I do have handouts. You'd be disappointed if I didn't.
(Laughter) [LB824]

SENATOR JOHNSON: Turn the fan the other way, would you. [LB824]

SENATOR HAAR: (Exhibit 1) Chairman Schilz, my name is Ken Haar, it's spelled K-e-n H-a-a-r, two A's. The handout I gave you today, the first number three is the position of the state in terms of wind potential in the nation. And the little guy in yellow there is how much wind we've exported so far. So I'd ask you to keep that in mind. We're third in potential, yet we have exported no wind. LB824 is about an energy environment that is changed and will continue to change. And I'm going to give you a real brief history of wind for export and then talk about why I'm supporting LB824. During my years of work on this issue, Nebraska has missed out on some key opportunities in part because of an existing structure that in its day was the best of the best and served Nebraska well, but now because of changes in the industry worldwide, needs to be reexamined, questioned, and improved. It's time for us to let go of our fear of change because change is necessary. And, frankly, I believe change must occur for public power to survive and to thrive. In terms of history, as we learned a number of years ago, Nebraska is number three in terms of wind potential. Sometimes we compete with Kansas. I'm not sure if Kansas or Nebraska is number three in terms of potential. But then LR83 in 2009, was a resolution to study wind for export. And it had among its cosigners--Langemeier, Carlson, Cook, Dubas, Fischer, myself, McCoy, Schilz, Giese, Gloor, Hansen, Pirsch, and so on. A lot of support for looking at how

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wind can work for Nebraska. And then in 2010, was LB1048, which became a committee priority of this committee and put in place the laws we have now. But as my cover sheet shows, even though LB1048 was passed now five or six years ago, we have no export of wind so far. In fact, there's been some import of wind energy to Nebraska. And then in LB1115 was passed in 2014, which gave \$200,000 for the Brattle Report. And a lot of cosigners in that..on page 2 if you look at it, is straight from the Brattle Report and it shows a comparison of Nebraska to Kansas and Oklahoma when it comes to, what I call, the hurdles--various things that have to be done in Nebraska, restrictions and regulations that aren't present in Kansas and Oklahoma. And, frankly, at least in my opinion, is one of the reasons Kansas and Oklahoma wind has continued to thrive and it's been somewhat restricted in Nebraska. Then last year in LB407, which was sort of a nuance to removal of those barriers, didn't get out of committee. And so this time, to me, last year, it seemed like, well, everything was over because the federal Production Tax Credit expired at the end of 2015. But in December, HR2029, the Consolidated Tax and Spending Package, passed Congress and was signed by the President, which extends the federal Production Tax Credit for five more years. So, really, we are in a "now or never" kind of environment. The Production Tax Credit, which has been very beneficial for wind, is not going to be there forever, and other states are on board. So what LB824 does, if you look back at page 2 of my handout, it pretty much puts Nebraska on par on the same level playing field as Kansas and Nebraska in terms of regulation. Then page 3, I'd like to go to why I favor wind development. Real property tax relief--as you notice, Holt County is \$2.5 million per year in property tax relief. And most sources say 20 years is about the useful life of a turbine, a modern turbine; \$50 million for Holt County. Custer County--\$20 million and so on and so forth. So developing wind is real property tax relief. And then if you go to page 4, I've listed a table that I developed showing a benchmark of a thousand megawatts of wind, and this is 2014. And so Nebraska will have more on-line soon, but so will Iowa. So Iowa, in 2014, was about six times as much wind energy developed as Nebraska. And you notice the investment that comes: Iowa about \$10 billion compared to Nebraska--\$1.5 billion. You get some additional personal income tax, the annual property tax. And then on row 5, the nameplate capacity tax. On line 6, the total revenue over a 20-year period would be about \$33 million in Iowa and about \$5 million in Nebraska. I'm sorry...line 7 is the 20-year total then. A little over \$.5 billion of tax revenue increase in Iowa; about \$100 million in Nebraska. It produces additional jobs, manufacturing. Iowa manufactures all parts of the wind turbines from the blades to the Nacelle and so on and so forth. We have a few parts manufactured in Nebraska. But manufacturing usually follows where the wind turbines are put because of the expense of transportation. So all of these are the reasons that wind energy makes sense. Wind is one of our most valuable resources. And I believe we need to be competitive with Kansas and Oklahoma. Page 5, again, top ten reasons to support wind energy. And it includes, as I said, manufacturing industry, the health benefits of clean energy which are now paid by the...costs now paid by the public. And number ten--as far as we can tell, wind energy developed in Nebraska will be a contribution to meeting Nebraska's goals of the EPA Clean Power Plan. And finally then in conclusion, my page 6, it really is a last chance. We need to take advantage of the

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federal Production Tax Credit and get the wind industry going...that would be export wind industry in Nebraska going, I believe. And the issue before us today is bigger than public power or even energy for that matter. It's really about Nebraska's ability to compete in a global economy for jobs, for investment, and to help rural Nebraska to survive and thrive. And so as Senator McCollister stated, I was involved in much of the development of wind for export, but I'm going to hand the wind turbine to Senator McCollister. And where is he sitting? You're up here. So I'd like to pass this along. [LB824]

SENATOR McCOLLISTER: From one blowhard to another. [LB824]

SENATOR HAAR: That's right. [LB824]

SENATOR McCOLLISTER: Thank you. [LB824]

SENATOR HAAR: And if we just let it sit, maybe at times during the testimony today, the turbine will start to rotate. So thank you very much. That ends my testimony and I'd be more than happy to answer any questions. [LB824]

SENATOR SCHILZ: Thank you, Senator Haar. Any questions for Senator Haar? Seeing none, thank you for your testimony. [LB824]

SENATOR HAAR: Thank you very much. [LB824]

SENATOR SCHILZ: And now we will move to proponents. Good afternoon, sir. [LB824]

THOMAS BUDLER: Good afternoon, Chairman Schilz, and members of the Natural Resources Committee. My name is Thomas, T-h-o-m-a-s, Budler, B-u-d-l-e-r. I'm president of BHE Wind and appear before you today in support of LB824. BHE Wind is a subsidiary of BHE Renewables which is a subsidiary of Berkshire Hathaway Energy Company and is a sister with Iowa's largest rate-regulated utility, MidAmerican Energy Company. Berkshire Hathaway Energy serves 11.4 million customers worldwide. In addition, BHE Renewables owns and operates more than 3,400 megawatts of wind, solar, gas, geothermal, and hydro resources throughout the United States. And we've invested more than \$10 billion to create these assets in the United States. In April of 2015, BHE Renewables announced plans to construct a 400-megawatt wind project, The Grande Prairie Wind Project, in Holt County, Nebraska, which is the largest wind energy project in the state's history, and constitutes an approximate \$700 million investment in the state. The project will create an estimated 350 temporary construction jobs, 12 to 15 permanent, full-time operation jobs, and generate over \$4 million a year in landowner lease payments. In addition, the

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project will also generate approximately \$2.6 million in new property tax revenue annually for Holt County, or nearly 8 percent of its total property taxes collected in 2015. Over two-thirds of these new property taxes are expected to go to the Holt County school districts which leads me to LB824. To date, the Grande Prairie Wind Farm is the only investment BHE Renewables has made in Nebraska. Since 2011, I've reviewed over 150 different projects throughout the United States and Grande Prairie is the only project in Nebraska in which we've chosen to make an investment. It's primarily due to the regulatory barriers that LB824 proposes to remove. In particular, the requirement that a project have an executed power purchase agreement before it may move forward is a critical barrier to BHE Renewables making additional investments in Nebraska. The requirement the facility have a power purchase agreement with a specific out-of-state off taker before it may construct an export facility is burdensome and unnecessary in today's markets and it's a requirement that does not exist in any other state. And as such, it places Nebraska and the project developers at a competitive disadvantage. By our nature, project developers invest in capital markets where they believe projects are economically viable. Requiring a facility to have a power purchase agreement puts a developer in a decidedly weak negotiating position, as the counterparty knows the developer must effectively enter into that power purchase agreement it is seeking at almost any economic cost. It is very difficult to negotiate from this position. And it is this and the stranded asset and eminent domain issues that have prevented BHE Renewables from investing greater amounts of capital in the state of Nebraska. In addition, the open market of the Southwest Power Pool provides a great opportunity for Nebraska to welcome private investment, economic development, and property tax relief. But by requiring a facility to have a power purchase agreement, the current regulatory requirements effectively prohibit a privately developed renewable energy facility from fully...freely participating in that open market. A power purchase agreement is desirable, but mandating that as the only available business model for a renewable energy generation facility in Nebraska places the state and the developers at a significant competitive disadvantage. Participation in this open market is happening all around us. For example, BHE Wind is currently building a project in Kansas just 40 miles south of Beatrice. That project will sell energy into the Southwest Power Pool and its effects in the market will be felt in Nebraska, as will other projects being built in Kansas and surrounding states. But the economic development benefits of our project and the other projects in the surrounding states will stay in those states and will not be felt in Nebraska. Before I close, I would like to stress the urgency of these reforms. The window for investing in Nebraska is finite. As Senator Haar noted, the federal Production Tax Credit was extended at full value through 2016. This means investment decisions... [LB824]

SENATOR SCHILZ: Go ahead, that's fine. [LB824]

THOMAS BUDLER: Sorry. ...for the next four years must be made today. The longer you delay in implementing these reforms, the less likely it is you will see such renewable generation

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investments being made in the state of Nebraska and the cost to comply for any future carbon constraints will no doubt be significantly higher than it would have been with this legislation in place. In closing, BHE Renewables is very interested in making additional major investments in the state of Nebraska, but the current regulatory environment makes it a much more difficult proposition than doing so in neighboring states. LB824 is a solution to this problem, and I respectfully encourage you to support and advance this bill. Thank you and I appreciate your time and would like to answer any questions. [LB824]

SENATOR SCHILZ: Thank you, sir. Any questions? I guess I have one. And we've heard this at times and have seen this, as we move forward, just for my own personal questioning, as we move forward, what do you see as the effect of more wind on what utilities or what ratepayers, excuse me, what ratepayers would have to pay for conventionally-produced energy? Do you have any...? [LB824]

THOMAS BUDLER: Yeah, as we move forward, and as I noted, I think, you know, wind actually can have a stabilizing effect on rates. And I would say in some respects, today coal has an advantage when bidding into the two-day market in the Southwest Power Pool. It's actually able to capture the additional value of the day-ahead market as compared to a wind facility where you don't, necessarily, offer the wind at 100 percent of its capacity in the day-ahead market. But also, and I think more importantly, on the future rates, now is the opportunity to utilize wind to decrease the cost of compliance in the future because, certainly, the cost of compliance and the impact to ratepayers in the future will, certainly, be more in a carbon-constrained environment if this legislation is not approved today. [LB824]

SENATOR SCHILZ: Sure. Senator Friesen. [LB824]

SENATOR FRIESEN: Senator Schilz, thank you. I'm just curious, with the changes that are being proposed, what are the number of wind farms that might be proposed? I mean, there's, obviously, going to be a rush to get things going in 2016 because of the federal Production Tax Credits, but we're opening this up to unlimited numbers of wind farms, whoever may want to come in comes in. Is there any concern about how much development we might...is there a possibility of having too much? [LB824]

THOMAS BUDLER: Well, as we look at...and folks may have their opinion on the Clean Power Plan or the carbon constraints, but we do see that there would be a carbon-constrained world into the future. And as we look at the compliance matrix for Nebraska today, as it would fall under the Clean Power Plan, we would see that an additional 3,500 megawatts of wind would need to be built to address those compliance matters. And so we do see that as a reasonable and realistic number of, number of megawatts that could be built in the state in the near term. [LB824]

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SENATOR FRIESEN: Do you feel we should limit it in the near term so that...I don't know what your capacity is to put in wind farms. I don't know what the invest dollars are out there. [LB824]

THOMAS BUDLER: I believe in letting the markets determine those limitations. I think to the extent, you know, they're economically viable; the projects will be built. And, personally, don't believe that there should be a limitation on the number of projects. I think the market will drive that. [LB824]

SENATOR FRIESEN: Do you have estimates on what the cost per megawatt would be once you're up and running or where your breakeven is or what...what is the price of wind power right now? [LB824]

THOMAS BUDLER: On a general basis, we see coal...excuse me, wind as being very competitive with gas generation today. Normally, you would see operations, you know, without the value of the Production Tax Credit in the 6 to 6.5 cent range for the cost of generation. That's dropped by the value of the Production Tax Credit on a total cost basis. [LB824]

SENATOR FRIESEN: Okay, thank you. [LB824]

SENATOR SCHILZ: Senator Johnson. [LB824]

SENATOR JOHNSON: Yes. One of the things that comes up on the floor several times is the incentives and government money to get things started. I'm sure we would have that issue if this moves out. But just a comment on that...the amount of that in order to get the private business going, you know, in this case. Another question or thought--the power purchase agreement is in place now. You have to have one of those now. What risk does a private company have without that, starting up a project, and what's the risk of being able to acquire a power purchase agreement? [LB824]

THOMAS BUDLER: Well, the risk a private company has today is that at some point there may be an argument for stranded assets or the eminent domain and a private entity could have invested hundreds of millions of dollars, as we would have done in the Grande Prairie Project, and effectively lose that project, lose that investment, and lose the ability to return...to earn a return on that capital that was invested in the state. I see, again, as the regulatory barriers are decreased, then the developers will make that determination. As far as any other incentives, we would make a determination on whether to invest in the state or not without those incentives in place. But it at least allows the developer to make that decision without the threat of that asset being taken away. [LB824]

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SENATOR JOHNSON: Okay, thank you. [LB824]

SENATOR SCHILZ: Thank you, Senator Johnson. Senator Hughes. [LB824]

SENATOR HUGHES: Thank you, Senator Schilz. Thank you for coming in today, Mr. Budler. I've got some questions on the current project, the Holt County project is progressing at this point? [LB824]

THOMAS BUDLER: It is, yes. [LB824]

SENATOR HUGHES: It is under construction. Did it qualify for any tax credits? What's the time line on qualifying for tax credits? Once you sign on the line, then they're available or do you have to wait until they're up and running? Could you expand on that a little bit. [LB824]

THOMAS BUDLER: And when you say "tax credits", are you... [LB824]

SENATOR HUGHES: The federal. [LB824]

THOMAS BUDLER: The federal Production Tax Credit--yes, the Grande Prairie Project has qualified for the federal Production Tax Credit. And we utilized a start of construction test that actually occurred in 2014. So we had actually qualified that project before the current Production Tax Credit was extended. And so there are a couple different ways to qualify for the Production Tax Credit. One would be the safe harbor test where a developer could purchase up to...or at least 5 percent of the total project costs. And sort of "safe harbor" turbines, if you will, so if it's a \$100 million project, if a developer would spend \$5 million towards purchasing equipment for that project, you effectively qualify under the safe harbor provisions. In addition, you could also meet a start of construction test, which is what we did at Grande Prairie whereby you actually, initially, start construction on a project, whether it's access roads, foundations, and begin start of construction by the end of what now would be 2016 to gain full value of the Production Tax Credit. [LB824]

SENATOR HUGHES: So the tax credits are the same every year depending on when you meet certain criteria? It's not a countdown then...five years? [LB824]

THOMAS BUDLER: The...fair point, the current extension of the Production Tax Credit actually is a declining basis through 2019. So 2016 is the last full year of the value of the Production Tax Credit. And it decreases by 20 percent each following year at that point. So there is a declining basis. Again, one of the significant reasons and the urgency to act today is that that

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value is much greater in the near term as opposed to waiting until one or two other legislative sessions. It's very critical and that really is the sense of urgency today. [LB824]

SENATOR HUGHES: So assuming we would pass this out April with emergency clause, became effective; what's the time line for a company like yours to look at a site, wind potential...I'm assuming there's quite a little research goes in before, actually, being shovel-ready or, you know, being willing to put up money to buy assets to lock in the subsidies. [LB824]

THOMAS BUDLER: Right. Yeah, so if this would happen during...if this legislation would pass during this session, given the number of developers in the state and the number of good developers, I think there's a good opportunity for the start of construction tests to be met at many of the projects within the state. There's been a lot of work to date, but...on the development side, but the developers have not made that next step to move forward with whether it's start of construction or the safe harbor expenditures given the regulatory environment. But that start of construction test could actually begin pretty significantly before the end of 2016. [LB824]

SENATOR HUGHES: Okay. On your current...on your Holt County project, I'm assuming you do have a purchase power agreement in place. [LB824]

THOMAS BUDLER: We do. That's fully contracted with OPPD. [LB824]

SENATOR HUGHES: Okay. Thank you, Mr. Chairman. Thank you. [LB824]

SENATOR SCHILZ: Thank you, Senator Hughes. Senator Kolowski. [LB824]

SENATOR KOLOWSKI: Thank you, Mr. Chairman. Mr. Budler, thank you for your testimony today and what you're bringing to the table with us. I have a question from a vacation I was on last summer. My wife and...we were cruising in the Baltic. One of the cruise stops we had was in northern Germany. And we had a day trip into Berlin. It was a three-hour bus ride from the coast where there were many wind turbines through the northern state that we were in at that time. For the three-hour bus ride, 90 minutes of that bus ride we were never without sight of wind turbines and solar panels, the combination of both in that area. And we were told by the guide on the bus that...when I asked questions about the energy production, they have like 130 percent more than they need and they export that to surrounding states and other locales. What other regulatory inclusions or exclusions that we are facing that stop us from being as productive or as useful in the energy production and sharing in our state or our region that you run into in your company's work? [LB824]

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THOMAS BUDLER: Yeah, I think it goes back to the three areas that I indicated. One, it's the requirement for the power purchase agreement, number one. Number two, it is the eminent domain issue. And then number three, the stranded asset, which really has prevent the investment of private developers in the state. And that's really why you see all of the wind being effectively, only utilized in the state of Nebraska. And as Senator Haar pointed out also, additionally, there are others now that are exporting into the state of Nebraska and it's really those three reasons why you see...those three reasons are the barriers for the noninvestment today. [LB824]

SENATOR KOLOWSKI: Thank you. [LB824]

SENATOR SCHILZ: Thank you, Senator Kolowski. Senator Friesen. [LB824]

SENATOR FRIESEN: Thank you, Chairman Schilz. Senator Hughes was asking a little bit about a time line. So once you...let's say that you qualify and you begin construction in September. How long do you have that you qualify and can maintain that qualification, til you have to have windmills up and running? [LB824]

THOMAS BUDLER: It's a good question that I normally will leave to our tax folks. But effectively, the test is to continuously construct. So, normally, under the provisions of the IRS, that would mean your...if you have not obtained permits, you're in the process of gaining permits, and you continue to move forward with continuous construction. So it really depends upon the entire status of the project. So if you're going through a permit process, it would include all of the permitting, all of that review, going through the necessary approvals, and then going through the construction phase of the project. So, it's a difficult question to answer. But in large part, would probably think that 18 months to two years would probably be the outset if you had a very difficult permitting regime. [LB824]

SENATOR FRIESEN: Theoretically then, you would say you could have up to 20 years to complete it if you wanted to? [LB824]

THOMAS BUDLER: Two years. Theoretically, I... [LB824]

SENATOR FRIESEN: That would be the end time? If you're not up and running in two years, you don't qualify for the credits? [LB824]

THOMAS BUDLER: Correct. I would be very nervous from a tax perspective that I would want to make that argument to the IRS. [LB824]

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SENATOR FRIESEN: I was just...I mean, curious. I mean, we can delay construction and slow it down to a snail's pace, and so you would continuously be constructing. But I'm just curious as when you would have to have the plants up and running in order to still qualify? [LB824]

THOMAS BUDLER: Yeah, there's not a definitive date in the IRS regulations. It's a continuous construction test and I would normally argue and I think the IRS would argue that the sooner the better. Extending out to 20 years, I think, is unreasonable. [LB824]

SENATOR FRIESEN: I was just picking a number, but...I know if I was building it myself, it would take, probably, about 20 years. (Laughter) Just curious to the process. In your comments earlier, you mentioned something about eminent domain. How does that fit in with this bill? [LB824]

THOMAS BUDLER: So what this bill looks to do is to remove these facilities from any stranded asset and eminent domain issues whereby...it removes the barrier that allows for our investment. So to date under the statute, if a project were built...determined that it impacts utilities that would have stranded assets, there's actually the possibility that then this project could be taken away from the developer. [LB824]

SENATOR FRIESEN: Okay. Thank you. [LB824]

SENATOR SCHILZ: Thank you, Senator Friesen. Senator Lindstrom. [LB824]

SENATOR LINDSTROM: Thank you, Chairman Schilz. Senator Haar handed out this pamphlet here with some of the numbers on here. You spoke about the Holt County project, correct? On here it said \$2.5 million per year. I'm assuming that's accurate. And how long are the lease payments of the \$2.5 million per year? Is it...how long does that go for? [LB824]

THOMAS BUDLER: Yeah, well, we're in the ballpark. We think it's \$2.6 million. [LB824]

SENATOR LINDSTROM: Two point six, okay. So in that area. [LB824]

THOMAS BUDLER: Yeah, so it's very accurate. And to be perfectly honest, I know we have long-term agreements. And I couldn't tell...and I've looked at a number of them, you know, with the different projects that we own and operate, but it's 25-plus years. [LB824]

SENATOR LINDSTROM: Twenty-five-plus. Okay. Thank you. [LB824]

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SENATOR SCHILZ: Thank you, Senator Lindstrom. Any other questions? Seeing none, thank you for your testimony today, appreciate it. [LB824]

THOMAS BUDLER: Thank you. [LB824]

SENATOR SCHILZ: Next proponent. Good afternoon. [LB824]

MIKE DEGAN: Good afternoon. Mr. Chairman, members of the committee, my name is Mike Degan, D-e-g-a-n. I'm with the Husch Blackwell law firm in Omaha, Nebraska, and I'm here this afternoon to testify on behalf of private wind developers. And as one of the attorneys that assisted with the drafting of this bill, I'm here to speak on behalf of the bill to address any issues that the committee may have. Before I begin my comments, I wanted to first start out by thanking Senator McCollister and Senator Haar, the rest of our sponsors for their leadership on this issue. I think this is very important not only for our clients, but we firmly believe this is an important issue for Nebraska in general. A little bit of background to touch upon the numbers that Senator Haar circulated with the committee. Nebraska does rank number three in terms of wind resource, but one number that was not on that sheet is where we currently rank in terms of energy produced from wind. So we've got the 3rd best resource, but we rank 23rd in the nation in taking advantage of that resource. Now, Nebraska has come a long ways in the last five, six, seven, eight years to turn which was, essentially, a zero production state through the construction of a number of facilities. And on behalf of the private wind...excuse me, on behalf of private wind developers, we are thankful for the support that we have gotten from public power utilities. But the fact is, Nebraska has a limited load. And unless we open the door to what is sometimes referred to as "wind for export," there will be very little additional wind development in the foreseeable future. So we will, very shortly, have maxed out on our ability to take advantage of that resource. We sometimes liken it, on a very loose basis, to corn. It would be similar to limiting the amount of corn that we grow in the state of Nebraska to domestic consumption only. Of course we don't do that. We export. It's one of our prime resources here in the state of Nebraska. We need to do the same thing with wind. We need to get...convert the wind resource that we have into energy that can be sold into energy markets. That's what we propose to do with LB824. So, we worked on this issue last session on LB407. We worked with the utilities to try to come to an agreement on how to best approach this. We weren't able to reach an agreement. So we're back again this session. And in the interim, the Brattle Report was issued. And that was a report sponsored by this body. And the Brattle Report came back with recommendations for how Nebraska could unlock its potential for purposes of wind for export. And along the lines of Mr. Budler's testimony, you're going to hear similar testimony this afternoon from other developers, the key things that the Brattle Report found is that Nebraska needs to simplify its regulatory process to bring clarity to the process. There are now 14 states in the Southwest Power Pool, and there are other states with good wind resources. And when developers are looking where to invest their dollars for purposes of development, they need clarity. If it's not clear whether they're

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going to get their project approved or not, they're not going to build here; they're going to go to a state where they can get that clarity. So, Mr. Budler talked to several of the issues, the principal ones being the PPA, the eminent domain threat, and stranded assets have been removed under this proposal. So LB824 would remove those regulatory hurdles. So our view is LB824 would accomplish those goals; would follow the recommendations of the Brattle Report, and would help open up the state of Nebraska to wind for export. Now, what it does not do is affect local control. It does not take away the ability of local communities and local elected officials to determine how we do this. It is important that this be done right. That is retained in the bill as it's currently written. Eminent domain is not a significant change. This body has, on each of the prior occasions that it has authorized renewable legislation, has built in eminent domain protection because the developer is not going to build a facility with Nebraska's special right of eminent domain that would allow a public utility to simply take that facility. We continue to work with the public utilities. And one of the primary push backs that we heard from the publics on LB824 was the fact that it includes a generation component and a transmission component. We've listened to those publics and we have agreed that the time is probably not right to tackle the transmission portion of this. And we've agreed, and I think we have an agreement from the publics that they will not resist us going forward if we remove transmission, and we intend to do that at the amendment phase, in addition to addressing some of the other issues that have been raised from other stakeholders. So with that I will conclude my remarks, unless the committee has any questions. [LB824]

SENATOR SCHILZ: Thank you, Mr. Degan. Any questions? Senator Friesen. [LB824]

SENATOR FRIESEN: Thank you, Chairman Schilz. I'm glad you brought up a comparison to corn. We do grow quite a bit of corn here, and then we eventually get a huge surplus and the price crashes and a few of us go bankrupt. So if we generate too much excess electricity down the road and the price goes too low and we can't export that surplus anymore, is there a chance of a bankruptcy? Or is the Production Tax Credit great enough that there's no risk of that? [LB824]

MIKE DEGAN: Excellent question. Absolutely. There is always the risk that if private developers overbuild that we could have an excess of power. I will say that markets cannot be looked at in a snapshot. The private industry is very bullish that the price difference between wind and other sources of energy are going to continue to align. And we are rapidly going to reach a point that wind is economical and competitive even without the PTC. These facilities will not get built unless there's a business case to be made for these developers to get the financing they need to actually build the projects. But ultimately, Senator, if facilities are built that are economically unviable, that's going to be on the investor-owned developers, and their stakeholders, their owners, their lenders. So unlike a public power district or public utility owned and operated structure, if there's a failure, it goes on the private owners. It does not become a liability for the state of Nebraska or its consumers. [LB824]

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SENATOR FRIESEN: So you would say that the Production Tax Credits are large enough to eliminate most of that risk?P [LB824]

MIKE DEGAN: No, I don't think that they're large enough to eliminate the risk. Frankly, I think we're going to rapidly get to a point where wind is competitive enough that it stands alone even without the PTC. But, ultimately, the PTC is not a guarantee. The PTC is not going to guarantee that any private facility is going to make any profit margin, that's going to be up to the private developers to effectively operate their facilities. [LB824]

SENATOR FRIESEN: But these PTCs are in effect for how long? [LB824]

MIKE DEGAN: The PTC, I believe, has an initial recovery of...is it ten years? Ten years. [LB824]

SENATOR FRIESEN: Okay. So what...without the Production Tax Credit, what would be break-even cost of electric generation in general in the industry? [LB824]

MIKE DEGAN: I would have to defer to the individual developers because they all operate differently. But again, my response to that question would be--we are rapidly moving into a phase where developers are looking at Nebraska in a post-PTC environment. In other words, that we're going to get into an environment because of other regulations that are out there--the clean power plan, other regulations on fossil fuel emissions, where it's going to be more and more expensive to generate electricity from traditional fossil fuels. And then we'll continually drive the industry to sources like natural gas and renewables or a combination thereof. And it's in that environment that developers are very bullish about Nebraska because undeveloped sites with very strong wind resources are going to be at a premium. And we're sitting on a lot of that here in Nebraska. [LB824]

SENATOR FRIESEN: So potentially down the road, wind development could happen without the Production Tax Credit, just because the cost of electricity has been driven up so high (inaudible) the clean power plant or whatever the reason. [LB824]

MIKE DEGAN: I believe that's absolutely true, yes. [LB824]

SENATOR FRIESEN: Thank you. [LB824]

SENATOR SCHILZ: Thank you, Senator Friesen. Any questions? Senator Schnoor. [LB824]

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SENATOR SCHNOOR: Thank you. Without...and I think you kind of alluded to this, but I just want to clarify, but without the Production Tax Credit, is there a profit margin in wind energy? [LB824]

MIKE DEGAN: Um, I believe so, yes. Now part of this is time specific. And it depends on the particular developer; it depends on the particular site. Sites vary on capacity factors. Unlike a coal plant where it doesn't really matter where you set it, because it's the engineering of the facility, wind blows harder and more consistently in some areas than in other areas. It is absolutely profitable today without the...with the Production Tax Credit. Most facilities today, probably need the Production Tax Credit. But that's in a snapshot today. I think the industry believes within a three to five-year time period, in strong wind-belt states, that many of these facilities will be viable with the new technologies that we've recently seen, will be viable without the Production Tax Credit. Is that today? No. I think the majority of the facilities today rely upon the PTC. But we are rapidly moving to a situation where that will no longer be true. [LB824]

SENATOR SCHNOOR: Okay. Thank you. [LB824]

SENATOR SCHILZ: Thank you, Senator Schnoor. Senator Johnson. [LB824]

SENATOR JOHNSON: Thank you, Senator Schilz. Have you or your law firm worked with developers in starting up a project? [LB824]

MIKE DEGAN: Yes, sir. [LB824]

SENATOR JOHNSON: Okay, you have. So maybe there's developers coming and maybe this is more important, I could ask them. When somebody comes in and wants to develop and they need to sign the leases, make contacts, how...what percentage of the area needs to be in a position of leased before they will look at a project? [LB824]

MIKE DEGAN: I will defer to the specifics to the developers. One of our clients will be speaking here that may be able to address that more specifically. [LB824]

SENATOR JOHNSON: Okay. Okay. [LB824]

MIKE DEGAN: I will say it does vary from developer to developer, but you raise an important point. Because unlike public utilities, private utilities...private developers do not have the power of eminent domain. And there's nothing in this bill that would change that or upset that in any way, shape, or form. But because we don't have the power of eminent domain, we have to

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negotiate and we have to sit down at the bargaining table with these landowners and we have to come to agreement because we don't have the big stick in our back pocket that we can use in the event that we can't reach an agreement, whether that's on a turbine site or for purposes of connecting those sites back to the collection station. [LB824]

SENATOR JOHNSON: Thank you. I'll ask some questions later. Thank you. [LB824]

MIKE DEGAN: Thank you. Thank you, Senator. [LB824]

SENATOR SCHILZ: Thank you, Senator Johnson. Any other questions? Seeing none, thank you for your testimony. [LB824]

MIKE DEGAN: Thank you. [LB824]

SENATOR SCHILZ: Further proponents? Good afternoon. [LB824]

FRANK COSTANZA: (Exhibit 2) Senator Schilz, good afternoon, members of the committee, thank you. My name is Frank, F-r-a-n-k Costanza, C-o-s-t-a-n-z-a. I'm executive vice president with Tradewind Energy. We're a developer of wind projects. And I appreciate the opportunity to speak with you today. I'm going to take a little deviation from my prepared written testimony and talk about a couple of specific issues. And perhaps I can answer a couple of the questions that Senator Johnson and others have had of developers. Let me just start by saying Tradewind is a Lenexa, Kansas, based wind energy company. We employ about 70 professionals. We have been in the business since 2003. Since 2007, we have built over 1,750 megawatts of wind and about 100 megawatts of solar energy. We focus our development, principally, in the Great Plains wind belt. We literally do live in the Saudi Arabia of wind, the best wind in the world is here where we live, where we're talking today. What we haven't done here, Tradewind has been developing projects in Nebraska since 2008. We have not built a project yet. And I won't go into the reasons because they've been touched on by Mr. Budler, by Mr. Degan. It's principally because of the onerous...what we would call onerous regulation that exist. Said differently, it's...we can develop anywhere in the Southwest Power Pool footprint, which you're a part of, and now two states to your north and certainly Kansas and Oklahoma to your south, and Missouri to the east are all members of. We, as developers, have to focus on delivering the lowest possible cost to our customers. And who are our customers? They are major utilities; they are the big utilities in the SPP footprint. And in fact, we also export power to the southeast to companies like Alabama Power Company. We can only build a project, and this is true of almost every developer, maybe not all of them, but almost every developer needs a power purchase agreement in place in order to build a project. We use a technique called "project financing." And I get into the details of that in my testimony and it's important for you to understand that. As has been pointed out, without a

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PPA, we can't get the financing we need. These are very capital-intensive projects, the most capital-intensive industry in the United States. So without financing from third parties, in addition to our own private equity capital, these projects won't get built. So to address the issue of...and I'd like to come back to the issue of what impact might that have on the marketplace. But we need that PPA and we compete in things called "request for proposals" from the utilities--lowest cost wins. There's a lot of competitors and some of my competitors are in the room today. Utilities buy very infrequently and they buy in large blocks of power. So we are highly focused on finding the lowest cost places that we can develop. Because within the power pool, we can send our energy across the whole power pool, as evidenced by Lincoln Electric recently signing a contract to buy power from Oklahoma. Cheapest energy, one of the reasons was it was the cheapest energy available. So when we look at Nebraska, we've got nothing operating in Nebraska yet. We've built a thousand megawatts in Oklahoma. We're building another 300 in Oklahoma as we speak. We've built 700 megawatts in Kansas. We've got another 400 megawatts of PPAs coming in that we plan to build either during '16 or into '17. And these are opportunities that are real and now. Again, Mr. Budler touched on the idea that the federal PTCs have been extended, so did Senator Haar. We do have another window of opportunity. Nebraska missed the first window of opportunity which I would call from 2005 until last year. With the passage of the PTCs and the fact that they run through 2020, there is another window. And since that passage in December, that federal tax extender bill, we have had an inordinate number of requests for proposals from utilities to buy energy. And we are looking at places to develop, as we speak, anywhere in the SPP footprint. So the opportunities are here, they're real. But if the committee...if the state doesn't take action, I think immediately, I think you may see another opportunity missed in the state. Lastly, I guess I'd just like to touch on the fact that LB824 is really intended to reduce red-tape regulation. It doesn't exist in any other state. The regulations you have here do not exist in the SPP footprint. That's why we simply can go to other places and do it cheaper, faster, and with less risk. So I'd suggest that what LB824 does is...it does not affect the relationship of public power with their customers. It does not give us any right to sell energy to their customers directly. We simply need a PPA in almost, I'd say, 90-plus percent of the cases before a project can get built. So without that long-term PPA, the energy isn't going to build. The question Senator Friesen had was--will the floodgates just open and we'll build projects everywhere. The answer is--under the way we have to finance these things, no, it's not going to happen. So with that, the red light is on, I'll let you seek any questions you'd like to ask. [LB824]

SENATOR SCHILZ: Thank you, Mr. Costanza. Any questions? Senator Johnson. [LB824]

SENATOR JOHNSON: I got an appointment with the Governor later, so I want to get my questions in. If you could follow up a little bit on the signing of the leases and that, if you're in a position to do that. [LB824]

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FRANK COSTANZA: Sure. [LB824]

SENATOR JOHNSON: So I'm clear on how much work you have to do before you call it ready to go. [LB824]

FRANK COSTANZA: Typically, in a wind development project, we...in order to get financing again, we need to have 12 months of wind data...wind data collected on site to say that the site is viable, just from the wind's perspective. Because the quality of the wind is what really drives the price more than anything in our business. So we'd like to have 12 months. And while we're collecting data, we start to lease pieces of land so we can kind of...if you think about a project that's tens of thousands of acres for a hundred megawatt project, we're trying to capture the edges to kind of get a footprint. We will sign leases with as many landowners as are willing to make a project viable. Our leases, we tend to try to sign 40-year leases because we see value in the projects. I think Senator Haar pointed out, that they have 20-year lives. Well, that's an accounting answer to what the life of a turbine is. A well-maintained turbine will last as long as you maintain it, it's like the engine of your car. It's like a gas turbine generator. If you take care of it, it's going to last. So we look for 40-year leases. And we hope to operate those projects that long. Our leases, and when we build, we take about 2 percent of the land, if it's farmland, out of production. So 2 percent of the land of 10,000 acres is not much and it's just simply for roads and the pad where the turbines sit. [LB824]

SENATOR JOHNSON: Thank you. [LB824]

SENATOR SCHILZ: Thank you, Senator Johnson. Senator Lindstrom. [LB824]

SENATOR LINDSTROM: Thank you, Mr. Chairman. Thank you, Mr. Costanza, for coming. I know some folks, and maybe in this room, are concerned about a failed wind project. Could you touch on how that might adversely affect the taxpayer...the local taxpayer. [LB824]

FRANK COSTANZA: Sure. Again, under the financing method that we use called "project finance," roughly a project is 50 percent our company's equity. So let's talk about a typical 100-megawatt project would cost about \$150 million. Seventy-five million dollars would come from our company and \$75 million would come from third-party...let's call them lenders--J.P. Morgan, Bank America. We only get paid under the PPAs we sign with utilities. We only get paid when we deliver energy. So we are highly incented to maintain our equipment and deliver that energy to the utility customer. But, and there has been no failures of wind projects that I am aware of in the SPP footprint, and there's been over 14,000 built so far...14,000 megawatts. If we were, for whatever reason, to have failed, didn't plan correctly, the only person that's at risk, the only entity

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that is at risk is our capital and that of the lender. There is no ratepayer to bail us out. We lose that investment. [LB824]

SENATOR LINDSTROM: You answered my question, thank you so much. [LB824]

SENATOR SCHILZ: Thank you, Senator Lindstrom. Any other questions? Mr. Costanza, we sit here and we talk about that, and then obviously if there would happen to be a failure, as you talked about, then according to law we have in place decommissioning stuff that you would have to comply with. [LB824]

FRANK COSTANZA: Correct. And the bill provides for decommissioning and it's customary in almost every state we operate in that we also place security in place equal to the decommissioning costs. [LB824]

SENATOR SCHILZ: Very good. And then as you talked about some of the issues, as we talked to...as we look at this and one of the ones that I'm trying to understand and try to get my mind around is this right of first refusal that's out there. Can you explain that...how that affects you guys and what...what that's doing? I'm trying to get my mind around that. [LB824]

FRANK COSTANZA: Well, I think the best person to answer that is Mike Husch. But let me take a very...what we're interested in...the right of first refusal, first of all, I think we've reach an accommodation with public power that we're going to work on that element of the bill. All we're interested in as a wind power developer is on the generation side. We, typically, because we're in pretty remote rural areas, we have to get from the project to the high-voltage transmission system. That could be, in some cases, hundreds of feet, but in most cases it's miles. Miles of line that has to be built from the project to the point of interconnection. What we're most interested in and hopefully can work through the language is to make sure that right now that's reserved for the utility to build. And if they don't build it in a timely fashion, we could have a project built and an interconnection and no straw to get the energy from point A to point B into the market or into the transmission grid to deliver to our customers. So we just are interested that that tie line that the construction of it is timely and at not a gold-plated cost. [LB824]

SENATOR SCHILZ: And those discussions are happening as we speak. [LB824]

FRANK COSTANZA: They are. [LB824]

SENATOR SCHILZ: Very good. Thank you. Senator Friesen. [LB824]

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SENATOR FRIESEN: Thank you, Senator Schilz. Maybe you can clarify something. Part of this bill would remove the requirement for a production...or a power purchase agreement. Is that right? [LB824]

FRANK COSTANZA: That's correct. [LB824]

SENATOR FRIESEN: And yet, you were just saying how you couldn't get financed if you didn't have a power purchase agreement. Is that correct? [LB824]

FRANK COSTANZA: That's correct. It's the timing of such that's an issue for us. And I think where the current statute says that you need a power purchase agreement before you can get approval. And approval is subject to the board approval at the Power Review Board. So we, often, are developing a project, and we have lots of moving parts, it's not like any other industry. We're negotiating a lot of different contracts for construction, for supply of turbines, and the power agreement could be in the later stages of development and we could have deadlines. And those PPAs typically have...power purchase agreements typically have dates by which we must deliver to the utility. So we have all these timing issues we're trying to line up. And if we go to a power review board, which we don't have to do in another state...any other state, and that review board, for whatever reason, finds that we can't move forward or they need more information or they need...timing may fall apart. And that's the biggest concern we have. So we typically...our company...and as I said, most developers, in order to attract the third-party financing, we have to have a PPA in place....long-term PPA. So one goes with the other. But it's the timing of getting all this together that is often at risk here. And we hate to spend the money on developing...we spend millions of dollars to develop a single wind project which can be lost if the timing doesn't work out. [LB824]

SENATOR FRIESEN: So another question and I'll just end with the question I asked before, but I'm not quite sure if I got a right answer or an answer period. So will you qualify in 2016.... [LB824]

FRANK COSTANZA: Um-hum. [LB824]

SENATOR FRIESEN: ...and you start construction by investing some money or starting to get contracts signed, what is the requirement before you lose the federal Production Tax Credit, what is the time period before you lose that and you have to have the windmills spinning? [LB824]

FRANK COSTANZA: Let me answer it this way: let's assume that the Production Tax Credit wasn't extended. The way the regs work, if it hadn't been extended, we would have had to have

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been in construction by the end of last year. And the IRS, and Mr. Budler is correct, it's a very gray area, what they find acceptable and not. But as long as we've made that safe harbor investment of 5 percent, either starting construction--moving dirt, doing things on the site, or buying turbines for the project, we have a period of time where we have to demonstrate continuous construction--getting permits, doing all the things we need to do, doing the engineering. The IRS and the people we get our financing from, they're attorneys, their tax attorneys have told us, as Mr. Budler said, 18 to 24 months, you're probably safest at 18, you might get 24, but it's over. Now that the...now, let's take a step into the present--the PTCs have been extended. And they've been extended through, I want to say 2019. They do step down in value over that period. But as long as now is we start construction somewhere along there, we're going to get ten years of PTCs at some level. [LB824]

SENATOR FRIESEN: If you had them up and spinning within the next couple of years... [LB824]

FRANK COSTANZA: So I would say that if we had a project today, if you passed the...if this bill would pass and get signed, we'd have this window of four or five years to start construction to meet the test to secure some level of PTCs. The later we start construction, the lower the PTC value, but it's still there. And that will extend 18 to 24 months beyond that last year that the PTCs have been extended. So 18 or 24 months past 2019. [LB824]

SENATOR FRIESEN: We're pretty well assured that you will start construction of some sort in 2016 though. [LB824]

FRANK COSTANZA: If we had a PPA on the projects we have, yes, we would. [LB824]

SENATOR FRIESEN: Thank you. [LB824]

FRANK COSTANZA: We are doing that in Kansas and Oklahoma as we speak. [LB824]

SENATOR SCHILZ: Thank you, Senator Friesen. Mr. Costanza, as we talked about...as we talk about this stuff and you talk about PTCs, and there's been extensive conversation on that, how does the industry and...or you, in particular, your company, how do they view the PTC? What exactly is your...do you utilize that tax credit for? What is it? Does it flow through to the ratepayer? Does it go into the pockets of the company? How does that work? [LB824]

FRANK COSTANZA: You've, essentially, have the gist of it. The PTCs have a value. They're tax credits and there's accelerated depreciation. The value of that is purchased on a discounted value

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by the J.P. Morgans, the Bank of Americas, etcetera. When we reach the end of construction and we go through a very laborious testing of the facility, those third-party lenders, let's call them, give us a check, a discounted-value check for the value of those ten years' tax credits and depreciation. We use that money simply to defray the cost of the project which, ultimately, lowers the cost that we have to recover from the utility and our PPA. So said differently, somebody asked--what's it worth? Today, the Production Tax Credit is worth about 2.5 cents a kilowatt hour. So it's a significant amount of money. [LB824]

SENATOR SCHILZ: Yeah. And then, if you can tell me, and I understand if you can't, relative to what conventional energy is selling for, when that tax credit is applied, what then would be, you know, on average the price that the ratepayer would pay, or the utility? [LB824]

FRANK COSTANZA: Sure. And I would...with the tax credit in place, full tax credit in place, and let's assume we do have economies of scale, so a project as large as Holt County, 400 megawatts, there are economies of scale, they will be able to sell the power lower than a hundred megawatt project in the same location. Ballpark, delivered cost of energy in today's environment is probably, with the tax credit, is probably in the 2.5 to 3.5 cent range...kilowatt hour. [LB824]

SENATOR SCHILZ: And conventional energy rates are the same way? [LB824]

FRANK COSTANZA: Natural gas fired combustion turbine, again, we have to look at all in-cost. This is all in-cost for wind. You can't look at just the variable cost that utilities typically talk about, their dispatch cost. All in-cost for a combined cycle gas-fired facility is probably in the...and I'm just spit balling here, I haven't done this for ten years, a gas-fired project, it's probably in the 5 to 7 cent range, somewhere in that ballpark. [LB824]

SENATOR SCHILZ: Okay. [LB824]

FRANK COSTANZA: So it is very competitive today with gas-fired generation when you look at all in-costs. [LB824]

SENATOR SCHILZ: Okay. Thank you. Any other questions? Senator Kolowski. [LB824]

SENATOR KOLOWSKI: Thank you, sir. Mr. Costanza, I've never asked this before, I thought I'd try to get some clarification. When you talk about the maintenance and all the upkeep and the longevity of 20, 30 years, whatever you might get out of a turbine, what does injure them? Lightning? Tornadoes? [LB824]

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FRANK COSTANZA: Sure. Good question. [LB824]

SENATOR KOLOWSKI: Swarms of locust? [LB824]

FRANK COSTANZA: Well, these are pretty simple machines. They're, basically, a generator that's the size of this desk, roughly, a box the size of this desk sitting at the top, blades, a shaft that turns the generator, and then some electronics that convert it from DC to AC. So you have blades. If you think about the wind blowing out in western Nebraska, dust, sand in the air, so the blades will have wear, those edges will wear. Now, those edges are, typically, made of carbon fiber. So they wear better in today's new technology. But blades can get hit by lightning and they ought...they do. And... [LB824]

SENATOR KOLOWSKI: Hailstorms. [LB824]

FRANK COSTANZA: You could have hailstorms. So, typically, the blades are replaced over time. The machine itself, we do periodic, normal maintenance to maintain the generator, the shafts. Again, these are simple machines. They're not like the gas turbine that's got lots of heat, lots of moving parts. [LB824]

SENATOR KOLOWSKI: Thank you. [LB824]

FRANK COSTANZA: So they're pretty easy to maintain. [LB824]

SENATOR KOLOWSKI: Thank you. [LB824]

SENATOR SCHILZ: Thank you, Senator Kolowski. Any further questions? Senator Lindstrom. [LB824]

SENATOR LINDSTROM: One last question. And this comes down to jobs. With each turbine, how many jobs does it create per turbine? And once it's built, how many jobs does it sustain over the course of, say, 25, 30 years. [LB824]

FRANK COSTANZA: Let me see if I can...I can't do this on a per-turbine basis. [LB824]

SENATOR LINDSTROM: Okay. [LB824]

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FRANK COSTANZA: I've never thought about it that way. A typical 100-megawatt project, we would probably see...during construction, so the period during construction, we probably see a peak of about 200 jobs, somewhere between 150 and 200 jobs on a 100-megawatt project. Permanent employment though, after the project goes into operation, about 8 to 10 people full time, but they're high-paying jobs. They're typically in the \$50,000 range, salary. These are technicians that need specific training. If you take it a different way, the 1,750 megawatts of wind that we've got in operation, that's created about 175 permanent, full-time, high-paying jobs in those locations where they are. [LB824]

SENATOR SCHILZ: Thank you, Senator Lindstrom. Senator Schnoor. [LB824]

SENATOR SCHNOOR: You refer to this as a 100-megawatt project. How many turbines...how many turbines would be located in that project? How big of an area would this take up--square miles, I guess? [LB824]

FRANK COSTANZA: A 100-megawatt project, usually about 10,000 acres roughly per hundred megawatts is a good rule of thumb, could be a little more. As to turbine size, every vendor--GE, Siemens, Vestas, they all have different megawatt-size turbines. Average size, two megawatts. So roughly 50 machines, plus or minus, depending on the vendor per 100-megawatt project. [LB824]

SENATOR SCHNOOR: Okay, thank you. [LB824]

SENATOR SCHILZ: Thank you, Senator Schnoor. Any further questions? Seeing none, thank you for your testimony, appreciate it. [LB824]

FRANK COSTANZA: Thank you. [LB824]

SENATOR SCHILZ: Next proponent. Good afternoon. [LB824]

EMILY KOBYLARCZYK: Good afternoon. Mr. Chairman and members of the committee, my name is Emily Kobylarczyk, E-m-i-l-y K-o-b-y-l-a-r-c-z-y-k. Thank you for the opportunity to speak to you this afternoon. I'm appearing before you representing Invenergy, a clean energy developer and operator in support of LB824. The Prairie Breeze Wind Energy Center, operated by Invenergy, is a 310-megawatt wind project that provides clean, homegrown energy in Antelope and Boone County, Nebraska. During my time working in northeastern Nebraska, I have seen firsthand the benefits realized by wind generation. Based on my work in the Prairie Breeze community, I want to bring to your attention the type of benefits that wind development

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offers. Prairie Breeze generates more than \$3 million in local economic impact via tax payments, landowner payments, staff salaries, and local spending annually. We hire from the area and, therefore, our employees are invested members of the community. Job opportunities created during both the construction and operational phases amount to over 300 locally-created jobs, approximately 18 of which are long-term. Lease payments made to landowners provide a steady source of long-term income to offset the fluctuating local prices received from crops, all while providing landowners an opportunity to diversify their farming operations through wind generation. Invenergy has invested more than \$500 million in Nebraska because we believe in the resources your state has and we believe in the counties where we have become community members. My role at Invenergy is to work with local communities and landowners to obtain permits and approvals for proposed projects, including working closely with county zoning and planning commissions and elected board officials. I'm here today to speak to my experiences in this regard--I'm the boots on the ground. What often is lost in the story of wind is the land that makes it possible to construct utility-scale wind projects and the people who work hard everyday to find a viable place for wind energy in their futures. As an example, you might picture a modest employee break room in the operation and maintenance building just outside of Elgin, Nebraska. Here you will find five to six employees laughing boisterously and bundling up as they prepare to climb a turbine. Mechanics, engineers, and local community members--these men are the forefront of wind energy. Each one of them was hired because of their expertise in wind turbines, but also because they're familiar and welcomed faces in the community. Last summer, I had the pleasure of spending two days at the Antelope County Fair with the Prairie Breeze Wind technicians. I was pleased with the number of families who approached the wind techs about their interest in wind energy. Coming from a family farm myself, I was eager to connect these families with a local opportunity to get involved through the wind energy-applied science program at the Northeastern Community College in Norfolk. This career path could allow them to return to their homes while earning a good wage. The time now is to empower the next generation of those who are interested in the renewable energy field, jobs that pay decent wages, keep Nebraskans local, and lend to the success of the state. Legislation like LB824 further positions the state for property tax abatement, economic development opportunities, and clean energy jobs now and into the future. Invenergy supports LB824 to help facilitate the direct investment in Nebraskans and the expanding energy market. This bill will allow Invenergy the opportunity to continue to work in Nebraska and develop additional projects such as the Prairie Breeze Wind Energy Center. Without this bill, our ability to develop future projects in Nebraska and cultivate additional local relationships is in question. Invenergy plans to do additional business here and LB824 will allow us to provide other families, such as the ones I met at the county fair, an opportunity to participate in the wind energy markets. We would like to see these opportunities stay here in Nebraska, in your districts, and not migrate to the other 14 states that are within the SPP footprint. We implore you to vote yes for LB824, a bill that would move Nebraska forward. Thank you and I'd be happy to answer any questions. [LB824]

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SENATOR SCHILZ: Thank you, Emily. Any questions? Must have done a great job, no questions. Thank you for your testimony. Next proponent. Good afternoon. [LB824]

DAVE HAMILTON: Good afternoon, Senator. I'm Dave Hamilton, D-a-v-e H-a-m-i-l-t-o-n. I'm a cattle rancher from Thedford, Nebraska; have property in Thomas and Cherry Counties. And I come as a representative of the Cherry County Wind Energy Association. That's a landowner group of 75 landowners represented by approximately 450,000 acres. And I guess I'll just kind of go through my notes hit and miss because there's a lot of points that I had written down that have already been made. But to give you a little of background on that landowner association--the board of commissioners in 2009 looked beyond the horizon and saw an opportunity for more than just one or two or three landowners to benefit from the revenue of potential wind energy. And they took this, they appointed a study committee and they worked with the county planning commission and that turned into a board of directors then for our current Cherry County Wind Energy Association. And right now that association, we're working with a developer. We, as landowners, have a contract with our association. And then in turn, that association has a lease with the developer. So we feel like there's power in numbers from a landowner association. We haven't drawn a dollar yet in revenue, but we've all paid in a certain amount for capital call to fund the association as we go along. From there I'll just kind of start making some points. And like I said, I won't be reading it because I don't want to take any more of your time. But we as a landowner association, we support this primarily for three reasons: one, this bill, LB824, would exempt privately-developed renewable energy generation facilities from regulation. And we think that's a plus in terms of Nebraska coming to the forefront. Number two, I think it would remove any competitive statutes in Nebraska that neighboring states don't have, that's already been referred to by one of our developers. I think the power of eminent domain, I think, could not be used, if I understand this text correctly, by public power to purchase privately-developed wind energy to developments. And I guess, maybe, the main point or my main object as a landowner is that we come to you quite often and we'll ask for property tax relief. You know, we'll want to try and split it between sales, income, and property and keep that equitable. And I think that's still a worthy goal. But I think I come to you today to emphasize the fact that wind energy development would expand the property tax base. And I think that's the most important thing to a landowner. The other thing is, our landowner association, with the size that it is, we're going to spread that revenue over a number of people so that many people can take advantage of the shares in that association. And I guess I would just conclude then by directing your attention to a recent University of Nebraska-Lincoln rural poll and that said that 80 percent of the people in Nebraska, rural residents in Nebraska, think that we should be putting more emphasis, or a great deal more, there's two categories there, on renewables. And I guess I was speaking, primarily, of the wind right now. Seventy-five percent of those polled thought that we should be spending more money or considerably more money on wind energy. So as a landowner, I think there's a real plus in passing this bill. And I thank you for your time today. Any questions? [LB824]

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SENATOR SCHILZ: Thank you, Mr. Hamilton. Any questions? Senator Schnoor. [LB824]

SENATOR SCHNOOR: Thank you, sir. How many members are in your...I guess two questions: how many members are in your association and what type of a geographical area, I realize you said you are in Thedford, but what type of a geographical area does that all include? [LB824]

DAVE HAMILTON: There's 75 members in the association now. [LB824]

SENATOR SCHNOOR: Okay. [LB824]

DAVE HAMILTON: And it's a county...it's Cherry County, and I don't have the exact square miles, but I think everyone knows that Cherry County... [LB824]

SENATOR SCHNOOR: That's close enough...that's close enough. [LB824]

DAVE HAMILTON: ...largest county in the state. It's very sizeable. [LB824]

SENATOR SCHNOOR: Okay. And they are all ranchers? [LB824]

DAVE HAMILTON: Yes, they're all landowners. [LB824]

SENATOR SCHNOOR: Okay. Okay. [LB824]

DAVE HAMILTON: They're all landowners in Cherry County. [LB824]

SENATOR SCHNOOR: All right. Thank you, sir. [LB824]

DAVE HAMILTON: Yes. [LB824]

SENATOR SCHILZ: Thank you, Senator Schnoor. Any other questions? Mr. Hamilton, how long has the Cherry County Wind Association been in existence in operation? [LB824]

DAVE HAMILTON: It started...the early stages in that study committee was in 2009. I think the association was actually formed in 2011. And then they've met on a monthly basis and have got the lease agreements in place and working with a developer at this time. [LB824]

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SENATOR SCHILZ: To get that done. And you...your contention that LB824, if passed, would help that move along, correct? [LB824]

DAVE HAMILTON: Oh, absolutely. I think it would give the opportunity, as has been mentioned by developers. You know, they want that opportunity to have less regulation like surrounding states. They also want the opportunity to be able to export that to other states. So I don't think there's any question about this would help facilitate the growth of wind energy in Nebraska. [LB824]

SENATOR SCHILZ: Okay. And then one last question. As you talked about when you talked about those 75 members and the land that's entailed and stuff like that, you talked about the ability to spread some of those payments and things over a broader area. Can you explain that a little bit of what you mean by that and how that would work? [LB824]

DAVE HAMILTON: The association is set up with three types of shares. A share is an acre. A share is equal to an acre. And there are direct impact acres, there are indirect impact, and there are no impact acres. So depending on how many acres you have in a potential wind energy development in one or any of those classes, that's how the revenue is determined is if...on those three bases. [LB824]

SENATOR SCHILZ: So you could possibly get paid something without even having a turbine on your property. [LB824]

DAVE HAMILTON: Absolutely. In fact, the great majority of those landowners in that association may never have a turbine on their property. [LB824]

SENATOR SCHILZ: But because they're a member and a part of this... [LB824]

DAVE HAMILTON: No, because they're a member, they would receive revenue as a...in that third classification that I gave you, a no impact acre. And in addition to that, there's a 5 percent allotment of the total revenue that goes into a foundation for scholarships for students in the county and for community development. [LB824]

SENATOR SCHILZ: Very good. Thank you very much. [LB824]

DAVE HAMILTON: Yes. [LB824]

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SENATOR SCHILZ: Any other questions? Senator Schnoor. [LB824]

SENATOR SCHNOOR: One more question in reference to the number of ranchers. What do you feel is, the number of ranchers involved with your association, what do you feel that is as far as the percentage of ranchers in Cherry County? I mean would it be (inaudible). I mean obviously Cherry County is big, but it's sparsely populated, but. [LB824]

DAVE HAMILTON: It's big. I guess I would give you a ballpark. [LB824]

SENATOR SCHNOOR: That's is... [LB824]

DAVE HAMILTON: I'm going to say that's maybe 25 to 30, a third of the ranchers I would...and that's just a...that's just kind of a guess. [LB824]

SENATOR SCHNOOR: That's fair enough. Thank you, sir. [LB824]

DAVE HAMILTON: But there's a wide range of representation all the way from a section of ground to over 40,000. [LB824]

SENATOR SCHNOOR: Okay. Thank you. [LB824]

SENATOR SCHILZ: Thank you, Senator Schnoor. Any other questions? Seeing none, thank you for your testimony. [LB824]

DAVE HAMILTON: Thank you, Senator. [LB824]

SENATOR SCHILZ: Appreciate it. Next proponent. Good afternoon, sir. [LB824]

BILL HARU: (Exhibit 3) Good afternoon. My name is Bill, B-i-l-l H-a-r-u, and I represent myself. (Laugh) The reason why I'm here is I'm really familiar with not so much wind power but solar power. And I know that if a private company wanted to come in and spend however million dollars it takes to put up a generating power plant, that it takes approximately 40 acres. And that would generate enough power to power...it would be 5 megawatts of power, roughly, for 40 acres of a solar farm. And the cost of that power, once it's initiated and paid for, is approximately 5 cents on a multi...5 cents per kilowatt-hour on a multimillion dollar project. That having been said, there's a city, Georgetown Texas, which is 64,000 people, and they're going to be the first city of any consequence that in 2017, the first part of 2017, they're going to be 100 percent solar

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and wind-generated. So I think the Legislature or the gentlemen here, you have an opportunity to literally transform Nebraska as far as allowing the private-public partnership, whether that company wants to come in and work with a utility or just, you know, I think it's for the good of Nebraska that solar and wind power be advanced. What would happen, too, when you have this, you also have this big controversy of climate change. If you had enough, you know, if we in Nebraska and the other 49 states in the United States actually went to more wind and solar, we would solve that puzzle by default, basically. And there would be no way to...you wouldn't have to argue the point anymore whether you were on one side or the other. And I just think it would be in Nebraska's best interest to allow this to happen and make it easier as opposed to make it difficult, because whether or not the bill passes or fails, technology is advancing. I know right now the cost of generation on solar farms is approximately 5 cents or less and that is only going to go down. So I'd like to see a situation where I could call up my local utility, be it NPPD or OPPD or LES, and say, you know what, I want to buy that equipment through my local utility, which none of them offer now as far as I can tell. And that way even the local utility companies would have the option to sell to individuals like myself and still make money along the way and offer a low, low competitive rate for years to come. And that's pretty much it. [LB824]

SENATOR SCHILZ: Very good. Any questions? Seeing none, thank you very much for your testimony. [LB824]

BILL HARU: Thank you. [LB824]

SENATOR SCHILZ: Appreciate it. Further proponents. [LB824]

MARK SHULTS: Hello and thank you. My name is Mark Shults, M-a-r-k S-h-u-l-t-s, and I'm the general manager of the Northeast Nebraska Public Power District in Wayne, Nebraska, and we are the local power company, along with a lot of others that are here today that do a very fine job. But I want to give you that perspective. Also here with me today are several members of our elected board of directors. We are a purchaser and a reseller. We don't generate but we try to find value for our customers in purchasing and delivering power. Having the Southwest Power Pool, or the SPP, as a multistate organization, which they have the responsibility to decide which generating plants run to meet the entire load in the Great Plains, but that...having the SPP is significantly different than nearly the entire history of the electric industry. First, all Nebraska utilities that do operate generating plants sell all energy produced into the SPP and not directly to Nebraskans. Even the power contracted back by Nebraska utilities from these proposed existing wind farms would actually be sold into the SPP, and then a blended market power from all generators that are running would be bought back from the SPP to serve Nebraska customers. The market price paid to the SPP both reflects the cost of the delivery and the value of the energy. Utilities that have loads to serve, like Northeast, will have an agent purchase all required

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energy at market prices to meet the needs of customers. In terms of SPP market competition, you've heard some of that talked around. You know, it's...I would say if Nebraska utilities can purchase coal from out of state, burn it, and sell it into a multistate market, then the addition of tax-paying wind generators into the state of Nebraska wanting to do the same thing sounds reasonable to me, driving that investment. Or if we don't let that happen, we're going to drive that same investment, as you've heard from the wind developers, to other states who are still, when it's in Kansas, are still going to be selling into the same SPP market and we're still going to be buying a blended amount of energy back out. The stage is set. Production tax credit has been extended and most states are making real plans to meet the requirements of the Clean Power Plan. Energy purchases from large-scale wind farms will be in increasing demand, I think, by utilities in other states without wind resources. They're going to want what we've got. Utilities may claim that allowing renewable generation development will increase costs to consumers, but wind developers are going to happen. And in fact, we think that we see an opportunity to purchase reason...low-priced energy, a portion of our supply requirements at a low fixed cost for a long time. And we see more wind as an advantage to customers. Northeast represents rural customers, some of which are very poor. And at present, there are three wind farm locations in our counties where investors have purchased wind and land rights. County governments and our customers will directly benefit if this investment happens, and we'd like to support that. On a different note, Northeast supports the repeal of Section 70-1028. Northeast is a transmission provider to the cities of Wayne and Wakefield but doesn't get to participate on an equal footing with other utilities, and this adds cost to these cities and our customers. Section 70-1028 is an unnecessary and outdated barrier and may prevent Northeast from building power lines in our legal service area to carry out our legislative mandate. This is why FERC did away with (inaudible) like 70-1028 a few years ago and why Nebraska and New Mexico, to my knowledge, are the only ones that still practice it. So with that, I appreciate you listening and I ask your support of LB824. [LB824]

SENATOR SCHILZ: Thank you, sir. Any questions? Seeing none, thank you for your testimony. [LB824]

MARK SHULTS: Thank you. [LB824]

SENATOR SCHILZ: Appreciate it. Further proponents. Good afternoon. [LB824]

JOHN HANSEN: (Exhibit 4) Good afternoon, Mr. Chairman and members of the committee. For the record, my name is John Hansen, J-o-h-n, Hansen, H-a-n-s-e-n. I am the president of Nebraska Farmers Union. We're the second oldest, second largest general farm organization in the state. About one in ten of Nebraska farmers are a member of our organization. We have been actively involved in helping move renewable energy forward because it creates new value with

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existing natural resources that we control. In the handout that I've given you is a very conservative document that we crafted ahead of the wind and solar conference last November to put a bit of a better, more clear view on just what renewable energy means for production agriculture. And as we look at the numbers from wind, it assumes the completion of the 400 megawatts in Holt County. But with that, using very, very conservative numbers, we end up with \$5.3 million of new earned income for Nebraska farmers and landowners as the result of 1,324 megawatts of wind. It means \$8.6 million of new local tax revenues annually that goes on indefinitely. It means at least 130 new jobs that are good-paying jobs in rural communities. And it represents \$2.3 billion of capital investment and new tax base in rural Nebraska. The number one issue that our organization has heard for as long as I've been president of our organization, which is 26 years, is property tax relief. And so part of the effort to harness the power and the value of renewable energy is the opportunity to help ourselves and look at creating a new additional tax base. And so when we have more additional tax base, we have more folks to help share the load. That provides a direct tax benefit to those of us in rural communities. And so as we look at this bill, we are...we have been a part of the process last year. And so we thank Senator Haar for his almost endless patience and determination at the same time to figure out a way to try to help streamline this regulatory process, and also thank Senator McCollister for his efforts this year. And we think that we are facing an historic opportunity for our state. And with the passage of the PTC at the federal level that is going to be phasing down, given our strategic position in the Southwest Power Pool, all things considered, we're either going to have to fish or cut bait. And this is an historic opportunity and we are pleased with some of the compromises that have been made with public power. We're also very proud and protective of our public power system, helped to organize it. And so with the changes that have been made, we think that comes the right direction. And this is a process of give-and-take and we think that where we're at right now is a darn good starting place. A few more things probably need to be done, but this helps us be in a more competitive position. And at the end of the day, the world-class wind resources we have are not that much different from South Dakota or Kansas or Wyoming or Colorado. They also have world-class wind resources. And so if we're going to be competitive in that process, we need to do those kinds of things that we need to do to put us on a more level playing field so that we can compete for this export market. And this provides us, we think, a tremendous additional opportunity. And as we go forward and you look at both wind and ethanol, which is on the back, these represent the two biggest new sources of capital investment and tax base in rural Nebraska in the last 20 years. And this is, in our view, about the future. And with that, I'll end my testimony and be glad to answer any questions if I could do so. [LB824]

SENATOR SCHILZ: Thank you, Mr. Hansen. Any questions? Senator Johnson. [LB824]

SENATOR JOHNSON: Yeah. Thank you, Senator Schilz. A request: I'm assuming you might have some members in your association that are involved with wind energy. And if they do, if they could send me some information about their situation, that would be helpful. Get a lot of e-

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mails, don't know where they're from or, you know. If they're directly involved in it, that would help me. If you could do that, I would appreciate it. [LB824]

JOHN HANSEN: Certainly. And we have...we're a large enough organization that we have just about every point of view that you could possibly imagine that exists in rural Nebraska, and so we have folks that are very much involved in organizing landowner associations. It's a concept that we brought to Nebraska in 2009. We compliment Cherry County. We think that's the approach to go. We think that that's a good-neighbor policy and it helps pave the way to local acceptance. And so we also have members that are, I'm sure, rather...you know, would rather fight than switch and will not support wind no matter how many benefits there are. And so we still have farmers in rural Nebraska who are still against ethanol and, yet, without ethanol their goose is cooked. But that's our folks. [LB824]

SENATOR JOHNSON: Thank you. [LB824]

SENATOR SCHILZ: Thank you, Senator Johnson. Any other questions? Seeing none, thank you for your testimony. [LB824]

JOHN HANSEN: Thank you. [LB824]

SENATOR SCHILZ: Appreciate it. Further proponents. Good afternoon. [LB824]

RICHARD LOMBARDI: (Exhibit 5) Good afternoon. Members of the committee, my name is Rich Lombardi. I'm appearing today on behalf of The Wind Coalition, which is the regional trade association for the wind industry. I have a handout I want to give you which represents a number of companies that have a very distinct interest in Nebraska and are very, very supportive of this particular bill. The other thing on the other side of this, lest there be any doubt that the actions that this committee and this Legislature has taken as had a dramatic impact on Nebraska, I will circulate this to the committee. This is a time line of investment that has transpired because of, frankly, work that's come out of this committee. You will see here that actually Nebraskans and their public power districts have already voted with their ratepayers' money. There have been significant investments made by the public power industry in this state for renewable energy. And they have done it because one of the things that isn't talked about nearly enough is that this is a fixed-cost resource. In this day and age where we have so much uncertainty, to have an actual energy resource that doesn't have fuel costs, that doesn't have pollution costs, but that actually we can lock in, we know how much this is going to cost and that's why there's been this level of investment. In this room, for instance, a third of these lights are generated by renewable energy as we speak right now. But there are 52...to build a commercial wind project in the state of Nebraska, there are 52 separate governmental permits that have to be navigated: 15 federal

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state agencies have to be navigated, 9 state agencies have to be navigated, 1 regional transmission, and a multitude of different types of county zoning. What we're focusing on today is a specific area of requirements that has been pointed out to you that are unique to Nebraska and they are mostly referring to the types of contracts, the types of financing. These are...these are issues that most businesses...these are...these business decisions, these are equity decisions that are being made by companies that are not needed to either protect Nebraska ratepayers nor are they needed for any other particular reason. But because of the dynamics that are going on with this industry, and this industry is booming and is going to boom, those impediments and the removal of those signals we will, as an industry and I know as a state, we will market like crazy, that if there's any question that Nebraska is not open for business, the actions hopefully with the passage of LB824 will give us ample opportunity to say come here. And as I've circulated to you, there's a lot of companies. This is an incredibly attractive resource and we, as Nebraskans, we've already taken advantage of significant portions of it, as you can see in the investments now exceeding \$1.5 billion. That's only happened, Senator, since you've been here, when you take a look at what a short time period that we have removed obstacles in the state of Nebraska. So you're afforded another. Where really I think as everyone has made case here is that this is an important time in the development of this industry and we have some locations that are probably ready to go. And to the degree that we're in competition, which we are, with other states, we still have one of the best resources in the world here and we have a number of companies that are interested in doing this work. And it seems to me that a removal of several of these items will be an attractive incentive as we go forward in trying to move some investments into the state of Nebraska. I'm done. [LB824]

SENATOR SCHILZ: Thank you, Mr. Lombardi. Any questions? Seeing none, thank you for your testimony. Further proponents. [LB824]

JOHNATHAN HLADIK: (Exhibit 6) Good afternoon, Chairman and members of the committee. My name is Johnathan Hladik. That's J-o-h-n-a-t-h-a-n H-l-a-d-i-k. I'm the policy director at the Center for Rural Affairs. Many of the very good reasons to support this bill have been already stated today and there's no reason for me to repeat it, two pages of testimony notwithstanding. I did want to go back and emphasize a couple points I think are worth extra attention. The first is the economic benefits. At the Center for Rural Affairs, one of the primary reasons we support this bill is for the rural economic benefits that it can bring to the small towns and rural communities that are so important to the state. So to emphasize, in the last five years alone this industry has created 950 Nebraska jobs, many of those in our rural communities. Each 1,000 megawatts of wind energy development generates nameplate capacity tax of \$3.5 million, and \$7 million in annual property tax payments to the county in which it's built. And participating landowners bring an additional \$8,000 per year. I also wanted to emphasize the fact that--and many, especially the developers, were able to speak well to this--the electricity system has changed so much over the past ten years. It's really been dramatic in a lot of different ways. And

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this is really about giving people an opportunity to participate in a system that changed a long time ago. And now we, as a state, need to I think adjust to that in some ways. There's a third point that we haven't heard. We're in agreement with additions found in Section 3 of the proposed bill. Retaining some level of Power Review Board oversight is obviously important, but we're a little bit concerned about whether that window for notice and comment is truncated. I think that community members and landowners and neighbors deserve more than 30 days of notice of a project before construction begins, and I think the Power Review Board should be given more than ten days before they're able to approve a proposal or make a decision or allow that to go forward. As we see wind development happen in rural communities in Nebraska and throughout the Midwest, I think we're seeing that some landowners have really big concerns that maybe their rights aren't being respected or maybe their opinions aren't being heard. And I think that in Nebraska we have a duty to make sure that we don't fall in that category. So I would recommend to the committee or even the bill's sponsors to take another look at that time language and maybe we can go from there. That's all. Any questions? [LB824]

SENATOR SCHILZ: Thank you, sir. Any questions? Seeing none, thank you for your testimony. Appreciate it. Next proponent. Good afternoon. [LB824]

DAVID LEVY: (Exhibit 7) Good afternoon, Chairman Schilz, members of the Natural Resources Committee. David Levy, D-a-v-i-d L-e-v-y, with the Baird Holm law firm, here today in support of LB824 on behalf of BHE Renewables, although we also represent many of the other wind energy developers active in the state. I have in front of me here a letter from Mike Zakrzewski, who is the chairman of the Holt County landowners' association. He could not be here today. I believe you have a copy of this letter. I will not read the whole thing to you but I want to read a couple of parts, if I might: My name is Mike Zakrzewski and I'm a third-generation farmer and rancher in Holt County, Nebraska. I am also chairman of the landowners' group for the Grande Prairie Wind Energy Project currently under construction in our neighborhood. He talks then about economic development benefits, jobs benefits, property tax benefits. But here's something I don't think you've heard today and I think this is one of the things that's really important and really exciting about this industry: I have had many conversations with young people excited about the possibility of coming back home to Holt County for their new careers and to raise their families--gratifying confirmation that if we provide these opportunities there is no shortage of next generation citizens eager to share in our rural lifestyle. I know you hear about the depopulation of rural Nebraska a lot and it's a real challenge and a very difficult one, so I think that's really an important point. And just read a couple of other paragraphs and then I'd be happy to answer any questions: The first phase of construction for Grande Prairie was public road reinforcement. Throughout the fall we watched as hundreds of trucks delivered thousands of tons of local aggregate for our neighborhood's public roads. The impact of this wasn't fully realized until our first snowstorm this winter. Roads that in previous years would have been impassable were now high and dry despite several inches of wind-blown snow. Best of all, it didn't take a

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dime out of our county road department budget. Throughout the seven years of the planning and development phase of the Grande Prairie Project, the agricultural economy enjoyed unprecedented growth and good fortune. Now that the cycle has entered a downturn in the agricultural sector, the realization of how beneficial having another industry share in the tax burden and income production for our county has really sunk in. Agriculture will always be the life's blood of rural Nebraska, but having this added source of diversity can only make us stronger. I strongly believe the renewable energy industry can play an important role in Nebraska's economy and ecology as we move forward, and it would serve us well to do all we can to support it at this early but important stage of its development. Sincerely, Mike Zakrzewski, O'Neill, Nebraska. So I wanted to highlight those points for you and I'm happy to answer any other questions that the committee might have. I do want to emphasize one point before I do that, in response to an earlier question. LB824 has no effect whatsoever on local control of land use. If the county wants to adopt zoning regulations that are very favorable to wind energy development, it can do that today and it will be able to do that just the same if LB824 becomes law. If the county wants to adopt zoning regulations that are very restrictive or some would say even prohibitive to utility-scale wind energy development, like Lancaster County recently did, they could do it today and they'll be able to do it exactly the same after LB824 becomes law. So I just...I think that it's very important to know that this bill in no way, shape, or form affects, detracts from, takes away from local control of land use with respect to renewable energy. So with that, happy to answer any questions. [LB824]

SENATOR SCHILZ: Thank you, Mr. Levy. Any questions for Mr. Levy? Seeing none, very good. Thank you. [LB824]

DAVID LEVY: Yes, thank you very much. [LB824]

SENATOR SCHILZ: Further proponents. Good afternoon, sir. [LB824]

GARY AKSAMIT: (Exhibit 8) Good afternoon, Mr. Schilz. Good afternoon, Chairman Schilz and members of the committee. My name is Gary Aksamit, G-a-r-y A-k-s-a-m-i-t. I am CEO of Aksamit Resource Management, a Nebraska corporation. I'm here to testify in support of LB824. The eminent domain language as contemplated will facilitate the construction of the 450 megawatts of wind generation my company currently has under development. We have term sheets in hand to finance and construct this \$725 million worth of economic development. Removing uncertainty around eminent domain ultimately lowers the cost of developing and financing a project. I'm happy to answer any questions about eminent domain, but I'm primarily...but I primarily want to address Section 2 of this bill, revising statute 70-1001.01 that defines unbundled billing, but nowhere in the state statutes is unbundled retail rates mandated. In addition to the revisions currently identified in LB824, a provision should be added to include

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that unbundled rates be mandated. It is imperative that the definition of unbundled billing is consistent for everyone, the components are defined, and every entity, be it public power or private, are all compiling and presenting their data the same way. The elements of unbundled billing must include the cost of electricity generation; demand; transportation...excuse me, transmission; and distribution; taxes; and decommissioning fees. Currently, there is a large disparity of retail rates within Nebraska, as you will see from the two bar charts that I provided to you. Based on the latest data from the Energy Information Administration, the 2013 retail rates in Nebraska ranged from 6.6 cents per kilowatt-hour to 14.48 cents per kilowatt-hour. The average price of electricity is commonly used when speaking about Nebraska having one of the lowest electricity rates in the nation. I don't think that the ratepayer who is paying 14.5 cents really cares about the average price of electricity. It is time that the electric customers knew...know what they were paying for and when their...when their bill arrives. Unbundled billing would allow the ratepayer to see the breakdown of the electricity rates into the different components that go into their rate. In 2015, the average market price for electricity was a little bit over 2.3 cents per kilowatt-hour. So using that 2013 data, the customer does not know how the remaining charges were broken down in the electricity rate that ranged anywhere from 4.3 cents to as much as 12.2 cents. Without unbundled billing, the customer does not know if they are subsidizing other ratepayers. This was demonstrated by Omaha Public Power District last month when they shifted their cost of energy to the cost of service because they stated it reflected the actual cost to provide service to the customer. There was significant conversation that took place about this among ratepayers and in the Omaha World-Herald. The greatest benefit to unbundled billing is that it will let the ratepayers have conversations about our energy future based on facts, not lore, that Nebraska has cheap power. In 2000, LB901 was passed to issue a "Condition Certain" report. One of the conditions studied in the report was to what extent retail rates have been unbundled in Nebraska. It was determined that unbundled billing is an indicator and a significant process for implementing retail competition. The electricity industry has changed dramatically in Nebraska since the Southwest Power Pool implemented the integrated energy market in 2014. With the new energy market, the electricity price is only about 15 (percent) to 30 percent of the electricity rate, so it is important for the customers to know what the costs are of the remaining components in the electricity rates since they can add up to 67 percent of the electricity rate. In addition to providing ratepayers with information, unbundled electricity bills also give the lawmakers the information needed to make informed energy policy decisions that will allow electricity rates to become more competitive. Thank you and I would be more than willing to answer any questions. [LB824]

SENATOR SCHILZ: Thank you, Mr. Aksamit. Any questions? Senator Friesen. [LB824]

SENATOR FRIESEN: Thank you, Chairman Schilz. Mr. Aksamit, how do you account for the huge difference in rates that are charged? [LB824]

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GARY AKSAMIT: A lot of that has to do with the demand component, which I think is the most important thing the individual ratepayers need to understand. As you see by providing entities in Nebraska, it is vastly fluctuated. A lot of that has to do with the irrigation load in some areas. In particular, there's some rural electric associations in western Nebraska that during the summertime can have a summertime peak of 100 to 120 "meg" load. And during the wintertime that can drop down to as little as 20 "meg." The problem with that is you also have the individuals in a residential situation who are paying for that excessive demand charge because it's aggregated or subsidized out across the entire rate pool. So that defines a lot of that. [LB824]

SENATOR FRIESEN: Are there other amounts that are built into some of the rates like in municipalities that might count for some... [LB824]

GARY AKSAMIT: Potentially. And with itemized billing, that would be broke out as additional fees if there's some sort of a checkoff, for example, or I believe some REAs refer to it as a roundup, where you can round up your bill and that money is saved for a later day. Those things could be itemized and broke out on the bill. As you can see, I provided you with a sample copy of a ComEd bill from Illinois that's broke down into quite specific detail. In this particular bill, they use the terminology "distribution facilities charge," which is actually the demand charge. They just call it something different. So this would be a pretty good example of how to provide clarity for the ratepayers. [LB824]

SENATOR FRIESEN: Thank you. [LB824]

SENATOR SCHILZ: Thank you, Senator Friesen. Any other questions? Seeing none, thank you for your testimony. Appreciate it. [LB824]

GARY AKSAMIT: Thank you. [LB824]

SENATOR SCHILZ: (Exhibits 9, 10, and 11) Further proponents. More proponents. In support of LB824 we have Virinder Singh with EDF Renewable Energy; Michael Zakrzewski from Grande...I think that's who Mr. Levy was taking about, from Grande Prairie Wind Energy Project; Ryan Beckman and John O'Connor from Olsson Associates; and Rod Koch from the city of South Sioux City. And with that, we will move...one more time. Is there any proponents left? Seeing none, are there any opponents? Looking for opponents. Good afternoon. [LB824]

CURTIS SCHWANINGER: Good afternoon. My name is Curtis Schwaninger. I live near Hallam, Nebraska. C-u-r-t-i-s S-c-h-w-a-n-i-n-g-e-r. And I'd like to urge you senators to vote no on LB824 as it stands right now. Checks and balances of the wind industry as it currently exists

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to protect the ratepayers should not be removed. This bill allows...would allow wind developers to do as they please without the Nebraska public Power Board to oversee them. And wind power, wind developers cannot be depended upon doing the right thing when millions of dollars are in line for them. It's just basically like putting a fox in a chicken house to protect the chickens. We cannot rely on wind developers to tell us exactly what's going on when \$300,000 of \$30 million for a 100 megawatt wind complex is available. And Joe Wood of Volkswind, who is a...Volkswind is a developer who tried to develop in densely populated southern Lancaster and northern Gage County--said at one time, he was quoted as saying the developer would take the risk of violation to get a complex put in. And so we need to have some kind of checks and balances to protect that from happening. Otherwise, the ratepayers are just at the mercy of the developers. And I'm not saying all developers are unscrupulous, but there are some doing that. And these tax incentives are a real thing that would urge them to not be completely honest. And also, before a wind complex is built, the electricity should already be sold. Otherwise, the wind developer could build a complex, then leave with millions of dollars in tax incentives and the people are left with nonoperating towers and that would be something that the state would have to deal with. Wind turbines are really not very efficient. They need backups in the form of coal and natural gas plants. If the issue is to eliminate the carbon print, the most logical and effective method would be to use these use tax incentives to convert existing electric plants from coal to natural gas or hydrogen rather than giving the wind developers over \$600,000 a tower to put up a wind tower. It's like paying for a Cadillac and getting a Model A. And another thing that needs to be in a bill is that there has to be proof of community involvement. Otherwise, it's very divisive to a community, it was in southern Lancaster County and northern Gage County. It was very divisive when nobody knew that the wind towers were coming in except the Volkswind and the people who signed the lease, and they were prohibited from even talking about them. And so we need to have community involvement and that needs to be part of the bill to have a bill done. I really think that LB824 should be killed in its form right now. [LB824]

SENATOR SCHILZ: Thank you, sir. Any questions? Sir, I have just a couple. As you...sir, sir, I'm sorry. Thank you. And as you talked about checks and balances, obviously this bill is covering things that are on the state level that this has to deal with. Do you not think that the opportunity for the local zoning and things like that gives folks an opportunity to dictate and to locally decide how that wants to go forward? [LB824]

CURTIS SCHWANINGER: I think the power grid is a thing that's not in local counties. It's all over the state. And we need to have an orderly power grid to somehow not have things mishmash, you know. And that's why I think that the Power Board should be put in there to do that, to kind of guide the direction of where the transmission lines go and where the power goes, where the windmills go and things like that. [LB824]

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SENATOR SCHILZ: And so if the Power Review Board has the ability to say whether this should go forward or not, does that then change your opinion on how this goes or...? [LB824]

CURTIS SCHWANINGER: I'm sorry, I don't understand. [LB824]

SENATOR SCHILZ: The Power Review Board that's in place right now that okays projects moving forward, if the Power Review Board is involved in the process does that then give you some comfort that there would be some of that question there as to how that permitting would go? [LB824]

CURTIS SCHWANINGER: Yeah, definitely. I think there has to be some kind of control that says, you know, how this works and how this won't work. [LB824]

SENATOR SCHILZ: Okay. [LB824]

CURTIS SCHWANINGER: Otherwise, it will be...everybody will do their own thing and the electric grid will be a mishmash. [LB824]

SENATOR SCHILZ: Okay. Thank you very much. Any other questions? Seeing none, thank you for your testimony today. Very much appreciate it. Next opponent, please. Good afternoon. [LB824]

SARA MACKLIN: Hi. I'm Sara Macklin, S-a-r-a M-a-c-k-l-i-n, and I'm here today to represent some stakeholders in this process that I don't feel have been mentioned yet today in these proceedings, and those are the people that would live in the shadows of the wind turbines. I think to fully understand or appreciate wind development in Nebraska, we have to really truly appreciate how people that live among wind turbines are affected by them. So I'm here today to testify in opposition of LB824 because I'm opposed to any legislation that would deregulate or incentivize wind development in Nebraska without first putting protective measures in place to safeguard citizens from the ill effects of wind turbines. When considering this bill and others that aim to increase wind development in our state, I urge you to consider how Nebraskans, such as my neighbors and I, could be adversely impacted by this legislation. If this bill passes, the proposed Cottonwood Wind Farm that is sited around my home in rural Webster County would have a better chance of being built. The wind developers would no longer require approval from the Nebraska Power Review Board, where it has lost...which it has been lost due to not securing a power purchase agreement. I truly believe that if built, this industrial wind farm would adversely affect my family's health, safety, and well-being. These burdensome regulations do provide protection to Nebraskans. This is an industry that I believe needs more regulation, not

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less. Despite the 52 government permits that they must obtain, it is still legal for this private wind developer to site this wind farm so poorly around my home and my neighbors' homes.

Cottonwood's private wind developer hopes to place 14 wind turbines within one mile of our home where my husband and I are raising our five daughters. Eight would be within one-half mile and the closest being less than 1,000 feet from our property line. Their computer modeling predicts that my family would be subjected to nearly 50 decibels of wind turbine noise, which is double the amount of noise that a nonparticipant resident should be subjected to, according to current research. Despite recommendations from the National Weather Service to prevent wind turbines within 11 miles of a NEXRAD installation, turbines would be placed two miles from a NEXRAD weather radar where they have the potential to negatively impact weather forecasters' ability to predict severe weather in my neighborhood. They would be sited next to historical landmarks and placed in the path of thousands of migratory birds, including the cranes. A vast majority of the people who would be negatively impacted by the wind farm has no participation in the project. The current body of research suggests that wind turbines are not related to adverse health effects, but it is important to note that is only in the case when they are sited properly. Our county's wind zoning, much like much of the state of Nebraska, are inconsistent with what the scientific literature points to as safe siting. Our county officials admit that our zoning was influenced by wind industry, much before the majority of concerned citizens in our county even knew that wind farm development was being considered. Now, despite petitioning our county for a year and a half to amend our zoning, they are unwilling to do this, most likely due to pressure from the wind industry. It is my experience that our county is ill-equipped to deal with such complex issues as wind zoning. I strongly urge you senators to consider statewide consumer protection measures to protect Nebraskans from the ill effects of wind turbines before passing legislation that would increase wind farm development. Thank you. [LB824]

SENATOR SCHILZ: Thank you, ma'am. Any questions? Seeing none, thank you for your testimony. Appreciate it. Next opponent. [LB824]

BRUCE BOSTELMAN: (Exhibit 12) Good afternoon. My name is Bruce Bostelman, B-r-u-c-e B-o-s-t-e-l-m-a-n. LB824 will gut the regulatory authority held by the Nebraska Power Review Board when dealing with privately owned renewable generation facilities. This authority is being construed as holding unnecessary regulatory hoops that neither protect Nebraskans nor create Nebraska economic development, which I feel is absolutely false. The Nebraska Power Review Board not only ensures reliable electric generation, it provides the same regulatory authority that is commonly exercised by state power regulatory boards across the United States. Quoting the Brattle report: The broader regional market for additional renewable generation is currently saturated or zero gigawatts needed in the SPP for wind generation through 2025. We find that the other permitting requirements in Nebraska are no more difficult than in neighboring states and the developers generally are very positive in their feedback on their working experience with the Power Review Board. The report states the perceived regulatory issues are due to developers'

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limited experience with PRB, not unnecessary regulatory red tape. The Nebraska Energy Office Web site shows there is 810 megawatts of wind energy being generated, 686 megawatts of construction...under construction, 4,716 megawatts proposed awaiting a PPA which does not include other projects being pursued. This results in 5,400 megawatts of new wind generation facilities on the books. Brattle reports there is room for only 2,000 megawatts without major infrastructure upgrades and costs which go upwards of \$4 billion, in addition to upgrades that are already in development. And I quote: A potentially significant portion of this cost would likely have to be borne by Nebraska utilities and their customers. The impact is a rate increase of at least 5 percent. By eliminating the PRB authority, you are removing the ratepayers' protection in the process. The PRB ensures sound business practices are in place, such as a PPA, no detrimental effects to retail electric rates, low risk for stranded assets, and decommissioning, to name a few. This bill will remove the majority of these important safeguards that protect the ratepayer and all power generators in Nebraska. Natural gas is generating power at an extremely low rate with facilities located in the southern part of the SPP near major populations. Why should the SPP support Nebraska grid upgrades when the immediate need is in the south? There is no market need within the SPP. Transmission upgrades to accommodate additional power export would be outside the SPP plans. And according to the Brattle report, 71 percent of the costs of those upgrades will be borne by Nebraska ratepayers. Further, Nebraska is already a net exporter of power. Wholesale rates paid for power from Nebraska are lower than the southern region of the SPP due to transmission congestion. Adding additional wholesale power to an already saturated market will further depress wholesale prices, reducing revenue for Nebraska public power generation entities, and directly increasing Nebraska utility rates. Without a PPP (sic) requirement, the 5,400 megawatts previously identified will be allowed to be built immediately. The regional grid was not designed for high-capacity variable electricity and there will be significant additional costs in upgrade and maintenance in the future. Next, there is no place to go with the power, which is the real reason wind power is not being built. Nebraska power plants will be required to power down or operate at reduced capacity. If they are unable to sell within the SPP, the results are increased production costs. The heavily subsidized renewables are directly...will directly compete at lower rates against the public utilities, resulting in an increased costs to the customers. I met with Governor Ricketts and the director of the Nebraska Energy Office, and the Governor has tasked the Energy director to compete...to complete an Energy Development Plan by 2017 which will look at our energy portfolio and provide additional, excuse me, provide information on further energy needs and statewide development. I believe this bill will circumvent that process and cause significant difficulties in the state. I would like to paraphrase Warren Buffett: The only reason to build wind facilities is for the credits and subsidies. And Bill Gates: That we need to stop funding wind projects that are inefficient and outdated. We need to look to the future and develop new reliable energy sources. Simplify does not mean remove significant authority from the Power Review Board. The board is not the issue. Market saturation and low costs of power generated by natural gas companies in the south are the issue. The board serves the state well and the elimination of its

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regulation...regulatory authorities in this bill is not good for Nebraskans, your constituents. In closing, as a public power owner and ratepayer, are we protected by some other means other than this bill? The answer is no. The PRB is the only state regulatory authority responsible and knowledgeable of the state's electric system. Without it, we face major grid issues, as identified by the SPP. Thank you for your time. Do you have any questions? [LB824]

SENATOR SCHILZ: Thank you, sir. Any questions? Senator Friesen. [LB824]

SENATOR FRIESEN: Thank you, Chairman Schilz. Well, you talked a lot about the excess capacity; we are currently saturated. The Brattle report did indicate we had room for some expansion. But with all of the megawatts currently on the books you talked about, what...where would that power end up going? Or would we just have to reduce production in our current facilities? [LB824]

BRUCE BOSTELMAN: I'm not the power generators. My understanding would be what happens when the SPP buys from the wind developers or from renewable energy, your power plants, your gas, your coal, your nuclear power down. So if they're taking the power...if since wind energy is heavily subsidized and they can sell it at a lower rate than what the other utilities will generate, that's going to cause our public power industries, our nuclear plants, our coal plants, our Monolith plant, or gas plants to power down and not sell their power onto the grid. And when they power down, that's less efficient. The efficiency of production of that increases the cost and the cleanliness of the items, of, say, coal or nuclear power. [LB824]

SENATOR FRIESEN: You mentioned... [LB824]

BRUCE BOSTELMAN: Does that answer your question? [LB824]

SENATOR FRIESEN: I think that does a little. You mentioned Warren Buffett and the tax credits. Do you have any idea what...in one place you mentioned some tax credits I think but what...do you have a dollar amount of what the tax credits for a wind farm are? [LB824]

BRUCE BOSTELMAN: I believe someone, one of the companies before, said there was 2.-some cents per kilowatt-hour, whatever it is. [LB824]

SENATOR FRIESEN: So you don't know what that amounts to per tower over a ten-year period of time? [LB824]

BRUCE BOSTELMAN: No, I can't tell you what that is per tower, no. [LB824]

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SENATOR FRIESEN: Thank you. [LB824]

SENATOR SCHILZ: Thank you, Senator Friesen. Any other questions? One question that I have and I've been struggling with this for a while. And you know as we talk about the effect on conventional power, whether it's with public power or any other provider or generator within the Southwest Power Pool, if we have 2,000 megawatts of room still left but there's 5,000 other megawatts that may be built in other places, does it matter if we do anything or not as to the effects that you're talking about happening to the...to conventional power? Because it's moving down that road anyway, isn't it? And the people of the state of Nebraska don't have any ability to stop Oklahoma, Kansas, North Dakota, South Dakota, anybody else that's in the Southwest Power Pool from allowing this and from...this from going forward, correct? [LB824]

BRUCE BOSTELMAN: Oh, a good question. And if I understand your question correctly, let me try to answer it for you. [LB824]

SENATOR SCHILZ: Okay. [LB824]

BRUCE BOSTELMAN: The state of Nebraska right now, according to the Nebraska Energy Office Web site, we currently produce 810 megawatts of wind energy, okay? On our grid we have 2,000...in Nebraska, okay, in Nebraska we have 2,000 megawatts of capacity left. There's over 5,000 megawatts, 5,400 megawatts of electricity that's sitting out there that they have identified as potential. Companies have said we have these wind farms that we want to put up. [LB824]

SENATOR SCHILZ: Is that just in Nebraska? [LB824]

BRUCE BOSTELMAN: In Nebraska only. [LB824]

SENATOR SCHILZ: Okay. [LB824]

BRUCE BOSTELMAN: So what that's going to do, it goes back to what the SPP has said, that if you put all this power on in a very short window, which is what I've heard all of the companies say--we're going to put this on right now, we're going to put this on in the next year or two years--if you do that, SPP warns and the NERC warns if you do that, you're going to have significant trouble, problems with your grid. And in fact one of them I think said that there's four areas that you potentially could have blackouts in, in Nebraska, four regions. So what I'm saying is that there's only 2,000 megawatts of room on our grid alone. Okay? And there's over 5,000 megawatts that they, if you...if LB824 goes through, that 5,400 megawatts can be built (snaps

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fingers) like that in the next year or two. As soon as they can get it in the ground, they can build it, because that's what they're saying they want to do. We only have room for 2,000 megawatts. That means we have to rapidly expand the grid, and the grid sometimes takes 7 to 15 years to do that. So we...and that's a \$4 billion cost that we will have to, as ratepayers and as utilities, will have to incur,... [LB824]

SENATOR SCHILZ: Let me... [LB824]

BRUCE BOSTELMAN: ...my understanding. [LB824]

SENATOR SCHILZ: Let me ask you this then. As we looked and you talked about the congestion as well that's already there, and if you look back to the summer of 2012 with the irrigation demand and everything like that, it would seem to me that we've already got an issue with transmission, because we almost had significant huge problems in 2012 because we didn't have enough transmission to get the power moved around to where it needed to be. So is there some belief on your part that we shouldn't do anything on transmission going forward to not just allow for other energy to get...well, basically, to allow energy to get out to the rest of the Southwest Power Pool so that these utilities can then start getting paid more for their energy that they produce today? [LB824]

BRUCE BOSTELMAN: I think you're talking about apples and oranges, in my...in the sense (inaudible). [LB824]

SENATOR SCHILZ: And you'll have to explain that to me. [LB824]

BRUCE BOSTELMAN: And why I say that is our...my understanding, and I think you can ask probably a representative from NPPD or OPPD or LES or an engineer about this who can give you this in more technical terms. But when we generate power with our nuclear plants, with our coal plants, with our gas-fired plants, with our Monolith plant that's being built, we're producing a constant--here again in layman's terms--a constant flow of electricity. When you bring wind power up, okay, that's one set of...way of handling on the grid. Okay, the grid is developed to have power go one way, not two ways, okay, and that's what happens when you have variable electricity, variable power go on the line that comes from these wind towers. Okay? We're talking two different...a DC and an AC current is what you're talking about, and I believe there's probably going to be an engineer that's going to come up in a minute that will be able to answer that question for you a lot better than I can. But I believe we're talking, because if we're sending this power out of state, that's on a 345 kV line. That's not what services our local areas. So in that sense, what I'm saying is I think we're apples and oranges. [LB824]

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SENATOR SCHILZ: Okay. And then you talked about the variability of wind. [LB824]

BRUCE BOSTELMAN: Uh-huh. [LB824]

SENATOR SCHILZ: Does Nebraska not see the same type of variability on the demand side rather than on the supply side? [LB824]

BRUCE BOSTELMAN: I don't understand your question. [LB824]

SENATOR SCHILZ: If you look at the irrigation... [LB824]

BRUCE BOSTELMAN: Right. [LB824]

SENATOR SCHILZ: ...and what happens, so all of a sudden if it rains you don't have to turn your irrigation engines on. You don't have to... [LB824]

BRUCE BOSTELMAN: Right. [LB824]

SENATOR SCHILZ: ...use any power or electricity. [LB824]

BRUCE BOSTELMAN: Right. [LB824]

SENATOR SCHILZ: But if it doesn't, then you're turning it on. But it's not on every single day. We know that. So as we're sitting here looking at it, the intermittency of the demand can do the same thing to you as the intermittency of the supply, correct? [LB824]

BRUCE BOSTELMAN: I don't think so. [LB824]

SENATOR SCHILZ: In 2012,... [LB824]

BRUCE BOSTELMAN: I don't think so. [LB824]

SENATOR SCHILZ: ...that's what we saw. [LB824]

BRUCE BOSTELMAN: I don't think so. [LB824]

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SENATOR SCHILZ: You don't. Well, we'll (inaudible). [LB824]

BRUCE BOSTELMAN: I don't believe (inaudible). [LB824]

SENATOR SCHILZ: I appreciate that. [LB824]

BRUCE BOSTELMAN: Sure. [LB824]

SENATOR SCHILZ: I'll ask somebody else. I appreciate your...any...oh, sorry. Any other questions? Seeing none, thank you very much for your testimony. Appreciate it. [LB824]

BRUCE BOSTELMAN: Yep. [LB824]

SENATOR SCHILZ: Further opposition. Any other opposition? Here we go. Good afternoon and welcome. [LB824]

JOEL MACKLIN: Good afternoon. Thank you. My name is Joel Macklin, J-o-e-l M-a-c-k-l-i-n. Thanks for allowing me to participate today. I am a lifelong resident of the state of Nebraska. I grew up on my parents' farm in northeast Nebraska and I currently live in south-central Nebraska where I'm an engineer and project manager for a small, employee-owned aerospace company. I'm here to express my concerns and my disapproval on LB824. And in the simplest terms, I oppose the state of Nebraska making changes to encourage the unregulated development of a fairly good wind resource. The safeguards in place I believe were intended to protect the citizens, residents, and electric ratepayers in the state of Nebraska. I understand the changes within LB824 are intended to spur private development of wind, but these changes introduce significant risk to the citizens of Nebraska. And I had some additional remarks here. I think a lot of this has been covered, but I'll try to hit just the highlights in the interest of time. We've already heard there's excess generation currently in-state and in the SPP, and the Brattle report recognized that. The reality of negative price points for power was experienced in September in Texas. I know it's happened other occasions. But it's an interesting and fairly complicated situation on the economic side. But it seems to me that the more we do to increase the generation export, it adds risk to in-state rate increases. And in other words, it seems like we're trying to stimulate the creation of product without a real market demand, if there's truly a surplus of wind and power in the SPP. And that product that we're looking to stimulate production of will adversely affect our rates. So that's the one thing. The other thing I just want to quick mention that there are several private wind developers that have agreed on that point in terms of these market conditions make it very cost competitive in the SPP as far as wind power. And you've heard several developers state their business model does not support building on speculation of finding a customer. I think

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this is a pretty key point. I mean it's not a big surprise, given the large-scale investment and the capital involved on a project of this scale. So to me, it seems pretty obvious. But I don't understand then why it is in that kind of a market condition, where it's so cost competitive and that they're saying they already need some sort of relatively firm agreement, that we need to eliminate the PPA requirement and the NPRB approval on top of that. The risk associated with what I'm calling "spec-built" wind farms is very one-sided and disproportionately not in favor of Nebraskans. So in closing, please think about the message that this LB824 sends. Do we really want to let the development occur at any cost or risk? We must ensure that if the development happens, it's done with minimal impact to the citizens of Nebraska. Thank you. [LB824]

SENATOR SCHILZ: Great. Thank you. Any questions? Seeing none, thank you very much for your testimony. [LB824]

JOEL MACKLIN: Thank you. [LB824]

SENATOR SCHILZ: Appreciate it. Further opponents. Good afternoon. [LB824]

JAN BOSTELMAN: (Exhibit 13) Chairman Schilz. Sorry, move this a little bit. Chairman Schilz, thank you for your time. State senators on the committee, I appreciate being able to come forward. My name is Jan Bostelman, that's J-a-n B-o-s-t-e-l-m-a-n. I'm the engineer side of Bruce Bostelman, what he mentioned. I am a licensed professional engineer of the state of Nebraska with over 35 years of experience in the electric utility industry, not only here in the United States but overseas as well. I am also a former member of the technical staff at Sandia National Labs, working in a reliability group. I also am a state officer of the Nebraska Society of Professional Engineers. And as a professional engineer, I am sworn to uphold the health and safety of the public above all else. I come to you, to this committee, with my concerns about LB824. The first one is the bill, as written currently, is at the state level right now with the Power Review Board, by state law an engineer has to be on that board. Bypassing that, in my opinion then, is bypassing an engineering review, which at this point I cannot condone or I am in opposition to that. Also, the most current 2016 SPP transmission expansion plan which was just released yesterday by the board of directors, it is a complex plan. And I talk about this because I have to interweave it into talking about reliability, and that's with our grid. It is a complex plan that has to take into consideration other higher priority projects within the transmission grids, the balanced portfolios, generation interconnections, transmission services, integrated transmission planning, sponsored upgrades, subregional planning, and it goes on a lot further. It's all within this document. If anybody would like to look at it, I do have a copy of it. All of which are...all these projects on the grid are evaluated by FERC as well. There is no guarantee that if you had to do some kind of proposed upgrade within the state of Nebraska on the transmission system that it would be cost allocated throughout the SPP. And also I want to point out the grid itself, as

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we've talked about throughout the afternoon, it's a complex system. And to quote a colleague of mine who's an expert in electrical engineering in the Northeast part of this country, he daily designs and works with the large-scale transmission and distribution systems--the grid. It was never built originally for power to move in multidirections like it has to do now with putting on renewable power sources, that ebb and flow generation. Electric energy transmission has to now operate differently than originally designed and, as such, requires very costly upgrades or addition of new transmission lines and some things sometimes such as extremely high-voltage DC lines to move power from remote rural locations. Those are costs that the public power entities, like NPPD, OPPD, and LES, might have to incur. Federal law requires that the grid has to be stable and the energy supplied through it reliable. So in order to meet those requirements, the public power entities have to invest significant upgrades to the transmission lines if there's going to be significant proposed cyclic capacity as it comes on-line. As part of their function, the Nebraska Power Review Board takes those projects and plans into consideration as part of their approval and certification processes. I'm against circumventing that approval and certification of that Nebraska Power Review Board on the generation because it defeats an oversight intent for the public power owners. The state authority has a better understanding of our state's requirements and needs, both those needs short- and long-term, since that can take up to 7 to 15 years as far as getting approvals going and through the whole SPP expansion plans and engineering as such. So the point of that is that there is that potential, if the Power Board is bypassed, that the new generators would be built and running at capacity in a short time frame that could have negative impacts on the grid regarding capacity and reliability. NERC, which is the national electrical reliability council (sic), and SPP have warned about this in their April 2015 reports and that we have to have a state authority--and I'll just finish that up--have a state authority in place and not to bypass that. I have other written information that's provided, so I'll take any questions at this point. [LB824]

SENATOR SCHILZ: Thank you, ma'am, very much. Any questions for her? Thank you very much for your testimony. Oh, Senator Friesen, I'm sorry. [LB824]

SENATOR FRIESEN: Thank you, Chairman Schilz. You talked, you mentioned just a little bit that if there were needs to upgrade the grid, the costs of doing that to stabilize the grid would not necessarily be borne by the SPP. Is that...could you elaborate on that? [LB824]

JAN BOSTELMAN: It's a very long-term process. They have three different phases that I can see. They have like an annual plan they look at. They have a 10-year plan, a 20-year plan. And there's also different ways you...utility companies would have to come to the SPP to get permission, to request for these types of these cost allocations, whether that's what they call in a balanced portfolio or if there's a high-priority project. For a case, one point, the OPPD transmission line going from Nebraska City down into Kansas City area, that's one of SPP's high-priority projects. Now like LES last year, they had one where they went in for, oh, I can't...I

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got it here. But anyway, they went in to request for funding but that doesn't guarantee that they will get that allocation, because it says in the SPP's plan they may have to pay for that all on their own. So it's not necessarily that. You have to go in and submit these plans then to the SPP to get those approvals and it's also a cost-benefit allocation as well. [LB824]

SENATOR FRIESEN: Does the Southwest Power Pool look at grid stability at all, or is that not their function? [LB824]

JAN BOSTELMAN: They do look at that. Also NERC, the national...the North American Electric Reliability Corporation, they are the ones that really give oversight. They are given that oversight by FERC and so they get involved with evaluating, doing the studies, feasibility studies and doing studies as this on the grid itself. SPP does do this because then they have to submit their plans to FERC to get approvals as well. [LB824]

SENATOR FRIESEN: So if instability in the grid showed up according to NERC,... [LB824]

JAN BOSTELMAN: Yes. [LB824]

SENATOR FRIESEN: ...the Southwest Power Pool would have to address it or...? [LB824]

JAN BOSTELMAN: Yes. There's already right now in the state of Nebraska, when NERC came out with their report in 2015, they identified four spots within the state of Nebraska. They call it "reactive areas" that have issues. So that just means it can be difficult to move power back and forth, like what you were talking about earlier in 2012. So those were identified in NERC's report in, like I said, April 2015. SPP echoed that in their own report that same time frame. [LB824]

SENATOR FRIESEN: And so those costs of stabilizing that wouldn't necessarily be borne by SPP. They could decide that it needs to be done and... [LB824]

JAN BOSTELMAN: It needs to be looked at, because SPP has other, more higher priority areas down in the southern part of its regional area that have even higher issues with moving power. So they may look at those areas first for cost allocations. And then it goes too with a formula that they have for cost-benefits as well and also moving stuff outside of SPP to other, like MISO, we call it MISO, or some of the other regional power pools. [LB824]

SENATOR FRIESEN: Okay. Thank you. [LB824]

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SENATOR SCHILZ: (Exhibits 14 and 15) Thank you, Senator Friesen. Any other questions? Seeing none, thank you very much for your testimony. Appreciate it. Any further opposition? Opposition? We have a couple letters here. We have one from Larry Chapman from Firth, a letter also from Mace Hack from the Nature Conservancy. And that should do it. And we will now move to neutral testimony. Come on up. Neutral, correct? [LB824]

TOM KENT: Correct. [LB824]

SENATOR SCHILZ: Very good. Thank you. Good afternoon. [LB824]

TOM KENT: (Exhibit 16) Good afternoon, Chairman Schilz, members of the committee. My name is Tom Kent, T-o-m K-e-n-t. I'm vice president and chief operating officer for the Nebraska Public Power District, over 25 years of experience in the electric utility industry, and I'm a registered professional electrical engineer in Nebraska. And I currently sit on the Southwest Power Pool members committee. I have about three minutes of prepared testimony and I'm also going to try and weave in some, hopefully, some answers and clarifications to some of the questions you've been asking as we've gone through the hearing today. I'm testifying today on behalf of NPPD in a neutral position on LB824. While NPPD was initially opposed to the bill as introduced, we have been unable to work with proponents of the bill to find common ground in which our concerns can be addressed. I would like to thank Senator McCollister for his leadership in helping bring the parties together over the last several days to reach an agreement. If one assumes additional renewable projects will be developed in the SPP footprint, the desire for Nebraska to share in that development is understandable. Rural Nebraska would benefit from property tax payments that could result from these projects. As part of this compromise, NPPD has dropped its opposition to changes in the Power Review Board's regulatory process for private renewable generation projects. NPPD is the largest owner of transmission facilities in the state, with 4,500 miles of high-voltage transmission lines in service. Between 2007 and 2022, NPPD will spend approximately \$1.4 billion on expansion and upgrades to the transmission system. This expansion has increased reliability, reduced congestion, and allowed for additional renewable generation interconnections, including 15 Generator Interconnection Agreements with private developers. To date, nine of these projects have been completed, representing 677 megawatts of generation. Currently, Nebraska law requires that developers of renewable energy export projects and public power develop a Joint Transmission Development Agreement. This process provides assurance that public power work with private developers to make smart and thoughtful decisions on the most appropriate way to complete the needed transmission improvements. Using this process, NPPD was able to successfully work with Invenergy in their development of the Prairie Breeze Project near Elgin to the benefit of both entities. The agreement reached with the proponents of this bill will ensure that provisions of statutes related to joint development will be retained. We are receptive to additional language clarifying the obligations of public power to exercise prudent utility practice regarding interconnection

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facilities. Renewable generation project developers are not subject to the right of first refusal provisions of Nebraska law. The provisions were passed into law in response to FERC Order 1000 which removes a federal right of first refusal for certain transmission projects. Nebraska law currently provides for responsible, cost-effective transmission development by requiring Power Review Board approval and by requiring a competitive bidding process for equipment and labor associated with transmission projects over \$500,000. NPPD is pleased that an agreement has been reached with the proponents of the bill where our interests in preserving the right of first refusal in Nebraska, preserving the ability of public power to participate collaboratively in transmission and distribution infrastructure development, and protecting the ability of public power to own and operate these interconnection facilities will be maintained. There's been several questions on how the Southwest Power Pool process works in terms of transmission development. I'd just like to make a couple of distinctions. The projects that come through renewable energy development go through what's called a generator interconnection process. That process is different than the process that is referenced in the SPP STEP plan that was just being discussed. The generator interconnect process results in a three-party agreement between SPP, as a transmission provider, the host utility that owns the transmission system, and the developer. That project identifies the facilities that are needed to safely and reliably integrate that generation into the system and who's responsible for paying for that. Generally, in generator interconnection agreement processes, most of those facilities are the responsibility of the generation provider to pay for. And some facilities, depending on what they are, will be paid for by the transmission owner and then there's a crediting mechanism for returning investments that provide network benefits, more than just what's required for the interconnection facility. The market in the Southwest Power Pool is very soft and I think it's important to understand that the market is an energy market. It compensates all generation based on its marginal cost to produce electricity so it doesn't compensate for things like capital, labor, administrative costs, insurance, etcetera. So today that market is influenced heavily by the amount of low natural gas price in the market and by the amount of energy in the market. The Southwest Power Pool is in a situation where it's an oversupply of energy. So what can happen is, in periods where there's low loads and high energy production, like a high wind time frame, is that can depress the prices in the market. And an example this year, two different days in January, similar temperatures in Nebraska, similar load profiles in Nebraska, the wind profile was much different in the SPP footprint. On an hour in that day the market price for electricity at Gerald Gentleman Station Unit 2 was 60 percent lower on the high-wind day than it was on the low-wind day. And then the difference in wind, the wind was about 2.4 times higher on the high-wind day than the low-wind day. So it certainly creates an impact. It's an impact all generators have to deal with. It's an impact that the renewable energy project developers will have to deal with. They have the advantage of the Federal Production Tax Credit to help make their economics work. And with that, I'll stop and be available to any questions you may have. [LB824]

SENATOR SCHILZ: Thank you, Mr. Kent. Any questions? Senator Hughes. [LB824]

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SENATOR HUGHES: Yes, thank you, Mr. Kent, for coming before us today. I'd like to get a little more information on the transmission costs. We've talked a lot about generating today but the transmission piece of that and who has regulatory authority over that to set rates or agree to rates that are negotiated or how does that work? [LB824]

TOM KENT: For the transmission? [LB824]

SENATOR HUGHES: Yes. [LB824]

TOM KENT: The transmission service for those of us in the Southwest Power Pool that have put our facilities under their functional coal...under their functional control are established by the Southwest Power Pool tariff. So each of the transmission owners submits our revenue requirements to the Southwest Power Pool. They use that information to develop the transmission rate for that pricing zone. So the part of Nebraska we serve is one pricing zone, so it's essentially our costs divided by the amount of billing units they expect to get. And that sets the rate. And again, it's a FERC-governed process. [LB824]

SENATOR HUGHES: So the price, and how often is that rate set? Is it annually or five years, ten years? [LB824]

TOM KENT: We go through an annual process. Our board has oversight on that process. And I need to clarify a little bit because there's two pieces here. Most of our customers are being served under our...what we would call our grandfathered rate, our Wholesale and Retail Power Agreement. So for all of those things, the transmission rate is set by us. But for others that are getting transmission service in the Southwest Power Pool footprint, Southwest Power Pool sets that rate. So if there's a customer, a new entity in Nebraska that wants to buy transmission service, they don't buy that from us. They buy that from the Southwest Power Pool. The process that we use to develop the rates for our existing customers is very similar to the process we use to determine what our cost requirements are that we give to the Southwest Power Pool to set the rate. And our board, again, has oversight on approving all of those rate-related issues, including what we provide to the Southwest Power Pool. [LB824]

SENATOR HUGHES: So are your rates that are grandfathered in, are they relatively close to the... [LB824]

TOM KENT: Yes. [LB824]

SENATOR HUGHES: ...to the new rates that are required? [LB824]

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TOM KENT: Yes, they're very similar. [LB824]

SENATOR HUGHES: Okay. And annually, when you go to the SPP to talk about, you know, we need to upgrade this line or...those are factors that are taken into consideration. Do they...I mean do they pretty much rubber stamp what you request or do they have an organization that comes and looks at what you...the material you've given them to verify that you need a rate increase? [LB824]

TOM KENT: Well, for transmission development, it's a very involved stakeholder process in the Southwest Power Pool. And the Southwest Power Pool is a very stakeholder driven organization. Their tariff that kind of governs everything is several thousand pages long. As part of that process for transmission development, the members will identify projects that they may see might help with reliability issues. The Southwest Power Pool planning staff will also identify projects that they may see might be needed. And then those projects are put into this STEP, the Strategic Transmission Expansion Plan. And it's three phases. They have what they call the near-term expansion plan, which is mainly focused on reliability projects. As a previous testifier indicated, we are required to meet federal reliability regulations managed by NERC and so the utilities in the state, as well as the Southwest Power Pool, are obligated to make sure those are met. And those short-term projects usually are projects to ensure that reliability can be maintained. They also go through a 20-year ITP, Integrated Transmission Plan 20-year, that takes a snapshot into the future what might be needed 20 years from now based on what we see for the potential for renewable development, Clean Power Plan impacts, load growth, etcetera. Projects usually don't come out of that process. That kind of gives you a picture of what might be needed. And then they do a ten-year process. And this is on a three-year cycle they go through this process. This ITP, Integrated Transmission Plan 10-year, is the way that the Southwest Power Pool, working through the membership, identifies which projects should be developed to meet the various needs of the regional footprint. And then those projects are funded or cost-shared based on what they call a "highway/byway" methodology. So projects that are 300 kV and above get shared across the entire footprint based on the load ratio share, and for NPPD that's about 5 percent. And the projects that are 100 kV to 300 kV, two-thirds of it is paid for by the local zone, NPPD if it's in our zone, and a third of it is shared across the footprint. [LB824]

SENATOR HUGHES: So the revenue from the transmission portion of NPPD is pretty much static. I mean it's...on a yearly basis. I mean that you're generating that income every day regardless of where the power is going, which way it's moving. [LB824]

TOM KENT: The transmission revenue is set based on the load that is being served by the transmission system in NPPD's footprint. [LB824]

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SENATOR HUGHES: Okay. [LB824]

TOM KENT: So the load will pay for that. And what gets paid is, you know, dependent on how much the load is. [LB824]

SENATOR HUGHES: Okay. And I guess my last question, NPPD would have transmission, a transmission revenue stream and a generation revenue stream. The percentage of profits for NPPD in any given year, are they about the same? Or transmission, I'm assuming generation would be more of a profit center than transmission or... [LB824]

TOM KENT: We're a not-for-profit entity, so I'm going to answer this a little bit different. [LB824]

SENATOR HUGHES: I understand that but... [LB824]

TOM KENT: If you look at our costs for our wholesale power, which is made up of generation and transmission, about 10 or 11 percent of those costs are transmission and the rest of it is related to generation. [LB824]

SENATOR HUGHES: But...okay. We'll leave it that. Thank you. [LB824]

TOM KENT: Uh-huh. [LB824]

SENATOR SCHILZ: Thank you, Senator Hughes. Senator Friesen. [LB824]

SENATOR FRIESEN: Thank you, Chairman Schilz. So earlier there was testimony a little bit that the potential for 5,000 megawatts of wind generation can come on-line. What would be the impact to NPPD, short term and long term? [LB824]

TOM KENT: It would be multiple. Southwest Power Pool this week in their quarterly meetings indicated that last year there was about 12,400 megawatts of generation in the footprint, expected to be about 14,000 megawatts at the end of this year. So a couple things will happen. As I indicated earlier, the footprint is long on energy. It's an oversupply of energy. So as more energy is put into the footprint, it's a supply and demand issue. As the supply goes up, that will depress the prices further. And so what that does for a generator like NPPD or other generators is that will start to skinny up or reduce the margins we receive on the energy that we sell into the market. We sell the energy into the market again on the marginal cost to produce it, and we bring

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the margin back, the difference between the market price and our cost, back to help offset fixed costs for our customers. So if those margins go down, then we have to make sure that we're doing what we need to, to manage and control those other fixed costs to manage rates. So that's...that can be a short-term impact. That can certainly change, as pointed out by others, as market conditions change over time. I mentioned in my testimony, you know, just as an example of what that impact can look like on a given day. There's certainly shorter-term operational issues because the renewable wind energy is intermittent. So our system operators in the footprint, system operators at NPPD have to adapt to that and be able to adjust and ensure that the lights stay on when the wind resources change or when solar resources change or if a traditional power plant was to trip off-line, similar kinds of issues. From a transmission standpoint, that kind of investment in renewable energy is going to require additional transmission investment, which can be good. It will help reduce congestion in the footprint, help strengthen the transmission system in Nebraska. And as I indicated for those generator interconnect type agreements, that investment is usually paid for by the generator. [LB824]

SENATOR FRIESEN: So if I can just summarize real shortly here, what I kind of gathered from you is your generation costs, you will generate a lot less electricity. So it's going to increase your fixed cost per kilowatt and those fixed costs are going to get passed on to the customer. [LB824]

TOM KENT: Well, yeah, I would say that's a fair summary. Whatever we don't...whatever we can't bring back from margin will be paid for by our customers. [LB824]

SENATOR FRIESEN: So with wind generation, if it goes down to two cents a kilowatt, then your losses otherwise, they're going to be passed on as fixed cost to the customer. So any savings in fuel cost from wind generation would be offset by increased transmission cost? [LB824]

TOM KENT: Not necessarily. I would say right now though the market conditions are difficult for any generation. The average market price in 2015 in the SPP footprint was about \$20 a megawatt-hour. Again, that's a marginal price. Our generators generally compete very well with that. One of the other testifiers was asked about what they thought the all-in cost of wind would be, which would be, you know, what they would do with a PPA. That wouldn't be very successful with us. That wouldn't be something we're interested in at those prices because we wouldn't be able to keep our customers whole. [LB824]

SENATOR FRIESEN: So if price is already depressed... [LB824]

TOM KENT: Yes. [LB824]

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SENATOR FRIESEN: ...and we add that much more wind generation, that surely is not going to make things better. [LB824]

TOM KENT: Not in the short term. [LB824]

SENATOR FRIESEN: So in the long term--let's look 20 years down the road--what has it done to our power industry? Is it something where we need to start looking at privatizing the generation portion of it and focusing on the transmission end of it? [LB824]

TOM KENT: I would hope not because I think public power does a very good job of effectively managing the risks associated with all parts of the energy industry, including generation. We certainly have to continue to adapt to the changing environment. People have mentioned the Clean Power Plan. The Clean Power Plan or whatever carbon regulation may happen in the future is going to impact the electric utility environment for everybody. I believe public power is very capable and very well adapted to adjust to those changes. [LB824]

SENATOR FRIESEN: It just seemed to me like the private industry is doing a lot better job of reacting and being able to build in new costs where you're unable to. Okay, I think that's all the questions I have. Thank you. [LB824]

TOM KENT: Thank you. [LB824]

SENATOR SCHILZ: Thank you, Senator Friesen. Any other questions for Mr. Kent? Seeing none, I have just one as we're sitting here talking. And I apologize that the Southwest Power Pool stuff and how the marketing works there and everything else is complex. And so as NPPD generates power, is that power sold directly to Nebraska consumers now or is...how does that work? [LB824]

TOM KENT: That's an excellent question. I think it creates a lot of confusion and I could see some of the confusion today during the testimony. What the market does is it really creates a more transparent way to understand what the price is for energy, much similar to the commodity markets for corn or beef or whatever. The fundamentals really aren't any different than they've ever been. But it's clearer as to what the price of electricity is. And when the market is working well, it's a mechanism that helps ensure the lowest cost of electricity is delivered to the consumer. Now, there's complexities there because transmission congestion can impact that, etcetera. [LB824]

SENATOR SCHILZ: Right. Okay. Senator Schnoor. [LB824]

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SENATOR SCHNOOR: I think you said this but I didn't catch it. Senator Friesen asked you, with the large influx in the short term, if there were to be a large influx of power into the grid that you would...you said you would have to...lines, transmission lines, and the whole grid would have to be updated. Did...was I... [LB824]

TOM KENT: I would expect the kind of numbers that we're talking about today would require additional transmission. And as I mentioned, every project that comes through has to go through a generator interconnect process where the Southwest Power Pool working with the transmission owners will study that and whatever facilities are needed to reliably interconnect that with the grid are identified and they're included in that agreement in terms of what needs to be built and who is paying for it. And I would expect this amount of generation that I keep hearing, yeah, that I would expect would cause additional transmission investment. [LB824]

SENATOR SCHNOOR: Okay. And then that leads me to my final question. Who pays for that then? [LB824]

TOM KENT: The transmission investment associated directly with the generator interconnect for the most part is paid for by the generator, and then some of that is credited back if it provides network benefits over time through SPP's processes. [LB824]

SENATOR SCHNOOR: Okay, thank you. [LB824]

SENATOR SCHILZ: Thank you, Senator Schnoor. Any further questions? Seeing none, thank you very much for your testimony, Mr. Kent. [LB824]

TOM KENT: Thank you. [LB824]

SENATOR SCHILZ: Further neutral testimony. Good afternoon. [LB824]

TIM TEXEL: Good afternoon, Senator Schilz. Mr. Chairman, members of the committee, my name is Tim Texel, T-i-m; last name is T-e-x-e-l, and I am the executive director and general counsel for the Nebraska Power Review Board. As the committee is aware, I'm sure, the board is the agency with primary jurisdiction over the electric suppliers in the state of Nebraska and has subject matter jurisdiction over the provisions largely in LB824. The Power Review Board discussed this bill at length during its public meeting on January 22, and the board members expressed several concerns about the bill. The single most important concern was the repeal of the right of first refusal, ROFR, provision that was in 70-1028 currently and the repeal of that statute. Although the board initially voted on a split vote to oppose the bill, my understanding is

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that the ROFR provision repeal would be removed and the deal has been worked out, and perhaps Senator McCollister will deal with that on closing. But with that development, my board has changed to neutral. That's why I'm testifying here today in neutral. That was a very important part of this to my board. And so we appreciate the developers and Senator McCollister and others that have worked on that to make that understanding happen. We do have several points that the board would like me to express, the technical points you typically hear me express on a bill. Aside from the ROFR, the first one is the lack of the decommissioning backstop authority. And you've heard testimony today about the decommissioning provisions in this bill. It does have a notice provision; it does have some decommissioning. But it's a notice to the Power Review Board and it mentions decommissioning. They have to certify and then essentially promise to live up to the decommissioning requirements. And Section 3, subsection (2)(c)--so I can put in the record what I'm talking about--states that private electric supplier must certify it will comply with any decommissioning requirements adopted by applicable local government, which I assume would normally be the counties, and that the private electric supplier will be responsible for all decommissioning costs. The board's concern is the lack of a backstop authority if a local government doesn't enact those protections. So if we would only have a couple counties that wouldn't, for whatever reason, there is no protection for those landowners that would have turbines on their property and in future years might have to take them down if something happened to the entity that put them up. This may be rare, but the results could be financially severe on the landowner with turbines on their property. My staff's research, although not extensive, indicated that this could be a cost of \$70,000 to \$224,000 to take down a turbine. And if there's multiple turbines, there could be a lot of cost for an individual landowner and that concerns my board if there's no local provisions creating some protections for the landowners. If there is an LLC formed to put these turbines up and if it would happen to go bankrupt and has no meaningful assets to attach, at that point then, 20 years down the road, the landowner could be stuck with the cost of taking that down. I think initially there is considerable cost with the parts and the scrap metal. As years go by, that's probably some salvage parts and largely scrap metal, but that would never offset the cost of...that I mentioned of taking down a turbine, and we wouldn't want any individual landowner to have to bear that kind of cost. So that was our concern. So what the board would recommend is to give backstop authority to the Power Review Board probably in a provision that the developer with the notice to us would have to submit a decommissioning plan that the board would then okay. And that's probably the least intrusive. I have several more but the second is the lack of the Game and Parks consultation provision. Right now under state law, in Section 37-807(3), an agency that approves anything has to go through the Game and Parks for consultation to see if the approval would affect threatened or endangered species or their critical habitat and we do that. This would remove that and my board has some concerns about the policies with that and that provision might want to be added back in so at least you could say that consultation has to be done perhaps. Another one is under the eminent domain provisions there's a phrase that says, "or useful for the operation of," and that's in Section

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1(4) and Section 3(5). The concern is that this is a pretty broad phrase for eminent domain and the intent is to...you want me to stop, Mr. Chairman, or continue on? [LB824]

SENATOR SCHILZ: No, no, keep going, you're fine. [LB824]

TIM TEXEL: Our concern is on the eminent domain that it's to protect and make sure that the public power entities can't use eminent domain to take the wind farm, solar facility away. And we certainly don't have any comment on that. But when you say, "or useful for the operation of," it broadens it to what my concern is. Basically everywhere in the state is probably useful for either a wind turbine or a solar facility or some kind of biomass. So our concern was there would be the attempt that even if our publics would want to put in some kind of a renewable facility, they may not be able to use eminent domain because somebody could claim it's useful for the operation of some renewable facilities. So it may have an unintended consequence. My board was concerned and wanted to bring that to your attention. I think all these are fairly easy to fix but we wanted to bring them to your attention because they may have unintended consequences. Another one is the scope of the definition for private electric supplier. And at the beginning of Section 2(3)--and again, I'm putting these in the record so that we have these--the board recommends adding the phrase "for the purposes of 70-1012 to 70-1027 and Section 3 of this act," and the reason for that is right now we have a lot of places in statute where it talks about suppliers, electric suppliers, suppliers of electricity. There's a lot of different terms and the definition here hasn't been a problem because it's electric supplier. Pretty much everybody on the board knows what's being talked about. But we add in private electric supplier as another definition here, and so we want to eliminate any argument that what some other statute is talking about is a private electric supplier and not the generic electric supplier, so just to tighten that up because that's the provisions in this bill. And I talked to the developers, with some of the developer representatives, so I think that probably makes sense to limit the application to those same provisions as this bill. And I can certainly get more information on these later if the committee wants. The last one is on the use of the term "biogas" in Section 2(4). Admittedly, somewhat minor clarification, but the board wants to make sure that we're implementing what the Legislature intends, and we're not familiar with the term "biogas." When we reviewed that, I don't think it's a term of art in Nebraska. I did some research and I don't find any use of that term in current state law and there's not a definition of it in here. So my initial reading was, does that mean landfill gas, does it mean methane digesters, does it mean both, does it mean something else? Just so that we implement what the Legislature's intent was, we'd either like to have a definition or some legislative discussion maybe on the floor debate with the sponsor and Senator Schilz or something like that that would say here's what the intent is for that. And I think there is. I actually had some information today given to me that there is--I think it was American Biogas Council or something like that--so we may have definitions that in other states are understood and just not in Nebraska. But that would help us to make sure we're implementing this correctly.

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So that's all I had that we wanted to point out. I appreciate it and I'll be glad to try and answer any questions. [LB824]

SENATOR SCHILZ: Thank you, Mr. Texel. Any questions? Senator Friesen. [LB824]

SENATOR FRIESEN: Thank you, Chairman. The Power Review Board, what are the duties of the Power Review Board right now? What's left? [LB824]

TIM TEXEL: We, well, right now we approve generation facilities in the state. I mean, taking out net metering, a few like that. But we approve all generation, the transmission outside of a service area, the utility builds. We approve new and--which doesn't happen really now--all amendments to petitions for creation and the following documents for the public power districts. So anytime they'd amend their number of directors or amend their territory, anything, we approve those based on the criteria in the statute. We're the repository for a lot of information and we also are the repository for the service areas and all amendments to the service areas, which to the entities is a pretty big deal. Exactly who gets to serve whom and any exceptions thereto, we approve all of those. If somebody is going to serve in another service area, they have to get permission from the other provider or go through us why they're invading another service territory. So those are some of our main duties. We have a whole myriad of smaller duties and reporting requirements. But I think that captures the lion's share of what we do. [LB824]

SENATOR FRIESEN: Thank you. [LB824]

SENATOR SCHILZ: Thank you, Senator Friesen. Any other questions? One question that I have that was brought up before is, as we talk about the Power Review Board's role in these types of renewal projects, can you go through what your duties are today, and then would those duties change with LB824? How does that work? [LB824]

TIM TEXEL: Well, the only way it would change is if there's a private export facility or a private renewable facility that an entity builds to export. Right now those would fall under the provisions of 70-1014.02, the certified renewable export facility. So if this were to go through as it's written without the ROFR, then that would be repealed, the CREF, as I call it, statute. And so we wouldn't review those. On a daily basis you're asking how much effect that would have. We've only ever had one application under that and it didn't go to the final state, so it doesn't have a daily...much of an impact to us. For whatever reasons, we unfortunately did not have that many applications come under this when LB1048 and after was passed. So I don't think it would have a lot of effect on the board as far as our daily duties or anything like that. The board had some concerns about the oversight and has some concerns that I mentioned in here. But on a day-to-day basis I don't think it would change very much for us. [LB824]

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SENATOR SCHILZ: Sure. Okay, thank you. Any other questions? Seeing none, thank you very much for your testimony. [LB824]

TIM TEXEL: Thank you. [LB824]

SENATOR SCHILZ: Further neutral testimony. Good afternoon. [LB824]

GARY KRUMLAND: Senator Schilz, members of the committee, my name is Gary Krumland; it's G-a-r-y K-r-u-m-l-a-n-d. I'm representing the League of Nebraska Municipalities. We had two technical concerns about a couple provisions in the bill relating to eminent domain and I think they did some things that weren't intended relating to ability of a city to use eminent domain for things like streets, water, and sewer, which is not the purpose of it. We've talked to Senator McCollister and some of the proponents. They've agreed to work with us to make those corrections. That's why we're neutral. And with...if we get those things cleaned up, we have no objections to the bill. But I just wanted to use this opportunity at least to tell you about it and also to thank Senator McCollister for his willingness to work with us. [LB824]

SENATOR SCHILZ: There you go. Any questions for Mr. Krumland? Seeing none, thank you very much for your testimony. Further neutral testimony. Good afternoon. [LB824]

KEVIN WAILES: Good afternoon. Mr. Chairman, members of the committee, I'm Kevin Wailes, K-e-v-i-n W-a-i-l-e-s. I'm the CEO and administrator for the Lincoln Electric System. And I know I'm kind of probably stretching you all because you haven't had much breaks today, so I'll try to make this fairly brief. I'm representing LES today in a neutral position on this bill; however, we support or we're neutral as it relates to the bill's core focus of expanding private wind energy development. We did have some technical concerns that have been actually pretty well covered by both Tom Kent as well as Tim Texel. We, too, appreciate Senator McCollister's and the sponsors' or the proponents' willingness to work with us on some of those issues. Because of some of the other testimony here though, I thought I might try to provide a few other pieces of clarification because there's been an awful lot of information on the industry that's been raised here and I think it might help to put a few pieces in perspective as it relates to these facilities. First of all, quickly, LES, since we've been referred to because, as you know, we purchase wind energy from out of state, one of the reasons we think it's probably a little counterintuitive for us to oppose it. By the same token, we have power supply resources in six states. We have...we own coal resources in Iowa, portions of a plant in Iowa, portions of a plant in Wyoming. We have natural gas facilities in, of course, our service territory. In addition, we have contracts with NPPD for coal resources as well. We have renewable resources in four states, wind in three: Nebraska, Oklahoma, and Kansas. And I've raised that because we have tried to optimize in these changing markets as well and we recognize what's happening there, but we still

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think that there are protections that should be in place. Right now we are in the somewhat unusual position that LES has 48 percent--an equivalent of 48 percent--of its retail energy provided by renewable energy, or produce that amount, so that is somewhat unusual. The other thing that's a little unusual is our capacity resources. If you look at the actual megawatts of capacity we have--that's total megawatts not just firm--is about one third coal, one third gas, and one third renewable, which we believe is pretty unique and it's also trying to hedge, as we've talked, you've heard about different types of carbon legislation coming around. One of the references that was made earlier was talking about this being a hedge for the clean power plan. Well, it might be, but we should just point out we can't get into all the details because that's an extraordinarily technical thing the state is working on right now. It depends on what way you look at addressing that. There are two main...there's a main fork in the road: whether you pick to address the clean power plan from a mass based or rate based. Under one of those the wind energy really doesn't have a significant impact with respect to that. So in the future as those issues come up, I think it would be important for you all to remember that. In addition, there seems to be some confusion about the markets, and you might recall we actually had a little bit of a seminar and workshop with respect to how SPP worked. We'd be happy to do that again. But one of the things that I wanted to make sure we clarified, and you'll probably remember, is it is only an energy market. So in order to be a member of SPP, you have to have sufficient generating resources to serve your load. And all the costs associated with keeping those resources--the debt service and the fixed costs associated with those--are still a part of that. You're not putting that into the market. You're only putting the energy into the market. And that's a very significant nuance with respect to where all those costs are and how they line up and the costs that we have that potentially have the exposure of being stranded, as was referred to as, like, the corn analogy. The fact that we do have those assets there is similar to the debt service you would have on your land and other costs you would have as that market is impacted. And that's kind of Tom alluding to how we have to work tight, you know, really have somewhat tighter margins you can (inaudible) over capacity. And last is I didn't really know that we might be talking about rates, but there were references to retail rates. And there's an awful lot of information out there that I think is confusing. But one of the sources I'd like to actually suggest you look at is we do a rate survey every year of 106 cities. It takes a lot of time because we look at about 12 different rate classes and energy consumption across these cities all over the country. And all of that data is on-line in that report. So instead of cherry-picking or taking averages, you can actually go look and see how we compare all across the country, and I think that and who the utilities are and what the states are. So I would encourage you to think about reviewing that when it comes to all the information out there about rates because it is kind of a confusing thing to do. I'd be happy to answer any questions. [LB824]

SENATOR SCHILZ: Thank you, sir. Any questions? Seeing none, thank you for your testimony, appreciate it. [LB824]

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KEVIN WAILES: Thank you. [LB824]

SENATOR SCHILZ: Next neutral testifier. Good afternoon. [LB824]

CHRIS DIBBERN: (Exhibits 17 and 18) Good afternoon. Good afternoon, Senator Schilz and members of the committee. Thank you for taking the time to listen to an important topic for Nebraskans today. My name is Chris Dibbern, D-i-b-b-e-r-n, C-h-r-i-s. I'm the general counsel and I am a registered lobbyist for the Nebraska Municipal Power Pool and the Municipal Energy Agency of Nebraska. We serve over 200 small communities in the Midwest and 68 of them are electric suppliers. For MEAN and NMPP, our mission in the past has been low-cost reliable energy and local control. The Legislature and its members have altered our mission to also include more renewable options for ratepayers and greater support for renewable projects. MEAN had the first small wind farm in the state in Kimball, Nebraska. It's so small we call it our wind garden now. But we've also had members who have had 100 percent renewable products, like Aspen, Colorado, and we've had members who have bought into methane, small hydro, and wind out of our resource pool. So we do have a dedication to renewable projects. We opposed LB824 as drafted but we are neutral today if you would listen to Tim Texel's remarks, to the League's remarks, and to NPPD of wanting to work with Senator McCollister. We also support Senator McCollister and others for supporting renewable energies. But you have to go sometimes slower than what maybe the developers would like you to do. One of the concerns that was mentioned today is the land use in Nebraska. I've shared with you a short summary of the importance of local government regulation of wind energy development in Montana. This was by the University of Montana School of Law. It was developed in 2012 and it mentions how important local control and local governments and state government regulation is of wind. I think it addresses a balance that you've heard today that location matters where these wind farms are sited, the appropriate placement of wind projects is critical not only for minimizing project impacts like roads, bridges, and viewscapes, but also for maximizing a community's economic and renewable energy deployment potential. You've heard earlier buying up lease options and maybe never developing them, so that's a concern too. Project viability requirements: small-scale wind farms and PURPA-type projects are streamlined, but these are large-scale projects and that would take some necessary reporting and vetting approved by the Power Review Board--some of the comments Tim made. Human health and safety issues--there's a chart in there on the noise by wind blades and generations, proper fencing, setbacks, FAA lightings--they can all be minimized by creating buffers around wind projects. But some of the risks require additional regulation and oversight. There's environmental impacts. Tim mentioned the Nebraska Game and Parks review of impacts. That came from this committee that you asked Game and Parks to look at endangered species and vegetation. That's still an important part of the bill, whether it's a private wind farm or a public wind farm. There are aesthetic conversations. Aesthetics are a concern with wind projects because they add large man-made structures to natural landscapes. The effect on the aesthetics of a region can be limited with proper regulations addressing the design and

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construction, actually how wind turbines are painted, if they're uniform, if they're gray, white, or black, if you prohibit advertising, if you don't have--and I might disagree with this--repeaters, telecommunications, or dishes on wind turbines. I think there may be sites that we might want to see those on. Lastly, some rural communities protect their viewsheds by restraining wind energy development within certain viewshed areas. I recall Beatrice, the national parks, the Homestead (National Monument) came to our office and talked with us about not siting wind projects within ten miles of a national park. Lastly, NMPP encourages light regulation in a way to support an industry and economic development that is associated with large-scale projects. But we thought LB824 goes too far too fast as drafted, but we're hearing that there's a willingness to work and amend it to something that can work with both sides of this room. Thank you for your time. Any questions? [LB824]

SENATOR SCHILZ: Any questions? Seeing none, thank you very much for your testimony. [LB824]

CHRIS DIBBERN: Thank you. [LB824]

SENATOR SCHILZ: Further neutral testimony. Good afternoon. [LB824]

MICHAEL MATHESON: (Exhibit 19) Good afternoon, Chairman Schilz and members of the committee. My name is Michael Matheson, M-i-c-h-a-e-l M-a-t-h-e-s-o-n. I am president of Grain Belt Energy Solutions. Until June of 2015 I worked 18 years as an engineer for Nebraska Public Power District. I'm here today in a neutral capacity on LB824. LB824 is a good start, but does not completely resolve the issue Nebraska has with eminent domain. Eminent domain is intended to obtain land for a project for public good, not to seize a private business so the government, a political subdivision in this case, can operate and profit from a seized business in a competitive marketplace. The ability of public power to seize generation or transmission assets may even be a violation of Amendment Five of the U.S. Constitution. This bill would make wind generation exempt from public power being able to use the power of eminent domain for existing generation, transmission, or distribution of electrical energy. This bill protects private wind developers from having their projects taken from them through the use of eminent domain, but the extent of eminent domain goes much further than wind generation. In today's energy market, statute 70-670 should be repealed in its entirety instead of being revised as proposed. When the Nebraska utilities joined the Southwest Power Pool, or SPP, Nebraska was no longer isolated from the rest of the region when it comes to electrical generation and transmission. And you can refer to the map of the footprint I had provided. The SPP area that includes Nebraska now goes from the Canadian border down into Texas. In 2014, SPP implemented an energy market that provides adequate electricity supply at a competitive price to its members. Nebraska utilities no longer generate the electricity they need for the customers in Nebraska. The power plants in

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Nebraska are now dispatched by SPP and all the electricity generated from those power plants is sold into the regional energy market. Transmission and planning is also done by SPP and not by Nebraska's utility. Although it is good that wind generation would be exempt from public power's use of eminent domain, this bill does not go far enough. All generation and transmission should be exempt from public power's use of eminent domain. Other than being used as a threat by public power, there is no legitimate business reason today for public power to be able to seize private generation or transmission assets. With the SPP energy market giving private developers the ability to build generation or transmission without the threat of being seized by public power would promote economic development in the state. Any new generation built within the SPP footprint, either in Nebraska or in neighboring states, affects electricity price the same. If private developers build projects outside of Nebraska because they fear the power of eminent domain, Nebraska's citizens will lose jobs, state and local tax revenue, and other economic development, eliminating public power's threat of eminent domain for most of development of projects in Nebraska by private developers. Other than intimidation, there is no reason for public power to have the ability to use eminent domain to take a private developer's generation or transmission project. There are communities or groups of communities in Nebraska interested in developing generation but do not want to take the financial or operational risk of owning a generation project. If the threat of the use of eminent domain was eliminated, a private developer could finance and build a generation project for these communities. As the statute now stands, a private developer cannot build a project for these communities without having the risk of having it seized by public power. The ability by public power to use eminent domain for generation and transmission projects harms economic development and serves no other purpose than to protect public power at the cost of the citizens of Nebraska. Instead of putting a Band-Aid on limiting the use of the power of eminent domain for wind generation by public power that would not solve the whole problem, please consider a comprehensive solution that fixes public power's use of eminent domain by repealing 70-670. Thank you. I'd be happy to answer any questions. [LB824]

SENATOR SCHILZ: Thank you, sir, appreciate it. Any questions? Seeing none, very good, thank you. [LB824]

MICHAEL MATHESON: Thank you. [LB824]

SENATOR SCHILZ: (Exhibit 20) Further neutral testimony. Any more neutral testimony? Seeing none, we do have one letter of neutral testimony from David Bracht of the Nebraska Energy Office. And with that, Senator McCollister, you're welcome to close. [LB824]

SENATOR MCCOLLISTER: Well, thank you, Chairman Schilz. And I'm grateful to the committee for its patience and indulgence and the kind attention that you gave all these many

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testifiers. I think you can appreciate now the wide range of stakeholders that have been involved with this particular bill. And we've heard terms from "ROFR" to "biomass." Perhaps Senator Schilz and Senator Schnoor can help us with biomass. But I'm grateful for your attention and you've been very, very attentive to all of our testifiers. First I also need to acknowledge Tim Texel from the Power Review Board and also John McClure from NPPD--a lot of late-night e-mails, they've given up a lot, and I think I'm grateful for their contribution and I think this bill will be a product of what they've been willing to do. A little old business, I need to read this particular statement into the record: An agreement has been reached to amend Section 10 of LB824 to remove the repeal of 70-1028, so the existing utility right of first refusal would be not affected by this bill. Secondly: acknowledgment that we have agreed also to amend the bill to reinstate the joint transmission development agreement requirement currently in 70-1014.02. We need to work on language for that particular provision. So those have now been read into the record and I think, you know, we can be sure that those will be brought to the bill as we continue to negotiate some of these important points. Just a few points that we should remember as we review the testimony. The Power Review Board has absolutely nothing to do with the regional transmission grid, nothing at all. The SPP has the authority that decides those kinds of issues. As we heard from the proponents, developers pay all the associated costs with developing that time line. So the developers pay that cost and the SPP is the authority that reviews those arrangements. Secondly, we talked about purchase power arrangements. And as you heard from some of the developers, those are important to have in place in order to get the borrowing or the lending they need from developers. What is critical is that the timing of that occurs in the proper sequence, and that's why that particular requirement is being pulled out, so. But we have resolved that and, as you heard from some of the developers, that is an important part of the piece. Finally, just I think you've heard from many of the testifiers the effect on property taxes. It's going to be a big boost to rural communities and helps them with some of the big increases in property values and costs that they've had over the last few years. And we need to help some of our rural areas diversify some of their property tax revenues. Secondly, this is a big economic development issue. I think as we look back on our Senate careers, we can look back at this bill and say that we had a hand in creating this bill and creating a better future for Nebraska. This is an idea whose time has come, so let's do our best, move this bill out of committee and onto the floor so we can get it passed and help citizens of Nebraska have a better future. Thank you, Mr. Chairman. Questions? [LB824]

SENATOR SCHILZ: Thank you, Senator McCollister. Any final questions? Senator Schnoor. [LB824]

SENATOR SCHNOOR: Yes. I'll talk to Chuck and have him bring you a big, round cornstalk bale and set it right in front of your office so then you'll know about biomass. [LB824]

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SENATOR McCOLLISTER: That's the biomass you're referring to? I was thinking of something worse but I won't go into that (laughter). [LB824]

SENATOR SCHILZ: We could arrange for that. [LB824]

SENATOR SCHNOOR: I do have a serious question. [LB824]

SENATOR McCOLLISTER: You have some of that as well? [LB824]

SENATOR SCHNOOR: Well, I got to get to my serious question. My next part is I haven't seen your turbine turn all afternoon, so. [LB824]

SENATOR McCOLLISTER: Oh, no. [LB824]

SENATOR SCHNOOR: I do have a concern. We are a public power state and you are asking to carve out a huge exemption for private companies to come in and build renewable energy and this, what we have heard to today, wind energy, with very little or no regulatory guidance or oversight, and I do have concern about that. [LB824]

SENATOR McCOLLISTER: I understand your concern. I don't think it's quite that way because some of the regulatory controls, particularly those local controls, are retained in the bill. And secondly, you need to remember that it's the developers that are taking the risk. The state of Nebraska or its citizens aren't at risk with any kind of wind development. And lastly, we need to remember that the reality of this business is that wind development will occur someplace in the SPP footprint. Now the question is whether that development will occur in Nebraska or whether it's going to occur in Oklahoma, Kansas, or South Dakota. And, you know, we can take advantage of the investments that will be made, and they will be made, and we can reap the benefits. Lastly, wind development is a rather small piece of the generation footprint. You know, I think in Nebraska currently coal is well over 50 percent of our generating capacity, and all the wind development that is envisioned for Nebraska will hardly move the needle. I mean it's...you know, coal is going to continue to be an important energy source in Nebraska for years to come, there's no question about that. And I think you'll slowly see wind development and renewables, you know, become more of a significant piece, but I think we're talking about decades. [LB824]

SENATOR SCHNOOR: Okay, thank you. [LB824]

SENATOR SCHILZ: Thank you, Senator Schnoor. Any further questions? Seeing none, thank you, Senator McCollister. [LB824]

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SENATOR McCOLLISTER: Thank you again. [LB824]

SENATOR SCHILZ: Thank you for everyone today. This will end our hearing on LB824. We appreciate everyone's input and thank you very much. Have a great evening. [LB824]