## Natural Resources Committee February 09, 2017

#### [LB392 LB626]

The Committee on Natural Resources met at 1:30 p.m. on Thursday, February 9, 2017, in Room 1525 of the State Capitol, Lincoln, Nebraska, for the purpose of conducting a public hearing on LB626 and LB392. Senators present: Dan Hughes, Chairperson; Bruce Bostelman, Vice Chairperson; Joni Albrecht; Suzanne Geist; Rick Kolowski; John McCollister; Dan Quick; and Lynne Walz. Senators absent: None.

SENATOR HUGHES: It's 1:30-plus, so we will opening our hearing. Welcome to the Natural Resources Committee. I'm Senator Dan Hughes; I am from Venango, Nebraska. I represent the 44th Legislative District and I serve as Chair of this committee. The committee will take up bills in the order posted. Our hearing today is your public part of the legislative process. This is your opportunity to express your position on proposed legislation before us today. The committee members might come and go during the hearing; this is just part of the process as we have bills to introduce in other committees. I ask you to abide by the following procedures to better facilitate today's proceedings. Please silence or turn off your cell phones. Please move to the reserved chairs when you are ready to testify; these are the chairs in the front row labeled the queue. Introducers will make initial statements followed by proponents, opponents, and neutral testimony. Closing remarks are reserved for the introducing senator only. If you are planning to testify, please pick up a green sign-in sheet that is on the table at the back of the room. Please fill out the green sign-in sheet before you testify. Please print and it is important to complete the form in its entirety. When it is your turn to testify, give the green sheet to the committee clerk or to a page. This will help us make a more accurate public record. If you do not wish to testify, but would like your name entered into the official record as being present at the hearing, there is a separate white sheet on the tables that you can sign for that purpose. This will be part of the official record of the hearing. Written materials may be distributed to the committee members as exhibits only while testimony is being offered. If you have handouts, please make sure to have 12 copies and give them to the page to distribute to the committee. When you come up to testify, please speak clearly into the microphone. Tell us your name, please spell your first and last name to ensure we get it on the record. If you do not, I will stop you and ask you to do that. We will be using the light system today for all testifiers. You will have five minutes to make your initial remarks to the committee. When you see the yellow light come on and that means you have one minute remaining, and the red light indicates your time has ended, please wrap up your testimony. Questions from the committee may follow. No displays of support or opposition to a bill vocal or otherwise will be allowed at a public hearing. The committee members with us today will introduce themselves beginning on my far left.

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

#### Natural Resources Committee February 09, 2017

SENATOR GEIST: I'm Suzanne Geist, District 25, which is the east side of Lincoln and north to Waverly.

SENATOR QUICK: Dan Quick, District 35, representing Grand Island and part of Hall County.

SENATOR WALZ: Lynne Walz, District 15, representing all of Dodge County.

SENATOR HUGHES: And beginning on my far right.

SENATOR ALBRECHT: Hi, I'm Joni Albrecht, I represent District 17, that's Wayne, Thurston, and Dakota Counties.

SENATOR McCOLLISTER: John McCollister, District 20, central Omaha.

SENATOR BOSTELMAN: I'm Bruce Bostelman, District 23, Saunders, Butler, and Colfax Counties.

SENATOR HUGHES: To my left is committee clerk, Laurie Lage; and to my far right is committee...or, I'm sorry, committee legal counsel, Laurie Lage; and to my far right is committee clerk, Mandy Mizerski. Our pages for the committee today are Heather Bentley from Miller, Nebraska; she is a freshman at UNL studying agriculture economics. And Lee-Ann Sims from Lincoln; she is a sophomore at UNL studying political science and global studies. So with that we will open our first hearing today, LB626, Senator Larson. Welcome to the Natural Resources Committee.

SENATOR LARSON: Thank you, Senator Hughes and members of the Natural Resources Committee. My name is Tyson Larson, T-y-s-o-n L-a-r-s-o-n and I come before you today to introduce LB626. LB626 creates and proposes to adopt the Shared Community Solar Act in an effort to promote and utilize the benefits of solar energy resources. The legislative concept presents only one of the several suggestions resulting from the LR455 Climate Action Committee interim study last year in which I co-chaired. As outlined in this bill, Shared Community Solar Generating Systems provide residents with increased access to local solar energy while encouraging investment in solar resources. The enhanced continued diversification of the state's energy resource mix and provide local distribution utilities and ratepayers with the opportunity to realize the many benefits associated with distributed energy. Community-based renewable programs, or pilot projects, also known as shared community solar, community solar gardens, or shared clean energy, allow multiple customers to purchase interest in a shared renewable energy systems located on-site or off-site. Participating customers are allocated

### Natural Resources Committee February 09, 2017

benefits from shared systems through either virtual net metering or bill credits. Although there has been a great deal of interest in solar energy development in Nebraska, very little exists today when compared with other states. At least 15 states and Washington, D.C., have legislation authorizing shared renewables. Furthermore, at least 10 states with shared renewable legislation include provisions to allow for additional renewable energy technology such as wind, biomass, or geothermal in programs. I believe the concept of LB626 is a step in the right direction when it comes to the advancement of solar energy development and gives people the ability to engage in virtual net metering and help grow our rural Nebraska economies. I am happy to work with members of the Natural Resources Committee to fine tune the legislation. Thank you for your time this afternoon and in consideration moving forward. [LB626]

SENATOR HUGHES: Thank you, Senator Larson. Are there questions? Senator Bostelman. [LB626]

SENATOR BOSTELMAN: Thank you, Mr. Chairman. Senator Larson, how does this differ than what we're already doing in the state with C-BED? We have our utilities, several communities across the state are already doing solar projects that are working very well and we have C-BED that's been in existence now for some time. How is this different and how will this be, I guess, beneficial to the state since we already have a, kind of, plan in place? [LB626]

SENATOR LARSON: Yea, I appreciate the question, Senator Bostelman. And I don't know the intricacies of C-BED specifically, but I can...(A) know enough to talk so if you want to correct me if I say something wrong. I'm always happy to take that. But in terms of the shared community solar virtual net metering, any development right now, my understanding you get so many kilowatts, 25 in terms of net metering, and that's on your property. What this would essentially allow is, let's say, you don't want the...maybe you don't want the solar panels on your property or your HOA doesn't allow solar panels in it. It would allow a group of individuals to, essentially, create an investment together using their own net metering allowances and have it off-site. And so you're still using your net metering allowance, but it might not be, necessarily, right at your place of residence. [LB626]

SENATOR BOSTELMAN: My understanding of the net metering that we have in the state of Nebraska now is, primarily, formed and functioned to be toward a single user or a single company. Do you feel that we would have to change legislation in order to have aggregate type of net metering that you're talking about because now we're stepping outside of the, I believe, the intent of the original legislation for net metering. [LB626]

SENATOR LARSON: I think this is that legislation in terms of combining the...allowing that aggregate net metering where everybody can use their 25 kilowatts. They're not getting an

## Natural Resources Committee February 09, 2017

additional 25 at their place of residence and 25 here, they would be using their net metering allowance at what would be a community solar project or whatnot. So I think this is that enabling legislation that would allow that. [LB626]

SENATOR BOSTELMAN: Sure. And I guess one more thing right off the top of my head would be where's the public utilities in this and how are they brought in to this as far as...I see there's connectivity issues, there's transmission issues, there's usage issues. Right now what's going on, the utilities are very much involved. When I read this, it seems like they're now disconnected, they're not involved at all, it's up to whoever wants to develop it to do what they want. And then the other ratepayers bear some costs on getting everything established. [LB626]

SENATOR LARSON: As is with any personal net metering, it's my understanding if I wanted to just put a solar panel on my house or small windmill off my house, that the public utility which you are within has to provide you that opportunity to sell that onto the grid. And LB626 doesn't change that; it tells the public utilities that they too have to accept the energy that is produced. I think as we're looking at ways to grow rural Nebraska, innovative ways to grow rural Nebraska, we have to look at everything across the board. And projects like this not only can help the individuals that are looking to save on their own energy costs but creates jobs in terms of building the projects and bringing...expanding the tax base and a number of those other things that come along with any type of construction in rural Nebraska. So not only are we going to see a rate savings to those that are participating, but you do see, I think, economic growth in a number of ways. [LB626]

SENATOR BOSTELMAN: Sure. You know, I appreciate individual use of solar power, businesses using solar power, I appreciate that. And that's, I guess, one...and the community set ups. Have you looked at Massachusetts at what they've done...what theirs and the results of what's happened of that? [LB626]

SENATOR LARSON: Not specifically. [LB626]

SENATOR BOSTELMAN: They've got, recently, in their community solar, they've had a 40 percent increase or cuts in what they do, so it's had a...guess it was a large build out without input from the utilities that caused a lot of problems for them. And now it's kind of had a negative effect on their infrastructure and I just wondered if you had looked at that at all. [LB626]

SENATOR LARSON: I haven't, but I'm always open to looking at it with the committee. [LB626]

### Natural Resources Committee February 09, 2017

SENATOR BOSTELMAN: Thank you. [LB626]

SENATOR HUGHES: Other questions? Senator Kolowski. [LB626]

SENATOR KOLOWSKI: Thank you, Mr. Chairman. Senator Larson, thank you for bringing this forward, I think it's a great idea that we keep looking at alternative sources and seeing where we'll be in our future. Between the alternative sources of wind versus solar, do you know what the percentages might be in that alternative package? [LB626]

SENATOR LARSON: I don't. [LB626]

SENATOR KOLOWSKI: Which one has (inaudible). [LB626]

SENATOR LARSON: I don't. You know, I think in terms of local personal use, obviously, solar is a little easier to put up solar panels than wind turbines at your facility or your home or even your facility. But I don't have any percentages, I'm sorry. [LB626]

SENATOR KOLOWSKI: Okay, we'll find it some other way. Thank you. [LB626]

SENATOR HUGHES: Senator McCollister. [LB626]

SENATOR McCOLLISTER: Yeah, thank you, Mr. Chairman. In the description of the bill, Senator Larson, it says if the community solar model that you're proposing, how does that differ from the community solar programs offered by LES and Central City? [LB626]

SENATOR LARSON: Speaking specifically to what is offered by LES and Central City, I've just heard on the periphery of what LES offers. I know...I think what LES is offering in terms of their big development is kind of community "solaresque" and I think this is maybe an expansion of that to ensure that anybody that wants to develop a solar...not just a develop a solar, but a group of individuals that want to invest in this type of energy have that ability. I think, as we have also learned, there's economies of scale, and that's what this would also...and when there's an economy of scale that allows more people to get into it. Because if it's \$3,000 to put solar panels on your own house, but if you were able to find 30 other people to do it on off-site, it might only be \$1,500. And that will create more people...giving more people the ability to take advantage of their own net metering allowance while at the same time, as I said, working to grow rural Nebraska through construction and investment and things of that nature. [LB626]

### Natural Resources Committee February 09, 2017

SENATOR McCOLLISTER: Well, the two models that I've...the question that I asked before was with local utilities, energy companies, aren't you also talking about using a third party to develop these arrangements? [LB626]

SENATOR LARSON: Not necessarily. It could be a third party, but it could be just a group of individuals that set it up amongst themselves. And it does say the utilities have to participate should that happen. [LB626]

SENATOR McCOLLISTER: Thank you, Senator Larson. Thank you, Mr. Chairman. [LB626]

SENATOR HUGHES: Other questions? Okay, I...oh, I'm sorry, Senator Geist, I apologize. [LB626]

SENATOR GEIST: Now I'm new at reading these bills, but I will just ask a couple of places that I'd just like a definition. [LB626]

SENATOR LARSON: Yeah, point them out. [LB626]

SENATOR GEIST: On page 3, line 14, you talk about qualified organization. Do you define what that is? I don't see the definition in here, but I'm wondering what is a qualified organization? It's line 14 on page 3. [LB626]

SENATOR LARSON: I guess that's something that we might have to define more in the bill, because you're right, we define a number of things, we define customer generator, but not, necessarily, "qualified organization." So thank you for bringing that to my attention. [LB626]

SENATOR GEIST: Okay. And then "a organization" then shows up again on the bottom of that page, so...anyway...so I just ask... [LB626]

SENATOR LARSON: And it might be an organization of customer generators because we do define that, because it says customer generator means end use electricity customer that generates electricity on a customer's side of the meter. So...if that needs more definition, I'm happy to work with the committee to do that. [LB626]

SENATOR GEIST: Okay, okay, thank you. [LB626]

SENATOR HUGHES: Other questions? Senator Quick. [LB626]

## Natural Resources Committee February 09, 2017

SENATOR QUICK: Will this...like for the rural power districts clear out in western Nebraska, I mean, is this... [LB626]

SENATOR LARSON: The REAs. [LB626]

SENATOR QUICK: Yeah, REAs, is it going...how will it affect them or will it benefit them the same way it would...and their customers the same it would in a bigger...like Lincoln or Grand Island or someplace? [LB626]

SENATOR LARSON: I think this has the opportunity to benefit everybody. I understand the REAs might not like any type of mandate saying they have to participate or they have to accept this type of production, but at the same time right now if an individual does it on their facility, their home, or at their business, they have to accept that net metering allowance is my understanding. So like I said, I'm trying to offer individuals the ability to pool their resources, get economies of scale, and work to build these type of energy. And frankly, I'd said that I understand that the REAs or public power might say that they don't like the mandate or there are costs to bringing these types of projects on-line, but imagine if you have a group of 40 people that all want to do solar panels on their own homes, but they could make it into one big area, I would say that would save a lot of costs if the REA or the public power utility only having to run that type of meter to that one facility versus 40 different individual ones. [LB626]

SENATOR QUICK: Thank you. [LB626]

SENATOR HUGHES: Okay. Other questions? Senator Albrecht. [LB626]

SENATOR ALBRECHT: Again, so are...why would you have brought this particular bill to us if this is already happening throughout the state? [LB626]

SENATOR LARSON: So there are...a few things, one, this was one of the recommendations from the LR455 committee as something that we felt was important. It was something that when we look at building rural economic development, we do think it's important and I think that there are a few places that this is happening--Central City and Lincoln are examples of that. But that doesn't, necessarily, mean...let me back up, those public power districts are very amenable and very forward looking in terms of working with their customers. There are others that might not necessarily be so forward looking and they understand that they have to accept an individual that wants to do it if they have that net metering allowance, but they don't have to accept if a group of individuals want to pool their resources. So there have been some that are amenable to letting this happen, but that doesn't mean they have to accept it. And I think, as I said, that's short

### Natural Resources Committee February 09, 2017

sighted, especially as we're looking to allow as many people as possible that want to invest in something like this the opportunity. [LB626]

SENATOR HUGHES: Okay. Anything else? Thank you...yes, Senator Bostelman. [LB626]

SENATOR BOSTELMAN: One more...one thing on page 3, line 4... [LB626]

SENATOR LARSON: Line what? [LB626]

SENATOR BOSTELMAN: Four. [LB626]

SENATOR LARSON: Okay, thank you. [LB626]

SENATOR BOSTELMAN: Says: does not exceed XX kilowatts. [LB626]

SENATOR LARSON: I'm happy to work with the Natural Resources Committee to discuss what was possible. That was on purpose, because I understand the different...how do I want to say this...if we are telling the public power districts that they need to accept these types of projects, and, obviously, we're allowing individuals to use their own personal net metering allowances to do that. There comes a point to where we might want to limit the total size of those. And I would understand that and that's why we left that open-ended to have those discussions with the members of the Natural Resources Committee. [LB626]

SENATOR HUGHES: Okay, anything else? So just so I can kind of get my head around, the intent of this legislation...what you're trying to do is allow a group of individuals to get together and act as what a community would now that has authority to do the community-based solar projects? Is that an accurate...? [LB626]

SENATOR LARSON: Yes. [LB626]

SENATOR HUGHES: Okay. Any other questions? Seeing none, Senator Larson, thank you.

[LB626]

SENATOR LARSON: Thank you. [LB626]

SENATOR HUGHES: Will you be staying for closing? [LB626]

## Natural Resources Committee February 09, 2017

SENATOR LARSON: Yeah, and I have the next bill up. [LB626]

SENATOR HUGHES: Okay, we'll entertain testimony for...proponents of LB626. This is why we have the queue, folks. So if you could be wanting to testify...don't be bashful. We haven't bit anybody yet. Welcome. [LB626]

CLIFF MESNER: Thank you. Chairman Hughes and members of the committee, my name is Cliff Mesner, C-l-i-f-f M-e-s-n-e-r. I'm an attorney from Central City, Nebraska, and the owner of Mesner Solar Development. We have completed four community solar projects in the state of Nebraska and currently are working with other communities on other projects. In Central City, we developed a 200-kilowat solar garden that is owned by a number of businesses and private residents in the city. That project is really aggregated solar using virtual net metering. The electricity produced is spread out, is split among the owners of the project, but the owners actually own specific panels, they use their own credits, they use their own depreciation. We do do a combined insurance through the lease arrangement. In Holdrege, we developed a 56kilowatt system in connection with a low-income housing tax credit project that we developed for the city. That array is built off-site and the city, again, credits the utilities back to the apartments in the project. And we just completed two projects with Nebraska Public Power District in Venango and Scottbluff. These projects, the solar array is owned by private investors who have a 20-year PPA with the Nebraska Public Power District and then the power district sells the solar energy on to some subscribers on the system. The subscribers right now are paying 1.2 cents more per kilowatt for solar. There's plenty of interest in that. But the cost of the solar is fixed over the 20-year period. So most of the subscribers think that as inflation catches up that solar will actually be cheaper for them in the future than the regular cost of energy. There are several communities...several models that can be used for solar. The Central City aggregated solar model is one; the NPPD subscriber model is a second; and the Lincoln Electric System panel purchase model is a third. There are others out there, but those three have already been introduced in the state. All provide significant advantages to the community and to the homeowners. Which one works the best kind of depends on individual circumstances. Community solar is much cheaper because it gets better economies of scale. It's also open to everybody because homeowners don't have to have the south-facing roof or a big backyard. They don't have to have someone up on their roof poking holes in it; they don't have to worry about the complications it creates when they reshingle their roof. They also don't have to recapture the investment with the sale of their house. They can take their virtual net metering and put it to their new house that they buy, or they can sell their solar to some other person that buys their home. But there are also many advantages to the city as well. In many respects, this becomes a zoning issue for the cities because a lot of the cities don't want to have solar panels starting to show up in all of their residential areas. A 25kW array is 10 feet tall and 140 feet long. And people can start putting that into their backyard. That's kind of how we started this process in Central City. The city said, no, we don't want those in our residential area, let's put them all someplace else.

### Natural Resources Committee February 09, 2017

So in Central City we've located them all in an abandoned parking lot in an industrial park. In Holdrege, we put it on top of the city's abandoned landfill next to their substation. In Venango, we put it in a field east of town. And in Scottsbluff, they wanted to put it in front of NPPD's building. But that becomes an advantage to the city because they can move all of that stuff out of a residential area and make it an easier system for them. So why do we need this program? Well, one of the unfortunate things right now is that you're at the whim of the utility companies. As the utility companies want to work with you, you can do it; if utility companies don't work with you, you have a problem. We've received numerous calls from Bellevue and Omaha trying to figure out how to do community solar there. But unless OPPD cooperates, there's no way to do that. A lot of the rurals are...a lot of the communities in outstate Nebraska are serviced by rurals and they have issues with...their interests are different and they aren't necessarily looking at doing the solar. I think one thing I want to say is that I think is important about this legislation is that it gives us an opportunity to work with the utility companies to make sure that the utility companies are treated fairly in this whole process. NPPD has carefully worked this out so that the other ratepayers are not subsidizing the solar. I think my time is up. [LB626]

SENATOR HUGHES: Okay. [LB626]

CLIFF MESNER: I'd be happy to answer any questions that you may have. [LB626]

SENATOR HUGHES: Okay, questions for Mr. Mesner? Senator McCollister. [LB626]

SENATOR McCOLLISTER: Thank you, Mr. Chairman. And thank you for your testimony. The arrangements you have with customers, you're the third party that I spoke of with Senator Larson. Is that correct? [LB626]

CLIFF MESNER: Yes. [LB626]

SENATOR McCOLLISTER: Okay. Typically lease or sell the solar panels that you provide? [LB626]

CLIFF MESNER: In Central City they were sold. In Venango and Scottsbluff, they are owned by the investor group who signed a 20-year purchase power agreement with NPPD, and then NPPD sells the power on. NPPD has the option to buy those panels at year 7, 10, 15, and 20. [LB626]

SENATOR McCOLLISTER: Did NPPD have a purchase power agreement for that electricity or are they using it inside their network? [LB626]

### Natural Resources Committee February 09, 2017

CLIFF MESNER: They have a PPA. They are purchasing electricity from us and then they're selling it on to their subscribers. [LB626]

SENATOR McCOLLISTER: So in essence, they're exporting the power? [LB626]

CLIFF MESNER: I'm not sure what you mean by "exporting." [LB626]

SENATOR McCOLLISTER: So they're moving it out of Nebraska. [LB626]

CLIFF MESNER: No, no, it's all being sold to residents in Venango or residents in Scottsbluff, and we're doing the same thing with Fremont and they're selling it all within the city. [LB626]

SENATOR McCOLLISTER: So a private party would take advantage of the tax benefits, correct? [LB626]

CLIFF MESNER: Correct. [LB626]

SENATOR McCOLLISTER: And they would use the power themselves or sell it back to the utility. What is the payout on something like that? How soon do they recover their investment? [LB626]

CLIFF MESNER: It really varies a lot depending on the size. In the smaller projects, it's really difficult to do. Like Fremont, we're looking at doing a one megawatt system. The investors and the current projections that we have would be a break even at about nine years. [LB626]

SENATOR McCOLLISTER: Okay. Thanks for your testimony. [LB626]

SENATOR HUGHES: Other questions? Senator Kolowski. [LB626]

SENATOR KOLOWSKI: Thank you, sir. I just wanted to ask you to reflect on the change in times over the last five to ten years as far as the accessibility of the solar power coming into more usage and sales and connections with public power within our state. Talk about the politics, because somebody's turf is there and territoriality and all those kinds of things. Let's have a reality check of how much has changed. Is it conducive for good investments and will this be something in the longer run better for Nebraska? [LB626]

### Natural Resources Committee February 09, 2017

CLIFF MESNER: I think the answer is yes. What we've seen over the last ten years is a dramatic drop in the price. It continues to drop. It has dropped dramatically in the last year and a half since we did the system in Central City in fact. [LB626]

SENATOR KOLOWSKI: Okay. Can I interrupt for a second. One of the answers you had for the senator...Senator McCollister was the buy-back or the dates of...one was like seven or nine years, was it, that you said...there's a whole lot of technology changes in a very short time. That could be three or four generations of change. [LB626]

CLIFF MESNER: Yes. [LB626]

SENATOR KOLOWSKI: And so you're using an old unit here that you said you're going to hold for seven years. Is there not a better buy-back...or inclusive model of getting something better quicker into the field? [LB626]

CLIFF MESNER: The model gets better every day. Okay? [LB626]

SENATOR KOLOWSKI: Sure. [LB626]

CLIFF MESNER: We built our system in Central City at \$3 a watt. Central City city council is going to look at expanding that next Monday night at \$1.42 a watt; only about 45 percent of what we initially invested in. But what people have been doing is, they've been locking in the contract. So NPPD is locked in a contract based on today's pricing. [LB626]

SENATOR KOLOWSKI: Sure. [LB626]

CLIFF MESNER: As the pricing gets better, it gets more and more profitable for us. And what's happened for us, I mean as a state, and what's happened is, we've been a little bit behind because our electric rates have been better than most states have been facing, so solar has gotten here a little bit later. But the pricing has gone down so far that solar now starts to make sense. And we have...the utility companies are trying to figure it out and they're trying to say--how do we integrate this into our system and make sure that we're bringing it in and that it is profitable and that we're not making some ratepayers pay for what other ratepayers want. And I think NPPD and LES have done a really good job of sorting through that and making sure that they're making this option available for communities and for people who want green energy without hurting the rest of the ratepayers. But it's not something that's universal across the state. And frankly, we need to be looking at these as pilot projects and trying to figure this out as a group so that we have a solution, a model that can be reproduced across the state and used for by everybody

### Natural Resources Committee February 09, 2017

without hurting any of the utility companies and making it available to the communities. [LB626]

SENATOR KOLOWSKI: I hope we're not...my question was more...what is the climate like? What is your...what other business deals that you're making and how well are they conducive for the expansion of green energy in our state rather than the coal fire furnaces and the gas fire...all those kind of things that we have concerns about as far our climate and everything else? [LB626]

CLIFF MESNER: I think those deals are becoming more and more attractive. But if you look at it right now, most of the deals that have been done in the state have been done by outside investors who have solar experience in other states. [LB626]

SENATOR KOLOWSKI: Okay. [LB626]

CLIFF MESNER: They understand it better than we do because they've been doing it for ten years in California or North Carolina or New Jersey. And we're starting to see now local investors. I've had a great deal of discussion with a number of Nebraska banks that are interested in looking at this and saying, you know, should this be a Nebraska industry? Is this something we should be investing in? And I think...I think they're coming to the conclusion that it does make sense, otherwise people wouldn't be coming from California and New Jersey to do it. [LB626]

SENATOR KOLOWSKI: And the amount of sun and wind that we have has gone untouched. We need to plug into that. [LB626]

CLIFF MESNER: Yes. [LB626]

SENATOR KOLOWSKI: Thank you very much. [LB626]

SENATOR HUGHES: Other questions? Senator Bostelman. [LB626]

SENATOR BOSTELMAN: Thank you, Mr. Chairman. Do you, Mr. Mesner, you said it's private developers primarily, is that mostly out of state...private develope...private money coming in? [LB626]

### Natural Resources Committee February 09, 2017

CLIFF MESNER: It's really varying. As I indicated, if you look at the large projects that are being done right now, those have been mostly done with out-of-state investors that have come in and done that. I have kind of been tasked with trying to find in-state investors, and in-state investors are suddenly showing a real interest in it. I had a meeting earlier this week, my third meeting with a Nebraska bank that wants to understand this stuff and get into it. And I think you're seeing it grow. But we just don't have the experience in Nebraska that they have in these other states. And that's because the other states had higher utility rates and it just started there sooner. [LB626]

SENATOR BOSTELMAN: Thank you. If you could explain the fixed price to me a little bit, because how does that work, those who are part of the community and those who are not and how that fixed price affects the non...people who are not participating. [LB626]

CLIFF MESNER: Sure. What they've done in Venango and Scottsbluff is, the bill actually shows like three lines. You've got your normal bill; and then they give you a bill for the cost of solar, which is 7 cents a kilowatt hour; and then they give you a credit for 5.8 cents a kilowatt hour, which is what NPPD figures is their cost of...all in-cost of production. So at the end of the day, you pay 1.2 cents more if you want the solar. But since the 7 cents is fixed for 20 years, under the purchase agreement, if the cost...NPPD's cost go up, then the solar becomes, by comparison, cheaper. If NPPD's costs go down, then the people buying the solar are still paying more. We've had awfully good success with it. I have to go out to Scottsbluff tonight, in fact, and I talked to the city administrator out there; we did a project there. And he said--I got to talk to you about another project, we have a lot of people on our waiting list and we need another, bigger project. People want to do this. So they're looking at that. I talked to Brian Newton in Fremont today and he said his initial look at it has gone very, very well. He's got a lot of people that are interested and so...there is an interest there. People want to do it and communities want to do it because they want to be able to park it at a reasonable price instead of having it show up in all the residential areas at twice the cost. [LB626]

SENATOR BOSTELMAN: Thank you. [LB626]

SENATOR HUGHES: Okay, Senator McCollister. [LB626]

SENATOR McCOLLISTER: Thank you, Mr. Chairman. So their motivation for doing this is probably the tax credits they're getting. Since the return on investment take eight or nine years, it's probably those tax credits that are motivating folks to produce new credits, would that be a correct characterization? [LB626]

### Natural Resources Committee February 09, 2017

CLIFF MESNER: The credits are motivating for the investors, yes. There's no question about that, because if you take the tax credits and the depreciation out of it, it's just not as profitable. [LB626]

SENATOR McCOLLISTER: There's no Nebraska credits, it's all federal, correct? [LB626]

CLIFF MESNER: It's all federal credits. [LB626]

SENATOR McCOLLISTER: Can you describe what that credit is? What's the amount? [LB626]

CLIFF MESNER: Sure. The credit is a 30 percent credit. It's taken all in the first year. It can be carried back one year or carried forward 20 years. The depreciation is also key to it because you get a 50 percent first-year-bonus depreciation. And you can take the rest of the depreciation over a five-year matrix. So it's a very short time that way. You get this quick return of most of your capital back between the credits and the depreciation. And it clearly does affect the ability to buy it down. It also affects who the investors are, because to use the credits, you have to have a big income tax bill to use the depreciation and they are passive so they have to be either subchapter (c) corporations or it has to be passive income. And that limits the number of people who can actually invest in these things (inaudible). [LB626]

SENATOR McCOLLISTER: Thank you, thank you very much, great answer. [LB626]

SENATOR HUGHES: Okay, other questions? I have just one, in dealing with wind, there are places in Nebraska where it is much better than other places. Is there any type of solar map that would indicate there's anywhere better or worse in Nebraska? [LB626]

CLIFF MESNER: Yes, yes. Clearly, the farther west you go the better off it is. [LB626]

SENATOR HUGHES: I knew that. (Laughter) We're talking about sun right now. [LB626]

CLIFF MESNER: It's the same with the sunshine. If you look at Fremont, a kilowatt system will produce 1,696. [LB626]

SENATOR HUGHES: Okay. [LB626]

CLIFF MESNER: If you go out to Broken Bow...I mean out to Scottsbluff, it will produce about almost 1,900. So there is a fairly significant difference. [LB626]

### Natural Resources Committee February 09, 2017

SENATOR HUGHES: Is that just based on elevation or lack of cloud cover? [LB626]

CLIFF MESNER: Lack of cloud cover. The average sunshine in Scottsbluff is 5.1 hours a day. And on the east side of the state, it's 4.9. And that over 20 years adds up. [LB626]

SENATOR HUGHES: Okay, any additional questions? Seeing none, thank you, Mr. Mesner. [LB626]

CLIFF MESNER: Thank you very much for your time. [LB626]

SENATOR McCOLLISTER: Venango was .0. [LB626]

SENATOR HUGHES: That's right. I got some land for sale. Welcome. [LB626]

KEN WINSTON: Good afternoon, Chairman Hughes, and members of the Natural Resources Committee. It's good to be back here again. My name is Ken Winston, K-e-n W-i-n-s-t-o-n, and I'm appearing on behalf of...I'm registered on behalf of the Cavanaugh Law Office and I'm appearing today on behalf of the Nebraska Sierra Club. The Nebraska Sierra Club is...has been the leading proponent of renewable energy in the state for the past 15 years and we wanted to say thanks to Senator Larson for introducing LB626. As Senator Larson indicated, there was a study last year, LR455, which...and one of the issues that we examined was solar energy. And the reason I say "we" is because of the fact that I was on the other side of the table and working for the Legislature last year and was a staff person for that committee. One of the things that we found in the course of that study, as Senator Larson indicated, is that there's a great deal of interest in solar energy. There's interest in rural areas, there's interest in urban areas. It's just...there was universal interest and we heard practically no negative messages about solar energy. There were lots of people, places like Loup City are talking about setting up solar systems. There's farmers in Custer County. Custer County actually has about 2 megawatts of solar development because of the fact that people out there really wanted to do solar development. And one of the things that was interesting was that the solar developers really wanted to emphasize the idea of having Nebraska investors in their solar projects and so they've insisted on Nebraska investors. So there's, as I indicated, there's a lot of interest in communities in solar energy, and in particular, community solar. And Mr. Mesner listed most of the benefits, but I'll just run through some that I was thinking of while he was testifying. One of the things, as he indicated, it allows better control by the utility of the solar project. They can...basically, they know where all the energy is coming from at any one time and so they know where the electricity is going to be coming from and it's easier for the utility to work with one larger project as opposed to having projects all over the community where there might be shade or there might be different things that would limit the amount of energy that would come on line at

## Natural Resources Committee February 09, 2017

any one time. It also allows individuals to make smaller investments. I mean, most of the people who put solar panels on their homes have to make a substantial investment of several thousand dollars, whereas you can have a smaller investment. For example, the Lincoln Electric System is allowing people to invest in their project out west of town for an investment of \$685. So that's a much smaller investment for somebody to make...to participate in a project. Then as Mr. Mesner indicated, it allows a better location, you can put it where you want to have it as opposed to having people just put it wherever they want it. There's better economies of scale. Solar energy generally generates at peak energy times, times of peak usage which are late afternoons in the summertime. As was previously indicated, you can lock in a price. And there's also fewer siting issues than there are with other forms of energy. You can put it lots of different places. You can put it on a parking lot; you can put it in a ravine; you can put it on a warehouse roof or something of that nature. Just a little bit of background about how solar energy is growing. At the beginning of 2016, there was about one megawatt in the whole state of solar development. By the end of last year, there was about six megawatts. I don't know how much will be in the...developed this year, but I've already heard about ten megawatts that are in the pipeline that people are considering developing. Now, that may sound like a pretty big deal, but...and it is, obviously, a huge growth, but it's still a very small fraction of the thousands of megawatts of electricity that are generated each year in the state of Nebraska. So it's still an industry that is in its infancy and the reason that a bill like LB626 would be important is it would provide a state authorization for this kind of program. I guess the final thing that I wanted to talk about is just the fact that I know that Senator Kolowski has a community solar bill and there's another virtual net metering bill that's going to be heard in a couple of weeks. I think Senator Wishart introduced that. Would encourage the committee, as Senator Larson said, there may be some pieces of each of those bills that might be worthwhile to consider in...as you're deliberating about the issue of community solar. I would be glad to answer any questions. [LB626]

SENATOR HUGHES: Okay, thank you for your testimony. Questions? [LB626]

SENATOR WALZ: I have a question. [LB626]

SENATOR HUGHES: Yes, Senator Walz. [LB626]

SENATOR WALZ: Okay, thank you for being here, first of all. You said that you could put it where you want to have it. Okay. Are there any restrictions on the placement or authorization from utility...local utility companies on where you will be able to place this? [LB626]

KEN WINSTON: Well, I guess I meant more the idea that there would be something where it would be something...where you would work with the utility to determine a good location in a community. And it might even be the utility who would develop the community solar project, as

### Natural Resources Committee February 09, 2017

LES did. So the idea would be rather than just having something located wherever...I mean, right now, with a net metering project, as long as I don't have a covenant in my community that prevents me from putting it on my roof, I can get a...well, also I'd also have to be able to afford it, but I'd be able to put some solar panels on my roof and LES would be obligated to buy the electricity from my solar panels. In this way, a person could just make the investment with LES, for example, and buy into the project that's already been built or buy into a project that's being developed. Did I answer your question? [LB626]

SENATOR WALZ: I guess. [LB626]

KEN WINSTON: Well, can I...well like for example, Mr. Mesner described the project they built in Central city, rather than having a bunch of different projects in people's backyards... [LB626]

SENATOR WALZ: Right. [LB626]

KEN WINSTON: ...they chose an undeveloped industrial site and put it out there. [LB626]

SENATOR WALZ: Okay. And how did that process work then? I mean, how did they make that decision and who was all involved in that decision, I guess? [LB626]

KEN WINSTON: Okay, I'm probably a little bit out of my league, I mean I don't want to speak for Mr. Mesner, but it is my understanding there was communication between the city, which is the utility in that area, and the people who wanted to develop the project and they reach an agreement on that location. [LB626]

SENATOR WALZ: Okay. Thank you. [LB626]

KEN WINSTON: You bet. [LB626]

SENATOR HUGHES: Okay, Senator Quick. [LB626]

SENATOR QUICK: Thank you, Chairman Hughes; and thank you for testifying. My question would be, like, let's say in an REA and would this mandate them...say someone wanted to put a bigger unit out there but they don't have any lines out to bring electricity in, would they have to put a line in then, would it mandate them then to do that? [LB626]

### Natural Resources Committee February 09, 2017

KEN WINSTON: Well, my reading of the bill, and I didn't draft this bill, so I don't...and I don't want to speak for Senator Larson, but my reading of the bill would be that the utility could say...because there's some language about them being able to limit the development. And so if they would say, well look, we've got to run another line out here and we can't...this is not going to work, that they could step in and say...and I...I'm certainly open to other interpretations, but that's the way I read the bill is that they wouldn't have to do it if it wasn't going to be feasible for them to do it. [LB626]

SENATOR QUICK: Okay, thank you. [LB626]

SENATOR HUGHES: Any other questions? Senator Albrecht. [LB626]

SENATOR ALBRECHT: Thank you, Chairman Hughes. This might not be a question for you, but maybe for someone else. So this solar group that decides to take care of the electricity for a particular area, does the public power still go into that area along with the solar? [LB626]

KEN WINSTON: Sure. Yeah. It would have to be in coordination with the utility; they can't just go off and create their own utility. [LB626]

SENATOR ALBRECHT: Okay, because I'm thinking if they're in a parking lot somewhere and they get taken out by a storm and they aren't generating any, obviously, they have the backup of their public power so that they have both at their homes, that's why the three-tier in their bill. Is that right? [LB626]

KEN WINSTON: Now that...I don't know the aspects of the billing system, but a private entity cannot create their own utility in the state of Nebraska. It has to be through a public power district. So if somebody just built their own... [LB626]

SENATOR ALBRECHT: Just enhance what they currently have to get at a lower rate. [LB626]

KEN WINSTON: Right, it would be...people would invest in this and then they could get a credit on their bill for the amount of solar energy that's generated. [LB626]

SENATOR ALBRECHT: Thank you. [LB626]

SENATOR HUGHES: Okay. Any other additional...Senator Kolowski. [LB626]

## Natural Resources Committee February 09, 2017

SENATOR KOLOWSKI: Thank you, Mr. Chairman. I just wanted to make sure to get this in the record. Thank you, Mr. Winston, for your testimony today. About 18 months ago, my wife and I were in the Baltic and we were landing in northern Germany and we had a day trip to Berlin. We had a three-hour bus ride to Berlin and 90 minutes of that ride we were never without a view of a windfarm, along with all the windfarms in the water riding up against the Baltic because it was so windy coming right off the sea in that way. Also, there was solar panels all over that northern German state. And they produce 150 percent of the power in that area. They could sell 50 percent of their power to neighboring states because it was so productive in that area. I just wanted to use that as an example of where other parts of the world are so far ahead of us. And we have this tremendous potential resource in our state that it can and should be tapped. And I hope we can negotiate properly to do the things we need to do to capitalize that and cut down on other sources of power. [LB626]

KEN WINSTON: If I could respond to Senator Kolowski's comment. One of the things in response to that, it is kind of ironic that Germany has so much solar development when Germany is a very cloudy country, and Nebraska, for example, is far sunnier than Germany. And so we would have a much better solar resource in terms of our ability to generate solar energy, as Mr. Mesner indicated. Scottsbluff is a very sunny place, and the further west you get, it gets a lot sunnier. And even Lincoln and Omaha are far sunnier than Germany is. [LB626]

SENATOR KOLOWSKI: Thank you. [LB626]

SENATOR HUGHES: Any additional questions? Seeing none, thank you. [LB626]

KEN WINSTON: Thank you, Senator. [LB626]

SENATOR HUGHES: Next proponent? [LB626]

NANCY MEYER: (Exhibit 1) Hello. My name is Nancy Meyer, N-a-n-c-y M-e-y-e-r. I'm here to testify in favor of LB626. I know that this committee, the state Legislature, and all Nebraskans value independence from outside economic pressures. Moreover, self-reliance is a strong and enduring aspect of our rural character. That is why I am testifying in favor of this bill. At present, Nebraska's public power has come primarily from the burning of coal purchased from out of state. The price of that resource can and does fluctuate, and Nebraska's public electricity service has had to continually adjust to those fluctuations. This puts a strain on both the ability to do financial planning and the ability to sustain revenues required to run the utilities and meet the needs of Nebraskans. Thus it makes sense that increased ability to generate power within the state using our own abundant natural resources will help utilities and all Nebraskans achieve greater autonomy and control of their energy destiny. This independence is the Nebraska way. I

## Natural Resources Committee February 09, 2017

understand that Nebraska's public power companies currently rely on selling power outside the state as a source of revenue. Again, too much reliance on revenue from external entities is not in Nebraska's best interests, because outside demand also can fluctuate without our control. However, the ability of Nebraska's public power districts to increase control over their own costs through local reliance on our state's own natural resources would allow them to remain competitive as a source of power for their external customers. For these two economic reasons the Community Solar Act would be good for Nebraska public power and good for all Nebraskans. [LB626]

SENATOR HUGHES: Thank you, Ms. Meyer. Are there questions? Seeing none, thank you for your testimony. [LB626]

NANCY MEYER: Thank you. [LB626]

SENATOR HUGHES: Next proponent? Welcome. [LB626]

ALAN MEYER: (Exhibit 2) Hello. Thank you. My name is Alan Meyer, A-l-a-n M-e-y-e-r. I live at 2043 County Road Y, Cedar Bluffs, Nebraska. That's in Saunders County, it's LD23. I am here today to express my support for LB626, the Shared Community Solar Act. I support the bill because it covers some basic principles that I believe in. Renewable, nonpolluting energy generation from local resources; basic capitalism; and also, individual freedom and choice to live ones life in the manner that one wishes. On renewable energy generation, I'm sure that other people, and as you've heard, have covered the benefits of solar energy generation much more eloquently and with greater authority than I could ever bring to bear. So on this topic, I just want to say that I agree that it is imperative that with utmost haste we do whatever we can to encourage the development of renewable energy resources that ultimately reduce carbon emissions and other forms of environmental degradation. For basic capitalism, I want to emphasize that I think our public power system is wonderful and should continue to serve the needs of all Nebraskans. But I also believe in the power of competition. I can understand why the existing power utilities could oppose this legislation. It encourages development of competing sources of energy and reduces their market. It is basic economics. A monopoly will always try to stifle competition. This is what makes monopolies bad. They spend resources stifling competition instead of doing a better job than the competition. Frankly, if the current public utilities are unable to supply a better economic benefit to a community than what would be provided by that community using the provisions of this bill, they're doing something wrong and need to be prodded by more competition. And that brings me to the individual freedom and choice. Frankly, in Nebraska at this time, solar power is a long-term economic investment. I can only speak for residential. My wife and I installed a 5 kilowatt solar array in 2014. We expected to fully recover our costs in 8 to 12 years. The continued decline in the cost of utility scale wind

### Natural Resources Committee February 09, 2017

and solar, should the public utilities make use of them, and our own personal factors, such as reduced use of electricity, means that it may take a little longer to recover our costs. I, for one, am not much saddened by this. We made the decision to install the system as a personal moral choice in concert with the economic benefits. I would definitely do it again. If the public utilities continue to rely on coal to generate electricity, I will do it again because the cost to generate electricity using coal has gone up, while the cost of residential solar has declined and will continue to decline. If a community can get together and make the same economic and moral choice that we made, they should have the freedom to do so. I'll take any questions. [LB626]

SENATOR HUGHES: Thank you, Mr. Meyer. Are there questions? Senator McCollister. [LB626]

SENATOR McCOLLISTER: Yes, thank you, Mr. Chairman. Thank you, Mr. Meyer, for appearing. Can you, basically, describe the unit you put on? Was it a house unit, a roof unit? [LB626]

ALAN MEYER: Yes, we live on five acres. It's not on our house, it's out in an unused area. And it's an adjustable tilt; it's not continuously...we, every month, go out and change the angle of the array. It's five kilowatts. We estimated at the time that it would provide about 50 percent of our household use. It's probably not quite that much, you know, for whatever factors, but we're very happy with it. [LB626]

SENATOR McCOLLISTER: Did you make arrangements with the utility for that and were they agreeable? [LB626]

ALAN MEYER: Oh, yes, you're pretty much required...we're doing net metering. So basically, there's two meters. One...electricity first comes into our house and we make use of that. Anything that we need in addition to that comes from the utility. If we generate more than what we're using at that moment, that goes out and there's a meter that tracks that. So on our bill, we'll have the total amount we used from the utility, the amount we generated extra that went out and we get a credit for that amount. [LB626]

SENATOR McCOLLISTER: When you installed this unit, did you get any kickback from your neighbors? [LB626]

ALAN MEYER: No. I'm not sure what you mean by kickback. [LB626]

SENATOR McCOLLISTER: Did they object to putting the... [LB626]

### Natural Resources Committee February 09, 2017

ALAN MEYER: Oh no, no, since we're...we're out in the rural, you know, nobody really sees it. So there would not be any objection. [LB626]

SENATOR McCOLLISTER: Lastly, you indicated that with...that you figure your investment time is probably going to take longer to recoup, isn't that right? [LB626]

ALAN MEYER: Yeah. And there's other factors besides the fact that we're using less electricity than we thought. And one of them that I'm pointing out is that...we expected the utilities will be using wind and that cost is going down as well. [LB626]

SENATOR McCOLLISTER: And the reason for that is that utilities are adding more renewable energy--wind and solar, so it's driving down the price of electricity even to all consumers. Correct? [LB626]

ALAN MEYER: That is correct. [LB626]

SENATOR McCOLLISTER: Thank you. [LB626]

SENATOR HUGHES: Other questions? Seeing none, thank you, Mr. Meyer. [LB626]

ALAN MEYER: Thank you. [LB626]

SENATOR HUGHES: Other proponents? Welcome. [LB626]

KEVIN CONNOT: (Exhibit 3) Good afternoon, Senator Hughes and members of the Natural Resources Committee. My name is Kevin Connot, K-e-v-i-n C-o-n-n-o-t. I live and work in Allen, Nebraska, I'm a consultant to small businesses and communities on economic development and renewable energy issues and I also have a small manufacturing business. And last year, we installed a small solar system that will come on...coming up will be in one year of operation. So I think that the other proponents did a good job of laying out the benefits of this bill and how we continue to do community-scale solar here. One thing I'd like to explore on, we talked a little bit about economies of scale. And when we talk about the cost of a solar project, there's the hard costs which are the cost of the solar panels and the inverters and the racking system. But there's also the soft cost, and that's everything else. And within soft costs, you have customer acquisition costs, you have financing costs, you have labor and some other general overhead costs. If we can reduce those costs, everybody wins. There was an NREL study a few years ago that talked about the percentage that actually laid out a lot of the costs of different scale systems. The soft costs of a small residential system in that study was 23 percent. Where in

### Natural Resources Committee February 09, 2017

the case of a utility scale system, 200kW and larger, the soft costs were only 5 percent. So if we collectively can have simpler financing structures, simpler permitting...streamline the process, everybody wins. [LB626]

SENATOR HUGHES: Okay, thank you, Mr. Connot. Any questions? Senator Kolowski. [LB626]

SENATOR KOLOWSKI: Thank you, Mr. Chairman. Mr. Connot, thank you for your testimony today; good to have you here. And on those soft costs, would more competition also lower that in the commercial venture of doing those things? [LB626]

KEVIN CONNOT: Oh, I think that's a fair statement. I think that if you just follow the usual product life cycle as a product is introduced to the marketplace, you see more economies of scale, more competition, and it's better for consumers. [LB626]

SENATOR KOLOWSKI: Thank you. [LB626]

SENATOR HUGHES: Okay, other questions? Senator Bostelman. [LB626]

SENATOR BOSTELMAN: Thank you, Mr. Chairman. Mr. Connot, could you speak a little bit to the cost associated with connecting and coupling to the transmission lines, because the grid, primarily, is a one-way flow and what costs and who absorbs those costs over time? [LB626]

KEVIN CONNOT: Well, in the case of our little system, it's only a 6kW, so it went very seamless. I mean, it was done, in my estimation, right. We involved the utility. They had to do an inspection, installed another meter so that the energy going back and forth could be metered. I'm not sure that they charged us for some of those costs, but it was...not substantial and not that cumbersome. [LB626]

SENATOR BOSTELMAN: Well, if you're...say you're going to put in 100kW or larger, I think was the meg talked earlier, would think there would be some substantial upgrades or connectivity that needs to be done. Have you looked...since you're the consulting group, do you know some information about that? [LB626]

KEVIN CONNOT: Well, I guess it depends upon where it would be interconnected whether the infrastructure is robust enough at that point to interconnect. So I think each situation would be different. [LB626]

### Natural Resources Committee February 09, 2017

SENATOR BOSTELMAN: Okay. How much on solar energy, in general in Nebraska, and I don't know if it's quantifiable or not, but how much can we rely upon that? And the reason...and what I'm getting at is we have to have a baseload in this state to run...is solar considered a baseload? Will it be considered a baseload? [LB626]

KEVIN CONNOT: Well, I think over time renewable energies, solar and wind, we know over time in a year about what it's going to do. We don't know exactly today or tomorrow what it's going to meet, and that has to be accounted for. I guess to maybe answer that question, one community that we're talking with is a population of 700 or so, and in the case of a solar system, just 100kW for easy figuring would really only be 2.5 or so percent of their total annual usage. So they annual output of 100kW system would amount to about 2.5 percent of their total usage. [LB626]

SENATOR BOSTELMAN: Okay, thank you. [LB626]

SENATOR HUGHES: Okay, other questions? Seeing none, thank you, Mr. Connot. [LB626]

KEVIN CONNOT: Thank you. [LB626]

SENATOR HUGHES: Other proponents? Welcome. [LB626]

GARNER GIRTHOFFER: Thank you. Chairman Hughes, members of the Natural Resources Committee, my name is Garner Girthoffer, G-a-r-n-e-r G-i-r-t-h-o-f-f-e-r; I'm a registered lobbyist on behalf of Geronimo Energy here in support of LB626 for many of the reasons that have already been outlined by prior testimony. I want to appreciate Senator Larson's efforts in this regard. One thing that we would like, we would like to work with the committee on, and Senator Larson, is if we could add some little additional information in terms of parameters of the program, are there any size limitations associated with it, number of subscribers, potential ownership interest in the community solar farm. And I should mention, in terms of Geronimo Energy and our experience, we have either under construction or in operation around 4,000 megawatts throughout the country and we've also worked on a number of community solar projects throughout the country to the extent that we can leverage those experiences in the other states to help make this program as beneficial to the ratepayers in this state. We look forward to working with you and Senator Larson to help make that happen. With that, I'd be more than happy to answer any questions you might have. [LB626]

SENATOR HUGHES: Okay, thank you, Mr. Girthoffer, is that correct? [LB626]

### Natural Resources Committee February 09, 2017

GARNER GIRTHOFFER: Girthoffer. [LB626]

SENATOR HUGHES: Questions? Senator Albrecht. [LB626]

SENATOR ALBRECHT: Could you speak...thank you for being here, could you speak more to the sustainability of this. I know that everybody is looking for new energy. But when these people buy into this, these investors, or whoever, how long does the equipment last and who takes care of it and who is responsible for it later and how long does the equipment last? [LB626]

GARNER GIRTHOFFER: They have a particular lifespan. In terms of...you know, you can have storms that will knock it out, insurance policies built into that, natural wear and tear of replacement of equipment, specific time lines, I'd say it's at least 25 years, I believe. In terms of maintaining the investment to ensure that it's sustainable, you just don't abandon a community solar project. I mean, you really do look at this as a partnership between people in the community and the investors that are made. And in part, this would be...it really...and I mean and it really is a partnership with public utilities. [LB626]

SENATOR ALBRECHT: So do they help maintain the equipment? Do they... [LB626]

GARNER GIRTHOFFER: The utilities? [LB626]

SENATOR ALBRECHT: The utility itself, like any maintenance? [LB626]

GARNER GIRTHOFFER: No, that's the responsibility of the subscribers. [LB626]

SENATOR ALBRECHT: So there would be some employment coming along with this system in the different areas? [LB626]

GARNER GIRTHOFFER: You would need to...well, construction in terms of the project, depending on the size of the project. I suspect that you'll have ongoing maintenance costs associated with it. Those type of issues and I believe the way that the legislation is actually structured, a lot of those issues will be worked out between the utilities and the subscribers themselves. [LB626]

SENATOR HUGHES: Okay. Senator Bostelman, you had a question? [LB626]

### Natural Resources Committee February 09, 2017

SENATOR BOSTELMAN: Thank you, Mr. Chairman. Yeah, two...a couple of questions. First question is, I want to follow up with what Senator Albrecht asked. Who bears that cost? Who bears the cost for upkeep? The (inaudible) lines... [LB626]

GARNER GIRTHOFFER: The subscribers. [LB626]

SENATOR BOSTELMAN: The subscribers do and not the public utility or the utility, whoever it is? [LB626]

GARNER GIRTHOFFER: No. [LB626]

SENATOR BOSTELMAN: The subscribers have to buy new panels, they have to buy...so not the investor, but the people who are actually subscribers. [LB626]

GARNER GIRTHOFFER: The investors are making the investment to build the solar project. Ongoing maintenance costs, the subscribers are purchasing an interest in that solar community and so those two balance the cost associated with ongoing operations of the project. [LB626]

SENATOR BOSTELMAN: Okay. Maybe we can talk later. I just would like to understand that a little bit better. [LB626]

GARNER GIRTHOFFER: Sure. [LB626]

SENATOR BOSTELMAN: And the other question I have, and maybe you can explain it to me, in...and I know you don't have the bill in front of you, but it sounds like you're fairly familiar with it, it talks about it in here that an established shared community solar energy generating system, to adopt regulations to establish a program, and to coordinate the interconnection and commencement of operations of the shared community solar energy generating system--who is engineering this thing? Is the public utility involved with this? Or is it the developer the one who engineers this thing? And make sure they know AAA, OSHA, those type of things, who is responsible for the engineering of the project and approval of that project and if it meets all state and federal guidelines? [LB626]

GARNER GIRTHOFFER: In terms of the regulatory framework put around it? I apologize, I don't remember off the top of my head who the regulatory authority is granted to. And to put it in context, and what we've seen in legislation in other states is the Public Service Commission, for example, has regulatory authority to work with, say, the public...say, the utilities, interested parties to figure out what and how it's going to be structured in a way that, otherwise, protects

### Natural Resources Committee February 09, 2017

ratepayers. So, I mean, there's a difference...there's a number of different ways you could do it and who you would otherwise want to grant that authority to. And it goes back to the point there is some...Senator Larson did a good job of, I think, introducing the concept, but I think, with a couple of additional refinements it might help out to your question and also give notice to people that are interested in participating in the program. [LB626]

SENATOR BOSTELMAN: Okay, thank you. [LB626]

SENATOR HUGHES: Okay. Any additional questions? Seeing none, thank you, Mr. Girthoffer. [LB626]

GARNER GIRTHOFFER: Thank you. [LB626]

SENATOR HUGHES: Any other proponents? Seeing none, if you wish to testify, would you please come to the front row. Welcome. [LB626]

JOHN HANSEN: Mr. Chairman, members of the committee, good afternoon. 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. I also wear an additional hat and that is that I am one of the co-chairs of the Nebraska Wind and Solar Conference. And we, several years ago, found ourselves in a position where we needed to add solar to wind because there was so much interest and growing interest in solar. And so from our vantage point where we've been working these issues for a very long time, we have had dramatic increase in the amount of interest across the state. Solar works well for communities and municipalities; works well for farmers and ranchers. It has fewer siting issues and conflict of use issues with wind. And so it's a nice fit. And so we thank Senator Larson for bringing this forward. We've been watching for some time Cliff Mesner and his efforts and the efforts in Scottsbluff and Venango and around the state. We field a lot of calls in our office of communities trying to figure out a way forward. And if I'm wrong, I will leave that to Senator Larson to straighten me out in his close, but as I look at this, this is a "may" rather than a "shall" on the part of the local utilities. But it also kind of sends a signal that this is an okay thing to do. And I always think from a public power standpoint, we're very much in support and protective of our public power system. It's always good when public power is finding ways to try to work with their owners. And if their owners are trying to do something like this, then this, I think, could be a useful instrument in order to try to find a way forward so that it works for everyone. And at the end of the day, everyone should be happy with the way it works out. And that I see this as...you know, this last year we just really...we had the tour, at the solar conference, of the first commercial utility solar project in Nebraska in the northwest corner of Lincoln with LES, and we compliment them. We think that we're just really in the kind of beginning stages of solar development in our state. And so all those kinds of mechanisms that kind of help us clear the

### Natural Resources Committee February 09, 2017

way forward are useful and it's always, in our view, a good idea when you develop energy sources that don't use any water, don't emit any carbon, and are what our citizens want to do. So with that I would end my remarks and answer any questions in the off-chance that I might be able to do so. [LB626]

SENATOR HUGHES: Any questions for Mr. Hansen? Seeing none, thank you for your testimony. [LB626]

JOHN HANSEN: Thank you. [LB626]

SENATOR HUGHES: (Exhibits 4, 5, 6, and 7) Any other proponents? We have letters submitted from Janece Molhoff, Nanette Day, Eric Williams and Helen Deffenbacher. Okay, opponents to LB626? Welcome. [LB626]

KRISTEN GOTTSCHALK: Thank you. Chairman Hughes, members of the Natural Resources Committee, my name is Kristen Gottschalk, K-r-i-s-t-e-n G-o-t-t-s-c-h-a-l-k. I'm the government relations director and the registered lobbyist for the Nebraska Rural Electric Association and I'm here to represent them today. The Rural Electric Association is 34 rural electric providers that provide energy to more than 230,000 meters across 87,000 miles of distribution line in the state of Nebraska. In my testimony today, I want to emphasize is not in opposition to community solar; it's not in opposition to renewables or renewables interconnected to our distribution systems. But the opposition today is because we truly feel legislation is not necessary to authorize community solar projects. I want to thank Mr. Mesner for his going through the list of projects that are currently online and that's an every-growing list of diversified projects of community solar in various different types of models that come across. And as Senator Larson said, he would probably expect the utilities to say that we are adverse to a mandate. And one of the reasons for that is mandates come with rules, guidelines, and definitions. And I think in the process of creating a mandate here we would begin to preclude some of the models that are already in place or discourage alternative models that may come on. And as we go through this bill, I want to point out some things that are in conflict. One of the things is, in order to participate in a community solar project you have to be a customer generator as defined in the bill. And as defined in the bill it means that you have to have generation on your side of the meter. And as I think was discussed, it's obvious that these types of projects are not for people who can have generation on their side of the meter, but it's for those individuals who, for whatever reason, are not able to do that and a community project would enable them to participate in a community solar or solar or even other type of renewable energy project which also would not be...be prohibited. So that's one of the things. And the project also goes on...or the bill also goes on to say that the utility must develop a pilot project if two or more customer generators within their service area approach them. Well, as we were talking and we heard

### Natural Resources Committee February 09, 2017

earlier testimony, economies of scale are what makes some of these projects more viable and a lot more...more sustainable over the long term. And I question whether two people involved in a project would provide value as a pilot project or provide value to the long-term sustainability of these types of systems. The other concern is that the bill does authorize the customer generators to contract with themselves. Now they could work with the utility, but they can contract with third-party operators to finance, own, build, and operate a shared community solar generating system. Well, the bill doesn't go on. And although it does give the utility some authority, since this part of the process can circumvent the utility, it's not clear how the energy would be distributed or metered because third-party operators are not eligible to distribute energy directly to a customer, it does have to go through a utility. There's no control over the price of energy purchase and no mention of a negotiation or contract for the energy or how that will be used to offset electric bills. And as Senator Bostelman brought up, concerns with engineering the systems into the local distribution utility, the local control and the utility's ability to ensure that the engineering and design is appropriate for the customer generators and appropriate for the distribution system needs to be the critical part of the process. And while the bill does allow the distribution utility to set some parameters and to establish rules and guidelines, that process to be able to go around the utility does create some conflict, and we are concerned with that. The bill also allows for these shared community things...projects to be on the customers' side of the meter or at another location. Again, there's some conflict there and how that would actually be or could be administered within a utility. And while we commend Senator Larson for bringing attention and his interest in making solar projects available to all customers, the bill, as drafted, is not a tool to do that. We don't believe legislation is necessary and we feel like the community solar and solar projects are burgeoning across the state and I think we're going to continue to see that happen. And with that, I would end my testimony and entertain any questions you may have. [LB626]

SENATOR HUGHES: Okay, thank you, Mrs. Gottschalk. Senator McCollister. [LB626]

SENATOR McCOLLISTER: Yeah, thank you, Chairman Hughes. Thank you for being here, Mrs. Gottschalk. Who bears the cost of design and construction of the transmission lines and the engineering that takes place when one of these projects is initiated? [LB626]

KRISTEN GOTTSCHALK: Well, I think the bill is silent on that, so it's unclear. However, that responsibility should be on the responsibility of the utility system to manage their own distribution system to make sure that things are built and constructed appropriately. But when you get into who should pay for that, it should be those that are benefiting from that build out or that extension. So it needs to be clear. As in the current net metering statutes that if there are expenses that aren't incur...would not be there should this project not be in place, those should be beared by the customer generators. But the design really should... [LB626]

### Natural Resources Committee February 09, 2017

SENATOR McCOLLISTER: They are the beneficiaries. [LB626]

KRISTEN GOTTSCHALK: Right. Correct. [LB626]

SENATOR HUGHES: Okay. Any other questions? Senator Geist. [LB626]

SENATOR GEIST: Is there any concern with overbuilding? [LB626]

KRISTEN GOTTSCHALK: Well, I would say yes...and yes and no. If the utility has control in the placement and the number and the size of facilities, then you have some...you can manage those resources. If not, you can...yes, you can overbuild. You can put facilities in place where the distribution system or the customer use of that energy is not great enough and it can cause conflicts. If there's no limit placed in statute, then it can begin to have a financial impact on the other customers within the distribution system. And in those cases, it's a negative impact, maybe not a technical impact on the financial well-being of the rest of our customers on a distribution system. [LB626]

SENATOR GEIST: Okay, thank you. [LB626]

SENATOR HUGHES: Okay, Senator Quick. [LB626]

SENATOR QUICK: Could there be any issues with...well, out in the rural districts, let's say, maybe, you have somebody who has land in two different power districts because...and that probably happens, I'm going to guess, but could there be...how would that work if they wanted to...they had land and where they're at is in one power district, but there's people in another power district want to build a panel, and they want to be part of that because they can't be in one on their own district, how would that...would that cause problems or how would you even address that? [LB626]

KRISTEN GOTTSCHALK: Well, I think...the bill does make a statement to the effect that these have to be within the service territory of the customer generators. [LB626]

SENATOR QUICK: Okay. [LB626]

KRISTEN GOTTSCHALK: So the bill does address that. Now, absent this legislation and the ability to...for utilities to put community solar projects in, it may cause some difficulties, but there, oftentimes, when utilities will share resources or trade customers across service territory

### Natural Resources Committee February 09, 2017

boundaries. So I think absent of legislation that if that were to happen and the utilities were agreeable, the differences could be worked out. [LB626]

SENATOR HUGHES: Okay, any further questions? Senator Bostelman. [LB626]

SENATOR BOSTELMAN: Yes, thank you, Mr. Chairman. A couple of questions, it's been testified that the...our utilities...our public utilities or distributions have been opposed to these projects, is that true? [LB626]

KRISTEN GOTTSCHALK: Well, I polled my members that were here recently for a legislative event to ask them--have you been approached by your customer-owners to create community solar projects? And the answer for the most part was no. I had one system in Wyoming that said that they had been contacted by one customer that wanted to see this type of project. The few contacts that have been made have been by vendors or developers who want to develop these projects and then market to consumers. So I would say no; they haven't denied projects. And in fact, as we see with NPPD, which wouldn't be within my membership, they've done this willingly and of their own accord. And then we also have systems, one of my systems, Custer Public Power District, while they didn't have consumer demand for a community solar project, they still did work with local developers on a solar project that they purchased the power from. And I rank those very beneficial to their customers. [LB626]

SENATOR BOSTELMAN: Could you...does LB824 come into play with this? And my question is, can an outside developing company come in and just build without...because they don't have to go through the Power Review Board or they don't have to, necessarily, talk to the utility? Can they just come and build it? [LB626]

KRISTEN GOTTSCHALK: Well, the reality is, I would say...a very simple answer is yes. But the...but it's not an absolute answer. They are...they are still parameters within LB824, but you're right, they would not have to, necessarily, go to the Power Review Board. Most of these projects that are going to go in are going to be under 80 megawatts. I don't know if you're familiar with the federal law, PURPA, the Public Utility Regulatory Policy Act, actually has provisions that require that any projects...renewable projects 80 megawatts or smaller must be interconnected to utility and the utility must buy the output of those projects at an avoided cost. So there some provisions there. And under the Power Review Board's statutes, if you qualify...if you're PURPA-qualified, then you're exempt from going to the Power Review Board for those projects anyway. [LB626]

### Natural Resources Committee February 09, 2017

SENATOR BOSTELMAN: So if I understand with what you said, perhaps then it would be a negotiation before they could build between the utility and the developer would have to take place? [LB626]

KRISTEN GOTTSCHALK: There has to be a connection between the utility and the developer, because the developer could not sell directly to customers, they would have to sell through the utility to do that. [LB626]

SENATOR BOSTELMAN: Okay, thank you. [LB626]

SENATOR HUGHES: Any other questions? Seeing none, thank you, Ms. Gottschalk. Next opponent? [LB626]

DAN SCHMID: (Exhibit 8) Good afternoon, Chairman Hughes and members of the Natural Resources Committee, my name is Dan Schmid, D-a-n S-c-h-m-i-d. I speak today as a customerowner of Butler Public Power District. I consider myself part owner of a public power provider. I'm an opponent of LB626 for several reasons that I believe could affect the public power system. One, it's unclear what kind of formula, as you guys have been talking about, or program would be used in connection with virtual net energy metering. For example, who would end up paying the cost for needed transmission improvements, facility improvements, etcetera. You guys have talked about that. Number two, the inherent intermittent, chaotic output of solar power means that fossil fuel energy would need to continue to run 24/7/365 to be ready to come on line when solar power ceases to produce, which it typically does during high-demand periods. Number three, there would be an added cost to the Southwest Power Pool to maintain grid reliability. More grid interventions would be required the more solar and the more wind that you hook up to the grid. And number four, how do you avoid rate impacts on non-participants? Since I still have a green light, Germany was mentioned. And for those of you that want to go all in on wind and solar, there's a couple of things--the grid operating tenant...operating company for Germany, and they've been at this a long more time than we have been, they project a 80 percent rise in grid operating costs for the year 2017. And this is due...someone mentioned 20-year contracts to put power onto the grid, well, then we get too much power on the grid, and this has happened in Germany, and they end up selling that power at a reduced price. And, for example, in Germany, sorry, the notes here, last year they paid German individuals, private individuals, they paid \$20 billion for power last year in Germany and it got sold for \$2 billion. Something else, they said grid intervention in Germany went up, it used to be three or four times a day that they would have to intervene and grid, now it's...I don't have the figure here, but it's, what I read, several hundred times a day, and that drives up costs. So that's all I have to say. I'm an opponent for LB626. [LB626]

### Natural Resources Committee February 09, 2017

SENATOR HUGHES: Okay, thank you, Mr. Schmid. Is there any questions? Thank you for coming in today. (Exhibits 9 and 10) Additional opponents? Seeing none, we have letters in opposition from Timothy Lindahl and Mark Farnsworth. Okay, neutral testimony? Welcome. [LB626]

SCOTT BENSON: Thank you. Good afternoon, Chairman Hughes, members of the committee. My name is Scott Benson, S-c-o-t-t B-e-n-s-o-n; I am here representing Lincoln Electric System. We've got a couple of programs that are similar to this. One is our virtual net metering program, you've heard about that today already. It's tied to our community solar project west of Lincoln. For a small fee, customers are able to buy into that up front, kind of reserve a portion of the output of that facility over the course of the program, 20 years, to start with. And it allows customers to see a credit on their bill each month. Now, we also have what we call a renewable generation rate, runs from 25kW to 100kW, so, basically, kicks in just above where the state statutes for net metering leaves off with 25kW. And that's designed to allow people to kind of partner and put in some of these systems, because they get to be quite expensive when they get larger. The one catch is, it's different from this bill and it's designed that we issue a check each month based on the peer production, it's not tied to your load. And then the members of that project would go ahead and parse out that bill among themselves. It kind of saves overhead on this side of the utility. So the reason we're neutral, we've got a couple of programs that are pretty similar, but we've got some concerns about some of the specific language in this bill. First and foremost, we think that the...really, the net metering cap that exists under state statute should be tied to this bill as well. Currently, under net metering, a utility is protected to only have to put in up to 1 percent of their average monthly peak demand in net metering. Why is that important? Well, if you look at LES as an example, if you take our residential retail rate, almost threefourths of the costs that go into that rate are actually fixed costs, costs that have nothing to do with how much energy we sell: wires, transformers, substations, assets of all types, even staff. Well, that becomes really important because if somebody does net metering, or in this case virtual net metering, they're earning the full retail rate. So what that means is, they're not paying their fair share of those fixed costs, those fixed costs that cover all the assets that they need to actually hook to the system to sell this solar. And so who covers those other fixed costs? Well, that's the rest of the customers, the nonparticipants, they're forced to pick up the rest of that. So you end up with a cost shift. And so we would prefer to see here would be that that 1 percent limit currently under net metering would mean you go up to 1 percent whether you have all net metering, you go up to 1 percent whether you have all virtual net metering, or you go up to 1 percent any combination of the two. In addition, we're also concerned about the complexity that would be caused by this bill. Billing systems are pretty complicated and there probably aren't too many in this state that would have this functionality built into them right now. Now LES might have a leg up on this at this point because we've done a virtual net metering program; we had to build a lot of this into our own system. But even with that said, we still think there would be a lot of administrative oversight; you've probably got a whole bunch of now solar facilities on your

## Natural Resources Committee February 09, 2017

utility system and each of those facilities has numerous participants. So the burden falls on the utility to try and track all the participants of each system, as well as the percentages of each participant's level of participation. That gets difficult in and of itself and then you think that over time some of these programs are going to add people and a lot of them are going to lose people because people either move out of your service territory or eventually some people might actually pass away. Any time that happens, that's going to change those percentages. It's going to juggle them til they all add up to 100 percent. The utility's got to keep track of that. We think that might be easier said than done. And again, where do the costs fall? The costs fall on the utility and most of the people paying for that are your nonparticipating customers, the customers that didn't put in solar. Another thing we've looked at in the bill is the actual metering construct they talked about. There's actually two options. Number one is that you would have a dedicated meter on the solar facility, and we prefer that. It's similar to our renewable generation rate. But the other option we give is that you could have a meter on an existing customer load and behind that you would put, maybe, the solar facility. So for example, that would be like I put solar on my house and then I get some partners that buy into it and we do virtual net metering. Well, the problem is, my meter is only going to see the excess that gets fed to the utility; it's going to see the output of my solar facility minus my load in my house. So it's not really fair to all the participants to then give credits out based on divvying up that excess. You really have to meter the solar at it's output to get a fair distribution. Those are really the primary points I had, but I'm happy to answer any questions you might have. [LB626]

SENATOR HUGHES: Okay, thank you, Mr. Benson. Any questions? Senator Bostelman. [LB626]

SENATOR BOSTELMAN: Thank you, Mr. Chairman. How is your project on the west as far as participation as a solar project? Is that what you expected it to be? Has it dropped off? Has it remained the same as far as participation? [LB626]

SCOTT BENSON: So, we actually kind of did it in two phases. The first phase started and it was called our Sun Shares Program and that was really just a contribution, people could make a voluntary contribution to support the project for as little as \$3 per month. It wasn't virtual net metering, you got no credit back, but people did that because they wanted to see Lincoln build that kind of a project. We had done a survey ahead of time, statistically valid survey, and on that survey about 50 percent of our customers would have given about \$3 per month to support a project like that. We ended up at 1,200 customers, which sounds pretty good, 1,200 customers giving \$3 per month every month for what could be 20 years. But 1,200 customers, that's far below 50 percent, that's about 1 percent for us. And so from that instance, it ended up a little bit shorter than what we thought from the survey. The virtual net metering program, that's new, that really just rolled out here starting in January. And I think as of last week, we had a hundred shares sold in that program. And each share for us costs \$685 up front and there are about 15,000

### Natural Resources Committee February 09, 2017

solar panels at that site and so that one share gets you the output of the equivalent of one panel over the life of that project. [LB626]

SENATOR BOSTELMAN: If I may follow up on that. We were talking about maintenance, Senator Albrecht asked that earlier, so in that array that you have...or the system that you have out there, who pays...how is that cost for replacing panels, replacing wiring, replacing any connectivity, who...where is that cost absorbed at or who pays for that cost? [LB626]

SCOTT BENSON: So on our particular project, we have what's called a power purchase agreement, the same things you see with all the large wind contracts where we have a contract with the developer and that developer owns that facility, they operate, they maintain it, they take care of everything. LES's part of the contract is that we buy all the energy they produce at a set rate. So any maintenance on our facility is actually covered as part of that contract. So none of our customers that get into virtual net metering have to worry about it, actually LES doesn't even have to worry about it. It falls on that developer. That's a larger project. A lot of times when you see some of the smaller projects like we're talking about here, that would fall on the actual owners of that array; maybe the homeowner if it's on your home, you're going to take care of that. [LB626]

SENATOR BOSTELMAN: Thank you. [LB626]

SENATOR HUGHES: Okay. Senator McCollister. [LB626]

SENATOR McCOLLISTER: Thank you, Mr. Chairman. Mr. Benson, thank you for appearing. You've done some of these projects and have a great deal of experience, correct? [LB626]

SCOTT BENSON: I don't know if you call it a great deal, but it's pretty good, I guess. [LB626]

SENATOR McCOLLISTER: As you've reviewed this legislation and you testified in a neutral basis, is there any improvements you could see in the legislation that would improve the bill? [LB626]

SCOTT BENSON: Yeah, I've mentioned the one already...a couple of them. One was we really think that 1 percent limit that's in net metering should really be common between net metering and virtual net metering because they're, basically, the same thing, just different ways to get there. I mentioned about the metering that we really think under this bill it would be very beneficial to have a dedicated meter. Another gap that we see in this bill is it doesn't contemplate excess production. It talks about a credit. Well, what happens if your solar array in a billing

### Natural Resources Committee February 09, 2017

period, a month, generates so much that one of the participants their solar generation actually exceeds their load that month? You have to kind of contemplate what are you going to do with those excess credits. Are you going to roll them over to the next billing period? Is it going to be some kind of a payout? Are you just going to let the utility take that energy for free? My guess is that last one is not true, but if you don't put it in there, then you don't know. So those would be some of the things I think you'll want to touch on. One last thing on it, it's not really a problem, but it's something to be cognizant of, it's very clear that it applies to all rate classes. If you look at LES's virtual net metering program, it only applies to residential and small commercial. And there's a reason for that, when you get to larger commercial industrial customers, they're ondemand rates. And so a large portion of their bill is based on the demand that they set during peak period, because the utility has to build to be able to serve that. But in turn, their energy rate is very, very low. So their payback on something like a solar program where they're offsetting their energy rate is really a long time. It gets so long that you probably can't calculate it in the life of solar. So that's why we've restricted ours to the people that residential and small commercial that have a higher energy rate, there's no demand payment. Doesn't mean that the bill as written wouldn't work, you just want to be very clear to people that you realize some customers are going to get more payback on this than others. And the ones that don't get much payback, would be the large industrial and commercial customers. [LB626]

SENATOR McCOLLISTER: Thank you. Thank you, Mr. Chairman. [LB626]

SENATOR HUGHES: Okay. Any other questions? Seeing none, thank you, Mr. Benson. [LB626]

SCOTT BENSON: Thank you. [LB626]

SENATOR HUGHES: Any additional neutral testimony? [LB626]

RICK NELSON: Mr. Chairman, members of the Natural Resources Committee, my name is Rick Nelson, R-i-c-k N-e-l-s-o-n. I am a general manager at Custer Public Power District. You might have heard about Custer being spoke about several times today. What I wanted to do, sorry, what I wanted to do was I'm hearing some operational questions and I'd like to answer those questions. But I also want to described what's going on in Custer County. In Custer County, there are individuals--customers, farmers, ranchers, that seem to have a tax problem. And so they're using these solar projects to kind of take care of some of that tax problem. In all and all when it's all said and done, there's about...they're calculating about a nine-year payback. And what we've established is a 25-year buy/sell agreement which is like a power purchase agreement. One of the issues that I get into is you definitely have to be able to site these substations that can handle the size of the unit. So I've had to hand pick individual locations

### Natural Resources Committee February 09, 2017

where it's possible to do that, especially up in our district where the wintertime load is about anywhere from 15 to 19 megawatts total, in the summertime it's close to 120 megawatts. So I have substations right now today that aren't even 300kW so I can't put a 300kW unit on. And I need to back up. There's about eight projects so far that I've interconnected with or Custer has interconnected with. They range from 150kW to 600kW. And with that, on these lightly loaded substations it creates an operational issue. You have a blue sky day with big puffy white clouds move over them. Well, your voltage goes from 136 volts down to 122 in a matter of seconds. So there's things that we had to do operationally in order to accommodate those solar projects. The other thing is, when you get more than a 1000kW on a delivery point, then SPP will then charge a transmission charges. Right now that's a proposed rule that SPP...which will add to the cost of the projects if we move over 1000kW. That's about what we have going on. Again, it was mentioned we're at about 2.1 megawatts. I can't stress enough that, especially in my district, you need to hand pick where those installations go. So I'm going to open it up to any questions that you may have. [LB626]

SENATOR HUGHES: Okay, thank you, Mr. Nelson. Are there questions? Seeing none, thank you for coming in and straightening it out for us. [LB626]

RICK NELSON: You betcha. [LB626]

SENATOR HUGHES: Are there any additional neutral testimony? Seeing none, Senator Larson, do you wish to close? [LB626]

SENATOR LARSON: Thank you, colleagues, of the Natural Resources Committee for listening to a hearing that was longer than I expected it to be. A few things, like I said, we, obviously, had a number of proponents explain the possible benefits that this could yield. And I think there is a strong interest; I think this could lead to a number of benefits for all communities. I'm willing to work with those people that did have concerns in terms of...I know I heard the concerns from LES, the 1 percent cap, and looking at siting concerns and things of that nature, I think those are things that I'm more than happy to look at in terms of being open to. I think a few things that we have to remember, you know, concerns that the NREA might have brought up. And in the end, pooling of people investing in these really makes it easier for the utilities. If you have 10, 15 people interested in this, it would be easier to hook up at one location than 15 locations. And it offers cost efficiencies for them as well. This helps people get more involved and make smarter investments. And we also have to be mindful...we have a business that is a large power user. Right now, they can still build behind the meter using significantly less power from any public power district and that would cost all users in the system significantly more. And that's something we have to be mindful of as well as we continue to look at these. Like I said, more than happy to work with the committee. Obviously, will take the neutral testimony and those in

### Natural Resources Committee February 09, 2017

opposition to heart and hopefully we can work something out. And I appreciate the time. [LB626]

SENATOR HUGHES: Okay. Any questions for Senator Larson? Seeing none, that will close the hearing on LB626. And we will open the hearing on LB392. Welcome, Senator Larson. [LB626]

SENATOR LARSON: Thank you, Chairman Hughes and members of the Natural Resources Committee. My name is Tyson Larson, T-y-s-o-n L-a-r-s-o-n, and I am here to present LB392. LB392 creates and proposes to adopt the Wind Friendly Counties Act in an attempt to promote and recognize counties that welcome wind energy development in their area. As stated, in Section 2 of the bill, wind energy production has the growing role and the economic vitality of rural areas of the state and in the state's overall economy. There's a public interest and need that exist in assisting and furthering efforts of wind energy industry and rural communities to preserve and enhance wind energy production as an essential element of economic development. Similar to the Nebraska Livestock Friendly Counties program, LB392 proposes to implement a voluntary program focused on counties that actively support the wind energy industry. The program is intended to encourage the future development and expansion of wind energy and to provide beneficial information and resources to counties. LB392 stipulates that the Department of Agriculture shall establish a process including criterion standards to recognize and assist efforts of counties to create, maintain, and expand wind energy opportunities under the Wind Friendly Counties Act. The process will allow counties who meet specific criteria to apply for said designation. I believe LB392 provides an additional tool for counties to distinguish themselves from their neighbors and promote rural economic development. I appreciate your consideration moving forward and I'm happy to answer any questions from the committee. [LB392]

SENATOR HUGHES: Thank you, Senator Larson. Are there questions? Senator Albrecht. [LB392]

SENATOR ALBRECHT: Thanks for your testimony. What exactly would the Department of Agriculture have to do with wind energy? [LB392]

SENATOR LARSON: The main process...I'm sure you've heard of the livestock county designation. [LB392]

SENATOR ALBRECHT: Yes. [LB392]

### Natural Resources Committee February 09, 2017

SENATOR LARSON: And the reason that I chose the Department of Agriculture is because they've already set up this process with livestock friendly counties in terms of the siting process and, essentially, the entire framework for how to go about a program like this. And in the end, I think since they have that experience they have that...they've done the process, it made sense to kind of...as you would say copy and paste. [LB392]

SENATOR ALBRECHT: And has the Ag Department chose to become a part of this bill? [LB392]

SENATOR LARSON: They issued a fiscal note for it, but in talking with Director Ibach, he understands it's just a...we're directing him to do that. Like I said, for me they made the logical choice since they were...they've done this. And for me it really is kind of a copy and paste type thing. Obviously, some of the regulations might be a little different with wind. But they understand the process of the zoning regulations they had to create for livestock friendly counties. And so that's why the Department of Ag made sense to me. And oftentimes, when we're looking at wind development throughout the state of Nebraska, and when you consider where it is, I like to say that wind is the new cash crop for farmers and ranchers across the state. This is another crop for them to harvest, another crop for them to look to diversify their own personal portfolios. [LB392]

SENATOR HUGHES: Okay, Senator McCollister. [LB392]

SENATOR McCOLLISTER: Yeah, thank you, Chairman Hughes. Thank you, Senator Larson. We passed a bill last year, LB824, to establish the protocol by which projects were approved. And, obviously, counties have the ability to disapprove any project, correct? [LB392]

SENATOR LARSON: Correct. [LB392]

SENATOR McCOLLISTER: But also, there are other agencies in the government that their net approval process as well, including Game Parks; I think the Environmental...they had an approval as well. So this designation wouldn't change any of those protocols, would they? [LB392]

SENATOR LARSON: No, this is, essentially, an option for counties to go get. I'm not sure how familiar you are with the Livestock County Friendly designation. Essentially it just tells investors or developers that they are open for business to have your hog facility in your area, your feedlot in your area because they have already adopted certain, whether it be zoning regulations or certain measures at a county level that provides an easier path for those types of investments.

### Natural Resources Committee February 09, 2017

And what I see, this would be the same for counties that want wind in their area. It doesn't say any county has to develop this. A county...their supervisors are opposed to wind development, they won't seek out the wind friendly county designation. But if a county wants to separate itself from its neighbors, wants to look to expand its tax base, wants to send a message to developershey, we're here, we're open for business, come invest in us. And they'll be able to go get the wind friendly county designation. [LB392]

SENATOR McCOLLISTER: Thank you for your testimony and thank you for the legislation. [LB392]

SENATOR HUGHES: Okay. Additional questions? Senator Bostelman. [LB392]

SENATOR BOSTELMAN: Thank you, Mr. Chairman. So would a county have to be zoned in order for this to apply? [LB392]

SENATOR LARSON: Right now under the ag friendly counties, I know there is some zoning regulations. The bill itself is pretty light on whether or not that would require the Department of Agriculture would set the regulations for what it would take to become a wind friendly county under the way the bill is currently written. [LB392]

SENATOR BOSTELMAN: It appears on page 2 in the third section there, appears...it's up to the county commissioners or the county to decide how the structure is going to be built, how it's...and here we're going back into the engineering operations of it as far as the...following ANSI, AWEA, you know, voltage control, all those type of things, do you think a county commissioner, a county board, county supervisor are qualified to do that? [LB392]

SENATOR LARSON: Can you repeat your question? Where are you specifically in Section 3? [LB392]

SENATOR BOSTELMAN: Yeah, according...well, I believe in here it talks about being initiated by the county at the time of application, formal expression of interest; I believe there's a place in here it gave it to, basically, the county board to determine how it's going to be built or where it's going to be built. And I'm kind of wondering if that...if you're leading to who is going to make the determination, you know, how the project is going to be engineered and built and is that up to the county or is that up to the developer? [LB392]

SENATOR LARSON: My understanding is the Department of Agriculture establishes a process including the criterion standards to recognize and assist efforts to counties, but...and a county has

### Natural Resources Committee February 09, 2017

to meet that criteria and they may apply for the designation as a wind friendly county from the Department of Agriculture. And when it's talking about such criteria and standards may include but aren't limited to, if you're in Section 3, you know, is consideration a diversity. So what it...that saying is that's directing the Department of Ag saying that such criteria may include those things. It's not asking the county to, it's saying these are the criteria that the Department of Ag could use to development what a wind friendly county would have to do to become that. [LB392]

SENATOR BOSTELMAN: I'm going to go back to Senator Albrecht's question. Last time this similar bill was introduced, it went underneath the Department of Energy. There's a large fiscal note with it. My question is, what expertise does the Department of Ag have in any power generation? [LB392]

SENATOR LARSON: I'm always open to if we want to create a cooperation between departments or whatever else, but the reason we went to the Department of Ag, as I said, is this is...or even a...if you want to say a short count...a short task force to help develop this. I'm open to that as well. The reason that we went to the Department of Ag is specifically they've done this, they know how to do this, and they know how to create a program like this. [LB392]

SENATOR BOSTELMAN: I understand what you're saying on the designation of a county friendly, but that's different than having the technical expertise, engineering expertise to know, to be able to provide the information. And that's where are energy folks are at and that's....that's, to me, it's a disconnect for me, because I think our energy department is the right place that we need to be getting our advice on how to do this versus Department of Ag. [LB392]

SENATOR LARSON: Well, maybe a suggestion for the committee would be then...in terms of developing the standards and the process, the Department of Ag shall work with the Department of Energy to set up the rules and the regulations. But the Department of Ag, specifically, are the ones that administer it since they are already administering a similar program. [LB392]

SENATOR BOSTELMAN: I guess a final question...or comment I'd have with this, do you think there would be a way to say that if there was going to be a development targeted for a certain county, if they want to do that, that there would be prior notice to the population prior to any contracts, prior to any discussion of the county commissioners to take place so the community, the people in the county know what's being talked about rather than... [LB392]

SENATOR LARSON: To a specific project or to the... [LB392]

### Natural Resources Committee February 09, 2017

SENATOR BOSTELMAN: Yeah, to a specific project. Because here, what it says, is the county commissioners can make that decision. And is there a mechanism...do you think there might be a mechanism where at least the people in the community could provide some comments and feedback because...I'm just kind of curious. [LB392]

SENATOR LARSON: In terms of getting this designation, I know in the counties... [LB392]

SENATOR BOSTELMAN: Right. [LB392]

SENATOR LARSON: ...that I have... [LB392]

SENATOR BOSTELMAN: Well, not only designation, but having a project being built. [LB392]

SENATOR LARSON: Well, the project being built still would have to go through the county board, regardless of whether or not they had the wind friendly designation. I can speak to...and I'll harken back to the counties in my district that have received the livestock friendly designation, first of all, that has gone through the whole county board process and testimony and whatnot. And in Knox County, for example, was somewhat contentious whether or not they went and followed the criteria that the Department of Ag laid out. And they did. And Knox County did get the Department of Ag livestock friendly designation. But every project that is built, every feedlot that's...the number of head is expanded to, or every new hog barn that is created in the livestock friendly designation has still had to go through the county board. So this doesn't stop...just because you have the designation doesn't mean every wind project would be approved. It just...it's more of a, what I would call, an economic development tool for a county saying—we're a friendly county towards that. I've seen massive benefits in my district to the livestock friendly designation. The number of permits coming through my district, I probably average at least once a week and possibly sometimes it's two or three a week. And so the counties have really used that in my district. [LB392]

SENATOR BOSTELMAN: Okay, thank you. [LB392]

SENATOR HUGHES: Senator Albrecht. [LB392]

SENATOR ALBRECHT: So if it were a wind friendly, would a matrix follow it based on what people need to follow? [LB392]

### Natural Resources Committee February 09, 2017

SENATOR LARSON: You know, with the ag friendly county designation, it's my...and I don't know the exact breakdown on how the Department of Ag did that, but I know the Department of Ag went to receive the livestock friendly designation, a county did have to adopt certain zoning regulations. So I would assume, as I said, I'm happy to say the Department of Ag has to work with the Department of Energy to set the regulations, but I think Department of Ag is still the best house to administer the program since they're already doing a similar one. If they want to create, you know, to get this designation, you have to have a matrix in your county or certain zoning regulations, that's up to them to develop that. But we've seen that with livestock friendly counties. And like I said, it's really worked and it's really boosted economic development in my area based on how many people are building facilities up there. And it might not sound a lot to get a new 5,000-head hog shed or whatever, but last year with LB176 passing, I think that was massively important. We're seeing the livestock friendly counties in my district that have that designation we're booming in hog facilities now. And like I said, that's part of it that is...we're getting...you know, I'm averaging at least one a week if not more. And same with feedlots and other things that these are how we grow rural Nebraska. And those designations have sent a message to developers and individuals--come here. [LB392]

SENATOR ALBRECHT: Thanks. [LB392]

SENATOR HUGHES: Okay. Additional questions? Seeing none, thank you, Senator Larson. I'm assuming you'll stay for closing? [LB392]

SENATOR LARSON: Yep. [LB392]

SENATOR HUGHES: Okay, proponents of LB392. Welcome, Senator Schilz. [LB392]

KEN SCHILZ: (Exhibit 1) Good afternoon, Senator Hughes, Chairman Hughes, members of the Natural Resources Committee. For the record, my name is Ken Schilz, it's spelled K-e-n S-c-h-i-l-z, and I'm a registered lobbyist here on behalf of Bluestem Energy Solutions. I'm here in support of LB392. And as Senator Larson said, economic development, it's important to the state of Nebraska and all local jurisdictions. And we believe that LB392 will help both...all counties, citizens, and private developers as they look at these types of endeavors. Obviously, with the bill and looking at how that works with the livestock friendly situation, counties can take the opportunity, and they should take the opportunity, to have discussions on how to best zone for wind development and how to best move forward with the smart development or whether the community wants development at all. I think the best conversations are always good to have before hand. I mean, it's never a good situation to end up with people that don't want something in place and a developer that's sitting there having invested money and then finding out that people don't want it. It doesn't work out very well. And so the key here is to find those places

### Natural Resources Committee February 09, 2017

around the state that are interested in this kind of development and then promoting them. Developers will gain understanding of which counties in the state are interested and ready to go when it comes to developing wind resources. Obviously, as you said, the bill is modeled after the livestock friendly bill, but it shouldn't be exactly the same. I mean, obviously, there's differences. When the bill was first written, in the past, we had the electric...the Energy Office and there's the one, but in Senator Larson's defense, when he looked at the livestock friendly situation and said, hey, let's see if we can save some money, right, put it over into agriculture where they've already done this for livestock friendly, remember, we are talking about rural economic development, a lot of the same things. You have to have a conditional use permit, you have to have certain things in place. Not necessarily pollution controls, but other things in place, like Senator Bostelman had talked about, that counties really don't have a handle on. That's why they hire engineers to do that stuff; that's why developers hire engineers to take care of all those situations. We've seen areas in the state that have had issues with wind development. And this would be one way for counties to begin the discussion of whether they're open to this kind of development. You know agriculture has seen a few good years of prices lately, but that's changed here over the last year. Revenues are down because farming comes down. I handed out an article. I think everybody got it, that speaks to some of the reasons for this. What are we doing today to diversify our rural economies? What industries are actively looking to come into rural areas and develop? Is manufacturing beating down the door in our smaller communities? How about high-tech ventures? Do we see a lot of that going on? Not really. There is one industry that has been knocking on the doors in rural Nebraska for a number of years now and they're looking to make a difference in these areas. Wind energy development has given new life to those areas that have embraced it and understand the opportunity. It's bringing money and capital back to these areas. Money and capital that is vital to maintaining our way of life, as well as growth, that decreases the tax burden for all citizens that the counties and Nebraska as a whole. As policymakers, and folks that are into moving economic development forward, we have to remember in an economy such as Nebraska where natural resources dominate the economic drivers, one person's windmill is no different than another person's feedlot or another person's outfitting company or another person's welding shop. If we rebuff those that want to invest and bring their investment and jobs to rural Nebraska, then over time this concept known as buffalo commons is actually possible. It can happen. And the ability to pay for needed infrastructures continues to deteriorate because of out-migration. Agriculture will continue, out of necessity, to become more and more efficient. This ultimately means fewer people needed to do the jobs. Wind energy and other development can help curb this phenomena. But as Nebraskans, we must be willing to allow others to develop their land and property as they see fit. As Nebraskans who have watched the decline in rural areas, it's incumbent upon its leaders to encourage this new development where and when it fits. Thank you very much. I'd be happy to take any questions. [LB392]

SENATOR HUGHES: Okay. Thank you, Senator Schilz. Senator McCollister. [LB392]

### Natural Resources Committee February 09, 2017

SENATOR McCOLLISTER: Yeah, thank you, Chairman Schilz...Senator Schilz. (Laughter) [LB392]

KEN SCHILZ: Chairman Hughes. [LB392]

SENATOR McCOLLISTER: Senator Hughes. There's a mistake. Are you at all familiar with the work of this committee? [LB392]

KEN SCHILZ: I've sat in the chair or two over there for a little while, yes. [LB392]

SENATOR McCOLLISTER: Okay. Now, there's some fear of helter-skelter development of wind resources. Can you briefly describe some of the control, the protocols we have that would make that kind of development... [LB392]

KEN SCHILZ: Well, I mean, especially...especially in counties with zoning. It's clearly lined out exactly what needs to happen--set backs, noise levels, all things like that have been put in place to help deal with those kind of things. And I've been a little bit nervous about some of those. When you start to talk about noise restrictions, we need to be really careful because in my county, Keith County, if I go out, put up a pivot and put in a diesel engine on a well, that's going to blow away any of these decibel levels that have been put out in any of these zoning regulations, like Lancaster County 40 or 50 decibels, whatever that is. Normally, a diesel engine will run about 110 decibels all the time, 24 hours a day. [LB392]

SENATOR McCOLLISTER: So Game and Parks has a...is part of the process. [LB392]

KEN SCHILZ: Game and Parks is involved. FERC is involved. I mean, there's federal things involved. Game and Parks is involved. It goes down the line. And the utilities have to be involved as well, because they have to make sure that what's needed is in place and can actually handle that. So developers have to work very closely with the utilities here in Nebraska to see these kind of endeavors come to fruition. [LB392]

SENATOR McCOLLISTER: Are there any environmental controls on development? [LB392]

KEN SCHILZ: Oh yeah, absolutely. You mentioned Game and Parks, and also federally listed species bring in Fish and Wildlife Services as well that takes a look at that stuff. And what we see in Nebraska is any place where...especially along the central fly zone, it gets pretty tough to place wind towers there, just...you know, the birds and situations like that. So, yeah, there's a lot

### Natural Resources Committee February 09, 2017

of restrictions. And as you look at all those restrictions, it does narrow down where you can put those and what you can do. [LB392]

SENATOR McCOLLISTER: Thank you. Sorry about the name confusion. [LB392]

KEN SCHILZ: No, don't apologize to me. [LB392]

SENATOR HUGHES: I'm sorry (inaudible). (Laughter) Any other questions for former Senator Schilz? Senator Bostelman. [LB392]

SENATOR BOSTELMAN: Thank you, Mr. Hughes. (Laughter) [LB392]

KEN SCHILZ: You think you just got points, right? [LB392]

SENATOR BOSTELMAN: Mr. Schilz, since you're, obviously, familiar with fiscal notes and how that works, and as we're talking about this now, if we stay with the Department of Ag doing the county friendly, got it, understand that. [LB392]

KEN SCHILZ: Sure. [LB392]

SENATOR BOSTELMAN: But I also understand, I think we've been talking about where we're going to have to get the Department of Energy...the state energy, some of those involved in doing some work there as well, so there's going to be a cost to them. Would that not...do you not think that that should be part of the...if we looked to that point, that would increase the fiscal note because they...we looked at that before, I believe, and there was some concerns...there's some costs there. [LB392]

KEN SCHILZ: It could be. But if you look at it in a sense of what Senator Larson talked about in sheerly an economic development tool, I mean, just because there's a county that's declared themselves friendly to livestock or wind or anything else doesn't mean that that's exactly where developers really want to go. So in that sense, you know, do we want to have thresholds that says, hey, unless the wind blows this much, or unless you're in a certain area that has this kind of transmission, should that limit you as to what you can do? And I'm not sure on that answer, but I think it should be up to every county if they want to become wind friendly and they decide to be wind friendly and move forward they need to work with folks to find transmission and things like that, then I think they should be allowed to do that. Now will they be successful at it? As you know, transmission is a bugaboo and really hard to deal with. But you want to be really careful on telling certain...telling folks at the local level you can or can't do this. But to your question in

### Natural Resources Committee February 09, 2017

talking about...I think the Energy Office could have some valuable information for us. And there could be a cost in that, yes. [LB392]

SENATOR BOSTELMAN: Yeah, because I think, my understanding, we were talking about before, they would be involved, they'd have to be involved at some level. [LB392]

KEN SCHILZ: Yeah. [LB392]

SENATOR BOSTELMAN: Okay, thank you. [LB392]

KEN SCHILZ: Sure. [LB392]

SENATOR HUGHES: Okay. Any additional questions? Seeing none, thank you. [LB392]

KEN SCHILZ: Thank you, Chairman Hughes. [LB392]

SENATOR HUGHES: Next proponent. Welcome, Mr. Winston. [LB392]

KEN WINSTON: Thank you. Good afternoon, again, Chairman Hughes and members of the Natural Resources Committee. My name is Ken Winston, K-e-n W-i-n-s-t-o-n, appearing on behalf of...I'm a registered lobbyist for the Cavanaugh Law Firm, appearing on behalf of the Nebraska Sierra Club. Nebraska Sierra Club is in strong support of renewable energy and has been for many years. The Nebraska Sierra Club supports LB392 in part because of the fact that we support criteria for determining siting of wind development. Such criteria should protect wildlife habitat and fragile ecosystems, particularly undisturbed grasslands. In response to some of the questions that have been raised this afternoon, the Nebraska Sierra Club would suggest an amendment that would include coordination with the Energy Office and Department of Environmental Quality and Game and Parks in creating the standards being implied by the bill. And one other thought as I was reviewing the fiscal note, one of the reasons for the fiscal note was the fact that the Department of Agriculture indicates they do not have expertise in wind energy matters. If the Energy Office were involved with this, it might actually reduce the fiscal note. I mean, obviously, I don't have any control over those agencies, but the Energy Office does have expertise in that area. So with that I would attempt to answer questions. [LB392]

SENATOR HUGHES: Okay, thank you, Mr. Winston. Any questions? Seeing none, thank you. [LB392]

### Natural Resources Committee February 09, 2017

KEN WINSTON: Thank you, Senator. [LB392]

SENATOR HUGHES: (Exhibits 2, 3, 4) Next proponent? Seeing none, any opponents? Oh, I'm sorry, proponents letters submitted were the Rath family, Troy Stowater, and Anne DeVries. Mr. Hansen. [LB392]

JOHN HANSEN: Chairman Hughes, members of the committee, for the record, my name is John Hansen, J-o-h-n, Hansen, H-a-n-s-e-n; I'm president of Nebraska Farmers Union. As most of you probably know, we have been working on trying to actively and aggressively promote wind and renewable energy for a very long time. We think it's a great fit for rural communities. We think it's a huge benefit to farmers. It's a new source of capital investment, new source of tax base, good paying jobs. It's clean energy. It's well suited to our natural resource base. And so we are very supportive of renewable energy. But as long as we've been supporting renewable energy, which goes back to the mid-'90s, long, long before that we have been supporting the concept of local control. And local control is really the business of whether or not people, where the rubber meets the road, are feeling like they are working with their local government and are partnering with them, and whether or not things are being done with them or whether or not things are being done to them. And so, notwithstanding, whether you win or lose a particular battle when you kind of go down the road to having people pick sides and you run the risk of community polarization, are you for or against, and you have all these fights, or which flag you fly, and you go down that road. We strongly support local communities going through the process of planning and zoning and charting their own course and doing it with unimpeded and without being told what it is that they need to have in their county in order to qualify for anything. And so we were not a supporter of livestock friendly counties because it undermined local control, in our opinion, and so the Department of Ag didn't just give them standards, it gave them standards that they needed to meet in order to meet a certain qualification. So once you've accepted that judgment and then the decision comes to your door and you're looking at a particular project, as part of a planning and zoning process, you've already supposed the outcome to a substantial degree by virtue of the fact that you've already designated what your outcome is going to be in advance the particulars of the facts of the application that you're looking at. So depending on the standards that you've set in a county, it makes a world of difference whether or not the developer that you're talking about, working with, has a good reputation or a bad one; whether or not the project is appropriately sited or whether it's not; whether or not the folks in that part of the county want it there or not. And so you've already supposed a whole bunch of things that I think are not helpful, and in fact, do undermine local control. And so as much as we appreciate Senator Larson's intentions, we think that when you add this up and you look at the cost benefit ratio of what it is that you're gaining versus what it is that you're giving up, when you undermine local control, and even though those decisions are sometimes made that we oppose, we still applaud the process and say that's your call to make because we don't think that folks in Lincoln ought to be in any way undermining or telling folks in local counties and subdivisions what it is that they

### Natural Resources Committee February 09, 2017

ought to do. And so with that I will end my testimony and answer any questions if I could. [LB392]

SENATOR HUGHES: Okay. Questions for Mr. Hansen? Senator McCollister. [LB392]

SENATOR McCOLLISTER: Yeah, thank you, Chairman Hughes. Mr. Hansen, thank you for appearing. So what you're saying, what I'm hearing is that when you make your county a wind friendly county, it makes it impossible to enforce your zoning laws or could, is that right? [LB392]

JOHN HANSEN: It really undermines and complicates the enforcement of your zoning laws, just apples to apples comparison because the developer is going to say, well, you already said you were a friendly county, so what are you...how can you possibly tell me no. And, well, I could tell you no if I didn't think it was in the right spot or it didn't meet the standards or, you know, whatever. But it complicates it, in my opinion, unnecessarily. And in my opinion, Nebraska has world-class wind resources across the state, and I think that most developers at this point look at it and say, you know, most of Nebraska is a good place to come. And I don't know that you necessarily gain any particular development advantage at this point. [LB392]

SENATOR McCOLLISTER: Thank you, Mr. Hansen. [LB392]

SENATOR HUGHES: Okay, Senator Bostelman. [LB392]

SENATOR BOSTELMAN: Thank you, Mr. Chairman. Do you feel, Mr. Hansen, do you feel that the county commissioners across the state have the expertise in determining what safe zoning, safe as far as siting of a facility might be? Do you think they all understand what that is? Have the expertise at this point to do that? [LB392]

JOHN HANSEN: I think that every county, when they do planning and zoning, hires a professional administrator, and sometimes it's full time, sometimes it's part time, and they hire the expertise that they need, depending on what it is that they're looking at planning and zoning to be able to hire that expertise and do what it is that they need to do to develop a plan that meets their goals based on what they want to do. And so to the extent that expertise exists anywhere, you're as likely to find it there as anywhere else. [LB392]

SENATOR BOSTELMAN: Thank you. [LB392]

SENATOR HUGHES: Okay. Any additional questions? Senator Kolowski. [LB392]

### Natural Resources Committee February 09, 2017

SENATOR KOLOWSKI: Thank you, Mr. Chairman. Mr. Hansen, it looks like you...I just feel the whole thing is fraught with conflict. I'm really getting a mixed message here between let's get development going in our state, yet you want to have the local control that could stop projects anywhere by enough people putting their voice out and just saying--not here, we're not going to do that here. I'm really getting a mixed message here. I just want to share that with you from the perspective of one person. [LB392]

JOHN HANSEN: Well, Senator Kolowski, my good friend. [LB392]

SENATOR KOLOWSKI: Yes, sir. [LB392]

JOHN HANSEN: Welcome to my world. My world is conflicted. I represent a bunch of strongwilled, independent, opinionated people, God bless them. And they're going to have different opinions about all kinds of things. And that's a good thing. And so, you know, if you have a lot of opposition, there's plenty of other places to go to put in a wind project where there's not opposition. If you put in a hog unit or you put in a wind farm, or whatever, and it's not what local folks want, there's going to be conflict, there's going to be hard feelings, there's other better places to go. And, you know, if you look at it conceptually in terms of decision making, with all of its flaws and all of its challenges, if you look at how it is the development is made at the local level, you're either going to have federal decision making, state decision making, local decision making, or in the absence of zoning, which is why Senator Bostelman, I think, your county ought to get zoned, is that you tend to have money deciding the issue. And so of all those different kinds of decision making and the pluses and the minuses of each, the one that you're most likely to have, that represents the will of the local people and that is, in fact, going to have to live with the consequences of the decisions they make are the folks at the local level. And they're the only level of decision making, in our view, that if they get it wrong, as all decisions can be made wrongly at whatever level, they have a vested interest in getting it right and fixing it. So that's why we're...our commitment to local control is as strong as it is and it trumps our other book of conflicted interest. [LB392]

SENATOR HUGHES: Any additional questions? [LB392]

SENATOR KOLOWSKI: I guess I was hearing it right. [LB392]

SENATOR HUGHES: Okay. Thank you. Any additional opponents? [LB392]

JOHN HANSEN: Thank you. [LB392]

### Natural Resources Committee February 09, 2017

DAN SCHMID: (Exhibit 5) Good afternoon, again, Chairman Hughes, members of the Natural Resources Committee. I'm going to abandon the first two points I have because you guys have covered them already. [LB392]

SENATOR HUGHES: Excuse me, could you say your name and spell it, please. [LB392]

DAN SCHMID: I'm sorry. Thank you. Dan Schmid from Dwight, Nebraska; D-a-n S-c-h-m-i-d. I want to back up a little bit of what John Hansen said a little bit about local. The people that would have to live with these wind turbines, if they get stuck in their areas, because I hear about bringing in manufacturers or business to the rural areas, but I don't hear too much about representation except right now of the people who have to live with these things once they're sited. And that's a big point with me. I'll jump to my third point of why I am opposed to LB392. The State Energy Office is already directed to help local boards and all forms of energy. LB392 would create a special designation which is not necessary for just one form of energy creation. Number four, you talked about already, taxes are high, state is short of money. Why do we need to spend \$24,000 and more the following year? I want to jump back to Germany, more, not necessarily on this, but for those who want to jump all in for wind and solar, there's a statement put out and Germany has jumped all in since Fukushima in 2011 over in Japan. They have declared they're going to shut down all their nuclear plants by the year 2022. So they've jumped in, all in, essentially, solar and wind. There's a report by the environmental progress site over there in Europe and it says, quote: not only did new solar and wind not make up for lost nuclear, the percentage of time during 2016 that solar and wind produced electricity declined dramatically. This is in Germany. The whole country of Germany. Germany added a whopping 10 percent more wind turbine capacity and 2.5 percent more solar panel capacity between 2015 and 2016, but generated less than 1 percent more electricity from wind and generated 1 percent less from solar. This is because of the intermittent nature of that type of energy. So those that would point out Germany as doing great, I think they're starting to second guess themselves a little bit. And like I said before, they've been in this business a lot longer than anybody in the U.S. has. In fact, their wind turbine companies are coming over to the United States to gather in U.S. subsidies because European subsidies are disappearing. I'll stop there. [LB392]

SENATOR HUGHES: Okay. Thank you, Mr. Schmid. [LB392]

DAN SCHMID: Thank you. [LB392]

SENATOR HUGHES: Any questions? Senator Bostelman. [LB392]

SENATOR BOSTELMAN: Thank you, Mr. Chairman. Mr. Schmid, I have a question, could you...I guess my...not really a question, but you skipped your first two points. [LB392]

### Natural Resources Committee February 09, 2017

DAN SCHMID: I did. [LB392]

SENATOR BOSTELMAN: I would like you to...could you explain what your opinion is, why you have the opinion under your first statement there, your first paragraph. [LB392]

DAN SCHMID: What I stated, this state assistance to...and now I quote out of the bill--"rural communities and counties seeking opportunities in growth of wind energy production" opens the door wider for lobbyists and law firm influence upon local officials. This kind of pressure is hard to combat at the local level. And the one reason I state that is because we tried to deal with some of this in our actual township, because we do not have zoning. And prior to a vote and at an annual meeting by the township, we received a threatening letter from a law firm/lobbyist. And I'll provide you the number of, whoever wants to know, I'll provide you the telephone number of any of 1 of 12 local officials and they can tell you the effect of that letter and what it meant to them. So that's kind of where I'm coming from. [LB392]

SENATOR HUGHES: Okay. Senator McCollister. [LB392]

SENATOR McCOLLISTER: Yeah, thank you, Chairman Hughes. Are you still a governmental official? [LB392]

DAN SCHMID: Am I still a governmental... [LB392]

SENATOR McCOLLISTER: Are you a county commissioner or involved with your city in some way? [LB392]

DAN SCHMID: I'm just a citizen. [LB392]

SENATOR McCOLLISTER: Citizen, okay. [LB392]

DAN SCHMID: I'm no official. [LB392]

SENATOR McCOLLISTER: But you reside in a county where you've had some wind development? [LB392]

DAN SCHMID: We've had activity, yes. [LB392]

### Natural Resources Committee February 09, 2017

SENATOR McCOLLISTER: Okay. And has there been any benefit to those people that put a turbine on their property? [LB392]

DAN SCHMID: There's no turbines at this date. [LB392]

SENATOR McCOLLISTER: Is it solar? [LB392]

DAN SCHMID: It's wind turbine. [LB392]

SENATOR McCOLLISTER: So there is a wind turbine in the county. [LB392]

DAN SCHMID: In the county, no, I don't think so. There's one at a local machinery business, a

private one. [LB392]

SENATOR McCOLLISTER: A private one. [LB392]

DAN SCHMID: Yes. [LB392]

SENATOR McCOLLISTER: Okay. So when wind development does occur, does it benefit the

landowner in any way? [LB392]

DAN SCHMID: It possibly could. [LB392]

SENATOR McCOLLISTER: Did they receive a payment for the electricity or having the wind

turbine located on their property? [LB392]

DAN SCHMID: They do, but I would maintain many of them are very sorry they ever signed up with them. And I'll tell you the process in our county, they show up two years prior to I even knowing that they were in the area, this is why some of this local control needs to...and we need to address...I'm for getting information out there. Get it out to all the people, because you go out to neighbors of myself today and this wind turbine company has been trying to sign people up for three years, plus or minus, and I could go to some of my neighbors and they've never heard about it; yet they could have a turbine that would affect their quality of life. [LB392]

SENATOR McCOLLISTER: Thank you. What county do you... [LB392]

### Natural Resources Committee February 09, 2017

DAN SCHMID: Butler County. [LB392]

SENATOR McCOLLISTER: Okay. Do you have any zoning regulations? [LB392]

DAN SCHMID: We do not. [LB392]

SENATOR McCOLLISTER: You do not. So the county has control? [LB392]

DAN SCHMID: No. Control as far as zoning? [LB392]

SENATOR McCOLLISTER: For zoning. [LB392]

DAN SCHMID: There's no zoning regulations. [LB392]

SENATOR McCOLLISTER: But that would probably be a good way to take care of some of the problems that you see. [LB392]

DAN SCHMID: It maybe would be. I don't disagree. [LB392]

SENATOR McCOLLISTER: Thank you very much for appearing. [LB392]

SENATOR HUGHES: Okay. Any additional questions for Mr. Schmid? Senator Bostelman. [LB392]

SENATOR BOSTELMAN: Thank you. Thank you, Mr. Chairman. Mr. Schmid, I want to go back to the question that Senator McCollister just asked you. Regarding the township boards, was there any pressure put on those township board members by anyone during this whole process that you think influenced them one way or another or potentially could influence, say, a county commissioner one way or another? [LB392]

DAN SCHMID: That was put on the board members? [LB392]

SENATOR BOSTELMAN: Yeah. [LB392]

### Natural Resources Committee February 09, 2017

DAN SCHMID: The only pressure I know was this letter that was sent to each board member on behalf of the wind company. And it was basically threatening a lawsuit. And this particular lobbyist also showed up at the annual meeting and issued the same threat. [LB392]

SENATOR BOSTELMAN: So you feel there was a negative influence put on these officials by the developer, they came in and threatened. [LB392]

DAN SCHMID: I do. I do. [LB392]

SENATOR BOSTELMAN: Thank you. [LB392]

SENATOR HUGHES: Additional questions? Seeing none, thank you, Mr. Schmid. [LB392]

DAN SCHMID: Thank you, Chairman. [LB392]

SENATOR HUGHES: (Exhibit 2) And are there any other opponents to LB392? Seeing none, neutral testimony? Excuse me, I misspoke earlier, the Rath family is not a proponent, they are an opponent of submitting a letter on LB392. Now, neutral testimony. [LB392]

KRISTEN GOTTSCHALK: I did a lobbyist faux pas and forgot to fill out my sheet, so I'll get that. Senator Hughes, members of the Natural Resources Committee, my name is Kristen Gottschalk, K-r-i-s-t-e-n G-o-t-t-s-c-h-a-l-k, I'm the government relations director and registered lobbyist for the Nebraska Rural Electric Association. And we discussed who they were before. And we're here today to testify in a neutral capacity on LB392. We did, however, in the process of evaluating this bill at our meeting, come up with a few questions. And I think those have been addressed as to who should be the lead agency in setting up the standards and qualifications for wind friendly counties. And we would strongly encourage that it should be the Energy Office. And as we've listened to other testimony, there's some value in that the Department of Ag has had experience with this, so the Energy Office working together with the Department of Ag seems to make the most sense. And some might not believe I'm going to say this, but we'd also concur with the Sierra Club in their assertion that you need to have some input from the Game and Parks and the Department of Environmental Quality as you set up those standards. As far as wind friendly counties go, as long as there is a clear process with good education that ensures a strong process of public involvement, and I emphasize that, public input into the process prior to making these designations there wouldn't be any reason for us to oppose that. But it does bring to mind one other question that came up during our discussions with the membership and does this actually...you know, the livestock friendly program doesn't differentiate between hogs and cattle and chickens and that, it's to create a livestock friendly county. But is there a concern, or we have

### Natural Resources Committee February 09, 2017

a wind friendly county, are we going to have methane friendly counties or solar friendly counties, are those designations going to be needed in the future? And is that confusing to the public as we move forward with this? With that I end my testimony. But one more comment, if Senator Schilz doesn't want the loud diesel generator, if you have an electric pump, it would be pretty quiet. (Laughter) [LB392]

SENATOR HUGHES: Okay, are there any questions for Ms. Gottschalk? Seeing none, thank you. [LB392]

KRISTEN GOTTSCHALK: Thank you. [LB392]

SENATOR HUGHES: Are there any other additional neutral testimonies? Seeing none, Senator Larson, you're welcome to close. [LB392]

SENATOR LARSON: Thank you. First, I will start with--this is local control at its best. In essence, whether it's Department of Ag with help, or whomever else, it is still the county's decision whether or not to pursue this. And there are set guidelines, obviously, to receive the designation, as we have seen in livestock friendly, but in every case, such as livestock friendly, there has been a substantial amount of public input, a substantial amount of things they have to go through to receive those designations. In terms of speaking directly to Senator Bostelman's concerns about the fiscal note, if you read the fiscal note closely, the Department of Ag already takes into account that they don't have the expertise. And part of that first year's fiscal note is paying a consultant to help them develop those guidelines. So whether that be the Energy Office or DEQ or whomever else, that's already built into the fiscal note. And when you talk about the costs, I've been around the Legislature long enough to understand that oftentimes when a state agency offers costs in terms of fiscal notes, it's FTEs, and that's what the Department of Agriculture has put in here, as well as the cost to hire a consultant. Whether, like I said, maybe they're paying the Department of Energy for, you know, just a small consultant fee to help them set that up, or whether that's an outside consultant, I would highly...I do not think the Department of Energy would need an FTE to set up the consultant basis of helping the Department of Ag administer this. And as I said, I do feel the Department of Ag is still the best place to administer the program once the regulations have been set up, just because they've already been doing it. They understand how it's done; they understand how to work with the counties. They understand that process. So hopefully we can move on and move forward. This is local control. No county would have to do it if they didn't want. It's as simple as that. And if the county wanted to, with input from their public, they could receive the designation. That doesn't mean that every wind project would be rubber stamped in their county. It, still again, go through the local process; it just sends a signal to developers that this is a friendly county. And just like livestock friendly

### Natural Resources Committee February 09, 2017

counties, a county can take away that designation should they no longer wish to have that designation anymore. [LB392]

SENATOR HUGHES: Okay. Thank you, Senator Larson. Any questions? Senator Bostelman. [LB392]

SENATOR BOSTELMAN: Last question, sorry. [LB392]

SENATOR LARSON: No problem, Senator. [LB392]

SENATOR BOSTELMAN: We've heard...debated about asking this question, but I'll ask it. [LB392]

SENATOR LARSON: I'm always here. [LB392]

SENATOR BOSTELMAN: We talked about economic growth, stimulus money into our counties, talking about farmers needing money, counties needing money; yet, our state we have about \$15 million in exemptions to wind energy. Do you think that should be discontinued? [LB392]

SENATOR LARSON: On the federal level? Are we discussing... [LB392]

SENATOR BOSTELMAN: No, state. [LB392]

SENATOR LARSON: Okay, I was just making...ask...making sure that you're asking me the specific question. Umm, not necessarily. I have seen what it has done for my district. I probably had more wind development in my district than any district in the state. I have the largest wind farm in the district in Holt County...or in the state in Holt County. And then I have two of the...another large one in Knox County. I have seen what it's done for local schools there. Holt County hasn't realized that yet because the project just finished. But I have seen what it's done for Bloomfield and Crofton school districts. If you want me to get into a tirade on the school aid formula here, I can, but... [LB392]

SENATOR HUGHES: This is not the Education Committee, Senator Larson. [LB392]

SENATOR LARSON: I think this is their room though, right? [LB392]

### Natural Resources Committee February 09, 2017

SENATOR HUGHES: This is our room. [LB392]

SENATOR LARSON: This is your room today. You share the room during the days of the week. I think there can be fixes to the state aid formula because of how money that...when energy becomes and affects the state aid formula, which I think is wrong, but they have offered a lot of economic development in my district, rural Nebraska. They have offered the agricultural producers, because the land is all on agricultural producers...the turbines are all on agricultural producers land, an opportunity to diversify and make sure that my communities aren't...main street in my communities haven't been hit as hard because these producers do have an extra source of income. They have made sure, as I've said, the school districts and the counties have been able to continually lower their levies, even in these years where farming (inaudible) going down; and, obviously, land prices are going up. And I'm not sure I have a county or a school district in my district that has raised a levy. Almost everyone has been cutting down, specifically, in Knox County and Holt where these projects are, and that's part of it. They have...they're offering taxpayers...local taxpayers an opportunity for relief and they are helping keep main street open because when you have...for the Holt County project, for example, has over 200 turbines. And we're talking...I've heard rumors of how much they get per turbine on their land. But a lot of that is going back into our local economy. So I understand the hit that the state is taking, but it is helping rural Nebraska significantly. [LB392]

SENATOR BOSTELMAN: Thank you. [LB392]

SENATOR HUGHES: Okay. Any other questions? Seeing none, that will close our hearing for today on LB392. [LB392]

SENATOR LARSON: Thank you. [LB392]

SENATOR HUGHES: And close... [LB392]